D-M-E Mold Technologies Catalog Index



The industry's most comprehensive range of mold technology products indexed from A to Z

D-M-E

Every step of the way

D-M-E Mold Components



D-M-E
Every step of the way

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

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New D-M-E Products

D-M-E Mold Components Offer Wide Range of Benefits

To help you meet the unprecedented demands you have for speed, cost reduction and performance, D-M-E continually strives to be an essential resource, and a provider that contributes to your success every step of the way. These recent new mold component introductions represent a renewed commitment to delivering the exceptional service, support, knowledge and reach that have been the hallmarks of D-M-E for seven decades.

MoldBasics™ Ejector Pins Offer Industry's Lowest Prices



D-M-E has again reduced the costs on basic mold components, this time with the industry's lowest prices on American standard inch-type nitrided ejector pins. The MoldBasics line of products provides D-M-E-assured quality with globally competitive prices. The new line of pins complement D-M-E's MoldBasics family of value-priced mold products that was created to bring greater competitiveness and flexibility to global customers.

Unprecedented Tolerances for New D-M-E CT Pins



D-M-E's new Close Tolerance series of ejector pins — featuring an unprecedented 0.0002-inch dimensional tolerance — are made of hardened M2 tool steel, improving their ability to absorb deflection without damage. Known as close tolerance through-hard ejector pins (CT pins), they are popular for any application where close tolerance is critical.

Industry's Smallest Size Compact Dual-Ring Mold Dating Insert



D-M-E saves space and complexity in dating plastic parts by combining month and date rings in the industry's smallest dual-ring, multi-dating, indexable mold dating insert (MDI). At just 10mm diameter x 12mm high, the new D-M-E Dual-Ring MDI is noticeably smaller than competitive offerings. The miniaturized unit features a 12-month outer ring and a six-year inner ring. The product also features D-M-E's patented "snap-in-place" design to ensure that the inner insert remains fixed in the proper indexed position.

D-M-E Expands Euro-Series Metric Components Line



D-M-E now offers North American molders and mold builders a comprehensive range of metric components, along with the same fast delivery and expert support they expect from D-M-E. In response to the continued growth of metric molds and components in North America, more than 4,000 Euro-Series components are now available, including ejector and guide pins, bushings, and locating rings.

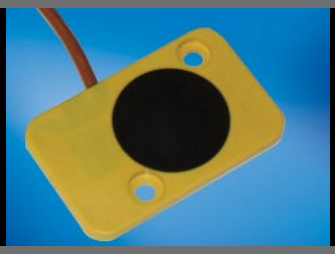
D-M-E Helical Gear, Stack Mold Centering Devices are Industry's First Off-the-Shelf Systems



D-M-E simplifies stack-mold design and fabrication with the industry's first off-the-shelf packages for Helical Gear, Stack Mold Centering Systems. Including all necessary components as part of a pre-engineered system, the systems save moldmakers the time and expense previously required to design, engineer, and source from multiple suppliers. For more information on Stack Molds and other Multi-Parting Line (MPL) systems, visit www.dme.net/MPL.

New D-M-E Products

New Smartflow® Thinswitch® Liquid-Resistant Limit Switch



Designed to verify ejector plate return in areas where occasional water or oil spray is present. The new Smartflow Thinswitch Liquid Resistant Limit Switch helps prevent accidental mold closure in injection molding applications by providing a position switch that is tied to the injection molding machine control.

Wide Variety of Inch Ejector Blades Introduced



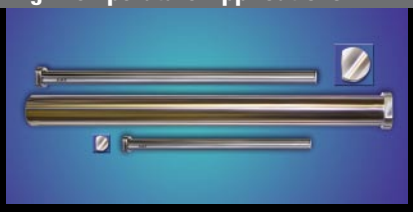
Off-the-shelf ejector blades are now available from D-M-E in a huge array of blade thicknesses, widths and lengths to accommodate more applications than ever. Precision-made of quality M2 high-speed tool steel and through-hardened for superior wear resistance, each blade features strong, one-piece construction held to a close tolerance (+.0000/-.0003) for the most exacting application.

VectorForm™ Lifter Systems Double the Undercut



D-M-E doubles undercut capability in plastic molds with the new VectorForm™ Lifter System. While most lifter systems recommend a maximum angle of 15°, the VectorForm, with its sliding base, can easily accommodate angles of 30° and more. Offering unprecedented design flexibility to OEMs and mold designers, the VectorForm Lifter System allows application designers to incorporate undercuts into their designs that are twice as deep as previously possible.

Keyed Ejector Pins Ideal for High Temperature Applications



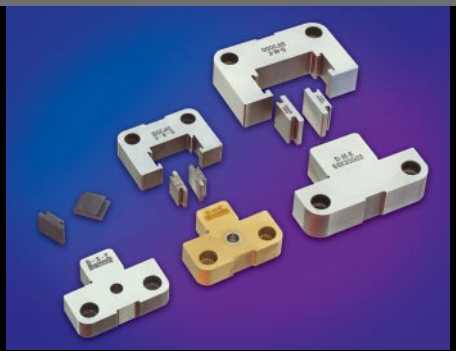
Featuring a precision-machined flat on head to prevent the pin from rotating, these pins are constructed from a superior shock-resistant hotwork steel. Ideal for high-temperature applications, the Keyed Ejector Pin from D-M-E provides a core hardness of 50-55 HRC and annealed hot-forged heads for uniform grain flow and easier machining.

D-M-E 2-Stage Ejectors Offer Unique Design Solutions



Combining cut-to-length adaptability for different mold base sizes and plate thicknesses with internal installation to avoid interferences with water line connectors and externally mounted components, D-M-E 2-Stage Ejectors are made of hardened steel for long life. With two available styles of ejection — Bottom Last (BL) and Top Last (TL) — the product is available in three diameters — 20mm, 26mm and 32mm — to accommodate most metric- or inch-standard D-M-E mold bases.

IN2™ Innovative Interlocks Reduce Costs, Save Time



New, patented interchangeable wear surfaces on D-M-E Company's IN2™ Innovative Interlocks reduce maintenance time and cost for plastic molders and moldmakers. The replaceable inserts eliminate the need to remove the interlock set during maintenance, resulting in significant time and cost savings. The unique off-the-shelf mold interlock offers 100% interchangeability. The new IN2™ design features an inexpensive wear insert of graphitic steel that is easily replaced when a mold is down for routine maintenance.

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Terms and Conditions of Sale

1. **FOB POINT / PRICES:** Products are sold F.O.B. point of origin. Any taxes are in addition to the prices and may be invoiced later.
2. **SHIPPING SCHEDULE:** The shipping schedule is our current estimate of delivery dates and we agree to use reasonable efforts to comply with the schedule.
3. **WARRANTY:**
   (a) Any D-M-E trademarked or tradenamed product or part thereof manufactured by or for us which, under normal operating conditions in the plant of the Buyer thereof, proves defective in material or workmanship, as determined by our inspection, within 12 months from the date of shipment will be replaced or repaired free of charge to Buyer.

   This warranty is contingent upon the following conditions: *that we promptly receive notice of the defect; that Buyer establish that the product has been properly installed, maintained, and operated within the limits of related and normal usage as specified by us; and that, upon our request, Buyer will return to us at our expense the defective product or part thereof.*

   (b) The terms of this warranty do not in any way extend to any product or part thereof which have a life, under normal usage, inherently shorter than 12 months.
   (c) The conditions of actual production in each end user's plant vary considerably. Therefore, descriptions of the production or performance capabilities of any product or software materials are estimates only and are not warranted.
4. **EXCLUSIONS OF WARRANTIES:** THE WARRANTIES TO REPAIR OR REPLACE DEFECTIVE PRODUCTS OR PARTS AS SET FORTH IN PARAGRAPH 3, AND ANY ADDITIONAL WARRANTY EXPRESSLY STATED TO BE A WARRANTY AND SET FORTH IN WRITING AS PART OF THESE TERMS HEREIN ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
5. **LIMITATION OF REMEDIES AND LIABILITIES:**
   UNDER NO CIRCUMSTANCES SHALL WE OR ANY AFFILIATE OF OURS HAVE ANY LIABILITY WHATSOEVER FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES HOWSOEVER CAUSED OR ARISING (INCLUDING CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE), such as, but not limited to, loss of profit or revenue; loss of use of the product, part thereof; cost of capital; cost of replacement equipment; or claims resulting from contracts between Buyer, its customers and/or suppliers. Unless expressly provided for herein, in no event shall we or any affiliate of ours assume responsibility or liability for (a) penalties, penalty clauses or liquidated damages clauses of any description, (b) certifications or (c) indemnification of Buyer or others for costs, damages or expenses arising out of or related to the product or part thereof.
6. **CANCELLATION:** Unless otherwise agreed, Buyer may cancel all or any part of the order by written notice received by us before our completion of the order or applicable portion of the order. On receipt of such notice, all work on the order or part thereof canceled will be stopped as promptly as is reasonably possible. Buyer will then be invoiced for and will pay to us a cancellation charge. For completed items, the charge will be equal to their established prices. For items not completed, the charge will be equal to our full cost plus a premium in addition to a charge for any packing and storage and less a credit for the balance of the material as scrap.
7. **PAYMENT TERMS:** Payment is due in accordance with any applicable progress, advance or other agreed upon payment schedule, or, if no such schedule has been agreed to, upon Acceptance as specified in Paragraph 8, but in no event later than 30 days from the date of invoice. No cash discount is provided. If, in our judgment, Buyer's financial condition changes, we may stop work until financial arrangements satisfactory to us are made.
8. **ACCEPTANCE OF PRODUCT:** Each such product shall be deemed to be accepted within seven days after delivery of the product to the Buyer, unless we receive written notification of rejection for cause from Buyer within the seven day period.

   "Returned Goods": No goods are returnable without prior approval, prepaid transportation and an issued RMA number. All items are subject to our inspection before credit will be allowed. Special mold bases or steel, items involving custom work, or items not shown in our catalog are considered non-returnable. A minimum service charge of 10% will be made on all returned goods.
   NO GOODS ARE RETURNABLE LATER THAN THIRTY DAYS AFTER RECEIPT OF MERCHANDISE.
9. **PATENT INDEMNITY:** We shall defend any suit or proceeding brought against Buyer and pay all costs and damages awarded against Buyer provided that:
   (a) The suit or proceeding is based upon a claim that the product or part thereof is an infringement of any claim of a presently existing U.S. patent;
   (b) The claim of infringement is not based, directly or indirectly, upon (i) the manufacture, use, or sale of any product furnished by us which has been modified without our consent; or, (ii) the manufacture, use, or sale of any combination of a product furnished by us with products not furnished by us; or (iii) performance of a patented process using a product furnished by us or production thereby of a patented product; and,
   (c) We are notified promptly and given information and assistance (at our expense) and the authority to defend the suit or proceeding. We shall not be responsible hereunder for any settlement made without our written consent nor shall we be responsible for costs or expenses incurred without our written consent. If our product is adjudicated to be an infringement and its use in the U.S. by Buyer is enjoined, we shall, at our own expense, either:
   (i) procure for Buyer the right to continue using our product;
   (ii) replace it with a noninfringing product;
   (iii) modify it so it becomes noninfringing;
   (iv) remove the product or part thereof and refund Buyer's net book value and transportation costs attributable to it.
   The foregoing states our entire liability with respect to any patent infringement by our products or any parts thereof. To the extent that our product or any part thereof is supplied according to specifications and designs furnished by Buyer, Buyer agrees to indemnify us in the manner and to the extent set forth above insofar as the terms thereof are appropriate.
10. **FORCE MAJEURE:** We shall not be liable for any delay in performance or nonperformance which is due to war, fire, flood, acts of God, acts of third parties, acts of governmental authority or any agency or commission thereof, accident, breakdown of equipment, differences with employees or similar or dissimilar causes beyond our reasonable control, including but not limited to, those interfering with production, supply or transportation of products, raw materials or components or our ability to obtain, on terms we deem reasonable, material, labor, equipment or transportation.
11. **ACCEPTANCE OF ORDERS:** Buyer agrees that all orders, including any arising from our Proposal, shall include these terms and conditions only, notwithstanding any different or additional terms that may be embodied in Buyer's order. All orders are subject to our acceptance and we reserve the right to reject orders as, in our sole judgement, mandated by business conditions. We reserve the right to not proceed with any order until all necessary information is received from Buyer.
12. **MERGER CLAUSE:** This Agreement entirely supersedes any prior oral representations, correspondence, proposal, quotation, or agreement. This writing constitutes the final and total expression of such agreement between the parties, and it is a complete and exclusive statement of the terms of that agreement.
13. **ASSIGNMENT:** Neither party may assign this Agreement without the written consent of the other party, except that we may assign this Agreement to a third party that acquires substantially all of our assets or we may assign the flow of funds arising out of this Agreement.
14. **GOVERNING LAW:** This Agreement shall be governed by and construed in accordance with the laws of the State of Michigan.

Sales and Ordering Information

U.S.A.

TERMS AND CONDITIONS OF SALE: See previous page.

PHONE ORDERS – TOLL FREE: 800-626-6653. D-M-E's Customer Service Dept. operates Monday through Friday from 8 a.m. to 8 p.m. E.S.T. Calls can be made from anywhere in the continental U.S. and Puerto Rico (Puerto Rico: use "137" prefix instead of "1"). Our Customer Service Representatives will be happy to answer your questions on D-M-E products or services, provide on-the-spot feedback on product availability and shipping details, or take any messages you wish relayed to your local D-M-E sales, manufacturing or technical service representatives.

MAIL ORDERS: If you prefer to order by mail, please address your order to:

- D-M-E Company, 29111 Stephenson Highway, Madison Heights, Michigan 48071-2330
  ATTN: Customer Service Dept.

FAX: You may fax your order to:

- D-M-E Customer Service
  248-398-6174 • 888-808-4363

CHECKS OR MONEY ORDERS: When paying invoices by check or money order, please make payable to *D-M-E Company.* Include remittance copy of invoice and mail to:

- D-M-E Company, Department Lock Box 78242, P.O. Box 78000, Detroit, Michigan 48278-0242

WALK-IN ORDERS, PICK-UPS AND RETURNS: If desired, ordered products in stock at your nearest D-M-E Service Center can be picked up rather than shipped. Walk-in orders at Service Center locations can also be processed while you wait. Products being returned for repair or exchange should be processed through Customer Service prior to being returned.

SPECIAL MACHINING SERVICES: Prints for quotation on special machining work can be sent by EDI to dme_cad@dme.net or mailed to the Estimating Department of the D-M-E manufacturing location nearest you. Call our toll-free number if desired to clarify location which serves your area.

Estimating locations are:

- 70 East Hillis Street, Youngwood, Pa 15697, FAX: 724-925-2424
- 1117 Fairplains Street, Greenville, MI 48338, Tel. 616-754-4601, FAX: 616-225-3924
- 3275 Deziel Drive, Windsor, Ont N8W 5A5, Tel. 519-948-5001, FAX: 519-948-4652
- 464-466 Windy Point Drive, Glendale Heights, IL 60139, Tel. 630-469-4280, FAX: 630-469-4740 (estimating only)

Please add "D-M-E Company" and "Attn: Estimating Dept." to above addresses when mailing prints. To obtain prices and delivery on special mold base orders or to check status of special work in progress please contact Customer Service.

CANADA

TERMS AND CONDITIONS OF SALE: See previous page.

PHONE ORDERS: Contact our Mississauga, Ontario office at 800-387-6600, FAX: 800-461-9965.

MAIL ORDERS: Send to: D-M-E of Canada, Ltd., 6210 Northwest Drive, Mississauga, Ontario L4V 1J6.

CHECK OR MONEY ORDERS: Make payable to *D-M-E of Canada, Ltd.* Include remittance copy of invoice and mail to Mississauga address above.

WALK-IN ORDERS, PICK-UPS, RETURNS, AND SPECIAL MACHINING: Contact our Mississauga office.

D-M-E — Your Essential Mold Components Resource



D-M-E offers a wide variety of proven and reliable, low-cost, high-quality products from slide action and mold cooling items to innovative solutions for molding undercuts and increasing mold capacity.

D-M-E
Every step of the way

For seven decades, D-M-E Company has been a mold technologies leader, innovator, global partner and preferred supplier to thousands of companies around the world. From its first innovation in 1942 of creating mold bases in standard sizes to its current standing as the leading provider of regional mold base standards in processing plants around the world, D-M-E is the brand that more plastics professionals depend upon than any other.

With extensive lines of products in several categories, including mold bases, mold components, moldmaking and molding equipment and supplies, hot runner systems and components, mold control systems and technical services, D-M-E has the world's most complete range of mold technology products.

The D-M-E line of mold components includes thousands of proven and reliable, low-cost, high-quality products from slide action and mold cooling items to innovative solutions for molding undercuts and increasing mold capacity.

Slide retainers, limit switches, wear plates, lifter systems, unscrewing devices, 2-stage ejectors, internal latch locks, mold dating inserts, ejector pins, sleeves and blades, and runner shut-off inserts are just several of the many mold components you'll find within the pages of your new D-M-E Mold Components Catalog.

Not only will you find product features and benefits, item numbers, and illustrations with dimensional specifications, but many D-M-E product descriptions include assembly and installation guidelines that assist you every step of the way in correctly applying our products to your application. It's no wonder why many customers call the D-M-E catalog the bible of the industry, and many competitors still promote their products by comparing them to D-M-E.



D-M-E Slide Action Components

Facilitating greater molding productivity through slide action innovation



SLIDE RETAINERS



WEAR PLATES



SMART LOCK



ANGLE PINS





GIB ASSEMBLIES



D-M-E
Every step of the way

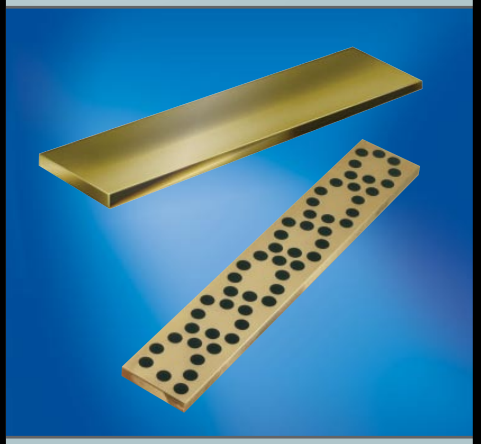
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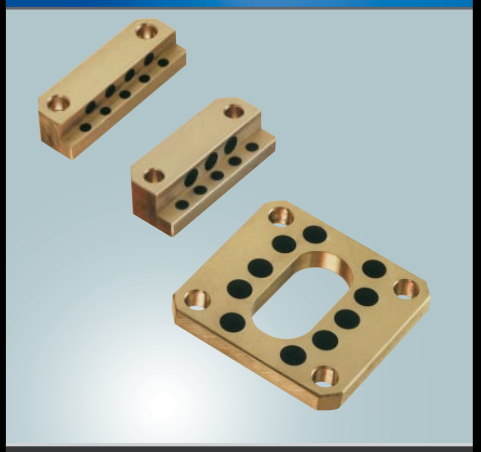
Angle Pins ..... **14 to 15**
Supplied with a pre-machined spherical radius on the head to eliminate angle grinding



Slide Retainers ..... **16 to 21**
Mini-Might™ and Smart-Lock® designed to be small in size yet strong in holding capacity



Wear Plates ..... **22 to 24**
Bronze-plated, self-lubricating wear surfaces for long-lasting results

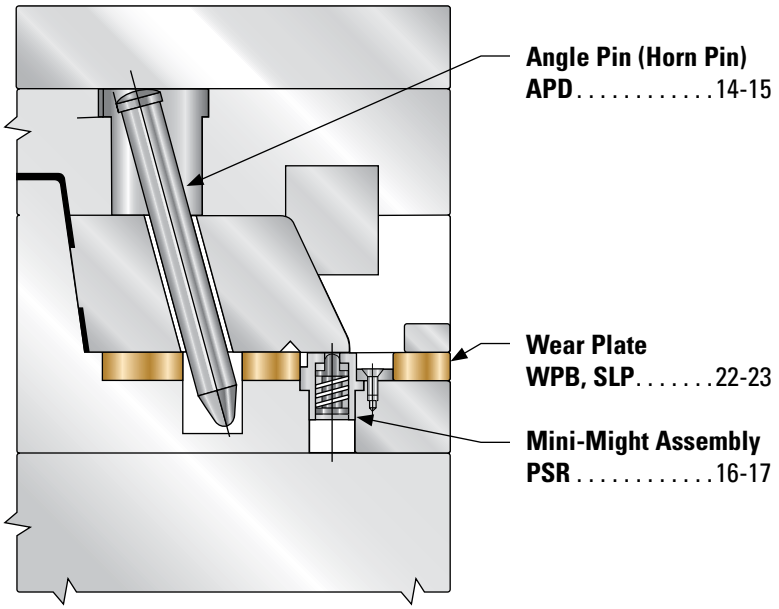


Gib Assemblies ..... **25 to 28**
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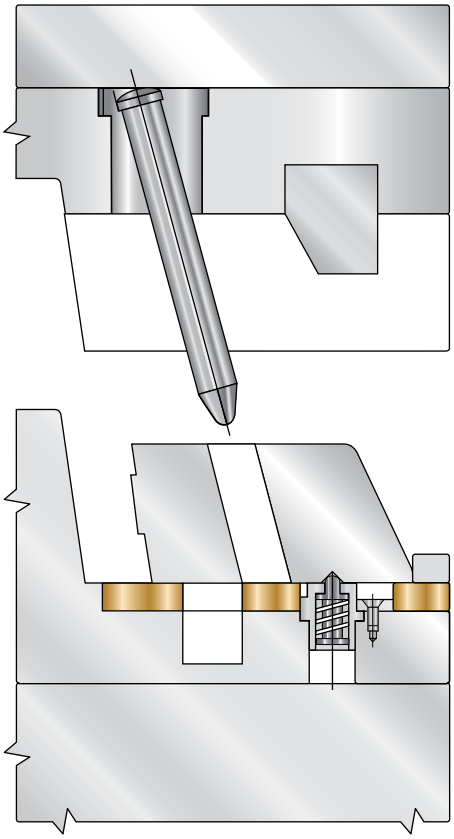
Online Price Guide

Go to www.dme.net/prices for the latest pricing guide.

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MOLD OPEN

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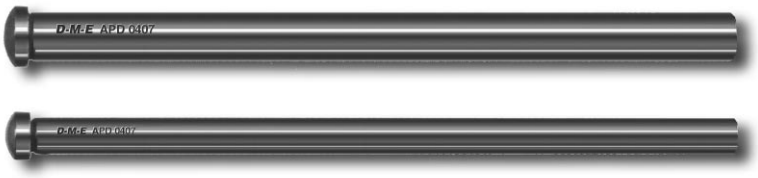
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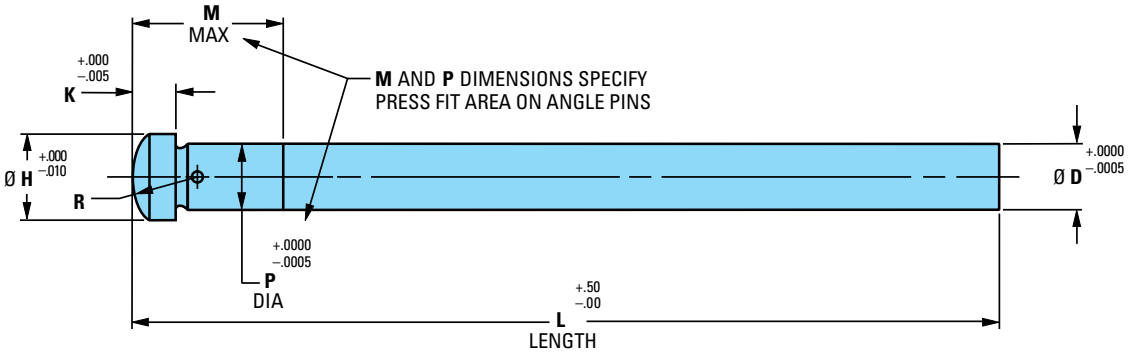
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Angle Pins



D-M-E Angle Pins are supplied with a pre-machined spherical radius on the head to eliminate angle grinding usually required on the pin head.



Angle Pins– APD

Material: H-13 Type Steel, 65-74 HRC Nitrided Surface, 30-35 HRC Core

ITEM NUMBER	Ø D	L LENGTH	M MAX	Ø H	K HD THK	Ø P	R SPH RAD
APD-0305	.3740	5.00	.87	.500	.250	.3765	.375
APD-0307		7.00	1.37				
APD-0405	.4990	5.00	.87	.625	.250	.5015	.500
APD-0407		7.00	1.37				
APD-0410		10.00	1.37				
APD-0505	.6240	5.00	.87	.750	.250	.6265	.625
APD-0507		7.00	1.37				
APD-0510		10.00	1.37				
APD-0607	.7490	7.00	1.37	.875	.312	.7515	.750
APD-0610		10.00	1.37				
APD-0614		14.00	1.37				
APD-0807	.9990	7.00	1.37	1.125	.312	1.0015	1.000
APD-0810		10.00	1.37				
APD-0814		14.00	1.37				

See D-M-E Standard Angle Pin Inserts, pre-machined for 10°, 15° or 20° angles.

Mold Machining and Installation Dimensions

ITEM NUMBER	Ø A*	B	C	Ø D
APD-0305 AND APD-0307	*.3765	10°	.256	.562
		15°	.264	
		20°	.275	
APD-0405 THRU APD-0410	*.5015	10°	.258	.688
		15°	.268	
		20°	.283	
APD-0505 THRU APD-0510	*.6265	10°	.260	.812
		15°	.273	
		20°	.291	
APD-0607 THRU APD-0614	*.7515	10°	.324	.938
		15°	.339	
		20°	.361	
APD-0807 THRU APD-0814	*1.0015	10°	.328	1.188
		15°	.348	
		20°	.377	

*Refer to Installation Note #1.

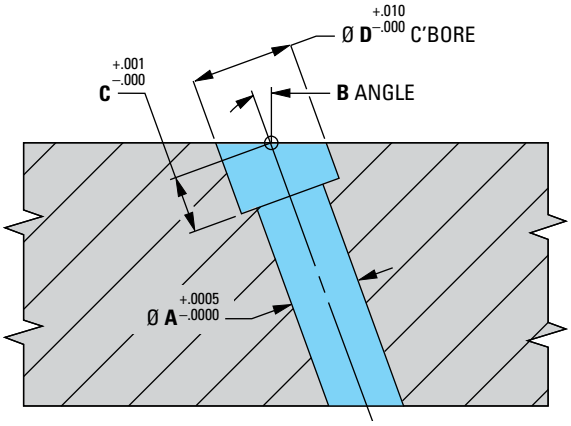
Installation Notes

*1. Ø **A** dimensions specified for hole will provide approximately .000 to .001 clearance with the Ø **P** or press fit area of the angle pins. Moldmaker to adjust Ø **A** hole dimensions to obtain specific fit required.

2. Cut angle pin to length as required to achieve desired travel on slide. Typically, a spherical radius or cone shape with a spherical radius is machined on end of angle pin (opposite the head).

3. Spherical radius on head is suitable for angles up to and including 20°.

Additional machining and installation data is available. Contact D-M-E.



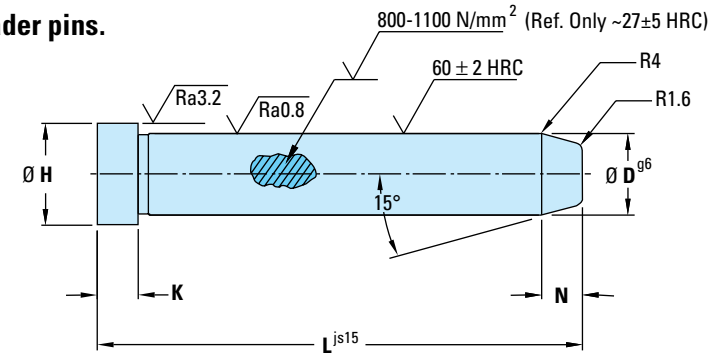
All items in stock.

HOW TO ORDER: Use Item Numbers in charts for ordering.

Metric Angle Pins (Guide Pins)

Can be used as angle (CAM) pins or as straight leader pins.





Material: DIN 1.7131 (AISI 5115 Type) Steel
Type: APD

Ø D	Ø H	K	N	L	ITEM NUMBER
10	12	3	5	40	APD 10-40
				60	APD 10-60
				80	APD 10-80
				100	APD 10-100
				110	APD 10-110
				120	APD 10-120
12	16	6	5	40	APD 12-40
				60	APD 12-60
				80	APD 12-80
				100	APD 12-100
				110	APD 12-110
				120	APD 12-120
				140	APD 12-140
				160	APD 12-160
14	18	8	6	40	APD 14-40
				60	APD 14-60
				80	APD 14-80
				100	APD 14-100
				110	APD 14-110
				120	APD 14-120
				140	APD 14-140
				160	APD 14-160
				180	APD 14-180
				200	APD 14-200
				210	APD 14-210
				220	APD 14-220
				230	APD 14-230
16	20	8	7	40	APD 16-40
				60	APD 16-60
				80	APD 16-80
				100	APD 16-100
				110	APD 16-110
				120	APD 16-120
				140	APD 16-140
				160	APD 16-160
				180	APD 16-180
				200	APD 16-200
				210	APD 16-210
				220	APD 16-220
				230	APD 16-230

Ø D	Ø H	K	N	L	ITEM NUMBER
18	22	8	8	40	APD 18-40
				60	APD 18-60
				80	APD 18-80
				100	APD 18-100
				110	APD 18-110
				120	APD 18-120
				140	APD 18-140
				160	APD 18-160
				180	APD 18-180
				200	APD 18-200
				210	APD 18-210
				220	APD 18-220
				230	APD 18-230
20	24	8	8	60	APD 20-60
				80	APD 20-80
				100	APD 20-100
				110	APD 20-110
				120	APD 20-120
				140	APD 20-140
				160	APD 20-160
				180	APD 20-180
				200	APD 20-200
				210	APD 20-210
				220	APD 20-220
				230	APD 20-230
22	26	15	8	80	APD 22-80
				100	APD 22-100
				110	APD 22-110
				120	APD 22-120
				140	APD 22-140
				160	APD 22-160
				180	APD 22-180
				200	APD 22-200
				210	APD 22-210
				220	APD 22-220
				230	APD 22-230
24	28	15	8	80	APD 24-80
				100	APD 24-100
				110	APD 24-110
				120	APD 24-120

Ø D	Ø H	K	N	L	ITEM NUMBER
24	28	15	8	140	APD 24-140
				160	APD 24-160
				180	APD 24-180
				200	APD 24-200
				210	APD 24-210
				220	APD 24-220
				230	APD 24-230
				240	APD 24-240
				270	APD 24-270
30	34	15	8	180	APD 30-180
				200	APD 30-200
				210	APD 30-210
				220	APD 30-220
				240	APD 30-240
				270	APD 30-270
				300	APD 30-300
34	38	15	8	100	APD 34-100
				120	APD 34-120
				170	APD 34-170
				190	APD 34-190
				210	APD 34-210
				250	APD 34-250
40	48	15	10	160	APD 40-160
				200	APD 40-200
				240	APD 40-240
				300	APD 40-300
42	48	15	10	160	APD 42-160
				200	APD 42-200
				240	APD 42-240
				300	APD 42-300
50	58	15	10	160	APD 50-160
				200	APD 50-200
				240	APD 50-240
				300	APD 50-300
				360	APD 50-360

All items in stock.

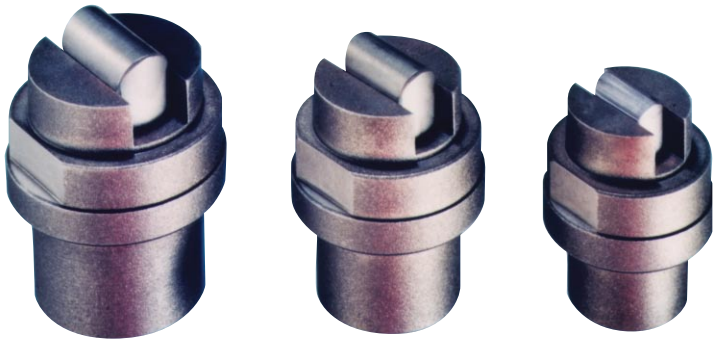
HOW TO ORDER: Use Item Numbers in charts for ordering.

Metric ISO Tolerances

NOMINAL SIZE (MM)		TOLERANCE (MM)											
OVER	TO	g6		h8		k6		m6		H5		H7	
0	3	-.002	-.008	0	-.014	+.006	0	+.008	+.002	+.004	0	+.010	0
3	6	-.004	-.012	0	-.018	+.009	+.001	+.012	+.004	+.005	0	+.012	0
6	10	-.005	-.014	0	-.022	+.010	+.001	+.015	+.006	+.006	0	+.015	0
10	18	-.006	-.017	0	-.027	+.012	+.001	+.018	+.007	+.008	0	+.018	0
18	30	-.007	-.020	0	-.033	+.015	+.002	+.021	+.008	+.009	0	+.021	0
30	50	-.009	-.025	0	-.039	+.018	+.002	+.025	+.009	+.011	0	+.025	0
50	80	-.010	-.029	0	-.046	+.021	+.002	+.030	+.011	+.013	0	+.030	0
80	120	-.012	-.034	0	-.054	+.025	+.003	+.035	+.013	+.015	0	+.035	0
120	180	-.014	-.039	0	-.063	+.028	+.003	+.040	+.015	+.018	0	+.040	0

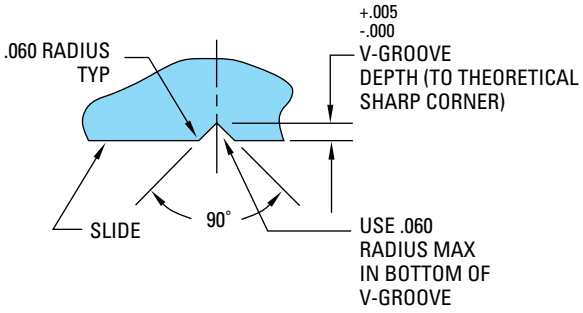
Mini-Might™ Slide Retainers

(U.S. Patent No. 5,397,226)



- Three sizes with retaining ratings for 10, 20 and 40 lbs.
- Small in size yet strong holding capacity
- Product design facilitates easy installation
- Slide can be removed without removing the slide retainer from the mold
- Self-contained design
- Line contact engagement

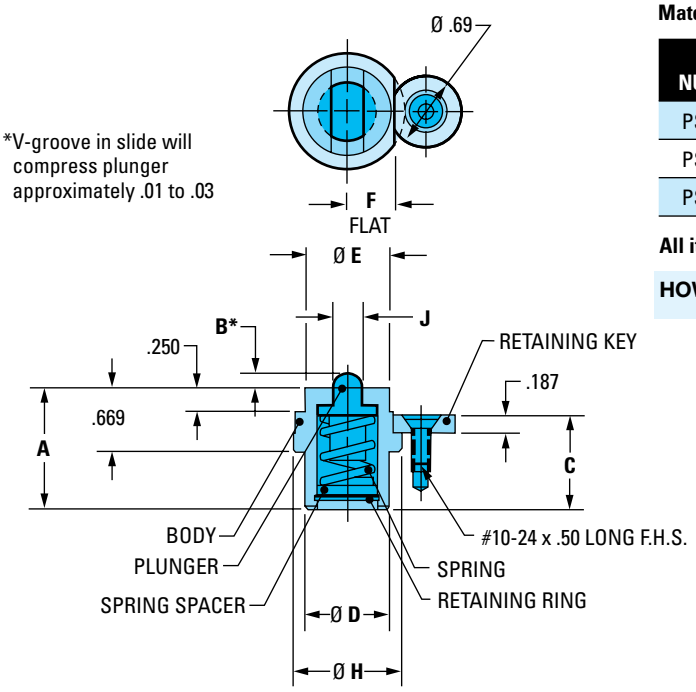
Installation Dimensions for Machining V-Groove in Slide



ITEM NUMBER	V-GROOVE DEPTH
PSR1000	.091
PSR2000	.153
PSR4000	.194

NOTE: See "Pocket Dimensions" for additional information.

Dimensional Information for Mini-Might™ Slide Retainers – PSR



Material: Hardened H-13 Steel (Body and Plunger)

ITEM NUMBER	A	B	C	Ø D	Ø E	F FLAT	Ø H	J PLUNGER
PSR1000	1.08	.072	.795	.620	.630	.375	.866	.188
PSR2000	1.32	.121	1.035	.740	.748	.420	.984	.250
PSR4000	1.26	.149	.975	.870	.866	.468	1.102	.312

All items in stock.

HOW TO ORDER: Use Item Numbers in charts for ordering.

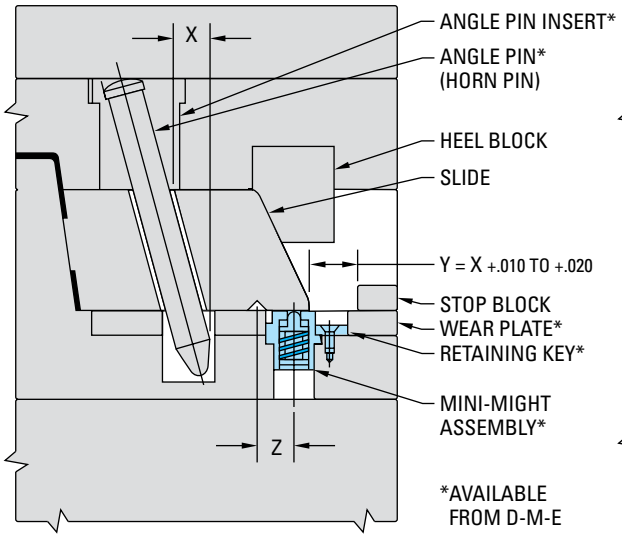
ITEM† NUMBER	MAXIMUM RECOMMENDED HOLDING WEIGHT
PSR1000	10 POUNDS
PSR2000	20 POUNDS
PSR4000	40 POUNDS

†Each includes: slide retainer assembly, retaining key and #10-24 x .50 long flat head screw. Replacement parts are special order.

NOTE: See "Pocket Dimensions" for additional information.

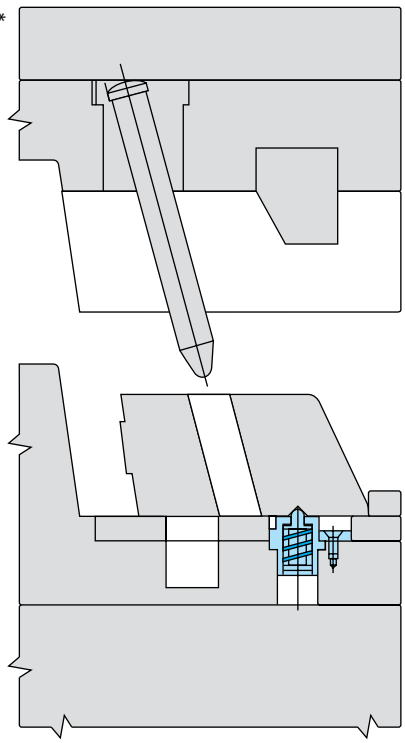
Mini-Might™ Slide Retainers

Typical Application



MOLD CLOSED

X = SLIDE TRAVEL CAUSED BY ANGLE PIN
Z = V-GROOVE LOCATION IN SLIDE FROM CENTERLINE OF SLIDE RETAINER
X = Z
Y = STOP BLOCK LOCATION



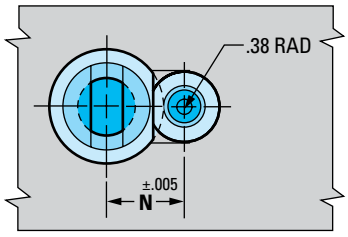
MOLD OPEN

NOTES:

1. Lubricate all metal-to-metal contact areas before first use and every 100,000 cycles (or more frequently as required). Use a good grade of moldmakers' non-melting type grease rated for the operating temperature to be encountered.
2. Replace compression spring every 1,000,000 cycles or as required.
3. **Do not operate at temperatures exceeding 250°F.**

Pocket Dimensions for Mini-Might™ Slide Retainers – PSR

NOTE: .500 thick wear plate can also be used to key and retain Mini-Might slide retainer instead of retaining key. Mold maker to machine to suit.

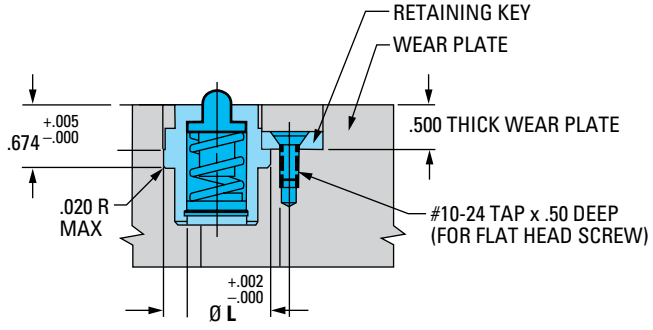


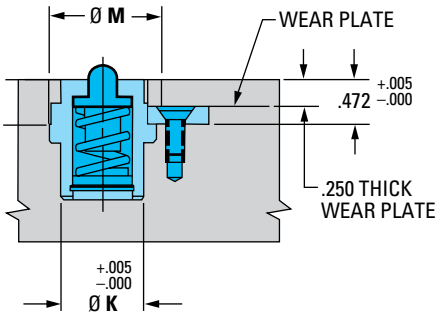
ITEM NUMBER	Ø K	Ø L	Ø M	N DIM
PSR1000	.625	.869	.94	.670
PSR2000	.750	.987	1.06	.715
PSR4000	.875	1.105	1.19	.763

All items in stock.

HOW TO ORDER:
Use Item Numbers in charts for ordering.

NOTE: Use .028 +.000 −.005 thick spacer under retaining key when mold has been machined for .500 thick wear plate. Mold maker to machine to suit.





SmartLock® Slide Retainer and Limit Switch

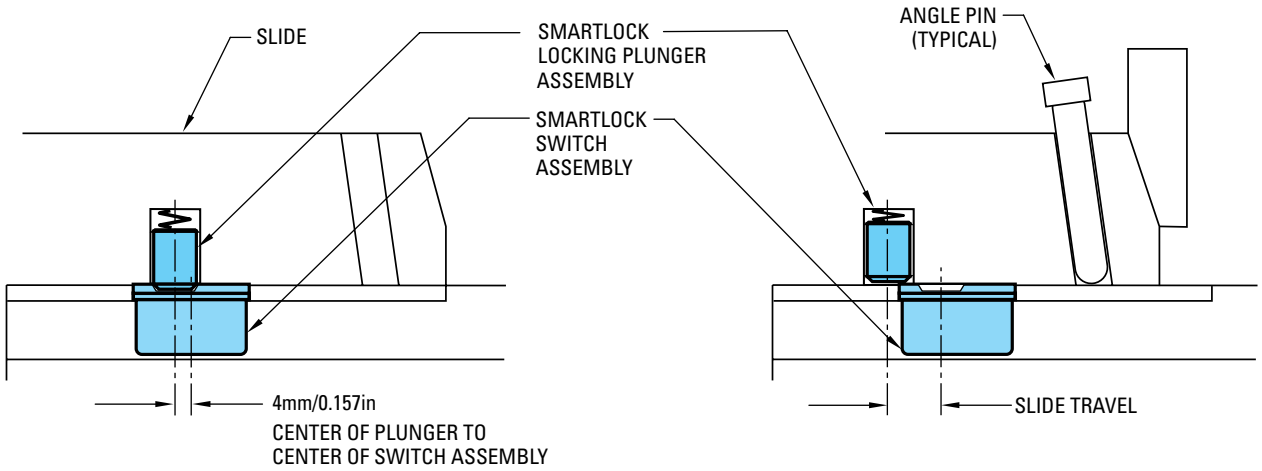
(U.S. Patent No. 6,126,429)



The SmartLock® slide retainer and limit switch is designed for injection molders to provide switching and a slide detent in one unique package. The SmartLock locking function prevents premature slide movement during molded part ejection while the SPDT switch is simultaneously actuated.

The SmartLock slide retainer and limit switch has been tested for reliability over 10 million cycles without failure. Two or more switches may be used for larger molds, or molds with multiple slides. Increased safety and prevention of mold damage result when the SmartLock slide lock and limit switch is installed in a mold.

- Prevents damage caused by premature slide movement
- 17 to 27 pounds holding force – adjustable for optimum operation
- 175°F (79.4°C) standard temperature rating enables use for most molding applications
- Quality tested over 10 million cycles to provide long, dependable service
- Flush-mounted switch is shielded from damage by mounting inside a protective milled pocket
- Stripped and tinned 6 ft. wire leads make the switch ready to install without modification
- Mounting screws and wire clips supplied for neat and easy installation



Slide Locked **Slide Unlocked**

SmartLock Slide Retainer and Limit Switch – SLS 2220

NOTE: Please contact D-M-E for high-temperature applications.

SPECIFICATIONS		MATERIALS	
BREAK-AWAY FORCE	17 TO 27 LBS. (USER ADJUSTABLE)	SWITCH ASSEMBLY BODY	FIBERGLASS-REINFORCED NYLON
ELECTRICAL	250VAC/28VDC 4 AMPS INDUCTIVE 5 AMPS RESISTIVE REQUIRES 3-PIN CONNECTOR WITH MINIMUM RATINGS LISTED ABOVE	LOCKING PLATE	HARDENED STEEL
		LOCKING PLUNGER ASSEMBLY	HARDENED STEEL
OPERATING TEMPERATURE	175°F MAX. (79.4°C MAX.)	WIRE LEADS	22GA STRANDED, 3 CONDUCTOR, SHIELDED CABLE, 6 FT. (1.8M) LONG, ENDS STRIPPED AND TINNED
SWITCHING	SPDT		

ITEM NUMBER
SLS 2220

All items in stock.

HOW TO ORDER:
Use Item Numbers in charts for ordering.

SmartLock® Slide Retainer and Limit Switch

The SmartLock switch is designed for use in very low power mold protection control circuits. It is not intended to switch heavy loads in power applications.



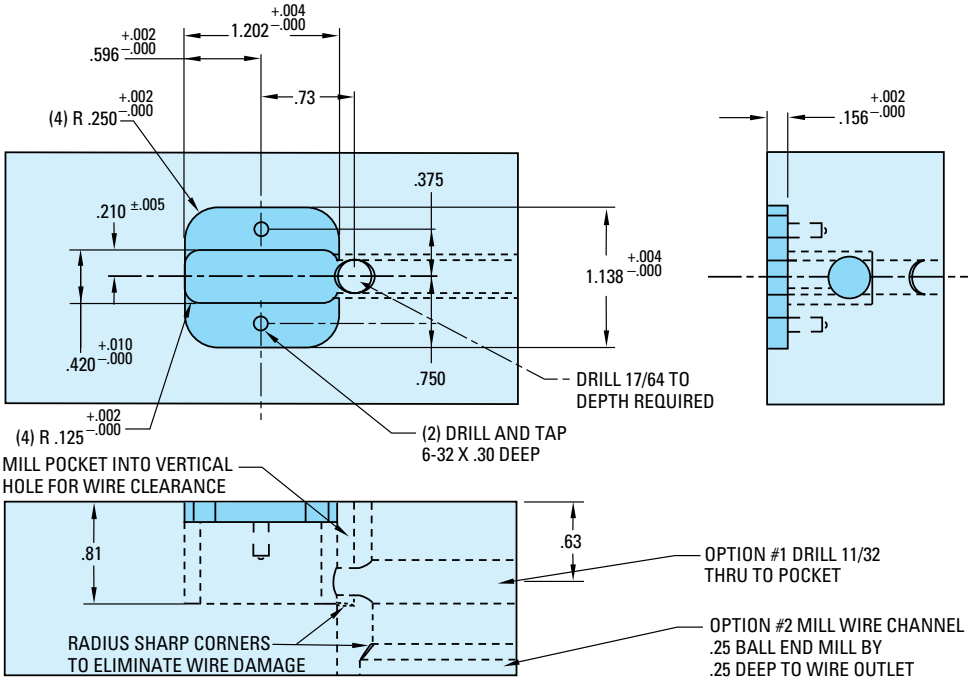
SmartLock includes 2 wire clamps.

Parts Included in SmartLock Slide Retainer and Limit Switch – SLS 2220

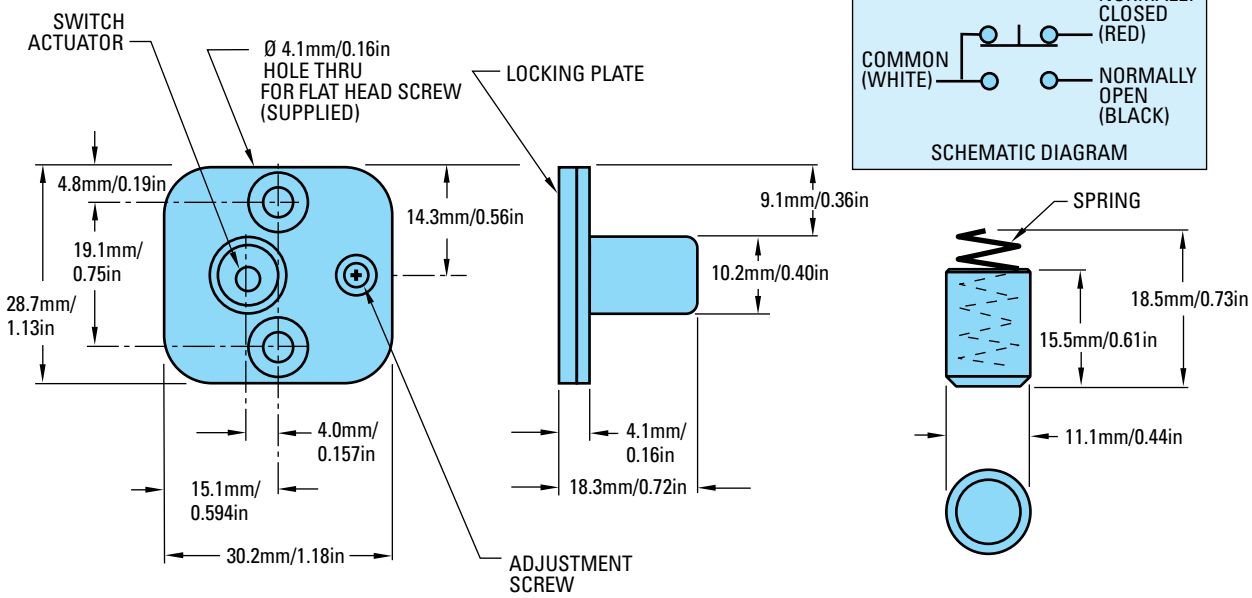
DESCRIPTION	QTY	DESCRIPTION	QTY
SWITCH ASSEMBLY	1	WIRE CLAMPS (.5" X .82" X .15" WITH .213" MOUNTING HOLE)	2
SWITCH MOUNTING SCREWS (#6-32 X 3/8" FLAT HEAD)	2	WIRE CLAMP SCREWS (#10-24 X 1/2" BUTTON HEAD)	2
LOCKING PLUNGER ASSEMBLY	1	INSTRUCTION SHEET	1

Rated Current vs. Steel Temperature – SLS 2220

AMPS	°F	°C
5.0	85	29.4
4.0	120	49.0
3.0	155	68.3
2.0	175	79.4



Suggested machining and wire routing.



Switch Assembly

Locking Plunger Assembly

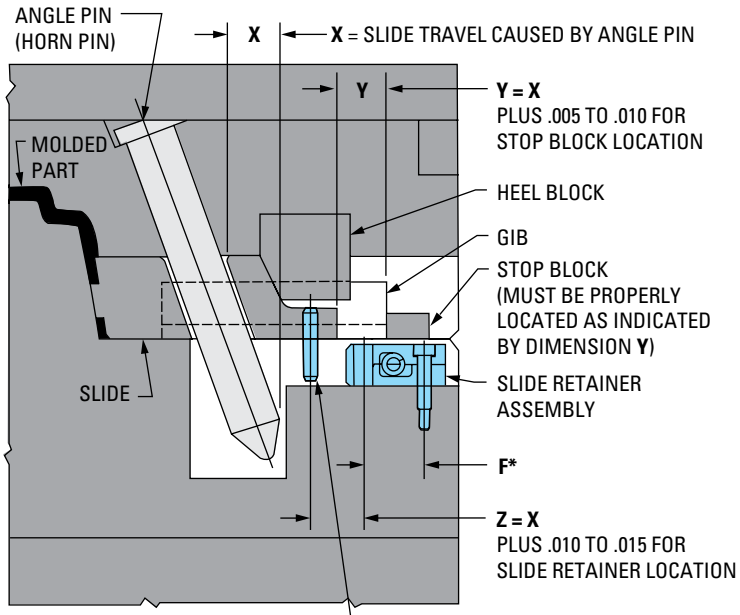
Slide Retainer Assemblies

The D-M-E Slide Retainer provides a compact and economical means of slide retention, which makes obsolete the cumbersome external spring or hydraulic methods. Its simple and positive operation makes it equally suitable for new tooling design or retrofitting existing molds. Available in three sizes with increasing weight-holding capacities, the Slide Retainers can be used individually or in multiples for larger or heavier slides.

Generally mounted behind and below the slide (see drawing at right), the D-M-E Slide Retainer is a compact unit that can be entirely contained within the mold. Interference with machine tie bars or safety gates is no longer a problem. (It can even be installed completely underneath the slide if space is limited.)

As the mold opens, the dowel pin installed in the slide positively locks into the retainer until disengaged by the mold's closing action. The custom-designed spring placed crosswise in the retainer maintains the force required to keep the dowel pin in the jaws when the mold is open.

The Slide Retainer is designed with a generous lead-in at the jaw opening so the dowel pin will enter the jaws even if there is a slight misalignment between the retainer and the pin.



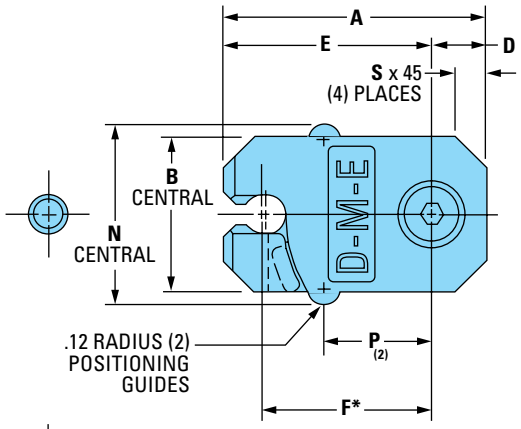
NOTE:
To prevent the dowel pin from contacting and applying pressure against the back of the retainer jaw (which could cause bending or shearing of the dowel pin or hold-down shoulder screw) the installation dimensions shown on these pages are recommended.

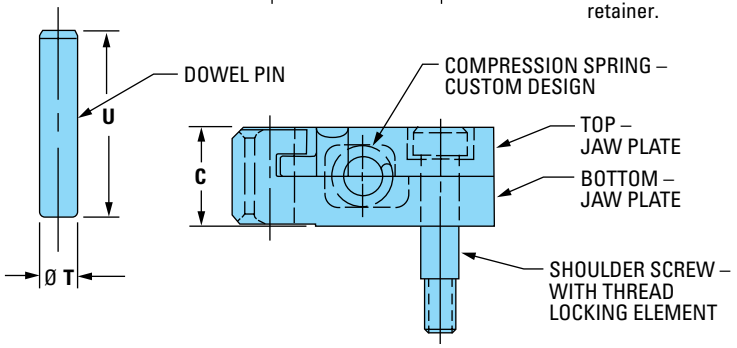


U.S. Patent
No. 4,961,702

Slide Retainer Assemblies – PSL

Material: Investment Cast from 8620 steel
Hardness: Case-Hardened 58-62 HRC





ITEM NUMBER	A	B	C	D	E	F*	N	P	S	T	U
PSL0001	1.50	.76	.63	.27	1.23	.980	.94	.61	.14	.250	1.25
PSL0002	2.13	1.26	.79	.44	1.69	1.375	1.44	.88	.25	.312	1.50
PSL0003	3.38	1.76	1.18	.75	2.63	2.125	1.94	1.57	.38	.375	2.25

* Dimension F, the distance from dowel pin centerline at end of slide travel and centerline of shoulder screw, is important. Overtravel of dowel pin beyond clearance provided at back of jaw area could result in damage to retainer.

ITEM† NUMBER	MAXIMUM RECOMMENDED HOLDING WEIGHT
PSL0001	22 POUNDS
PSL0002	44 POUNDS
PSL0003	88 POUNDS

† Includes top and bottom jaw plate, compression spring, shoulder screw with thread locking element and dowel pin.

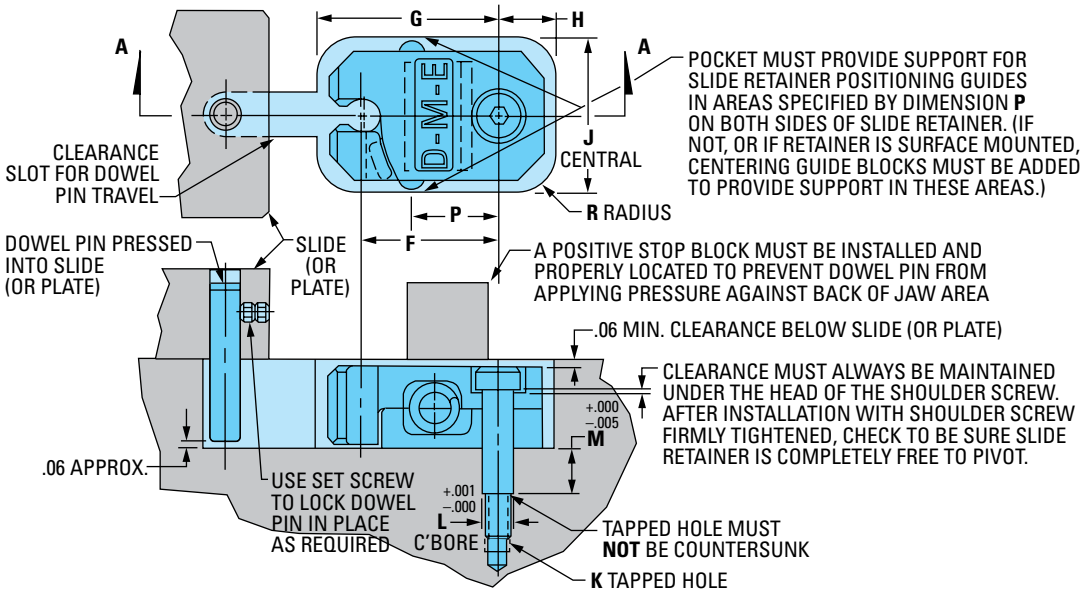
All items in stock.

HOW TO ORDER:
Use Item Numbers in charts for ordering.

Slide Retainer Installation Guidelines

Pocket Dimensions/Installation Guidelines

(Slide Retention Application Shown)

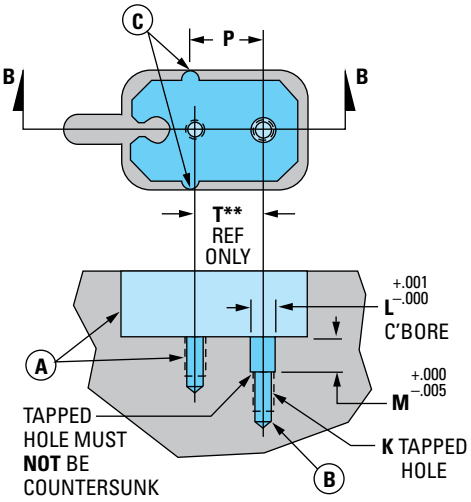


Section A-A

ITEM NUMBER	F	P	G	H	J	R RAD	K TAPPED HOLE AND TAP DEPTH BELOW C'BORE	L C'BORE	M C'BORE DEPTH
PSL0001	.980	.61	1.35	.39	1.00	.31	#10-24 x .50 DEEP	.249	.310
PSL0002	1.375	.88	1.81	.56	1.50	.37	1/4-20 x .56 DEEP	.3115	.430
PSL0003	2.125	1.57	2.75	.88	2.00	.50	5/16-18 x .62 DEEP	.374	.580

NOTES:

1. Dimension F, the distance from dowel pin centerline at end of slide travel and centerline of shoulder screw, is important. Overtravel of dowel pin beyond clearance provided at back of jaw area could result in damage to retainer.
2. Lubricate all metal-to-metal contact areas before first use and every 100,000 cycles (or more frequently as required). Use a good grade of moldmakers' non-melting type grease rated for the operating temperature to be encountered.
3. **Do not operate at temperatures exceeding 225°F.**
4. If two or more retainers are used, mount them uniformly to provide a balanced operation. Retainer sizes should not be mixed in a multiple retainer application.
5. Surface to which retainer is mounted should not prevent retainer from pivoting freely.
6. Replace retainer assembly and/or dowel pin when total wear in jaw area or on dowel pin exceeds .010.
7. Replace compression spring every 1,000,000 cycles or as required, following procedures packaged with retainer.



Section B-B

NOTES:

A. Existing pocket and tapped hole for previous slide retainer (MRT-22, 44 or 88).
B. Drilling, tapping and counterboring for shoulder screw at new location is required per drawing and chart dimensions.
C. Existing pocket must provide support for retainer positioning guides in areas designated by dimension P or centering guide blocks must be added.

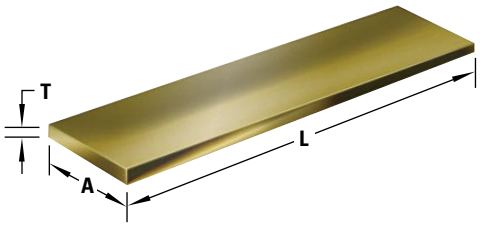
Retrofit Data for Molds with Previous Design Slide Retainers

ITEM NUMBER	K TAPPED HOLE AND TAP DEPTH BELOW C'BORE	L C'BORE	M C'BORE DEPTH	P	T** REF ONLY	FOR REPLACEMENT OF SLIDE RETAINER ITEM NUMBER
PSL0001	#10-24 x .50 DEEP	.249	.310	.61	.620	MRT-22
PSL0002	1/4-20 x .56 DEEP	.3115	.430	.88	.875	MRT-44
PSL0003	5/16-18 x .62 DEEP	.374	.580	1.57	1.325	MRT-88

Dimension **T is for reference only. See charts and application drawings to determine specific installation dimensions.

HOW TO ORDER: Use Item Numbers in charts for ordering. **All items in stock.**

Bronze-Plated Wear Plates



D-M-E Bronze-Plated Wear Plates provide a long-lasting wear surface for Bronze-Plated molds requiring slides, cams or flat surfaces where frictional wear is a factor.

- Bronze plating of .008 to .010 thickness applied to the top surface of flat steel plates
- Close tolerance on thickness of +.000/-.002
- Easy to machine, saving time and tools
- No pre-drilled holes – allows flexibility in mounting patterns

Bronze-Plated Wear Plates – WPB

A WIDTH +.000 -.060	T THICKNESS 1/8 – 3/8									
	1/8	WEIGHT LBS. PER INCH*	3/16	WEIGHT LBS. PER INCH*	1/4	WEIGHT LBS. PER INCH*	5/16	WEIGHT LBS. PER INCH*	3/8	WEIGHT LBS. PER INCH*
1.00	WPB-0205	0.035	WPB-0305	0.053	WPB-0405	0.071	WPB-0505	0.088	WPB-0605	0.106
1.25	WPB-0206	0.044	WPB-0306	0.066	WPB-0406	0.089	WPB-0506	0.111	WPB-0606	0.133
1.50	WPB-0207	0.053	WPB-0307	0.080	WPB-0407	0.106	WPB-0507	0.133	WPB-0607	0.160
1.75	WPB-0209	0.062	WPB-0309	0.093	WPB-0409	0.124	WPB-0509	0.155	WPB-0609	0.186
2.00	WPB-0210	0.071	WPB-0310	0.106	WPB-0410	0.142	WPB-0510	0.177	WPB-0610	0.213
2.50	WPB-0212	0.089	WPB-0312	0.133	WPB-0412	0.177	WPB-0512	0.221	WPB-0612	0.266
3.00	WPB-0215	0.106	WPB-0315	0.159	WPB-0415	0.213	WPB-0515	0.265	WPB-0615	0.319
3.50	WPB-0217	0.124	WPB-0317	0.186	WPB-0417	0.248	WPB-0517	0.310	WPB-0617	0.372
4.00	WPB-0220	0.142	WPB-0320	0.212	WPB-0420	0.284	WPB-0520	0.354	WPB-0620	0.425
4.50	WPB-0222	0.160	WPB-0322	0.239	WPB-0422	0.319	WPB-0522	0.398	WPB-0622	0.479
5.00	WPB-0225	0.177	WPB-0325	0.265	WPB-0425	0.355	WPB-0525	0.442	WPB-0625	0.532
6.00	WPB-0230	0.213	WPB-0330	0.318	WPB-0430	0.425	WPB-0530	0.531	WPB-0630	0.638
8.00			WPB-0340	0.424	WPB-0440	0.567	WPB-0540	0.708	WPB-0640	0.851
10.00					WPB-0450	0.709	WPB-0550	0.885	WPB-0650	1.064
12.00					WPB-0460	0.851	WPB-0560	1.062	WPB-0660	1.276

A WIDTH +.000 -.060	T THICKNESS 1/2 – 1"							
	1/2	WEIGHT LBS. PER INCH*	5/8	WEIGHT LBS. PER INCH*	3/4	WEIGHT LBS. PER INCH*	1"	WEIGHT LBS. PER INCH*
1.00	WPB-0805	0.142	WPB-1005	0.177	WPB-1205	0.213	WPB-1605	0.284
1.25	WPB-0806	0.177	WPB-1006	0.222	WPB-1206	0.266	WPB-1606	0.355
1.50	WPB-0807	0.213	WPB-1007	0.266	WPB-1207	0.319	WPB-1607	0.425
1.75	WPB-0809	0.248	WPB-1009	0.310	WPB-1209	0.372	WPB-1609	0.496
2.00	WPB-0810	0.284	WPB-1010	0.355	WPB-1210	0.425	WPB-1610	0.567
2.50	WPB-0812	0.355	WPB-1012	0.443	WPB-1212	0.532	WPB-1612	0.709
3.00	WPB-0815	0.425	WPB-1015	0.532	WPB-1215	0.638	WPB-1615	0.851
3.50	WPB-0817	0.496	WPB-1017	0.620	WPB-1217	0.744	WPB-1617	0.993
4.00	WPB-0820	0.567	WPB-1020	0.709	WPB-1220	0.851	WPB-1620	1.134
4.50	WPB-0822	0.638	WPB-1022	0.798	WPB-1222	0.957	WPB-1622	1.276
5.00	WPB-0825	0.709	WPB-1025	0.886	WPB-1225	1.064	WPB-1625	1.418
6.00	WPB-0830	0.851	WPB-1030	1.064	WPB-1230	1.276	WPB-1630	1.702
8.00	WPB-0840	1.134	WPB-1040	1.418	WPB-1240	1.702	WPB-1640	2.269
10.00	WPB-0850	1.418	WPB-1050	1.773	WPB-1250	2.127	WPB-1650	2.836
12.00	WPB-0860	1.702	WPB-1060	2.127	WPB-1260	2.552	WPB-1660	3.403

*To calculate weight, multiply the weight per inch by the number of inches (length) desired.

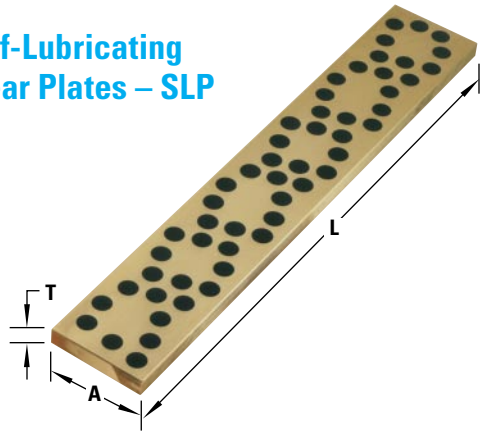
NOTE:
Wear Plate lengths are available in one-inch increments, with a minimum order length of 6" required. Full bar length is 96". Cut length is provided with an additional 1/16 to 1/8 inch in length for machining. Minimum cut length is 3 inches.

All items in stock.

WHEN ORDERING, PLEASE SPECIFY:
1. Item Numbers from charts
2. Plate length
3. Number of pieces
4. Method of shipment

Self-Lubricating Wear Plates

Self-Lubricating Wear Plates – SLP



D-M-E Self-Lubricating Wear Plates provide a long-lasting wear surface for molds requiring slides, cams or flat surfaces where frictional wear is a factor.

- Low coefficient of friction
- No pre-drilled holes – allows flexibility in mounting patterns
- Standard plug pattern designed for maximum surface lubrication
- Close tolerance to ease installation

Material: Aluminum Bronze with Graphite Plugs **Hardness:** 179 Bhn

T THICKNESS 1/4 (.250 ±.001)		
ITEM NUMBER	A WIDTH	L LENGTH
SLP0404	1.00	4.00
SLP0405	1.00	5.00
SLP0406	1.00	6.00
SLP0408	1.00	8.00
SLP0410	1.00	10.00
SLP0412	1.00	12.00
SLP0414	1.50	4.00
SLP0415	1.50	5.00
SLP0416	1.50	6.00
SLP0418	1.50	8.00
SLP0420	1.50	10.00
SLP0422	1.50	12.00
SLP0424	2.00	4.00
SLP0425	2.00	5.00
SLP0426	2.00	6.00
SLP0428	2.00	8.00
SLP0430	2.00	10.00
SLP0432	2.00	12.00
SLP0434	2.50	4.00
SLP0435	2.50	5.00
SLP0436	2.50	6.00
SLP0438	2.50	8.00
SLP0440	2.50	10.00
SLP0442	2.50	12.00
SLP0444	3.00	4.00
SLP0445	3.00	5.00
SLP0446	3.00	6.00
SLP0448	3.00	8.00
SLP0450	3.00	10.00
SLP0452	3.00	12.00
SLP0454	4.00	4.00
SLP0455	4.00	5.00
SLP0456	4.00	6.00
SLP0458	4.00	8.00
SLP0460	4.00	10.00
SLP0462	4.00	12.00

T THICKNESS 3/8 (.375 ±.001)		
ITEM NUMBER	A WIDTH	L LENGTH
SLP0504	1.00	4.00
SLP0505	1.00	5.00
SLP0506	1.00	6.00
SLP0508	1.00	8.00
SLP0510	1.00	10.00
SLP0512	1.00	12.00
SLP0514	1.50	4.00
SLP0515	1.50	5.00
SLP0516	1.50	6.00
SLP0518	1.50	8.00
SLP0520	1.50	10.00
SLP0522	1.50	12.00
SLP0524	2.00	4.00
SLP0525	2.00	5.00
SLP0526	2.00	6.00
SLP0528	2.00	8.00
SLP0530	2.00	10.00
SLP0532	2.00	12.00
SLP0534	2.50	4.00
SLP0535	2.50	5.00
SLP0536	2.50	6.00
SLP0538	2.50	8.00
SLP0540	2.50	10.00
SLP0542	2.50	12.00
SLP0544	3.00	4.00
SLP0545	3.00	5.00
SLP0546	3.00	6.00
SLP0548	3.00	8.00
SLP0550	3.00	10.00
SLP0552	3.00	12.00
SLP0554	4.00	4.00
SLP0555	4.00	5.00
SLP0556	4.00	6.00
SLP0558	4.00	8.00
SLP0560	4.00	10.00
SLP0562	4.00	12.00

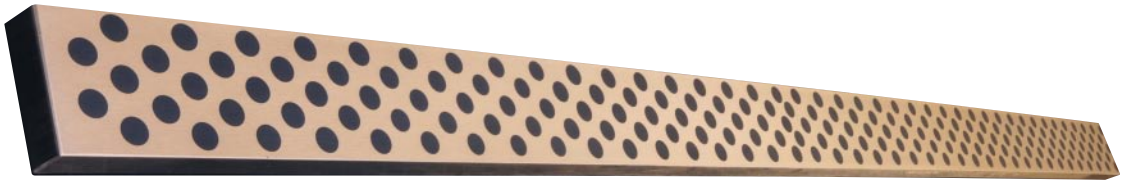
T THICKNESS 1/2 (.500 ±.001)		
ITEM NUMBER	A WIDTH	L LENGTH
SLP0603	1.50	3.00
SLP0604	1.50	4.00
SLP0605	1.50	5.00
SLP0606	1.50	6.00
SLP0608	1.50	8.00
SLP0610	1.50	10.00
SLP0612	1.50	12.00
SLP0613	2.00	3.00
SLP0614	2.00	4.00
SLP0615	2.00	5.00
SLP0616	2.00	6.00
SLP0618	2.00	8.00
SLP0620	2.00	10.00
SLP0622	2.00	12.00
SLP0623	2.50	3.00
SLP0624	2.50	4.00
SLP0625	2.50	5.00
SLP0626	2.50	6.00
SLP0628	2.50	8.00
SLP0630	2.50	10.00
SLP0632	2.50	12.00
SLP0633	3.00	3.00
SLP0634	3.00	4.00
SLP0635	3.00	5.00
SLP0636	3.00	6.00
SLP0638	3.00	8.00
SLP0640	3.00	10.00
SLP0642	3.00	12.00
SLP0654	4.00	4.00
SLP0655	4.00	5.00
SLP0656	4.00	6.00
SLP0658	4.00	8.00
SLP0660	4.00	10.00
SLP0662	4.00	12.00

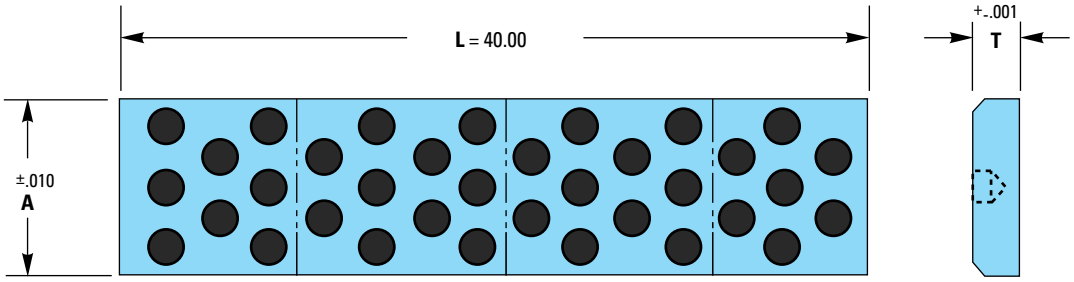
T THICKNESS 5/8 (.625 ±.001)		
ITEM NUMBER	A WIDTH	L LENGTH
SLP0703	1.50	3.00
SLP0704	1.50	4.00
SLP0705	1.50	5.00
SLP0706	1.50	6.00
SLP0708	1.50	8.00
SLP0710	1.50	10.00
SLP0712	1.50	12.00
SLP0723	2.00	3.00
SLP0724	2.00	4.00
SLP0725	2.00	5.00
SLP0726	2.00	6.00
SLP0728	2.00	8.00
SLP0730	2.00	10.00
SLP0732	2.00	12.00
SLP0733	2.50	3.00
SLP0734	2.50	4.00
SLP0735	2.50	5.00
SLP0736	2.50	6.00
SLP0738	2.50	8.00
SLP0740	2.50	10.00
SLP0742	2.50	12.00
SLP0743	3.00	3.00
SLP0744	3.00	4.00
SLP0745	3.00	5.00
SLP0746	3.00	6.00
SLP0748	3.00	8.00
SLP0750	3.00	10.00
SLP0752	3.00	12.00
SLP0754	4.00	4.00
SLP0755	4.00	5.00
SLP0756	4.00	6.00
SLP0758	4.00	8.00
SLP0760	4.00	10.00
SLP0762	4.00	12.00

All items in stock.

HOW TO ORDER: Use Item Numbers in charts for ordering.

Self-Lubricating Wear Ways





NOTE: All D-M-E Self-Lubricating Wear Ways are supplied in 40" lengths.

Self-Lubricating Wear Ways – SLW

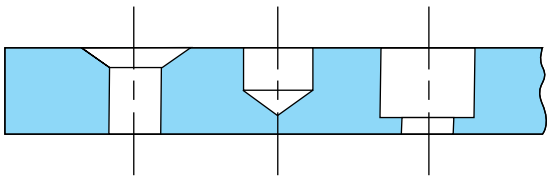
- Well-suited for custom applications
- Standard plug pattern facilitates cutting to a variety of lengths
- No pre-drilled holes – allows flexibility in mounting patterns

D-M-E Self-Lubricating Wear Ways are supplied in 40-inch lengths. The plug pattern is consistent throughout the surface of the Wear Way, so that the Wear Way may be cut to a variety of lengths. Mounting holes are not supplied so that they may be drilled to suit custom applications.

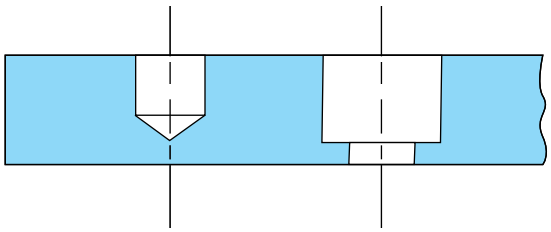
Typical mounting procedure is to machine out the plug location to use for mounting screws. (See "Suggestions for Fastening" below.)

Suggestions for Fastening

Typical mounting procedure is to use plug location for screw location.



NOTE: For 3/8" thicknesses, the suggested screw is a 1/4 flathead screw (or 1/4 socket head screw max).



NOTE: For 1/2", 5/8", 3/4" thicknesses, the suggested screw is a 3/8 socket head screw max.

Material: Aluminum Bronze with Graphite Plugs
Hardness: 179 Bhn

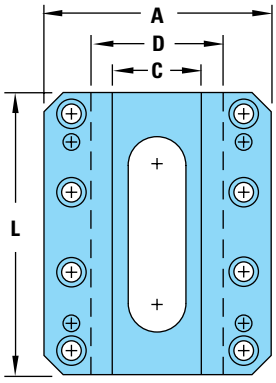
ITEM NUMBER	T THICKNESS	A WIDTH
SLW0515	.375	1.50
SLW0520	.375	2.00
SLW0525	.375	2.50
SLW0530	.375	3.00
SLW0615	.500	1.50
SLW0620	.500	2.00
SLW0625	.500	2.50
SLW0630	.500	3.00
SLW0640	.500	4.00
SLW0720	.625	2.00
SLW0730	.625	3.00
SLW0740	.625	4.00
SLW0820	.750	2.00
SLW0830	.750	3.00
SLW0840	.750	4.00
SLW0850	.750	5.00

All items in stock.

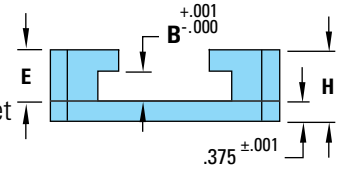
WHEN ORDERING, PLEASE SPECIFY:
1. Item Numbers from charts
2. Quantity
3. Method of shipment

Self-Lubricating Gib Assemblies | Base Plates for Assemblies





- Standardized assembly
- Wide variety of applications
- Easily installed in pre-machined pocket
- Reduces design and assembly time

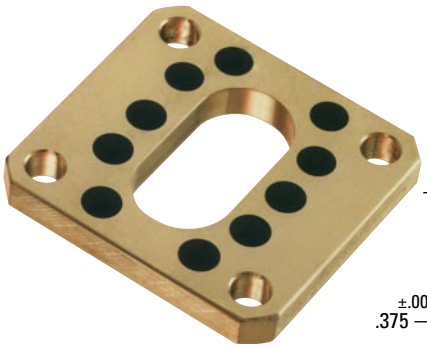


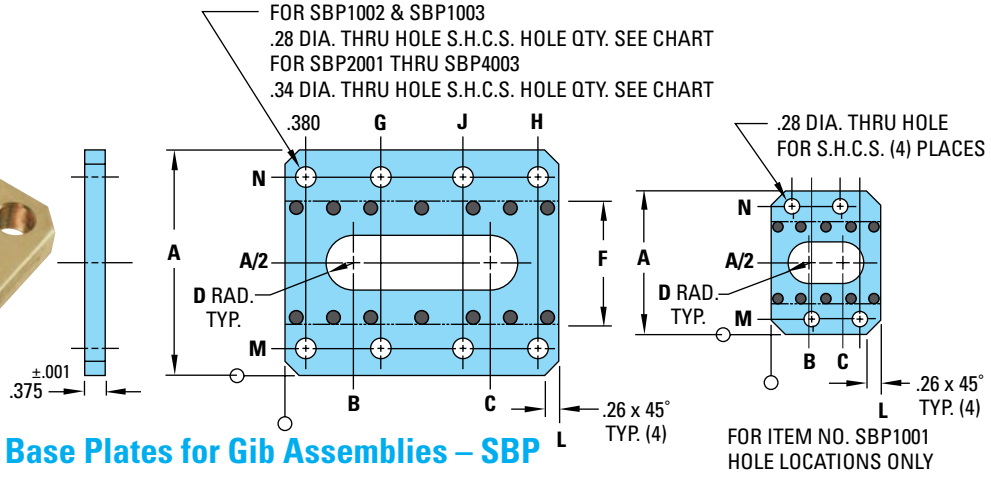
The Gib Assembly includes three components: two L-Gibs and a Base Plate. The L-Gibs are provided with screw holes and are spot-drilled for dowels; the Base Plate includes thru holes to allow for easy assembly.

Self-Lubricating Gib Assemblies – SLA

Material: Aluminum Bronze with Graphite Plugs
Hardness: 179 Bhn

ITEM NUMBER	H	A	L	B	C	D	E
SLA1001	1.12	2.62	2.00	.312	1.12	1.50	.75
SLA1002	1.12	2.62	3.00	.312	1.12	1.50	.75
SLA1003	1.12	2.62	4.00	.312	1.12	1.50	.75
SLA2001	1.12	3.12	3.00	.375	1.12	1.62	.75
SLA2002	1.12	3.12	4.00	.375	1.12	1.62	.75
SLA2003	1.12	3.12	5.00	.375	1.12	1.62	.75
SLA3001	1.25	4.12	3.00	.500	1.62	2.36	.88
SLA3002	1.25	4.12	4.00	.500	1.62	2.36	.88
SLA3003	1.25	4.12	5.00	.500	1.62	2.36	.88
SLA3004	1.25	4.12	6.00	.500	1.62	2.36	.88
SLA4001	1.62	4.62	4.00	.750	1.62	2.62	1.25
SLA4002	1.62	4.62	5.00	.750	1.62	2.62	1.25
SLA4003	1.62	4.62	6.00	.750	1.62	2.62	1.25





Base Plates for Gib Assemblies – SBP

Material: Aluminum Bronze with Graphite Plugs **Hardness:** 179 Bhn

ITEM NUMBER	A	L	B	C	D	F	G	H	J	M	N	MOUNTING HOLE QTY
SBP1001	2.620	2.00	.69	1.31	.38	1.50	.740	1.62	1.260	.280	2.340	4
SBP1002	2.620	3.00	.88	2.12	.38	1.50	—	2.620	—	.280	2.340	4
SBP1003	2.620	4.00	1.00	3.00	.38	1.50	2.000	3.620	—	.280	2.340	6
SBP2001	3.120	3.00	.88	2.12	.38	1.68	—	2.620	—	.370	2.750	4
SBP2002	3.120	4.00	1.00	3.00	.38	1.68	2.000	3.620	—	.370	2.750	6
SBP2003	3.120	5.00	1.12	3.88	.38	1.68	2.500	4.620	—	.370	2.750	6
SBP3001	4.120	3.00	1.00	2.00	.50	2.25	—	2.620	—	.495	3.625	4
SBP3002	4.120	4.00	1.12	2.88	.50	2.25	2.000	3.620	—	.495	3.625	6
SBP3003	4.120	5.00	1.25	3.75	.50	2.25	2.500	4.620	—	.495	3.625	6
SBP3004	4.120	6.00	1.50	4.50	.50	2.25	2.000	5.620	4.000	.495	3.625	8
SBP4001	4.620	4.00	1.12	2.88	.50	2.41	2.000	3.620	—	.560	4.060	6
SBP4002	4.620	5.00	1.25	3.75	.50	2.41	2.500	4.620	—	.560	4.060	6
SBP4003	4.620	6.00	1.50	4.50	.50	2.41	2.000	5.620	4.000	.560	4.060	8

NOTES:
1. Tolerances not noted are ±.010, Hole locations are ±.005.
2. Graphic plug pattern varies by product size.

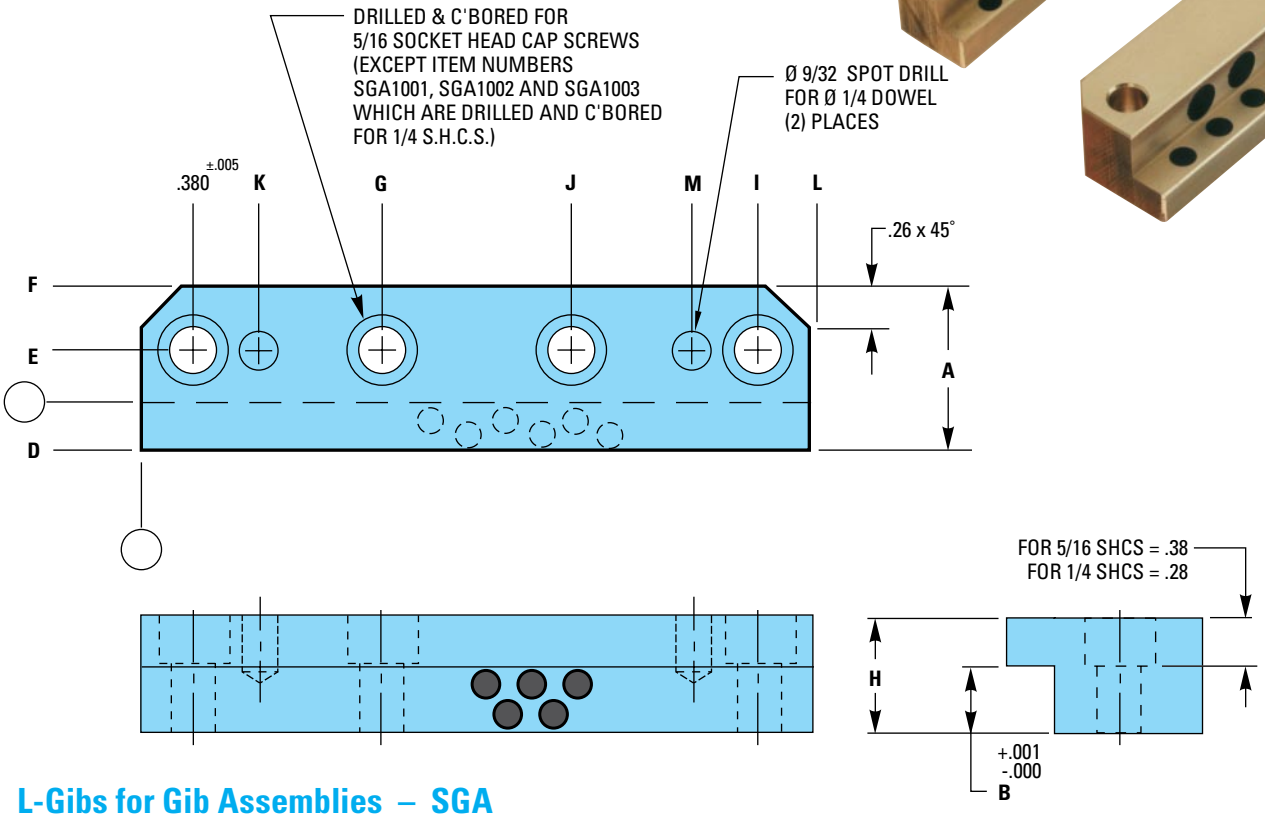
All items in stock.

WHEN ORDERING, PLEASE SPECIFY:
1. Item Numbers from charts
2. Quantity
3. Method of shipment

L-Gibs for Gib Assemblies



NOTES:
1. Tolerances not noted are ±.010, Hole locations are ±.005.
2. Graphic plug pattern varies by product size.



L-Gibs for Gib Assemblies – SGA

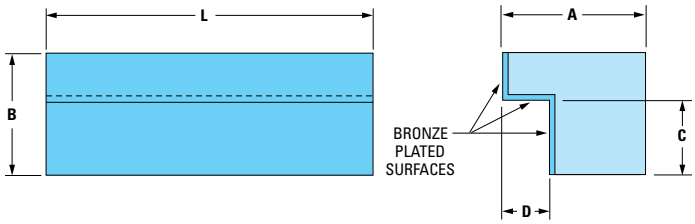
Material: Aluminum Bronze with Graphite Plugs **Hardness:** 179 Bhn

ITEM NUMBER	H	A	L	B	D	E	F	G	I	J	K	M	MOUNTING HOLE QTY
SGA1001	.75	.750	2.00	.312	.188	.28	.56	—	—	1.26	.79	1.74	2
SGA1002	.75	.750	3.00	.312	.188	.28	.56	—	2.620	—	.88	2.12	2
SGA1003	.75	.750	4.00	.312	.188	.28	.56	2.00	3.620	—	.88	3.12	3
SGA2001	.75	1.000	3.00	.375	.250	.38	.75	—	2.620	—	.88	2.12	2
SGA2002	.75	1.000	4.00	.375	.250	.38	.75	2.00	3.620	—	.88	3.12	3
SGA2003	.75	1.000	5.00	.375	.250	.38	.75	2.50	4.620	—	.88	4.12	3
SGA3001	.88	1.250	3.00	.500	.375	.38	.88	—	2.620	—	.88	2.12	2
SGA3002	.88	1.250	4.00	.500	.375	.38	.88	2.00	3.620	—	.88	3.12	3
SGA3003	.88	1.250	5.00	.500	.375	.38	.88	2.50	4.620	—	.88	4.12	3
SGA3004	.88	1.250	6.00	.500	.375	.38	.88	2.00	5.620	4.000	.88	5.12	4
SGA4001	1.25	1.500	4.00	.750	.500	.44	1.00	2.00	3.620	—	.88	3.12	3
SGA4002	1.25	1.500	5.00	.750	.500	.44	1.00	2.50	4.620	—	.88	4.12	3
SGA4003	1.25	1.500	6.00	.750	.500	.44	1.00	2.00	5.620	4.000	.88	5.12	4

WHEN ORDERING, PLEASE SPECIFY:
1. Item Numbers from charts
2. Quantity
3. Method of shipment

All items in stock.

Bronze-Plated L-Gibs | Self-Lubricating L-Gibs

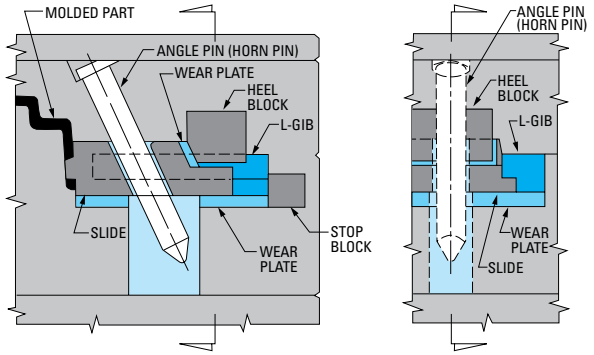




Bronze-Plated L-Gibs – LGB

ITEM NUMBER	A WIDTH	B HEIGHT	C +.001 −.000	D +.001 −.000	L LENGTH	APPROX WEIGHT (LBS)
LGB-1001	.750	.485	.3125	.1875	8.75	0.75
LGB-2001	1.000	.610	.375	.250	10.00	1.50
LGB-3001	1.250	.860	.500	.375	12.50	3.20
LGB-4001	1.500	1.235	.750	.500	15.00	6.30
LGB-5001	2.000	1.470	.875	.625	24.00	16.25
LGB-6001	2.500	1.970	1.250	.750	32.00	36.25
LGB-7001	3.000	2.470	1.500	1.000	48.00	80.50

Typical Applications of L-Gibs and Wear Plates



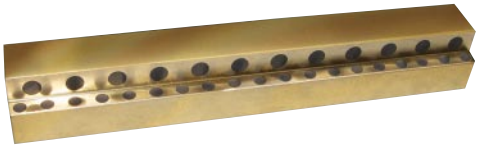
Self-Lubricating L-Gibs – SLG

Material: Aluminum Bronze with Graphite Plugs
Hardness: 179 Bhn

ITEM NUMBER	H	A	L	B	C	D
SLG1001	.75	.75	5.25	.312	.187	.56
SLG1002	.75	.75	7.00	.312	.187	.56
SLG1003	.75	.75	8.75	.312	.187	.56
SLG2001	.75	1.00	6.00	.375	.250	.75
SLG2002	.75	1.00	8.00	.375	.250	.75
SLG2003	.75	1.00	10.00	.375	.250	.75
SLG3001	.88	1.25	6.00	.500	.375	.88
SLG3002	.88	1.25	7.50	.500	.375	.88
SLG3003	.88	1.25	10.00	.500	.375	.88
SLG3004	.88	1.25	12.50	.500	.375	.88
SLG4001	1.25	1.50	6.00	.750	.500	1.00
SLG4002	1.25	1.50	9.00	.750	.500	1.00
SLG4003	1.25	1.50	12.00	.750	.500	1.00
SLG4004	1.25	1.50	15.00	.750	.500	1.00
SLG5001	1.50	2.00	8.00	.875	.625	1.37
SLG5002	1.50	2.00	12.00	.875	.625	1.37
SLG5003	1.50	2.00	16.00	.875	.625	1.37
SLG6001	2.00	2.50	12.00	1.25	.750	1.75
SLG6002	2.00	2.50	18.00	1.25	.750	1.75
SLG6003	2.00	2.50	24.00	1.25	.750	1.75
SLG7001	2.50	3.00	12.00	1.50	1.000	2.00
SLG7002	2.50	3.00	18.00	1.50	1.000	2.00
SLG7003	2.50	3.00	24.00	1.50	1.000	2.00

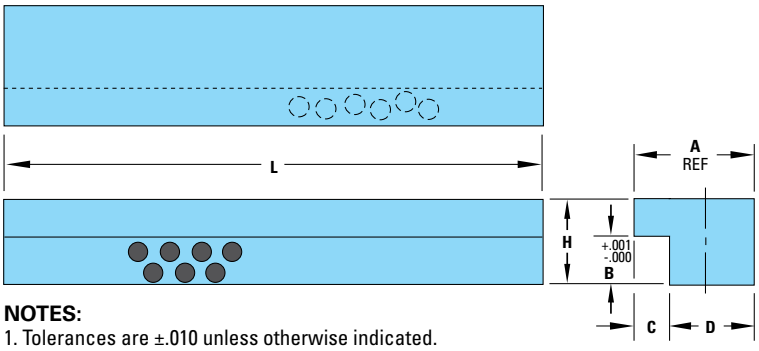
All items in stock.

- Low coefficient of friction
- No pre-drilled holes – allows flexibility in mounting patterns
- Close tolerance



D-M-E Self-Lubricating L-Gibs provide a long-lasting wear surface for high-production molds using slides and cams. L-Gibs are easy to machine and can be shaped to any configuration, requiring no special tools.

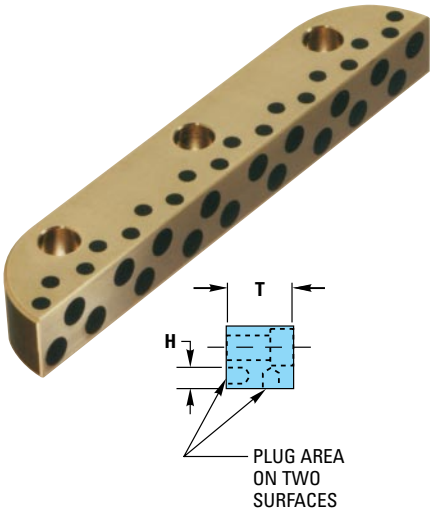
They are supplied with no pre-drilled holes, providing the designer with flexibility in mounting patterns. This allows the designer to work around water lines and other components in the mold.

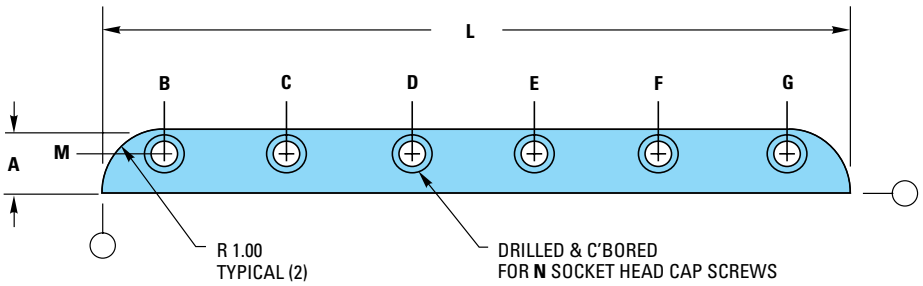


NOTES:
1. Tolerances are ±.010 unless otherwise indicated.
2. Graphic plug pattern varies by product size.

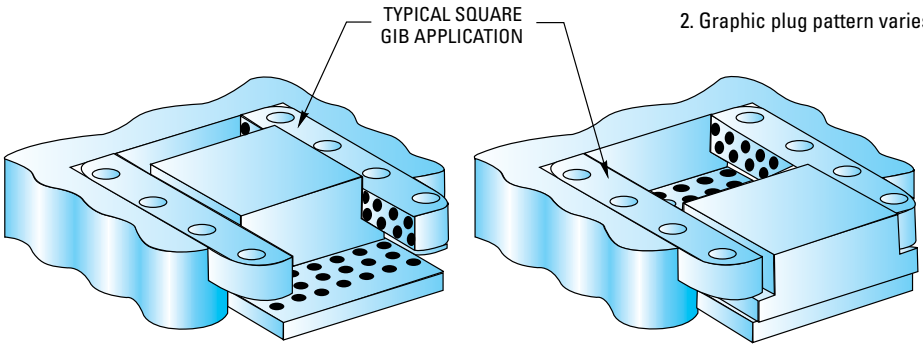
WHEN ORDERING, PLEASE SPECIFY:
1. Item Numbers from charts
2. Quantity
3. Method of shipment

Self-Lubricating Square Gibs





NOTES:
1. Tolerances are ±.010 unless otherwise indicated.
2. Graphic plug pattern varies by product size.



Self-Lubricating Square Gibs – SSG

Material: Aluminum Bronze with Graphite Plugs **Hardness:** 179 Bhn

ITEM NUMBER	T	A	L	B	C	D	E	F	G	H	M	N
SSG1001	.750	1.00	4.00	1.00	3.00	—	—	—	—	.39	.625	3/8
SSG1002	.750	1.00	5.00	1.00	2.50	4.00	—	—	—	.39	.625	3/8
SSG1003	.750	1.00	6.00	1.00	3.00	5.00	—	—	—	.39	.625	3/8
SSG1004	.750	1.00	8.00	1.00	3.00	5.00	7.00	—	—	.39	.625	3/8
SSG1005	.750	1.00	10.00	1.00	3.00	5.00	7.00	9.00	—	.39	.625	3/8
SSG1006	.750	1.00	12.00	1.00	3.00	5.00	7.00	9.00	11.00	.39	.625	3/8
SSG2001	1.00	1.25	4.00	1.00	3.00	—	—	—	—	.62	.875	3/8
SSG2002	1.00	1.25	5.00	1.00	2.50	4.00	—	—	—	.62	.875	3/8
SSG2003	1.00	1.25	6.00	1.00	3.00	5.00	—	—	—	.62	.875	3/8
SSG2004	1.00	1.25	8.00	1.00	3.00	5.00	7.00	—	—	.62	.875	3/8
SSG2005	1.00	1.25	10.00	1.00	3.00	5.00	7.00	9.00	—	.62	.875	3/8
SSG2006	1.00	1.25	12.00	1.00	3.00	5.00	7.00	8.00	11.00	.62	.875	3/8
SSG3001	1.50	2.00	8.00	1.50	4.00	6.50	—	—	—	.86	1.25	5/8
SSG3002	1.50	2.00	10.00	1.25	3.75	6.25	8.75	—	—	.86	1.25	5/8
SSG3003	1.50	2.00	12.00	1.50	4.50	7.50	10.50	—	—	.86	1.25	5/8

WHEN ORDERING, PLEASE SPECIFY:
1. Item Numbers from charts
2. Quantity
3. Method of shipment

All items in stock.

D-M-E Molding Undercuts

Solutions that maximize design and production efficiency



Molding Undercuts

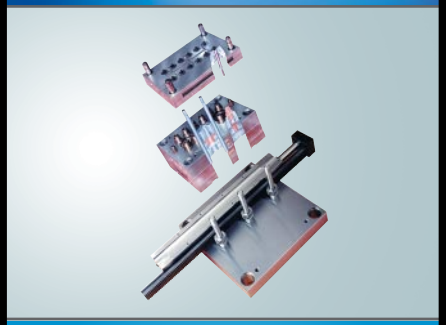
D-M-E
Every step of the way

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VectorForm Lifter Systems.....32 to 42

Taking lifter systems to the next level



Hydraulic Unscrewing Device.....43 to 52

Standardized system for molding internal threads



Multiform Collapsible Cores .....53 to 57

Efficiently mold plastic parts requiring internal threads, undercuts, protrusions or cut-outs



Collapsible Cores .....58 to 59

Helps produce plastic parts with internal protrusions, dimples and uninterrupted threads



Expandable Cavity Systems .....60 to 70

Proven technology for molding external threads, grooves and undercuts

Online Price Guide

Go to www.dme.net/prices for the latest pricing guide.

D-M-E VectorForm Lifter Systems

TAKING LIFTER SYSTEMS

TO THE NEXT LEVEL



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ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Overview

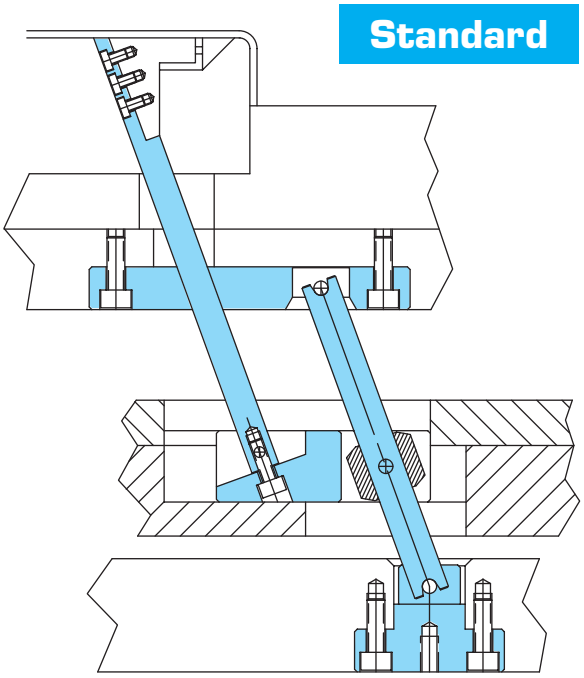
VectorForm Lifter Advantages

- 30˚+ Angle – Half the stroke for the same undercut
- Simple plate machining
- Easy installation
- May be ganged
  – Multiple systems may be “ganged” to lift a large lifter core
  – A single system can lift multiple lifter cores
- Accelerate or decelerate the motion of the lifter core relative to the ejector plate
- Cooling may be added
- Design flexibility is improved

View a VectorForm Lifter animation at www.dme.net/vectorform

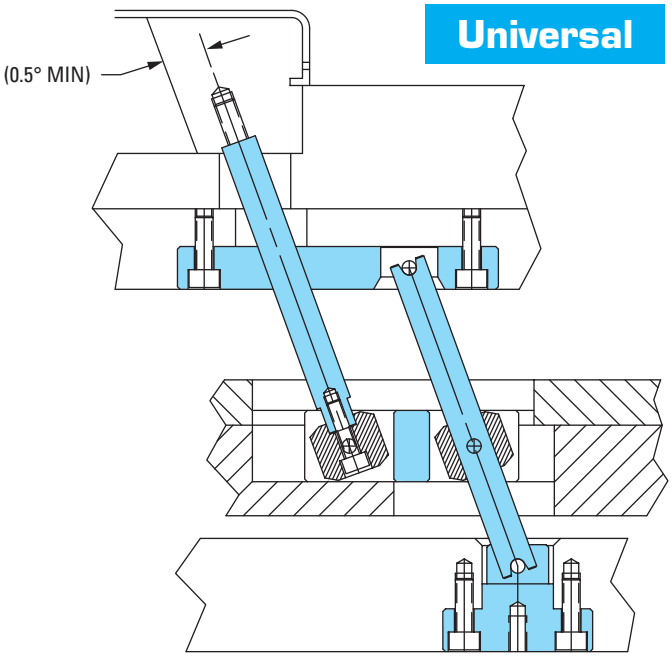
VectorForm Lifter Systems Design and Assembly Guide available upon request or at www.dme.net/vectorform

Standard



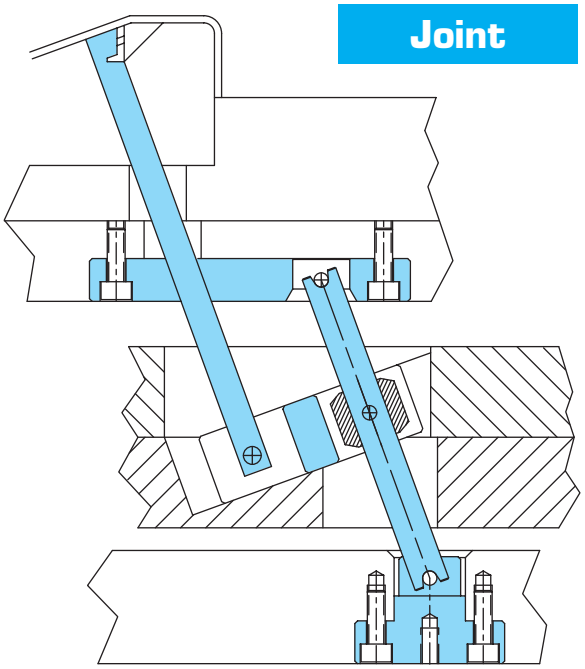
General installation. Standard Slide Base in typical ejector plate installation shown.

Universal



Universal Slide Base shown in typical ejector plate installation.

Joint

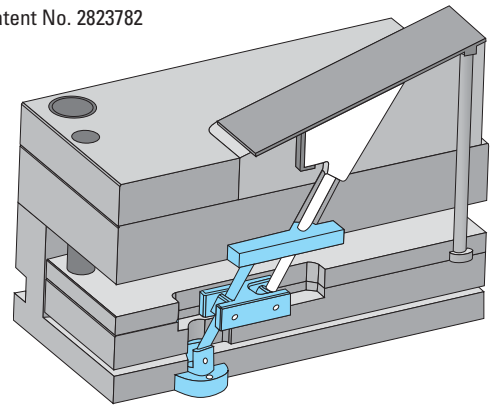


Angled Slide Base installation may be used to accelerate or decelerate the action of the VectorForm Lifter System. In this example, the VectorForm Lifter System movement is decelerated relative to the movement of the ejector plate.

Overview

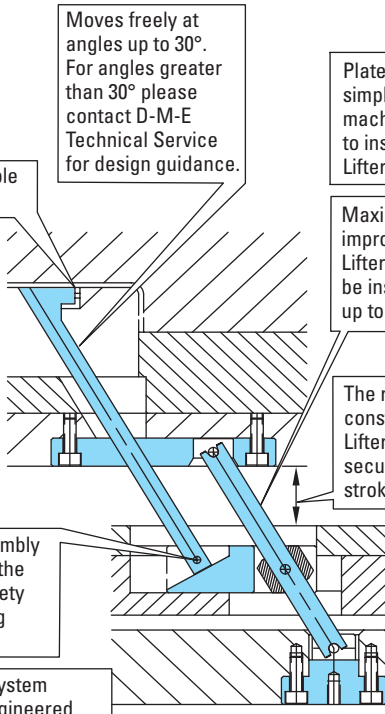
VectorForm Lifter System Features & Benefits

Patent No. 2823782



D-M-E Supplied Customer Supplied

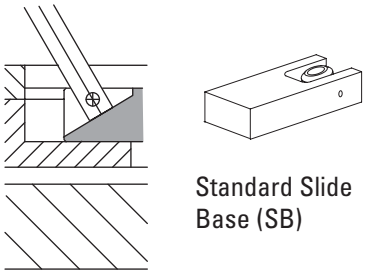
VectorForm Lifter Systems maximize design flexibility and offer off-the-shelf installation into most lifter applications.



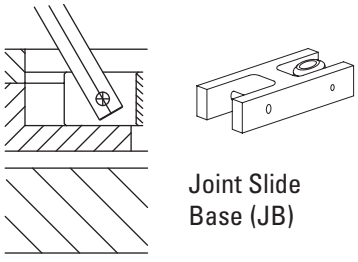
VectorForm Slide Bases

VectorForm Lifter Systems offer three types of slide bases to meet the needs of your applications.

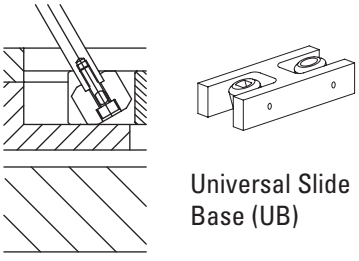
- The **Standard Slide Base** (SB) is the most flexible and the most economical slide base. The Standard Slide Base can be custom machined by the mold builder to meet specialized application requirements. The Standard Slide Base is also the most robust slide base with respect to loads and forces.
- The **Joint Slide Base** (JB) permits the lifter core assembly to be retained with a single pin.
- The **Universal Slide Base** (UB) is similar to the Joint Slide Base, although the single pin is replaced by a universal joint which offers greater flexibility than the Joint Slide Base (JB) while still requiring only one screw to retain the lifter core assembly.



Standard Slide Base (SB)



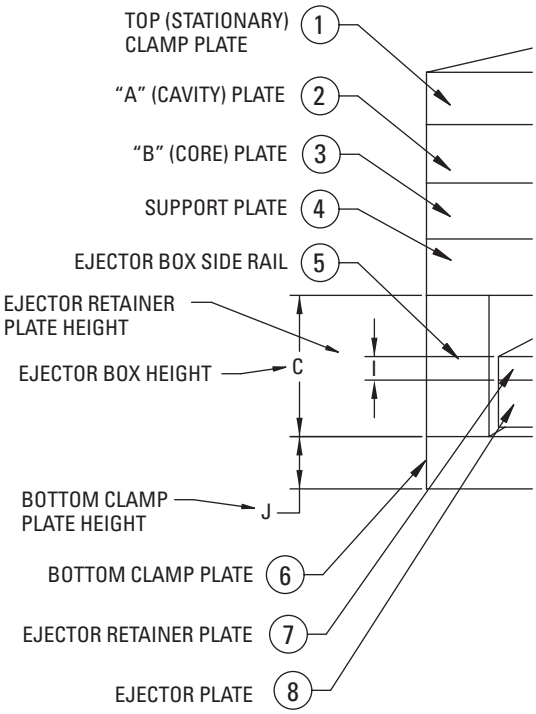
Joint Slide Base (JB)



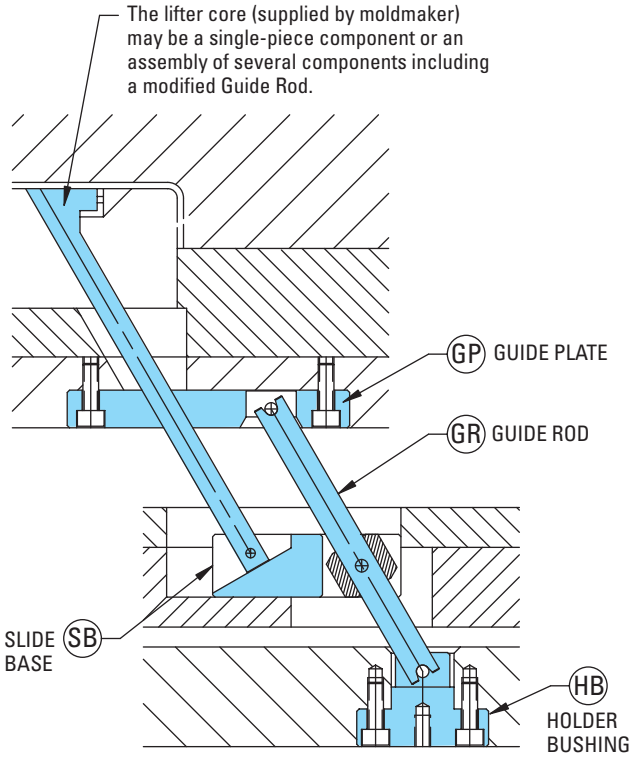
Universal Slide Base (UB)

Overview

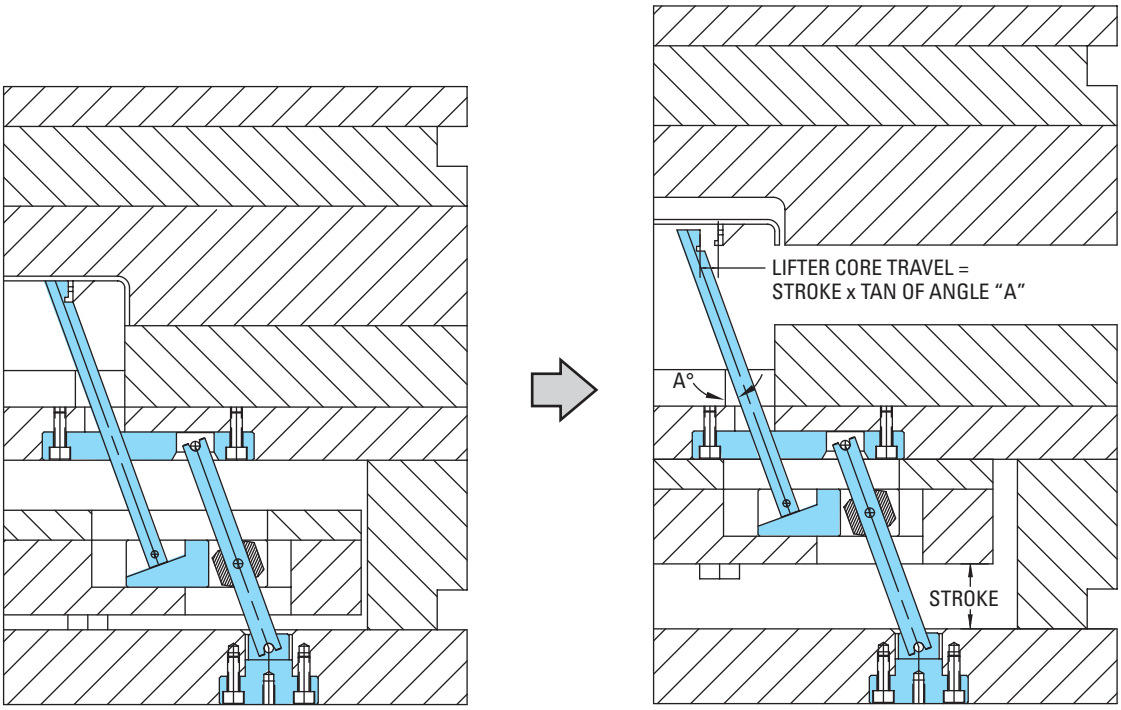
Mold Base Overview



VectorForm Lifter Overview

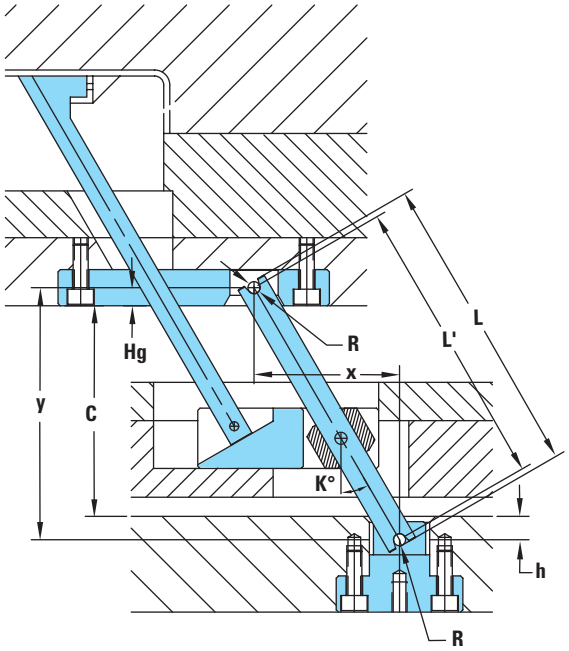


VectorForm Lifter Operating Sequence

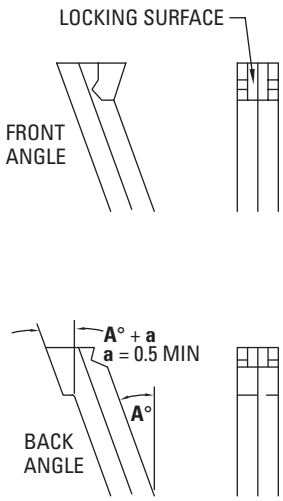


Design Guidelines

LENGTH OF GUIDE ROD:
y = C + Hg + h
L' = y/cosK° L = L' + 2R



Locking Angles



1. General Installation

- It is recommended that the VectorForm Lifter System be installed as shown above.
- For each given VectorForm set, all components MUST be of the same size. However, separate sets of different sizes may be installed in the same mold.
- Actuation of VectorForm Lifter Systems can be accelerated or decelerated by an inclined sliding surface on the ejector plate and ejector retainer plate.

2. Angles

- The VectorForm Lifter System may be used with angles ranging from 5° (minimum) to 30° (maximum).
- Deep undercuts in the molded part can be obtained by using a larger angle in the lifter core and by increasing the ejector plate stroke.

3. Lifter Core Guidance

- The lifter core must have sufficient guidance in the tool. For multiple lifter cores installed in tandem in the tool, additional guidance in the core inserts is recommended.
- If resistance in actuation is great, an additional Guide Plate may be placed directly below the core insert.

4. Guided Ejection

- Guided ejection is recommended for all designs.

5. Fit and Finish

- Standard component dimensions and Rockwell hardness are provided in the component specifications section of this brochure. Should the standard components need to be modified, additional performance can be obtained by treating after finish machining (TiN coating, flash-chrome, etc.). Component installations can be fitted to suit.
- Ensure a loose fit on the Holder Bushing and Guide Plate installation. Ensure a precise fit between the lifter core and the Guide Plate. The Holder Bushing will automatically align prior to bolting the bushing to the clamp plate.
- Lubrication is not generally required nor recommended. If lubrication is used, it should be low-viscosity.

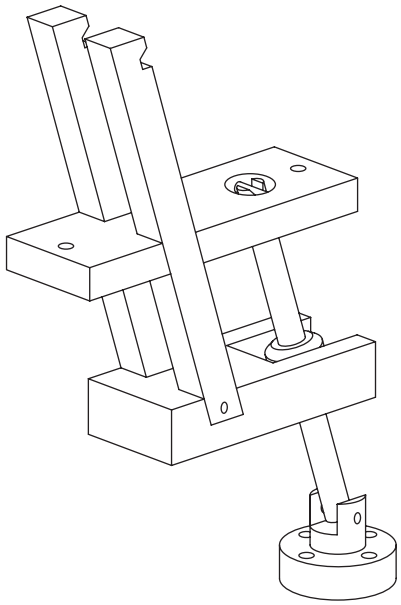
6. Locking Angles/Component Back-Up

- Locking angles may be designed to provide a locking surface to counter against molding pressure.
- A block construction using a square lifter core can also allow the resin pressure to be backed up by the core insert.
- If the axial load acting on the lifter core exceeds the limit allowed for the slide base pin (used in JB and UB Slide Bases), use a Standard (SB) Slide Base and back the lifter core on the slide by machining a ledge that is perpendicular to the axis of the lifter core. The lifter core must then seat firmly against the angled face of the Slide Base.

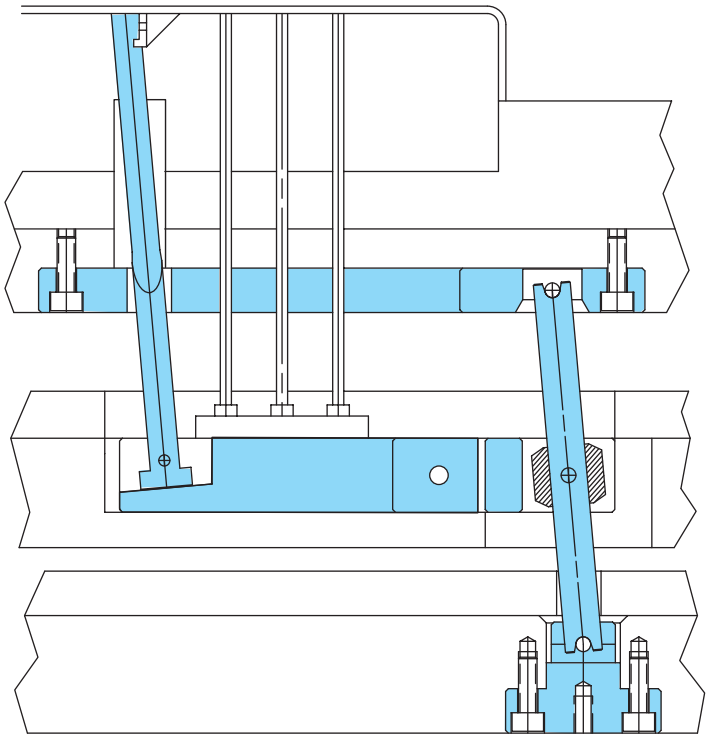
7. Non-Standard Shapes/Materials

- Lifter core blocks may be machined to any desired shape and size, provided the chosen number and size of the VectorForm Lifter System core standard components will support the lifter core blocks. Lifter core blocks are to be supplied by the moldmaker.

Advanced Applications

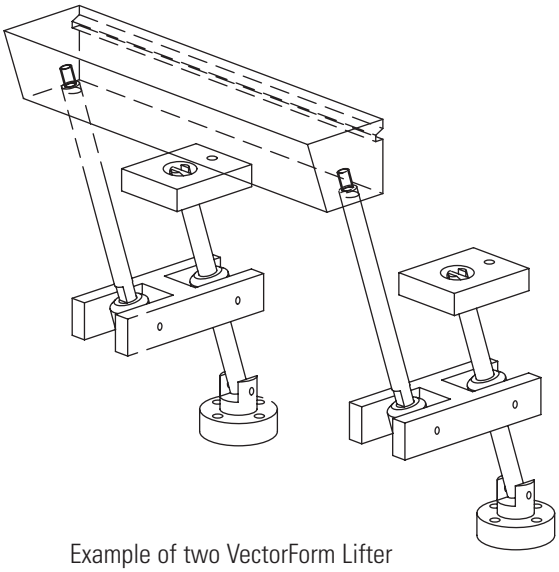


Example of multiple lifter cores being actuated in parallel by a Standard Slide Base (SB).

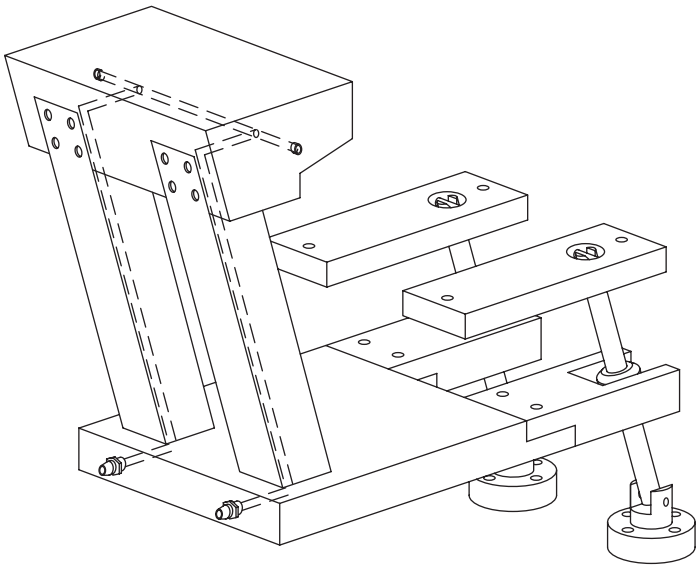


VectorForm Lifter System example with tandem ejector pins in close proximity to slide base. Joint Slide Base (JB) shown.

NOTE: Ejector pins are secured to, and move with, the ejector plate assembly, not the VectorForm System Slide Base.

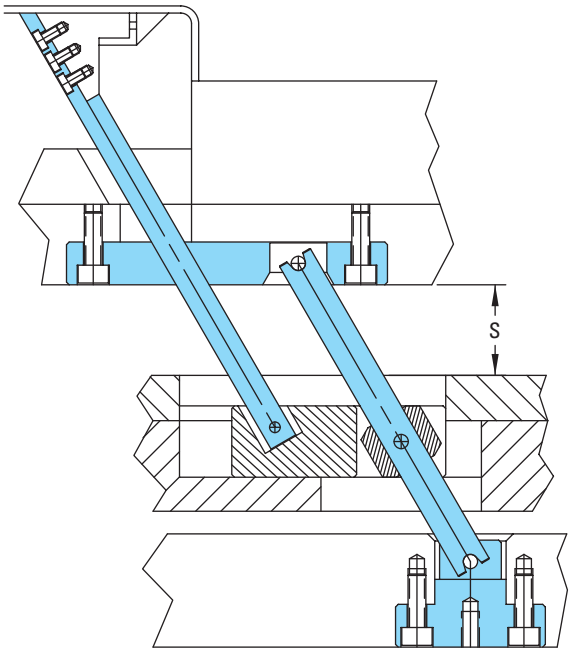


Example of two VectorForm Lifter System assemblies being used in parallel to lift a large lifter core assembly (UB shown).

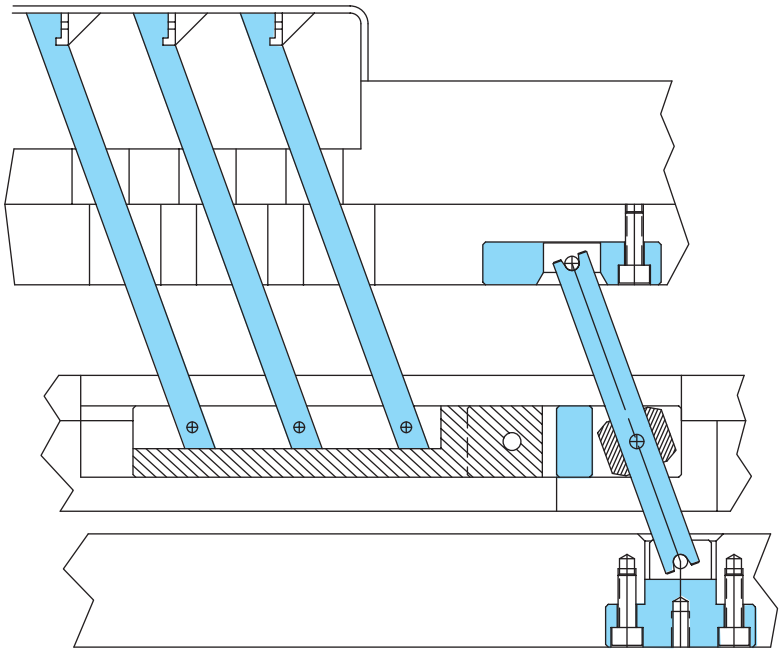


Multiple VectorForm Lifter Systems shown in parallel, actuating a large water-cooled lifter core through an extended Standard Slide Base.

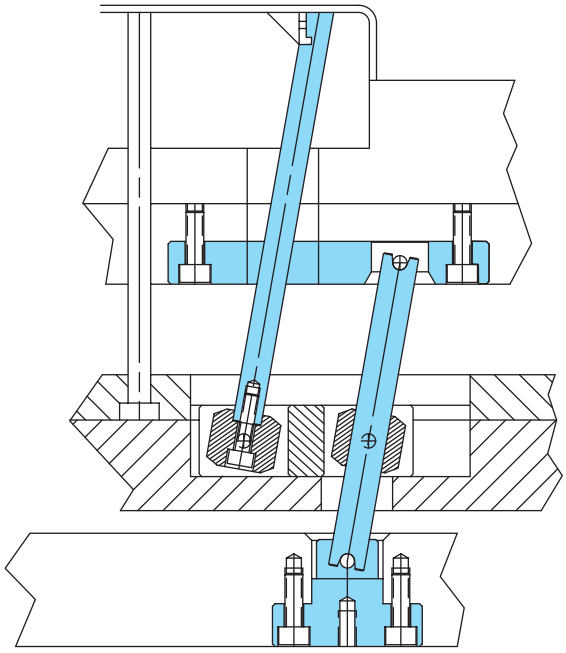
Advanced Applications



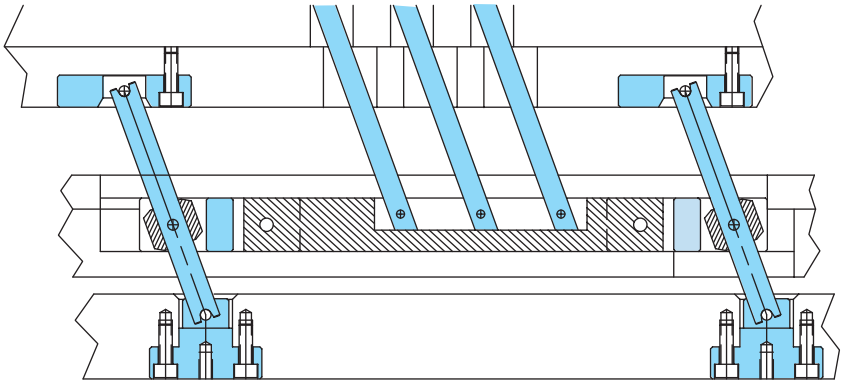
Deep undercut attained by increasing the shift angle and by having sufficient stroke "S". Standard Slide Base (SB) shown.



Multiple VectorForm Lifter Systems can be operated in tandem by a single Guide Rod assembly with the use of a simple extension coupled with a standard slide plate. Joint Slide Base (JB) shown.



Avoid interference with the adjacent components by using a small section lifter core and by using reverse installation. Universal Slide Base (UB) shown.

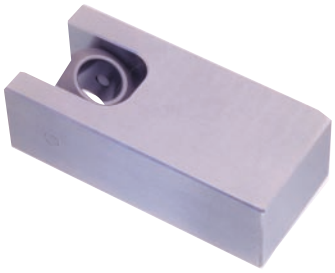


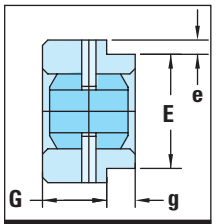
In cases of high ejection resistance, serial tandem guidance can be aided by using two or more Guide Rod assemblies. Joint Slide Base (JB) shown.

VectorForm Component Specifications

Standard Slide Base – SB

Material: SCM-440 / DIN-1.7225 / AISI-4140
Hardness: 29-34 HRC

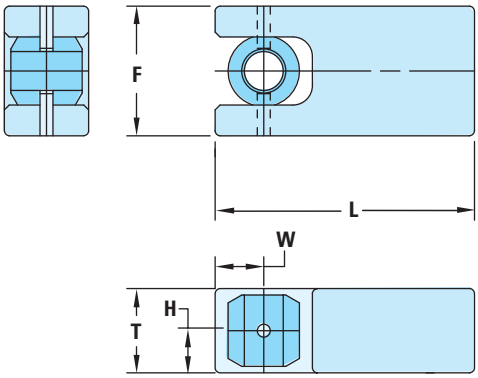




STANDARD SIZE OF GUIDE STEP

	E	e	G	g
06	16	2.0	9	4
08	20	2.5	11	4
10	26	3.0	14	6
13	33	3.5	17	8
16	42	4.0	22	8
20	50	5.0	28	12

NOTE: Dimensions for retaining step to be machined by moldmaker as necessary.



Additional Machining:

- Retaining bolt installation on lifter core rod or assembly
- Grooves as shown to far left of figure (for alignment) if required

Heat Treatment:

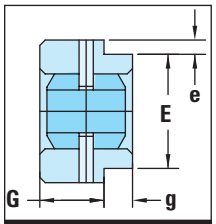
- Gas nitriding is permissible after additional machining has been performed

Joint Slide Base – JB

Material: SCM-440 / DIN-1.7225 / AISI-4140
Hardness: 29-34 HRC

Joint Pin material: SKH-51 / DIN-1.1213 / AISI-1050
Hardness: 60-66 HRC
Tempering temperature: 600°C

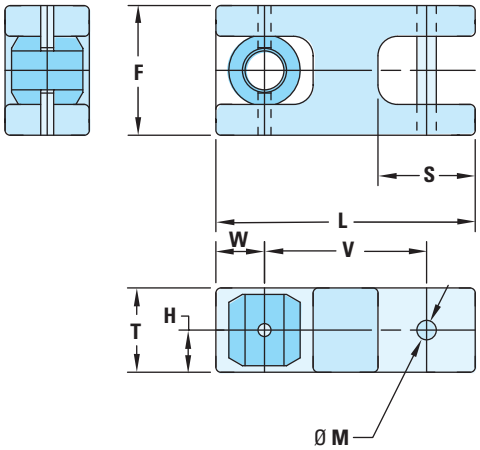




STANDARD SIZE OF GUIDE STEP

	E	e	G	g
06	16	2.0	9	4
08	20	2.5	11	4
10	26	3.0	14	6
13	33	3.5	17	8
16	42	4.0	22	8
20	50	5.0	28	12

NOTE: Dimensions for retaining step to be machined by moldmaker as necessary.



Additional Machining:

None

Attachment: Joint Pin

Heat Treatment:

- Gas nitriding is permissible
- During nitriding, use a pin finer (-0.01) than the attached joint pin

VectorForm Component Specifications

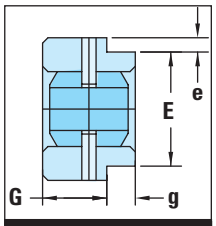
Universal Slide Base – UB

Material: SCM-440 / DIN-1.7225 / AISI-4140
Hardness: 29-34 HRC
Heat Treatment: Nitriding is permissible



Additional Machining:
None

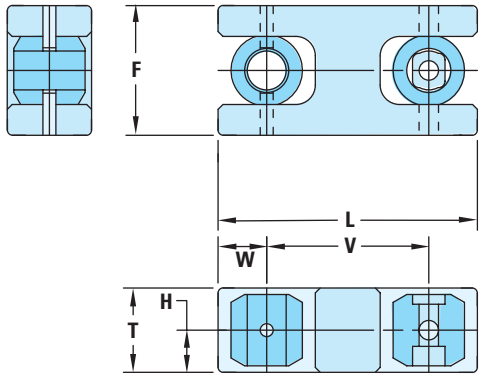
Attachment: None



STANDARD SIZE OF GUIDE STEP

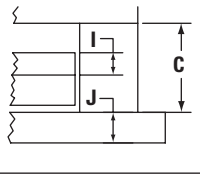
	E	e	G	g
06	16	2.0	9	4
08	20	2.5	11	4
10	26	3.0	14	6
13	33	3.5	17	8
16	42	4.0	22	8
20	50	5.0	28	12

NOTE: Dimensions for retaining step to be machined by moldmaker as necessary.



Slide Base Ordering Information

	ITEM NUMBER					
SIZES	06	08	10	13	16	20
SB – STANDARD SLIDE BASE	VF 06 SB	VF 08 SB	VF 10 SB	VF 13 SB	VF 16 SB	VF 20 SB
JB – JOINT SLIDE BASE	VF 06 JB	VF 08 JB	VF 10 JB	VF 13 JB	VF 16 JB	VF 20 JB
UB – UNIVERSAL SLIDE BASE	VF 06 UB	VF 08 UB	VF 10 UB	VF 13 UB	VF 16 UB	VF 20 UB

	DIMENSIONS						INSTALLATION CLASSIFICATION
SYMBOL \ SIZES	06	08	10	13	16	20	
I	13	15	20	25	30	35	
J	20	25	30	35	40	50	
C	50-120	50-150	70-200	100-250	120-300	120-400	
T	$13^{\ 0}_{-0.02}$	$15^{\ 0}_{-0.02}$	$20^{\ 0}_{-0.03}$	$25^{\ 0}_{-0.03}$	$30^{\ 0}_{-0.05}$	$40^{\ 0}_{-0.05}$	
F	$20^{\ 0}_{-0.02}$	$25^{\ 0}_{-0.02}$	$32^{\ 0}_{-0.03}$	$40^{\ 0}_{-0.03}$	$50^{\ 0}_{-0.05}$	$60^{\ 0}_{-0.05}$	
L	40	50	60	80	100	130	
D	10.5	13.5	17	22	27	33	
S	15	20	25	30	40	50	
H	6.5	7.5	10	12.5	15	20	
W	7.5	10	12.5	15	20	25	
N	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	
V*	25	30	35	50	60	80	
M*	Ø3	Ø4	Ø5	Ø6	Ø8	Ø10	

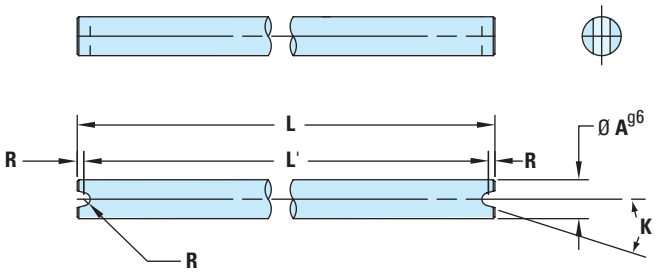
*Applies to JB and UB only.

VectorForm Component Specifications

Guide Rod – GR

Material: S-UJ-2 / DIN-1.3505 / AISI-52100
Hardness: 56-62 HRC
Heat Treatment: Induction hardening completed; heat treat is not required





NOTE: Moldmaker to add grooves and chamfers per specifications shown.

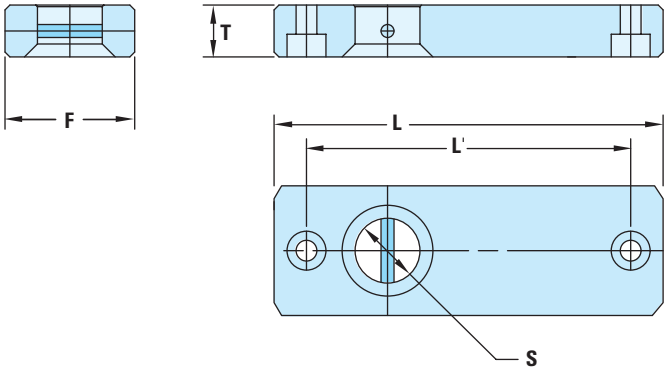
Additional Machining:

- Center distance: L' = L - 2R
- All dimensions shown are to be held after any additional machining has been performed
- Non-designated tolerance: +/- 0.1
- Non-designated chamfer "C" tolerance: 0.5 ~ 1.0

Guide Plate – GP

Material: S-50-C / DIN-1.1213 / AISI-1050
Hardness: 30-33 HRC
Heat Treatment: Gas nitriding is permissible after additional machining has been performed





Additional Machining:

- Lifter core hole or slot
- As required to accommodate the lifter core assembly

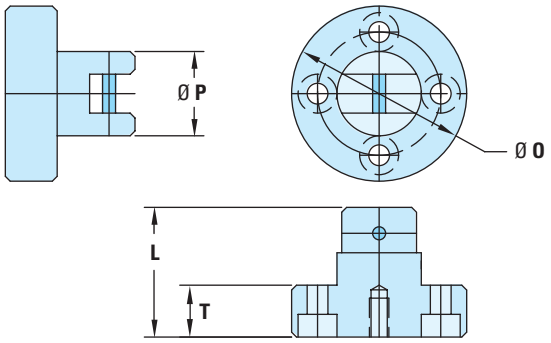
VectorForm Component Specifications

Holder Bushing – HB

Material: S-50-C / DIN-1.1213 / AISI-1050
Hardness: 13-22 HRC
Heat Treatment: Not required



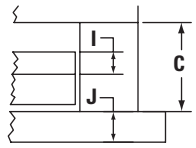
Additional Machining:
None



Guide Rod, Guide Plate, Holder Bushing Ordering Information

SYMBOL \ SIZES	DIMENSIONS PER LIFTER SIZE 06	08	10	13	16	20
I	13	15	20	25	30	35
J	20	25	30	35	40	50
C	50-120	50-150	70-200	100-250	120-300	120-400
GR – GUIDE ROD	VF 06 GR	VF 08 GR	VF 10 GR	VF 13 GR	VF 16 GR	VF 20 GR
A^{g6}	Ø6 $^{-0.004}_{-0.012}$	Ø8 $^{-0.005}_{-0.014}$	Ø10 $^{-0.005}_{-0.014}$	Ø13 $^{-0.006}_{-0.017}$	Ø16 $^{-0.006}_{-0.017}$	Ø20 $^{-0.007}_{-0.020}$
L	150	190	250	310	370	500
L'	L'	L'	L'	L'	L'	L'
K°	Same as the shift angle of the lifter core (30° MAX)					
R	1.0 $^{+0.02}_{0}$	1.5 $^{+0.02}_{0}$	2.0 $^{+0.03}_{0}$	2.5 $^{+0.03}_{0}$	3.0 $^{+0.05}_{0}$	3.5 $^{+0.05}_{0}$
GP – GUIDE PLATE	VF 06 GP	VF 08 GP	VF 10 GP	VF 13 GP	VF 16 GP	VF 20 GP
T	8 $^{0}_{-0.02}$	10 $^{0}_{-0.02}$	12 $^{0}_{-0.03}$	15 $^{0}_{-0.03}$	20 $^{0}_{-0.05}$	25 $^{0}_{-0.05}$
F	20 $^{0}_{-0.02}$	25 $^{0}_{-0.02}$	32 $^{0}_{-0.03}$	40 $^{0}_{-0.03}$	50 $^{0}_{-0.05}$	60 $^{0}_{-0.05}$
L	60 $^{0}_{-0.04}$	70 $^{0}_{-0.04}$	90 $^{0}_{-0.06}$	120 $^{0}_{-0.06}$	150 $^{0}_{-0.1}$	180 $^{0}_{-0.1}$
L'	50	60	75	105	130	155
S	Ø10	Ø13	Ø16	Ø20	Ø25	Ø30
HB – HOLDER BUSHING	VF 06 HB	VF 08 HB	VF 10 HB	VF 13 HB	VF 16 HB	VF 20 HB
P	Ø13 $^{0}_{-0.05}$	Ø16 $^{0}_{-0.05}$	Ø20 $^{0}_{-0.07}$	Ø25 $^{0}_{-0.07}$	Ø32 $^{0}_{-0.1}$	Ø40 $^{0}_{-0.1}$
L	20	25	30	35	40	50
O	Ø27 $^{0}_{-0.2}$	Ø34 $^{0}_{-0.2}$	Ø42 $^{0}_{-0.3}$	Ø51 $^{0}_{-0.3}$	Ø65 $^{0}_{-0.5}$	Ø80 $^{0}_{-0.5}$
T	8 $^{-0.1}_{-0.2}$	10 $^{-0.1}_{-0.2}$	12 $^{-0.1}_{-0.3}$	15 $^{-0.1}_{-0.3}$	18 $^{-0.1}_{-0.5}$	22 $^{-0.1}_{-0.5}$

INSTALLATION CLASSIFICATION



Ordering Information

VectorForm Lifter Set Ordering Information

SIZES	06	08	10	13	16	20
SS – STANDARD SET	VF 06 SS	VF 08 SS	VF 10 SS	VF 13 SS	VF 16 SS	VF 20 SS
JS – JOINT SET	VF 06 JS	VF 08 JS	VF 10 JS	VF 13 JS	VF 16 JS	VF 20 JS
US – UNIVERSAL SET	VF 06 US	VF 08 US	VF 10 US	VF 13 US	VF 16 US	VF 20 US

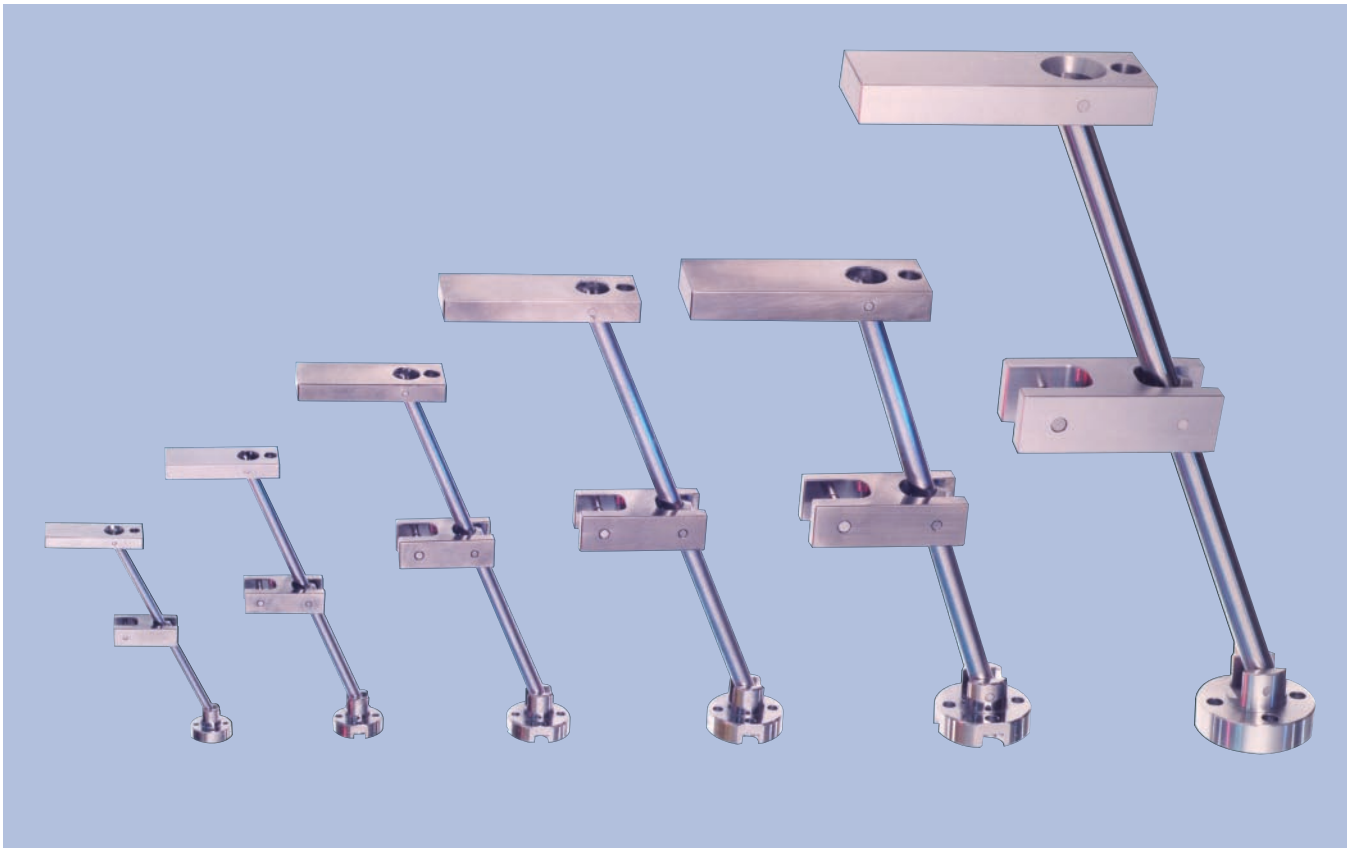
VectorForm Lifter Sets include:

(1) Holder Bushing – HB

(1) Guide Rod – GR

(1) Guide Plate – GP

(1) Slide Base (Standard – SB, Joint – JB, or Universal – UB)



D-M-E Hydraulic Unscrewing Devices

STANDARDIZED SYSTEMS
FOR MOLDING
INTERNAL THREADS

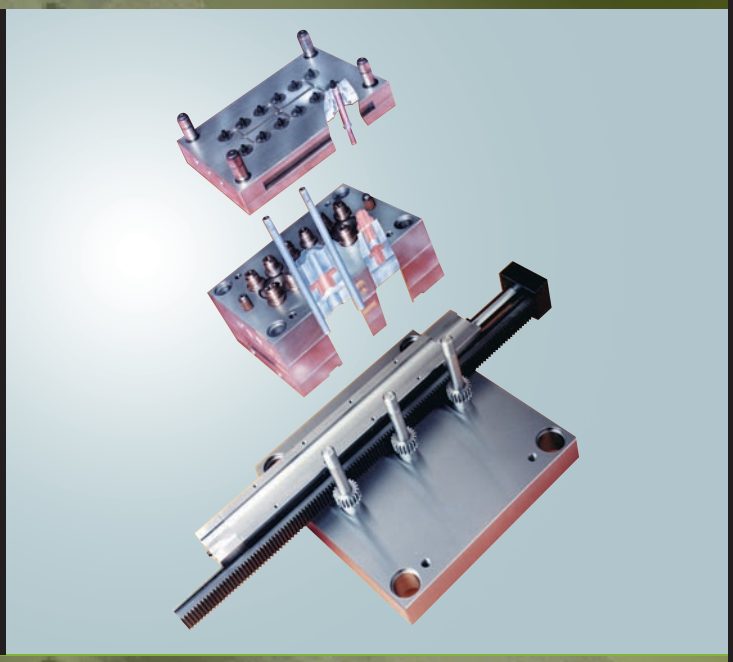
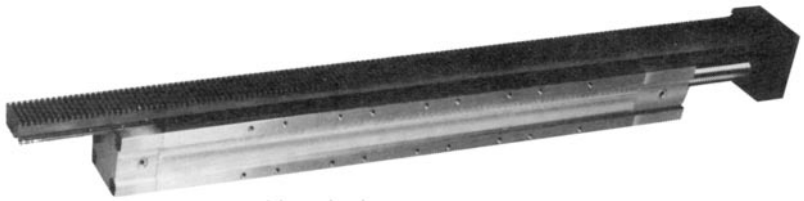


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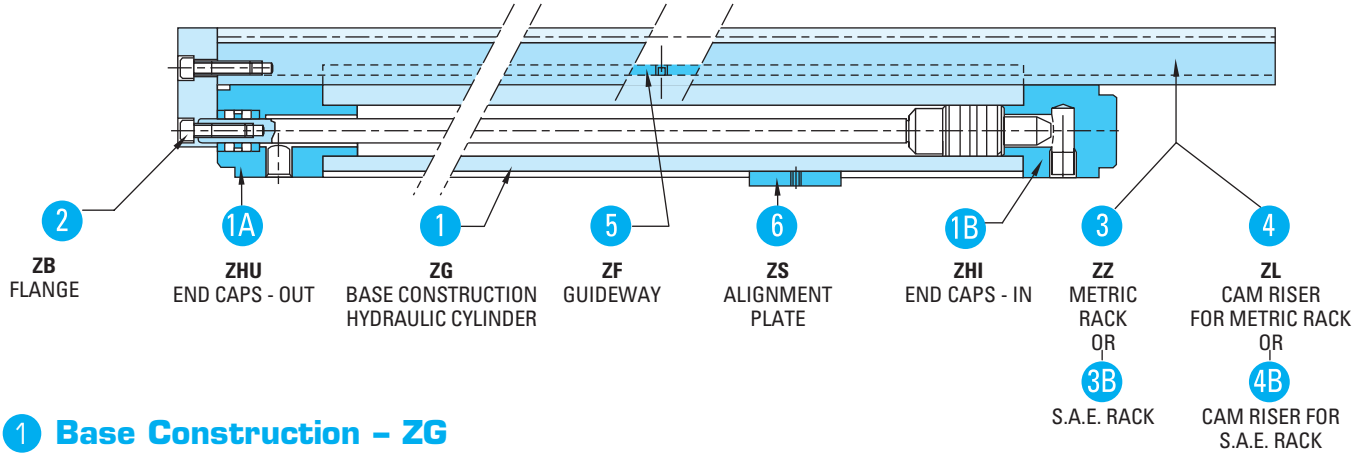
Hydraulic Unscrewing Device Components *44-47*
Calculations/Specifications *48-50*
Applications *51-52*

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Components

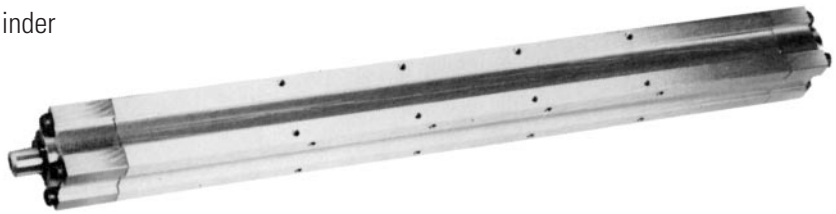


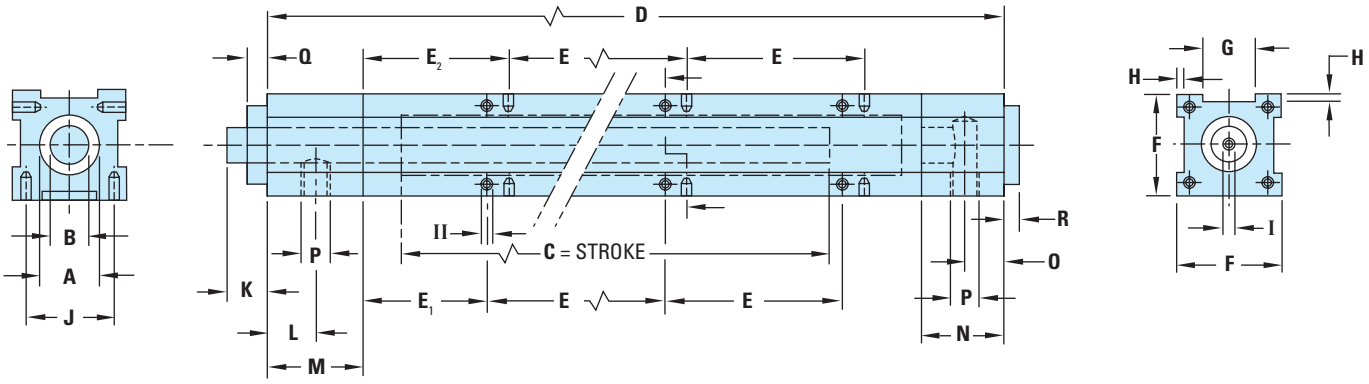
NOTE:
End caps 1A and 1B, Internal Seals ZD, and NPT Pipe Thread Adapters are included in Base Construction.



1 Base Construction – ZG

Hydraulic Cylinder





ITEM NO	A	B	C	D	E	E1	E2	F	G	H	J	K	L	M	N	O	P	Q	R	Metric Threads I	Metric Threads II
ZG-25-300 ZG-25-400 ZG-25-500	Ø .984	Ø .630	11.811 15.748 19.685	16.693 20.630 24.567	3x3.150 3x3.150 5x3.150	2.205 4.173 2.992	2.598 4.567 3.386	1.811	.787	.138	1.339	.709	.846	1.693	1.142	.433	1/4" BSPT	.354	.236	M 8x1.25x20	SM 5x.80x10
ZG-40-300 ZG-40-400 ZG-40-500	Ø 1.575	Ø .866	11.811 15.748 19.685	17.008 20.945 24.882	3x3.150 3x3.150 5x3.150	2.205 4.173 2.992	2.598 4.567 3.386	2.205	1.181	.138	1.732	.866	1.339	2.087	1.063	.512	1/2" BSPT	.354	.315	M 10x1.5x30	SM 5x.80x10
ZG-63-400 ZG-63-500	Ø 2.480	Ø 1.417	15.748 19.685	21.890 25.827	3x3.150 5x3.150	4.488 3.307	4.882 3.701	3.780	1.969	.315	2.756	1.496	.984	2.047	1.378	.630	3/4" BSPT	.866	.472	M 16x2.0x45	SM 8x1.25x16

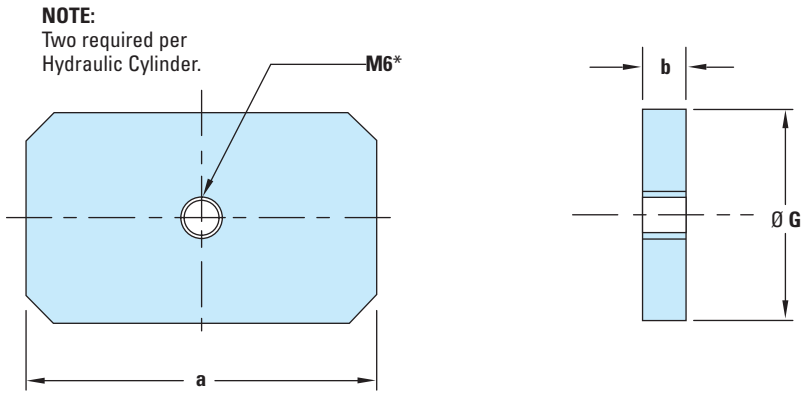
NOTE: "A" is the bore size of the ZG Base Construction Hydraulic Cylinder.

Components

Standardized system for molding internal threads

- SAE-rack design
- Off-the-shelf replacement parts
- Simplifies mold design
- Applicable to different design styles
- Technical and application support
- Rack sized to provide maximum stroke lengths

6 Alignment Plate – ZS

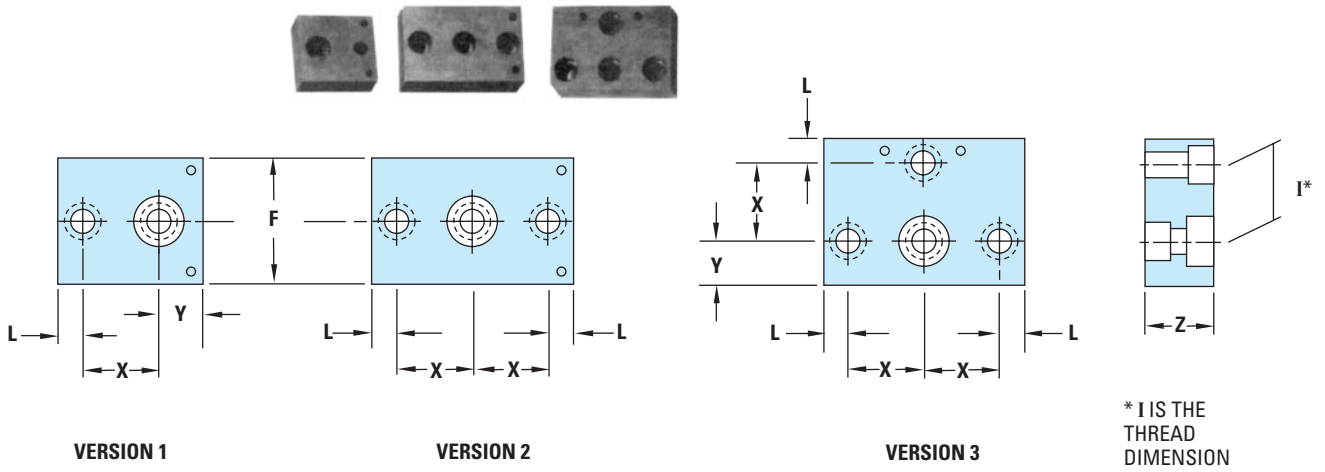


ITEM NO	A	G	a	b
ZS-25	Ø.984	.787	1.575	.236
ZS-40	Ø1.575	1.181	1.969	.236
ZS-63	Ø2.480	1.969	3.150	.591

*M6 Metric socket head screw included.

NOTE: "A" is the bore size of the ZG Base Construction Hydraulic Cylinder.

2 Flange – ZB



VERSION 1 VERSION 2 VERSION 3

ITEM NO	A	X	Y	F	Z	L	Metric Threads I	Version
ZB-25-1							2 qty. M 8x1.25x20	Vers. 1
ZB-25-2	Ø.984	1.063	.492	1.811	.787	.413	3 qty. M 8x1.25x20	Vers. 2
ZB-25-3							4 qty. M 8x1.25x20	Vers. 3
ZB-40-1							2 qty. M 10x1.5x30	Vers. 1
ZB-40-2	Ø1.575	1.339	.787	2.205	1.181	.433	3 qty. M 10x1.5x30	Vers. 2
ZB-40-3							4 qty. M 10x1.5x30	Vers. 3
ZB-63-1							1 qty. M 12x1.75x40 / 1 qty. M 16x2.0x45	Vers. 1
ZB-63-2	Ø2.480	2.165	1.181	3.780	1.575	.591	2 qty. M 12x1.75x40 / 1 qty. M 16x2.0x45	Vers. 2
ZB-63-3							3 qty. M 12x1.75x40 / 1 qty. M 16x2.0x45	Vers. 3

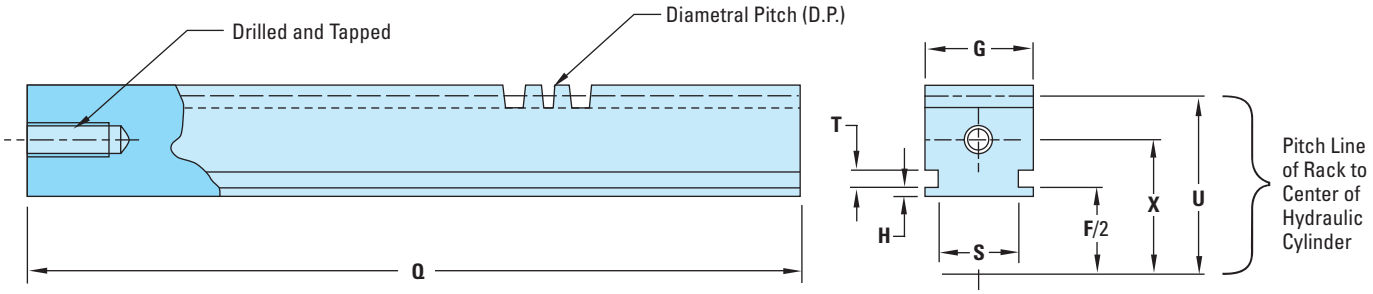
*Metric socket head cap screws included with Flange (see I).

NOTE: "A" is the bore size of the ZG Base Construction Hydraulic Cylinder.

3B S.A.E. Rack – ZZ

20 Degree Pressure Angle Gear Teeth





NOTE: Mating Gear to be supplied by moldmaker.

ITEM NO	A	F/2	G	H	Q	S.A.E. Diametral Pitch	S	T	U	X	Metric I
ZZ2501	Ø.984	.906	.772	.118	48	12	.551	.250	1.500	1.063	M 8x1.25x20
ZZ4001	Ø1.575	1.102	1.166	.118	48	12	.945	.250	1.750	1.339	M 10x1.5x30
ZZ6301	Ø2.480	1.890	1.953	.295	48	12	1.654	.312	2.625	2.165	M 12x1.75x40

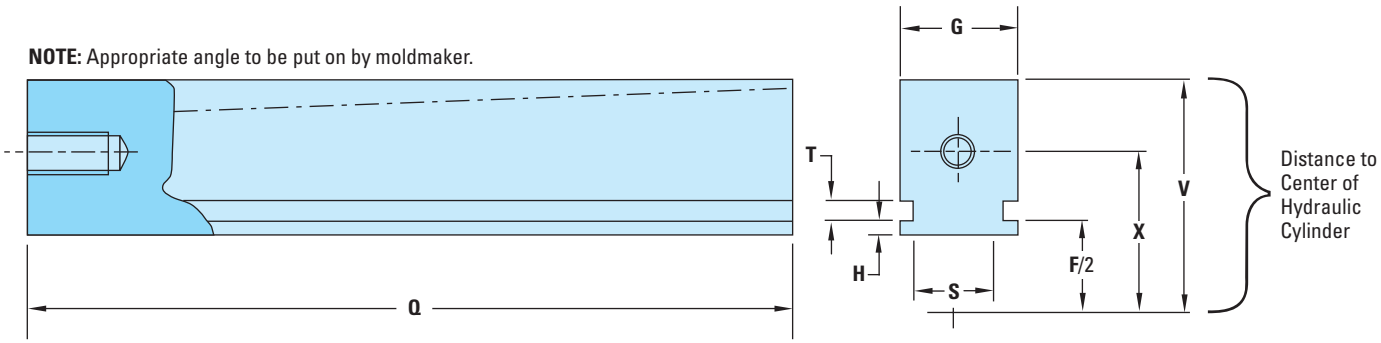
NOTE: "A" is the bore size of the ZG Base Construction Hydraulic Cylinder.

4B CAM Riser – ZL

(for use with S.A.E. Racks)



NOTE: Appropriate angle to be put on by moldmaker.



ITEM NO	A	F/2	G	H	Q	S	T	V	X	Metric I
ZL2501	Ø.984	.906	.772	.118	48	.551	.177	1.949	1.063	M 8x1.25x20
ZL4001	Ø1.575	1.102	1.166	.118	48	.945	.177	2.539	1.339	M 10x1.5x30
ZL6301	Ø2.480	1.890	1.953	.295	48	1.654	.256	3.937	2.165	M 12x1.75x40

NOTE: "A" is the bore size of the ZG Base Construction Hydraulic Cylinder.

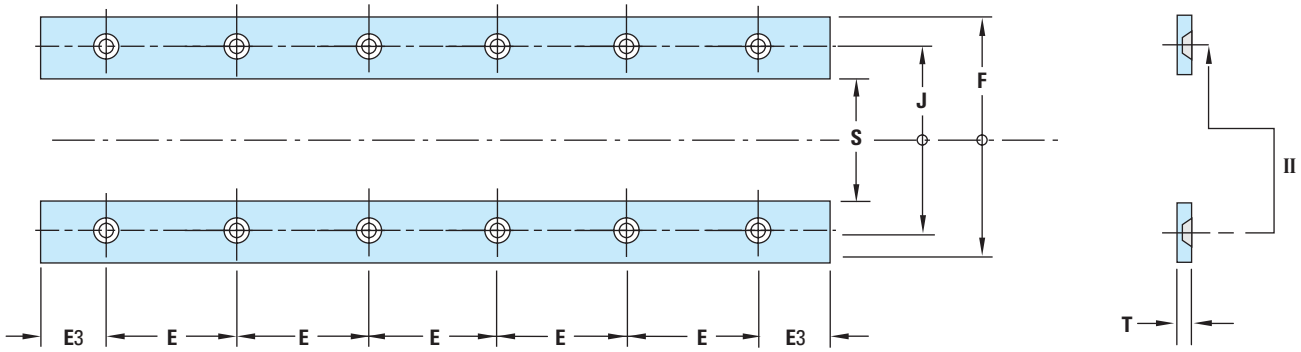
Components

5 Guideway – ZF



NOTES:

1. Two guideways are required per Rack or per Cam Riser.
2. Only one length is stocked and must be cut to length to fit for shorter Hydraulic Cylinders.
3. Metric flat head screws are included with Guideway (see II).

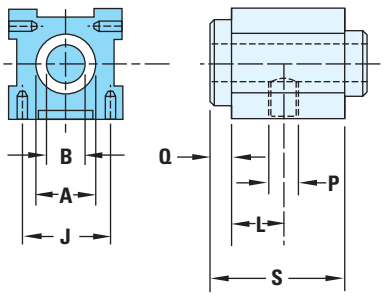


ITEM NO	A	C	E	E3	F	J	S	T	Metric II
ZF0001	Ø.984	19.685	5x3.150	2.599	1.811	1.339	.551	.188	SM 5x.80x10
ZF0001	Ø1.575	19.685	5x3.150	2.599	2.205	1.732	.945	.188	SM 5x.80x10
ZF0002	Ø2.480	19.685	5x3.150	1.913	3.780	2.756	1.654	.250	SM 8x1.25x16

NOTE: "A" is the bore size of the ZG Base Construction Hydraulic Cylinder.

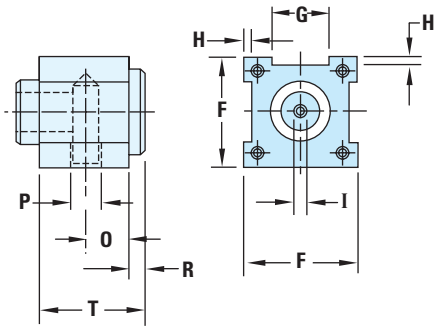
MAINTENANCE REPLACEMENT PARTS ONLY

1A End Caps (out) – ZHU



ITEM NO	L	Q	P	S
ZHU-25	.846	.354	1/4" BSPT	2.047
ZHU-40	1.339	.354	1/2" BSPT	2.441
ZHU-63	.984	.866	3/4" BSPT	2.913

1B End Caps (in) – ZHI



ITEM NO	O	R	P	T
ZHI-25	.433	.236	1/4" BSPT	1.378
ZHI-40	.512	.315	1/2" BSPT	1.378
ZHI-63	.630	.472	3/4" BSPT	1.850

NOTE: BSPT = British Standard Pipe Taper
Ø = Diameter in Inches
M = Metric Socket Head Cap Screw
SM = Metric Flat Head Socket Cap Screw

NOTE: All other dimensions in inches unless otherwise specified.

Seal Kit – ZD



ITEM NO
ZD-25
ZD-40
ZD-63

Pipe Thread Adapters – ZG

Adapter converts male BSPT to female NPT.

ITEM NO	CONVERSION
ZG2501	1/4" BSPT = 1/4" NPT
ZG4001	1/2" BSPT = 1/2" NPT
ZG6301	3/4" BSPT = 3/4" NPT

Calculations/Specifications

Thread Lead = 1/(Threads per inch) = 1/Pitch = Inches/Thread
Thread Length = Length of threads to be removed from the cap

A. Stroke (Inches)

NOTE: Limit switches should be used if possible to limit full cylinder travel. This will extend the seal life inside the hydraulic cylinder.

a) Required revolutions (thread core)

$$= \frac{\text{Thread Length}}{\text{Thread Lead}} + \text{Safety (.5 revolutions minimum)}$$

b) 1. Required stroke – Inches

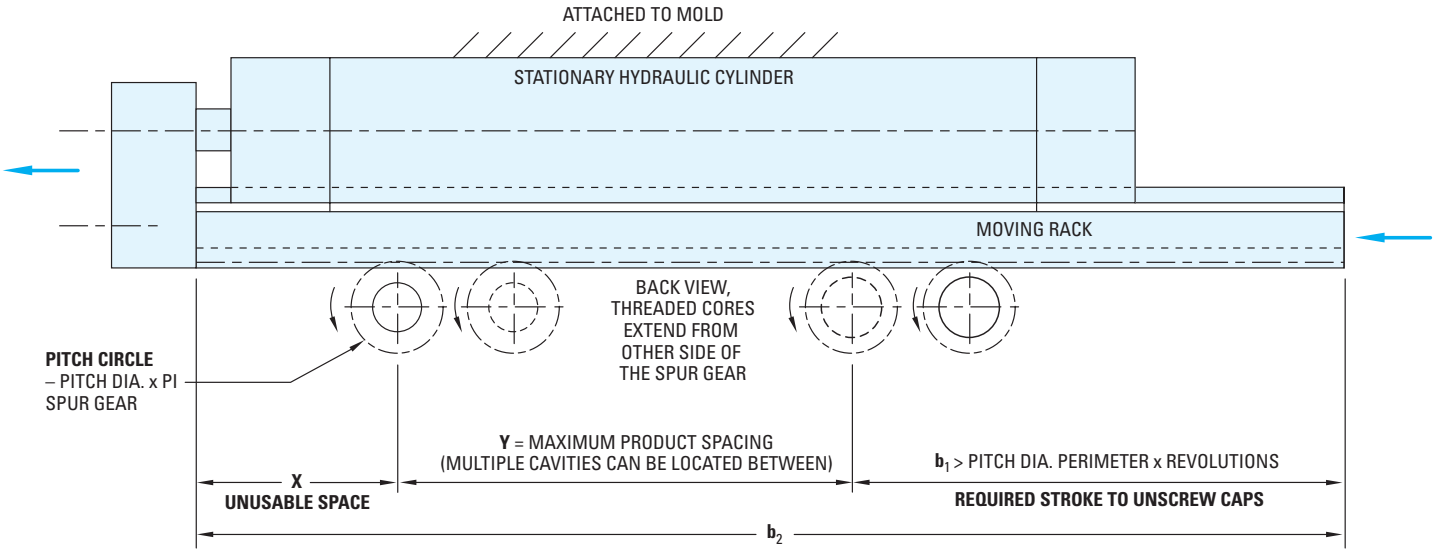
= Gear Pitch Diameter x π x Required Revolutions
If required stroke is too long, a cogwheel transmission should be used.

2. Length of Rack

$b_2 = x + y + b_1$

c) Stripper stroke (Inches)

= Cylinder Stroke – Required Rack Stroke



Calculations/Specifications

B. Control Cam Calculation

d) Moving Cam (α)

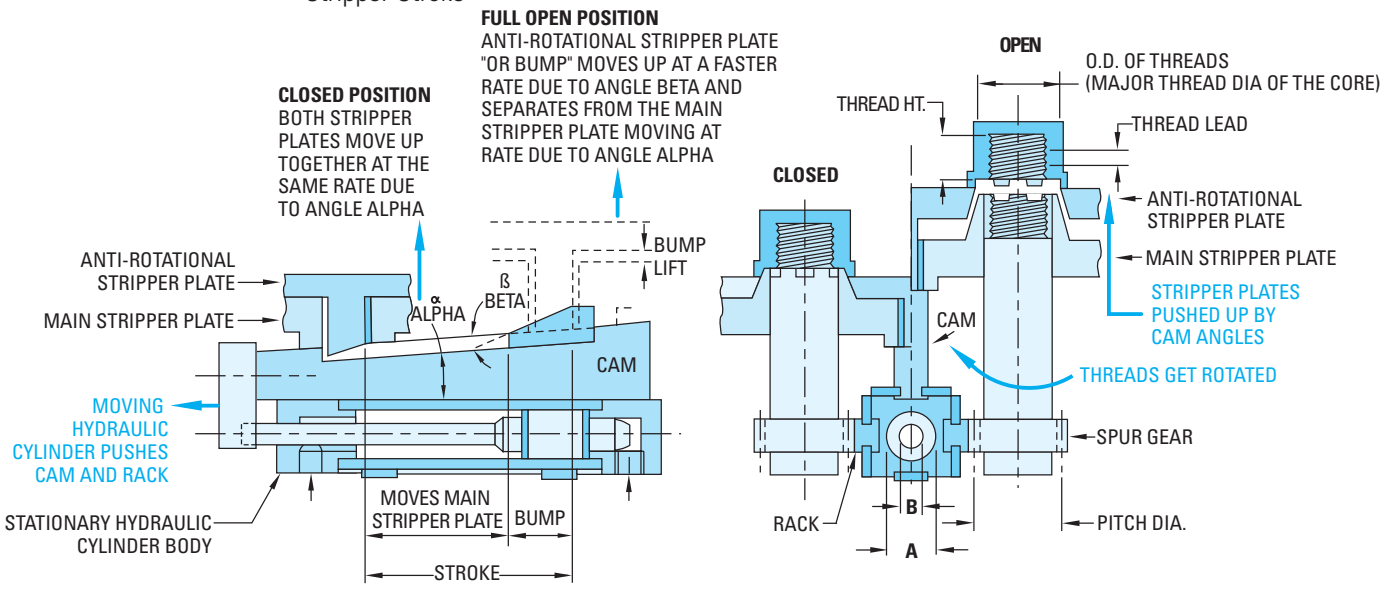
NOTE: Moves Main Stripper Plate in sync. with unscrewing thread.

$$\tan \alpha = \frac{\text{Thread Lead}}{\text{Gear Pitch Diameter x } \pi}$$

e) Stripper Cam (β)

NOTE: Moves Anti-Rotational Stripper Plate or provides "BUMP" to shake part off.

$$\tan \beta = \frac{\text{Stripper Height}}{\text{Stripper Stroke}}$$



C. Unscrewing Force

These figures should only be used as a guideline, as many other factors will affect the calculation (material, variation of dimensions, material shrinkage, core surface area, temperature, lubricants, friction, etc.).

f) Residual Pressure (PSI)

= 1/100 of maximum injection pressure

g) Effective core surface area (Square Inches or in^2, Outer Core Cylinder Shell)

Flat end of threaded core neglected, x 2 value for 45° triangle thread shape

= major thread dia. of the core x π x thread height x 2

h) Unscrewing torque (in-lb$_f$)

= Residual Pressure x Effective core surface area x major thread radius of core

i) Unscrewing force rack (lb$_f$)

$$= \frac{\text{Unscrewing Torque}}{\text{Gear pitch radius}} \text{ x number of cavities}$$

k) Hydraulic force (lb$_f$)

NOTE: x 1.5 is 50% Safety Factor, if x 1.0 there would be no safety factor.

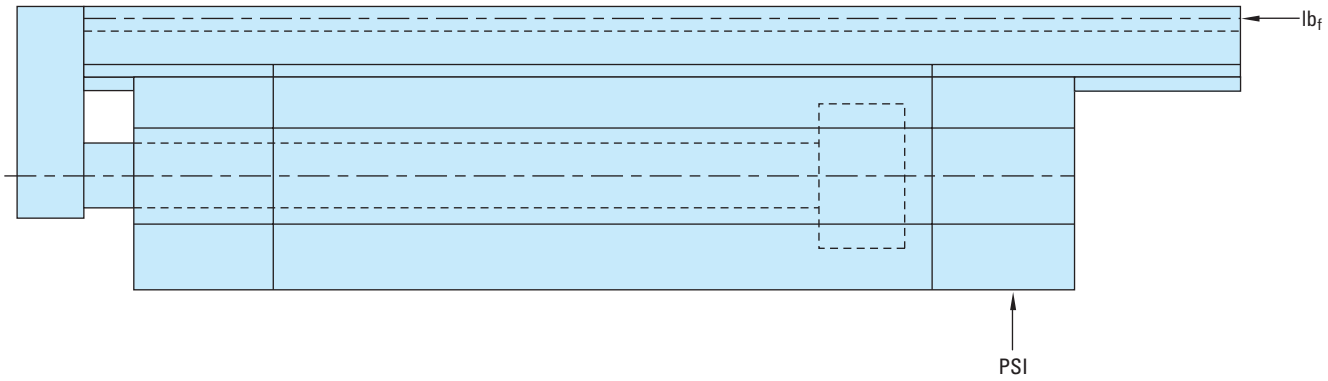
= Unscrewing Force x 1.5

Calculations/Specifications

Working Cylinder Stroke

Unscrewing force available at different hydraulic pressures (PSI)

Working Stroke



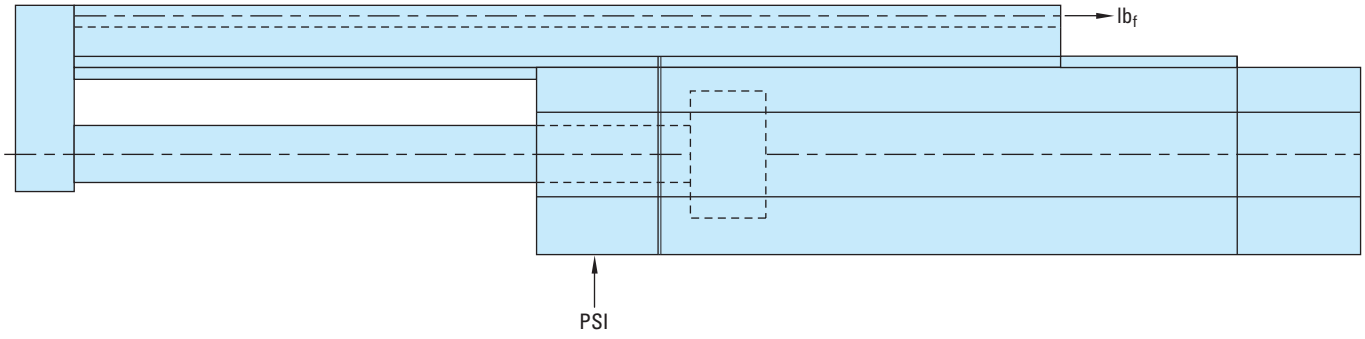
A (piston)	B (shaft)	1,160 PSI	1,450 PSI	1,740 PSI	2,030 PSI	2,175 PSI
Ø.984"	Ø.630"	887 lb_f	1,102 lb_f	1,326 lb_f	1,529 lb_f	1,664 lb_f
Ø1.575"	Ø.866"	2,248 lb_f	2,810 lb_f	3,395 lb_f	3,957 lb_f	4,204 lb_f
Ø2.480"	Ø1.417"	5,598 lb_f	6,992 lb_f	8,409 lb_f	9,802 lb_f	10,476 lb_f

NOTE: "A" is the bore size of the ZG Base Construction Hydraulic Cylinder.

Returning Cylinder Stroke

Force available at different hydraulic pressures (PSI)

Return Back



A (piston)	B (shaft)	1,160 PSI	1,450 PSI	1,740 PSI	2,030 PSI	2,175 PSI
Ø.984"	Ø.630"	517 lb_f	652 lb_f	787 lb_f	922 lb_f	989 lb_f
Ø1.575"	Ø.866"	1,574 lb_f	1,978 lb_f	2,361 lb_f	2,743 lb_f	2,967 lb_f
Ø2.480"	Ø1.417"	3,777 lb_f	4,721 lb_f	5,665 lb_f	6,587 lb_f	7,081 lb_f

NOTE: "A" is the bore size of the ZG Base Construction Hydraulic Cylinder.

Applications

APPLICATIONS

Required D-M-E Component List

Application A

Item No	Qty	Description
ZG-xx-yyy	1	Hydraulic Cylinder
ZS-xx	2	Alignment Plate
ZB-xx-y	1	Flange-Version 3
ZZ-xx-yy	2	S.A.E. Rack
ZL-xx-yy	1	Cam Riser
ZF-yyyy	6	Guideways for Racks & Cam

Application B

Item No	Qty	Description
ZG-xx-yyy	1	Hydraulic Cylinder
ZS-xx	4	Alignment Plate
ZB-xx-y	1	Flange-Version 1
ZZ-xx-yy	1	S.A.E. Rack
ZF-yyyy	2	Guideways for Rack

Application C

Item No	Qty	Description
ZG-xx-yyy	2	Hydraulic Cylinder
ZS-xx	4	Alignment Plate
ZB-xx-y	2	Flange-Version 1
ZZ-xx-yy	2	S.A.E. Rack
ZF-yyyy	4	Guideways for Racks

Application D

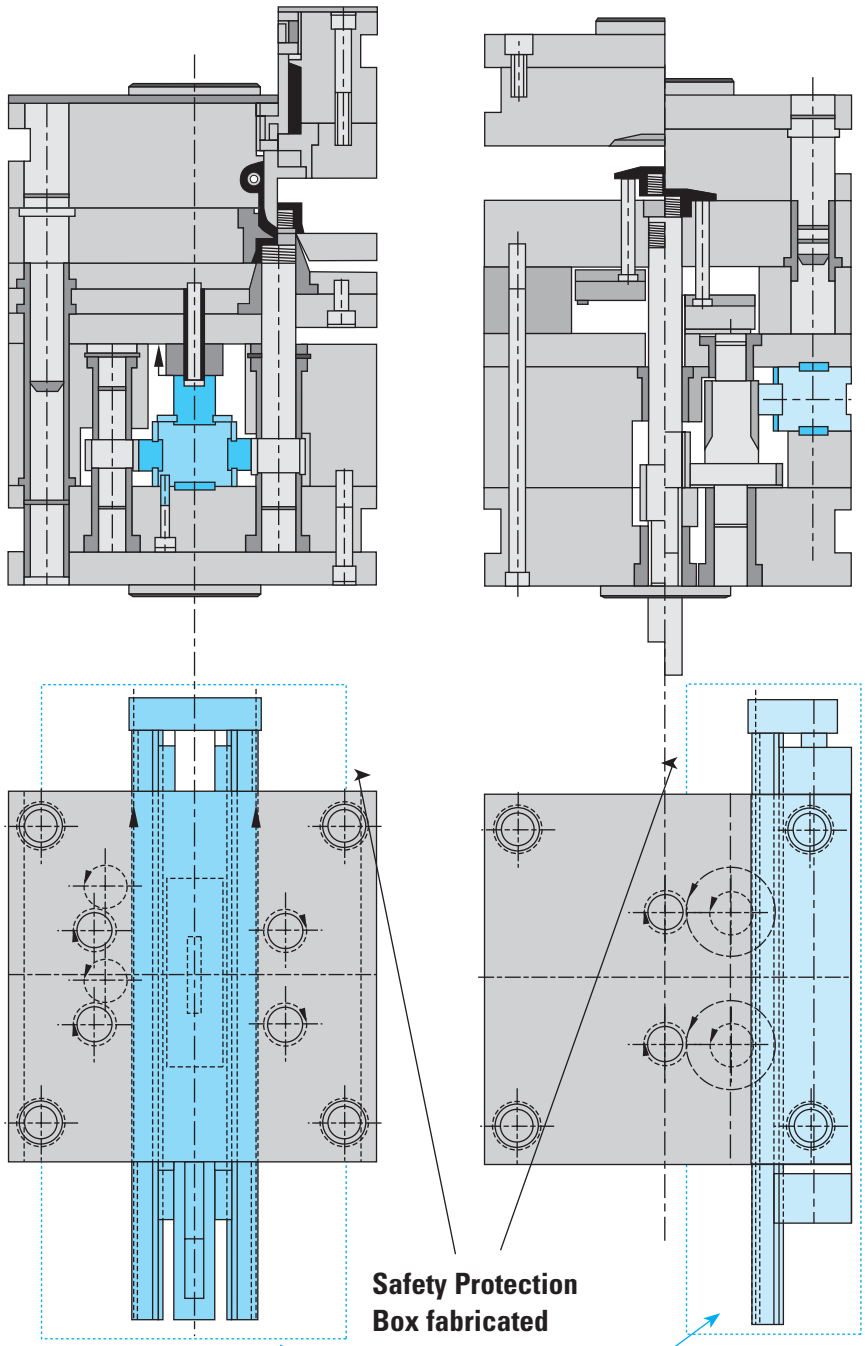
Item No	Qty	Description
ZG-xx-yyy	1	Hydraulic Cylinder
ZS-xx	2	Alignment Plate
ZB-xx-y	1	Flange-Version 2
ZZ-xx-yy	1	Cam Riser
ZF-yyyy	2	Guideways for Cam

NOTE:

Moldmaker should provide limit switches for fully closed and for cylinder extended. Full cylinder extension should be avoided to improve internal cylinder seal life.

Application A
Without guiding thread with cam

Application B
With guiding thread



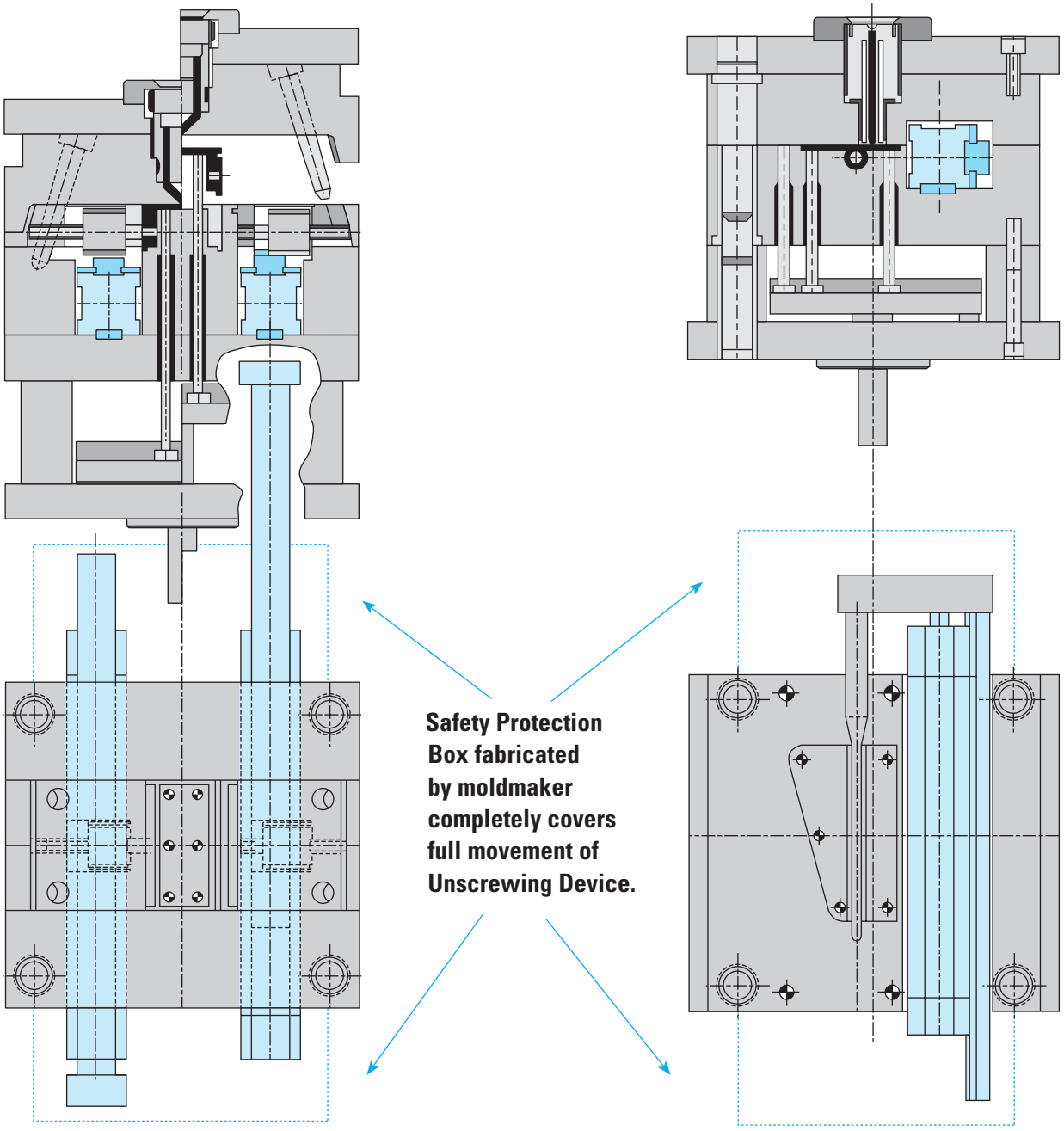
Safety Protection Box fabricated by moldmaker completely covers full movement of Unscrewing Device.

A complete Engineering Design Guide, plus separate example, are available at www.dme.net/hud

Applications

Application C
With guiding thread

Application D
Long guiding cores



Safety Protection Box fabricated by moldmaker completely covers full movement of Unscrewing Device.

Safety Considerations: Moldmaker must fabricate boxes over the rack areas which move to protect against injury to personnel. Moldmaker must also use safety interlocks to prevent movement of unscrewing device if these protection boxes are removed for any reason. Also, sheet metal should be used to cover areas where the gears are, to prevent damage from loose debris falling between the gears and racks.

D-M-E Multiform, Collapsible Core and Expandable Cavity Systems

EFFICIENTLY MOLD
PLASTIC PARTS REQUIRING
INTERNAL THREADS, UNDERCUTS,
PROTRUSIONS OR CUT-OUTS



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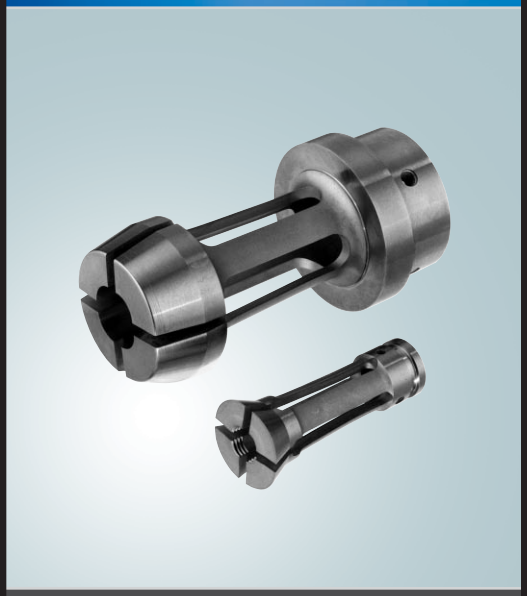


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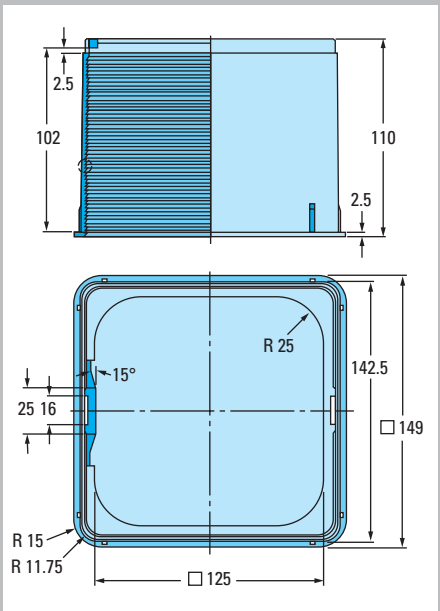
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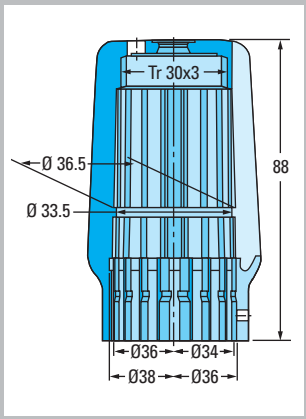
Online Price Guide

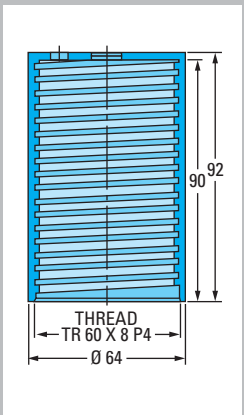
Go to www.dme.net/prices for the latest pricing guide.

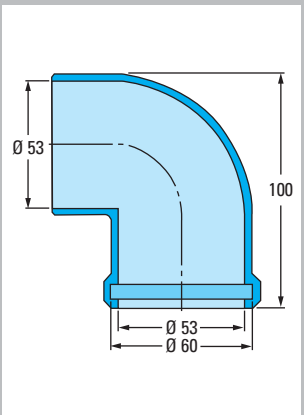
Application Examples

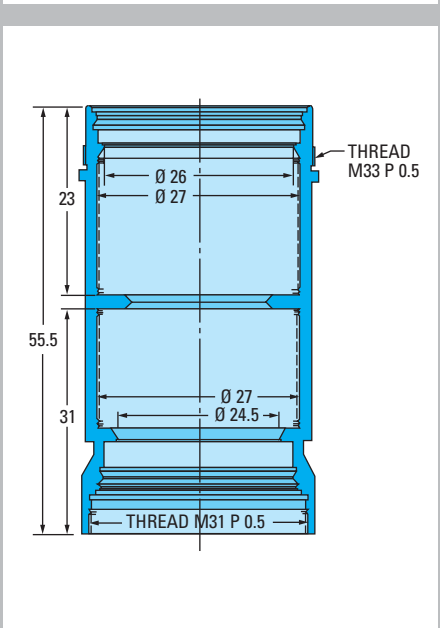
Application Examples for Multiform Collapsible Cores

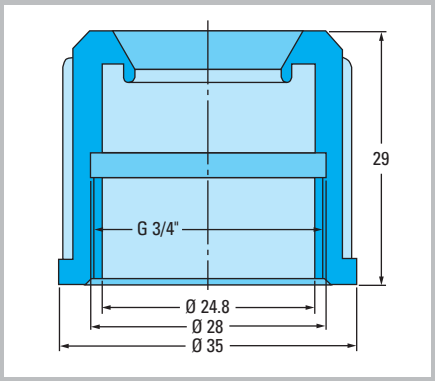


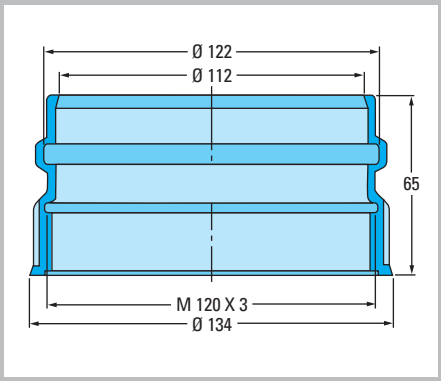


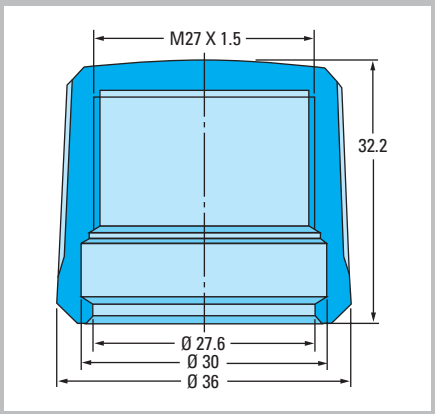


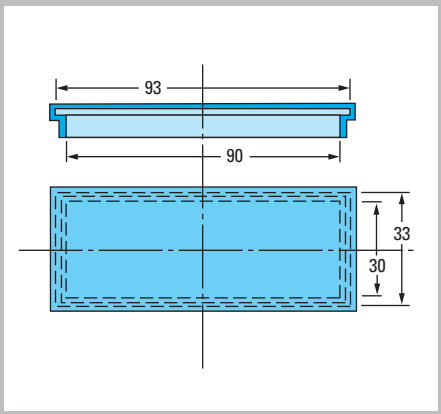












Multiform Collapsible Cores – Features and Benefits



- From diameter 10 to 200mm
- Can be used for round, square or oval parts
- Various coating options
- Can be used with all thermo-plastics used in injection molding
- Also suitable for diecasting and thermosets
- Separate segments are exactly adjusted to match perfectly together
- For undercuts up to 12%
- High degree of temperature control as of diameter 14mm



Ordering Information

Multiform Collapsible Cores are supplied to customer specification. If you would like to place an order, please contact D-M-E. To calculate the core's geometry, a drawing showing the item is required.

The Multiform Collapsible Core and its Possibilities

- With this Multiform Collapsible Core, internal undercuts on plastic or die-cast items are no longer a problem.
- Internal undercuts – all the way round or just partially – on round, square or oval parts can now be carried out without any problems.
- Parts no longer have to be separated into two pieces. The procedures for gluing, ultrasonic welding, screwing or mechanical reworking are no longer required.
- Parts with single or multistart threads (also a combination of right- and left-handed threads).
- By means of the D-M-E Multiform Collapsible Core, non-loosening water-tight snap-on connections can be created. Threaded components, such as screw caps, can be produced at reduced cost, as the core allows the wall thickness to be reduced to a minimum. The dimensional stability of parts manufactured using D-M-E Multiform Collapsible Cores meets the highest requirements. For example, an accuracy of ±0.015mm is achieved for flatness and roundness. Since no ejection draft line is required, precisely shaped, cylindrical parts with a uniform wall thickness can be produced.

Possible Undercut Ratios

The size of the maximum undercut ratio depends on the internal length (L). For each item's contour, the best possible design conditions are calculated, so that the best diameter and internal length ratios are achieved for each application.

For pre-selection, the small diameter (d) for a given large diameter (D) and a given internal length (L) can be calculated using the following formulas:

For small internal lengths:

$$\frac{\text{internal length L}}{\text{large diameter D}} < 2$$

$$d = D \times \left(0.866 + \frac{L}{D} \times 0.0328\right)$$

For large internal lengths:

$$\frac{\text{internal length L}}{\text{large diameter D}} \geq 2$$

$$d = D \times \left(0.9316 + \left(\frac{L}{D} - 2\right) \times 0.017\right)$$

Example: internal length L = 76.8mm
large diameter D = 128.0mm

$$\text{Ratio } \frac{L}{D} = \frac{76.8\text{mm}}{128\text{mm}} = 0.6 \rightarrow \text{small internal length (formula 1)}$$

$$d = D \times \left(0.866 + \frac{L}{D} \times 0.0328\right) = 128\text{mm} \times (0.866 + 0.6 \times 0.0328)$$

$$d = 113.64\text{mm}$$

The small diameter d can be a minimum of 113.64mm.

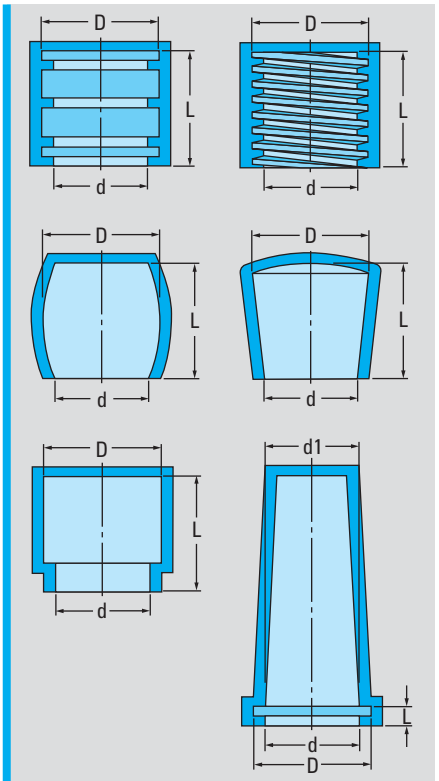
d = small diameter	D = large diameter	L = internal length

Installation and Motion Sequence

Structure

Normally, the D-M-E Multiform Collapsible Core consists of an inner core and six external segments. The segments are arranged on the inner core in various precisely calculated bevelled planes. During ejection, the segments slide across the inner core (dovetail) and perform a radial movement, which allows the internal undercut to demold.

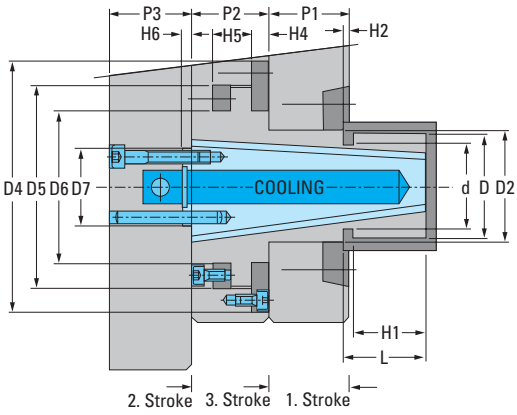




The internal undercut is comprised of the smaller diameter "d" and the bigger diameter "D." For a mathematical calculation of the Multiform Collapsible Core, the internal length "L" is also of great importance. The larger the ratio of L to D, the smaller the possible undercut ratio.

In order to achieve an excellent undercut ratio for large item lengths where the internal undercut is at the item's front part, it is possible to flange a stationary core in front of the D-M-E Multiform Collapsible Core.

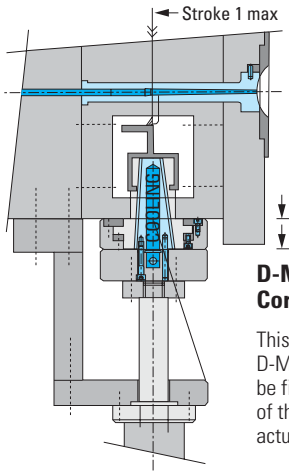
Installation Instructions



D = large diameter
d = small diameter
D2 = stripping diameter
L = internal length
P1 = stripping plate
P2 = segment retaining plate
P3 = clamping plate
D4 = max. external diameter

1. Stroke = mold opens
2. Stroke = axial segment movement (segment lift)
3. Stroke = stripping

Stroke 2 added to Stroke 3 = ejection stroke

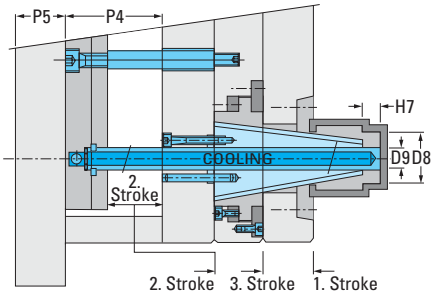


D-M-E Multiform Collapsible Core (flanged on the side)

This example illustrates that the D-M-E Multiform Collapsible Core can be fitted into the tool in the direction of the split line or obliquely. It is actuated using a hydraulic cylinder.

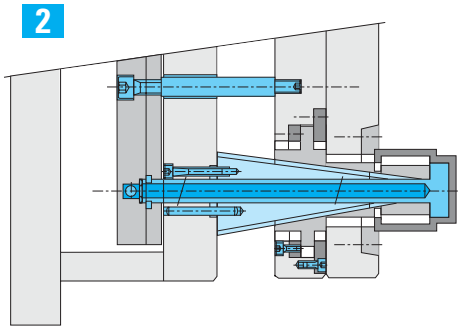
Motion Sequence (with flanged stationary core)

1



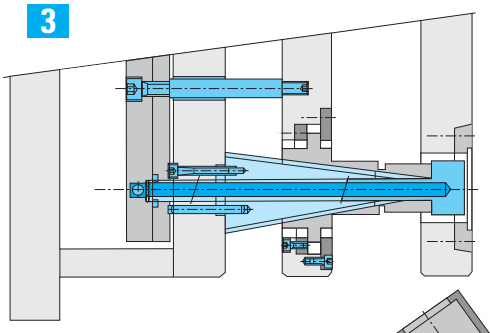
The cooling time has expired – the mold opens completely.

2

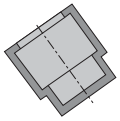


Ejection movement forward until the segments' axial movement has been completed; undercut is released.

3



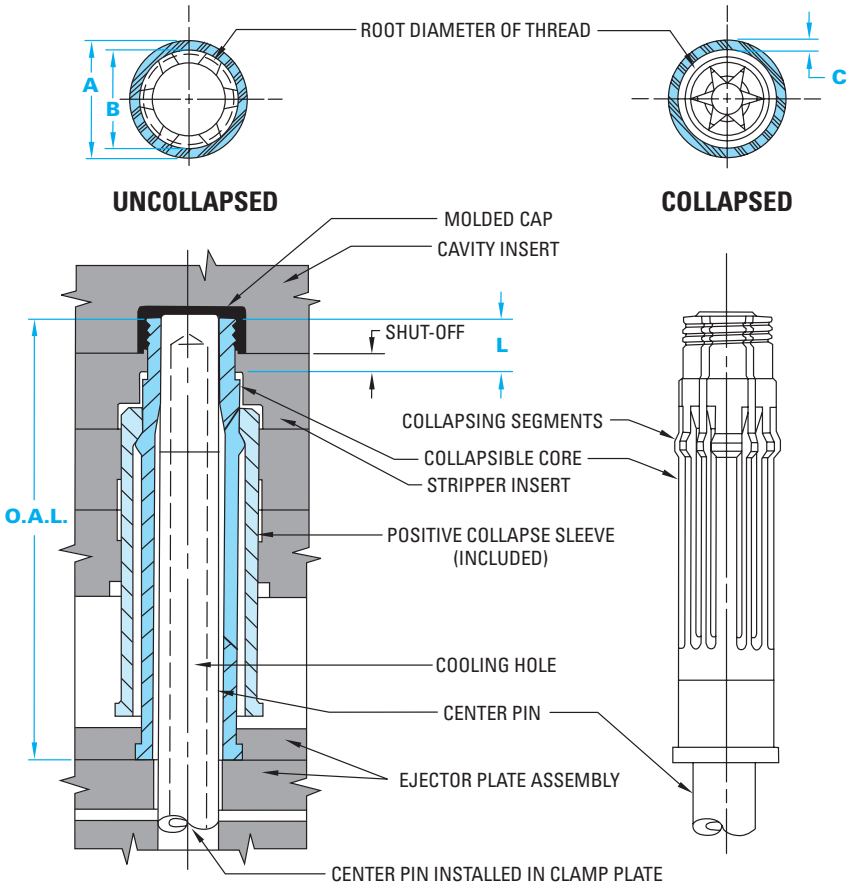
Ejector movement completed; part is ejected.



Collapsible Cores – Features and Benefits



U.S. Patent Nos. 3,247,548; 3,660,001
Foreign Patents Issued



Economically produce complex plastic parts

The Collapsible Core is a major breakthrough for molding plastic parts requiring internal threads, undercuts, protrusions or cut-outs. The patented design incorporates only three moving parts, which utilize conventional mold movements.

The Collapsible Core's automatic operation makes it possible for you to produce parts that, previously, had been considered impossible to mold. Parts with internal protrusions, dimples, interrupted threads and cut-outs can now be economically produced on a high- or low-volume basis.

For conventional threaded parts, the Collapsible Core could cut your cycle time up to 30% when compared with unscrewing or other complex actuating mechanisms.

Full technical details, including basic stripper plate mold construction, core grinding instructions, and core and mold machining dimensions are included in the Collapsible Core and Collapsible Mini-Core Design & Assembly Guide – contact D-M-E for a copy.

ITEM NUMBER	A MAX O.D. OF THREAD OR CONFIG		B MIN I.D. OF THREAD OR CONFIG		CENTER PIN DIAMETER (AT TOP OF CORE)		L MAX MOLDED LENGTH (INCL MOLD SHUT-OFF)		C COLLAPSE PER SIDE AT TOP OF CORE**				O.A.L. OVERALL LENGTH OF COLLAPSIBLE CORE (ONLY)	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	*inch	*mm	inch	mm
CC-125-PC	.720	18.29	.620	15.75	.490	12.45	.800	20.32	.027	.69	.032	.81	5.605	142.37
CC-150-PC	.850	21.59	.700	17.78	.580	14.73	1.000	25.40	.037	.94	.042	1.07	6.615	168.02
CC-175-PC	.970	24.64	.760	19.30	.640	16.26	1.000	25.40	.043	1.09	.048	1.21	6.615	168.02
CC-200-PC	1.270	32.25	.910	23.11	.785	19.93	1.150	29.21	.043	1.09	.048	1.21	7.315	185.80
†CC-250-PC	1.270	32.25	.910	23.11	.785	19.93	1.150	29.21	.043	1.09	.048	1.21	5.440	138.17
CC-202-PC	1.390	35.30	1.010	25.65	.885	22.47	1.150	29.21	.055	1.39	.064	1.62	7.315	185.80
†CC-252-PC	1.390	35.30	1.010	25.65	.885	22.47	1.150	29.21	.055	1.39	.064	1.62	5.440	138.17
CC-302-PC	1.740	44.19	1.270	32.25	1.105	28.06	1.400	35.56	.068	1.72	.083	2.10	7.315	185.80
†CC-352-PC	1.740	44.19	1.270	32.25	1.105	28.06	1.400	35.56	.068	1.72	.083	2.10	6.065	154.05
CC-402-PC	2.182	55.42	1.593	40.46	1.388	35.25	1.700	43.18	.090	2.28	.103	2.61	7.815	198.50
CC-502-PC	2.800	71.12	2.060	52.32	1.750	44.45	1.900	48.26	.115	2.92	.125	3.17	9.625	244.47
CC-602-PC	3.535	89.78	2.610	66.29	2.175	55.24	2.400	60.96	.140	3.55	.148	3.75	11.250	285.75
CC-652-PC	3.800	96.52	2.890	73.41	2.450	62.23	2.400	60.96	.150	3.81	.160	4.06	11.250	285.75
CC-702-PC	4.225	107.31	3.350	85.09	2.875	73.02	2.400	60.96	.165	4.19	.170	4.32	11.250	285.75

†Shorter overall length Collapsible Cores for any application, and particularly where mold shut height is limited.

NOTE: Special Collapsible Cores with molding lengths, special diameters or collapse other than shown in table above will be quoted on request.

*Cores having slightly greater collapse, as shown above, are usually available from stock – contact D-M-E.

**To determine maximum dimension of moldable undercut, reduce the amount of collapse per side shown in the table above by .020 per inch of part height requiring collapse.

Collapsible Mini-Cores – Features and Benefits

Easily mold parts with closures as small as 13mm

The Collapsible Mini-Core broadens the applications of collapsible core molds for closures as small as 13mm. Due to the smaller diameters involved, these Mini-Cores employ three larger collapsing segments combined with three narrow, non-collapsing blades, which are an integral part of the center pin.

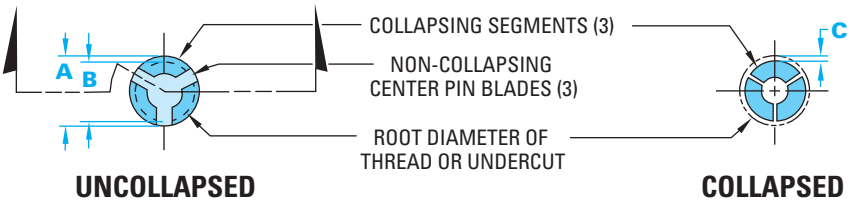
As a result, up to 80% full threads or undercuts can be molded. The function of the collapsing core also permits threads to stop at any point along the molded length – threads need not run out to the top of the core as with unscrewing molds. If a seal is required in the top of the closure, an undercut can be molded into the part to hold such a seal in place.

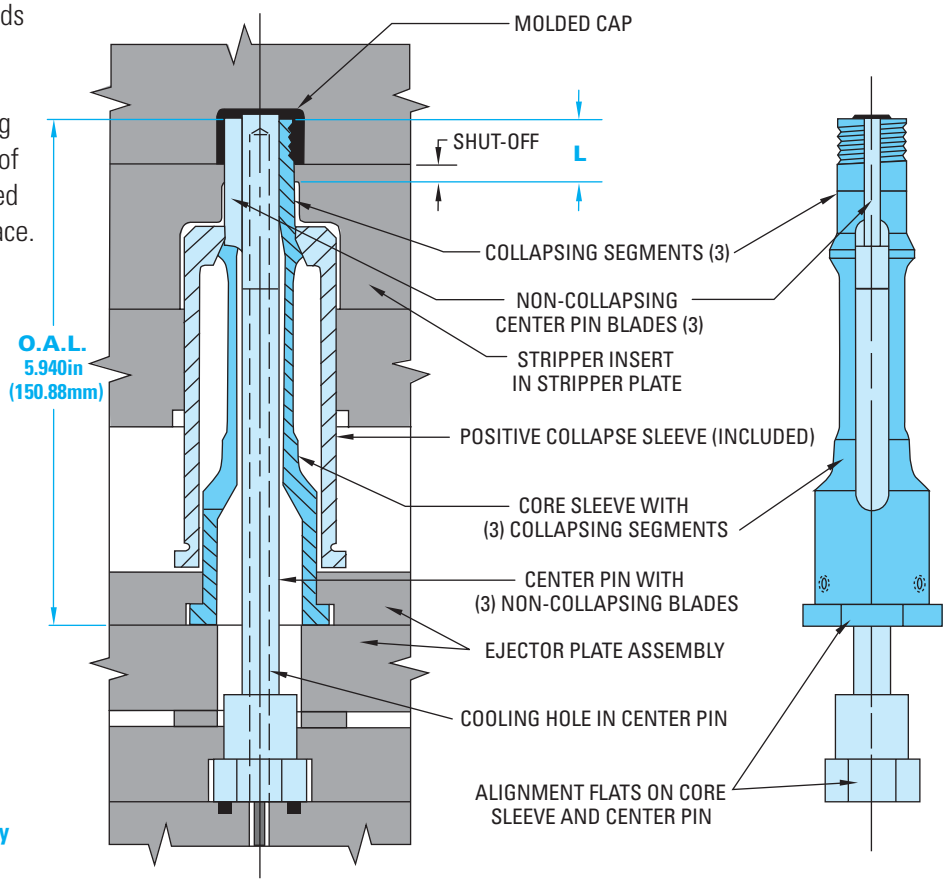
The collapsing action also permits a longer threaded area to be formed, without adding to the cycle time or requiring long rack and pinion mechanisms. In addition to threads, other configurations such as dimples, cut-outs or protrusions beyond the capabilities of unscrewing molds can be successfully molded. Three standard sizes of Collapsible Mini-Cores are available, for 13-16, 17-20 and 21-24mm closures.

Full technical details on core grinding and stripper plate mold construction are included in the Collapsible Core and Collapsible Mini-Core Design & Assembly Guide – contact D-M-E for a copy.



Patent Pending





ITEM NUMBER	FOR CLOSURE DIAMETER RANGE	A MAX O.D. OF THREAD OR CONFIG		B MIN I.D. OF THREAD OR CONFIG		CENTER PIN DIAMETER (AT TOP OF CORE)		WIDTH OF (3) NON-COLLAPSING CENTER OF PIN BLADES (AT TOP OF CORE)		L MAX MOLDED LENGTH (INCL MOLD SHUT-OFF)		C COLLAPSE PER SIDE AT TOP OF CORE*	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
CCM-0001	13-16	.645	16.38	.425	10.80	.300	7.62	.170	4.32	.850	21.59	.052	1.32
CCM-0002	17-20	.805	20.45	.560	14.22	.420	10.67	.190	4.83	.850	21.59	.057	1.45
CCM-0003	21-24	.965	24.51	.710	18.03	.560	14.22	.200	5.08	1.000	25.40	.059	1.50

NOTES:
1. Cores listed above include core, center pin, positive collapse sleeve, clamping ring and a special, non-bladed center pin arbor required for proper core grinding.
2. Collapsible Mini-Cores with longer molding lengths, special diameters, collapse or number of segments will be quoted on request. For larger diameters (up to 3.535"), see Collapsible Cores.

*To determine maximum dimension of moldable undercut, reduce the amount of collapse per side shown in the table above by .020 per inch of part height requiring collapse.

View Collapsible Core animation at www.dme.net/cc

Expandable Cavity System – Features and Benefits

Lowers development and processing costs

The Expandable Cavity saves money at every step — from initial tooling to processing to maintenance. Intelligent engineering reduces or eliminates many costly factors such as complex design details, core slides and required mechanical components, added maintenance and replacement of high-wear items often found in traditional slide action molds.



The Expandable Cavity is maintained under compression during molding.

As the mold opens, segments are released automatically to the expanded position, and the part is released.

U.S. Patent Numbers
5,387,389 D 356,320

View Expandable Cavity animation at www.dme.net/ec

Broad range of benefits

Simple design

The revolutionary design and engineering of the Expandable Cavity saves steps and solves problems that have complicated plastics molding for years. In addition to simplifying new tooling design, it can be retrofit to existing molds.

More reliable

Complete reliability of the Expandable Cavity is assured, not only by the simplicity of the design, but also by the use of superior materials and proven proprietary processing techniques. You can count on minimal downtime and higher productivity. The Expandable Cavity has been field tested over several million cycles.

More compact

Using the D-M-E Expandable Cavity allows you to design more cavities in each mold.

Speeds molding process

The Expandable Cavity concept eliminates the need for side-action mechanisms and the additional machining steps they require. Various part ejection methods can be employed.

Speeds development

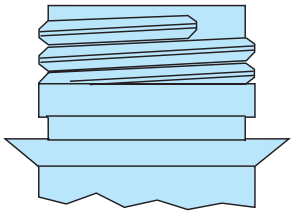
The Expandable Cavity concept simplifies the engineering required to design and manufacture a new cavity. This means that your new products go into production in less time than was previously possible.

Typical Molded Parts

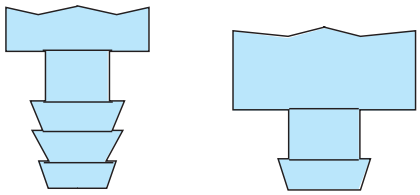
Typical parts molded with the Expandable Cavity System

The Expandable Cavity was developed for molding the external profile of circular and other parts with undercuts such as threads, dimples, and protrusions. Typical molded parts include:

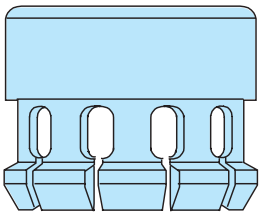
- Bottle caps
- Plumbing supplies
- Snap O-ring caps
- Automotive parts
- Medical parts and packaging
- Hose couplings
- Industrial flanges and valves
- Electrical fixtures
- Cosmetic packaging



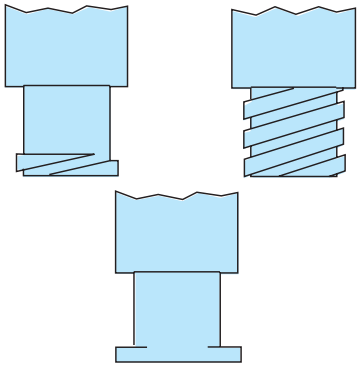
BOTTLE TOPS



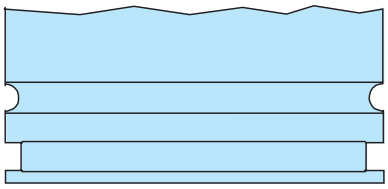
BARB CONNECTIONS



SNAP FIT COVERS/LENSES



LUER CONNECTIONS



O-RING GROOVES

Components



Typical Expandable Cavity for "A" Side Striker Insert

Typical Expandable Cavity for "B" Side Striker Insert

General maintenance

After 100-200 initial shots, the Expandable Cavity should be rechecked to ensure proper mechanical function.

A routine maintenance program of your Expandable Cavity System is recommended after 50,000 to 100,000 cycles. Thoroughly degrease and demagnetize system components. Observe for signs of abnormal wear. A light lubricant such as a P.T.F.E. should then be applied to the Striker Insert, Center Pin and the Expandable Cavity. This will increase the life of the system components. Never use a heavy grease. Re-install Expandable Cavity System.

If this maintenance procedure is performed as described above, several million cycles are easily obtainable.

Expandable Cavity

The Expandable Cavity is typically made of A-2 tool steel, hardened to 54-58 Rockwell "C". The typical tool has four segments which expand radially away, under their own spring force, from the center axis of the tool. In the closed molding position, the precision fit between each segment permits flash-free molding.

Striker insert

The striker insert is made from different types of tool steel. It is typically hardened to 32-45 Rockwell "C" scale, depending on the application. The striker insert has a lower hardness than the Expandable Cavity to ensure the eventual wear will occur on the striker insert and not the detailed Expandable Cavity. Depending on the part configuration, the striker insert can be used in the "A" or "B" side of the mold (see Figs. 1 and 2 for details).

The striker insert must be closely fit to the Expandable Cavity to ensure that in the **mold closed** position the segments are completely sealed against one another. The tolerance on this fit must be held to ±0.0005 inch to ensure flash-free molding.

Interchangeable center pin

The solid center mandrel is the most common type of center pin. It may have an inner cooling channel depending on its size. The center pin provides an internal shut-off with the Expandable Cavity.

Ejector sleeve

An ejector sleeve is commonly used to ensure part ejection from the cavity. The sleeve rides forward over the center pin, once the mold is opened and the cavity expanded. Many times the expansion needed is dependent on leaving clearance for the ejector sleeve.

Expansion limiter sleeve

If part design is such that it could tend to stick in the "A" side of the mold when the Expandable Cavity opens, an expansion limiter sleeve can be used. This sleeve will restrict expansion and retain the part until activation of a stripper plate allows additional expansion prior to part ejection (see Fig. 3).

Typical Applications

Fig. 1
With "A" Side Striker Insert

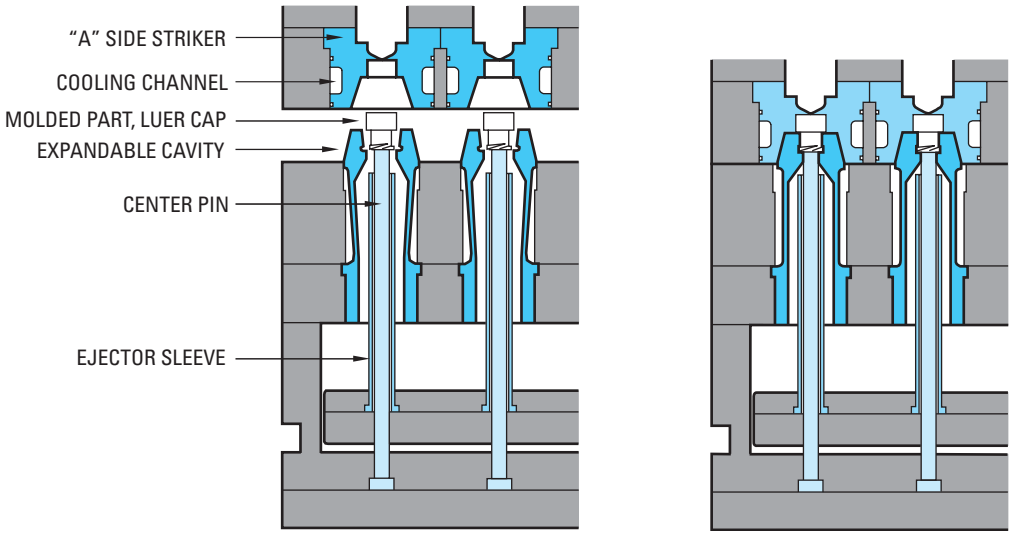


Fig. 2
With "B" Side Striker Insert

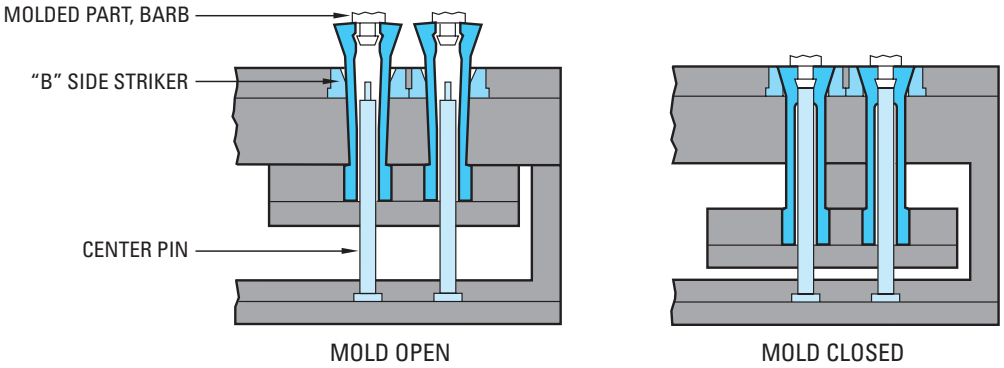
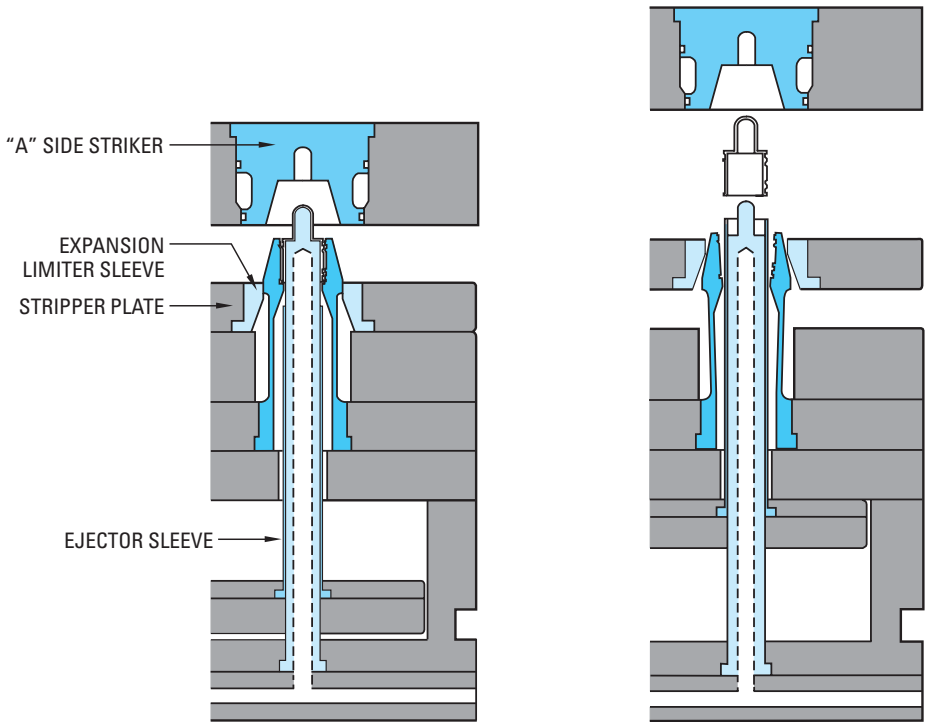


Fig. 3
With "A" Side Striker Insert and Expansion Limiter Sleeve



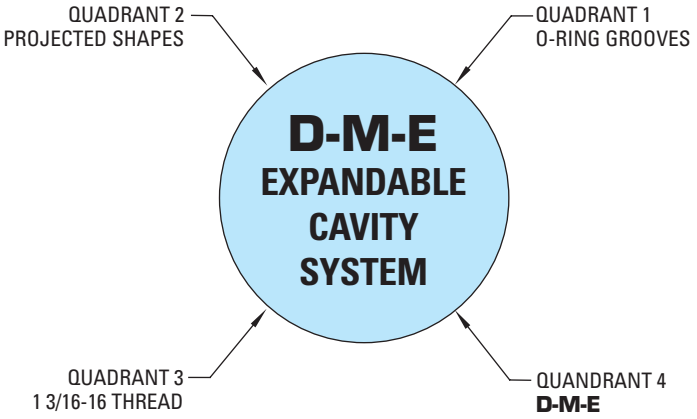
Plastic Part Design

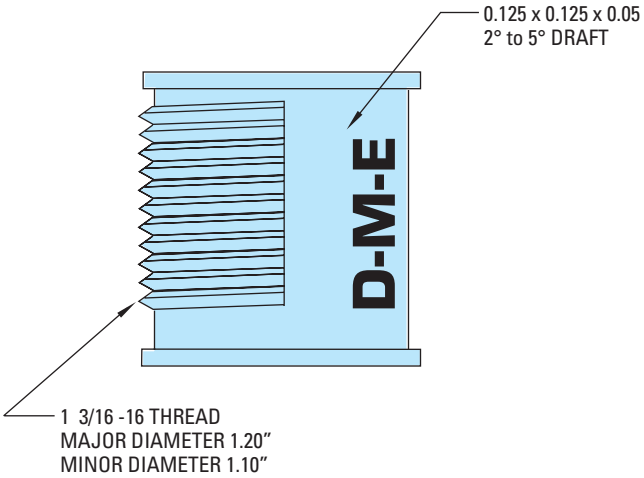
The Expandable Cavity was designed to produce external details. All commonly used thermoplastic molding polymers, including filled materials and engineering polymers, have been successfully molded with the Expandable Cavity. When using a corrosive polymer such as PVC, the Expandable Cavity must be surface treated with a protective coating. To prevent loss of expansion properties in the Expandable Cavity, the surface treatment process should not exceed a temperature of 600° F.

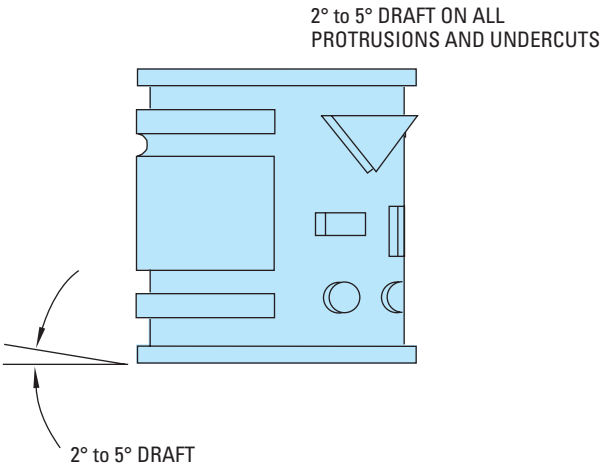
Good plastic design practice should be observed to avoid such conditions as distortion, sink marks, etc. These problems and their solutions are identical to those found in conventional moldings.

All undercuts, protrusions, windows, etc. will typically include two to five degrees of draft. The bottom edge of the part must also have approximately two to five degrees of draft. Also, if molding is required on the top of the Expandable Cavity, two to five degrees of draft needs to be included. This is necessary because the segments flex radially away from the molding position in an arc. The draft allows the segments to expand freely.

NOTE: The amount of draft varies with tool design. Changes in tool design (length, body diameter, etc.) can minimize draft requirements.







NOTE: Demo part has four (4) different quadrants of detail (call D-M-E for a sample).

Expandable Cavity and Striker Insert Design

The Expandable Cavity can mold a full 360 degrees around. The most common configuration is four (4) segments that mold 90 degrees each. The Expandable Cavity can also be designed as asymmetrical, such as two segments that mold 90 degrees each and three segments that mold 60 degrees each. (Contact D-M-E Applications Engineering for details.) The amount of expansion varies according to the part requirements and clearances needed.

The general calculations for total expansion necessary are:

1. Calculate the critical expansion per side

The critical expansion (CE) needed to release the undercut is not the radial difference between major diameter (D) and minor diameter (d). For a typical four segment Expandable Cavity, the formula for calculating critical expansion is (see Fig. 4):

$$CE = \frac{\sqrt{D^2 - (d^2/2)}}{2} - \frac{\sqrt{2} \times d}{4}$$

2. Calculate the loss of expansion

Loss of expansion = molding length x .050in

The loss of expansion is the amount of expansion the tool loses as you move back from the cavity's face. This is due to the fact that the segments expand radially outward from fixed points on the common base. The outward bend of a typical segment is about 2 to 3 degrees. The tool typically loses 0.050 inch per inch as you move into the Expandable Cavity from the tool's face (see Fig. 5).

3. Calculate the total expansion

Total expansion = critical expansion per side
+ loss of expansion + 0.005 clearance

When the mold is closed, the exterior of the Expandable Cavity must be supported by the Striker Insert at least 7/8 of the molding length plus the shut-off, to ensure no flash conditions. Allow for 0.200 inch of shut-off length below the molding length — any more is excessive (see Fig. 6).

Fig. 4

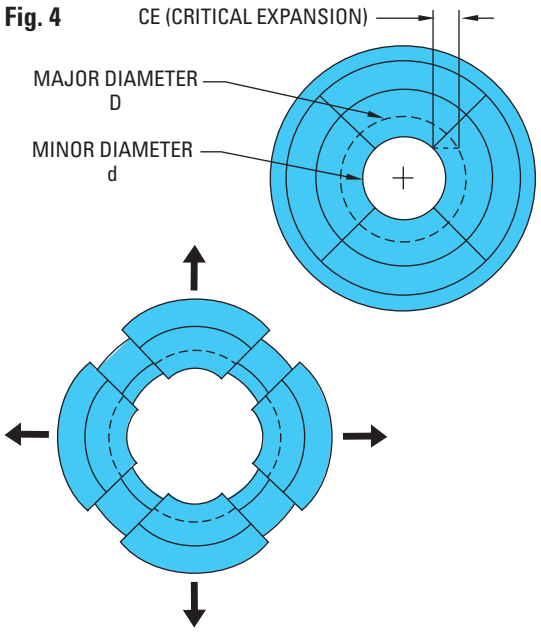


Fig. 5

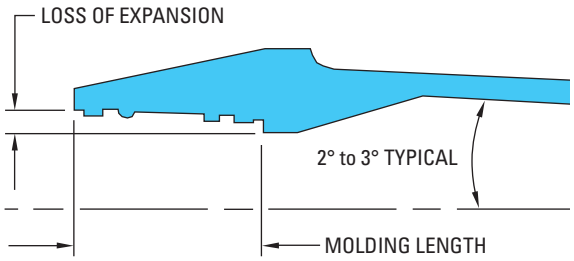
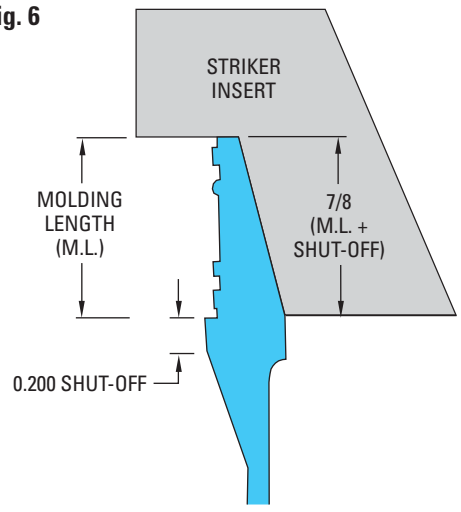
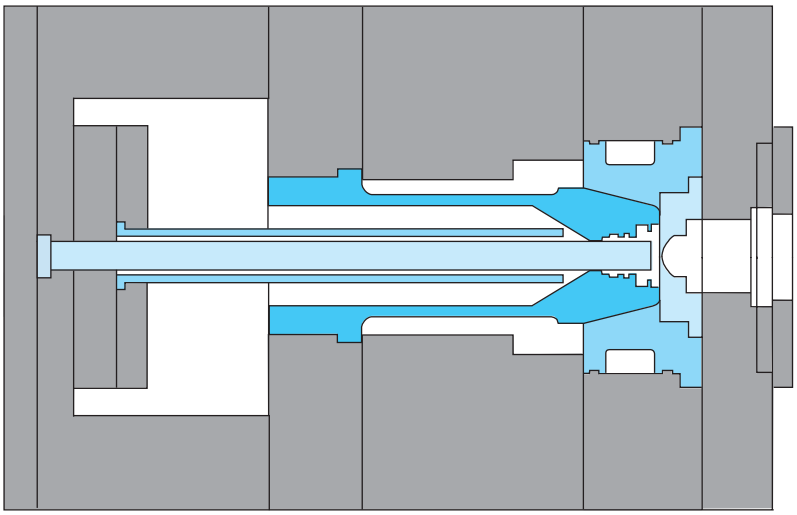


Fig. 6

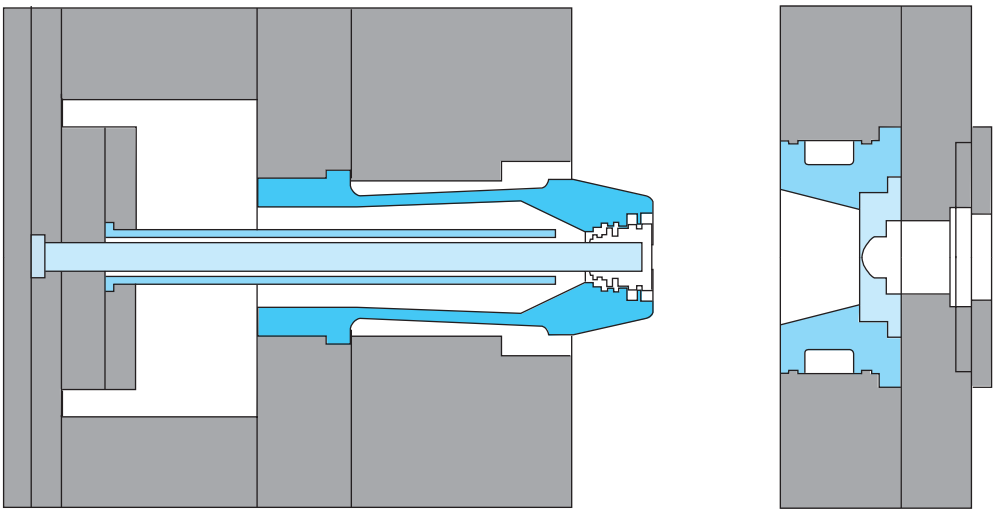


Typical Operating Sequence

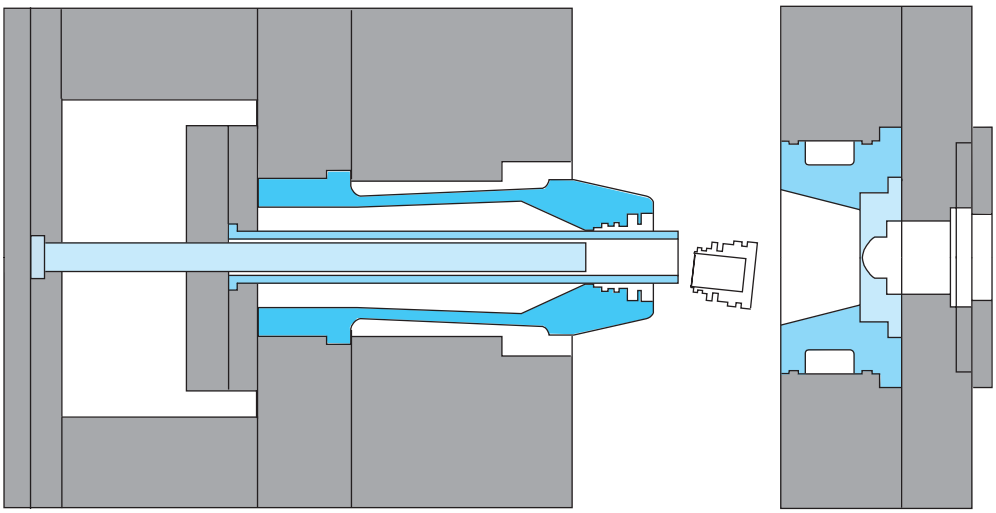
Mold Closed



Mold Open, Cavity Expanded



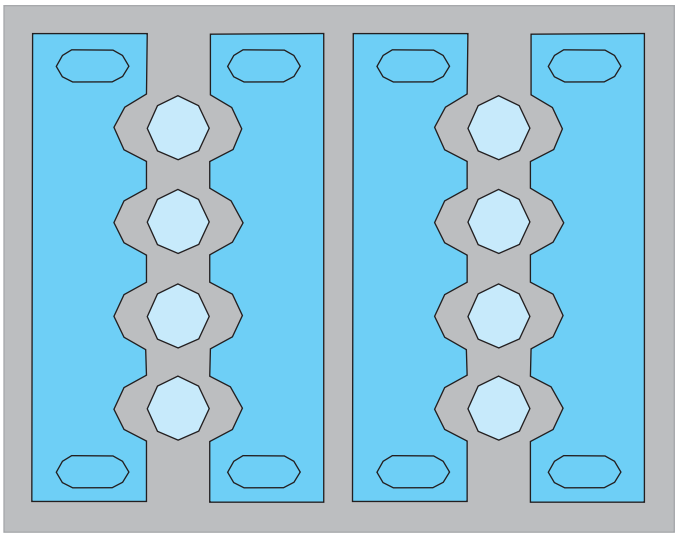
Ejector Forward, Part Ejected



Typical Mold Layouts

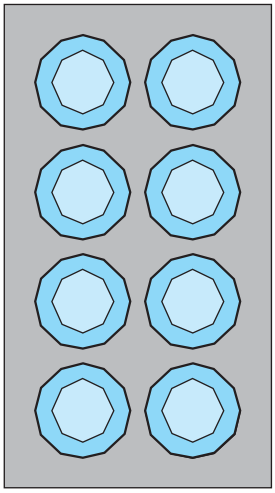
Go from this …

Mold Layout with Conventional Slide Mold

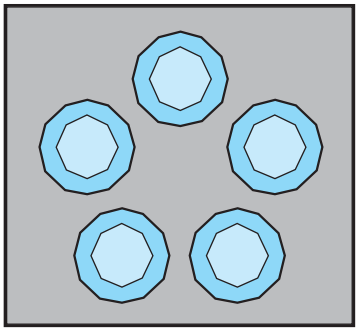


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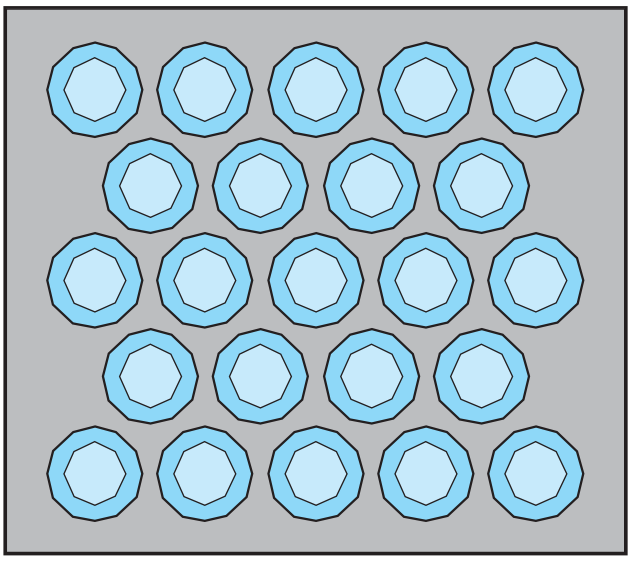
Reduced Mold Size with Expandable Cavity



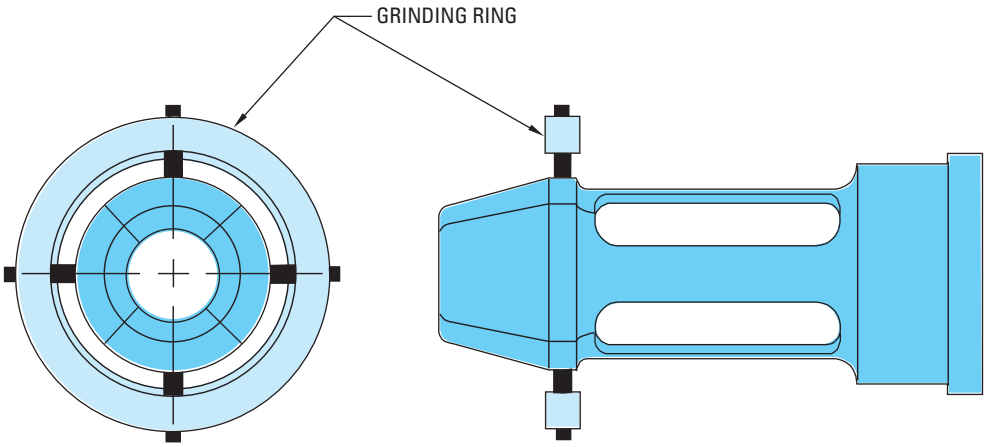
Radial Mold Layout with Expandable Cavity



Nest Mold Layout with Expandable Cavity



Application Guidelines



The possibilities are almost limitless

- Size Range: The Expandable Cavity is typically designed for parts with outside dimensions of 1/32 to 3 inches, but more custom designs are also available to suit your overall part size or undercut requirements
- Can be designed for retrofit to existing molds
- Can be designed for use in combination with D-M-E Collapsible Cores, Collapsible Mini-Cores, unscrewing cores or straight pull outs for interior of part
- Can be designed in inch or metric sizes

The Expandable Cavity System may be subject to restrictions in its use for the molding of plastic tamper-indication closures in threaded caps under U.S. Patent No. 5,281,385 of Sunbeam Plastics Corporation. Roehr Tool disclaims any damages or responsibility for the use of its core when used in the method of such patent.

Detailing

Most Expandable Cavity details are usually ground or EDM'd. It is important when grinding to flood tool with suitable coolant for hardened tool steels. Do not grind with a loaded wheel (dress wheel frequently). The wheel must be of a soft grade (60J, 46J, etc.). When grinding make sure the Expandable Cavity is completely closed in a true circle by using the grinding ring supplied, as shown here.

After all finish grinding, polishing and EDM'ing work, be sure to demagnetize the Expandable Cavity to prevent adhesion of any metal particles that might find their way into the cavity during molding.

NOTE: D-M-E does not provide the part configuration detailing or machining. We can direct you to an appropriate source for this service if required.

How to order

The Expandable Cavity is designed and constructed based on part configuration and mold design requirements. For a quotation, copy and fill out the Quote Request Form on the facing page and mail or fax to the address or fax number shown on the form. If you also include a part print and/or mold design, D-M-E can assist you in determining the feasibility of molding with the Expandable Cavity and review your overall mold design.

Applications Engineering Quote Request Form

QUOTE FAX HOTLINES AVAILABLE or visit www.dme.net

United States 888-808-4363 • Canada 800-461-9965 • International 248-398-7394

Company name:	**D-M-E account #:**
Contact name:	**P.O. #:**
Phone:	**FAX:**
Address:	**E-mail:**
City:	**State/Province:**
ZIP/Postal Code:	**Country:**

Shipping method:

☐ **UPS Ground** ☐ **UPS 2nd Day Air** ☐ **UPS Next Day** ☐ **FedEx** ☐ **Other** _____

Expandable Cavity Requirements

I. POLYMER SPECIFICATIONS:

A. What is the material to be molded? _____

B. What is the process temperature? _____ ❑ Filled ❑ Unfilled ❑ Glass ❑ Mineral

II. DIMENSIONS OF EXPANDABLE CAVITY: (Part print is required)

A. Specify largest diameter to be molded _____

B. Specify smallest diameter to be molded _____

C. Specify major diameter of undercut or thread _____

D. Specify minor diameter of undercut or thread _____

III. MOLDED PART LENGTH:

A. Molding Length: _____ (Within the Expandable Cavity)

B. Mold Shut-off: .200 (Shut-off land below part)

IV. EXPANSION REQUIREMENTS: (See Expandable Cavity and Striker Insert Design)

A. Critical Expansion per side: _____

B. Loss of expansion (.050in/in): _____
Multiply molding length (Distance from top of Expandable Cavity to bottom of last undercut) by .050in

C. Clearance (Air) between plastic and steel upon expansion: .005

V. MOLD LAYOUT

A. Distance from gate (center to center): _____

B. Number of cavities: _____

❑ Retrofit ❑ New Mold

AE019 08/04

Additional Products



Patent No. 6.575.730
and 6.106.271
(additional patents pending)

Additional D-M-E products compatible with Collapsible Core applications

2-Stage Ejectors — positive control of stroke sequence and distance in two-stage ejection

D-M-E 2-Stage Ejectors adapt to a number of mold base sizes and plate thicknesses and are available in two ejection sequences: Top Last (TL) and Bottom Last (BL). Each ejection sequence is available in three sizes to accommodate most standard D-M-E mold bases. The stroke range for each ejection stage is determined and fixed by the customer in a simple procedure and once installed, cannot be tampered with or accidentally changed. Featuring internally installed components, the D-M-E 2-Stage Ejector avoids interference with waterline connectors and externally mounted components.



Patent No. 5,494,435

Internal Latch Lock — precise control of mold plate latching operation

D-M-E's Internal Latch Lock allows measured control of the mold plate opening sequence on mold bases with stripper plates. It enables one plate or group of plates to be latched together while the first parting line opening occurs. After a predetermined amount of travel, the latch lock releases the latched plates for the remaining parting line or lines to open.

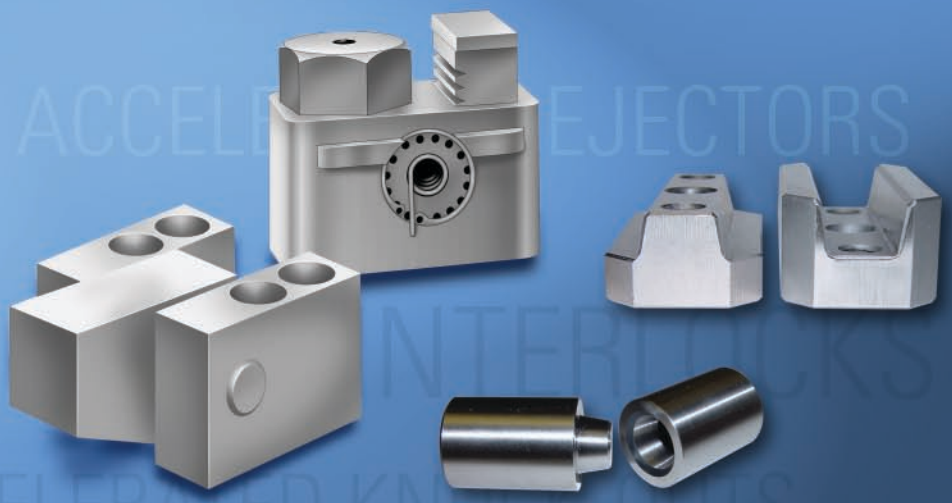
To accommodate most standard D-M-E stripper plate mold bases, the latch lock is available in three sizes — 28mm, 34mm, and 45mm — with two travel ranges and two center puller pin lengths. Like the 2-Stage Ejector, once installed the Internal Latch Lock cannot be accidentally changed and does not interfere with waterline connectors or externally mounted components.

D-M-E Plate and Pin Control

Optimizing part appearance through tighter mold alignment







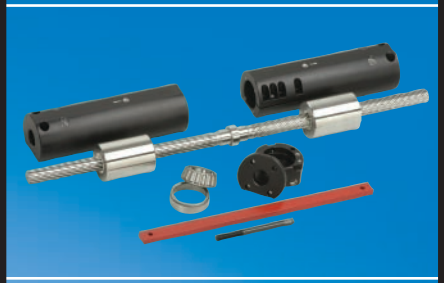
D-M-E
Every step of the way

Plate and Pin Control

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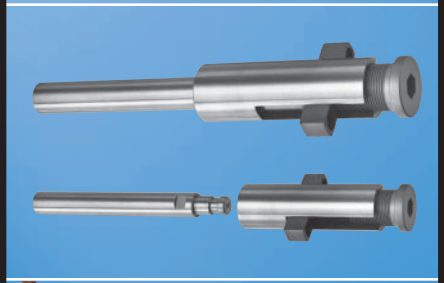
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Cost-effective solution for increasing capacity with less capital investment



Helical Gear Stack Mold Components ..... 77 to 82
Greater productivity through simplification of design and standardization of components



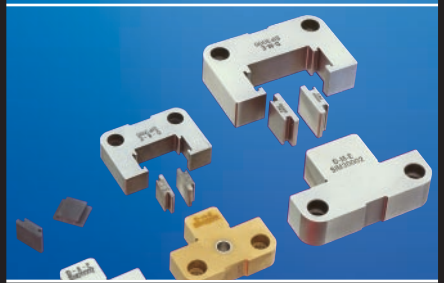
2-Stage Ejectors ..... 83 to 102
Positive, precision control of two-stage ejection — available in two ejection sequences



Precision Control of Mold Plate Operation ..... 103 to 132
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Accelerated Ejectors
Early Ejector Return Assembly
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Prevent accidental mold closure in injection molding applications



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A variety of standard interlock styles to suit any application

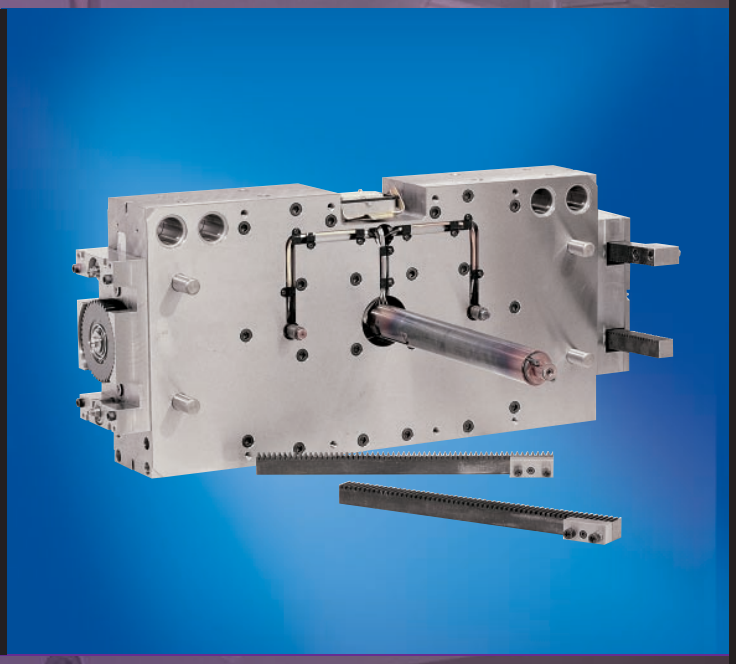
Online Price Guide

Go to www.dme.net/prices for the latest pricing guide.

D-M-E Multi-Parting Line Systems

COST-EFFECTIVE SOLUTION

FOR INCREASING CAPACITY





Comprehensive Options

When you choose D-M-E as your partner for MPL Systems, you are choosing a total solution.



We can deliver:

- Mold bases
- Complete hot runner systems, their components and temperature controllers
- Functional subassemblies such as centering devices, center supports and their components
- Flexibility and scalability in assisting in your program
- System assembly
- Engineering expertise and design service
- Outstanding, unparalleled service

Comprehensive Options for High Productivity

Today's plastics processor has to do more with less – less labor, less capital investment, less floor space, and less time. Multi-Parting Line (MPL) systems double the cavitation of a standard single-face mold without an increase in machine tonnage. Key benefits of MPL systems include:

- Cost-effective solution for increasing capacity
- Optimum use of shop floor space and machine capacity
- Expanded molding capacity without capital expenditures
- More output per unit of shop floor labor – higher productivity in your operation

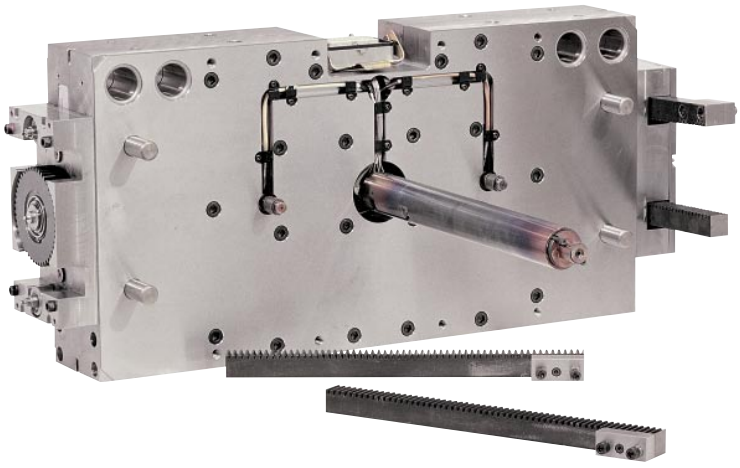
Multi Parting Line systems are ideally suited for automotive, housewares, caps and closures, cutlery, and electronic parts.

D-M-E, in collaboration with Milacron, offers an industry-leading range of MPL systems, including the following centering devices:

- Stack Molds
  - – Rack & Gear (pre-engineered design)
  - – Helical Gear (pre-engineered design assemblies and standard off-the-shelf components)
  - – Harmonic Arms (custom and engineered to suit your requirements)
- Injection molding presses specifically designed for MPL mold systems
- Design Services – design assistance or complete system design



Comprehensive Options



With D-M-E MPL systems – the choice is yours. Our systems feature complete flexibility – built around a family of product standards that simplify implementation. Only D-M-E gives you this wide range of choices. And, because they're from D-M-E, you can expect reliability, advanced engineering, and outstanding performance.

D-M-E delivers critical expertise with mold technology, while Milacron offers high-performance injection molding machinery when the application demands it. The combination is unbeatable.

Turnkey Systems Deliver a Total Solution

When you choose D-M-E as your partner for MPL systems, you're choosing a total solution. How big that solution is, will be your choice. We can deliver a turnkey molding system (excluding the cores and cavities) including a molding machine.

Our turnkey systems may include:

- Mold bases
- Hot runner systems and controllers
- Components – including centering and actuation devices
- System assembly
- Injection molding machines

View D-M-E Stack Molds animation at www.dme.net/stackmolds

D-M-E offers the following pre-engineered subassemblies for your MPL systems:

Centering Devices

Used for synchronizing two or more parting line openings.

Helical Gear Shaft and Nuts

- Available in 28mm and 38mm nominal gear diameters

Rack and Gear

- Available in 160mm and 120mm nominal gear diameters

Hot Runner Systems

To deliver the plastics from the machine barrel to the cavities. They include sprue bars, stack manifolds, and nozzles optimized to your application.

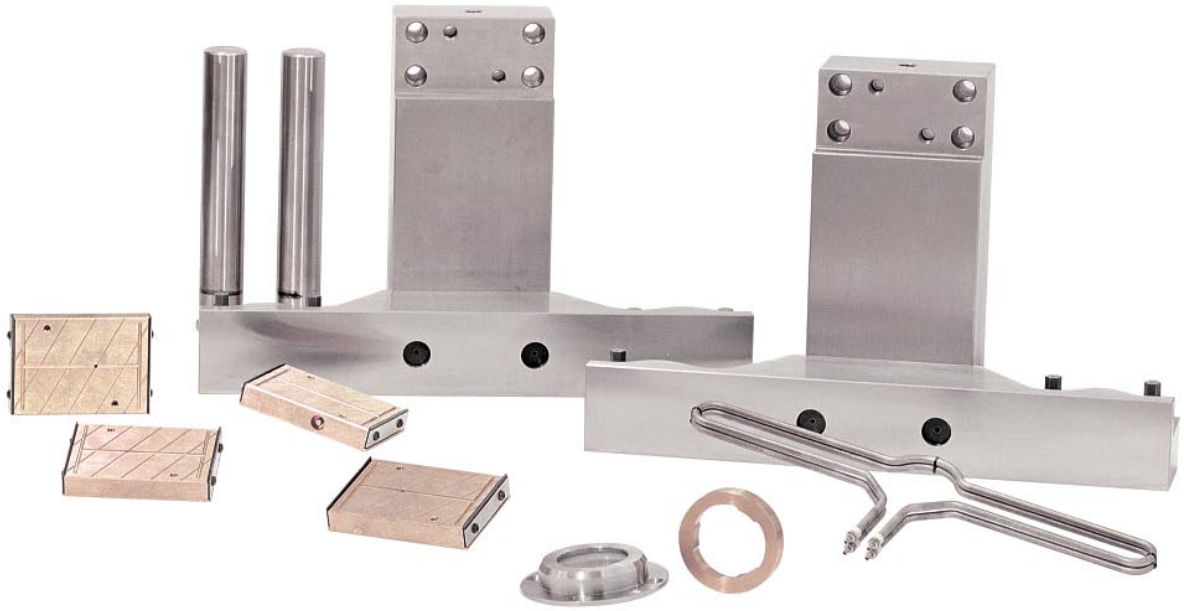
Center Supports

To support the center portion of the stack mold while the mold is open. Adjustable to compensate for misalignment and wear, they can transfer the weight of the mold center portion to the:

- Top tie bars
- Bottom tie bars
- Both top and bottom tie bars
- Machine ways

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Comprehensive Options



Our designers can assist in the choice and application of our rigorously engineered and proven MPL Components and Hot Runner Systems.

Engineering Expertise Ensures Success

The D-M-E design and engineering team delivers over six decades of experience with injection molding, and injection mold design. Our engineering services can quickly scale to meet the specific needs of your program. Our designers can assist in the choice and application of our rigorously engineered and proven MPL Components and Hot Runner Systems. We can offer the hot runner package alone, or we can handle the entire stack mold design, configuration, and assembly – including the mold base, centering and actuating components, hot runner system, and temperature controller.

Stack Systems

Only D-M-E offers a choice of three centering actuation systems to suit your requirements – including Rack & Gear, Helical Gear, and Harmonic Arms. We also offer a choice of center support configurations – including support on the tie bars (top, bottom, or both), on the machine ways, or on both the ways and tie bars. Ejection can be accomplished via machine knock-outs (moving platen only), or using hydraulic, pneumatic, or mechanical actuation. In addition, D-M-E has extensive experience in hot runner systems and offers different types of stack mold melt-delivery systems.

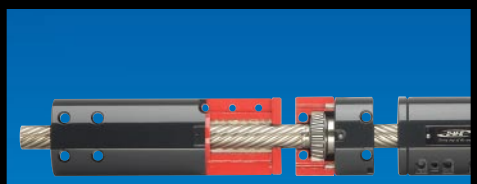
D-M-E Helical Gear Stack Mold Components

GREATER PRODUCTIVITY
THROUGH SIMPLIFICATION
AND STANDARDIZATION



ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

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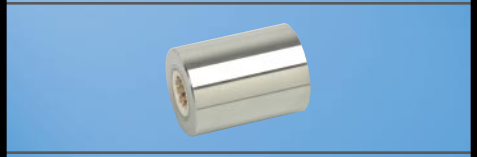
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Tapered Roller Bearing 82



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Roller Bearing Housing 82



Shipping Strap 82



Alignment Rod 82

Online Price Guide

Go to www.dme.net/prices for the latest pricing guide.

D-M-E Design and Engineering Expertise



Decades of Design and Engineering Expertise at Your Service

D-M-E has decades of design and engineering expertise to assist you in design and development of stack molds.

Our Helical Gears are the industry standard with decades of proven applications in a wide variety of applications and plastic resins. Our Helical Gear housings and assemblies greatly simplify the design and development of stack molds, leaving you more time to concentrate on the core and cavity details.

Off-the-shelf components are available when you need them.

D-M-E quality ensures reliability and inter-changeability of all components.

D-M-E engineers and designers are available to assist you with your questions whether you are building your first stack mold or challenging multi-level stack molds with complex mold actions.

D-M-E even offers complete design services (up to the cores and cavities) for those needing to off-load design and engineering during peak workloads.

With D-M-E, you can order individual components, complete assemblies ready for installation, or complete systems including design and engineering.

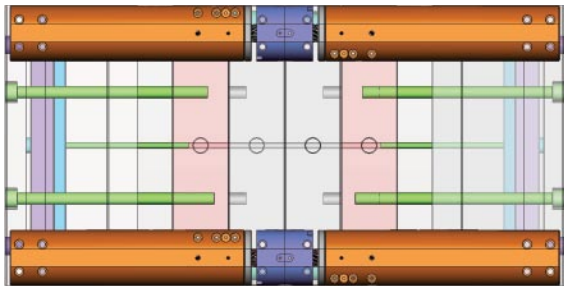
D-M-E is with you every step of the way!

Send your request or question to D-M-E Applications Engineering: appl_eng@dme.net, and we will take it from there.

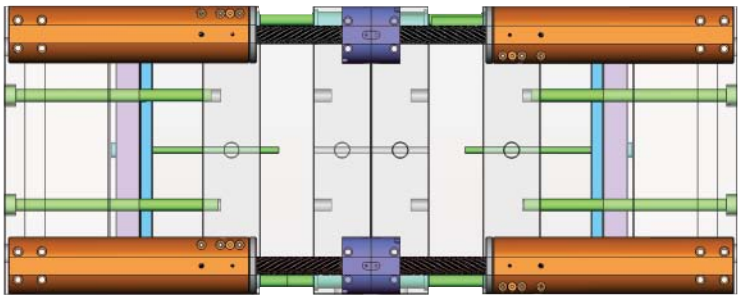
D-M-E Helical Gear housings and assemblies greatly simplify the design and development of stack molds — leaving you more time to concentrate on core and cavity details.

Helical Gear Stack Mold Centering Device Set-up and Maintenance Guide available upon request or at www.dme.net/hgguide

Mold closed

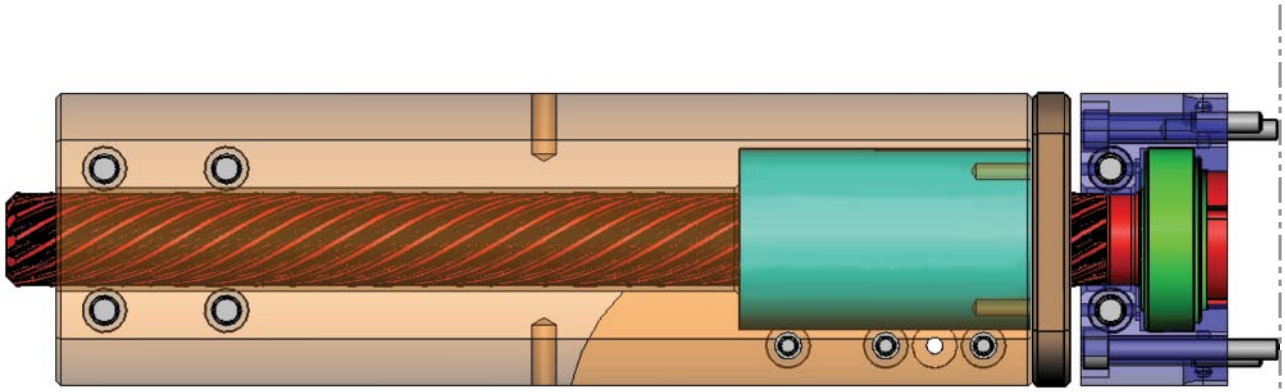


Mold open



Helical Gear Stack Mold Centering Devices ensure that both parting lines open the same distance simultaneously.

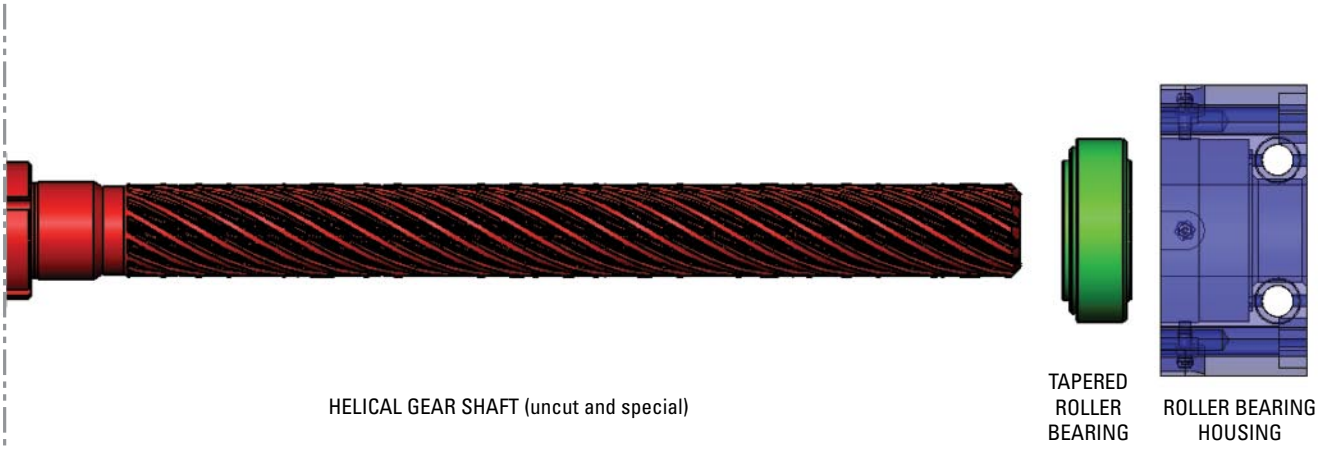
Stack Mold Helical Gear Centering Devices

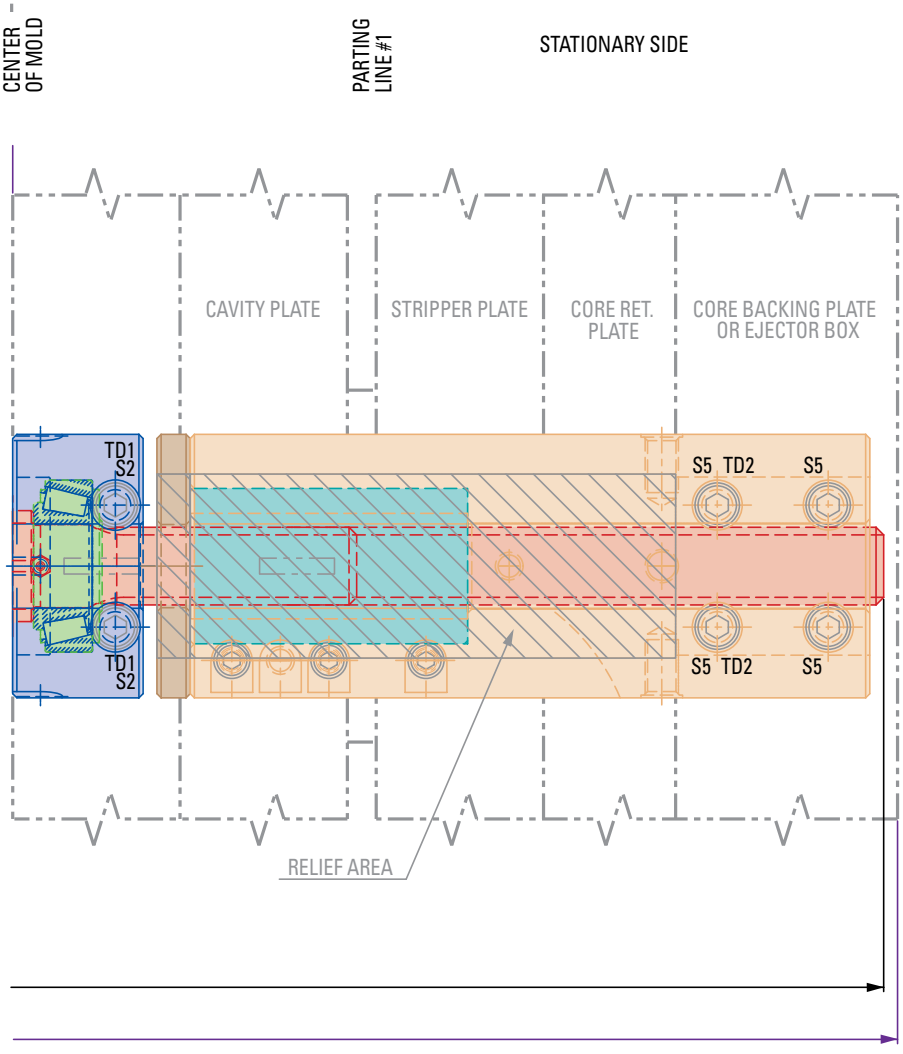


Mounting Screws and Dowels

	HG28	HG38
S2 SOCKET HEAD CAP SCREW	M10 x 75mm (PART # M1075SH)	M12 x 110mm (PART # M12110SH)
S5 SOCKET HEAD CAP SCREW	M10 x 75mm (PART # M1075SH)	M12 x 110mm (PART # M12110SH)
TD1 TUBULAR DOWEL	Ø14mm x 10mm (PART # PH1410)	Ø18mm x 12mm (PART # PH1812)
TD2 TUBULAR DOWEL	Ø14mm x 10mm (PART # PH1410)	Ø18mm x 12mm (PART #PH1812)

Stack Mold Helical Gear Centering Devices





Constant Dimensions

	HG28-1000	HG38-1200	HG38-1500
A1	1000	1200	1500
A2	245	296	296
A3	436	520	670
A4	12	15	15
A5	5	5	5
A6	47	60	60
A7	37	48	48
A8	60	75	75
A9	22	29	29
A10	70	90	90
A11	55	70	70
A12	15	20	20
A13	35	45	45
A14	45	57	57
A15	95	120	120
A16	124	155	155
A17	376	445	595
A18	5	5	5
A19	5	5	5

Calculated Dimensions

	HG28	HG38
C1		
C2		

C1 = 2 x (A16 + B2)
IF: C1 > (B1 – 10)
THEN: Gear Shaft is too long.
Increase B1 (total shut height).

C2 = (B4 + A10) – (A4 + A5 + A6)
IF: C2 < A2
THEN: Nut Housing is too short.
Increase B1 (total shut height).
IF: C2 > A3
THEN: Need special Nut Housing, longer than A3.
IF: C2 > 1/2 x B1 – (A4 + A5 + A6 + A19)
THEN: Nut Housing is too long.
Increase B1 (total shut height).

Input Data

	HG28	HG38
B1		
B2		
B3		
B4		

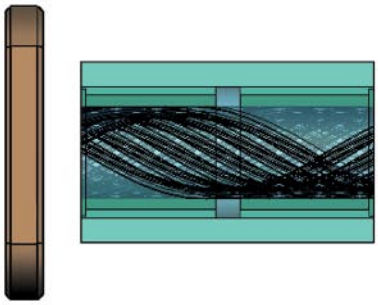
RESTRICTIONS
IF: B4 ≥ 1/2 x B1
THEN: Impossible configuration.
Decrease B4 or increase B1.

IF: B3 < A6
THEN: Impossible configuration. Increase B3.

IF: B2 ≥ 1/2 x B1
THEN: Impossible configuration. Decrease B2.

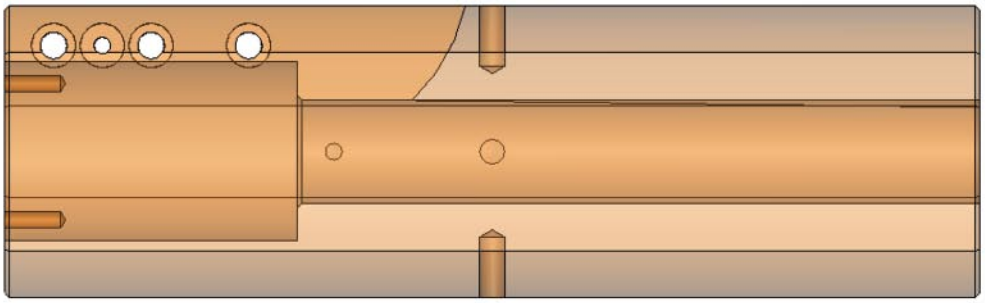
Configuration Calculation Sheet available from D-M-E Applications Engineering to help determine the lengths of the Helical Gear Shaft and Nut Housing based on mold size, and required parting line openings per side.

Helical Gear Components



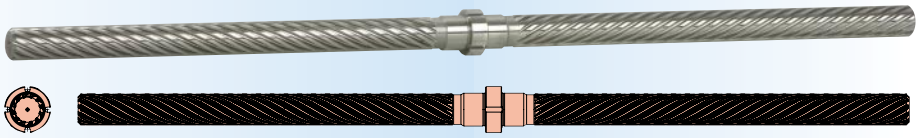
NUT HOUSING END CAP

NYLON NUT (left and right)

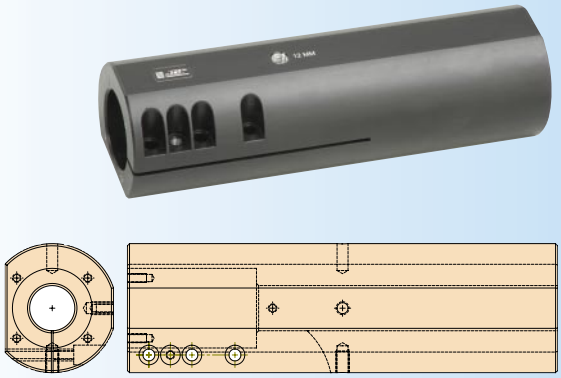


NUT HOUSING BLANK

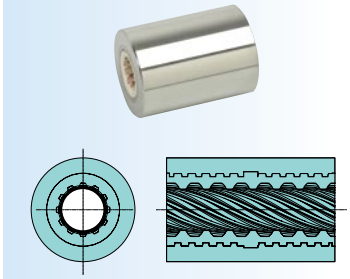
Helical Gear Components



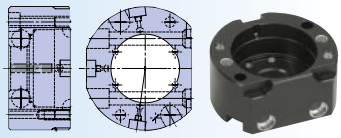
HELICAL GEAR SHAFT
Material: Pre-Hardened Steel
Variable length; cut to match your application.



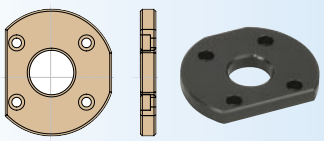
NUT HOUSING BLANK
Material: Aircraft Aluminum
Variable length; cut to match your application.



NYLON NUT (left)
NYLON NUT (right)
Material: Outer Sleeve – Steel
Nylon Insert – High-strength nylon
Nylon insert provides lubricity and an engineered fail-safe. The nylon insert will strip from the steel outer sleeve should the stack mold seize. This minimizes the potential of costly damage to the mold.
NOTE: It is recommended that a set of spare nylon nuts be kept on hand.



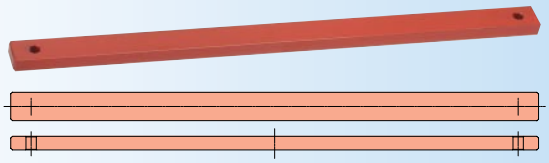
ROLLER BEARING HOUSING
Material: Aircraft Aluminum



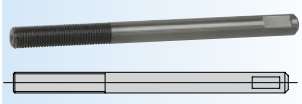
NUT HOUSING END CAP
Material: Aircraft Aluminum



TAPERED ROLLER BEARING
Material: Industry Standard



SHIPPING STRAP
Material: Steel



ALIGNMENT ROD
Material: Steel

ITEM NUMBERS	
HELICAL GEAR SHAFT	
HG28SH1000	HG38SH1200
—	HG38SH1500
NUT HOUSING BLANK	
HG28NH1000BL	HG38NH1200BL
—	HG38NH1500BL
NUT HOUSING END CAP	
HG28NHC	HG38NHC
NYLON NUT	
HG28NNL (left)	HG38NNL (left)
HG28NNR (right)	HG38NNR (right)
ROLLER BEARING HOUSING	
HG28RBH	HG38RBH
TAPERED ROLLER BEARING	
HG28RB	HG38RB
ALIGNMENT ROD	
HG28AR	HG38AR
SHIPPING STRAP	
HG28ST	HG38ST

D-M-E 2-Stage Ejectors

POSITIVE, PRECISION CONTROL
OF TWO-STAGE EJECTION



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ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Benefits

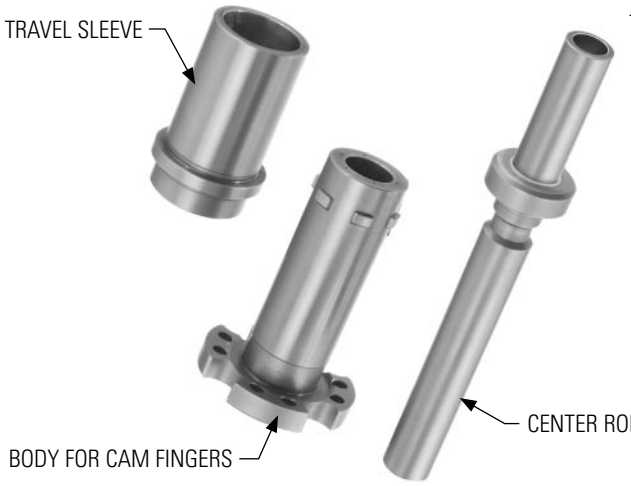
Positive, Precise Plate Control

D-M-E 2-Stage Ejectors (TS) adapt to a number of mold base sizes and plate thicknesses. They are available in two ejection sequences: Top Last (TL) and Bottom Last (BL). Each ejection sequence is available in three sizes to accommodate most standard D-M-E mold bases. The stroke range for each ejection stage is determined and fixed by the customer by cutting the Center Rod to the desired length (both TL and BL types) and by also cutting the Travel Sleeve to the desired length (BL type only). Once installed, the D-M-E 2-Stage Ejector ensures positive, precise control of the sequence and distance of each stroke of the two ejector plates. Once installed, there are no adjustments that can be accidentally changed.

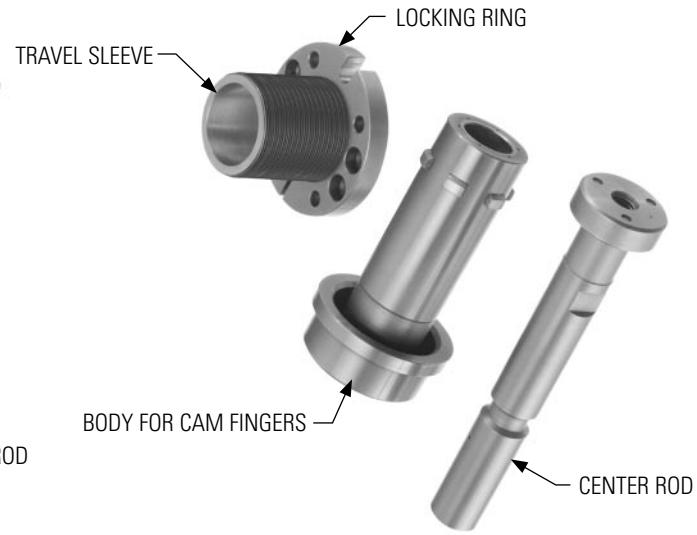
Benefits

- Both the first stage and second stage strokes are set independently
- Easy set-up and installation
- Fixed strokes cannot be tampered with or accidentally modified
- Internal installation – avoids interferences with water line connectors and externally mounted components
- Utilizes latching mechanism similar to D-M-E Internal Latch Lock for smooth operation and guidance
- Three sizes to choose from for each style, to accommodate most standard D-M-E mold bases
- Hardened steel components for long life

Top Last Subcomponents



Bottom Last Subcomponents



NOTE: Puller Pins are not shown. Puller Pins must be purchased separately.

Size and Quantity Selection Guidelines

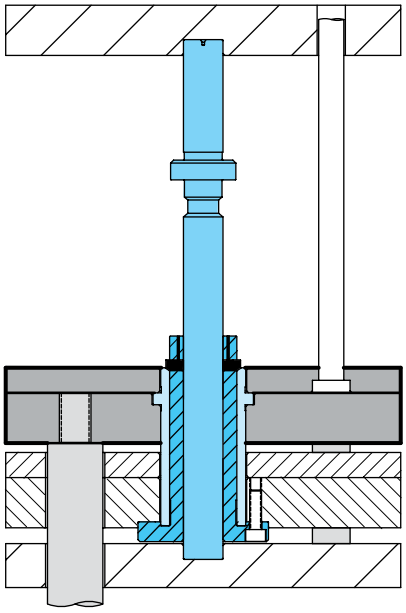
- Select 20mm diameter (small), 26mm diameter (medium), or 32mm diameter (large) 2-Stage Ejector based on the width of the mold base (large molds, thick plates or heavy load applications may require the next size assembly).
- Determine the travel range for each ejection stroke (first and second), being careful not to exceed the maximum stroke specified for the chosen 2-Stage Ejector style and size. This selection is based on the specific application.
- In general, a minimum of two 2-Stage Ejectors are required. For larger molds, thick plates, or an application where loads are near maximum, additional assemblies and/or larger assemblies may be required. An application must never exceed the maximum recommended load values.
- A balanced load must be maintained to avoid cocking and binding which could cause severe overloading. Only one size of 2-Stage Ejectors should be used in each mold base.

View a 2-Stage Ejectors animation at www.dme.net/2stage

2-STAGE EJECTOR ASSEMBLY **ITEM NUMBER**	BASIC CENTER ROD DIA	STROKE 1 MINIMUM	STROKE 1 MAXIMUM	STROKE 2 MINIMUM	STROKE 2 MAXIMUM	RECOMMENDED MAXIMUM MOLD BASE WIDTH	MAXIMUM RECOMMENDED LOAD VALUES (PER ASS'Y) STATIC	MAXIMUM RECOMMENDED LOAD VALUES (PER ASS'Y) DYNAMIC	
2-STAGE EJECTOR TOP LAST (TS TL)									
TS TL 20 A	20mm (Small)	1.0	79.0	4.0	79.0	Up to 200mm, 1 TL-20 Up to 450mm, 2 TL-20	5.8 kN	0.58 kN	mm
		.04	3.11	.16	3.11	Up to 8", 1 TL 20 Up to 18", 2 TL 20	1300 lbf	130.0 lbf	in
TS TL 26 A	26mm (Medium)	1.0	84.0	6.0	84.0	Up to 450mm, 1 TL 26 Up to 600mm, 2 TL 26	10.8 kN	1.08 kN	mm
		.04	3.31	.24	3.31	Up to 18", 1 TL 26 Up to 26", 2 TL 26	2428 lbf	242.8 lbf	in
TS TL 32 A	32mm (Large)	1.0	92.0	8.0	92.0	Up to 600mm, 1 TL 32 Up to 900mm, 2 TL 32	19.6 kN	1.96 kN	mm
		.04	3.62	.31	3.62	Up to 26", 1 TL 32 Up to 35.5", 2 TL 32	4406 lbf	440.6 lbf	in
2-STAGE EJECTOR BOTTOM LAST (TS BL)									
TS BL-20 A*	20mm (Small)	8.0	82.0	12.0	82.0	Up to 200mm, 1 BL-20 Up to 450mm, 2 BL-20	5.8 kN	0.58 kN	mm
		.32	3.23	.47	3.23	Up to 8", 1 BL-20 Up to 18", 2 BL-20	1300 lbf	130.0 lbf	in
TS BL-26 A*	26mm (Medium)	10.0	92.0	18.0	92.0	Up to 450mm, 1 BL-26 Up to 600mm, 2 BL-26	10.8 kN	1.08 kN	mm
		.40	3.62	.71	3.62	Up to 18", 1 BL-26 Up to 26", 2 BL-26	2428 lbf	242.8 lbf	in
TS BL-32 A*	32mm (Large)	12.0	102.0	24.0	102.0	Up to 600mm, 1 BL-32 Up to 900mm, 2 BL-32	19.6 kN	1.96 kN	mm
		.47	4.02	.95	4.02	Up to 26", 1 BL-32 Up to 35.5", 2 BL-32	4406 lbf	440.6 lbf	in

*Puller Pins are **not** included with BL Assemblies and must be ordered separately.

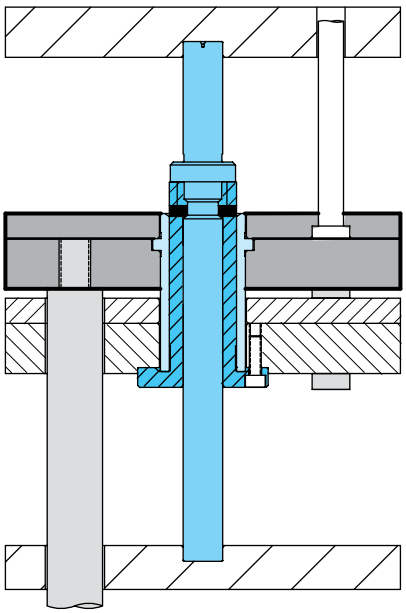
Top Last Sequencing



1. Ejector Plates Back

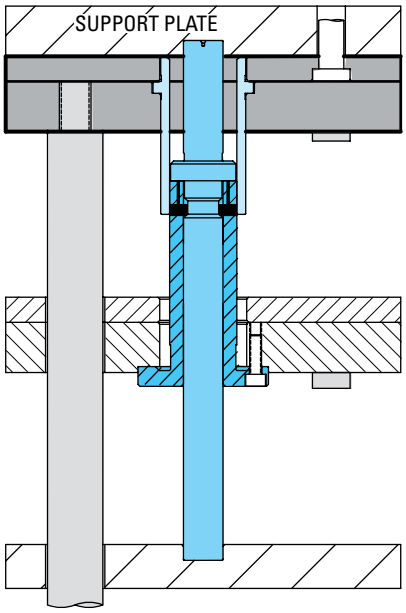
Patent No. 6.575.730
Patent No. 6.106.271
(Additional patents pending)





2. First Ejector Stroke

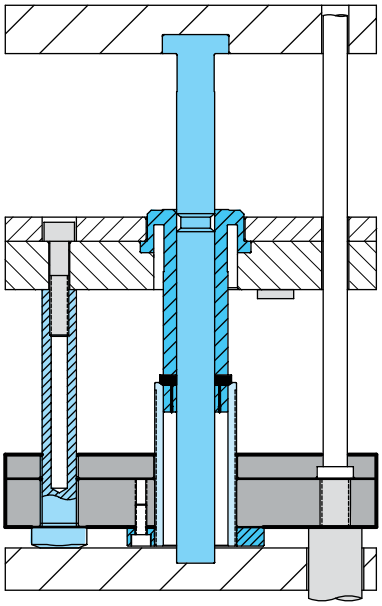
After a predetermined amount of travel, the latch mechanism latches onto the Center Rod, thereby fixing the position of the bottom (moving platen side) ejector plate assembly.



3. Second Ejector Stroke

The top (stationary platen side) ejector plate assembly continues to move through the "second" (or remaining) stroke until the top ejector plate assembly contacts the bottom of the support plate.

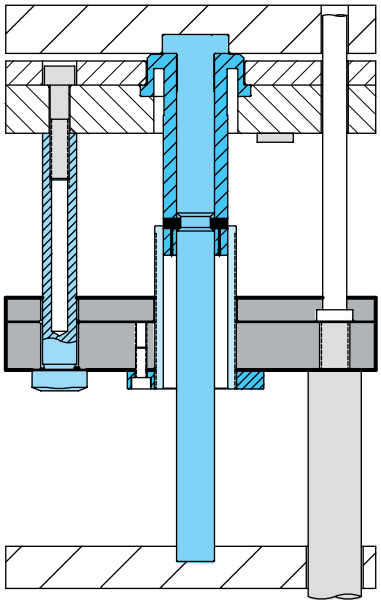
Bottom Last Sequencing



Patent No. 6.575.730
Patent No. 6.106.271
(Additional patents pending)

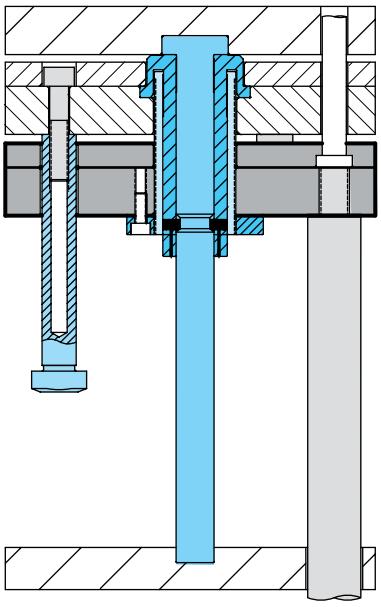


1. Ejector Plates Back



2. First Ejector Stroke

After a predetermined amount of travel, the latch mechanism latches onto the Center Rod, thereby fixing the position of the top (stationary platen side) ejector plate assembly.



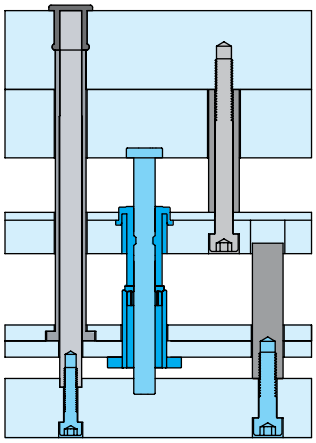
3. Second Ejector Stroke

The bottom (moving platen side) ejector plate assembly continues to move through the "second" (or remaining) stroke until the bottom ejector plate assembly contacts the top ejector plate assembly.

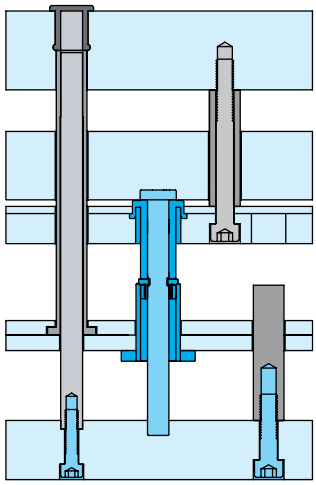
Application Examples

2-Stage Ejector Bottom Last Application Example 1

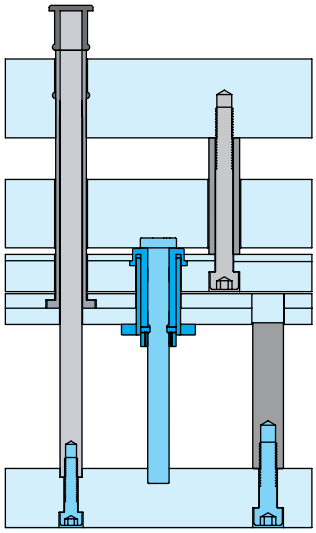
1. First ejector stroke lifts cavity plate and ejector sleeve. Center pin remains back. Part is free to be ejected.
2. Second stroke moves the ejector sleeve, releasing the part from cavity. **This configuration is recommended for parts with outside details with smooth or round edges.**



1. Ejector Plates Back



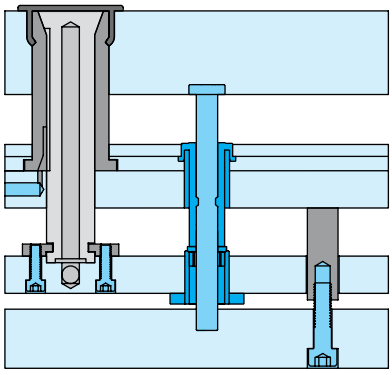
2. First Ejector Stroke



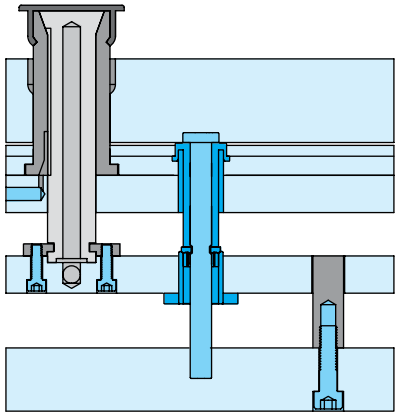
3. Second Ejector Stroke

2-Stage Ejector Bottom Last Application Example 2

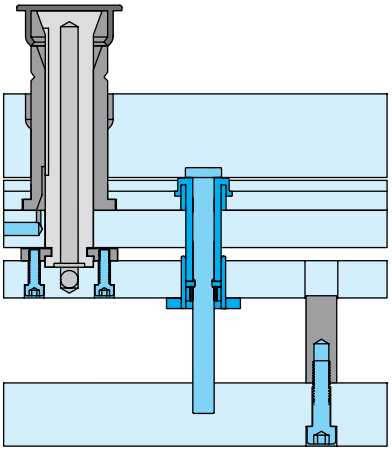
1. First ejector stroke pulls the central core pin and sleeve forward. Part is released from cavity.
2. Second stroke pulls the center pin and part forward. Because of plastic elasticity the part is stripped from core. **Recommended for parts with an inner undercut – a circular detail placed on the edge (for example, inward undercut).**



1. Ejector Plates Back



2. First Ejector Stroke

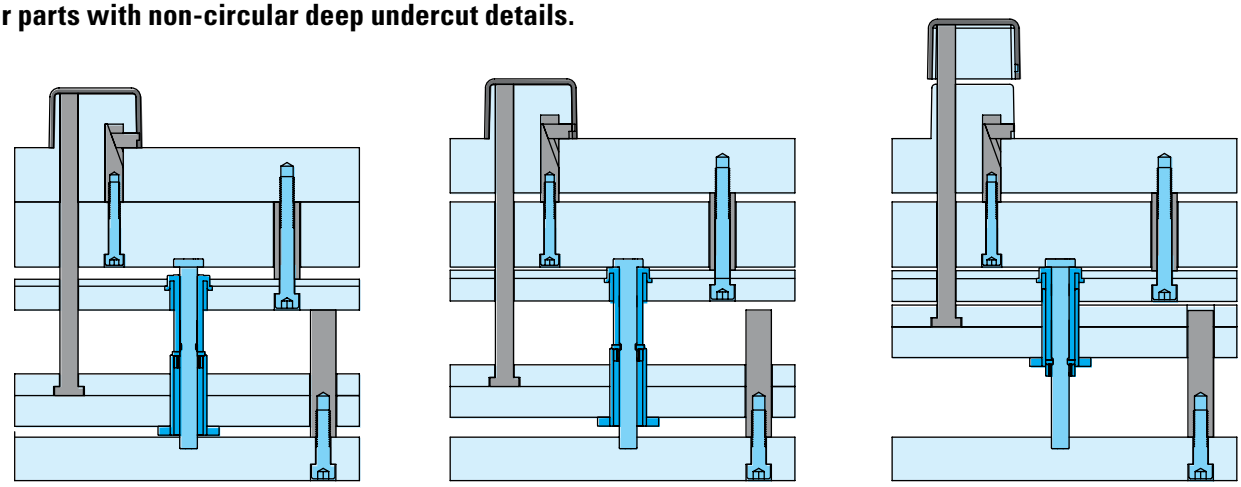


3. Second Ejector Stroke

Application Examples

2-Stage Ejector Bottom Last – TSBL
Application Example 3

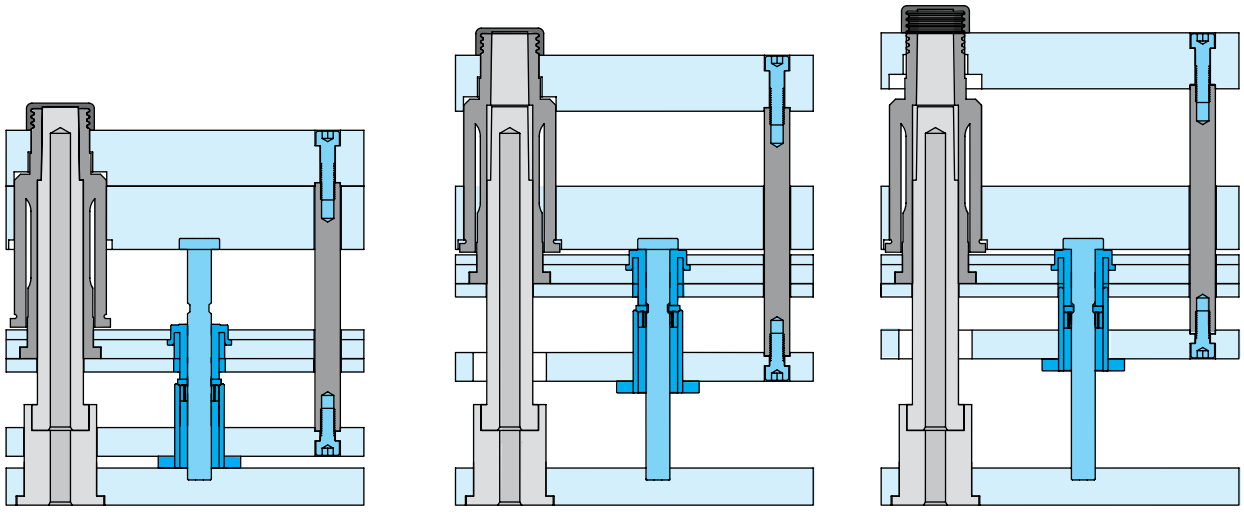
1. First ejector stroke moves forward the cavity plate with inner plate. This movement is forcing the edge to move inward. At the end of the stroke the edge clears the inner undercut.
2. Second stroke actuates the ejector pin. This releases the part from the core. **This configuration is recommended for parts with non-circular deep undercut details.**



1. Ejector Plates Back | 2. First Ejector Stroke | 3. Second Ejector Stroke

2-Stage Ejector Bottom Last – TSBL
Application Example 4

1. First ejector stroke lifts the collapsible core off the center pin. Collapse segments retract. After a certain traveling distance, when puller pin is clearing the inner side of segments, the positive collapse sleeve is actuated for positive collapse.
2. Second stroke moves the stripper plate past the end of the core so the part can be ejected from the mold. **This configuration is recommended for complex undercuts, collapsible core applications.**

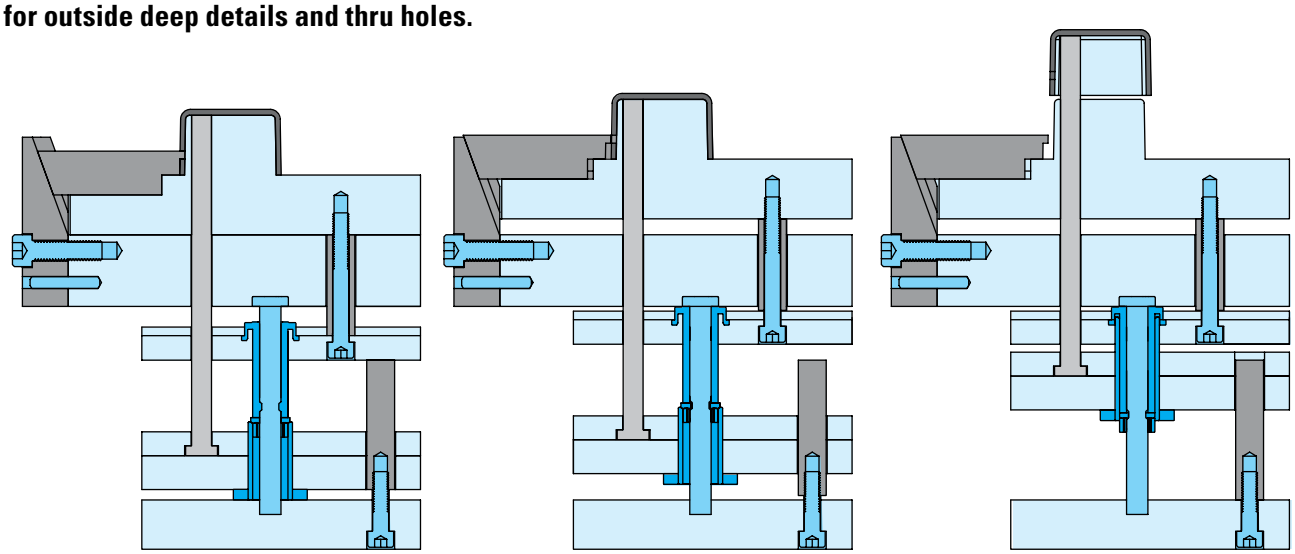


1. Ejector Plates Back | 2. First Ejector Stroke | 3. Second Ejector Stroke

Application Examples

2-Stage Ejector Bottom Last – TSBL
Application Example 5

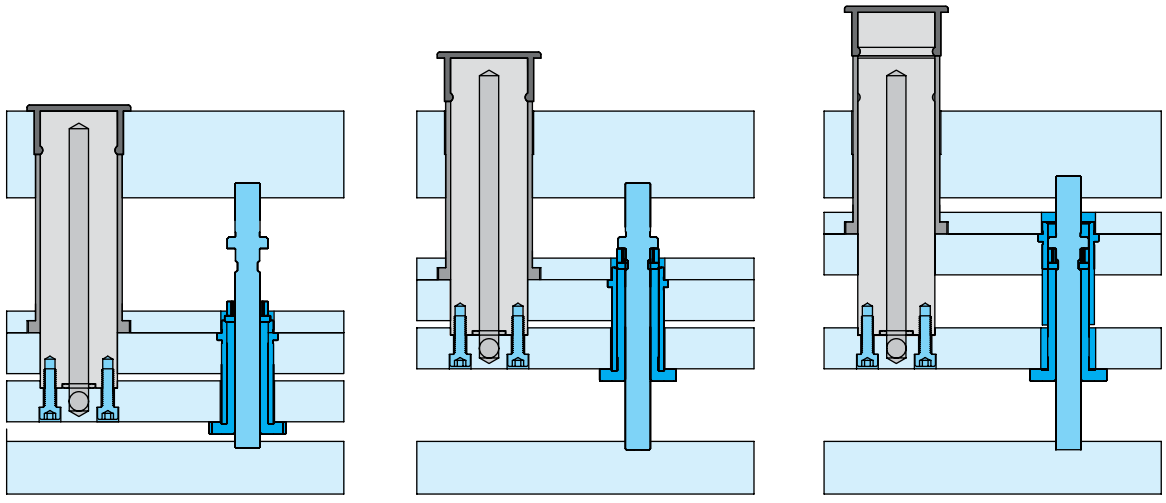
1. First ejector stroke moves the angle slide up. As a result the horizontal slide with the exterior detail pulls away from the part.
2. Second stroke actuates the ejector pin. Part is lifted behind the inner cavity. **This configuration is recommended for outside deep details and thru holes.**



1. Ejector Plates Back | 2. First Ejector Stroke | 3. Second Ejector Stroke

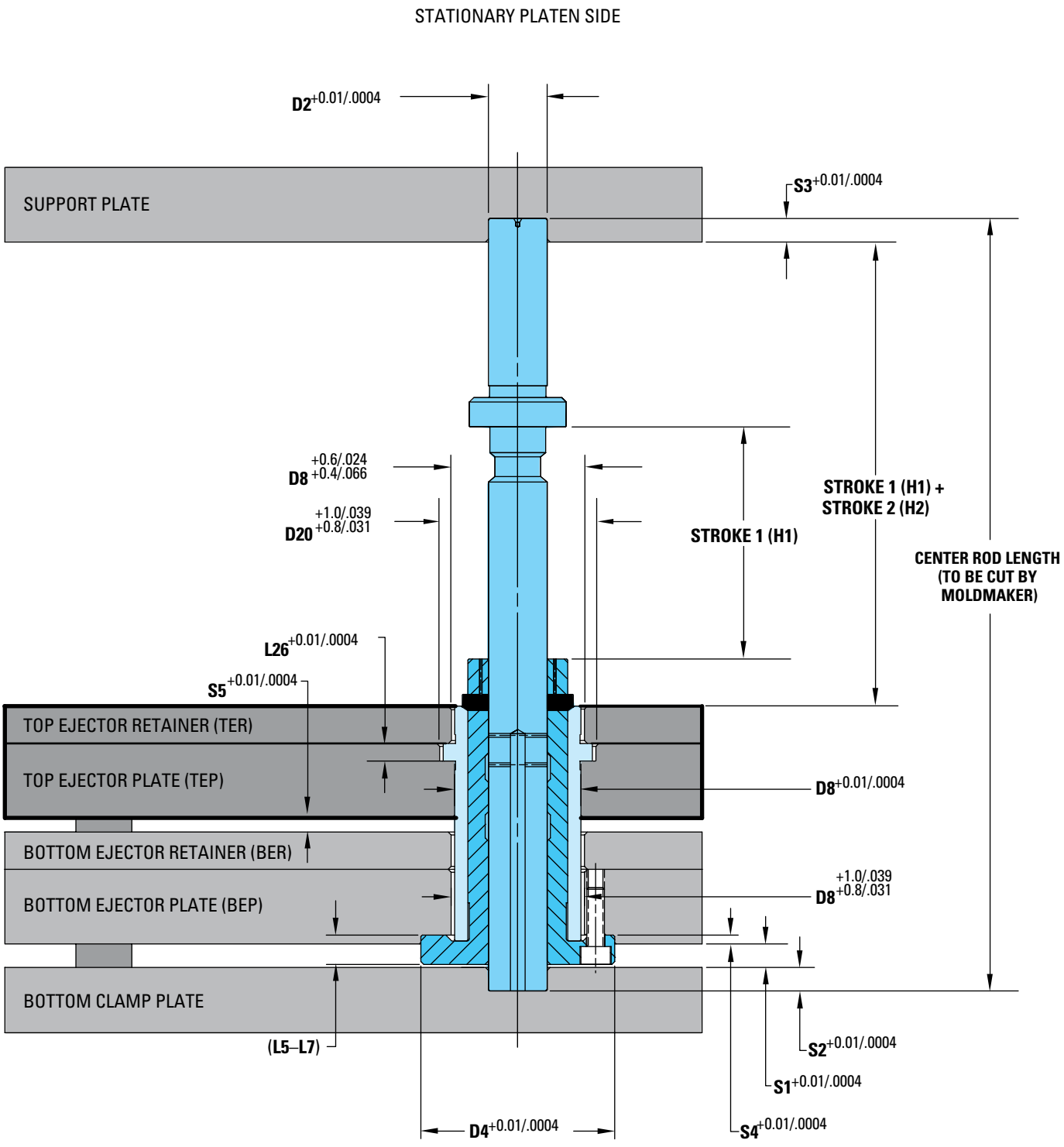
2-Stage Ejector Top Last – TSTL
Application Example

1. First ejector stroke lifts part, central pin and ejector bushing out of "B" plate.
2. Second stroke actuates the ejector bushing and the part is pushed out of the central pin core. **This configuration is recommended for inner undercuts with round, smooth edges.**



1. Ejector Plates Back | 2. First Ejector Stroke | 3. Second Ejector Stroke

Assembly and Installation Information – Top Last



- Tolerances depicted here are installation tolerances
- See component detail drawings for specific component tolerances
- Refer to applicable tables for nominal dimension

Assembly and Installation Information – Top Last

Top Last – TSTL

ITEM NUMBER	CENTER ROD DIA	CENTER ROD LENGTH	H1 – STROKE 1 (2) MINIMUM	H1 – STROKE 1 (2) MAXIMUM	H2 – STROKE 2 (3) MINIMUM	H2 – STROKE 2 (3) MAXIMUM	
2-STAGE EJECTOR TOP-LAST (TS-TL)							
TS TL-20 A	20mm (Small)	262.96	1.0	79.0	4.0	79.0	mm
		10.353	.04	3.11	.16	3.11	in
TS TL-26 A	26mm (Medium)	285.32	1.0	84.0	6.0	84.0	mm
		11.233	.04	3.31	.24	3.31	in
TS TL-32 A	32mm (Large)	316.68	1.0	92.0	8.0	92.0	mm
		12.468	.04	3.62	.31	3.62	in

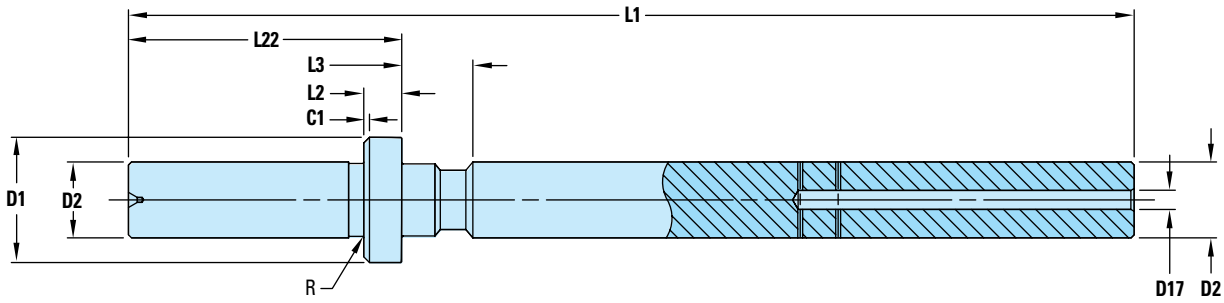
ITEM NUMBER	CENTER ROD DIA	BEP	BER	TEP	TER	S1	S2	S3	S4	S5	
2-STAGE EJECTOR TOP-LAST (TS-TL)											
TS TL-20 A	20mm (Small)	25.40	12.70	25.40	12.70	8.00	8.00	8.00	3.00	4.76	mm
		1.000	.500	1.000	.500	.315	.315	.315	.118	.188	in
TS TL-26 A	26mm (Medium)	28.58	12.70	28.58	12.70	10.00	10.00	10.00	4.00	4.76	mm
		1.125	.500	1.125	.500	.394	.394	.394	.157	.188	in
TS TL-32 A	32mm (Large)	28.58	15.88	28.58	15.88	15.00	12.00	12.00	4.00	4.76	mm
		1.125	.625	1.125	.625	.591	.472	.472	.157	.188	in

Assembly and Installation Guidelines

- At end of first stroke, Body for Cam Fingers must seat firmly against Center Rod flange.
- The Body must not apply full static pressure against Cam Fingers at end of first stroke.
- The moldmaker must cut and/or grind the Center Rod to the required length prior to installation of the 2-Stage Ejector assembly into the mold base. Do not cut off more than the minimum stroke (H2). The recommended tolerance on the Center Rod length after the customer has cut the Center Rod is +0/-0.02mm or less.
- Stroke 1 (H1) is reduced by cutting and/or grinding the moving platen end of the Center Rod.
- Stroke 2 (H2) is reduced by cutting and/or grinding the stationary platen end of the Center Rod. Minimum H2 specified in table does not include additional stop pins to stationary-side spacer plate. To reduce H2 even further than what is specified in table, add stop pins.
- All 2-Stage Ejectors in a mold must be cut to the same strokes.
- It is recommended that guided ejection be used.
- Ejector speed must be controlled, ensuring that excessive shock loading does not occur.
- 2-Stage Ejectors are not suitable for severe load conditions.
- 2-Stage Ejectors must not be exposed to temperatures that exceed 150°C (300°F) at any time.
- Lubricate all metal-to-metal contact areas initially and periodically as required. A good grade of moldmakers non-melting type grease for the appropriate temperature should be used.

Component Information – Top Last

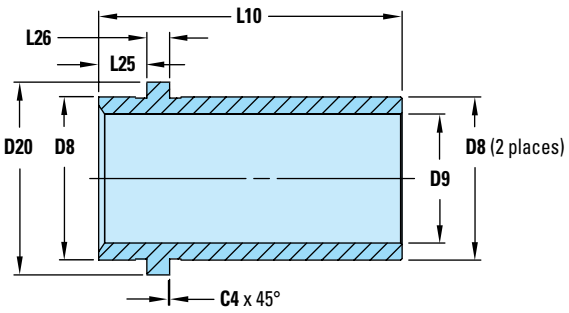
Center Rod – CR



ASSEMBLY ITEM NUMBER	CENTER ROD DIA	COMPONENT ITEM NUMBER	D1 DIA	D2 DIA	D17 DIA	L1* LENGTH	L2 THICK	L3 LENGTH	L22** LENGTH	C1 CHAMFER	R RADIUS	
TS-TL-20	20mm (Small)	TS-TL-20-CR	33.0	$20.0^{-0.01}$	5.0	265	10.0	18.74	72.0	1.5	.4	mm
			1.30	$0.787^{-.0004}$	.20	10.43	.39	.738	2.83	.06	.02	in
TS-TL-26	26mm (Medium)	TS-TL-26-CR	42.0	$26.0^{-0.01}$	6.0	290	12.0	22.93	76.0	2.0	.8	mm
			1.65	$1.024^{-.0004}$	2.4	11.42	.47	.903	2.99	.08	.03	in
TS-TL-32	32mm (Large)	TS-TL-32-CR	53.0	$32.0^{-0.01}$	6.0	320	15.0	28.25	82.0	2.5	.8	mm
			2.09	$1.260^{-.0004}$	.24	12.60	.59	1.112	3.23	.10	.03	in

*Cutoff on both ends of Center Rod only per installation data.
**Final length must have tolerance of –0.02mm (–0.001in) after moldmaker has cut the Center Rod to the desired length.

Travel Sleeve – TS

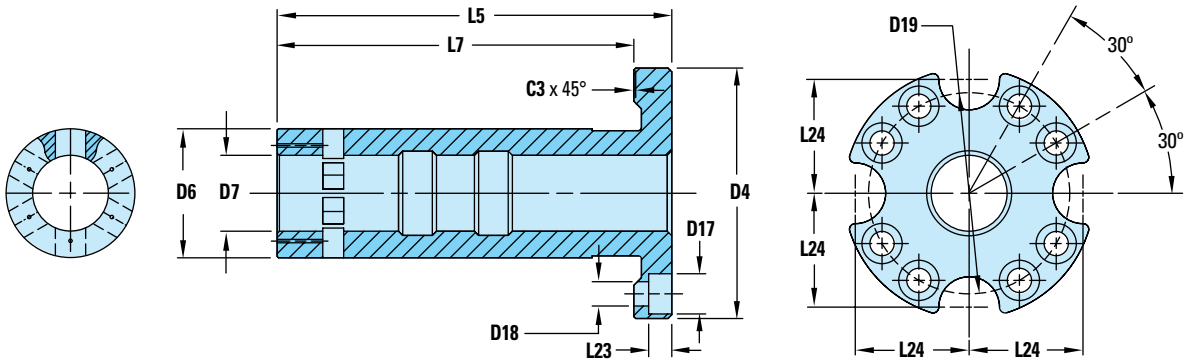


ASSEMBLY ITEM NUMBER	CENTER ROD DIA	COMPONENT ITEM NUMBER	D8 DIA	D9 DIA	D20 DIA	L10 LENGTH	L25 LENGTH	L26 THICK	C4 CHAMFER	
TS-TL-20	20mm (Small)	TS-TL-20-TS	$43.0^{-0.03}$	34.0	50.8	79.96	12.70	$6.00^{-0.01}$	.5	mm
			$1.693^{-0.001}$	1.34	2.00	3.148	.500	$.236^{-.0004}$	.02	in
TS-TL-26	26mm (Medium)	TS-TL-26-TS	$54.0^{-0.03}$	43.0	63.0	85.32	12.70	$8.00^{-0.01}$	.5	mm
			$2.126^{-0.001}$	1.69	2.48	3.359	.500	$.315^{-.0004}$	.02	in
TS-TL-32	32mm (Large)	TS-TL-32-TS	$68.0^{-0.03}$	54.0	78.0	93.68	15.88	$10.00^{-0.01}$	.5	mm
			$2.677^{-0.001}$	2.13	3.07	3.688	.625	$.394^{-.0004}$	.02	in

NOTES: All dimensions shown for components are intended for drawing layout purposes only and in some cases have been rounded off. Also, where the same diameter dimension is shown for parts that fit together, the tolerances create the appropriate clearance or fit.

Component Information – Top Last

Body for Cam Fingers – BD
(Body only without Cam Fingers)

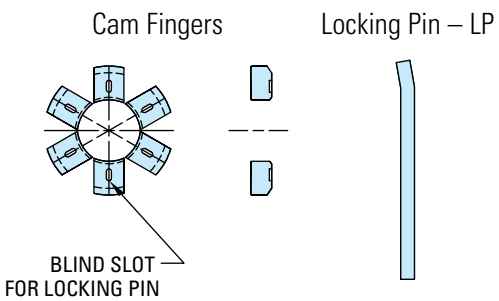


ASSEMBLY ITEM NUMBER	CENTER ROD DIA	COMPONENT ITEM NUMBER	D4 DIA	D6 DIA	D7 DIA	D17 DIA	D18 DIA	D19 DIA	
TS-TL-20	20mm (Small)	TS-TL-20-BD	$66.00^{-0.03}$	34.0	20.0	10.6	6.4	53.0	mm
			$2.598^{-0.001}$	1.34	.79	.42	.25	2.09	in
TS-TL-26	26mm (Medium)	TS-TL-26-BD	$84.00^{-0.03}$	43.0	26.0	13.8	8.7	67.0	mm
			$3.307^{-0.001}$	1.69	1.02	.54	.34	2.64	in
TS-TL-32	32mm (Large)	TS-TL-32-BD	$105.00^{-0.03}$	54.0	32.0	16.8	10.8	85.0	mm
			$4.134^{-0.001}$	2.13	1.26	.66	.43	3.35	in

ASSEMBLY ITEM NUMBER	CENTER ROD DIA	COMPONENT ITEM NUMBER	L5 LENGTH	L7 LENGTH	L23 LENGTH	L24 LENGTH	C3 CHAMFER	
TS-TL-20	20mm (Small)	TS-TL-20-BD	104.0	94.0	6.1	30.0	.5	mm
			4.09	3.70	.24	1.18	.02	in
TS-TL-26	26mm (Medium)	TS-TL-26-BD	116.0	103.0	8.2	37.0	.5	mm
			4.57	4.06	.32	1.46	.02	in
TS-TL-32	32mm (Large)	TS-TL-32-BD	131.0	113.4	10.2	47.0	.6	mm
			5.16	4.46	.40	1.85	.02	in

Cam Finger Replacement Kit – KT

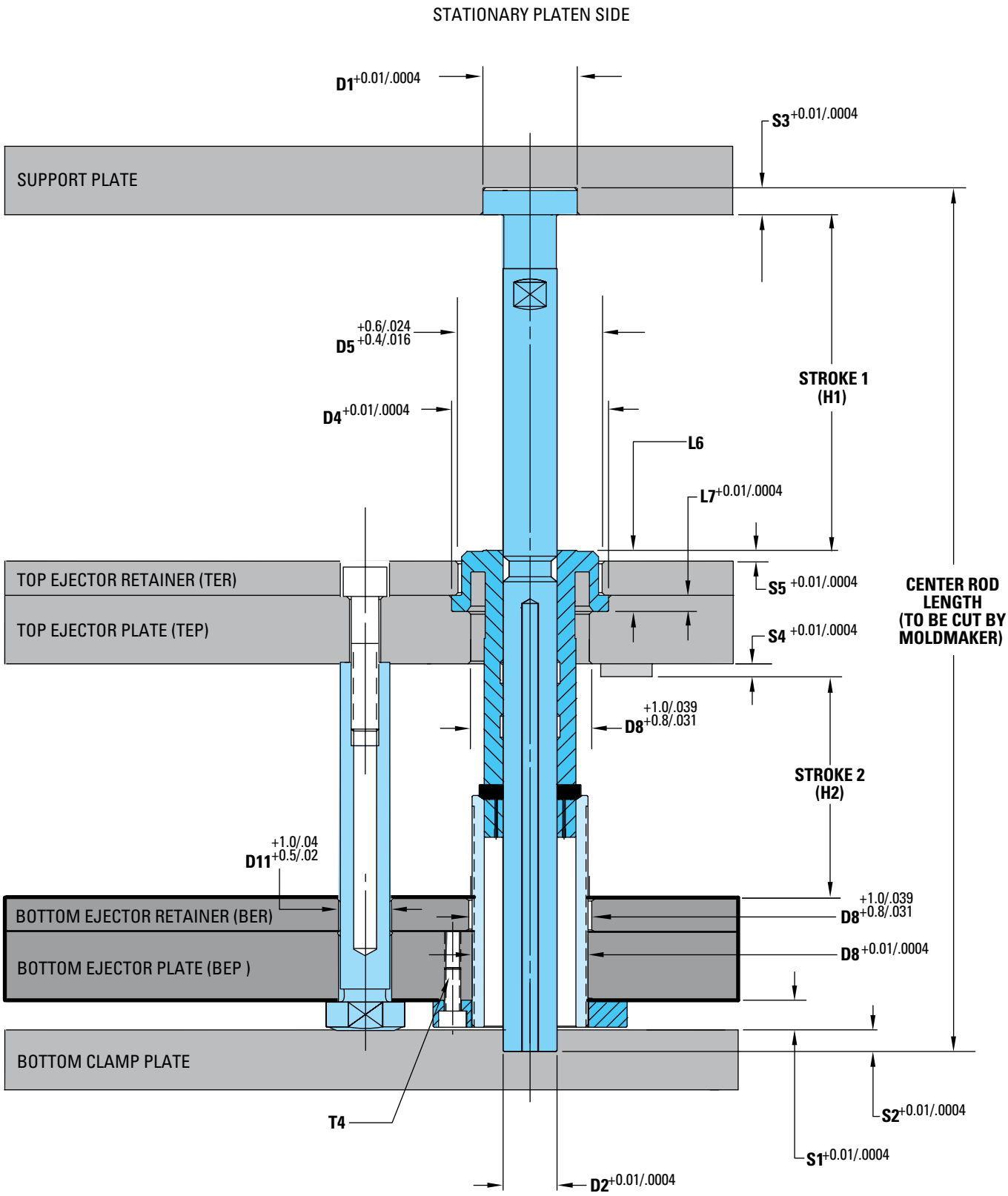
With (6) Cam Fingers, and (8) Locking Pins



ASSEMBLY ITEM NUMBER	CENTER ROD DIA	KIT ITEM NUMBER
TS-TL-20	20mm (Small)	TS-TL-20-KT
TS-TL-26	26mm (Medium)	TS-TL-26-KT
TS-TL-32	32mm (Large)	TS-TL-32-KT

NOTES: All dimensions shown for components are intended for drawing layout purposes only and in some cases have been rounded off. Also, where the same diameter dimension is shown for parts that fit together, the tolerances create the appropriate clearance or fit.

Assembly and Installation Information – Bottom Last



- Tolerances depicted here are installation tolerances
- See component detail drawings for specific component tolerances
- Refer to applicable tables for nominal dimension

Assembly and Installation Information – Bottom Last

Bottom Last – TSBL

ITEM NUMBER	CENTER ROD DIA	CENTER ROD LENGTH	TRAVEL SLEEVE LENGTH	H1 – STROKE 1 (3)		H2 – STROKE 2 (4)		
				MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	
2-STAGE EJECTOR BOTTOM LAST (TS BL)								
TS BL-20 A	20mm (Small)	277.96	86.00	8.0	82.0	12.0	82.0	mm
		10.943	3.386	.32	3.23	.47	3.23	in
TS BL-26 A	26mm (Medium)	311.32	94.00	10.0	92.0	18.0	92.0	mm
		12.257	3.701	.39	3.62	.71	3.62	in
TS BL-32 A	32mm (Large)	352.21	105.00	12.0	102.0	24.0	102.0	mm
		13.867	4.134	.47	4.02	.94	4.02	in

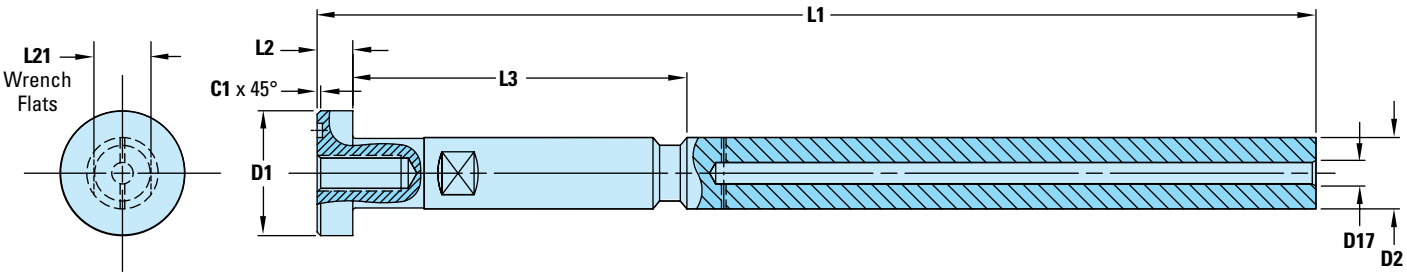
ITEM NUMBER	CENTER ROD DIA	BEP	BER	TEP	TER	T4	S1	S2	S3	S4	S5	
2-STAGE EJECTOR BOTTOM LAST (TS BL)												
TS BL-20 A	20mm (Small)	25.40	12.70	25.40	12.70	M6	11.00	8.00	10.00	4.76	4.00	mm
		1.000	.500	1.000	.500	M6	.433	.315	.394	1.86	.157	in
TS BL-26 A	26mm (Medium)	28.58	12.70	28.58	12.70	M8	14.00	10.00	12.00	4.76	4.00	mm
		1.125	.500	1.125	.500	M8	.551	.394	.472	1.86	.157	in
TS BL-32 A	32mm (Large)	28.58	15.88	28.58	15.88	M10	17.00	12.00	14.00	6.29	6.00	mm
		1.125	.625	1.125	.625	M10	.669	.472	.551	.248	.238	in

Assembly and Installation Guidelines

- At end of second stroke, Body for Cam Fingers must seat firmly against Center Rod head or spacer plate.
- The moldmaker must cut and/or grind the Center Rod to the required length prior to installation of the 2-Stage Ejector assembly into the mold base. The recommended tolerance on the Center Rod length after the customer has cut the Center Rod is +0/-0.02mm or less.
- The moldmaker must cut and/or grind the Travel Sleeve to the required length prior to installation of the 2-Stage Ejector assembly into the mold base.
- Stroke 1 (H1) is reduced by cutting and/or grinding the moving platen end of the Center Rod.
- Stroke 2 (H2) is reduced by cutting and/or grinding the moving platen end of both the Center Rod and the Travel Sleeve.
- All 2-Stage Ejectors in a mold must be cut to the same strokes.
- It is recommended that guided ejection be used.
- Ejector speed must be controlled, ensuring that excessive shock loading does not occur.
- 2-Stage Ejectors are not suitable for severe load conditions.
- 2-Stage Ejectors must not be exposed to temperatures that exceed 150°C (300°F) at any time.
- Lubricate all metal-to-metal contact areas initially and periodically as required. A good grade of moldmakers non-melting type grease for the appropriate temperature should be used.
- A minimum of (4) Puller Pins should be used with each mold. Larger molds may require additional Puller Pins.
- The moldmaker must cut and/or grind the Puller Pins to the required length.
- Puller Pins are **not** included with Bottom Last Assemblies and must be ordered separately.

Component Information – Bottom Last

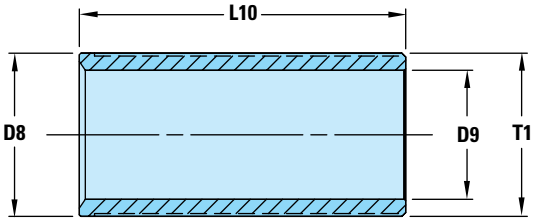
Center Rod – CR



ASSEMBLY **ITEM NUMBER**	CENTER ROD DIA	COMPONENT **ITEM NUMBER**	**D1** DIA	**D2** DIA	**D17** DIA	**L1*** LENGTH	**L2** THICK	**L3** LENGTH	**L21** FLATS	**C1** CHAMFER	
TS-BL-20	20mm (Small)	TS-BL-20-CR	$34.0^{-0.01}$	$20.0^{-0.01}$	6.0	280.0	$10.0^{+0.02}$	93.66	16.0	1.0	mm
			$1.339^{-.0004}$	$.787^{-.0004}$	.24	11.02	$.394^{+.001}$	3.687	.63	.04	in
TS-BL-26	26mm (Medium)	TS-BL-26-CR	$44.0^{-0.01}$	$26.0^{-0.01}$	6.0	314.0	$12.0^{+0.02}$	105.67	20.0	1.0	mm
			$1.732^{-.0004}$	$1.024^{-.0004}$	.24	12.36	$.472^{+.001}$	4.160	.79	.04	in
TS-BL-32	32mm (Large)	TS-BL-32-CR	$58.0^{-0.01}$	$32.0^{-0.01}$	8.0	354.0	$14.0^{+0.02}$	118.80	27.0	1.5	mm
			$2.283^{-.0004}$	$1.260^{-.0004}$	.31	13.94	$.551^{+.001}$	4.677	1.06	.06	in

*Cutoff on small diameter end only per installation data.

Travel Sleeve – TS



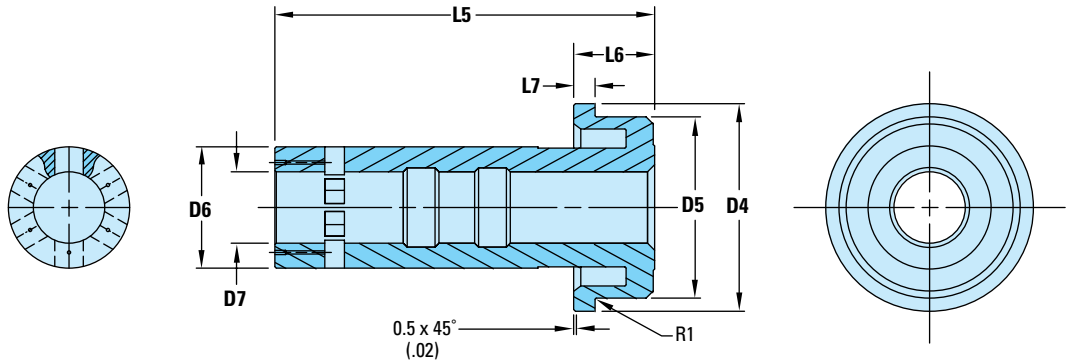
ASSEMBLY **ITEM NUMBER**	CENTER ROD DIA	COMPONENT **ITEM NUMBER**	**D8** DIA	**D9** DIA	**L10*** LENGTH	**T1** THREAD	
TS-BL-20	20mm (Small)	TS-BL-20-TS	$43.00^{-0.03}$	34.0	86.0	M43.2 x 1.25	mm
			$1.693^{-0.001}$	1.34	3.39		in
TS-BL-26	26mm (Medium)	TS-BL-26-TS	$54.00^{-0.03}$	43.0	94.0	M54.2 x 1.25	mm
			$2.126^{-0.001}$	1.69	3.70		in
TS-BL-32	32mm (Large)	TS-BL-32-TS	$68.00^{-0.03}$	54.0	105.0	M68.25 x 1.5	mm
			$2.677^{-0.001}$	2.13	4.13		in

*Supplied to provide maximum travel with no cutoff. To reduce travel in Stroke 2 (H2), cut threaded end per installation data.

NOTES: All dimensions shown for components are intended for drawing layout purposes only and in some cases have been rounded off. Also, where the same diameter dimension is shown for parts that fit together, the tolerances create the appropriate clearance or fit.

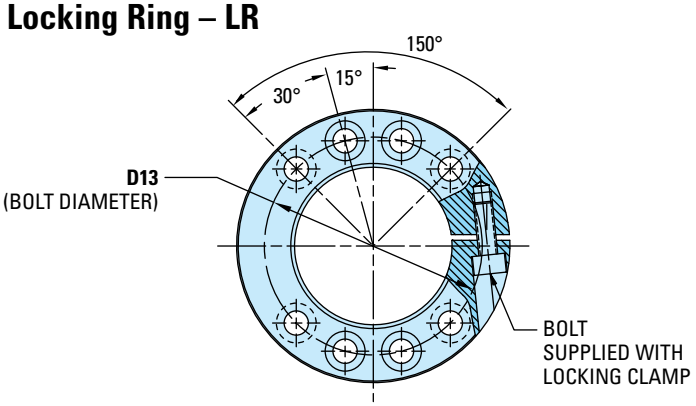
Component Information – Bottom Last

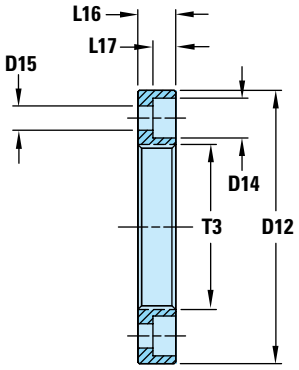
Body for Cam Fingers – BD
(Body only without Cam Fingers)



ASSEMBLY **ITEM NUMBER**	CENTER ROD DIA	COMPONENT **ITEM NUMBER**	**D4** DIA	**D5** DIA	**D6** DIA	**D7** DIA	**L5** LENGTH	**L6** THICK	**L7** THICK	**R1** RADIUS	
TS BL 20	20mm (Small)	TS BL-20-BD	$58.20^{-0.03}$	$50.8^{-0.2}$	34.00	20.00	106.46	22.70	$6.0^{-0.01}$	.4	mm
			$2.291^{-0.001}$	$2.00^{-.008}$	1.339	.787	4.191	.894	$.236^{-.0004}$	.02	in
TS BL 26	26mm (Medium)	TS BL-26-BD	$70.00^{-0.03}$	$62.6^{-0.2}$	43.00	26.00	121.22	22.70	$6.0^{-0.01}$	.4	mm
			$2.756^{-0.001}$	$2.46^{-.008}$	1.693	1.024	4.772	.894	$.236^{-.0004}$	.02	in
TS BL 32	32mm (Large)	TS BL-32-BD	$87.00^{-0.03}$	$78.0^{-0.2}$	54.00	32.00	139.70	28.88	$7.0^{-0.01}$	.4	mm
			$3.425^{-0.001}$	$3.07^{-.008}$	2.126	1.260	5.500	1.137	$.276^{-.0004}$	.02	in

Locking Ring – LR





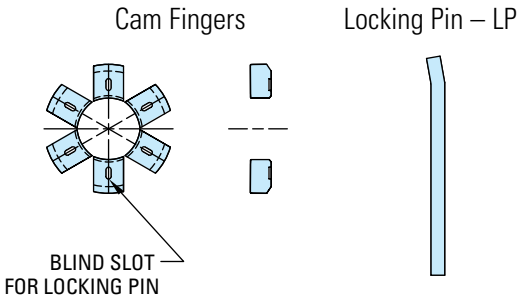
ASSEMBLY **ITEM NUMBER**	CENTER ROD DIA	COMPONENT **ITEM NUMBER**	**D12** DIA	**D13** DIA	**D14** DIA	**D15** DIA	**L16** LENGTH	**L17** LENGTH	**T3** THREAD	
TS-BL-20	20mm (Small)	TS-BL-20-LR	72.0	57.4	10.5	6.4	10.0	6.0	M43.2 x 1.25	mm
			2.83	2.26	.41	.25	.39	.24		in
TS-BL-26	26mm (Medium)	TS-BL-26-LR	90.0	72.0	13.8	8.6	13.0	8.1	M54.2 x 1.25	mm
			3.54	2.83	.54	.34	.51	.32		in
TS-BL-32	32mm (Large)	TS-BL-32-LR	112.0	90.0	16.8	10.8	16.0	10.1	M68.25 x 1.5	mm
			4.41	3.54	.66	.43	.63	.40		in

NOTES: All dimensions shown for components are intended for drawing layout purposes only and in some cases have been rounded off. Also, where the same diameter dimension is shown for parts that fit together, the tolerances create the appropriate clearance or fit.

Component Information – Bottom Last

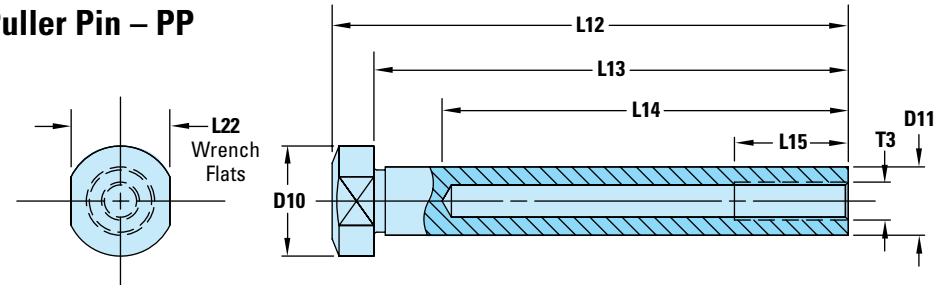
Cam Finger Replacement Kit – KT

With (6) Cam Fingers, and (8) Locking Pins



ASSEMBLY **ITEM NUMBER**	CENTER ROD DIA	KIT **ITEM NUMBER**
TS-BL-20	20mm (Small)	TS-BL-20-KT
TS-BL-26	26mm (Medium)	TS-BL-26-KT
TS-BL-32	32mm (Large)	TS-BL-32-KT

Puller Pin – PP



ASSEMBLY **ITEM NUMBER**	CENTER ROD DIA	COMPONENT **ITEM NUMBER**	**D10** DIA	**D11** DIA	**L12** LENGTH	**L13** LENGTH	**L14** LENGTH	**L15** LENGTH	**L22** FLATS	**T3** THREAD	
TS-BL-20	20mm (Small)	TS-BL-20-PP	29.0	18.0	136.0	125.0	107.0	30.0	26.0	M10	mm
			1.14	.71	5.35	4.92	4.21	1.18	1.02		in
TS-BL-26	26mm (Medium)	TS-BL-26-PP	34.0	21.0	153.0	139.0	120.0	40.0	30.0	M12	mm
			1.34	.83	6.02	5.47	4.72	1.57	1.18		in
TS-BL-32	32mm (Large)	TS-BL-32-PP	43.0	26.0	171.0	154.0	138.0	50.0	36.0	M16	mm
			1.69	1.02	6.73	6.06	5.43	1.97	1.42		in

NOTE: A minimum of (4) Puller Pins should be used with each mold. Larger molds may require additional Puller Pins. Puller Pins are **not** included with BL Assemblies and must be ordered separately.

Top Last Replacement Component Item Numbers

ASSEMBLY **ITEM NUMBER**	CENTER ROD DIA	CENTER ROD	TRAVEL SLEEVE	BODY FOR CAM FINGERS	CAM FINGER REPLACEMENT KIT
TS-TL-20 A	20mm (Small)	TS-TL-20 CR	TS-TL-20-TS	TS-TL-20-BD	TS-TL-20-KT
TS-TL-26 A	26mm (Medium)	TS-TL-26-CR	TS-TL-26-TS	TS-TL-26-BD	TS-TL-26-KT
TS-TL-32 A	32mm (Large)	TS-TL-32-CR	TS-TL-32-TS	TS-TL-32-BD	TS-TL-32-KT

NOTES: All dimensions shown for components are intended for drawing layout purposes only and in some cases have been rounded off. Also, where the same diameter dimension is shown for parts that fit together, the tolerances create the appropriate clearance or fit.

Bottom Last Replacement Component Item Numbers

ASSEMBLY **ITEM NUMBER**	CENTER ROD DIA	CENTER ROD	TRAVEL SLEEVE	BODY FOR CAM FINGERS	LOCKING RING	CAM FINGER REPLACEMENT KIT	PULLER PIN*
TS-BL-20 A	20mm (Small)	TS-BL-20-CR	TS-BL-20-TS	TS-BL-20-BD	TS-BL-20-LR	TS-BL-20-KT	TS-BL-20-PP
TS-BL-26-A	26mm (Medium)	TS-BL-26-CR	TS-BL-26-TS	TS-BL-26-BD	TS-BL-26-LR	TS-BL-26-KT	TS-BL-26-PP
TS-BL-32 A	32mm (Large)	TS-BL-32-CR	TS-BL-32-TS	TS-BL-32-BD	TS-BL-32-LR	TS-BL-32-KT	TS-BL-32-PP

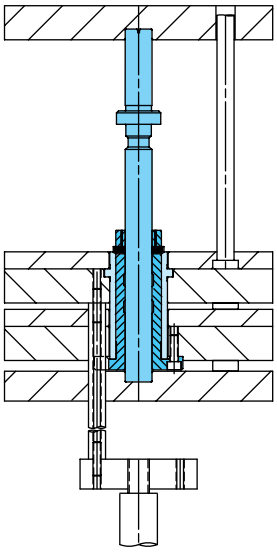
*Puller Pins are **not** included with BL Assemblies and must be ordered separately.

Alternate Configurations

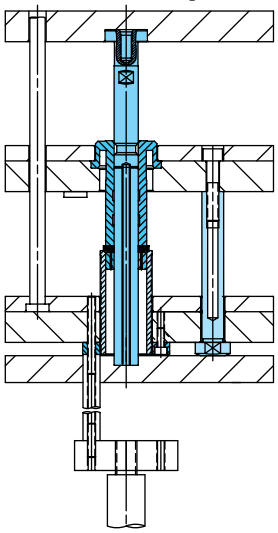
System Configuration for Central Ejector Rod Location

The illustrations below show one 2-Stage Ejector assembly that has been centrally located on the ejector plates.

TL Assembly



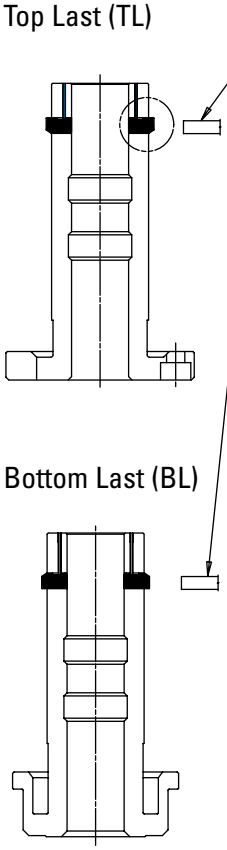
BL Assembly

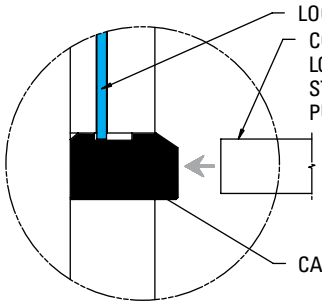


TL & BL 2-Stage Ejectors – Cam Finger Removal Guide

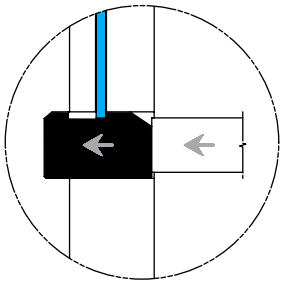
Top Last (TL)

Bottom Last (BL)

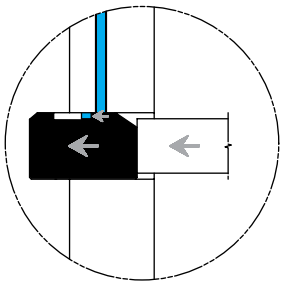




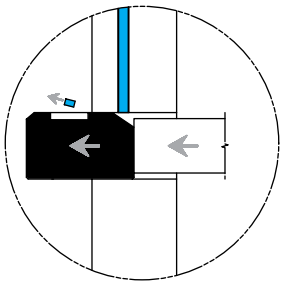
STEP 1
Punch is struck firmly and quickly with a hammer.



STEP 2
Cam Finger is knocked toward the inside diameter region of the Body for Cam Fingers. The Cam Finger pushes against the Locking Pin.



STEP 3
A portion of Locking Pin breaks cleanly away and travels with the moving Cam Finger toward the inside diameter of the Body for Cam Fingers.



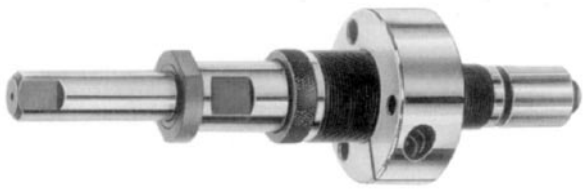
STEP 4
Both the Cam Finger and broken piece of Locking Pin drop into the inside diameter of the Body for Cam Fingers.

NOTES:

- Cold rolled, low carbon steel must be used as a removal punch to avoid damaging the Cam Fingers and/or Body.
- The contact surface of the punch (where it rests against the Cam Finger) should be profiled with a curved surface that matches the exposed surface of the Cam Finger.
- Ensure that Body for Cam Fingers is firmly retained before attempting Cam Finger removal.

Two-Stage Ejectors – Installation

Two-Stage Ejector – FW 1800



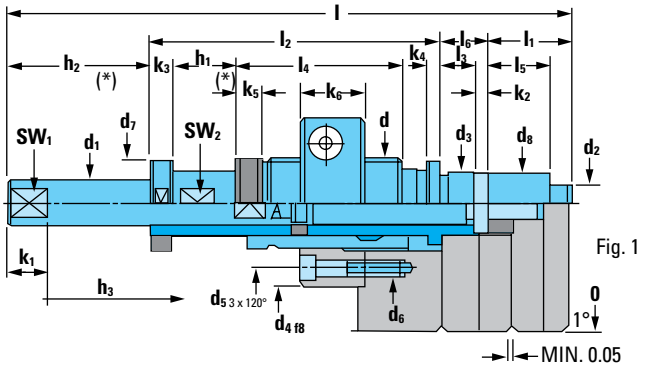


Fig. 1

REF d	d_1	d_2	d_3	d_4	d_5	d_6	d_7	d_8	d_9	$*l_0$	l	l_1	l_2	l_3	l_4	l_5	l_6	STROKE(*) h_1	h_2	h_3	k_1	k_2	k_3	k_4	k_5	k_6	SW_1	SW_2	A mm²
FW 1800 M32X1.5	16	M12X1	M22X1	60	46	M5	32	20.6	M10	160	200	30	101	11	56	20	16	5-30	50	80	16	5	9.0	5	8	24	13	20	56
FW 1800 M42X1.5	22	M16X1.5	M30X1.5	80	62	M6	42	28.0	M14	200	266	40	132	16	75	30	22	10-40	70	110	20	6	9.0	6	10	30	17	27	100
FW 1800 M52X1.5	28	M20X1.5	M38X1.5	90	72	M8	53	36.0	M16	350	285	45	134	16	75	35	22	10-40	80	120	22	6	10.5	8	12	30	22	35	152
FW 1800 M62X1.5	37	M24X1.5	M48X1.5	120	80	M8	63	44.0	M20	500	300	50	140	16	80	40	22	10-40	80	120	22	6	10.5	8	12	30	30	44	215

*l_0: Length of ejector plate

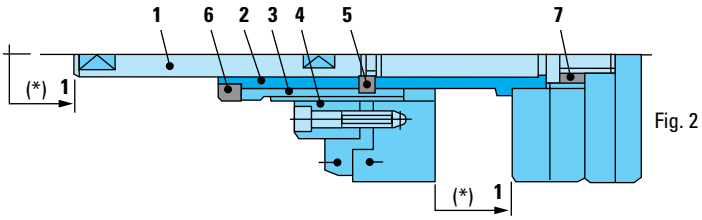


Fig. 2

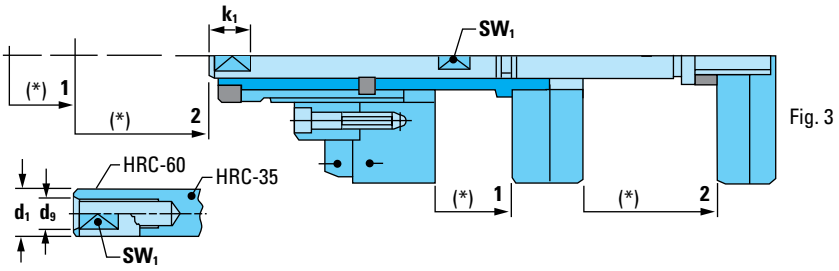


Fig. 3

1. Ejector rod
2. Ejector sleeve
3. Adjusting bush
4. Assembly flange
5. Segments
6. Stopring
7. Spacer

Fitting:

1. Mount ejector rod #1 together with ejector plate. For safety please use LOCTITE C 242.
2. Move over parts #2, 3 and 4 together and tighten up part #3 (SW2 see chart).
3. Tighten up adjusting bush #3 with assembly flange #4.
4. Fix assembly flange.

Recommended lubricants: C 135, C 160, C 170, etc.

Installation Instructions:

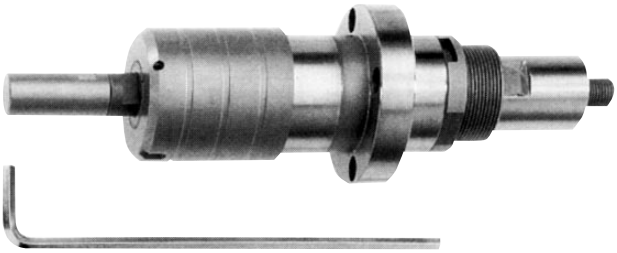
This device is preferably screwed together with the hydraulic machine ejector. The required internal or external thread of part #1 has to be made adequately. The ejector rod #1 may not be shortened by more than length k1, if the total stroke h3, including a possible deeper run in of part #1 into part #2, is not maintained. By rotating adjustment of bush #3 the first stroke h1 is continuously adjusted. With stroke h1 both ejector pin plates are moved simultaneously. On the following stroke h2 only the second ejector pin plate movement is continued. Choose the thickness of the spacer ring #7 so that there is at least 0.05mm clearance between the ejector pin plates (see Fig. 1).

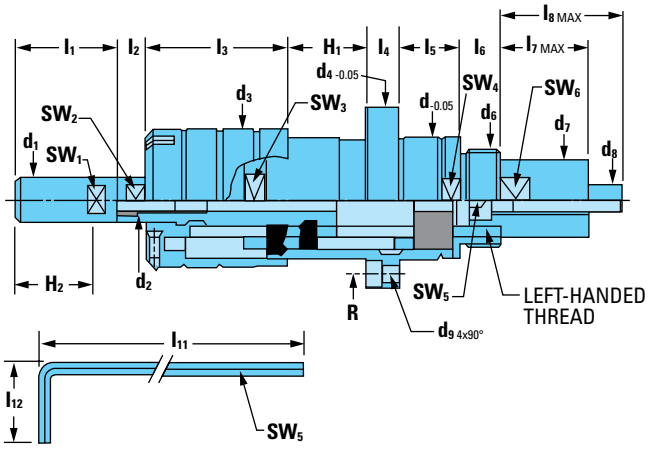
Two-Stage Single-Stroke Ejector | Adapter with Screw

Two-Stage Single-Stroke Ejector – FW 1850

The two-stage single-stroke ejector can be integrated into ejection molding tools. This ejector automatically divides the motion into two sequential strokes.

The functional sequence associated with this makes it possible to create new mold ejection mechanisms.



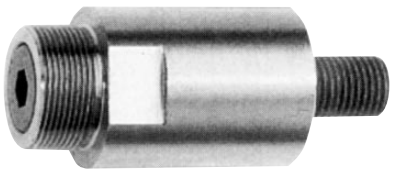


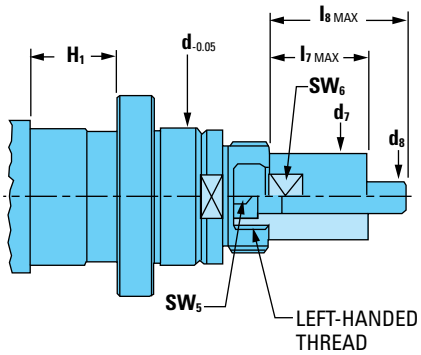
REF d X H_1 MAX	H_1 MIN	H_2	d_1	d_2	d_3	d_4	d_6	d_7	d_8	d_9	R	l_1	l_2
FW 1850 50X32	5	12-32	18	M12	56	75	M40X1.5	31.5	M12X1.25	M6X16	31	42	12
FW 1850 58X40	5	15-40	22	M16	64	90	M45X1.5	36	M14X1.5	M8X20	36	42	15
FW 1850 58X56	5	25-65	22	M16	64	90	M45X1.5	36	M14X1.5	M8X20	36	58	15
FW 1850 70X71	10	20-71	26	M20	79	100	M55X1.5	44	M16X1.5	M8X25	42	75	18

REF d X H_1 MAX	l_3	l_4	l_5	l_6	l_7 MAX	l_8 MAX	l_{11}	l_{12}	SW_1	SW_2	SW_3	SW_3 Nm	SW_4	SW_5	SW_6
FW 1850 50X32	58	14	25	17	36	50	180	37	14	14	36	120	46	6	27
FW 1850 58X40	68	16	25	17	45	66	200	44	18	18	41	160	55	8	32
FW 1850 58X56	84	16	25	17	45	66	250	44	18	18	41	120	55	8	32
FW 1850 70X71	107	22	30	22	56	80	270	50	22	24	50	200	65	10	38

Adapter with Screw – FW 1851

Material: 1.6582





REF d X H_1 MAX	d_7	d_8	l_7 MAX	l_8 MAX	SW_5	SW_6
FW1851 50x32	31.5	M12X1.25	36	50	6	27
FW1851 58x40	36	M14X1.5	45	66	8	32
FW1851 58x56	36	M14X1.5	45	66	8	32
FW1851 70x71	44	M16X1.5	56	80	10	38

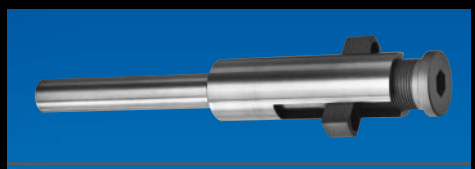
D-M-E Internal Latch Lock, Toggle-Lok, Jiffy-Jector

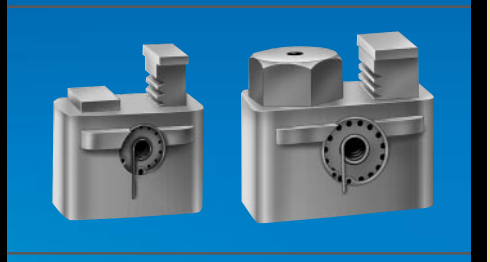
PRECISION CONTROL

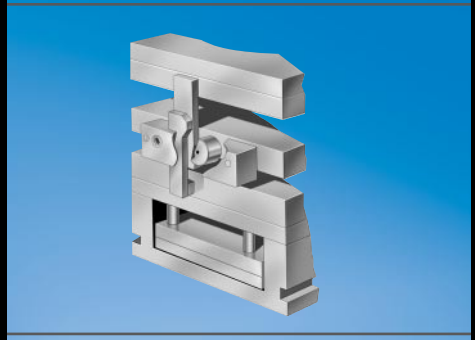
OF MOLD PLATE OPERATION



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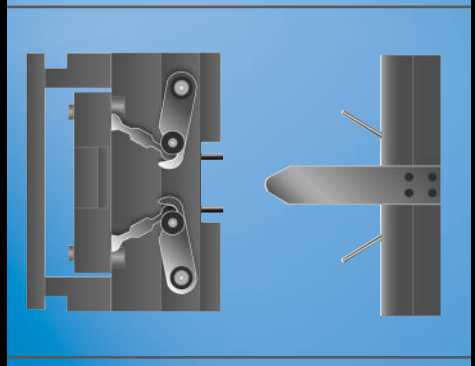






Internal Latch Lock

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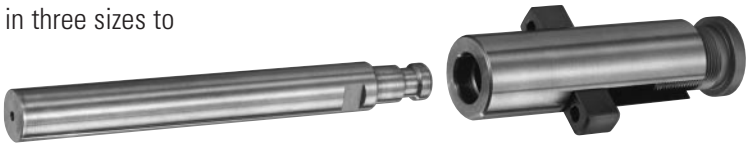
Online Price Guide

Go to www.dme.net/prices for the latest pricing guide.

Benefits and Selection Table

D-M-E's Internal Latch Lock Allows Precision Control of Mold Plate Latching Operation

D-M-E's unique internally-mounted latch lock mechanism adapts to a number of mold base sizes and plate thicknesses. It is available in three sizes to accommodate most standard D-M-E stripper plate mold bases. Two travel ranges and two center puller pin lengths are available for each of the three latch lock sizes. Once installed, D-M-E's internal latch locks control the sequence of one parting line opening after the first parting line has traveled a predetermined distance. After installation there are no adjustments that can be accidentally changed. The internal latch locks are most commonly used on D-M-E AX-Series stripper plate mold bases but can be used on other D-M-E stripper plate mold bases as well.



U.S. Patent No. 5,494,435

D-M-E's internal latch lock allows control of the mold plate opening sequence on mold bases with stripper plates. It enables one plate or group of plates to be latched together while the first parting line opening occurs. Then, after a predetermined amount of travel, the latch lock releases the latched plate or group of plates for the remaining parting line or parting lines to open.

- Three diameter sizes to choose from – 28mm, 34mm, and 45mm – depending on the size of the mold and the application
- Two travel ranges and two center puller pin lengths to choose from for each of the three sizes
- Hardened steel components for longer life
- Latching mechanism has built-in travel limitation
- When latch is released, latching cams hold released stripper plate in fully traveled position
- Easy set-up of timing for latching mechanism
- Internal installation avoids interferences with water line connectors and externally mounted components

Basic Latch Size	Internal Latch Lock Assembly Item Number	"T" Travel Range				Center Puller Pin Length Options		Recommended Maximum Standard D-M-E Mold Base Width	Maximum Recommended Load Values (Per Ass'y.)	
		Minimum		Maximum						
		mm	in	mm	in	mm	in		Static	Dynamic
28mm DIA (Small)	DKL-2811	5	.197	30	1.181	140	5.512	11-7/8 in	10 kN	100 kg
	DKL-2812					250	9.843			
	DKL-2821	30	1.181	55	2.165	140	5.512			
	DKL-2822					250	9.843			
34mm DIA (Medium)	DKL-3411	6	.236	41	1.614	160	6.299	16-1/2 in	20 kN	200 kg
	DKL-3412					280	11.024			
	DKL-3421	41	1.614	76	2.992	160	6.299			
	DKL-3422					280	11.024			
45mm DIA (Large)	DKL-4511	12	.472	58	2.283	200	7.874	23-3/4 in	30 kN	380 kg
	DKL-4512					310	12.205			
	DKL-4521	58	2.283	104	4.094	200	7.874			
	DKL-4522					310	12.205			

See page 111 for information regarding an additional option that provides guided ejection and return of the ejector assembly with guided ejection and return sleeves.

Supplied to provide maximum travel with no cutoff. To reduce travel between maximum and minimum, cut off slotted travel limiting sleeve on threaded end only per installation data.

Center puller pin length ordered must be slightly longer than application requires. Moldmaker then cuts off as required. See installation data.

A minimum of four assemblies are recommended per mold. However, for larger molds, thick plates, or an application where loads are near maximum, additional assemblies and/or next largest size assemblies may be required. An application must never exceed the maximum recommended load values. A balanced load must be maintained to avoid cocking and binding, which could cause severe overloading. Only one size latch lock assembly should be used in each mold base.

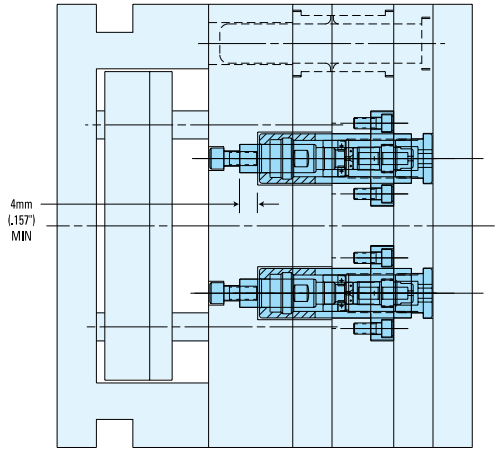
Typical Application Design Guidelines

Basic Selection and Application Design Guidelines

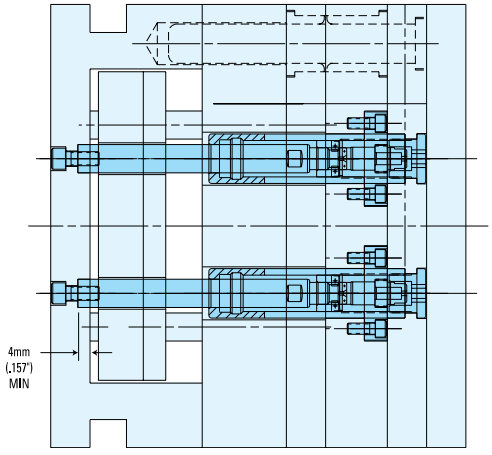


U.S. Patent No. 5,494,435

1. Select the appropriate internal latch lock size – 28mm diameter (small), 34mm diameter (medium), or 45mm diameter (large) based on the width of the mold base, as indicated in the chart on page 105. However, large molds, thick plates or heavy load applications may require the next largest size assembly than is specified.
2. Select the appropriate travel range from the two choices for each size in the table on page 105. This selection is based on the specific application requirements for the amount of travel that must occur at one parting line prior to the latch being released. The total travel requirements are based on the amount needed for the application as explained above, plus 3mm (.12") minimum additional allowance. This added 3mm minimum will make sure the full required travel has occurred before the latch lock starts its releasing action.
3. Select the appropriate length for the center puller pin from the two choices for each size in the chart. The length of the pin is determined by the specific application including the mold base plate thicknesses, where the pin will be mounted, etc. If possible, the center puller pin should be mounted in the support plate. However, some applications require the center puller pin to be mounted in the bottom clamping plate. This will depend on the travel or the length of the split sleeve component which controls the travel and the plate thicknesses in the mold base.
4. The answers to the above items (1-3) should establish a specific item number assembly from the table on page 105.
5. A minimum of four assemblies are recommended per mold. However, for larger molds, thick plates, or an application where loads are near maximum, additional assemblies and/or next largest size assemblies may be required. An application must never exceed the maximum recommended load values. A balanced load must be maintained to avoid cocking and binding which could cause severe overloading. Only one size latch lock assembly should be used in each mold base.
6. The center puller pin should be counterbored into its mounting plate 4mm (.157") minimum for most applications, as shown in the drawings at right. This counterbore aligns the center puller pin with the other components in the assembly.
7. The most common applications for the latch locks are for the D-M-E AX-Series stripper plate mold bases. However, many other types of stripper plate mold bases can also be used with this internal plate latching mechanism. It is important to make sure that the leader pin lengths in all applications are long enough to fully engage the stripper plate through its full travel. The latch lock mechanism latches two plates together but is not intended to provide guidance. Instead, it relies on the leader pins in the mold for proper alignment and support of the actuated stripper plates.
8. In the fully latched position the internal latch lock mechanism will allow movement of approximately 0.4mm (.016") for the 28mm diameter and 34mm diameter assemblies and approximately 0.5mm (.020") for the 45mm diameter assemblies.
9. Injection molding machine mold opening speed may have to be reduced in order to make sure that excessive shock loading does not occur.
10. The internal latch lock is not recommended for severe load applications.
11. The internal latch lock must not be exposed to temperatures that exceed 150°C (300°F) at any time.
12. Lubricate all metal-to-metal contact areas initially and periodically as required. A good grade of moldmakers non-melting type grease for the appropriate temperature should be used.
13. An optional sleeve can be added to the latch lock that provides two additional functions. However, this optional sleeve is not required for the latch lock function. The optional sleeve can be added to incorporate guided ejection and/or normal ejector assembly return functions in the mold. Refer to page 111 for specific information regarding this sleeve option.



Internal latch lock application with center puller pins mounted in the support plate. This is typically done in applications where the travel is shorter and/or when mold plates are thicker. D-M-E AX-Series mold base is shown in this typical application.

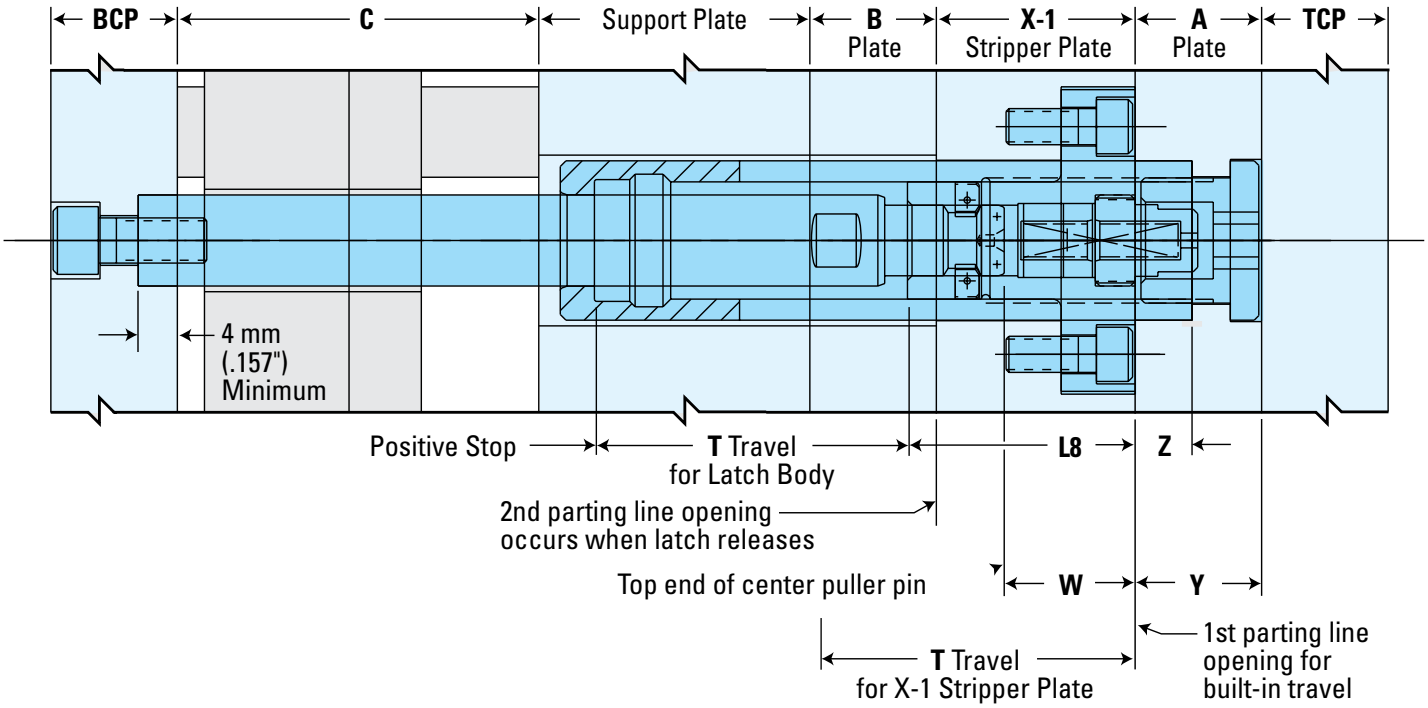


Internal latch lock application with center puller pin mounted in the bottom clamping plate. This is typically done in applications where the travel is longer and/or when mold plates are thinner. (Some applications may require a thicker than standard bottom clamping plate.) D-M-E AX-Series mold base is shown in this typical application.

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Set-Up Dimensional Information

D-M-E AX-Series stripper plate mold base is shown



IMPORTANT SET-UP DIMENSIONS
(Refer to Drawing Above)

Basic Latch Size	Internal Latch Lock Assembly Item Number	"T"(1) Travel Range Minimum mm	"T"(1) Travel Range Minimum in	"T"(1) Travel Range Maximum mm	"T"(1) Travel Range Maximum in	L8 Body for Cam Fingers Length Dimension mm	L8 Body for Cam Fingers Length Dimension in	W(2) Center Puller Pin Set-Up Dimensions mm	W(2) Center Puller Pin Set-Up Dimensions in	Y(3) Mounting Plate Thickness Range mm	Y(3) Mounting Plate Thickness Range in	Z(4) C'Bore Depth in Mounting Plate mm	Z(4) C'Bore Depth in Mounting Plate in
28mm DIA (Small)	DKL-2811	5	.197	30	1.181	40	1.575	23 +0.1	.906 +.004	22 to 35	.866 to 1.378	10 +0.04 -0	.3937 +.0016 -.0000
	DKL-2812												
	DKL-2821	30	1.181	55	2.165								
	DKL-2822												
34mm DIA (Medium)	DKL-3411	6	.236	41	1.614	51	2.008	32 +0.1	1.260 +.004	27 to 47.6	1.063 to 1.875	12 +0.04 -0	.4724 +.0016 -.0000
	DKL-3412												
	DKL-3421	41	1.614	76	2.992								
	DKL-3422												
45mm DIA (Large)	DKL-4511	12	.472	58	2.283	68	2.677	43 +0.1	1.693 +.004	35 to 60	1.375 to 2.375	16 +0.04 -0	.6299 +.0016 -.0000
	DKL-4512												
	DKL-4521	58	2.283	104	4.094								
	DKL-4522												

(1) Supplied to provide maximum travel with no cutoff. To reduce travel between maximum and minimum, cut off slotted travel limiting sleeve on threaded end only per installation data. Cut off to no less than minimum travel; maintain close tolerances per installation data.

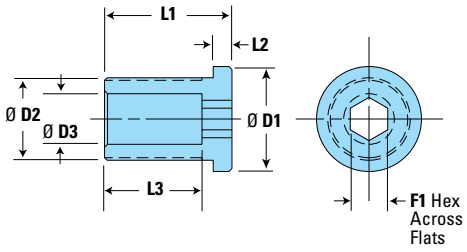
(2) This set-up dimension is critical and must be maintained as specified to properly locate pin and cam body to latch. Dimension W is from top of X-1 stripper plate to top end of center puller pin. See installation data for additional information.

(3) "Y" mounting plate dimension will be the "A" plate for AX-Series stripper plate mold bases.

(4) This counterbore depth is critical and must be maintained as specified to locate split sleeve, cam body, and pin to latch.

Component Dimensional Information

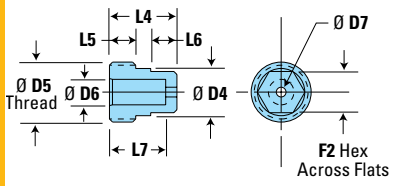
Assembly Retaining Screw



Basic Latch Size	Internal Latch Lock Assembly Item Number	ASSEMBLY RETAINING SCREW								
		Component Item No	D1 DIA	D2 Thread	D3 DIA	L1 Length	L2 Length	L3 Length	F1 Hex Across Flats	
28mm DIA (Small)	DKL-2811, DKL-2812, DKL-2821 & DKL-2822	DKL-2011	28	M22x1.25	13.5	34	5	26	10	mm
			1.102	None	.531	1.339	.197	1.024	.394	in
34mm DIA (Medium)	DKL-3411, DKL-3412, DKL-3421 & DKL-3422	DKL-3011	33	M26x1.5	16	46	6	35	12	mm
			1.299	None	.630	1.811	.236	1.378	.472	in
45mm DIA (Large)	DKL-4511, DKL-4512, DKL-4521 & DKL-4522	DKL-4011	42	M34x1.5	18.4	59	10	42	14	mm
			1.654	None	.724	2.323	.394	1.654	.551	in

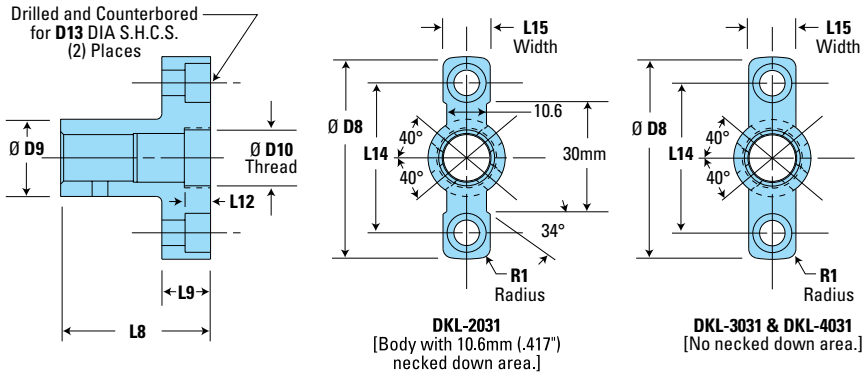
Cut-off length on thread end only per installation data

Spring Retainer



Basic Latch Size	Internal Latch Lock Assembly Item Number	SPRING RETAINER									
		Component Item No	D4 DIA	D5 Thread	D6 DIA	D7 DIA	L4 Length	L5 Length	L6 Length	L7 Length	F2 HEX. Across Flats	
28mm DIA (Small)	DKL-2811, DKL-2812, DKL-2821 & DKL-2822	DKL-2021	12.6	M16x1	6.8	2.6	18	7	7	15	11	mm
			.496	None	.268	.102	.709	.276	.276	.591	.433	in
34mm DIA (Medium)	DKL-3411, DKL-3412, DKL-3421 & DKL-3422	DKL-3021	15	M19x1	8.3	3	21	8	8	17	13	mm
			.591	None	.327	.118	.827	.315	.315	.669	.512	in
45mm DIA (Large)	DKL-4511, DKL-4512, DKL-4521 & DKL-4522	DKL-4021	17.2	M24x1	10	3.5	25	10	9	21	15	mm
			.677	None	.394	.138	.984	.394	.354	.827	.591	in

Body for Cam Fingers (Body Only Without Cam Fingers)



Basic Latch Size	Internal Latch Lock Assembly Item Number	BODY FOR CAM FINGERS													
		Component Item No	D8 DIA	D9 DIA	D10 Thread	L8 Length	L9 Length	L12 Length	L14 Length	L15 Width	R1 Radius	Mounting Holes & D13 SHCS			
												Drill DIA	C'Bore DIA	C'Bore Depth	D13 SHCS
28mm DIA (Small)	DKL-2811, DKL-2812, DKL-2821 & DKL-2822	DKL-2031	54	20.6	M16x1	40	13	7	40	12.6	2.5	6.8	10.4	6.8	M6x1	mm
			2.126	.811	None	1.575	.512	.276	1.575	.496	.098	.268	.409	.268	1/4-20	in
34mm DIA (Medium)	DKL-3411, DKL-3412, DKL-3421 & DKL-3422	DKL-3031	60	24.4	M19x1	51	15	8	46	12.6	2.5	6.8	10.4	6.8	M6x1	mm
			2.362	.961	None	2.008	.591	.315	1.811	.496	.098	.268	.409	.268	1/4-20	in
45mm DIA (Large)	DKL-4511, DKL-4512, DKL-4521 & DKL-4522	DKL-4031	78	32.4	M24x1	68	20	10	60	17	4	8.4	13.7	8.5	M8x1.25	mm
			3.071	1.276	None	2.677	.787	.394	2.362	.669	.157	.331	.539	.335	5/16-18	in

Do not alter body in any way

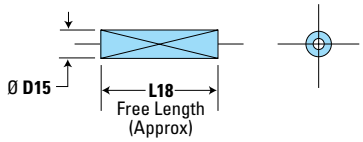
Use either metric or inch socket head cap screws

NOTE:

All dimensions shown for components are intended for drawing layout purposes only and in some cases have been rounded off. These dimensions are not intended to be used for the manufacturing of any components. Also, where the same diameter dimension is shown for parts that fit together, the tolerances create the appropriate clearance or fit.

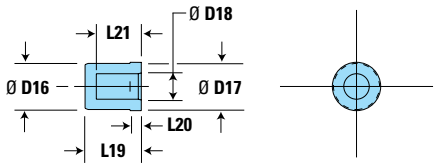
Component Dimensional Information

Spring for Holding Pin



Basic Latch Size	Internal Latch Lock Assembly Item Number	SPRING FOR HOLDING PIN			
		Component Item No	D15 DIA	L18 Free Length	
28mm DIA (Small)	DKL-2811, DKL-2812, DKL-2821 & DKL-2822	DKL-2041	6.5	56	mm
			.256	2.20	in
34mm DIA (Medium)	DKL-3411, DKL-3412, DKL-3421 & DKL-3422	DKL-3041	8	70	mm
			.315	2.76	in
45mm DIA (Large)	DKL-4511, DKL-4512, DKL-4521 & DKL-4522	DKL-4041	9.7	90	mm
			.382	3.54	in

Holding Pin for Cams

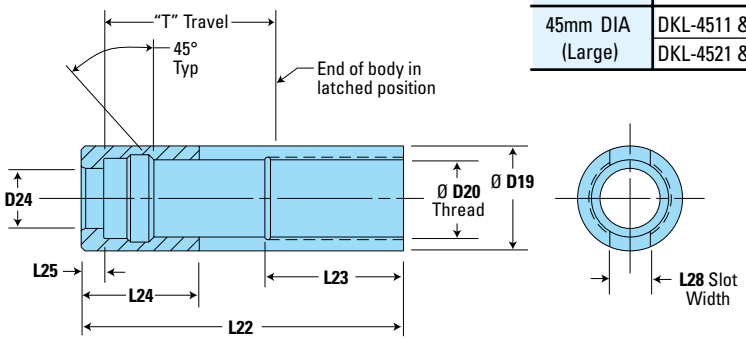


Basic Latch Size	Internal Latch Lock Assembly Item Number	HOLDING PIN FOR CAMS							
		Component Item No	D16 DIA	D17 DIA	D18 DIA	L19 Length	L20 Length	L21 Length	
28mm DIA (Small)	DKL-2811, DKL-2812, DKL-2821 & DKL-2822	DKL-2051	12.3	12.9	6.8	15	3	12	mm
			.484	.508	.268	.591	.118	.472	in
34mm DIA (Medium)	DKL-3411, DKL-3412, DKL-3421 & DKL-3422	DKL-3051	14.4	15.4	8.3	23	5	19.5	mm
			.567	.606	.327	.906	.197	.768	in
45mm DIA (Large)	DKL-4511, DKL-4512, DKL-4521 & DKL-4522	DKL-4051	19.4	20.4	10	32	7	28	mm
			.764	.803	.394	1.260	.276	1.102	in

Slotted Travel Limiting Sleeve

Basic Latch Size	Internal Latch Lock Assembly Item Number	SLOTTED TRAVEL LIMITING SLEEVE				
		Component Item No	"T" Travel Range – Minimum to Maximum		L22 Length	
			mm	in	mm	in
28mm DIA (Small)	DKL-2811 & DKL-2812	DKL-2071	5 to 30	.197 to 1.181	86	3.386
	DKL-2821 & DKL-2822	DKL-2072	30 to 55	1.181 to 2.165	111	4.370
34mm DIA (Medium)	DKL-3411 & DKL-3412	DKL-3071	6 to 41	.236 to 1.614	111	4.370
	DKL-3421 & DKL-3422	DKL-3072	41 to 76	1.614 to 2.992	146	5.748
45mm DIA (Large)	DKL-4511 & DKL-4512	DKL-4071	12 to 58	.472 to 2.283	152	5.984
	DKL-4521 & DKL-4522	DKL-4072	58 to 104	2.283 to 4.094	198	7.795

Supplied to provide maximum travel with no cutoff. To reduce travel between maximum and minimum, cut off on threaded end only per installation data.



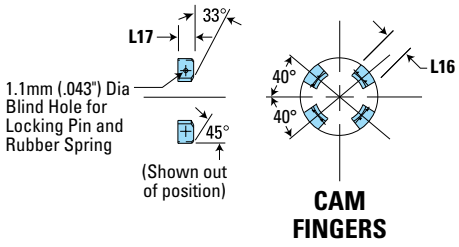
Basic Latch Size	Internal Latch Lock Assembly Item Number	SLOTTED TRAVEL LIMITING SLEEVE								
		Component Item No	D19 DIA	D20 DIA Thread	D24 DIA	L23 Length	L24 Length	L25 Length	L28 Slot	
28mm DIA (Small)	DKL-2811, DKL-2812, DKL-2821 & DKL-2822	DKL-2071 & DKL-2072	28	M22x1.25	16	37	31.5	6	10.8	mm
			1.1024	None	.630	1.457	1.240	.236	.425	in
34mm DIA (Medium)	DKL-3411, DKL-3412, DKL-3421 & DKL-3422	DKL-3071 & DKL-3072	34	M26x1.5	19	49	41	7	12.8	mm
			1.3386	None	.748	1.929	1.614	.276	.504	in
45mm DIA (Large)	DKL-4511, DKL-4512, DKL-4521 & DKL-4522	DKL-4071 & DKL-4072	45	M34x1.5	26	65	56	10	17.3	mm
			1.7717	None	1.024	2.559	2.205	.394	.681	in

NOTE:
All dimensions shown for components are intended for drawing layout purposes only and in some cases have been rounded off. These dimensions are not intended to be used for the manufacturing of any components. Also, where the same diameter dimension is shown for parts that fit together, the tolerances create the appropriate clearance or fit.

Component Dimensional Information

Cam Finger Replacement Kit

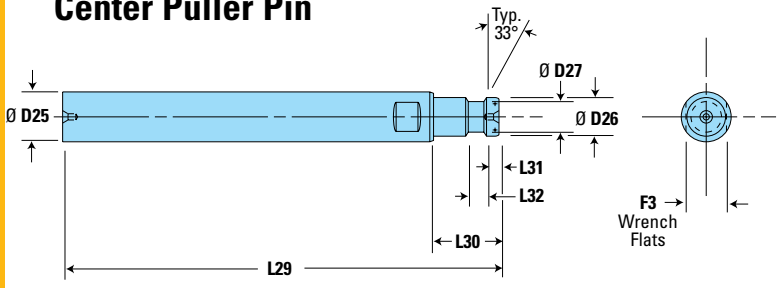
With (4) Cam Fingers, (6) Locking Pins, and (6) Rubber Springs*



Basic Latch Size	Internal Latch Lock Assembly Item Number	CAM FINGER REPLACEMENT KIT			
		Component Set Item No	L16 Width	L17 Thick	
28mm DIA (Small)	DKL-2811, DKL-2812, DKL-2821 & DKL-2822	DKL-2062	5.8	4.2	mm
			.228	.165	in
34mm DIA (Medium)	DKL-3411, DKL-3412, DKL-3421 & DKL-3422	DKL-3062	7.2	4.8	mm
			.283	.189	in
45mm DIA (Large)	DKL-4511, DKL-4512, DKL-4521 & DKL-4522	DKL-4062	9	6	mm
			.354	.236	in

**Two extra locking pins and rubber springs are included.*

Center Puller Pin



Basic Latch Size	Internal Latch Lock Assembly Item Number	CENTER PULLER PIN		
		Component Item No	L29 Length mm	L29 Length in
28mm DIA (Small)	DKL-2811 & DKL-2821	DKL-2081	140	5.512
	DKL-2812 & DKL-2822	DKL-2082	250	9.843
34mm DIA (Medium)	DKL-3411 & DKL-3421	DKL-3081	160	6.299
	DKL-3412 & DKL-3422	DKL-3082	280	11.024
45mm DIA (Large)	DKL-4511 & DKL-4521	DKL-4081	200	7.874
	DKL-4512 & DKL-4522	DKL-4082	310	12.205

Cutoff on large diameter end only per installation data

NOTE:

All dimensions shown for components are intended for drawing layout purposes only and in some cases have been rounded off. These dimensions are not intended to be used for the manufacturing of any components. Also, where the same diameter dimension is shown for parts that fit together, the tolerances create the appropriate clearance or fit.

Basic Latch Size	Internal Latch Lock Assembly Item Number	CENTER PULLER PIN								
		Component Item No	D25 DIA	D26 DIA	D27 DIA	L30 Length	L31 Length	L32 Length	F3 Across Flats	D28 Tap – Rec.
28mm DIA (Small)	DKL-2811, DKL-2812, DKL-2821 & DKL-2822	DKL-2081 & DKL-2082	16	12.4	9.8	21	4	6.7	13	M8x1.25 mm
			.6299	.488	.386	.827	.157	.264	.512	5/16-18 in
34mm DIA (Medium)	DKL-3411, DKL-3412, DKL-3421 & DKL-3422	DKL-3081 & DKL-3082	19	14.5	11.7	24	4.6	7.6	15	M10x1.5 mm
			.7480	.571	.461	.945	.181	.299	.591	3/8-16 in
45mm DIA (Large)	DKL-4511, DKL-4512, DKL-4521 & DKL-4522	DKL-4081 & DKL-4082	26	19.5	15.9	31	5.5	9.5	22	M12x1.75 mm
			1.0236	.768	.626	1.220	.217	.374	.866	1/2-13 in

Use either metric or inch tap and socket head cap screw (tap after pin cutoff)

Replacement Components

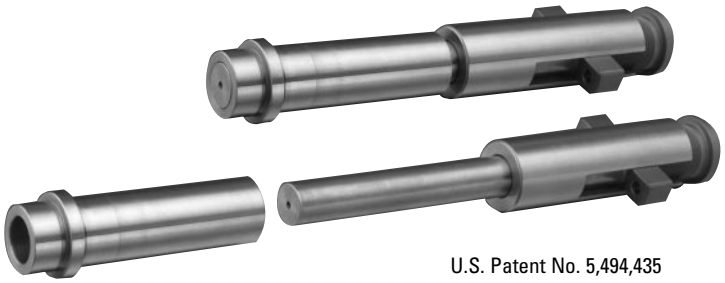
Basic Latch Size	Internal Latch Lock Assembly Item No.	Center Puller Pin			Slotted Travel Limiting Sleeve			Component Item Numbers						
		Component Item No	L17 Length mm	L17 Length in	Component Item No.	"T" Travel Range mm	"T" Travel Range in	Assembly Retaining Screw	Spring Retainer	Body for Cam Fingers Without Cam Fingers	Body for Cam Fingers With (4) Cam Fingers	Cam Finger Replacement Kit	Spring for Holding Pin	Holding Pin for Cams
28mm DIA (Small)	DKL-2811	DKL-2081	140	5.512	DKL-2071	5 to 30	.197 to 1.181	DKL-2011	DKL-2021	DKL-2031	DKL-2032	DKL-2062	DKL-2041	DKL-2051
	DKL-2812	DKL-2082	250	9.843										
	DKL-2821	DKL-2081	140	5.512	DKL-2072	30 to 55	1.181 to 2.165							
	DKL-2822	DKL-2082	250	9.843										
34mm DIA. (Medium)	DKL-3411	DKL-3081	160	6.299	DKL-3071	6 to 41	.236 to 1.614	DKL-3011	DKL-3021	DKL-3031	DKL-3032	DKL-3062	DKL-3041	DKL-3051
	DKL-3412	DKL-3082	280	11.024										
	DKL-3421	DKL-3081	160	6.299	DKL-3072	41 to 76	1.614 to 2.992							
	DKL-3422	DKL-3082	280	11.024										
45mm DIA (Large)	DKL-4511	DKL-4081	200	7.874	DKL-4071	12 to 58	.472 to 2.283	DKL-4011	DKL-4021	DKL-4031	DKL-4032	DKL-4062	DKL-4041	DKL-4051
	DKL-4512	DKL-4082	310	12.205										
	DKL-4521	DKL-4081	200	7.874	DKL-4072	58 to 104	2.283 to 4.094							
	DKL-4522	DKL-4082	310	12.205										

Body for Cam Fingers with Cam Fingers installed includes: (1) body, (4) cam fingers, (4) locking pins, and (4) rubber springs

Cam Finger Replacement Kit includes: (4) cam fingers, (6) locking pins, and (6) rubber springs (two extra locking pins and rubber springs are included).

Optional Guided Ejection and Return Sleeves

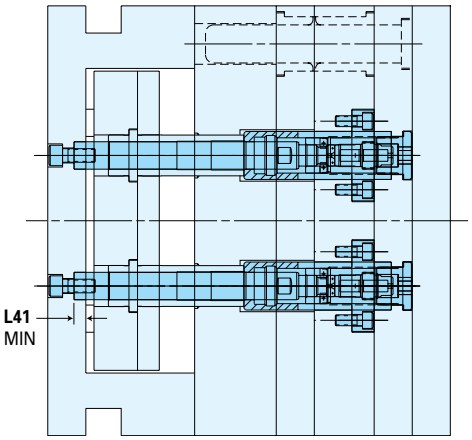
Add Guided Ejection and Return Pin Functions to Internal Latch Lock Mechanism with the Optional Sleeve

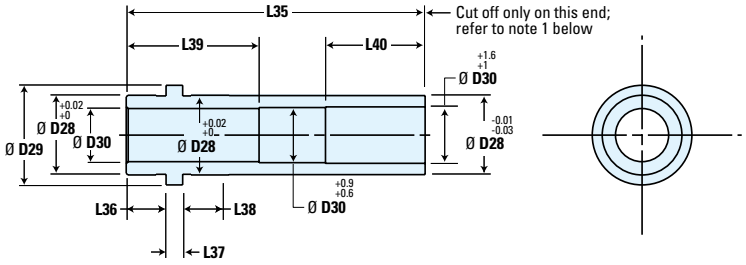


U.S. Patent No. 5,494,435

The optional Guided Ejection and Return Sleeves, although not required for the Internal Latch Lock, can add two functions to the mold base that are typically required in most molds. These optional sleeves can add guided ejection and ejector assembly return functions to the mold base. Additionally, these added functions fall within the space requirements of the plate latching mechanism. However, these optional sleeves do not create an early ejection return system that is occasionally required in some applications.

- Sleeves can add guided ejection function to mold base along with plate latching mechanism
- Sleeves can replace function of return pins in mold base for most applications using the plate latching mechanism
- Sleeves fit around the center puller pin of the plate latching mechanism and are mounted in the ejector assembly, thus eliminating the need for additional mold space usually required for the guided ejection and return pin functions



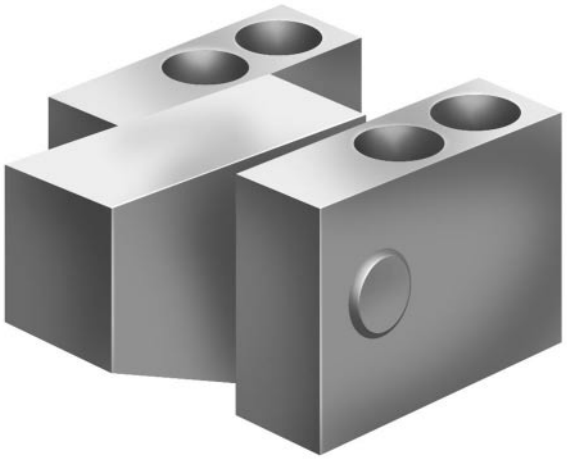


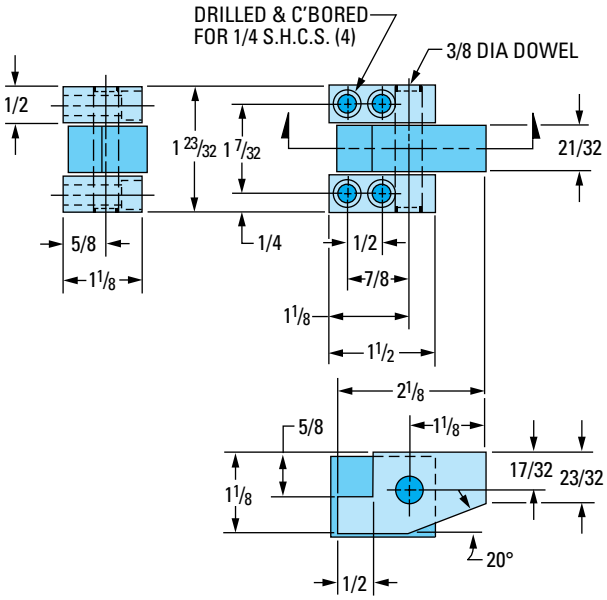
Basic Latch Size	Internal Latch Lock Assembly Item Number	OPTIONAL SLEEVES – GUIDED EJECTION AND RETURN SLEEVE DIMENSIONS																					
		Component Item No	L35 Length		D28 DIA		D29 DIA		D30 DIA		L36 Length		L37 Thickness		L38 Length		L39 Length		L40 Length		L41 Min	
			mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
28mm DIA (Small)	DKL-2811, DKL-2812, DKL-2821 & DKL-2822	DKL-2101	90	3.543	24	.9449	30	1.181	16	.630	12	.472	5	.197	14	.55	40	1.57	30	1.18	12	.472
		DKL-2102	140	5.512																		
34mm DIA (Medium)	DKL-3411, DKL-3412, DKL-3421 & DKL-3422	DKL-3101	110	4.331	28	1.1024	35	1.378	19	.748	14	.551	6	.236	16	.63	50	1.97	35	1.38	15	.591
		DKL-3102	160	6.299																		
45mm DIA (Large)	DKL-4511, DKL-4512, DKL-4521 & DKL-4522	DKL-4101	140	5.512	38	1.4961	46	1.811	26	1.024	18	.709	8	.315	20	.79	70	2.76	40	1.57	20	.787
		DKL-4102	200	7.874																		

NOTES:

1. Choose the appropriate length sleeve so that it can be cut off to a length that will fully return the ejector assembly. See installation data.
2. The center puller pins must support and guide the sleeves, as well as the ejector assembly. The pins must have sufficient bearing surface contact as specified by dimension "L41" minimum.
3. Additional bearing surface contact for the center puller pins may require a thicker bottom clamping plate or the addition of another plate to the bottom of the mold for some applications. See installation data.
4. A minimum of four assemblies are typically recommended per mold. However, for larger molds, thick plates, or an application where loads are near maximum, additional assemblies and/or next largest size assemblies may be required. An application must never exceed the maximum recommended load values. A balanced load must be maintained to avoid cocking and binding which could cause severe overloading. Only one size latch lock assembly should be used in each mold base.

Accelerated Knock-Outs – Typical Application

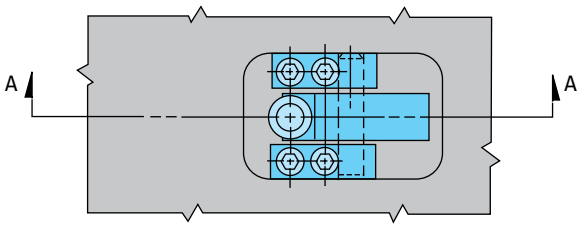




The D-M-E Accelerated Knock-Outs are simple in design, using a pivot-type motion for accelerated ejection. Mechanical advantage is 1:1. They will accommodate ejector pins up to 3/8" in diameter. (Pins with head diameters greater than 5/8" can be ground down to fit.)

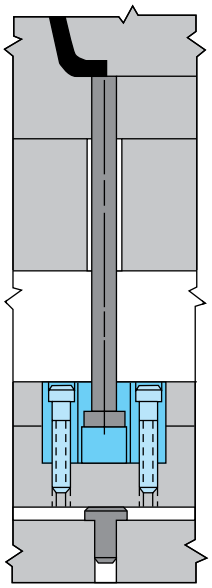
Simplicity of design permits D-M-E Accelerated Knock-Outs either to be inserted into the ejector plate (as shown below) or top-mounted, depending on space available for the ejection movement.

ITEM NUMBER
AKO-1

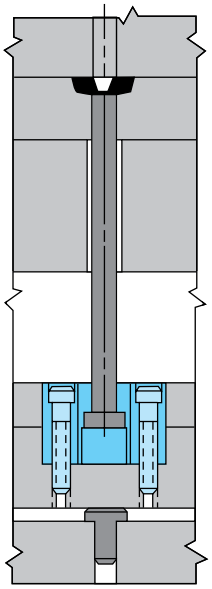


VIEW C-C

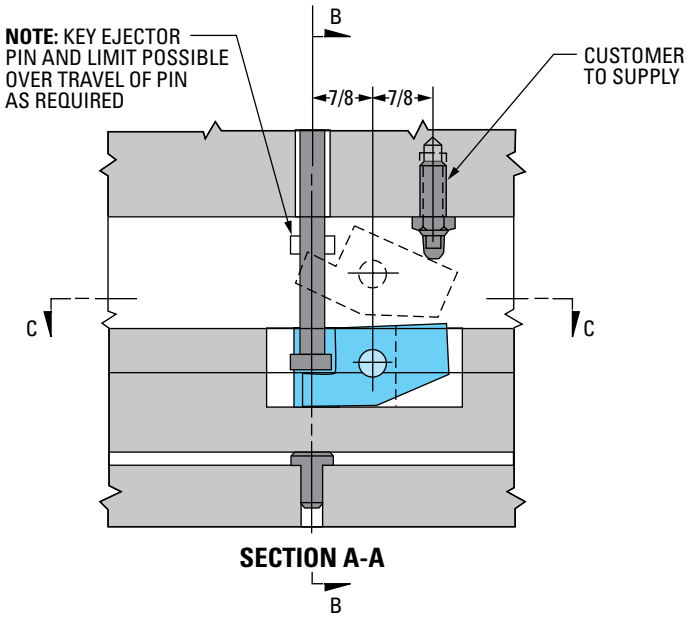
Typical Applications



SECTION B-B
APPLICATION 1



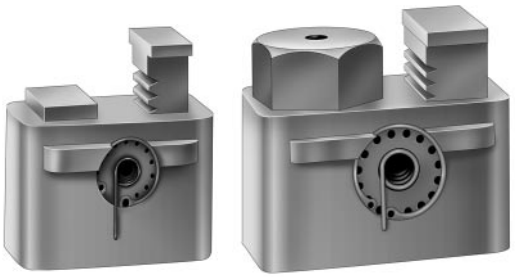
SECTION B-B
APPLICATION 2



SECTION A-A

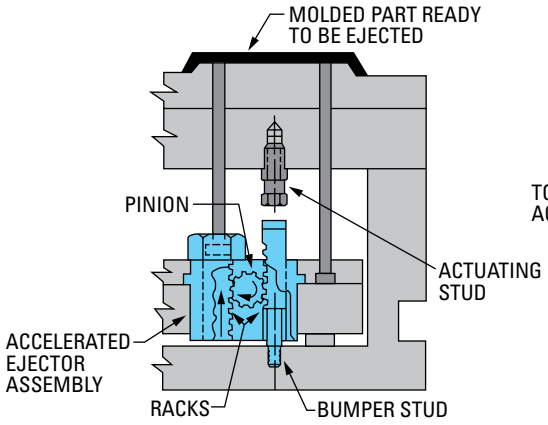
Accelerated Ejectors – General Information

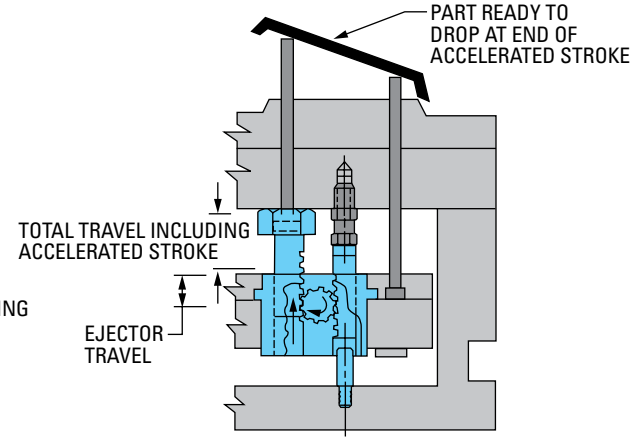
D-M-E Accelerated Ejectors use a rack and pinion mechanism to provide up to 5/8" additional ejector stroke. Their simple, linear movement can be used to increase the speed and stroke of ejector pins, ejector sleeves or entire ejector assemblies. The flanges and rounded corners on these units facilitate installation within the ejector assembly. The rectangular cross-section of the racks prevents them from rotating. Included with each unit is a bumper stud, which ensures positive return of the racks when the ejector assembly is fully returned.

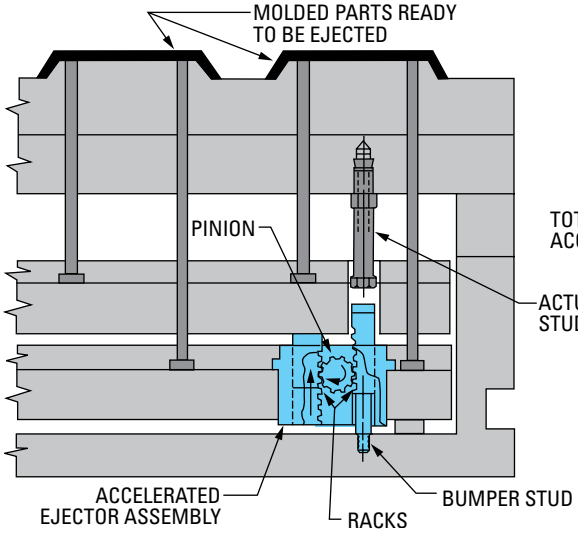


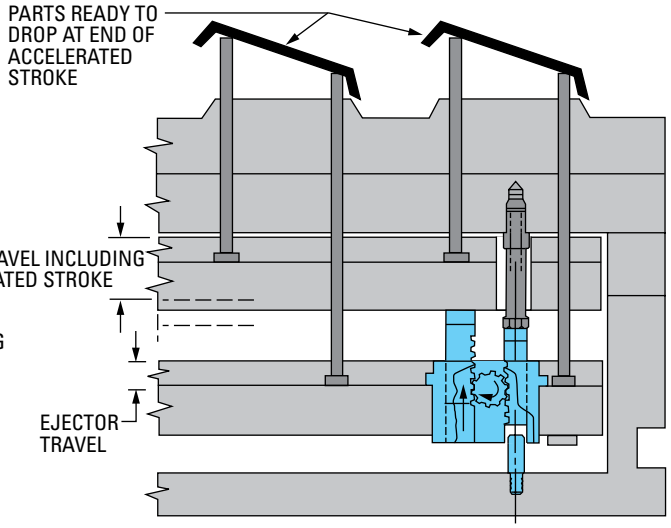
U.S. Patent No. 3,893,644

D-M-E Accelerated Ejectors are available in two sizes (small or regular) and two types (pin or bumper). The pin type units are used for individual ejector pin acceleration (one unit per pin). Bumper type units are used for accelerating the entire upper ejector assembly in a dual ejector assembly mold (a minimum of four units are normally used in this application).







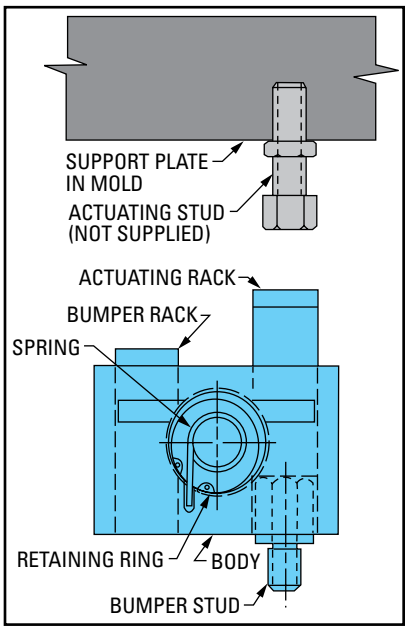


ITEM NUMBER	DESCRIPTION	USED WITH PLATE THICKNESS		EJECTOR PIN DIAMETER (MAXIMUM)
		EJECTOR PLATE	EJECTOR RETAINER PLATE	
AEP-10	PIN TYPE – SMALL	1"	1/2	1/4
AEP-20	PIN TYPE – REGULAR	1 1/8	1/2 OR 5/8	1/2
AEB-10	BUMPER TYPE – SMALL	1"	1/2	—
AEB-20	BUMPER TYPE – REGULAR	1 1/8	1/2 OR 5/8	—

Accelerated Ejectors – General Information

- Stroke for all units = 5/8 maximum
- Keep pinion lubricated
- Do not use with opposing spring pressure

Bumper Type



Pin Type

TEETH
AEP-20 PIN TYPE/ AEB-20 BUMPER TYPE
PINION – 16 PITCH 1.000 P.D. – 16 TEETH 20° PRESSURE ANGLE
AEP-10 PIN TYPE/ AEB-10 BUMPER TYPE
PINION – 20 PITCH .700 P.D. – 14 TEETH 20° PRESSURE ANGLE

Accelerated Ejector Dimensions

ITEM NUMBER	A	B	C	E	F	G	H	J	K	L	M	N	P	Q	R
AEP-10 • PIN TYPE	+.000 −.002	+.000 −.002	+.000 −.002	9/16	1.600	1.100	1/2	±.002	.510	1.103	1/2	1/2	1.030	1.783	2.025
AEB-10 • BUMPER TYPE	2.125	1.062	1.125					.125							—
AEP-20 • PIN TYPE	+.000 −.004	+.000 −.002	+.000 −.002	13/16	17/8	11/4	5/8	±.002	5/8	15/8	3/4	3/4	1.016	21/16	23/8
AEB-20 • BUMPER TYPE	2.875	1.437	1.625					.187							—

ITEM NUMBER	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD	EE	FF	GG	HH
AEP-10 • PIN TYPE	.550	.425	5/8-18	1/8	.491	.551	.250	1.625	15/16	1/4	1/4	3/4	3/8	5/16-18	3/8	5/8
AEB-10 • BUMPER TYPE	—	—	—	—	—				—							
AEP-20 • PIN TYPE	.680	1/2	11/8-12	1/4	5/8	13/16	.250	2.375	13/8	3/16	1/4	.72	1/2	3/8-16	9/16	11/8
AEB-20 • BUMPER TYPE	—	—	—	—	—				—							

Early Ejector Return Assembly – General Information

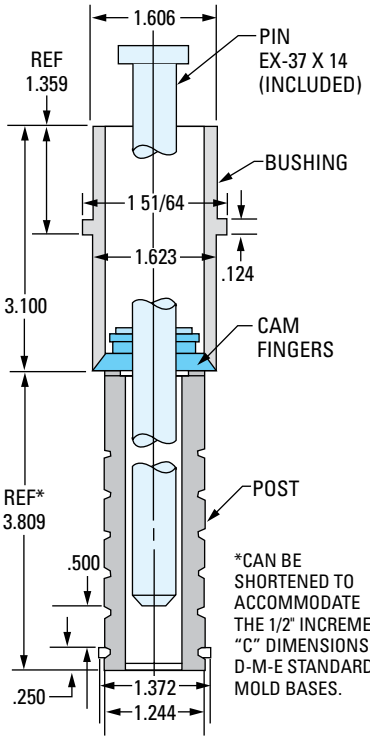
D-M-E Early Ejector Return assemblies are designed to save you time and money. Unique design permits simple, low-cost internal installation. Internal installation also helps control your maintenance costs as there are no outside projections to break or bend or to interfere with water line connections or slide movements. All wear surfaces are hardened to provide long life. The drawings below illustrate the simple, positive operation.

For returning ejector plate before mold is closed



U.S. Patent No. 3,516,302

Early Ejector Return Unit Assembly



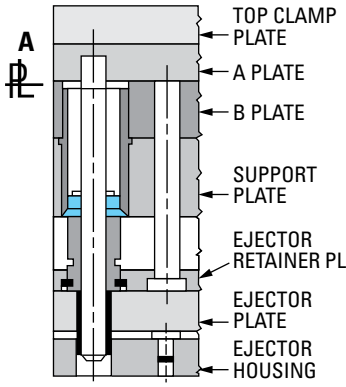
ITEM NUMBER	Early Ejector Return Assembly
ER-101	

ITEM NUMBER	Replacement Parts Kit
ER-101-RK	Kit consists of: 1 set of cam fingers 1 guide washer 1 snap ring (lower) 1 snap ring (upper)

Early Ejector Return Operation Sequence

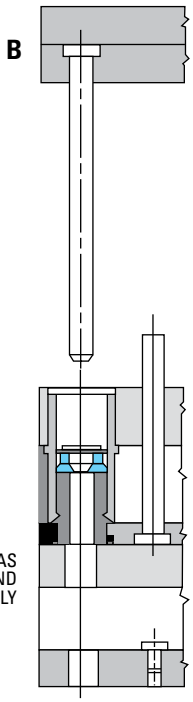
Normal Installation in Mold Base

VIEW 1



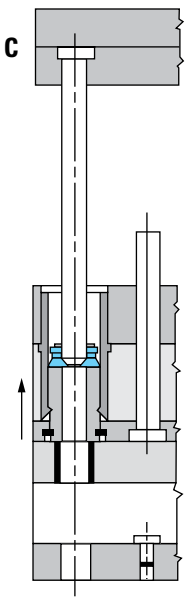
MOLD CLOSED IN MOLDING POSITION

VIEW 2



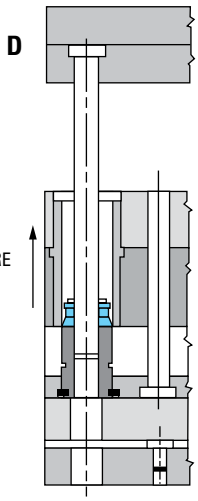
MOLD FULL OPEN – PRESS K.O. ROD HAS PUSHED EJECTOR PLATE FORWARD AND CAM FINGERS HAVE SLIPPED INWARDLY FROM C'BORE IN BUSHING ALLOWING EJECTOR PLATE TO MOVE FORWARD.

VIEW 3



MOLD CLOSING – EARLY EJECTOR RETURN CAM FINGERS HAVE JUST CONTACTED ACTUATOR PIN.

VIEW 4



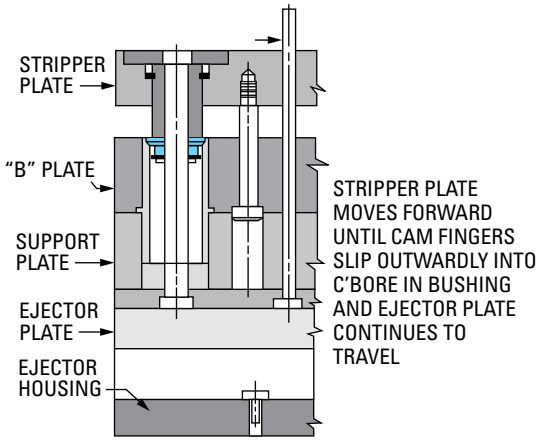
MOLD CONTINUES CLOSING – EJECTOR PLATE HAS BEEN PUSHED ALL THE WAY BACK. CAM FINGERS HAVE SLIPPED OUTWARD INTO COUNTERBORE IN BUSHING ALLOWING ACTUATOR PIN TO SLIP BY. MOLD CONTINUES CLOSING UNTIL COMPLETELY CLOSED AS IN VIEW 1.

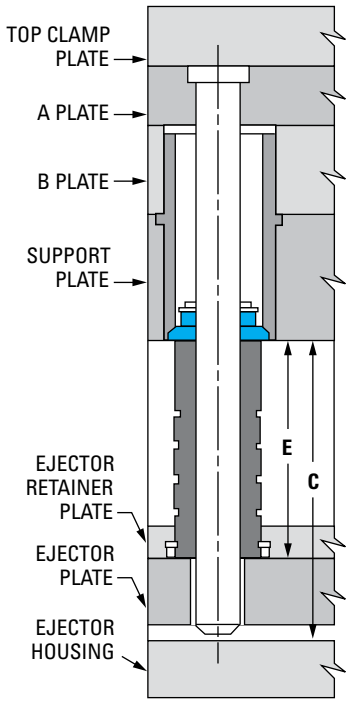
Early Ejector Return Assembly – Installation

Installation for Ejector Pin Travel Beyond Stripper Plate

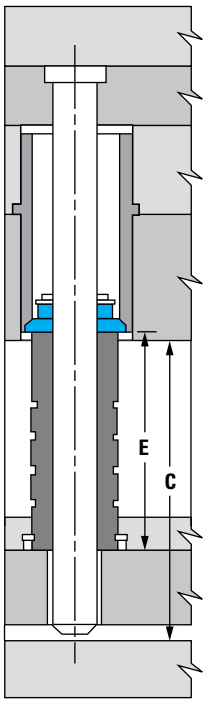
NOTES:
1. Care should be taken to ensure that the ejection assembly is evenly loaded. It is recommended that Guided Ejection be used.
2. Four (4) early ejector return assemblies are recommended per mold. Larger molds may require additional assemblies.
3. Timing of all units to be within ±.005 inch.

When mold design or components restrict the use of an internally installed return assembly, please refer to D-M-E's externally mounted Toggle-Lok.

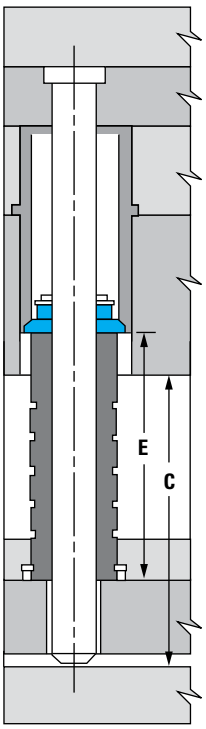




108A THRU 1123A
STANDARD MOLD BASE



1212A THRU 1329A
STANDARD MOLD BASE



1518A THRU 2435A
STANDARD MOLD BASE

Determining Post Length

C	MOLD BASE SIZE						C
	108A THRU 1123A		1212A THRU 1329A		1518A THRU 2435A		
	*	E	*	E	*	E	
2 1/2	2.500	1.309	—	—	—	—	2 1/2
3	2.000	1.809	2.000	1.809	1.500	2.309	3
3 1/2	1.500	2.309	1.500	2.309	1.000	2.809	3 1/2
4	1.000	2.809	1.000	2.809	.500	3.309	4
4 1/2	.500	3.309	.500	3.309	.000	3.809	4 1/2

*Remove this amount of stock from bottom end of post.

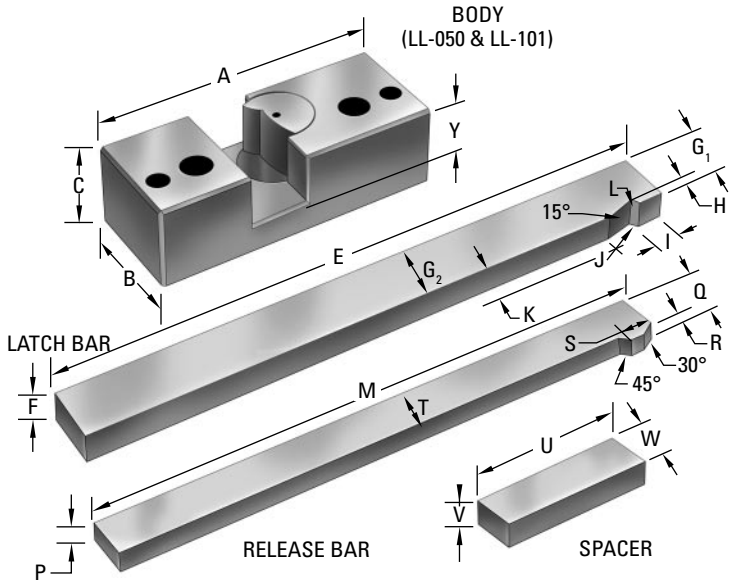
Jiffy Latch-Lok™ Assemblies – General Information

A Simple, Easy-to-Install Device to Mechanically Float Plates

The D-M-E Jiffy Latch-Lok™ provides new freedom in design to mechanically float plates. There is no need for electric switches, pneumatic controls or timing devices with delicate adjustments. The action of the Jiffy Latch-Lok is positive.

Once properly installed, the Latch-Lok eliminates the possibility of smashing the mold because there are no adjustments that can change, or connections that can be accidentally knocked off. The Jiffy Latch-Lok is available in sizes for regular or heavy-duty operation. It also comes in regular or 90° (right angle) designs to provide maximum installation flexibility.

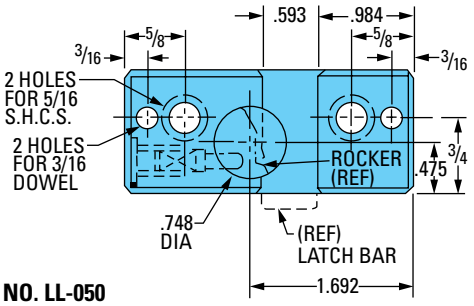
A minimum of four assemblies required per mold. Large molds may require additional assemblies.



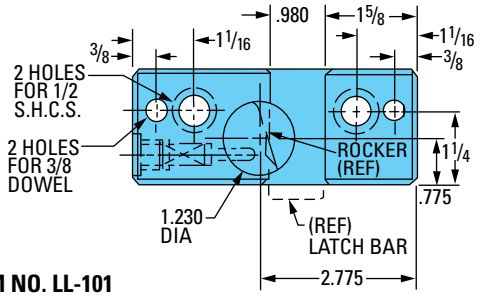
U.S. Patent No. 3,706,116

RECOMMENDED USAGE BASED ON MOLD BASE WIDTH	
≤ 10"	LL-050
11" to 15"	LL-101 or LL-151
> 16"	LL-201

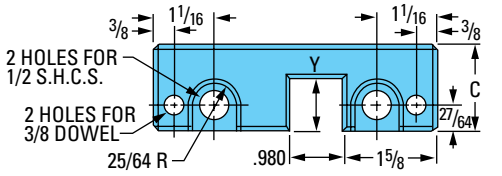
Replacement parts are available.



ITEM NO. LL-050

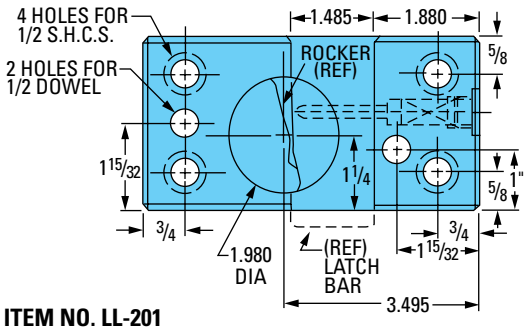


ITEM NO. LL-101



(RIGHT ANGLE-EJECTOR PLATE TYPE)
(SAME AS LL-101 EXCEPT MOUNTING HOLES ROTATED 90° AS SHOWN)

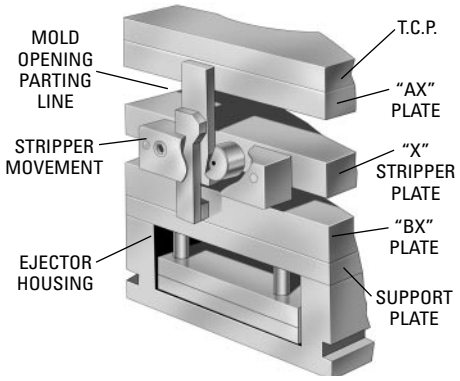
ITEM NO. LL-151



ITEM NO. LL-201

ITEM NUMBER	BODY				LATCH BAR									RELEASE BAR						SPACER		
	A	B	C	Y	E	F	G1 NOM	G2 NOM	H	I NOM	J RAD	K	L RAD	M	P	Q	R NOM	S	T	U	V	W
LL-050	3	1 3/16	15/16	.535	7	.285	.585	.590	.070	.30	.375	.103	.018	7	.230	.590	1/8	3/8	1/2	1 3/4	.295	1/2
LL-101	5	1 15/16	1 7/16	7/8	10	.475	.967	.977	.115	1/2	.615	.170	.03	10	.355	.977	3/16	5/8	.825	3	.488	7/8
LL-151																						
LL-201	6	2 15/16	2 7/16	1 1/2	16	.975	1.465	1.475	.187	5/8	.989	.130	.04	16	.475	1.475	.275	7/8	1.255	4 1/2	.995	1 1/2

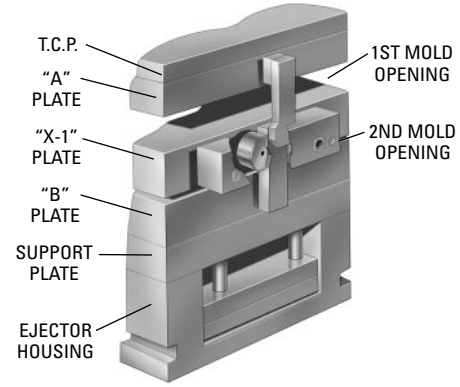
Jiffy Latch-Lok™ Assemblies – Application Information



To Control Stripper Plate

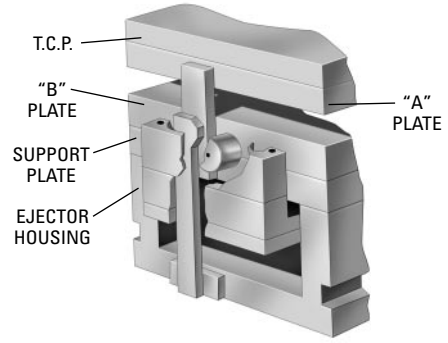
Cycle time is often wasted waiting for the press knock-out bar to function. With the application of the D-M-E Jiffy Latch-Lok, as illustrated to the right, the stripper plate is moved in a secondary action of the mold opening without the aid of the press knock-out bar.

The Jiffy Latch-Lok permits you to shorten the ejection stroke, improve cycle time and increase the number of parts per shift.



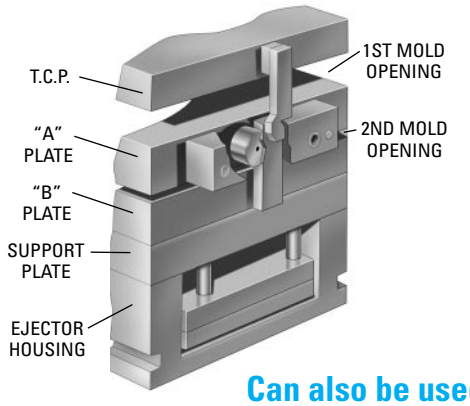
To Float "X-1" Plate Away from "A" Plate while Locking "X-1" and "B" Plates

In this application of the Jiffy Latch-Lok, the "X-1" plate is floated away from the "A" plate in the first mold opening sequence. At a predetermined opening (you determine the distance) the "X-1" plate is released from the "B" plate for the second mold opening. This application of the Jiffy Latch-Lok is particularly effective on "AX" or three-plate top runner molds.



To Float "A" Plate Away from Top Clamp Plate while Locking "A" and "B" Plates

In the D-M-E Latch-Lok application illustrated here, the "A" plate moves away from the top clamp plate in the first mold opening. During this portion of the cycle, the "A" and "B" plates are locked. As the release bar passes the rocker, the "A" and "B" plates part in the second mold opening.



Actuation of Ejector Assembly Without Aid of Press Knock-Out Bar (LL-151 only)

For those mold applications where a shorter press stroke is required, the D-M-E Jiffy Latch-Lok is extremely effective.

You can activate the Jiffy Latch-Lok at any time after the mold begins to open, and pull the ejector assembly forward. This simple action shortens cycle time and increases part production.

Can also be used for "Reverse" Ejection from the Stationary Side of the Mold.

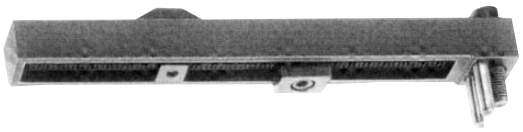
D-M-E Jiffy Latch-Lok Replacement Parts

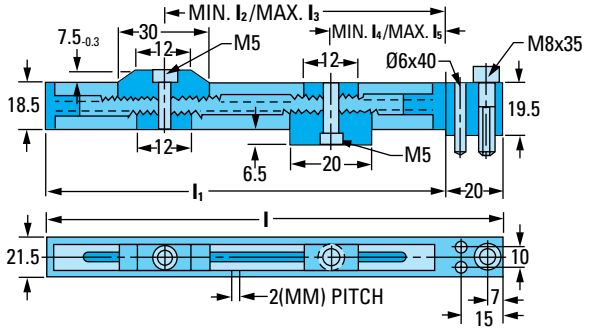
DESCRIPTION	FOR LATCH-LOK LL-050 ITEM NUMBER	FOR LATCH-LOK LL-101 ITEM NUMBER	FOR LATCH-LOK LL-151 ITEM NUMBER	FOR LATCH-LOK LL-201 ITEM NUMBER
ROCKER	LL-052	LL-102	LL-102	LL-202
LATCH BAR	LL-053	LL-103	LL-103	LL-203
RELEASE BAR	LL-054	LL-104	LL-104	LL-204

Latch Locks – General Information

KU: Latch Locks – Baffle Bars

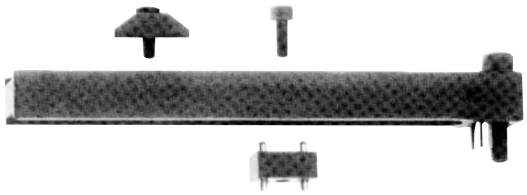
KU 1-1-…
appropriate for KL 1-1-70
KL 1-2-…

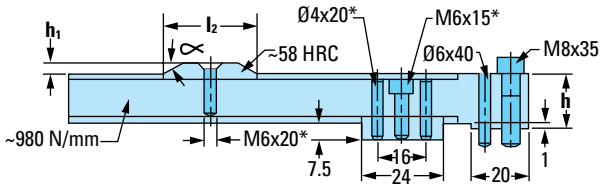




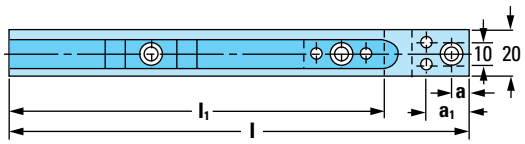
ITEM NUMBER	l1	l2	l3	l4	l5
KU 11140	120	20	100	20	104
KU 11204	184	20	164	20	168
KU 11254	234	20	214	20	218

KU 1-2-…
appropriate for KL 1-1-70
KL 1-2-…
KL 1-3-…
KU 2-2-…
appropriate for KL 2-2-256

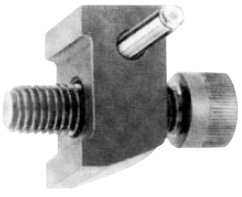
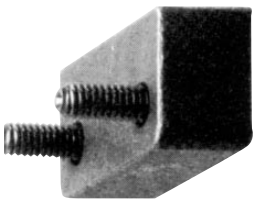




*Bore hole as per customer's requirements

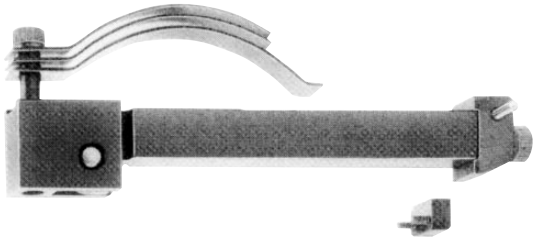


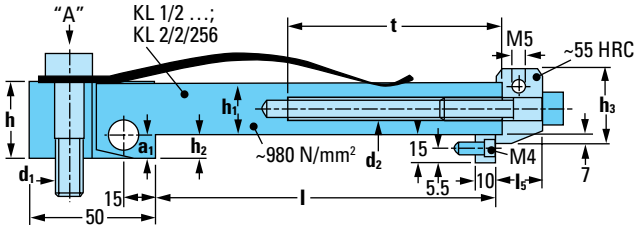
ITEM NUMBER	a	a1	h	h1	l1	l2	∝
KU 12200	7	15	20	7	170	30	35
KU 12250	7	15	20	7	220	30	35
KU 12300	7	15	20	7	270	30	35
KU 22400	10	19.5	30	8	360	50	40

SPARE PARTS FOR:	**KF**: SPRINGS	**KK**: HEADS	**KV**: WEARING BARS
			
ITEM NUMBER	**ITEM NUMBER**	**ITEM NUMBER**	**ITEM NUMBER**
KL 1170	KF 1270	KK 1112	KV 1122
KL 1290	KF 1290	KK 1112	KV 1122
KL 12170	KF 12170	KK 1112	KV 1122
KL 12220	KF 12220270	KK 1112	KV 1122
KL 12270	KF 12220270	KK 1112	KV 1122
KL 13110	WZ 8030 M1	—	KV 1122
KL 13170	WZ 8030 M1	—	KV 1122
KL13220	WZ 8030 M1	—	KV 1122
KL 22256	KF 22256	KK 22	KV 1122

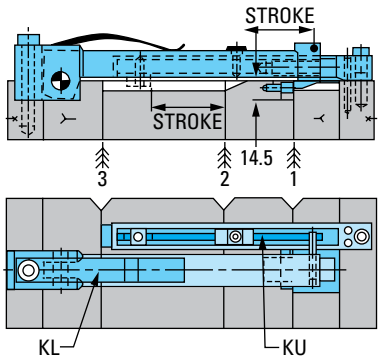
Latch Locks – Typical Application

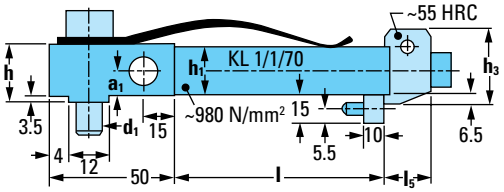
Latch Locks – KL

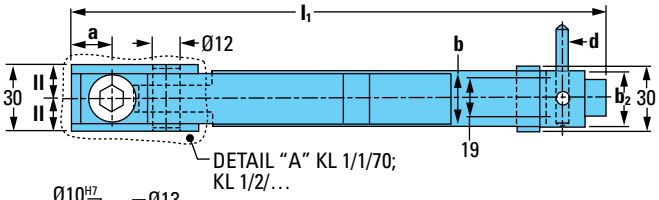


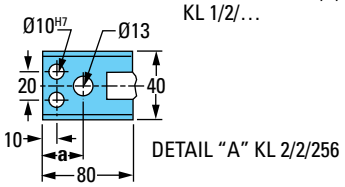


Typical Application

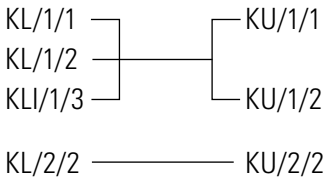








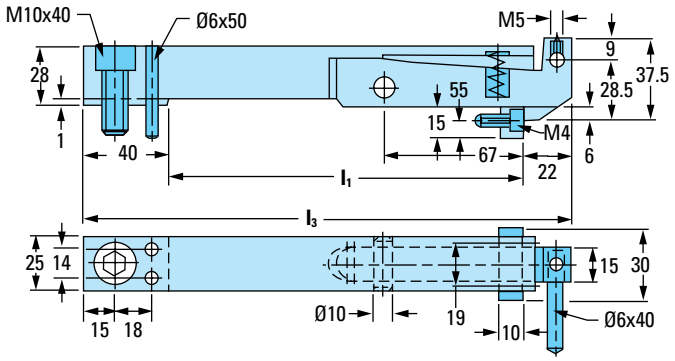
Combinations



ITEM NUMBER	a	a1	b	b2	d	d1	d2	h	h1	h2	h3	l1	l5	t	Fmax daN
KL 1170	10	15	25	27	6	M10	M12	31.5	23.5	15	37.5	152	20	45	6000
KL 1290	10	15	25	27	6	M10	M12	42.0	23.5	15	37.5	172	20	80	6000
KL 12170	10	15	25	27	6	M10	M12	42.0	23.5	15	37.5	252	20	80	6000
KL 12220	10	15	25	27	6	M10	M12	42.0	23.5	15	37.5	302	20	80	6000
KL 12270	10	15	25	27	6	M10	M12	42.0	23.5	15	37.5	352	20	80	6000
KL 22256	30	14	30	30	12	M12	M16	56.0	40.0	16	55.0	379	27	80	11000



ITEM NUMBER	l3
KL 13120	182
KL 13170	232
KL 13220	282



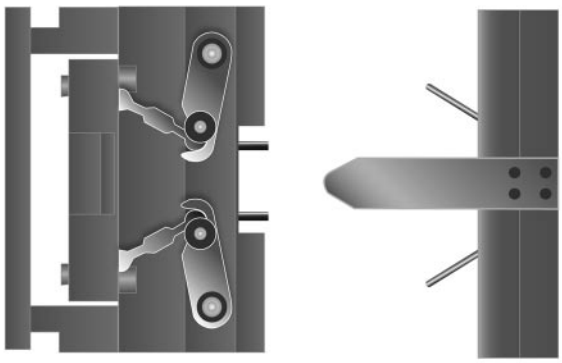
Positive Early Ejector Return

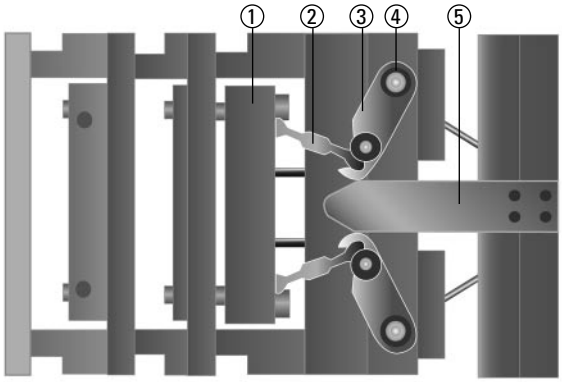
The D-M-E Toggle-Lok is an externally mounted device used to positively return the ejector assembly before the mold completely closes. Employed when ejector pins or other moving components interfere with normal mold closure, the Toggle-Lok returns and locks the ejector assembly firmly in place, preventing expensive mold damage. It uses a positive cam linkage and activator lever rather than springs, pneumatics, hydraulics or other more cumbersome methods. Since it is mounted externally, the Toggle-Lok allows more space for cavities, slides or other required mold components. It is available in three styles to suit a broad variety of applications. Each style is available in a Toggle-Lok Package, which corresponds to a specific mold base requirement.

Operating Sequence

Upper photo shows mold in open position, with ejector assembly fully forward. Before the mold has fully closed, the Toggle-Lok levers engage and move the arms to return the ejector assembly.

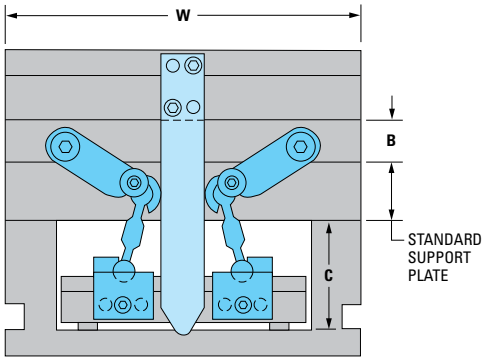
U.S. Patent No. 3,226,771



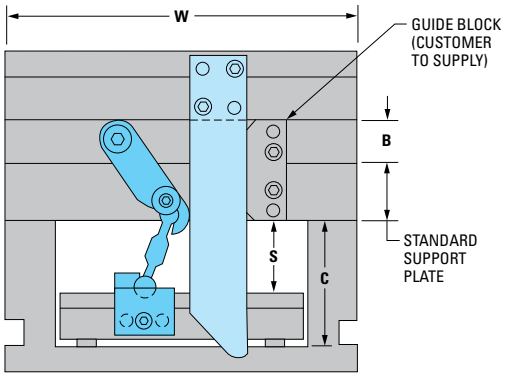


1. Mount and Cover Plate
2. Joint
3. Arm
4. Shoulder Screw
5. Lever

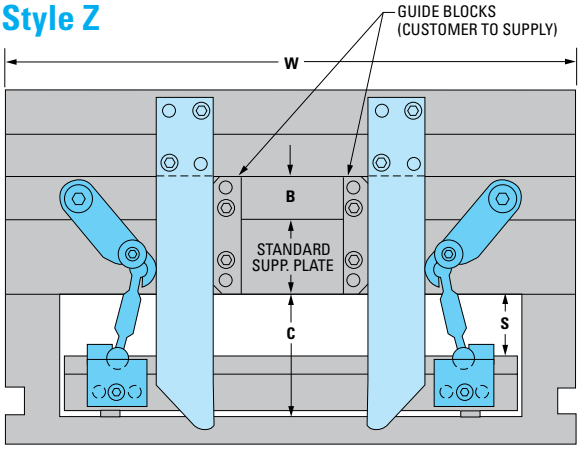
Style X



Style Y



Style Z



Each Standard Toggle-Lok Package includes components and hardware necessary to equip both ends of the mold.

STYLE X PACKAGE INCLUDES:

1. (4) Arms with:
   - (4) Shoulder Screws (TLSS-12)
   - (4) Retainers (TLR-10)
   - (4) Button-Head Screws
2. (4) Joints
3. (4) Side Mounts (standard) or Top Mounts (if specified) with:
   - (4) Cover Plates
   - (4) Socket Head Cap Screws
   - (8) Dowels
4. (2) Levers with:
   - (2) Lever Spacers (TLS-20)
   - (4) Socket Head Cap Screws
   - (4) Dowels
5. (1) Hole Location Template

STYLE Y PACKAGE:
Same as Style X, with half the quantities listed in items 1, 2 and 3.

STYLE Z PACKAGE:
Same as Style X, with twice the quantities listed in item 4.

Assembly Specifications

TOGGLE-LOK PACKAGES		MOLD BASE REQUIREMENTS				DIMENSIONS					PACKAGE INCLUDES				
											ARMS	JOINTS	MOUNTS	LEVERS	TEMPLATE
ITEM NO	STYLE	**W** DIM (MOLD BASE WIDTH)	**C** DIM	**S** DIM (MAX EJECTION STROKE)	**B** DIM (MIN PLATE THICKNESS)	**F**	**G**	**H**	**J**	**K**	(QTY) **ITEM NO**	(QTY) **ITEM NO**	(QTY) **ITEM NO**	(QTY) **ITEM NO**	(QTY) **ITEM NO**
TL-825	Y	7 7/8	2 1/2	1 3/16	7/8	.81	0	3.86	.28	1.28	(2) TLA-20	(2) TLJ-20	(2) TLSM-125	(2) TLL-20-S	TLT-10
TL-830	Y	7 7/8	3	1 11/16	1 3/8	.75	0	4.84	.28	1.59	(2) TLA-30	(2) TLJ-20	(2) TLSM-125	(2) TLL-20-S	TLT-11
TL-835	Y	7 7/8	3 1/2	2 3/16	1 3/8	.84	0	5.32	.28	1.59	(2) TLA-30	(2) TLJ-24	(2) TLSM-125	(2) TLL-20-S	TLT-12
TL-840	Y	7 7/8	4	2 11/16	1 7/8	2.17	0	5.92	.28	1.22	(2) TLA-40	(2) TLJ-24	(2) TLSM-125	(2) TLL-20-S	TLT-13
TL-845	Y	7 7/8	4 1/2	3 3/16	1 7/8	2.13	0	6.44	.28	1.25	(2) TLA-40	(2) TLJ-30	(2) TLSM-125	(2) TLL-20-S	TLT-14
TL-1025	X	9 7/8	2 1/2	13/16	7/8	2.99	1.99	4.13	.50	.735	(4) TLA-20	(4) TLJ-20	(4) TLSM-200	(2) TLL-15	TLT-15
TL-1030	X	9 7/8	3	1 5/16	1 3/8	2.99	2.24	4.76	.50	.735	(4) TLA-24	(4) TLJ-20	(4) TLSM-200	(2) TLL-15	TLT-16
TL-1035	X	9 7/8	3 1/2	1 13/16	1 3/8	3.11	2.24	5.19	.50	.735	(4) TLA-24	(4) TLJ-24	(4) TLSM-200	(2) TLL-15	TLT-17
TL-1040	Y	9 7/8	4	2 5/16	1 7/8	1.50	0	6.59	.50	1.53	(2) TLA-40	(2) TLJ-24	(2) TLSM-200	(2) TLL-20-S	TLT-18
TL-1045	Y	9 7/8	4 1/2	2 13/16	1 7/8	3.03	.66	6.87	.50	.41	(2) TLA-40	(2) TLJ-30	(2) TLSM-200	(2) TLL-20-S	TLT-19
TL-1125	X	10 7/8	2 1/2	13/16	1 3/8	3.55	1.99	4.17	.50	.735	(4) TLA-24	(4) TLJ-20	(4) TLSM-200	(2) TLL-15	TLT-20
TL-1130	X	10 7/8	3	1 5/16	7/8	3.55	2.24	4.61	.50	.735	(4) TLA-24	(4) TLJ-24	(4) TLSM-200	(2) TLL-15	TLT-21
TL-1135	X	10 7/8	3 1/2	1 13/16	1 7/8	3.51	2.64	5.66	.50	.98	(4) TLA-30	(4) TLJ-24	(4) TLSM-200	(2) TLL-20-D	TLT-22
TL-1140	Y	10 7/8	4	2 5/16	1 7/8	1.50	0	6.59	.50	1.53	(2) TLA-40	(2) TLJ-24	(2) TLSM-200	(2) TLL-20-S	TLT-18
TL-1145	Y	10 7/8	4 1/2	2 13/16	1 7/8	2.00	0	6.93	.50	1.33	(2) TLA-40	(2) TLJ-30	(2) TLSM-200	(2) TLL-20-S	TLT-23
TL-1230	X	11 7/8	3	1 3/16	7/8	3.92	1.99	4.52	.62	.735	(4) TLA-30	(4) TLJ-20	(4) TLSM-200	(2) TLL-15	TLT-24
TL-1235	X	11 7/8	3 1/2	1 11/16	7/8	3.92	1.99	5.04	.62	.735	(4) TLA-30	(4) TLJ-24	(4) TLSM-200	(2) TLL-15	TLT-25
TL-1240	Y	11 7/8	4	2 3/16	1 3/8	.88	0	5.81	.62	1.53	(2) TLA-30	(2) TLJ-24	(2) TLSM-200	(2) TLL-20-S	TLT-26
TL-1245	Y	11 7/8	4 1/2	2 11/16	1 7/8	1.41	0	7.07	.50	1.64	(2) TLA-40	(2) TLJ-30	(2) TLSM-200	(2) TLL-20-S	TLT-27
TL-1330	X	13 3/8	3	1 1/16	1 3/8	2.99	2.49	4.46	.75	.735	(4) TLA-20	(4) TLJ-24	(4) TLSM-200	(2) TLL-15	TLT-28
TL-1335	X	13 3/8	3 1/2	1 9/16	1 3/8	3.11	2.49	5.08	.75	.735	(4) TLA-24	(4) TLJ-24	(4) TLSM-200	(2) TLL-15	TLT-29
TL-1340	X	13 3/8	4	2 1/16	1 3/8	4.59	2.41	6.09	.50	.98	(4) TLA-40	(4) TLJ-24	(4) TLSM-200	(2) TLL-20-D	TLT-30
TL-1345	X	13 3/8	4 1/2	2 9/16	1 3/8	4.58	2.51	6.60	.50	.98	(4) TLA-40	(4) TLJ-30	(4) TLSM-200	(2) TLL-20-D	TLT-31
TL-1530	X	14 7/8 TO 17 7/8	3	1 1/16	7/8	2.99	2.24	4.03	.75	.735	(4) TLA-20	(4) TLJ-20	(4) TLSM-200	(2) TLL-15	TLT-32
TL-1535	X	14 7/8 TO 17 7/8	3 1/2	1 9/16	1 3/8	2.99	2.99	5.48	.75	.735	(4) TLA-24	(4) TLJ-30	(4) TLSM-200	(2) TLL-15	TLT-33
TL-1540	X	14 7/8	4	2 1/16	7/8	4.58	2.74	5.96	.62	.98	(4) TLA-40	(4) TLJ-24	(4) TLSM-200	(2) TLL-20-D	TLT-34
TL-1545	X	14 7/8	4 1/2	2 9/16	7/8	4.62	2.71	6.48	.62	.98	(4) TLA-40	(4) TLJ-30	(4) TLSM-200	(2) TLL-20-D	TLT-35
TL-1640	X	15 7/8 TO 17 7/8	4	2 1/16	1 3/8	3.61	2.29	6.21	.62	.98	(4) TLA-30	(4) TLJ-30	(4) TLSM-200	(2) TLL-20-D	TLT-36
TL-1645	X	15 7/8	4 1/2	2 9/16	7/8	5.22	2.91	6.46	.62	1.48	(4) TLA-40	(4) TLJ-30	(4) TLSM-200	(2) TLL-30	TLT-37
TL-1745*	X*	16 1/2	4 1/2	2 9/16	1 3/8	4.60*	2.79*	6.47	.62*	.98*	(4) TLA-40*	(4) TLJ-30*	(4) TLSM-200*	(2) TLL-20-D*	TLT-38*
TL-1845	X	17 7/8	4 1/2	2 9/16	1 3/8	4.60	2.79	6.47	.62	.98	(4) TLA-40	(4) TLJ-30	(4) TLSM-200	(2) TLL-20-D	TLT-38
TL-1930	Z	19 1/2 & WIDER	3	1 1/16	1 3/8	2.25	1.50	4.03	.75	TO SUIT	(4) TLA-20	(4) TLJ-20	(4) TLSM-200	(4) TLL-20-S	TLT-32
TL-1935	Z	19 1/2 & WIDER	3 1/2	1 9/16	1 3/8	2.25	2.25	5.48	.75	TO SUIT	(4) TLA-24	(4) TLJ-30	(4) TLSM-200	(4) TLL-20-S	TLT-33
TL-1940	Z	19 1/2 & WIDER	4	2 1/16	1 3/8	2.63	1.31	6.21	.62	TO SUIT	(4) TLA-30	(4) TLJ-30	(4) TLSM-200	(4) TLL-20-S	TLT-36
TL-1945	Z	19 1/2 & WIDER	4 1/2	2 9/16	1 3/8	3.62	1.81	6.47	.62	TO SUIT	(4) TLA-40	(4) TLJ-30	(4) TLSM-200	(4) TLL-20-S	TLT-38

NOTE: All dimensions are nominal reference dimensions. Use the hole location template, which is included with each assembly, to establish hole locations on the mold.

*The centerline of the lever is offset 1" from the centerline of the mold. The centerline of the lever on the other end of the mold must also be offset 1", but in the opposite direction from the mold centerline for balanced operation.

WHEN ORDERING, PLEASE SPECIFY:

1. **Item Number of Toggle-Lok package**
2. **Quantity**
3. **"Top Mount," if required (no charge)**
4. **"Special Lever with Fitting Spacer," if required (special order only)**
5. **Method of shipment**

Basic Design Guidelines for Standard Mold Bases

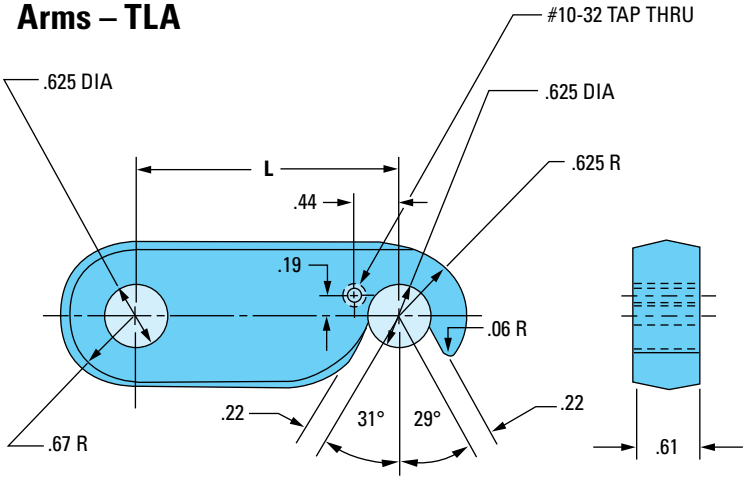
Follow Installation Instructions Packaged with the D-M-E Toggle-Lok Assembly.

1. It is recommended that guided ejection be used.
2. The side mount should be used when the ejector plate is approximately flush with the end of the mold; either the standard or small side mount should be used as specified in the chart. The top mount should be used when the ejector plate extends beyond the end of the mold, since it is designed to be mounted on top of the ejector plate.
3. When the ejector plate is recessed inside the mold, spacers must be used so the mounts will clear the support plate by 0.016". Customer to supply spacers to suit mold requirements (see drawings, Styles X, Y or Z).
4. Be sure the levers do not interfere with part ejection. If there is insufficient mold open stroke, it may be necessary to rotate the mold 90° from its normal position so the levers will not interfere with ejecting parts.
5. Locate all levers so they will push evenly and return the ejector plate without cocking.
6. When the lever is offset from the centerline of the mold (Style X) or when the mount is offset from the centerline (Style Y), their locations on the other end of the mold must also be offset. The offset distance on each end of the mold should be the same, but in opposite directions from the mold centerline for balanced operation.
7. When using Styles Y or Z, hardened lever support blocks are required. These support blocks prevent the levers from deflecting when they contact the arms in the full ejection forward position. Customer to supply hardened support blocks to suit mold requirements (see drawings, Styles Y and Z).
8. The ejector assembly will normally return within .010" to .020" of complete return, although this will depend on how carefully the installation is made.
9. If it is necessary to return the ejector assembly closer than .010" to .020", levers with fitting spacers should be ordered. These are available on special order.
10. Edges of the ejector plate must be finished square before installing side mounts.
11. Be sure to provide a clearance slot in the ejector plate for the lever when necessary.
12. Locate lever mounting holes (two 3/8 S.H.C.S. and two 3/8 dowels) to avoid interference with leader pins, water lines and other mold components.
13. Be sure there is no interference between the Toggle-Lok components and other elements of the mold.
14. The knockout rods in the press must not interfere with the full return of the ejector assembly.
15. The levers must not interfere with the platens of the press when the mold is completely closed.
16. For packages TL-840, TL-845 and special applications only: If the joints are entirely below the bottom of the support plate in the mold closed position, the retainers must be attached to the joints rather than the arms. This will prevent the joints from sliding under the support plate where they would interfere with normal ejection forward movement.

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

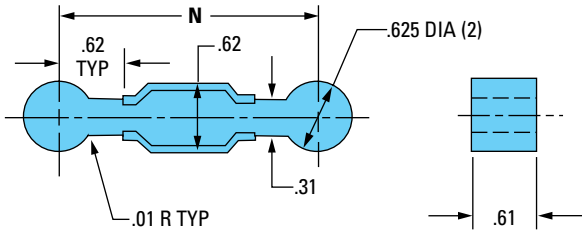
Toggle-Lok Components

Arms – TLA



ITEM NUMBER	L
TLA-20	2.00
TLA-24	2.50
TLA-30	3.00
TLA-40	4.00

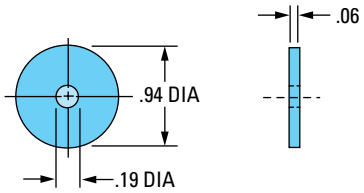
Joints – TLJ



ITEM NUMBER	N
TLJ-20	2.00
TLJ-24	2.50
TLJ-30	3.00

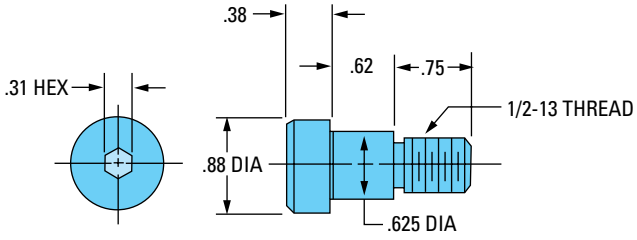
Retainer – TLR

Mount on arm with button head screw to retain joint



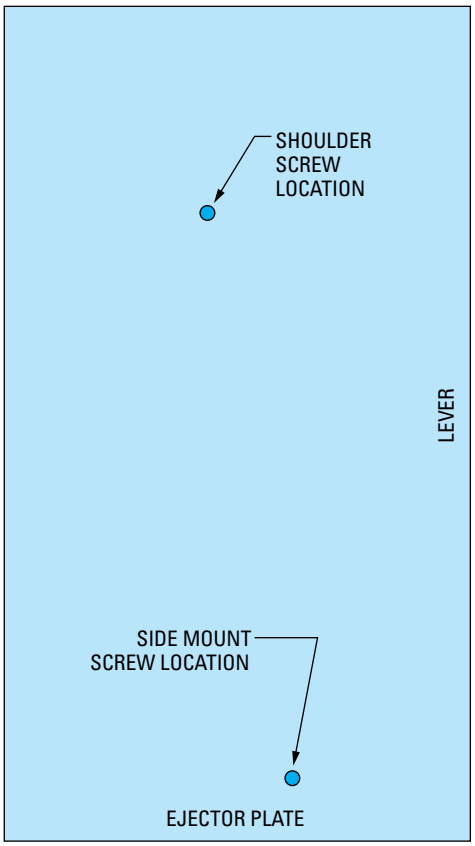
ITEM NUMBER
TLR-10

Shoulder Screw



ITEM NUMBER
5858SB

Typical Hole Location Template – TLT

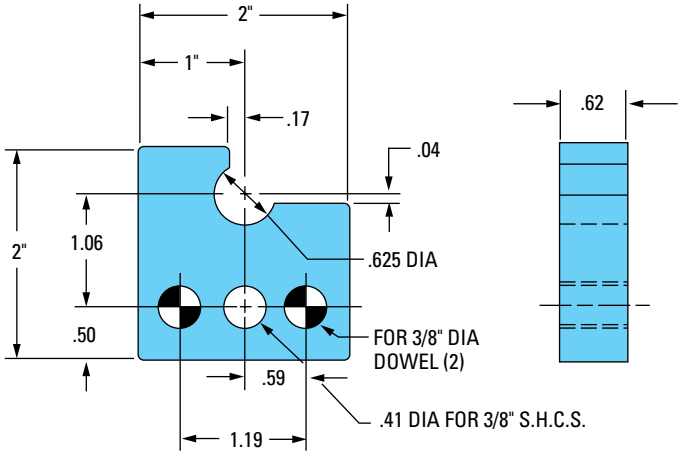


D-M-E TOGGLE-LOK TEMPLATE ITEM NUMBER
TLT-32

Toggle-Lok Components

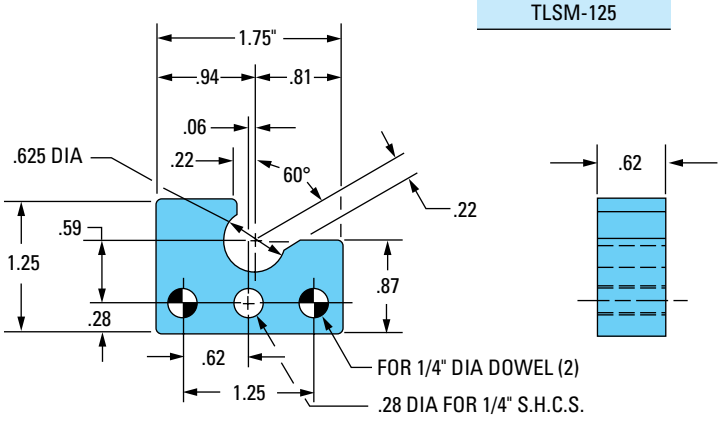
Standard Side Mount – TLSM

ITEM NUMBER
TLSM-200



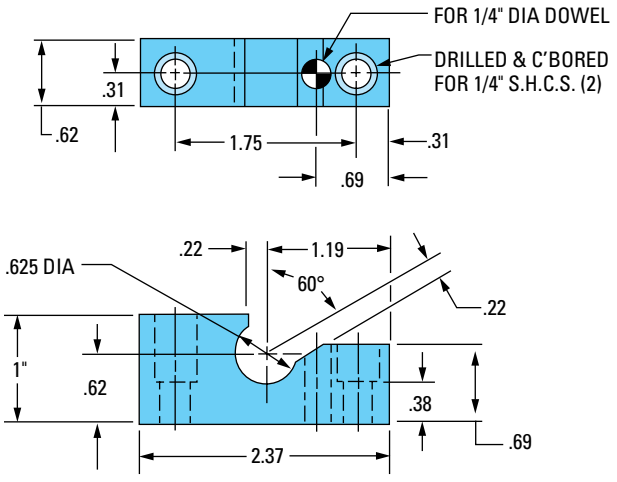
Small Side Mount – TLSM

ITEM NUMBER
TLSM-125



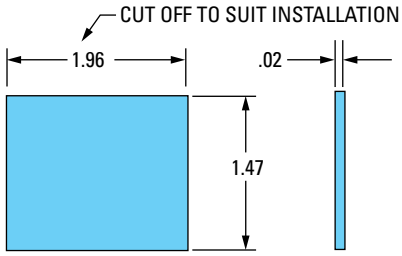
Top Mount – TLTM

ITEM NUMBER
TLTM-100



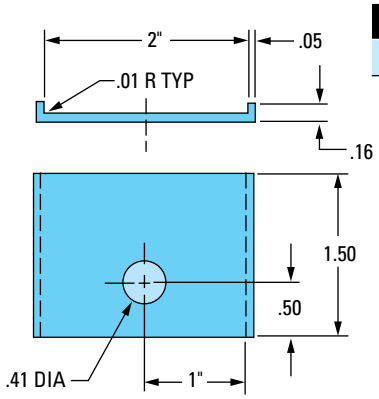
Lever Spacer – TLS

ITEM NUMBER
TLS-20



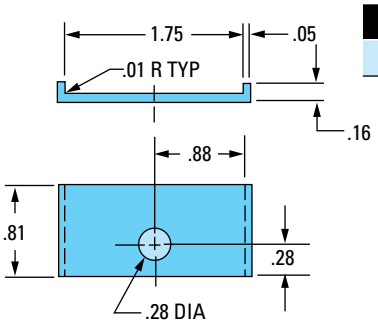
Cover Plate for Standard Side Mount – TLCP

ITEM NUMBER
TLCP-200

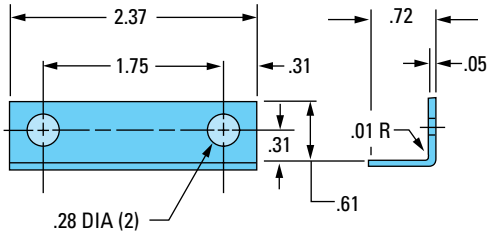


Cover Plate for Small Side Mount – TLCP

ITEM NUMBER
TLCP-125



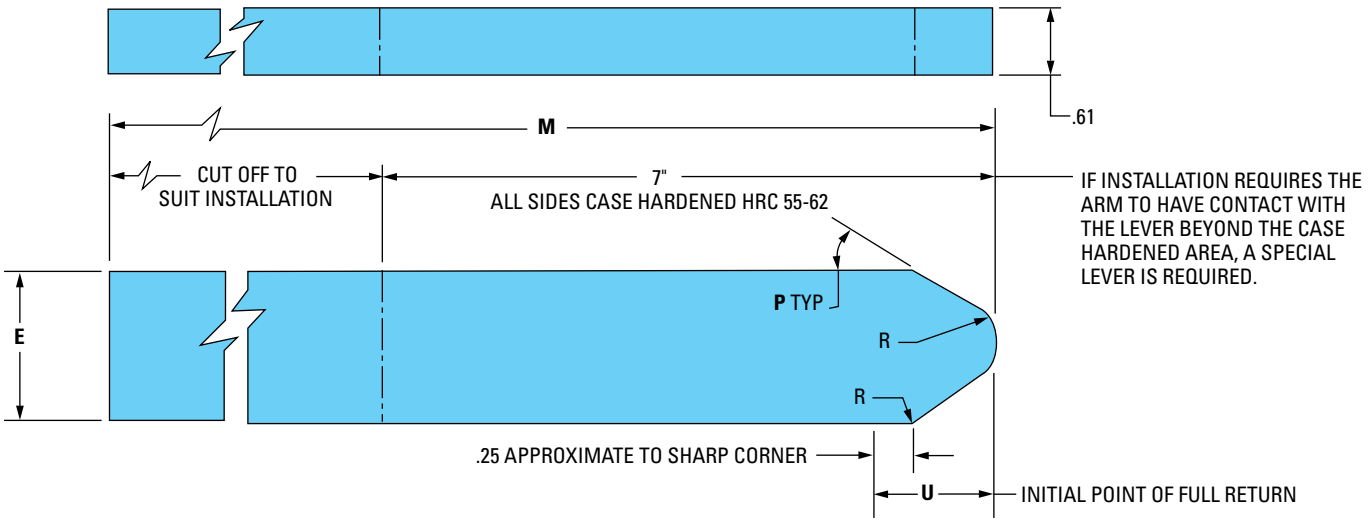
Cover Plate for Top Mount – TLCP



ITEM NUMBER
TLCP-100

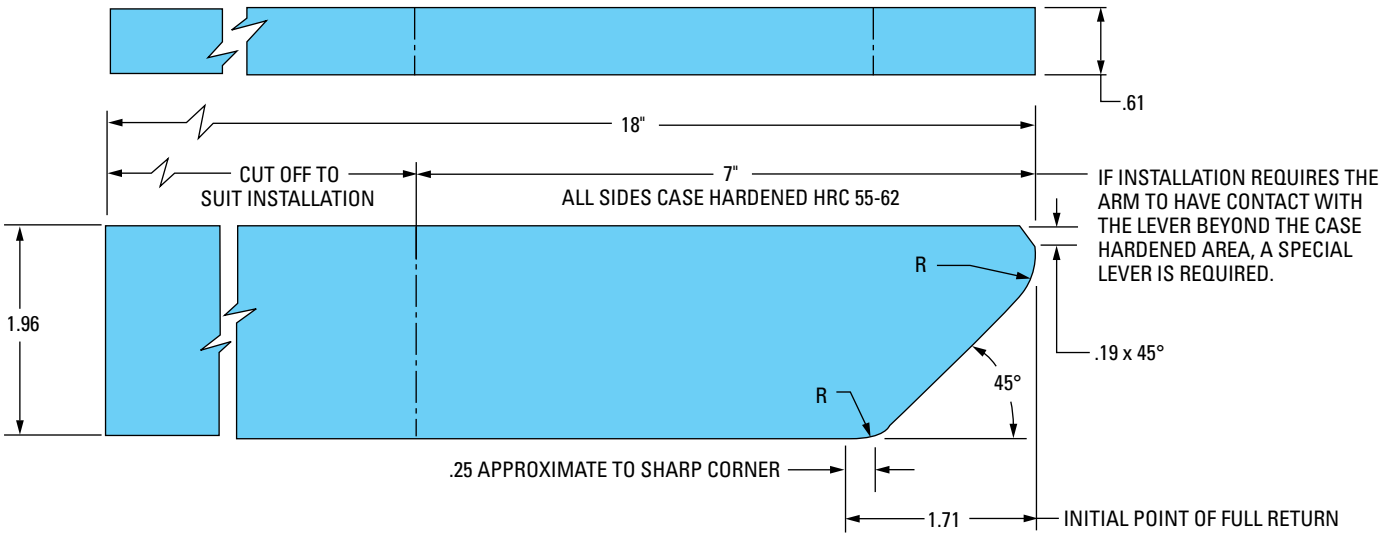
Toggle-Lok Components

Levers – Double Angle



ITEM NUMBER	E	M	P	U
TLL-15	1.47	14.25	30°	1.15
TLL-20-D	1.96	18"	30°	1.57
TLL-30	2.96	18"	45°	1.58

Lever – Single Angle

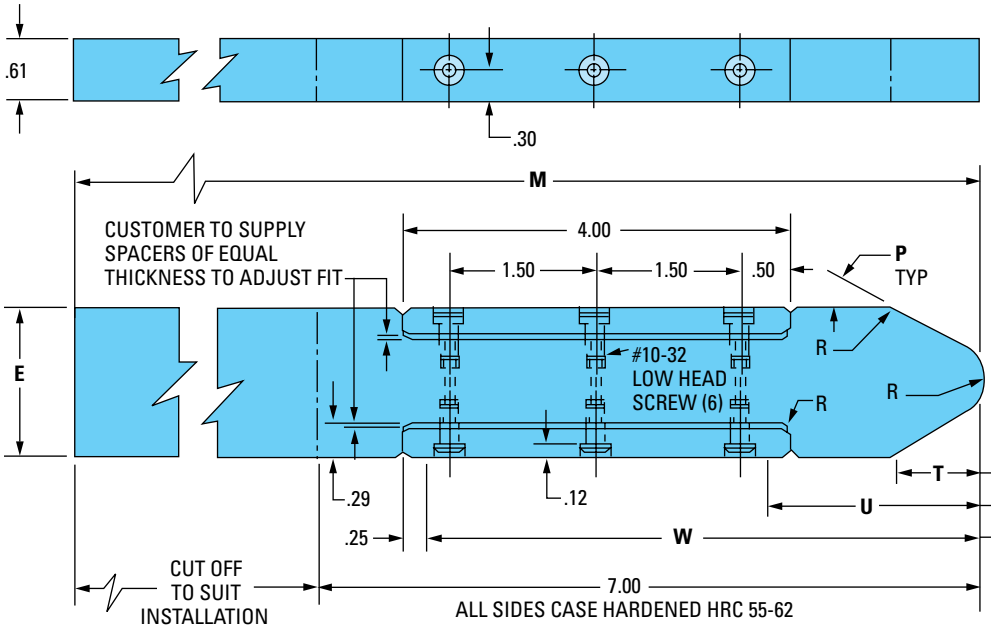


NOTE: All dimensions are nominal reference dimensions. Use the hole location template, which is included with each assembly, to establish hole locations on the mold.

ITEM NUMBER
TLL-20-S

Toggle-Lok Special Order Components

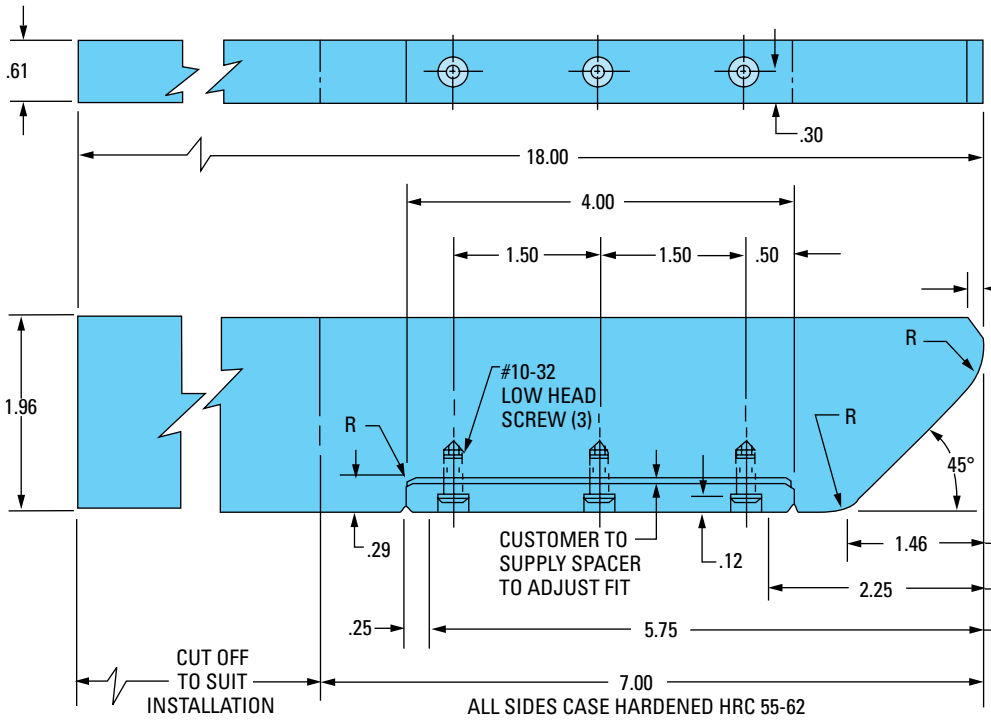
Levers – Double Angle with Fitting Spacers



NOTE: All dimensions are nominal reference dimensions. Use the hole location template, which is included with each assembly, to establish hole locations on the mold.

ITEM NUMBER	E	M	P	T	U	W
TLL-15-FS	1.47	14.25	30°	.90	1.75	5.25
TLL-20-D-FS	1.96	18.00	30°	1.32	2.25	5.75
TLL-30-FS	2.96	18.00	45°	1.33	2.25	5.75

Lever – Single Angle with Fitting Spacer



NOTE: All dimensions are nominal reference dimensions. Use the hole location template, which is included with each assembly, to establish hole locations on the mold.

Toggle-Lok Ordering Information

TOGGLE-LOK PACKAGES		MOLD BASE REQUIREMENTS			
ITEM NUMBER	STYLE	W MOLD BASE WIDTH	C RISER HEIGHT	B MINIMUM PLATE THICKNESS	S MAXIMUM EJECTION STROKE
TL-825	Y	7 7/8	2 1/2	7/8	1 3/16
TL-830	Y	7 7/8	3	1 3/8	1 11/16
TL-835	Y	7 7/8	3 1/2	1 3/8	2 3/16
TL-840	Y	7 7/8	4	1 7/8	2 11/16
TL-845	Y	7 7/8	4 1/2	1 7/8	3 3/16
TL-1025	X	9 7/8	2 1/2	7/8	13/16
TL-1030	X	9 7/8	3	1 3/8	1 5/16
TL-1035	X	9 7/8	3 1/2	1 3/8	1 13/16
TL-1040	Y	9 7/8	4	1 7/8	2 5/16
TL-1045	Y	9 7/8	4 1/2	1 7/8	2 13/16
TL-1125	X	10 7/8	2 1/2	1 3/8	13/16
TL-1130	X	10 7/8	3	7/8	1 5/16
TL-1135	X	10 7/8	3 1/2	1 7/8	1 13/16
TL-1140	Y	10 7/8	4	1 7/8	2 5/16
TL-1145	Y	10 7/8	4 1/2	1 7/8	2 13/16
TL-1230	X	11 7/8	3	7/8	1 3/16
TL-1235	X	11 7/8	3 1/2	7/8	1 11/16
TL-1240	Y	11 7/8	4	1 3/8	2 3/16
TL-1245	Y	11 7/8	4 1/2	1 7/8	2 11/16
TL-1330	X	13 3/8	3	1 3/8	1 1/16
TL-1335	X	13 3/8	3 1/2	1 3/8	1 9/16
TL-1340	X	13 3/8	4	1 3/8	2 1/16
TL-1345	X	13 3/8	4 1/2	1 3/8	2 9/16
TL-1530	X	14 7/8 TO 17 7/8	3	7/8	1 1/16
TL-1535	X	14 7/8 TO 17 7/8	3 1/2	1 3/8	1 9/16
TL-1540	X	14 7/8	4	7/8	2 1/16
TL-1545	X	14 7/8	4 1/2	7/8	2 9/16
TL-1640	X	15 7/8 TO 17 7/8	4	1 3/8	2 1/16
TL-1645	X	15 7/8	4 1/2	7/8	2 9/16
TL-1745*	X*	16 1/2	4 1/2	1 3/8	2 9/16
TL-1845	X	17 7/8	4 1/2	1 3/8	2 9/16
TL-1930	Z	19 1/2 & WIDER	3	1 3/8	1 1/16
TL-1935	Z	19 1/2 & WIDER	3 1/2	1 3/8	1 9/16
TL-1940	Z	19 1/2 & WIDER	4	1 3/8	2 1/16
TL-1945	Z	19 1/2 & WIDER	4 1/2	1 3/8	2 9/16

*The centerline of the lever is offset 1" from the centerline of the mold. The centerline of the lever on the other end of the mold must also be offset 1", but in the opposite direction from the mold centerline for balanced operation.

NOTE: If it is necessary to return the ejector assembly closer than .010" to .020" of complete return, levers with fitting spacers should be ordered. Contact D-M-E for details.

Toggle-Lok Component Parts

Arms

ITEM NUMBER
TLA-20
TLA-24
TLA-30
TLA-40

Includes retainer (TLR-10) and button head screw required for installation.

Shoulder Screw

ITEM NUMBER
5858SB

Joints

ITEM NUMBER
TLJ-20
TLJ-24
TLJ-30

Mounts (side and top)

ITEM NUMBER	TYPE
TLSM-200	STANDARD SIDE
TLSM-125	SMALL SIDE
TLSM-100	TOP

Includes socket head cap screws and dowels required for installation.

Cover Plates

ITEM NUMBER	USED WITH MOUNT
TLCP-200	TLSM-200
TLCP-125	TLSM-125
TLCP-100	TLSM-100

Levers (double and single angle)

ITEM NUMBER	TYPE
TLL-15	DOUBLE ANGLE
TLL-20-D	DOUBLE ANGLE
TLL-30	DOUBLE ANGLE
TLL-20-S	SINGLE ANGLE

Includes lever spacer, socket head cap screws and dowels required for installation.

WHEN ORDERING, PLEASE SPECIFY:

1. **Quantity and Item Numbers from charts**
2. **If the ejector plate extends beyond the ends of the mold, please specify "Top Mount" as part of the Toggle-Lok Package, and add "TM" to end of Item Number; e.g., TL-825-TM (no additional charge)**
3. **Method of shipment**

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Jiffy-Jector Benefits and Ordering Information

U.S. Patent No. 4,162,886



Each Jiffy-Jector Package Includes:

- Actuator Housing Assembly
- Actuator Pin Assembly
- Air Logic Manifold Assembly
- Manifold Bracket
- Thrust Insert
- Dual Air Filtration System
- Polyurethane Tubing (1/8 I.D. x 9 feet long)
- Installation Instructions

Runner hang-ups in 3-plate molds are both costly and time consuming. When a runner hangs up, the machine stops, disrupting the cycle. Mold damage may also occur. The D-M-E Jiffy-Jector prevents runner hang-up problems.

The pneumatically controlled and operated Jiffy-Jector is compact and powerful. It moves the runner system away from the X-1 Plate and then, by means of a short positive stroke and a blast of compressed air, ejects the runner system down and out of the mold – putting an end to costly hang-up problems.

The basic requirement for proper operation of the Jiffy-Jector is a clear, unobstructed path out of the mold for the runner system.

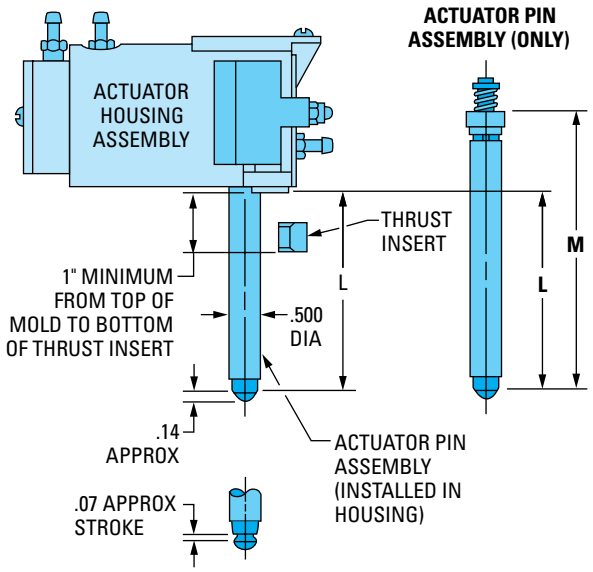
The Jiffy-Jector is adaptable to most 3-plate molds. It can be designed into new molds or retrofitted to existing molds.

The Jiffy-Jector increases the production efficiency of the mold, and helps boost your profits by cutting downtime.

Prevent runner hang-ups in your 3-plate molds. Use the D-M-E Jiffy-Jector.

Jiffy-Jector Benefits:

- Prevents hang-ups in 3-plate molds
- Increases production efficiency
- Adaptable to most 3-plate molds
- Works well in new molds and can be retrofitted to existing molds



Jiffy-Jector Packages

ITEM NUMBER	L
JJ-102	2.00
JJ-103	3.00
JJ-104	4.00
JJ-105	5.00

Actuator Pin Assembly (only)

ITEM NUMBER	L	M
AP-332	2.00	3.32
AP-432	3.00	4.32
AP-532	4.00	5.32
AP-632	5.00	6.32

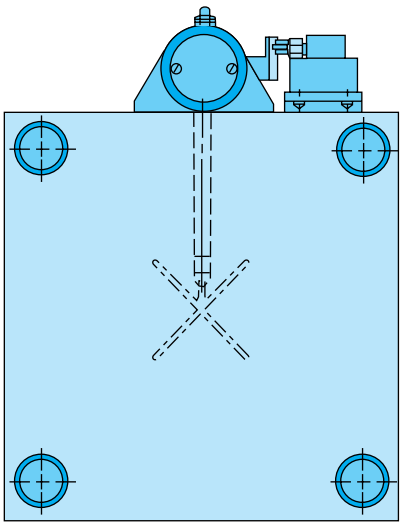
NOTES:
Actuator Pin Assemblies are interchangeable for replacement purposes or for subsequent applications where a longer or shorter pin is required.

For best results, it is recommended that the end of the actuator pin be located as close to the sprue as possible, especially when molding flexible resins. (Select actuator pin length accordingly.)

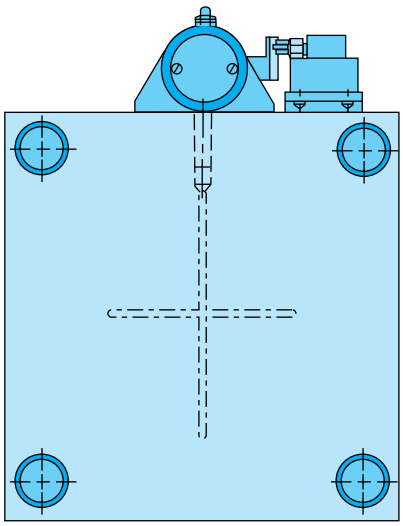
For complete design and application guidelines, contact D-M-E.

Jiffy-Jector Design and Application Guidelines

1. For best results, locate the actuator pin as close to the sprue as possible, especially when molding flexible resins (see Typical Application 1). Mold, runner or part design may require a longer distance between the actuator pin and sprue (see Application 2).
2. Design actuator pin shutoff into the split line between the X-1 and X-2 Plates. The bored or reamed hole is usually located on the centerline of the mold.
3. Locate two 5/16-18 tapped holes in the X-1 Plate for mounting the actuator housing (see assembly drawing).
4. Locate two 5/16-18 tapped holes in the "A" clamping plate (A.C.P.) for manifold bracket (see assembly drawing).
5. Provide 1" additional mold opening between the X-1 and X-2 Plates (1st parting line). This allows the actuator pin to move 1" away from the X-1 Plate and still have adequate clearance for runner ejection.
6. When retrofitting a mold with the Jiffy-Jector:
   a. Provide 1" longer stripper bolts between the X-1 and X-2 Plates.
   b. Be sure the leader pins are long enough to allow 1" additional movement of the X-2 Plate – use longer leader pins if necessary.
   c. Provide clearance for the longer stripper bolts and leader pins (without interfering with water lines or other mold components).
7. The Jiffy-Jector does not eliminate the need for sucker pins or normal 3-plate mold components or sequences.
8. Allow sufficient stroke between the X-1 Plate and the A.C.P. (3rd parting line) to strip the runners from the sucker pins and break the sprue from the nozzle.
9. To minimize clearance required for runner system ejection, sprueless design is recommended – such as the D-M-E T-Series Straight-Shot Hot Sprue Bushing.
10. It is important the runner system have a clear path out of the mold. Leader pins, water hoses, fittings and other mold components must not obstruct the ejection path.
11. An air pressure range of 55 psi minimum, to 100 psi maximum, is required.
12. Be sure the mounting holes and the bored or reamed hole for the actuator pin assembly do not interfere with leader pins, water lines or other mold components.
13. The manifold bracket is supplied with elongated slots for adjustment. Adjust the position of the Jiffy-Jector manifold assembly on this bracket so the pneumatic limit switch will be actuated near the end of the X-1 Plate travel (refer to assembly drawing).
14. If a standard actuator pin is too long, mount the actuator housing and manifold bracket on spacers to reduce the distance the pin extends into the mold (refer to assembly drawing and actuator pin assembly chart).

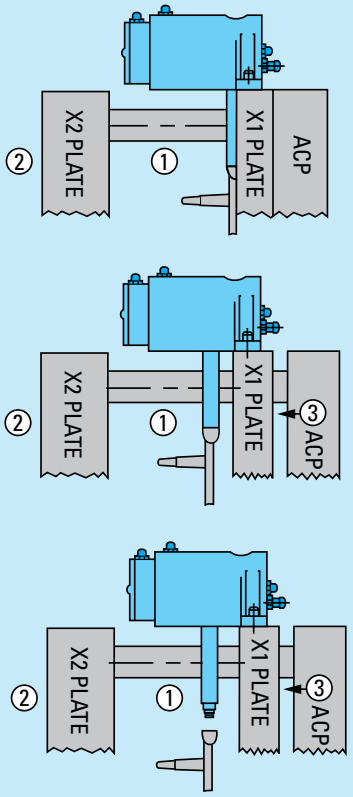


D-M-E Jiffy-Jector Typical Application 1 (Preferred)



D-M-E Jiffy-Jector Application 2

Jiffy-Jector Operating Sequence | Installation Dimensions for "T" Series Mold Bases



D-M-E Jiffy-Jector Operating Sequence

STEP 1

- Parting lines 1 and 2 open.

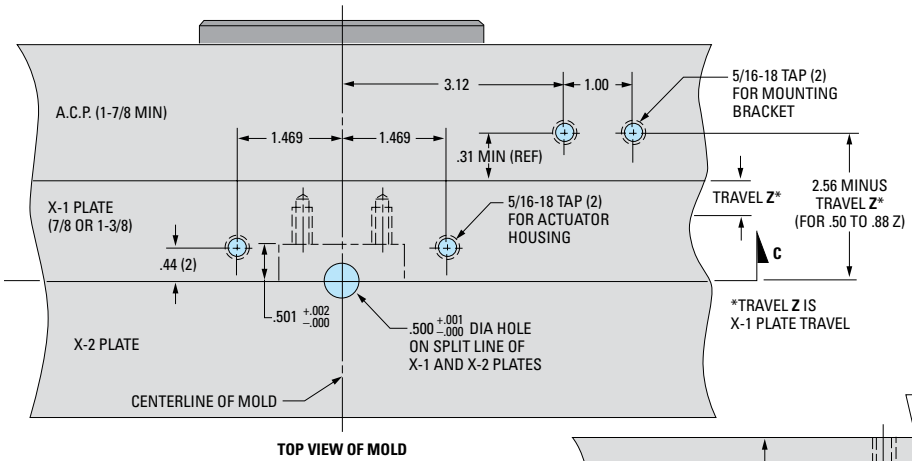
STEP 2

- Parting line 3 opens and actuates the pneumatic limit switch.
- Air cylinder moves actuator pin assembly and runner system away from the X-1 Plate.

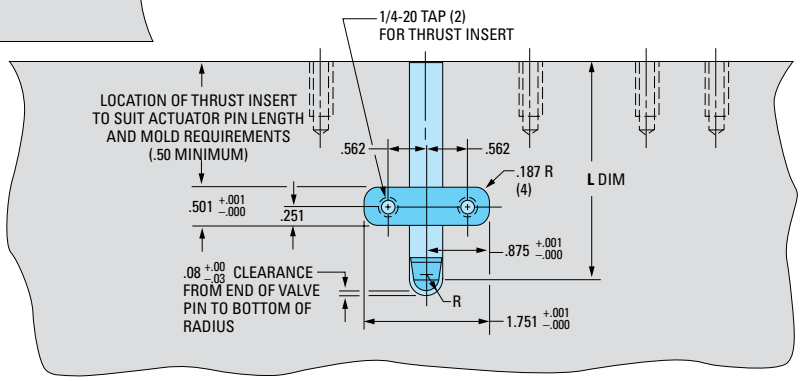
STEP 3

- Near the end of the 1" air cylinder stroke, the depressed ball gives the valve a short positive stroke, loosening the runner system from the actuating pin. Simultaneously, a blast of compressed air is released, ejecting the runner system down and out of the mold.
- After the adjustable time delay valve times out, the air cylinder returns the actuator pin assembly to the X-1 Plate.
- The mold begins the normal mold close sequence.

Installation Dimensions for "T" Series Mold Bases



TOP VIEW OF MOLD



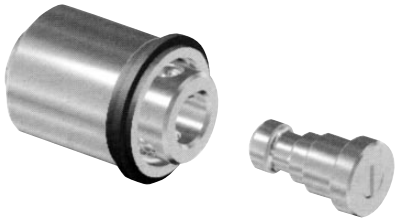
VIEW C-C

FOR JJ-102 THRU JJ-105 (CONTACT D-M-E FOR JJ-101 INSTALLATION INSTRUCTIONS)

TOLERANCES UNLESS NOTED	
FRACTIONS	±.015
.00	±.010
.000	±.005
ANGLES	±1°

Ejector Return Couplings – General Information

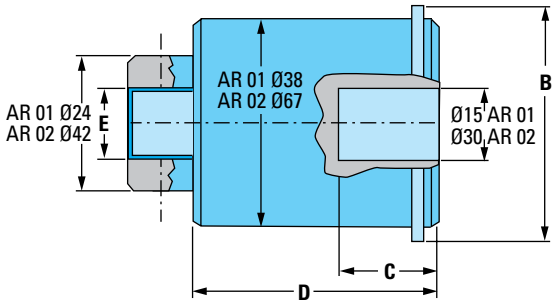
Quick Action Ejector Return Couplings for Presses with Hydraulic Ejection



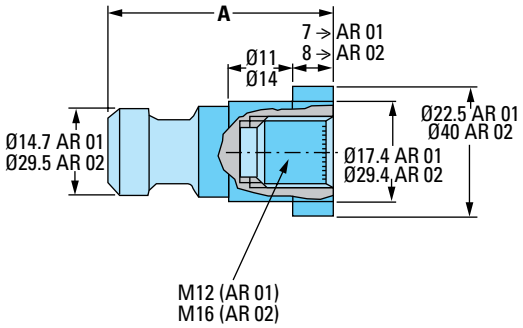
Economical
- Shortens mold changeover times
- Only one unit required per injection molding machine

Universal
- Can be put into existing molds to save time and money
- Hydraulic return by means of fixed coupling
- Pulsating ejection possible

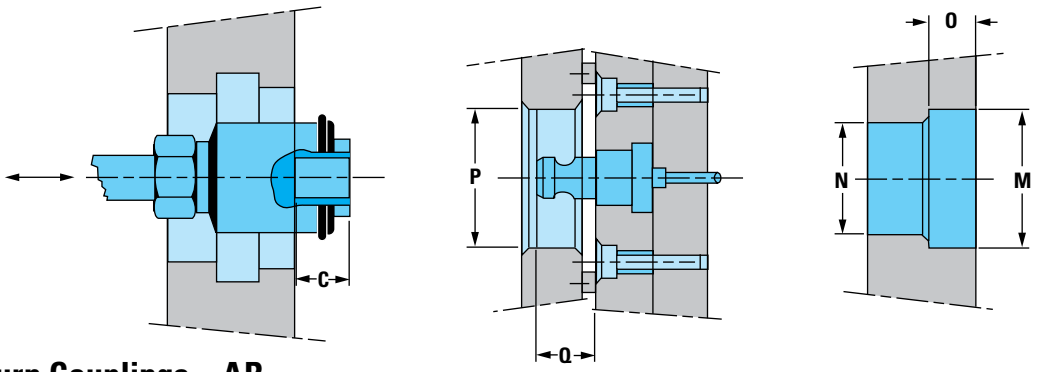
Quick return coupling (incl. connecting plug)



Connecting plug



REF	TYPE
AR01 RESP. 02	QUICK RETURN COUPLING (INJECTION PRESS)
AR01 RESP. 02 P	CONNECTING PLUG (MOLD)

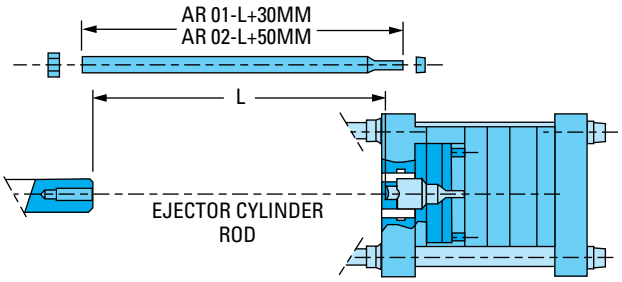


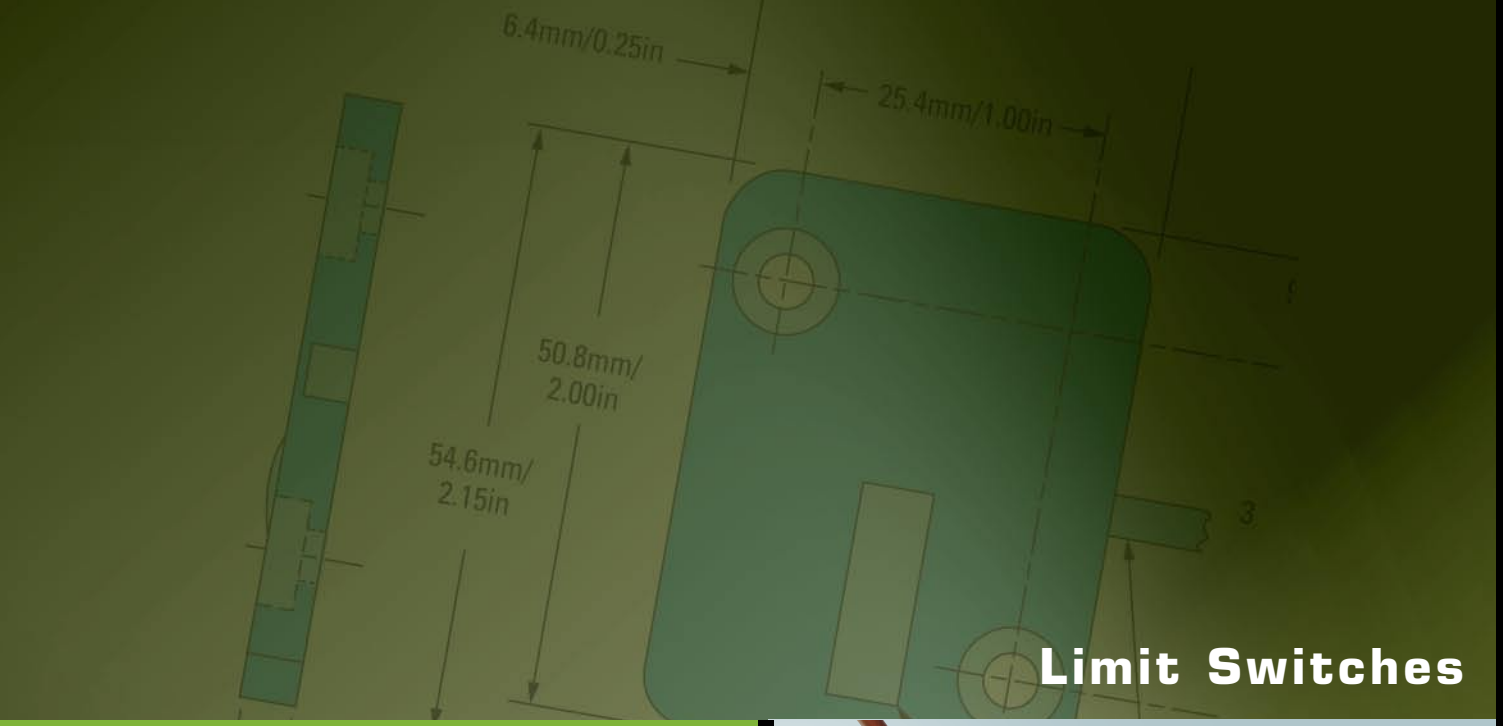
Ejector Return Couplings – AR

REF	A	B	C ±0.02	D	E	M	N	O +0.05 +0.02	P MIN.	Q MIN.	kN
AR01	38	43	18	43.5	M16	23	18	7	48	C +1	40
AR02	43	73	24	70.5	M20	42	32		80	C +1	140

Installation

1. Move the ejector plate to the molding position (mold closed).
2. Move also the ejector cylinder rod to the fully retracted position. It is important to check by hand, that the rod is fully pushed back to the fully retracted position before measuring.
3. Measure the distance between the coupling and the ejector cylinder rod.
4. Extend the ejector cylinder rod with an extra knock-out rod of the measured length + 30mm for AR-01 and 50mm for AR-02.
5. Move the mold ejector plates to the forward position (mold open).
6. Lock both the extra knock-out rod and at the other end the quick coupling.
7. Move the mold ejector plates back to the mold closed position and make the coupling between ejector plate and ejector cylinder rod. Make sure that the ejector plate and ejector cylinder rod are both in the mold closed position as soon as the coupling is made. If not, adjust. **Do not use with quick-change mold systems.**

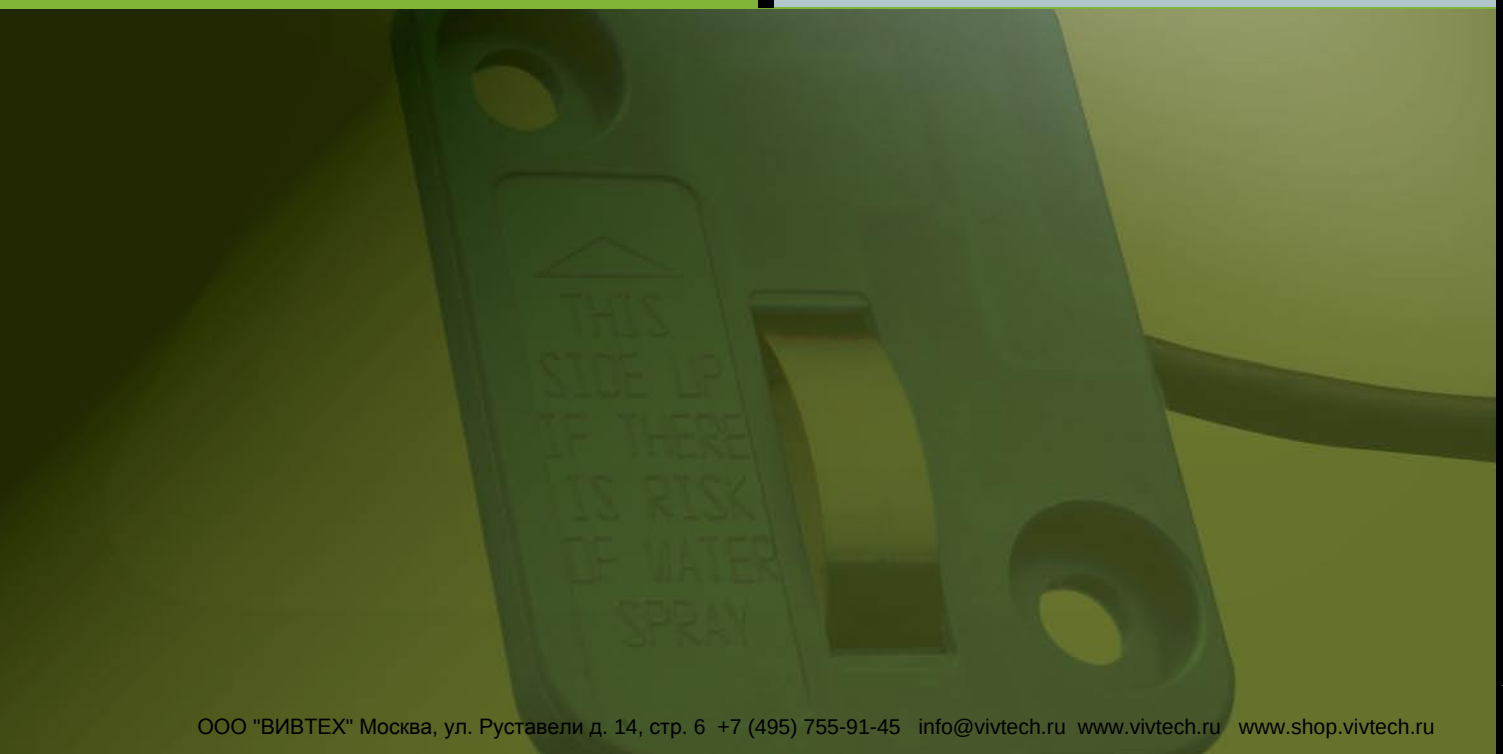




Limit Switches

QUALITY TESTED TO
PROVIDE LONG,
DEPENDABLE SERVICE





Thinswitch® Limit Switch



U.S. Patent No. 5,446,252

The Thinswitch® limit switch is specially designed to verify ejector plate return before permitting the mold to close in injection molding machines. Thin enough to fit inside the ejector housing, it can also be used for core slides, or any place space is limited.

The Thinswitch limit switch has been tested for reliability in more than 10 million cycles without failure. Two switches can be used in series for larger molds to ensure the ejector plate returns, preventing costly mold damage.

- Prevents costly damage by ensuring the ejector assembly is fully returned
- Adjustable operating point allows actuation between .187" and .250" from the base
- $^{3}/_{16}$" thick design fits snugly behind the ejector plate in the space provided by the rest buttons
- Included mounting hardware installs the Thinswitch Limit Switch easily
- Stripped and tinned 6 ft. wire leads make the switch ready to install without modification
- 175°F (79.4°C) standard temperature rating enables use for most molding applications
- **Quality tested over 10 million cycles to provide long, dependable service**
- Linear adjustment set screw can be set within .005 to .0025
- Premature spring and switch failure may result by adjusting the operating point more than .020" (.5mm) before the end of the ejector plate stroke
- In stock to provide same day delivery

RATED CURRENT VS. STEEL TEMPERATURE TSW 2220		
AMPS	°F	°C
5.0	85	29.4
4.0	120	49.0
3.0	155	68.3
2.0	175	79.4

NOTE: Please contact D-M-E for high-temperature applications.

THINSWITCH LIMIT SWITCH CATALOG #TSW2220			
SPECIFICATIONS		MATERIALS	
ELECTRICAL:		BODY	FIBERGLASS-REINFORCED NYLON
250VAC	5 AMPS RESISTIVE	SPRING	STAINLESS STEEL
	4 AMPS INDUCTIVE	BACK COVER	POLYESTER FILM
28VDC (SEA LEVEL)	5 AMPS RESISTIVE	WIRE LEADS	22GA STRANDED, 3-CONDUCTOR, SHIELDED CABLE, 6 FT. (1.8M) LONG, ENDS STRIPPED AND TINNED
	4 AMPS INDUCTIVE		
OPERATING TEMPERATURE	175°F MAX (79.4°C MAX)		
SWITCHING	SPDT		

NOTE: Pressure required to activate the switch: 1 oz. min., 5 oz. max.

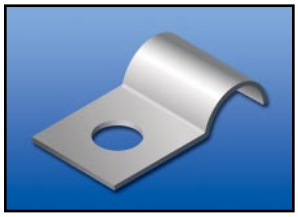
The Thinswitch Limit Switch is designed for use in very low power mold protection control circuits. It is not intended to switch heavy loads in power applications.



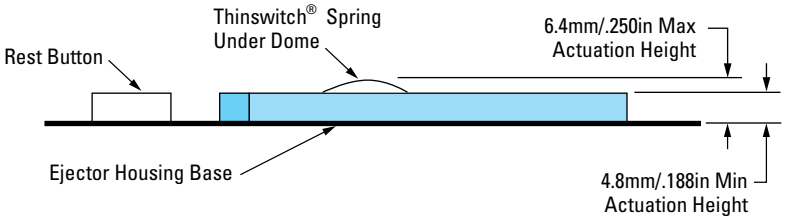
Thinswitch® Limit Switch

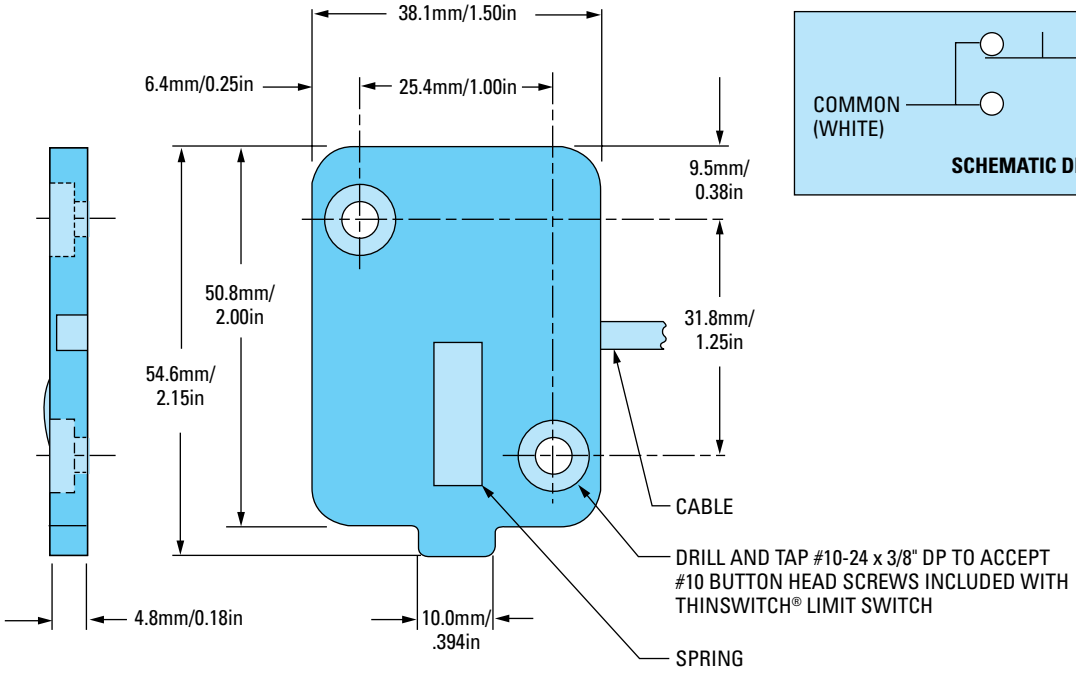
PARTS INCLUDED	
DESCRIPTION	QTY
THINSWITCH LIMIT SWITCH	1
4-40 ALLEN WRENCH (FOR HEIGHT ADJUSTMENT)	1
SCREWS (#10-24 X 1/2" BUTTON HEAD)	4
WIRE CLAMPS (.5" X .82" X .5" WITH .213" MOUNTING HOLE)	2
INSTRUCTION SHEET	1





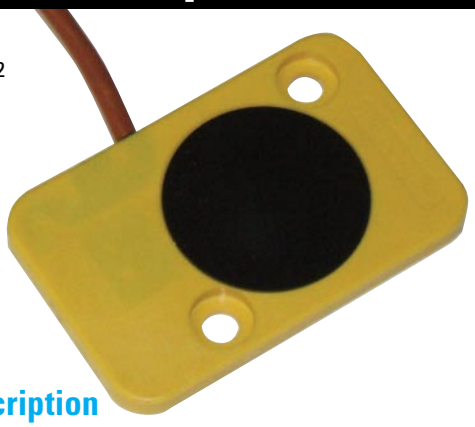
Thinswitch includes 2 wire clamps.





Two- and three-dimensional part files are available from the D-M-E web site at www.dme.net.

NEW! Smartflow® Thinswitch® Liquid-Resistant Limit Switch



U.S. Patents 5,446,252 and 6,982,392

T-222-LR 175°F (79.4°C) operating temperature
HT-291-LR 250°F (121°C) operating temperature

General Description

Smartflow® Thinswitch® Liquid-Resistant Limit Switch is designed to verify ejector plate return in areas where occasional water or oil spray is present. The Thinswitch helps prevent accidental mold close in injection molding applications by providing a position switch that is tied to the injection molding machine control. The liquid resistant switch uses the same mounting hole locations as the original Thinswitch.

The Thinswitch has been tested for reliability over 10 million cycles without failure. Two switches can be used in series for larger molds to ensure the ejector plate return, preventing costly mold damage.

SPECIFICATIONS

Part Number/Operating Temperature: T-222-LR Standard Model, 175°F max. (79.4°C max.)
HT-291-LR High Temp Model, 250° max. (121°C max.)
Switching: SPDT
Electrical: 250VAC – 5 amps resistive, 4 amps inductive (max)
28VDC (sea level) – 5 amps resistive, 4 amps inductive (max)

MATERIALS

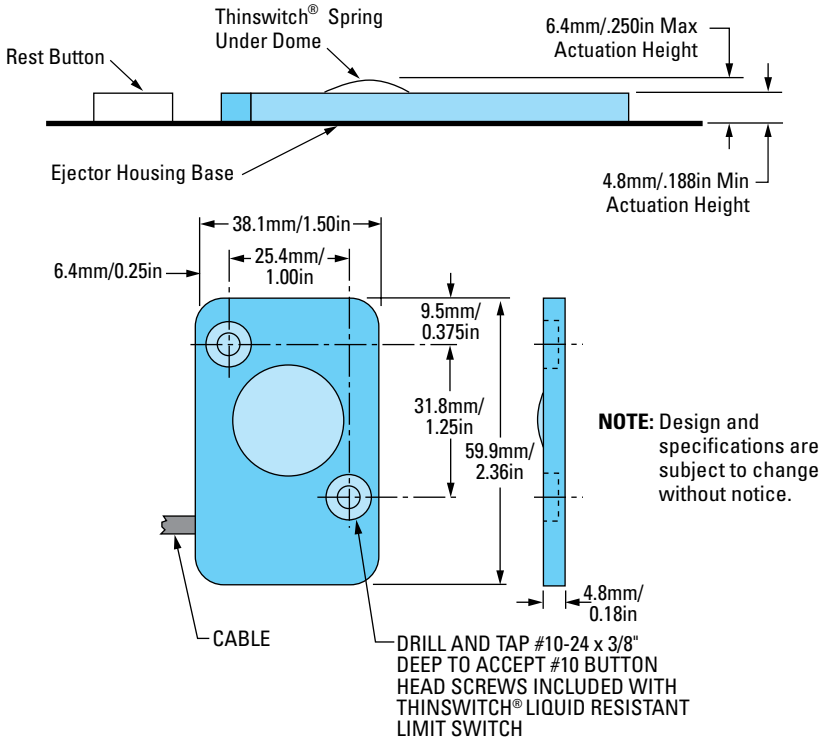
Body: Fiberglass-reinforced nylon
Dome: Polyurethane
Back Cover: Polyester Film
Wire Leads: 22ga stranded, 3-conductor, shielded cable, 6 ft. (18m) long, ends stripped and tinned

RATED CURRENT (RESISTIVE) VS. OPERATING STEEL TEMPERATURE					
T-222-LR			HT-291-LR		
AMPS	°F	°C	AMPS	°F	°C
5.0	85	29.4	5.0	100	37.7
4.0	120	49.0	4.5	155	68.3
3.0	155	68.3	4.0	210	98.8
2.0	175	79.4	3.5	250	121.1

The Thinswitch® Limit Switch is designed for use in very low power mold protection control circuits. It is not intended to switch heavy loads in power applications.

Features and Benefits

- **Over 10 million cycle life**
- 175°F (79.4°C) standard temperature rating
- 250°F (121°C) high-temperature unit for higher temperature needs
- Adjustable actuation between .187" and .250" from the mold base
- $^{3}/_{16}$" thick design fits snugly behind the ejector plate between the rest buttons
- Stripped and tinned 6 ft. wire leads
- Mounting screws and wire clips included



NOTE: Design and specifications are subject to change without notice.

NOTE: Premature spring and switch failure may result by adjusting the operating point more than .020" (.5mm) before the end of the ejector plate stroke.

D-M-E Innovative Mold Interlocks

COST-EFFECTIVE

INTERCHANGEABLE

WEAR SURFACES

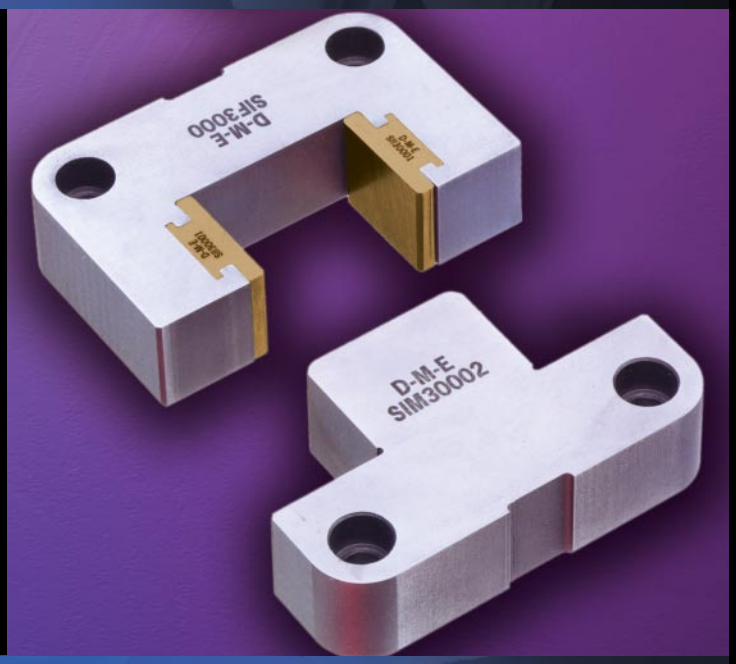
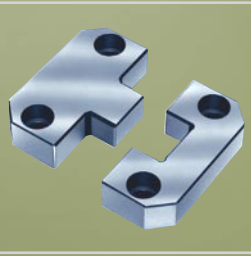


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Straight-Side Interlocks

Interlock Dimensions 141



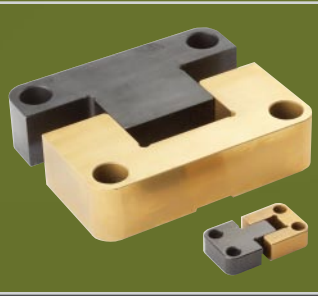
X-Style Interlocks

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Black & Gold Mold Interlocks

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Online Price Guide

Go to www.dme.net/prices for the latest pricing guide.

Mold Interlock Benefits

D-M-E Side Interlocks provide:

- Accurate alignment of mold halves
- Easy installation
- Easy and cost-effective maintenance
- Industry-compatible sizes

Installation

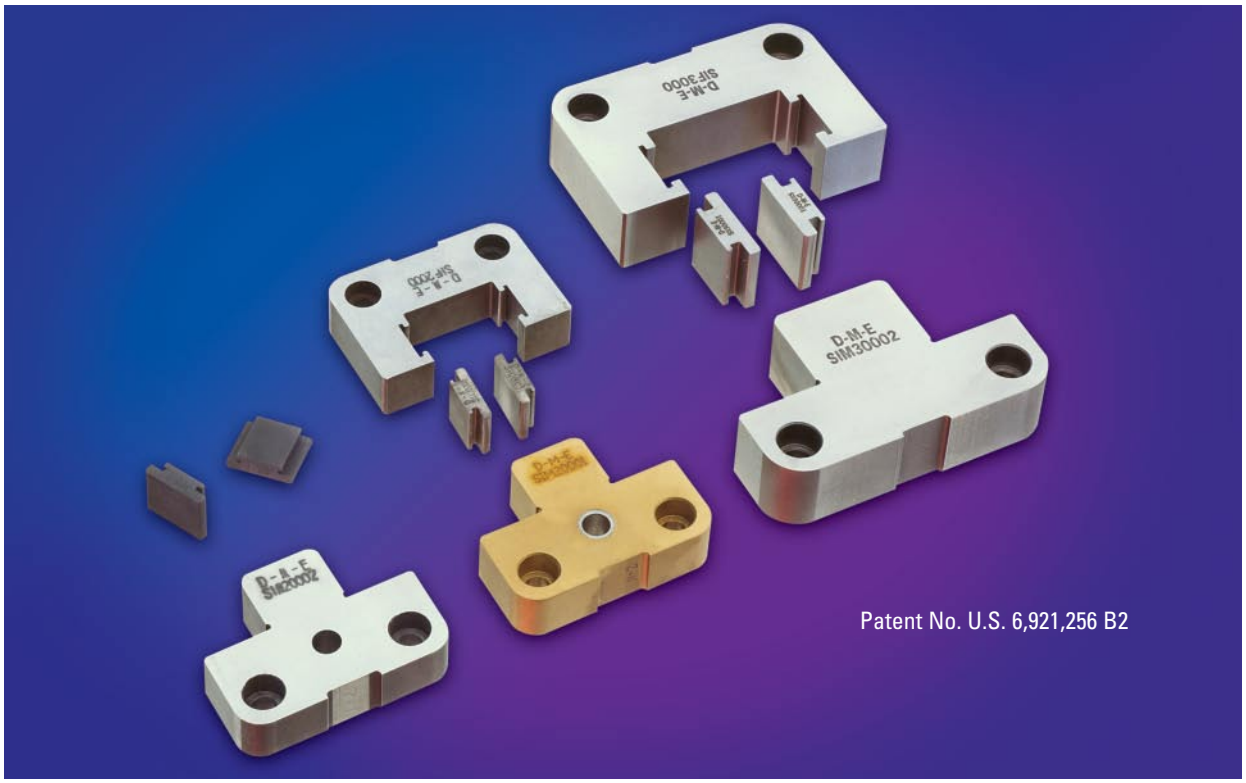
- Install four (4) IN2 Side Interlocks per mold (one per side)
- Install IN2 Side Interlocks on the Center Line of each side of the mold
- Replace IN2 Interchangeable Inserts as desired

Precision tolerancing, precision manufacturing means off-the-shelf interchangeability

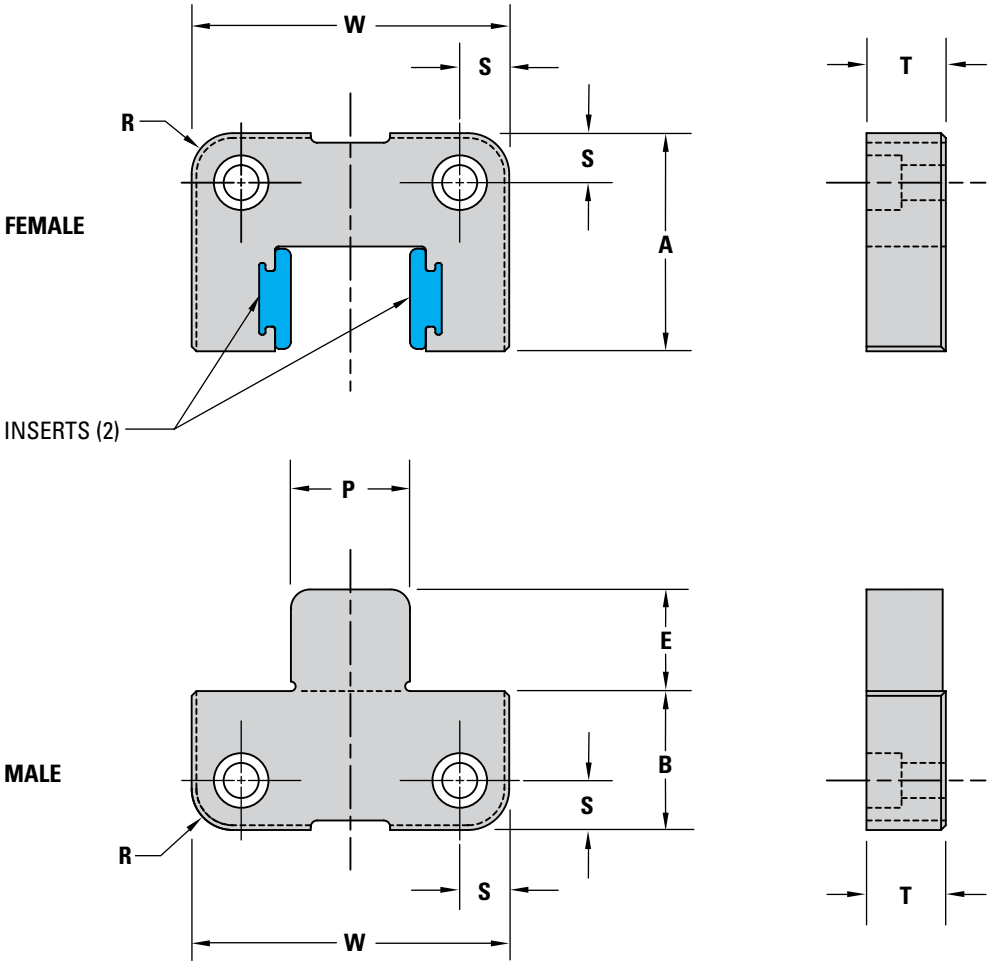
D-M-E IN2™ Mold Interlocks are manufactured to exacting standards. Precise dimensional and geometrical tolerances ensure interchangeability. Interchangeability that no one else in the industry matches — *no one*. Precision tolerancing and manufacturing ensures that all D-M-E IN2 Mold Interlock components are interchangeable — off-the-shelf. Replace any D-M-E IN2 Mold Interlock component independently — no need to replace the entire set. *No one* else offers this level of interchangeability — no one.

The D-M-E Standard of Interchangeable Interlock Components sets D-M-E apart from the industry.

And now…
D-M-E offers another innovation: IN2 Innovative Interlocks with Interchangeable Inserts. Interchangeable Inserts offer you simple, cost-effective maintenance. No need to replace the entire set when you use IN2 Innovative Interlocks with Interchangeable Inserts.



IN2 Side Interlocks



Side Interlock Dimensions

W WIDTH	A HEIGHT FEMALE	B HEIGHT MALE	E INTERLOCK HEIGHT	P INTERLOCK WIDTH	T THICKNESS	R RADII	S SCREW LOCATIONS	SHCS SIZE
1.500	.875	.875	.490	.450	.500	.26	.250	#8-32 X .62
2.000	1.375	.875	.640	.750	.500	.26	.312	#10-32 X .62
3.000	1.875	.875	.920	1.250	.750	.39	.375	1/4-20 X .88

Side Interlock Ordering Information – SIS, SII

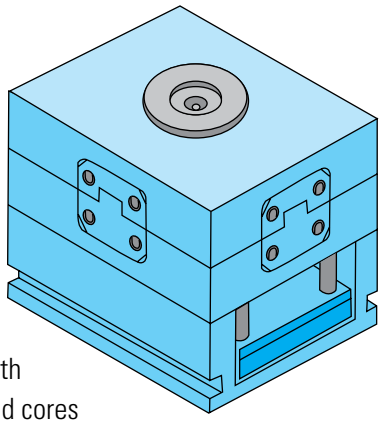
Material – Male Interlock: High-Speed Tool Steel **Hardness:** 61-65 HRC
Material – Interlock Inserts: Graphitic Tool Steel **Hardness:** 48-52 HRC

INTERLOCK SET* **ITEM NUMBER**	**W** INTERLOCK WIDTH	REPLACEMENT INTERCHANGEABLE INSERTS** **ITEM NUMBER**
SIS150023	1.500	SII15003
SIS200023	2.000	SII20003
SIS300023	3.000	SII30003

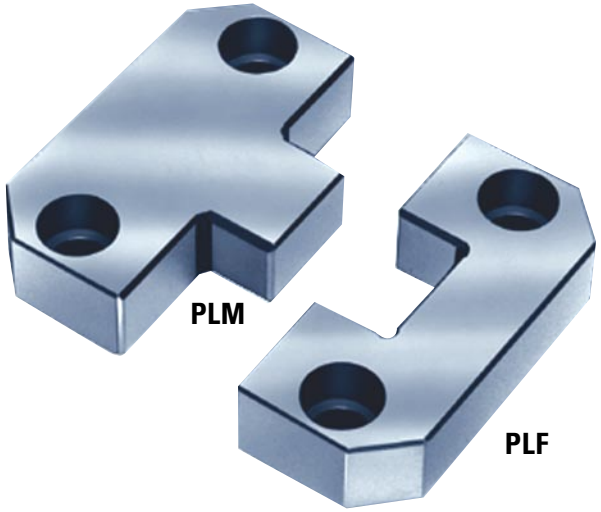
*Sets include one (1) female, one (1) male, two (2) inserts, four (4) SHCS.

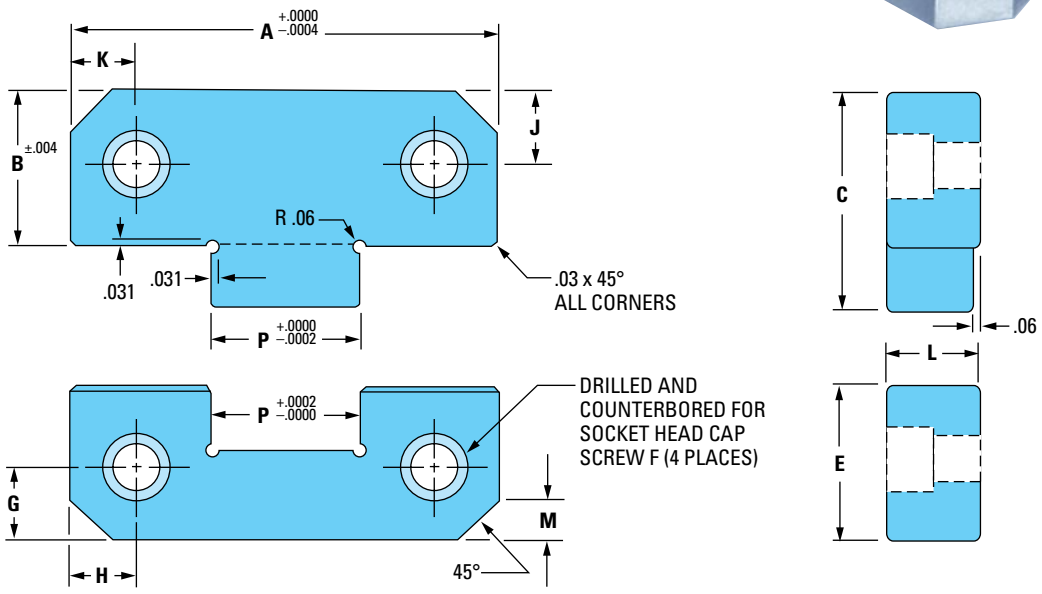
**Replacement Interchangeable Inserts are sold as pairs.

Straight-Side Interlocks



- Provides positive alignment for molds with interlocking cavities and cores





NOTES:
1. Recommend four (4) per mold.
2. Mount on centerline on all four sides to avoid problems with heat expansion.

Straight-Side Interlocks – PLM, PLF

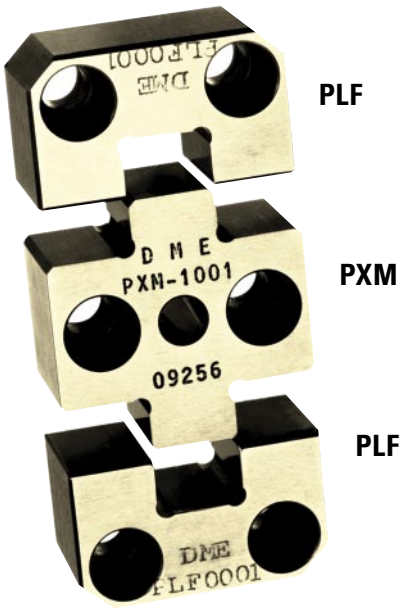
Material: 8620 Steel-Carburized, Hardened and Ground **Hardness:** PLM: 50-55 HRC, PLF: 55-60 HRC

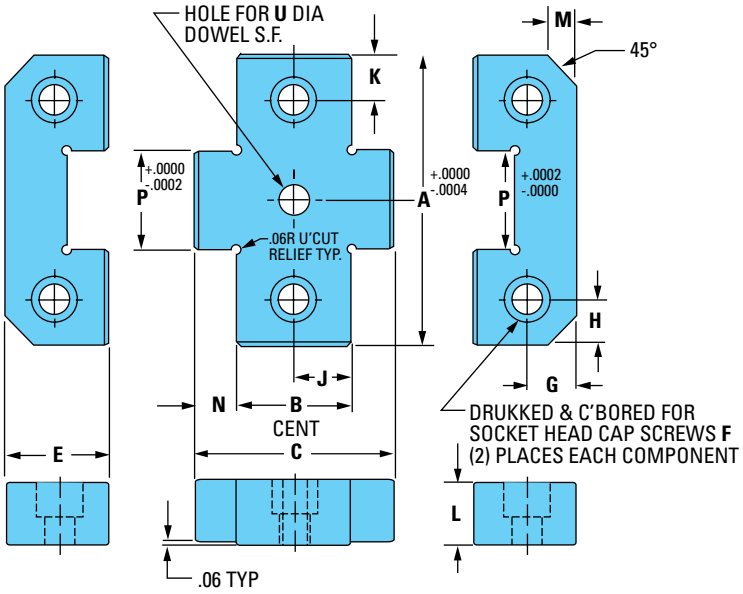
ITEM NUMBER	A NOMINAL	B	C	P NOMINAL	E	F*	G	H	J	K	L	M
PLM-0001	1.5000	.870	1.18	.5000	.870	1/4-20 X 3/4	.281	.281	.437	.281	.620	.19
PLF-0001												
PLM-0002	2.0000	.870	1.18	.6800	.870	1/4-20 X 3/4	.375	.375	.437	.375	.620	.19
PLF-0002												
PLM-0003	3.0000	1.360	1.910	1.0000	1.370	3/8-16 X 1	.688	.375	.688	.375	.745	.19
PLF-0003												
PLM-0004	4.0000	1.870	2.640	1.3750	1.870	3/8-16 X 1	.875	.625	.875	.625	.745	.50
PLF-0004												
PLM-0005	5.0000	1.870	2.640	1.7500	1.870	1/2-13 X 1 1/4	.875	.750	.875	.750	1.120	.50
PLF-0005												

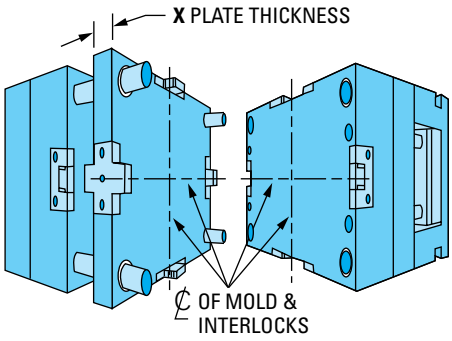
*(2) F-size S.H.C.S included with each interlock.

X-Style Straight-Side Interlocks

- Provides positive alignment between three adjacent plates when mold has two parting line openings, providing close alignment for interlock cavities and cores in stripper plate-type molds
- Used with AX-Series (floating plate) and X-Series (stripper plate) mold bases, as well as other mold bases with floating plates
- Interchangeable male PXM and female PLF details can be purchased individually







X-Style Straight-Side Interlocks – PLF, PXM

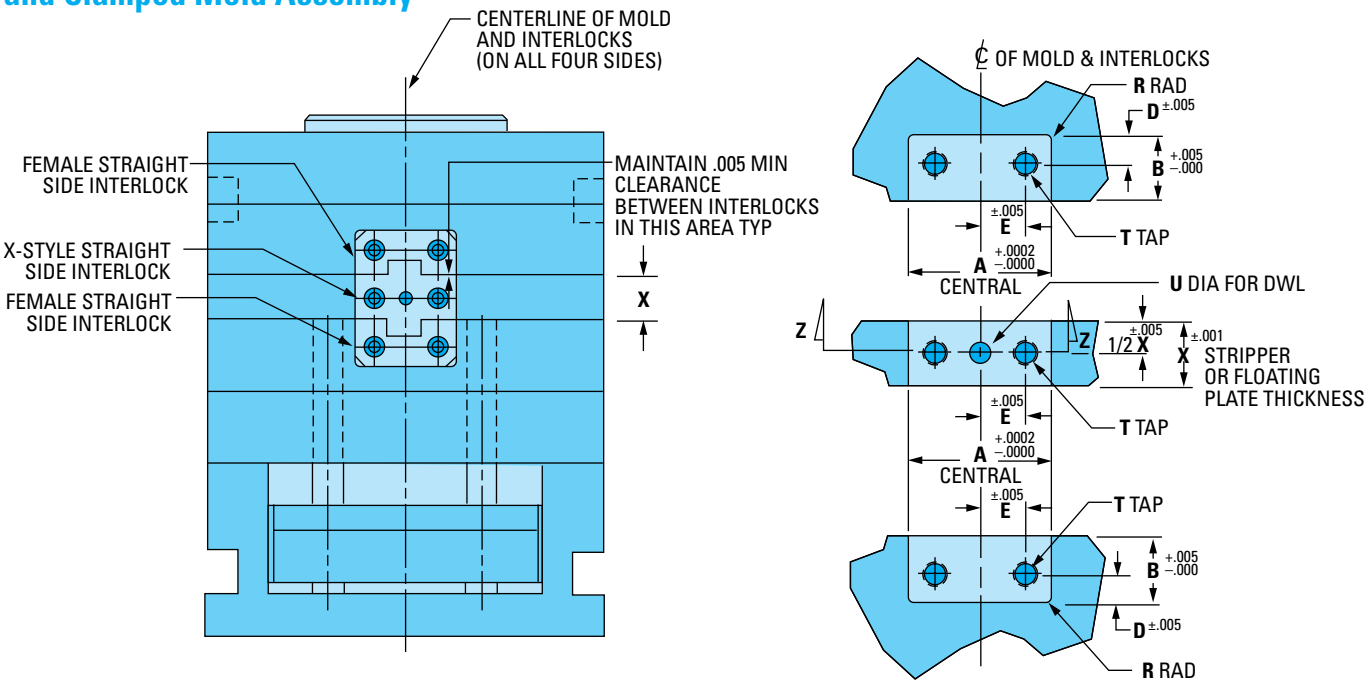
Material: AISI 8620 Steel-Carburized, Hardened and Ground **Hardness:** PXM: 50-55 HRC, PLF: 55-60 HRC

ITEM NUMBER		X PLATE THICKNESS	A NOMINAL	B	C	P NOMINAL	E	F	G	H	J	K	L	M	N	U DIA
FEMALE	X-STYLE															
PLF-0001 (2 REQ'D)	PXM-1001	.875	1.5000	.850	1.470	.5000	.870	1/4-20 X 3/4	.281	.281	.425	.281	.620	.19	.310	.2500 (1/4 DIA X 1" LG DWL)
	PXM-2001	1.375		1.350	1.970						.675					
PLF-0002 (2 REQ'D)	PXM-1002	.875	2.0000	.850	1.470	.6800	.870	1/4-20 X 3/4	.375	.375	.425	.375	.620	.19	.310	.2500 (1/4 DIA X 1" LG DWL)
	PXM-2002	1.375		1.350	1.970						.675					
PLF-0003 (2 REQ'D)	PXM-1003	.875	3.0000	.850	1.950	1.0000	1.370	3/8-16 X 1	.688	.375	.425	.375	.745	.19	.550	.3750 (3/8 DIA X 1 1/4 LG DWL)
	PXM-2003	1.375		1.350	2.450						.675					
PLF-0004 (2 REQ'D)	PXM-2004	1.375	4.0000	1.350	2.890	1.3750	1.870	3/8-16 X 1	.875	.625	.675	.625	.745	.50	.770	.3750 (3/8 DIA X 1 1/4 LG DWL)
	PXM-3004	1.875		1.850	3.390						.925					
PLF-0005 (2 REQ'D)	PXM-2005	1.375	5.0000	1.350	2.890	1.7500	1.870	1/2-13 X 1 1/4	.875	.750	.675	.750	1.120	.50	.770	.5000 (1/2 DIA X 2" LG DWL)
	PXM-3005	1.875		1.850	3.390						.925					

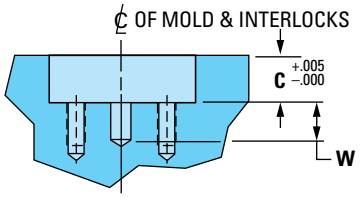
NOTE: (2) socket head cap screws and (1) dowel of the size and length indicated in the chart are included with each X-Style interlock. Additionally, (2) socket head cap screws of the size and length indicated in the chart are included with each female interlock.

X-Style Straight-Side Interlocks

Basic Dimensions for Machining Pockets for X-Style and Female Interlocks on Centerlines of the Closed and Clamped Mold Assembly



VIEW OF POCKET ON CENTERLINE OF MOLD



The D-M-E X-Style straight-side interlocks are designed for use on molds with floating plates when the two parting lines must be closely aligned with each other. The X-Style straight-side interlocks are designed to be used, and to mate with two of the equivalent size D-M-E female straight-side interlocks. The X-Style interlocks are typically used on "X" and "AX" series mold bases, as well as other mold bases with floating plates.

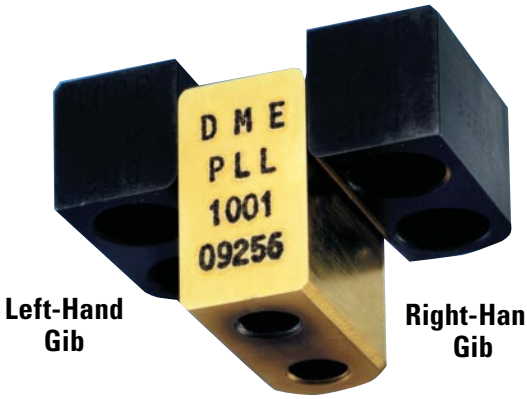
Typical application is for use on a mold base with a stripper or floating plate. (4) X-Style interlocks and (8) female interlocks are used per mold assembly. One set is used on centerline of each end and one set on centerline of each side.

Moldmaker to adjust fit to suit as needed for specific application. Please contact D-M-E for complete installation instructions for the X-Style Interlocks.

ITEM NUMBER		X PLATE THICKNESS	A CENT	B	C	D	E	T TAP	Ø U	W	R RAD
FEMALE	X-STYLE										
PLF-0001 (2 REQ'D)	PXM-1001	.875	1.5000	.875	.625	.281	.469	1/4-20 UNC X .56 DEEP (1/4-20 X 3/4 LG S.H.C.S.)	.2500 (1/4 DIA X 1" LG DWL)	.50	.12
	PXM-2001	1.375									
PLF-0002 (2 REQ'D)	PXM-1002	.875	2.0000	.875	.625	.375	.625	1/4-20 UNC X .56 DEEP (1/4-20 X 3/4 LG S.H.C.S.)	.2500 (1/4 DIA X 1" LG DWL)	.50	.12
	PXM-2002	1.375									
PLF-0003 (2 REQ'D)	PXM-1003	.875	3.0000	1.375	.750	.688	1.125	3/8-16 UNC X .88 DEEP (3/8-16 X 1" LG S.H.C.S.)	.3750 (3/8 DIA X 1 1/4 LG DWL)	.62	.12
	PXM-2003	1.375									
PLF-0004 (2 REQ'D)	PXM-2004	1.375	4.0000	1.875	.750	.875	1.375	3/8-16 UNC X .88 DEEP (3/8-16 X 1" LG S.H.C.S.)	.3750 (3/8 DIA X 1 1/4 LG DWL)	.62	.38
	PXM-3004	1.875									
PLF-0005 (2 REQ'D)	PXM-2005	1.375	5.0000	1.875	1.125	.875	1.750	1/2-13 UNC X 1.00 DEEP (1/2-13 X 1 1/4 LG S.H.C.S.)	.5000 (1/2 DIA X 2" LG DWL)	1.00	.38
	PXM-3005	1.875									

NOTE: (2) socket head cap screws and (1) dowel of the size and length indicated in the chart are included with each X-Style interlock. Additionally, (2) socket head cap screws of the size and length indicated in the chart are included with each female interlock.

Parting Line Interlocks



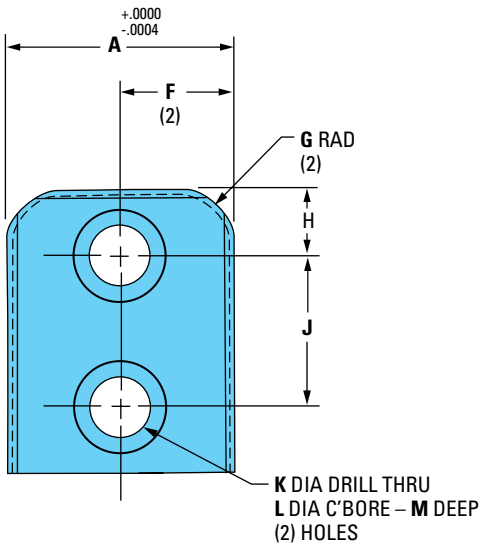
- For accurate alignment between mold halves
- All machining can be done from the parting line … saving set-up time and machining costs
- Components can be purchased individually

Typical Application

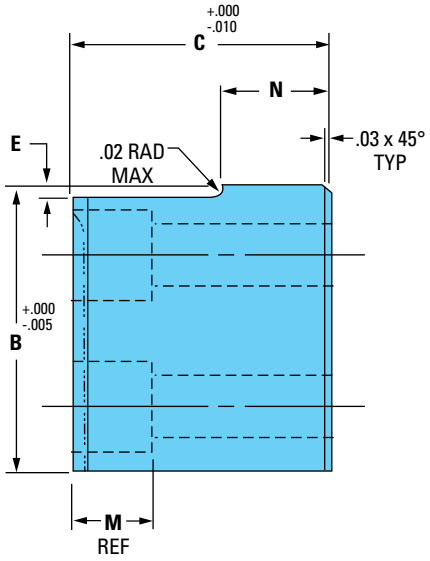
The male interlock is typically installed in the ejector half of the mold. Left- and right-hand gibs are typically installed in the stationary half of the mold.

Mold machining and installation data are available. Contact D-M-E.

Center Male Interlock – PLL



CENTER MALE INTERLOCK

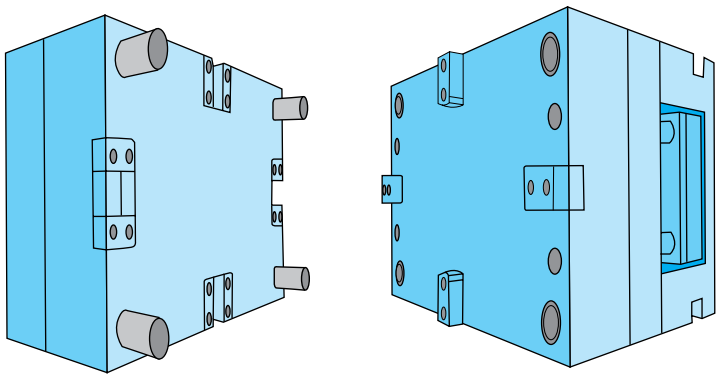


Material: S7 Steel, 52-58 HRC, Titanium Nitrided
80-85 HRC for wear and lubricity

ITEM NUMBER	A WIDTH	B LENGTH	C	E	F	G	H	J	K	L	M	N
PLL-1001	.4998	1.000	.85	.030	.250	.19	.250	.500	.219	.344	.22	.36
PLL-1002	.9998	1.500	1.35	.060	.500	.25	.312	.875	.281	.406	.28	.61
PLL-1003	1.4998	2.000	1.72	.060	.750	.38	.438	1.125	.406	.594	.41	.73
PLL-1004	1.9998	2.500	2.10	.060	1.000	.50	.562	1.375	.531	.781	.53	.86

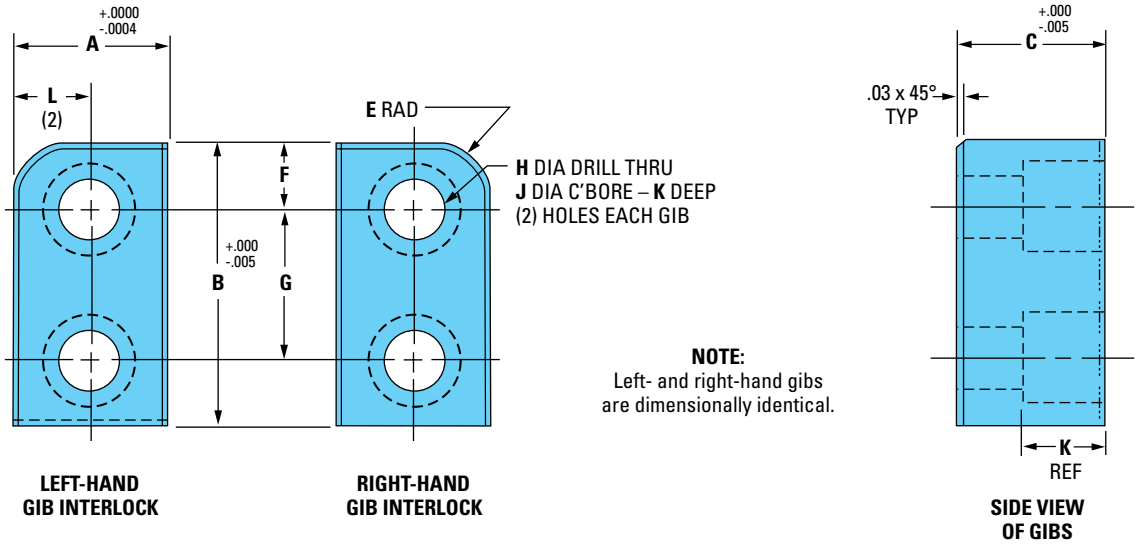
See next page for right- and left-hand gibs for parting line interlocks.

Parting Line Interlocks



NOTES:
1. Select center, right and left interlock components that are the same length (size) to make one set (e.g., PLL-1002, PLL-2002 and PLL-3002).
2. Four sets of interlocks should be used in each application. They must be installed on the center line of each side of the mold.
3. Each component includes two socket head cap screws with nylon-type thread locking element.

Gibs (left and right) – PLL

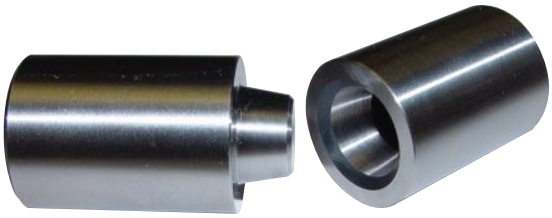


Material: H-13 steel, 40-45 HRC, melanite coated for wear and lubricity

ITEM NUMBER		A	B	C	E	F	G	H	J	K	L
LEFT-HAND GIBS	RIGHT-HAND GIBS	WIDTH	LENGTH								
PLL-3001	PLL-2001	.5000	1.000	.500	.19	.250	.500	.219	.344	.22	.250
PLL-3002	PLL-2002	.7500	1.500	.750	.25	.312	.875	.281	.406	.28	.375
PLL-3003	PLL-2003	1.0000	2.000	1.000	.38	.438	1.125	.406	.594	.41	.500
PLL-3004	PLL-2004	1.2500	2.500	1.250	.50	.562	1.375	.531	.781	.53	.625

See previous page for center male parting line interlock.

Tapered Interlocks (Round)

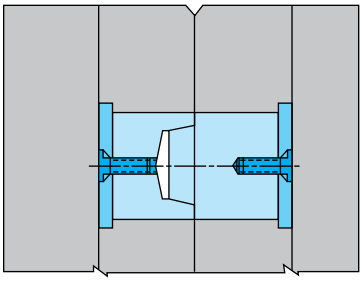


D-M-E Tapered Interlocks provide positive metal-to-metal mold registry to align mold halves, mold plates or individual cavities and cores. The larger sizes are generally used with large molds or plates. The 1/2 and 3/4 sizes are generally used with small molds or to align cavities and cores. At least two sets are recommended for small molds or inserts, four for medium-size molds and six or more for large molds.

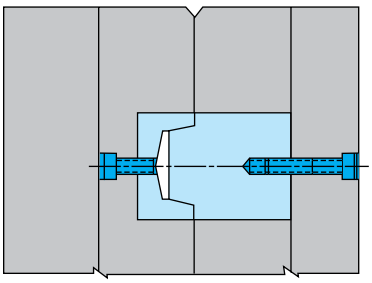
To obtain accurate registry, the installation holes or pockets must be accurately aligned. For this reason, through construction is recommended because the two plates can be clamped together and line-bored. Combination construction can also be line-bored or at least partially line-bored to create a pilot for the blind pocket. Blind pocket construction in both plates is the most difficult installation. Close attention is required to make certain the two pockets line up.

There is stock allowance at the back of both male and female details to permit fitting at assembly to match a specific mold plate thickness or pocket depth. There is also additional stock allowance on the front face of the female detail. The interlocks may be installed to locate metal-to-metal on the tapered diameters by grinding the excess stock from the front face of the female until there is a slight clearance between the faces of the male and female when assembled. By precision fitting, the front face of the female detail can be ground so the interlocks will locate on both the tapered diameters and faces simultaneously.

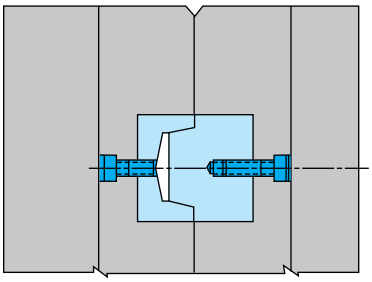
Through



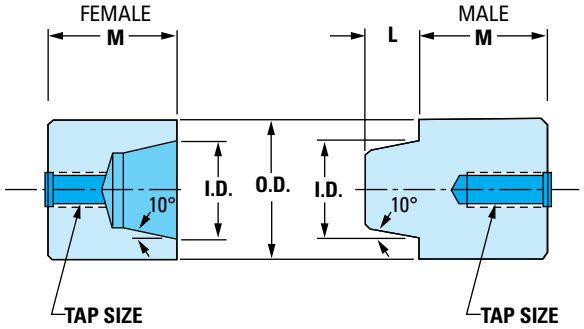
Combination



Blind



Tapered Interlocks (Round)



Female Tapered Interlocks – FT (Round)

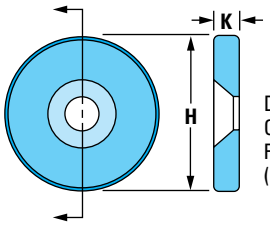
O.D. +.0000 -.0005	I.D. +.0002 -.0000	TAP SIZE	M +.015 +.020	ITEM NUMBER
1/2	5/16	10-24	11/16	FT04-11
			7/8	FT04-14
			1 3/16	FT04-19
			1 3/8	FT04-22
3/4	1/2	1/4-20	11/16	FT06-11
			7/8	FT06-14
			1 3/16	FT06-19
			1 3/8	FT06-22
1"	5/8	1/4-20	11/16	FT08-11
			7/8	FT08-14
			1 3/16	FT08-19
			1 3/8	FT08-22
1 1/2	1"	5/16-18	1 1/8	FT12-18
			1 3/8	FT12-22
			1 5/8	FT12-26
2"	1 1/2	5/16-18	1 1/8	FT16-18
			1 3/8	FT16-22
			1 5/8	FT16-26

Male Tapered Interlocks – MT (Round)

O.D. +.0000 -.0005	I.D. +.0000 -.0002	L	TAP SIZE	M +.010 +.015	ITEM NUMBER
1/2	5/16	1/4	10-24	11/16	MT04-11
				7/8	MT04-14
				1 3/16	MT04-19
				1 3/8	MT04-22
3/4	1/2	9/32	1/4-20	11/16	MT06-11
				7/8	MT06-14
				1 3/16	MT06-19
				1 3/8	MT06-22
1"	5/8	11/32	1/4-20	11/16	MT08-11
				7/8	MT08-14
				1 3/16	MT08-19
				1 3/8	MT08-22
1 1/2	1"	1/2	5/16-18	1 1/8	MT12-18
				1 3/8	MT12-22
				1 5/8	MT12-26
2"	1 1/2	1/2	5/16-18	1 1/8	MT16-18
				1 3/8	MT16-22
				1 5/8	MT16-26

Shoulder Plates – SP *(Must be ordered separately)*

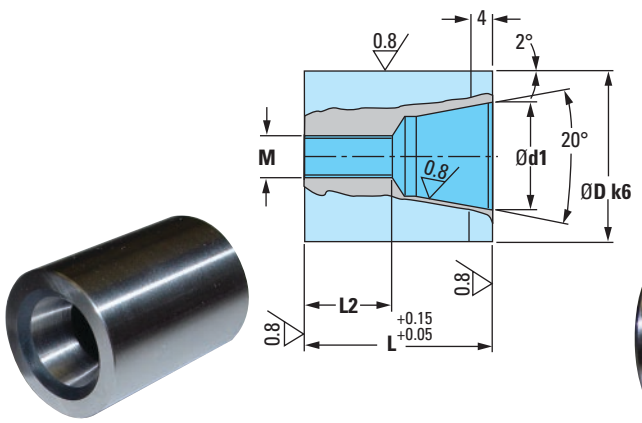
MALE OR FEMALE O.D.	Ø H	K +.000 -.002	J	ITEM NUMBER
1/2	11/16	3/16	10-24	SP-04
3/4	1"	3/16	1/4-20	SP-06
1"	1 3/16	3/16	1/4-20	SP-08
1 1/2	1 11/16	1/4	5/16-18	SP-12
2"	2 3/16	1/4	5/16-18	SP-16



DRILLED & COUNTERSUNK FOR FLAT HEAD SCREW .50 LONG (INCLUDED)

Tapered Interlocks (Round) – Metric

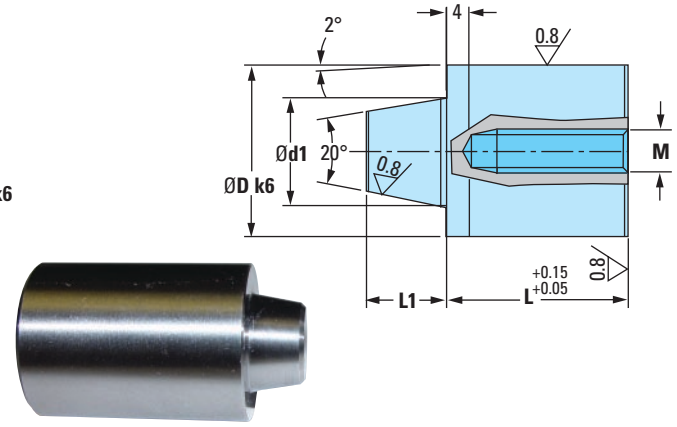
Tapered Interlocks – FT



Material: DIN 1.7131 58-62 HRC

REF	L	M	d1	D	d2
FT 12-15	15	M5	7	12	7
FT 20-21	21	M6	13	20	9
FT 20-31	31				19
FT 25-21	21	M6	16	25	8
FT 25-31	31				18
FT 25-41	41				28
FT 32-30	30	M8	20	32	14
FT 32-50	50				34
FT 42-30	30	M8	30	42	12
FT 42-50	50				32

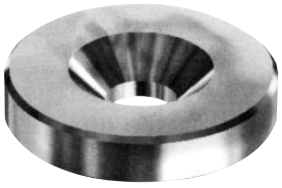
Tapered Interlocks – MT

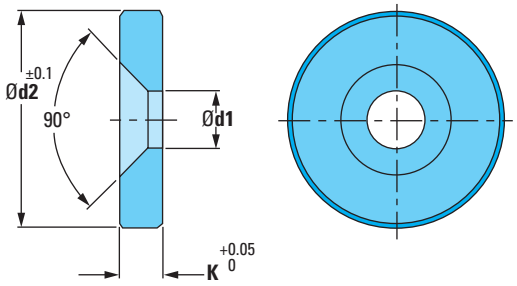


Material: DIN 1.7131 58-62 HRC

REF	L	L1	M	d1	D
MT 12-15	15	7	M5	7	12
MT 20-21	21	11	M6	13	20
MT 20-31	31				
MT 25-21	21	12	M6	16	25
MT 25-31	31				
MT 25-41	41				
MT 32-30	30	15	M8	20	32
MT 32-50	50				
MT 42-30	30	17	M8	30	42
MT 42-50	50				

Shoulder Plates for Tapered Interlocks – AGS



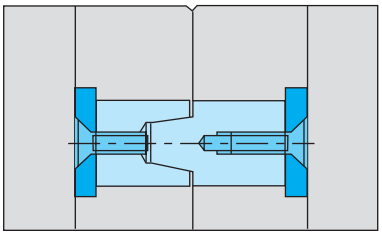


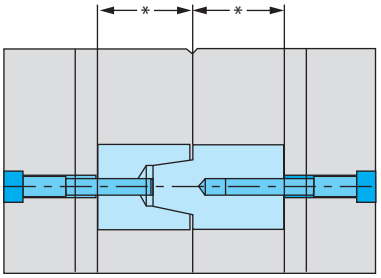
Material: DIN 1.7131 58-62 HRC

REF	d1	d2	$K^{+0.05}_{0}$	FOR
AGS 12	5.5	16	5	FT12 MT12
AGS 20	6.6	25		FT20 MT20
AGS 25	6.6	30		FT25 MT25
AGS 32	9	37	6	FT32 MT32
AGS 42	9	47		FT42 MT42

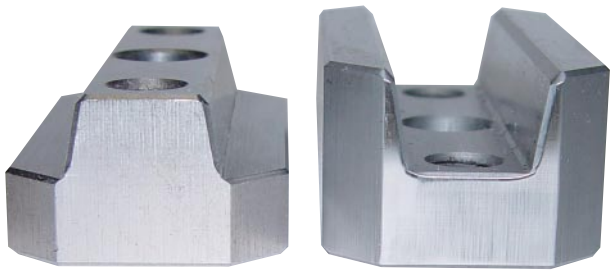
AGS: Typical Application

***Measure actual height of assembled pair FT + MT and mill counterbore accordingly.**



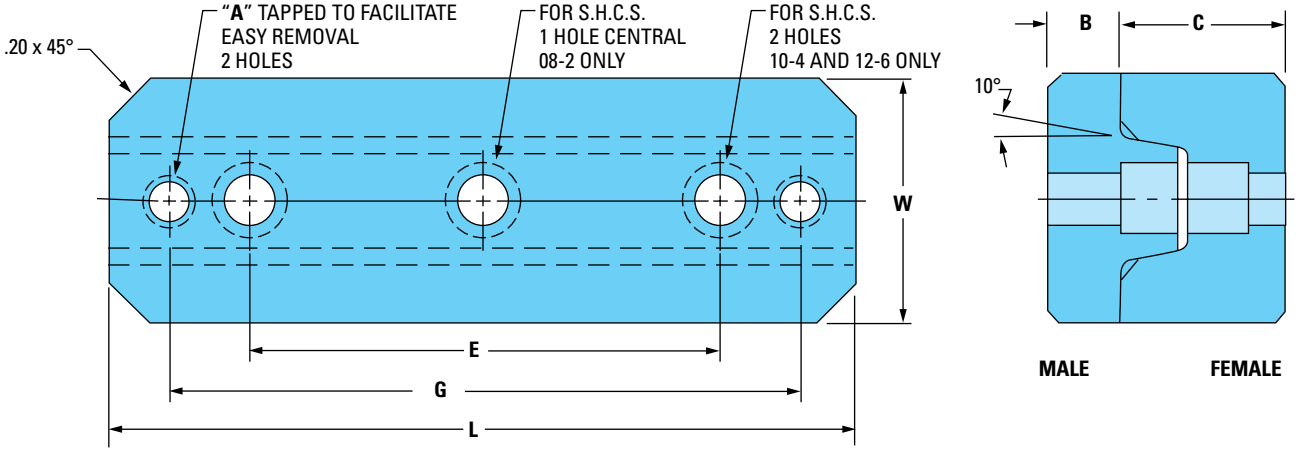


Tapered Interlocks (Rectangular)



D-M-E Standard Rectangular Tapered Interlocks provide positive, metal-to-metal alignment between mold or die halves, between plates or between individual cavities and cores. These Tapered Interlocks will maintain proper alignment while permitting thermal expansion between the mold or die halves. Mating sets are mounted in-line and/or perpendicular to one another (never parallel).

D-M-E Rectangular Tapered Interlocks are made of shock-resisting S-7 tool steel, and are hardened and ground to precision tolerances, which permit interchangeability.



Male Tapered Interlocks – MTR (Rectangular)

E ±.005	L ±.010	W +.000 -.001	B ±.005	A	G	USES S.H.C.S.	ITEM NUMBER
—	1.980	.999	.312	1/4-20	1.50	NO. 10-24	MTR-08-2
2.500	3.980	1.249	.375	1/4-20	3.38	1/4-20	MTR-10-4
4.000	5.980	1.499	.500	5/16-18	5.25	5/16-18	MTR-12-6

Female Tapered Interlocks – FTR (Rectangular)

E ±.005	L ±.010	W +.000 -.001	C ±.005	A	G	USES S.H.C.S.	ITEM NUMBER
—	1.980	.999	.69	1/4-20	1.50	NO. 10-24	FTR-08-2
2.500	3.980	1.249	.87	1/4-20	3.38	1/4-20	FTR-10-4
4.000	5.980	1.499	1.00	5/16-18	5.25	5/16-18	FTR-12-6

NOTE: Male and female lengths must match.

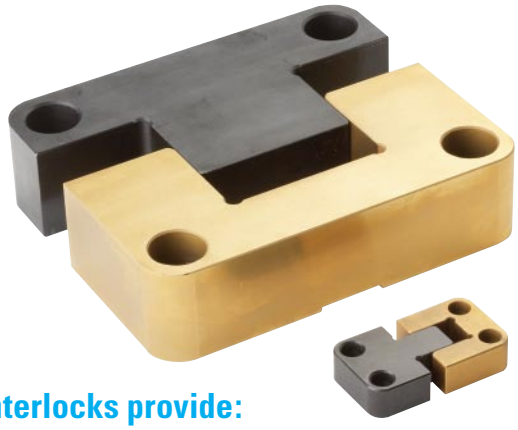
Installation Guidelines

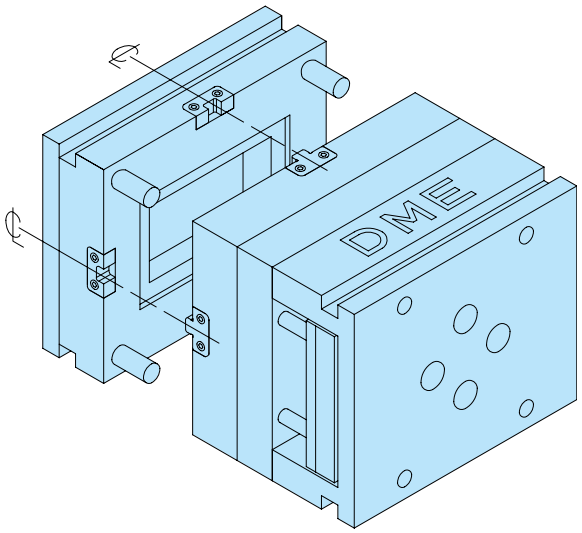
Each mounting pocket must be accurately aligned with the pocket for the mating interlock in the other half of the mold or die. The width of each pocket serves as a precision keyway to maintain the steadfast position of each interlock.

Each pocket must be flat and parallel to the parting line. The mating interlocks should be fitted with a slight preload to ensure metal-to-metal engagement.

The pocket lengths should be long enough to provide clearance.

Black and Gold Side Interlocks



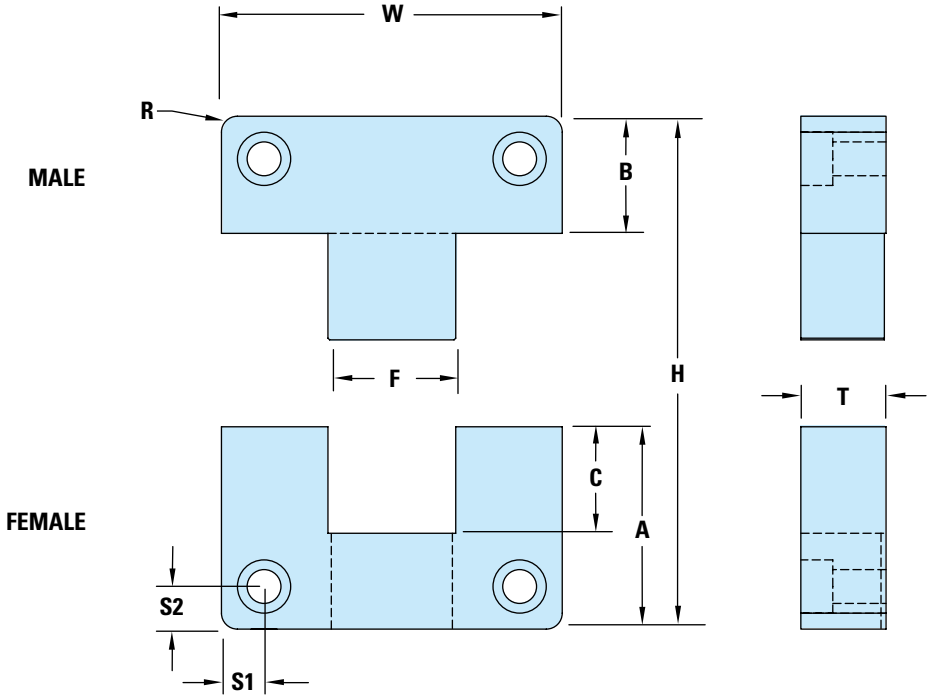


D-M-E Side Interlocks provide:

- Accurate alignment of mold halves
- Easy installation
- Industry-compatible sizes

Installation

- Install four (4) Side Interlocks per mold (one per side)
- Install Side Interlocks on the Center Line of each side of the mold

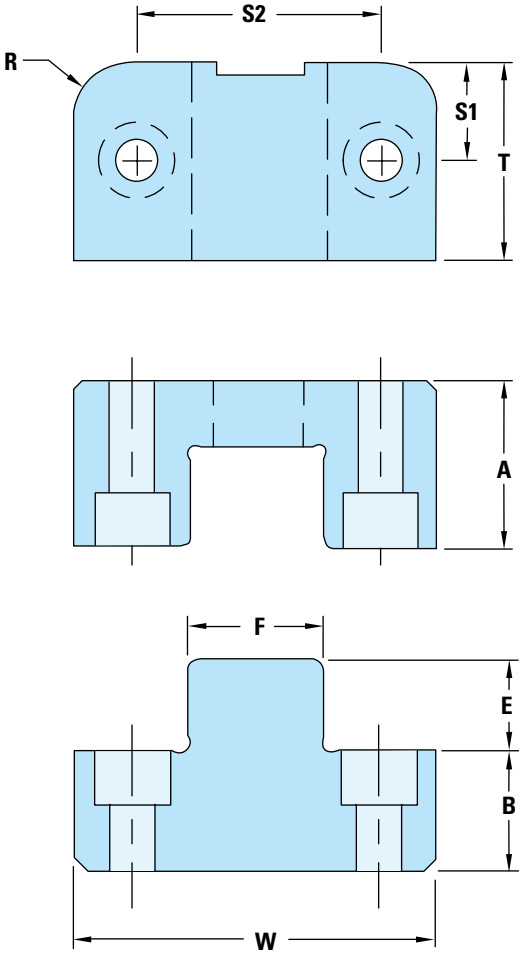


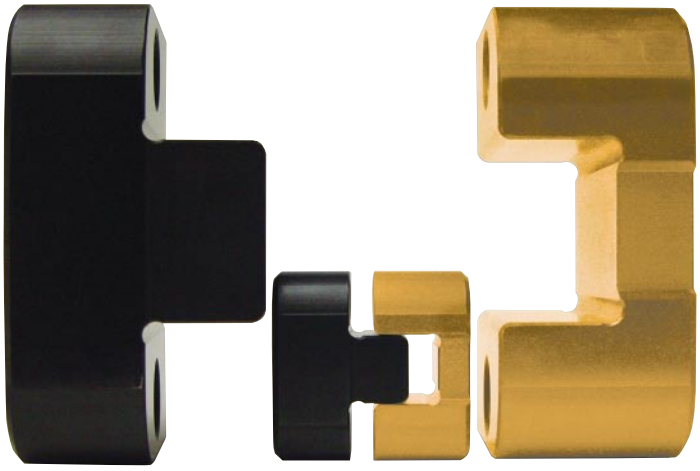
Black and Gold Side Interlocks – BGS

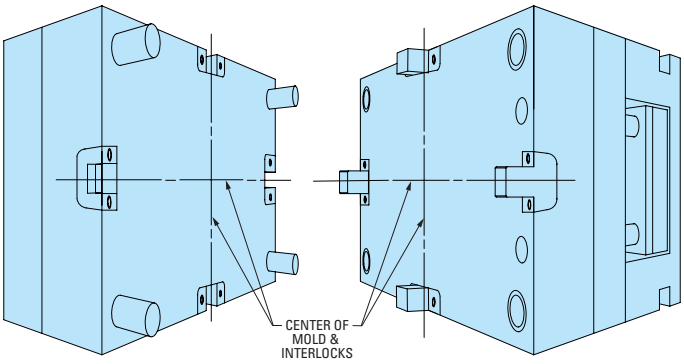
Female Interlock – Material: AISI 8620 Steel **Heat Treat:** Core Hardened to 58-62 HRC **Surface Treatment:** Tin – Tinanium Nitride Coated
Male Interlock – Material: AISI H-13 Steel **Heat Treat:** 40-44 HRC **Surface Treatment:** Melonited (SBN)

ITEM NUMBER	W +.000 -.004	A +.000 -.002	B +.000 -.002	E	F .0001 / .0002 CLEARANCE PER SIDE	T +.000 -.002	R POCKET RADIUS	S ±.01	SHCS SIZE
BGS1500	1.500	.875	.875	.56	.563	.500	.187	.250	#8-32 x 5/8"
BGS2000	2.000	1.375	.875	.66	.750	.500	.187	.312	#10-32 x 5/8"
BGS3000	3.000	1.875	.875	1.13	1.50	.750	.250	.375	1/4-20 x 3/4"
BGS4000	4.000	2.375	1.375	1.25	1.500	1.000	.500	.500	3/8-16 x 1"
BGS5000	5.000	2.875	1.375	1.63	2.000	1.250	.500	.625	1/2-13 x 1-1/4"

Black and Gold Top Interlocks







D-M-E Top Interlocks provide:

- Accurate alignment of mold halves
- Easy installation
- Industry-compatible sizes

Installation

- Install four (4) Top Interlocks per mold (one per side)
- Install Top Interlocks on the Center Line of each side of the mold

Black and Gold Top Interlocks – BGT

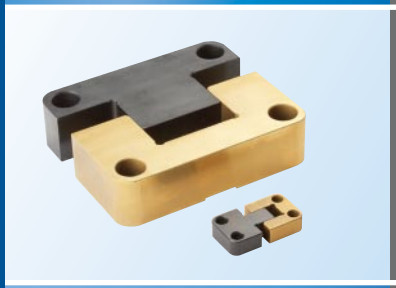
Female Interlock – Material: AISI 8620 Steel **Heat Treat:** Core Hardened to 58-62 HRC **Surface Treatment:** Tin – Tinanium Nitride Coated
Male Interlock – Material: AISI H-13 Steel **Heat Treat:** 40-44 HRC **Surface Treatment:** Melonited (SBN)

ITEM NUMBER	W +.000 -.002	A +.000 -.002	B +.000 -.002	E ±.01	F .0001 / .0002 CLEARANCE PER SIDE	T +.000 -.002	R POCKET RADIUS	S1 ±.01	S2 ±.01	SHCS SIZES
BGT1250	1.250	.625	.500	.41	.438	.625	.250	.312	.875	M: #6-32 x 5/8" F: #6-32 x 3/4"
BGT1500	1.500	.875	.750	.53	.500	.875	.250	.437	1.000	M: #8-32 x 7/8" F: #8-32 x 1"
BGT2000	2.000	1.125	.750	.66	.750	.750	.375	1.000	1.375	M: #10-32 x 1" F: #10-32 x 1-1/8"
BGT3000	3.000	1.500	.750	.78	1.125	1.125	.500	.562	2.250	M: 1/4-20 x 7/8" F: 1/4-20 x 1-5/8"
BGT3000S	3.000	1.250	.875	.75	1.125	1.750	.500	.875	2.250	M: 5/16-18 x 1" F: 5/16-18 x 1-1/4"

D-M-E Interlocks Provides Perfect Alignment For Long Mold Life



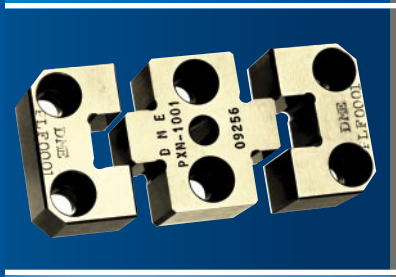
IN2 Interlocks



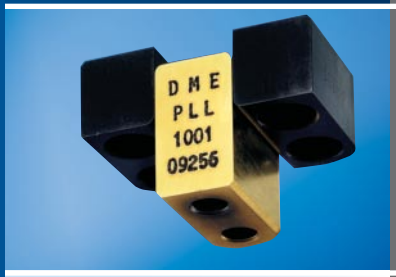
Black and Gold Side Interlocks



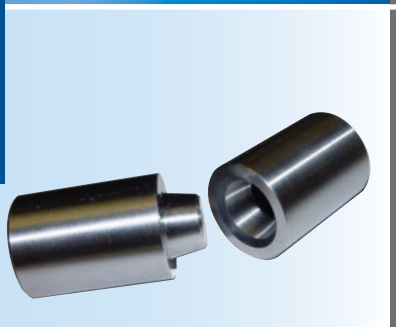
Straight-Side Interlocks



X-Style Straight-Side Interlocks



Parting Line Interlocks



Tapered Interlocks

Accurate, reliable plate control is a key to long mold life. D-M-E plate control components provide critical control of alignment and enable smooth, repeatable mold action. Our extensive line of mold interlocks provides accurate alignment of mold halves and offer precise dimensional and geometrical tolerances.

IN2 Side Interlocks with Interchangeable Inserts
Replace only the wear surface of IN2 Interlocks. There's no need to replace the entire interlock set. It's easy and cost-effective maintenance that improves efficiency.

Black and Gold Top Interlocks and Side Interlocks
Available in five sizes, these interlocks are economical and easy to install.

Straight-Side Interlocks
A long-standing favorite of molders worldwide, D-M-E Straight-Side Interlocks, when used on all four sides of the centerline, eliminate heat expansion issues.

X-Style Straight-Side Interlocks
When your mold has two parting line openings, X-Style Straight-Side Interlocks provide positive alignment between three adjacent plates.

Parting Line Interlocks
Available as a set or individual components, D-M-E Parting Line Interlocks enable all machining to be done from the parting line to save set-up time and costs.

Tapered Interlocks
Available in round and rectangular styles, D-M-E Tapered Interlocks provide positive, metal-to-metal alignment between mold or die halves, plates or individual cavities and cores.

D-M-E Cavity and Core Components

Comprehensive line of space-saving mold components



D-M-E
Every step of the way

Cavity and Core Components

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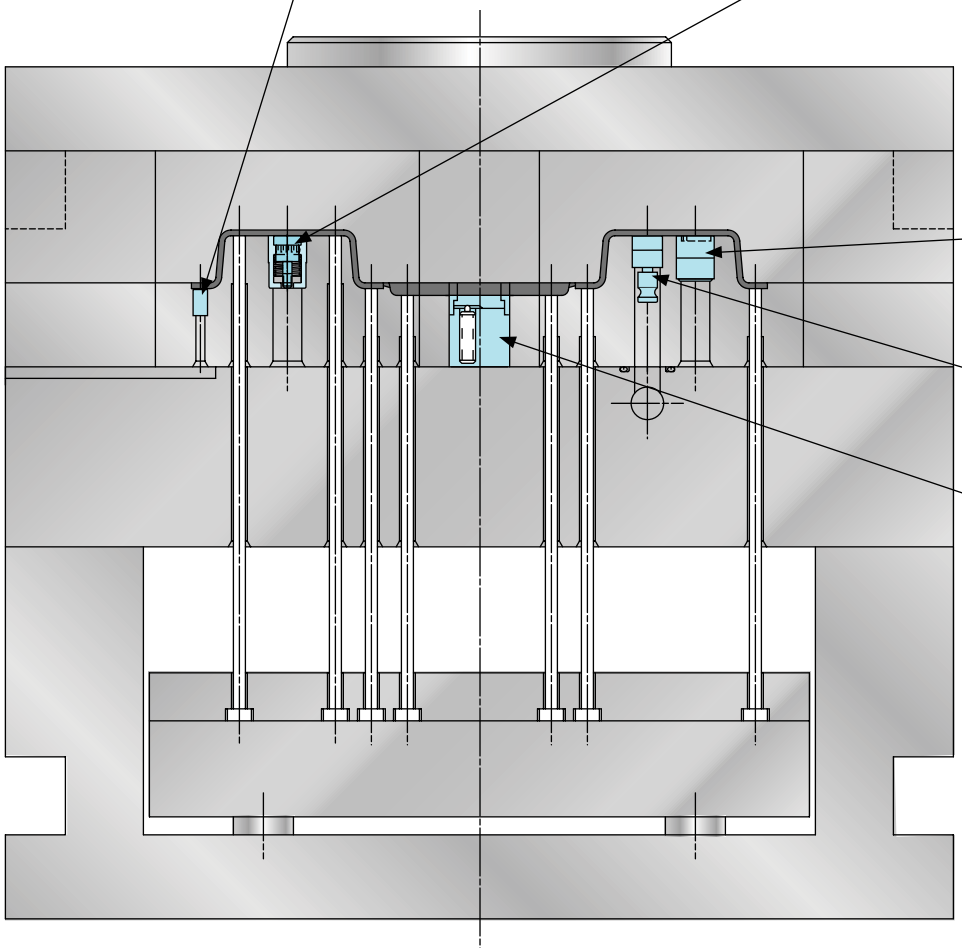
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Online Price Guide

Go to www.dme.net/prices for the latest pricing guide.

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Mold Dating Insert Family

Features and Benefits of Mold Dating Inserts

Dual-Ring Mold Dating Insert

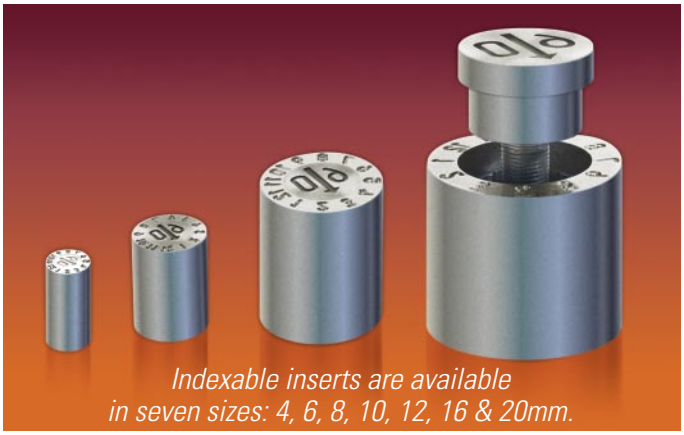
- Double indexable: both arrows independently "click into position"
- All inserts remain flush when rotated



Dual-Ring Mold Dating Insert

Indexable Mold Dating Inserts

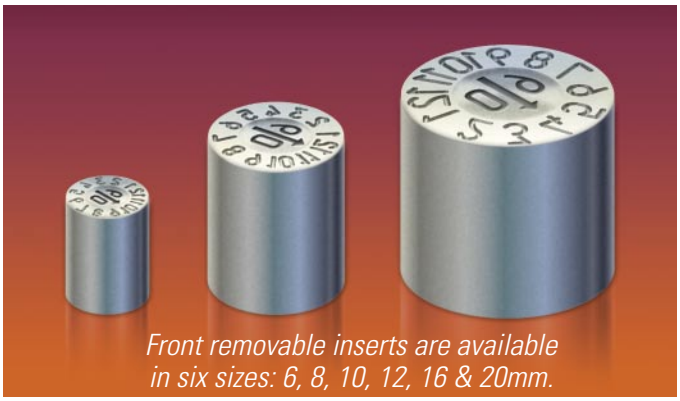
- Provides indexable snap-in-place alignment of arrow
- Unique design keeps inner insert flush for three full turns
- 4mm diameter available in Indexable Insert only



Indexable inserts are available in seven sizes: 4, 6, 8, 10, 12, 16 & 20mm.

Indexable Inserts and Front Removable Inserts

- Provides product traceability required in part quality programs
- Allows placement of year, month, day, shift or numerals (0-9) on part for batch identification or product quality control
- Easily adjustable inner insert is removable using a screwdriver
- Date-sensitive inner inserts can be changed at the parting line without removing outer insert from the mold
- Offers a broad variety of insert dating combinations
- Available in 6mm, 8mm, 10mm, 12mm, 16mm and 20mm diameters
- Choose from two styles to suit your application: indexable and front removable



Front removable inserts are available in six sizes: 6, 8, 10, 12, 16 & 20mm.



D-M-E family of mold dating inserts.

Dual-Ring Mold Dating Insert

Dual-Ring Mold Dating Insert Offers the Ultimate in Date Insert Flexibility

Patented Indexable Mold Date Insert Technology

The new Dual-Ring Mold Dating Insert from D-M-E features a date insert valid for six years and is based on Indexable Mold Date Insert technology.

The Dual-Ring Insert eliminates the need to install two date inserts or change the inner insert each year. This easy-to-use indexable insert provides the flexibility you need to keep your mold dating current, especially as the lifetime of molds becomes shorter.

- Outer ring: 12 months, months 1 through 12
- Inner ring: 6 years + arrow (arrow points to month)
- Center insert: arrow (points to year & adjusts position of both arrows)

Features and Benefits

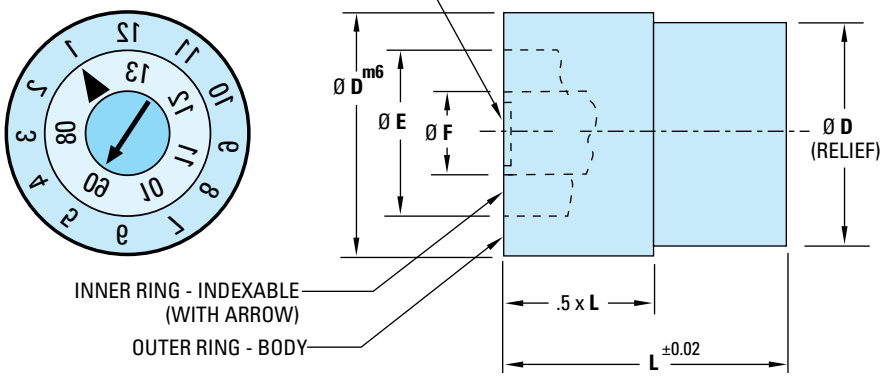
- Double indexable: both arrows independently "click into position"
- Change positions easily with only a screwdriver using arrow in inner insert
  - Turn clockwise to change "year" arrow (6 years)
  - Turn counter-clockwise to change "month" arrow (12 months)
- All inserts remain flush when rotated
- Dual-Ring Insert may be interchanged for the 10mm, 8mm to 6mm diameter Indexable and Front Removable inserts



Patent Pending

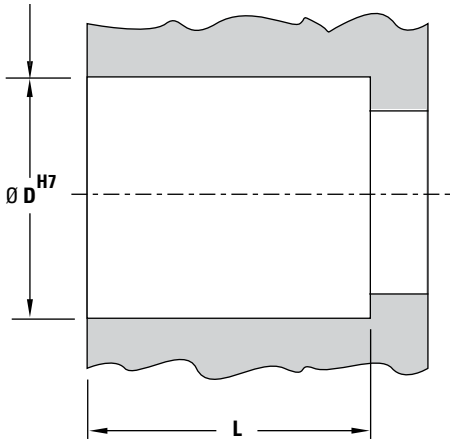
Installation and Machining

- Press-fit installation required
- Maintain a close tolerance press fit. Too loose a fit could allow the insert to move out of position, while too tight a press fit might prevent the inner insert and inner ring from rotating when required
- Accurately measure the Ø **D** for each part and machine hole to provide about 0.005mm (.0002") press fit



Ø D	TOLERANCE	
	m6	H7
10	+0.015 TO +0.006	0.000 TO -0.015
8	+0.006 TO +0.015	0.000 TO +0.015
6	+0.004 TO +0.012	0.000 TO +0.012

NOTE: Inner Insert & Inner Ring are not replaceable.



Pocket for installation
(hold pocket depth as required by the application)

INFORMATION KEY:

D = Outside Diameter
E = Outside Diameter of Inner Ring
F = Outside Diameter of Inner Insert
G = Hole Diameter
L = Length

Material: Corrosion-resistant Stainless Steel
Hardness: 53 ± 3 HRC
Max. Temp: 150°C (300°F)
Dimensions: All dimensions are in mm, except as noted

Dual-Ring Mold Dating Insert – MD Dimensions and Assembly

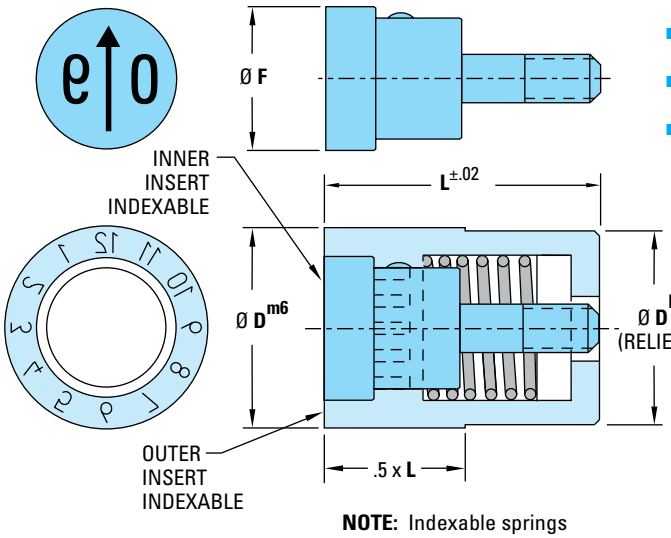
ITEM NUMBER	Ø D	Ø E	Ø F	L LENGTH
MD 10 20_*_	10	6.4	3.2	12
MD 08 20_*_	8	5.3	2.5	10
MD 06 20_*_	6	3.8	1.8	10

* When ordering, add digits of engraved year required where asterisks (_*_) are shown in item number (e.g., MD 10 20_*_: MD 10 2007; MD 10 20_*_: MD 10 2012).

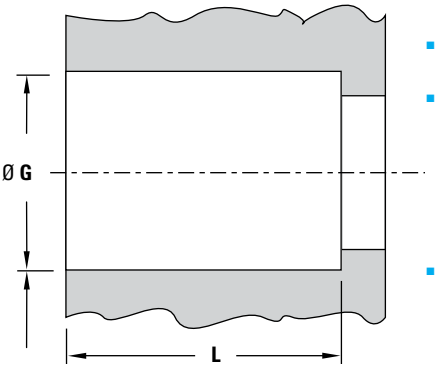
Indexable and Front Removable Mold Dating Inserts

Indexable Inserts

U.S. Patent No. 5,788,872

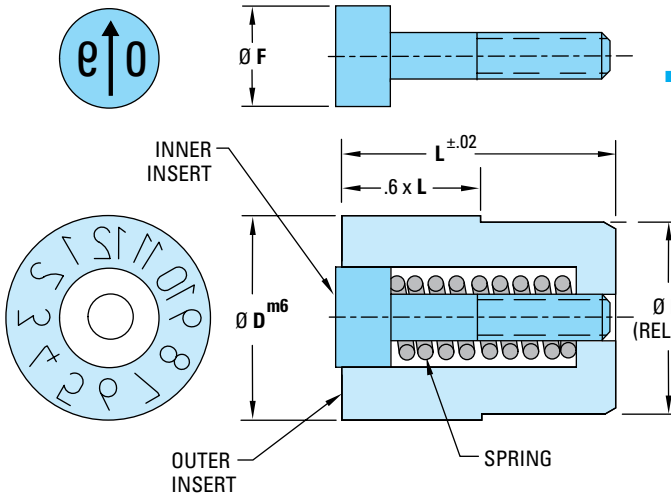


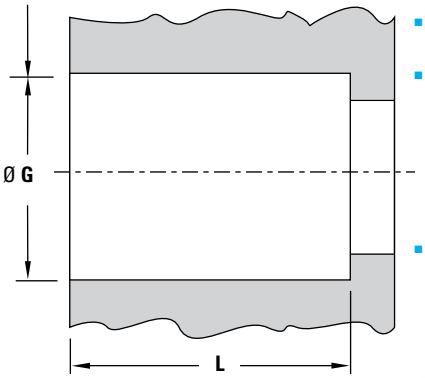
NOTE: Indexable springs are built in.



- Relief on bottom of insert will align insert into hole.
- An aluminum rod should be placed against the face of the insert with the rod larger in diameter than the Outer Insert. The aluminum rod should be tapped with a hammer to move the insert to its flush position.
- Inner insert must be flush or below flush during installation.

Front Removable Inserts





- Relief on bottom of insert will align insert into hole.
- An aluminum rod should be placed against the face of the insert with the rod larger in diameter than the Outer Insert. The aluminum rod should be tapped with a hammer to move the insert to its flush position.
- Inner insert must be flush or below flush during installation.

Features of Indexable and Front Removable Inserts

- Designed for plastics injection molds
- Maximum operating temperature is 150°C (300°F)
- Numerals are 0.2mm deep and arrow is 0.4mm deep
- Arrow is adjustment slot

Installation and Machining for Both Insert Styles

- Press-fit installation required
- Maintain a close tolerance press fit. Too loose a fit could allow the insert to move out of position, while too tight a press fit might prevent the inner insert from rotating when required
- Accurately measure the Ø **D** for each part and machine Ø **G** hole to provide about 0.005mm (.0002") press fit

Dimensions and Tolerances of Indexable and Front Removable Inserts

INFORMATION KEY:
D = Outside Diameter of Outer Insert
F = Outside Diameter of Inner Insert
G = Hole Diameter
L = Length
Material: Stainless Steel
Hardness: 50-55 HRC
Max. Temp: 150°C (300°F)
Dimensions: All dimensions are in mm, except as noted

Ø D	TOLERANCE		L	Ø F INDEXABLE INDEX	Ø F FRONT REMOVABLE
	m6	h7			
4	+0.012 TO +0.004	0 TO -0.012	8	2.4	—
6	+0.012 TO +0.004	0 TO -0.012	8	3.7	3.1
8	+0.015 TO +0.006	0 TO -0.015	10	5.0	4.4
10	+0.015 TO +0.006	0 TO -0.015	12	6.3	5.2
12	+0.018 TO +0.007	0 TO -0.018	14	7.5	6.2
16	+0.018 TO +0.007	0 TO -0.018	14	11.0	8.2
20	+0.021 TO +0.008	0 TO -0.021	16	13.2	11

All dimensions and tolerances are in mm.



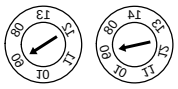
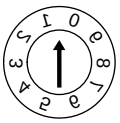
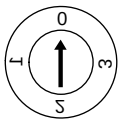
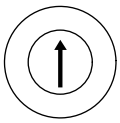
Front Removable Springs

ITEM NUMBER (PACKAGE OF 5)	Ø D
DFQ9006	6
DFQ9008	8
DFQ9010	10
DFQ9012	12
DFQ9016	16
DFQ9020	20

NOTE: Springs are for Front Removable Inserts only.

Mold Dating Inserts – Ordering Information

Complete Assemblies

DESCRIPTION	Ø D (MM)	ITEM NUMBER INDEXABLE	ITEM NUMBER FRONT REMOVABLE
 Month (outer), Year and Arrow (inner)	4	UYM_*_04	—
	6	UYM_*_06	FYM_*_06
	8	UYM_*_08	FYM_*_08
	10	UYM_*_10	FYM_*_10
	12	UYM_*_12	FYM_*_12
	16	UYM_*_16	FYM_*_16
	20	UYM_*_20	FYM_*_20
 Month (outer), Arrow (inner)	4	UOM0004	—
	6	UOM0006	FOM0006
	8	UOM0008	FOM0008
	10	UOM0010	FOM0010
	12	UOM0012	FOM0012
	16	UOM0016	FOM0016
	20	UOM0020	FOM0020
Indexable Front Removable  (6) Years (7) Years (outer), Arrows (inner)	4	UOY_*_04	—
	6	UOY_*_06	FOY_*_06
	8	UOY_*_08	FOY_*_08
	10	UOY_*_10	FOY_*_10
	12	UOY_*_12	FOY_*_12
	16	UOY_*_16	FOY_*_16
	20	UOY_*_20	FOY_*_20
 Day (outer), Arrow (inner)	12	—	FOD0012
	16	UOD0016	FOD0016
	20	UOD0020	FOD0020
 "Numerals" 0 thru 9 (outer) Arrow (inner)	4	UOR0004	—
	6	UOR0006	FOR0006
	8	UOR0008	FOR0008
	10	UOR0010	FOR0010
	12	UOR0012	FOR0012
	16	UOR0016	FOR0016
	20	UOR0020	FOR0020
 "Shift" (outer), Arrow (inner)	4	UOS0004	—
	6	UOS0006	FOS0006
	8	UOS0008	FOS0008
	10	UOS0010	FOS0010
	12	UOS0012	FOS0012
	16	UOS0016	FOS0016
	20	UOS0020	FOS0020
 Blank (outer), Arrow (inner)	4	UOB0004	—
	6	UOB0006	FOB0006
	8	UOB0008	FOB0008
	10	UOB0010	FOB0010
	12	UOB0012	FOB0012
	16	UOB0016	FOB0016
	20	UOB0020	FOB0020

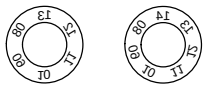
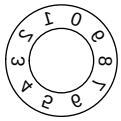
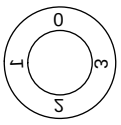
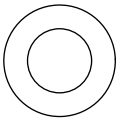
NOTES:

1. When ordering date-sensitive assemblies, add digits of engraved year requested where asterisks (*) are shown in item number (e.g., UUY0916).
2. Availability of year-sensitive items will vary during last quarter of each calendar year. Order next year's Mold Dating Inserts during October to beat the rush.

Inner Inserts

DESCRIPTION	Ø D (MM)	ITEM NUMBER INDEXABLE	ITEM NUMBER FRONT REMOVABLE
 Year and Arrow	4	YUU_*_04	—
	6	YUU_*_06	YON_*_06
	8	YUU_*_08	YON_*_08
	10	YUU_*_10	YON_*_10
	12	YUU_*_12	YON_*_12
	16	YUU_*_16	YON_*_16
	20	YUU_*_20	YON_*_20
 Arrow	4	OUU0004	—
	6	OUU0006	OON0006
	8	OUU0008	OON0008
	10	OUU0010	OON0010
	12	OUU0012	OON0012
	16	OUU0016	OON0016
	20	OUU0020	OON0020

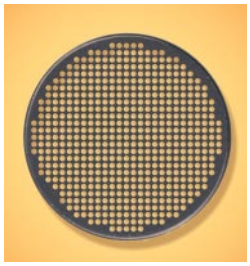
Outer Inserts

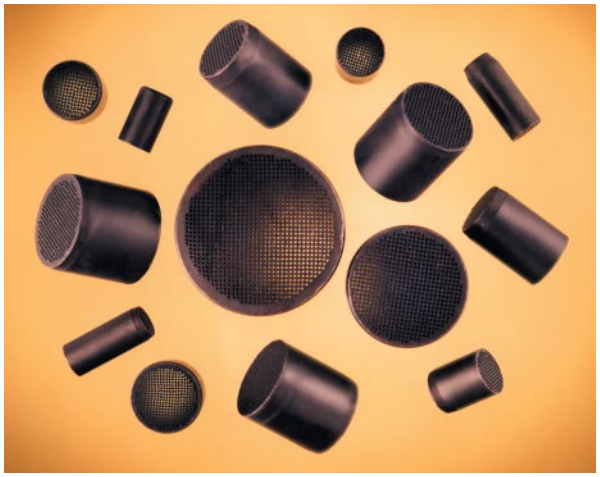
DESCRIPTION	Ø D (MM)	ITEM NUMBER INDEXABLE	ITEM NUMBER FRONT REMOVABLE
 Month (1 thru 12)	4	UUM0004	—
	6	UUM0006	OOM0006
	8	UUM0008	OOM0008
	10	UUM0010	OOM0010
	12	UUM0012	OOM0012
	16	UUM0016	OOM0016
	20	UUM0020	OOM0020
Indexable Front Removable  (6) Years (7)	4	UUY_*_04	—
	6	UUY_*_06	OOY_*_06
	8	UUY_*_08	OOY_*_08
	10	UUY_*_10	OOY_*_10
	12	UUY_*_12	OOY_*_12
	16	UUY_*_16	OOY_*_16
	20	UUY_*_20	OOY_*_20
 Day (1 thru 31)	12	—	OOD0012
	16	UUD0016	OOD0016
	20	UUD0020	OOD0020
 "Numerals" (0 thru 9)	4	UUR0004	—
	6	UUR0006	OOR0006
	8	UUR0008	OOR0008
	10	UUR0010	OOR0010
	12	UUR0012	OOR0012
	16	UUR0016	OOR0016
	20	UUR0020	OOR0020
 "Shift" (0 thru 3)	4	UUS0004	—
	6	UUS0006	OOS0006
	8	UUS0008	OOS0008
	10	UUS0010	OOS0010
	12	UUS0012	OOS0012
	16	UUS0016	OOS0016
	20	UUS0020	OOS0020
 Blank	4	UUB0004	—
	6	UUB0006	OOB0006
	8	UUB0008	OOB0008
	10	UUB0010	OOB0010
	12	UUB0012	OOB0012
	16	UUB0016	OOB0016
	20	UUB0020	OOB0020

Sintered Vents – For Plastics Injection Molding

Features and Benefits of Sintered Vents – USV

- Venting of air or gas reduces occurrence of short shots and burned parts
- Self-contained standardized vents save time in design, installation and maintenance
- Wide variety of off-the-shelf standard sizes available
- Fast and easy replacement or cleaning of sintered vents improves productivity
- Field tested to ensure product reliability





Sintered vents are a unique venting plug composed of a large number of straight, parallel and uniform pores made through a powdered metallurgy process. The pores allow trapped air or gas to escape from the mold cavity during the injection molding or die casting process, thereby reducing the occurrence of defective parts.

Application Recommendations

Plastics injection molding

A 0.03mm vent diameter should be used with polymers such as polyethylene or polypropylene. Use a vent with a pore diameter of 0.05mm for low-flow polymers such as polycarbonate, nylon, or ABS. When molding highly viscous material (very low-flow properties), use a vent with a 0.10mm pore diameter.

Stainless Steel sintered vents are recommended for plastic materials that are particularly gaseous or corrosive, such as PVC. Stainless Steel sintered vents are also recommended for plastic materials containing flame-retardants.

SINTERED VENTS FOR PLASTICS INJECTION MOLDING APPLICATIONS
VENT MATERIAL: STAINLESS STEEL

VENT TYPE	ITEM NUMBER	OUTSIDE DIA (MM)	FULL LENGTH (MM)	NO. OF PORES	PORE DIA (MM)	POROSITY % OF EFFECTIVE DIA	EFFECTIVE DIA (MM)	EFFECTIVE LENGTH (MM)
A	USV0035	2	10	280	0.03	25	1	10
	USV0036	3	10	630	0.03	25	1.5	10
	USV0038	2	10	250	0.05	25	1.7	10
	USV0039	3	10	400	0.05	25	2	10
	USV0040	4	10	400	0.05	25	2	10
B	USV0041	6	10	400	0.05	25	2	3
	USV0042	8	10	1600	0.05	25	4	3
	USV0043	10	10	3600	0.05	25	6	3
	USV0044	12	10	6400	0.05	25	8	3
	USV0045	15	10	10000	0.05	25	10	4
	USV0046	5	10	76	0.10	19	2	3
	USV0047	6	10	76	0.10	19	2	3
	USV0048	8	10	300	0.10	19	4	3
	USV0049	10	10	690	0.10	19	6	3
	USV0050	12	10	1200	0.10	19	8	3

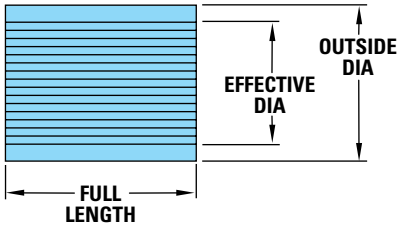
SINTERED VENTS FOR PLASTICS INJECTION MOLDING APPLICATIONS
VENT MATERIAL: IRON ALLOY

VENT TYPE	ITEM NUMBER	OUTSIDE DIA (MM)	FULL LENGTH (MM)	NO. OF PORES	PORE DIA (MM)	POROSITY % OF EFFECTIVE DIA	EFFECTIVE DIA (MM)	EFFECTIVE LENGTH (MM)
B	USV0027	10	10	880	0.10	29	5.5	5
	USV0028	8	10	880	0.10	29	5.5	5
	USV0029	10	10	880	0.05	18	3.5	5
	USV0030	8	10	880	0.05	18	3.5	5
	USV0031	6	10	880	0.05	18	3.5	5
	USV0032	10	10	880	0.03	13	2.5	5
	USV0033	8	10	880	0.03	13	2.5	5
	USV0034	6	10	880	0.03	13	2.5	5

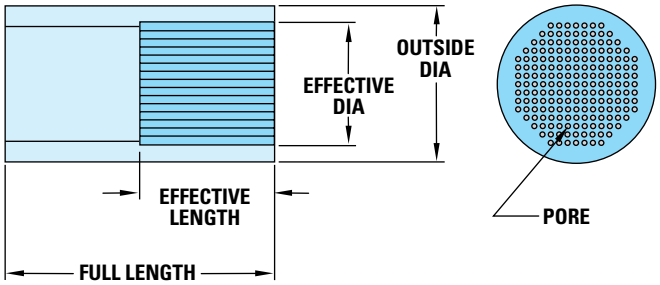
All dimensions and tolerances are in mm.

Sintered Vents – For Gravity & Low-Pressure Diecasting

Vent Type "A"



Vent Type "B"



Application Recommendations

Gravity and Low-Pressure Diecasting

Die casters should use vents with pore diameters of 0.5mm, 0.3mm, or 0.2mm, depending on pressure.

Installation Information for All Sintered Vents

- The recommended press-fit is 0.01 to 0.02mm for outside diameters of 10mm or less, and 0.015mm to 0.035mm for outside diameters over 10mm
- Use a plastic or wooden hammer for installation. Do not tap the pore surface of the sintered vent with a metallic or hard tool. The use of hard tools will result in clogging or chipping of the vents
- Do not grind, machine, or cut the pore surfaces

Ultrasonic Cleaning

- Use ultrasonic cleaning to periodically clean pores in the sintered vents, as required

SINTERED VENTS FOR GRAVITY AND LOW-PRESSURE DIECASTING APPLICATIONS
VENT MATERIAL: IRON ALLOY

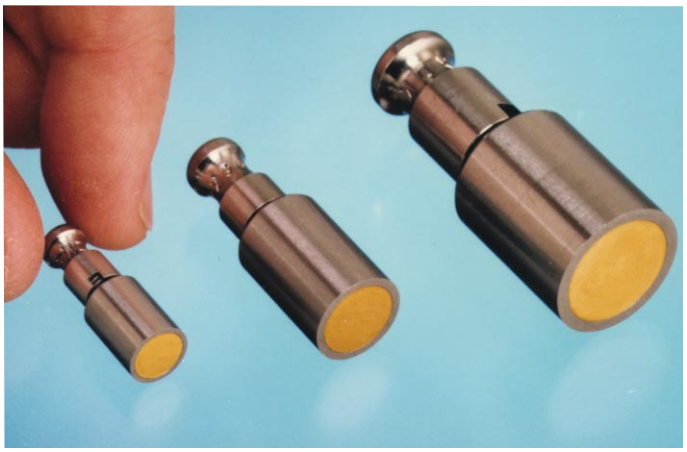
VENT TYPE	ITEM NUMBER	OUTSIDE DIA (MM)	FULL LENGTH (MM)	NO. OF PORES	PORE DIA (MM)	POROSITY %
A	USV0001	4	10	39	0.5	55
	USV0002	6	10	61	0.5	40
	USV0003	6	15	61	0.5	40
	USV0004	8	10	89	0.5	35
	USV0005	8	15	89	0.5	35
	USV0006	10	10	200	0.5	34
	USV0007	10	15	200	0.5	34
	USV0008	12	10	200	0.5	31
	USV0009	12	15	200	0.5	31
	USV0010	14	15	340	0.5	35
	USV0011	16	15	340	0.5	32
	USV0012	18	15	553	0.5	34
	USV0013	20	15	550	0.5	33
	USV0014	28	15	970	0.5	30
	USV0015	5	10	89	0.3	30
	USV0016	5	15	89	0.3	30
	USV0017	6	10	89	0.3	29
	USV0018	6	15	89	0.3	29
	USV0019	8	10	200	0.3	28
	USV0020	8	15	200	0.3	28
	USV0021	10	10	340	0.3	31
	USV0022	10	15	340	0.3	31
	USV0023	12	10	340	0.3	28
	USV0024	12	15	340	0.3	28
	USV0025	14	15	550	0.3	27
	USV0026	10	10	880	0.2	35

All dimensions are in mm.

Air Poppet Valves – Applications

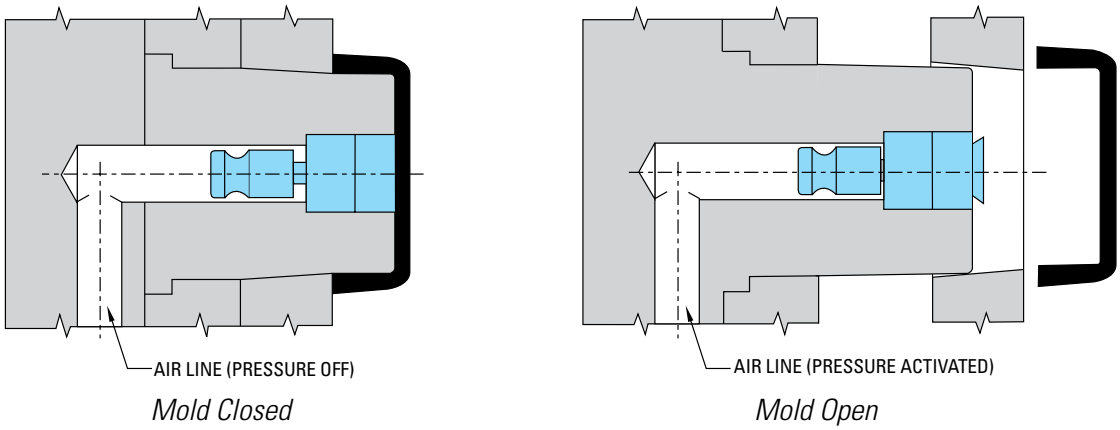
Air Poppet Valves – VA Features and Benefits

- Prevents mold damage due to ejection problems with deep-draw or thin-walled parts
- More durable and precision-made than competitive units

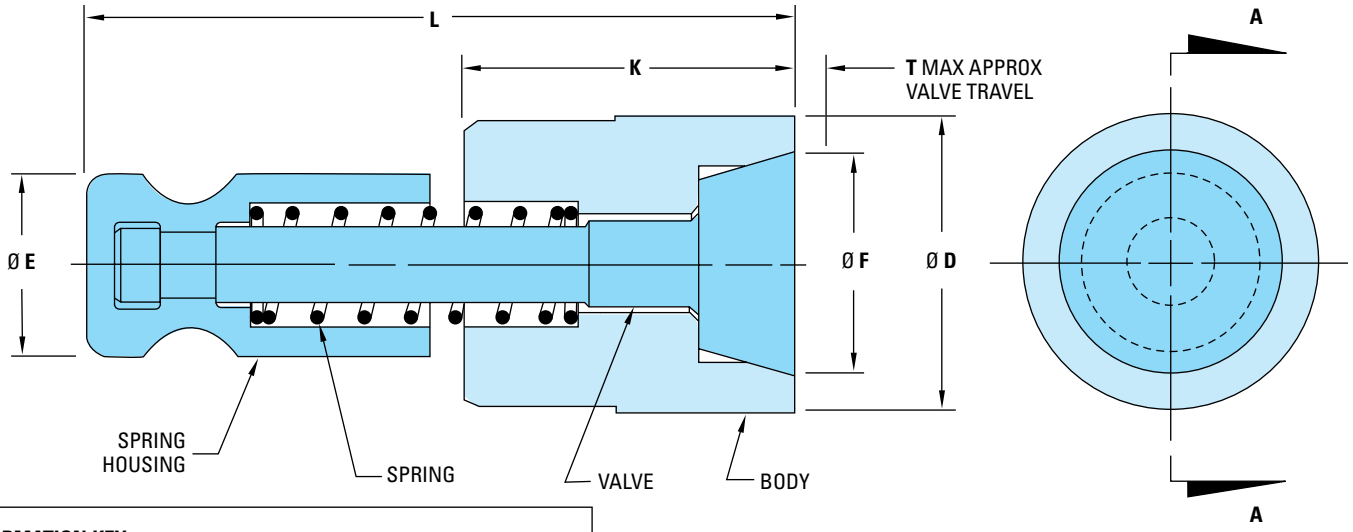


These precision-engineered valves are designed to remedy the vacuum problem often encountered during the molding of deep-draw (e.g., buckets) or thin-walled parts. Air flow, timed to coincide with the ejection cycle, opens the valve to break the vacuum and facilitate part ejection. A precision-ground valve seat helps prevent flash from entering the assembly during injection. Each valve is matched to the body to further assure reliable performance.

Typical Application



Mold Closed *Mold Open*



INFORMATION KEY:

D = Outside Diameter
E = Housing Diameter
F = Approx. Valve Diameter
G = Hole Diameter
H = Hole Diameter
K = Body Length
L = Overall Length
N = Depth
T = Max Valve Travel

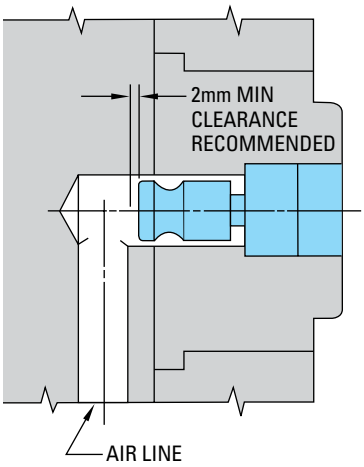
Body Material: Stainless Steel
Body Hardness: 53 ±3 HRC
Valve Material: Stainless Steel
Valve Surface Treatment: Titanium Nitrided
Max. Temp: 120°C (250°F)
Operating Air Pressure: 58 PSI min.
87 PSI max
Dimensions: All dimensions are in mm

ITEM NUMBER	Ø D	Ø F (APPROX)	K BODY LENGTH	L OVERALL LENGTH	Ø E	T MAX TRAVEL
VA 01	8	6.6	11	24	6	1.2
VA 02	12	9.7	18	34	8	1.9
VA 03	18	14.8	22	45.5	12	2.5

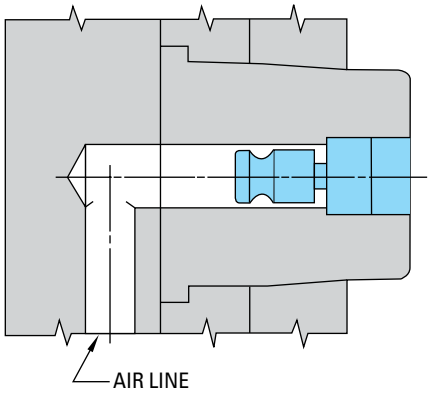
All dimensions shown are in mm.

Air Poppet Valves – Typical Installations

Typical Installations

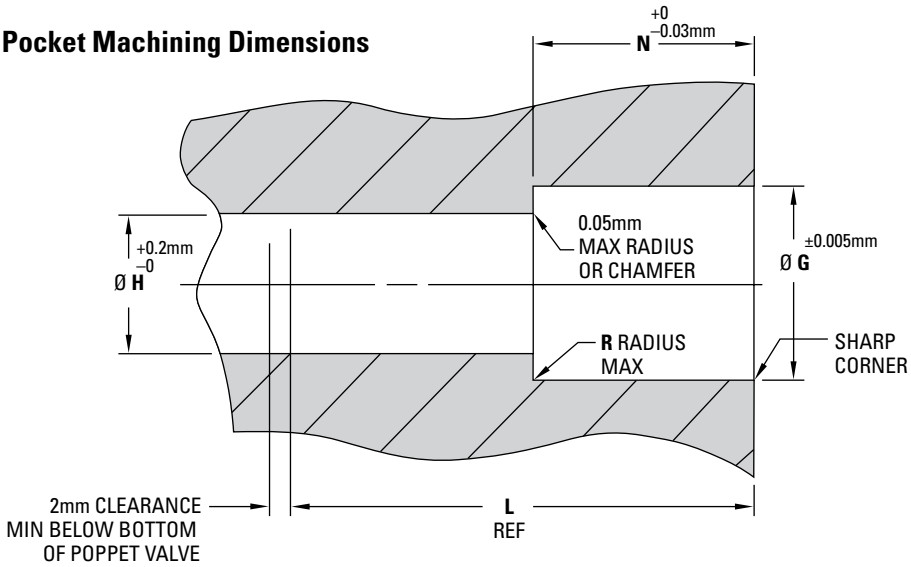


Standard 'A' Series Mold Base Installation (Ejector pins required for part ejection)



'X' Series Stripper Plate Mold Base Installation (Stripper plate required for part ejection)

Pocket Machining Dimensions



ITEM NUMBER	Ø G	N DEPTH	Ø H	R	L REF
VA 01	8	11	6.75	0.1	24
VA 02	12	18	9	0.2	34
VA 03	18	22	14	0.3	45.5

All dimensions shown are in mm.

Quantity Discounts

8 to 15 valves ..... Less 3%
16 or more valves ..... Less 5%

Discounts apply to current net prices. Sizes may be combined on one order for quantity discounts.

Installation Information

- Press-fit installation required.
- Maintain a close tolerance press fit, as specified. Too loose a fit could allow the Air Poppet Valve to move out of position, while too tight a press fit could interfere with the movement of the valve.

NOTES:

1. Pressure to air line of Air Poppet Valve and machine ejection should be activated at the same time. This allows valve to relieve negative pressure build-up (vacuum) in the cavity during part ejection.
2. The air flow to the poppet valve must be fully relieved to the atmosphere after each cycle to ensure that the poppet valve closes before the next injection cycle. Material injected into a partially open poppet valve could cause damage to the valve and/or the mold. Control valves and limit switches to be supplied by moldmaker and/or molder.
3. The Air Poppet Valve should never be used as the sole means of part ejection. Material shrinkage and other factors will not allow it to be used as an alternative to ejector pins or stripper plates.
4. Do not position Air Poppet Valve directly under hot drop.

Cashew Gate Inserts



Round Gate Insert
Round with rounded tunnel

Square Gate Insert
Square with rounded tunnel

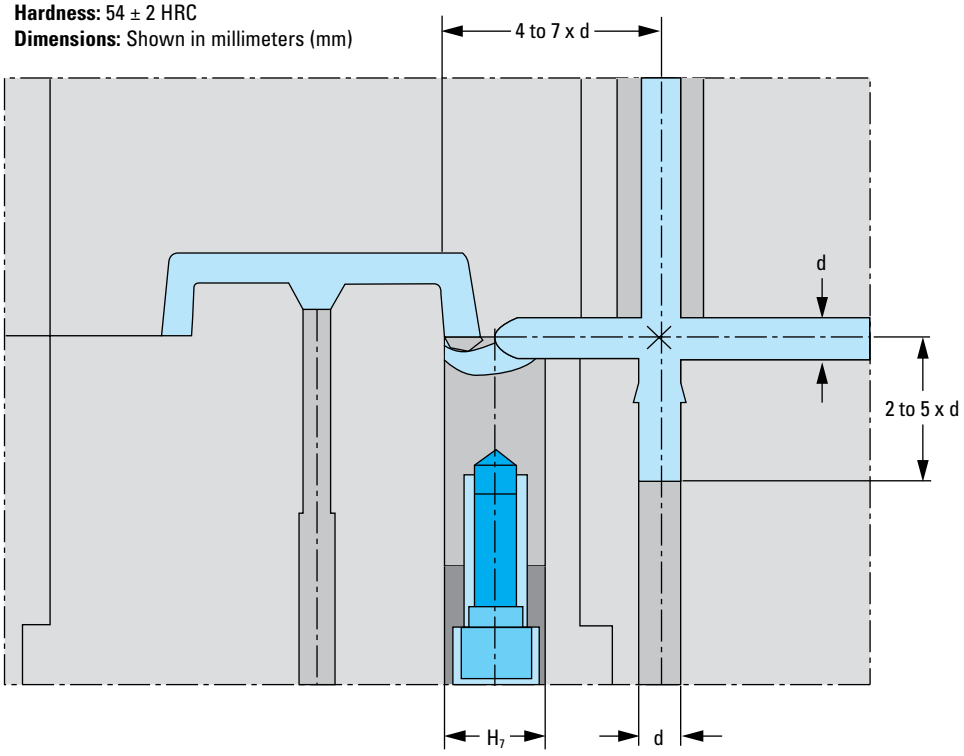
Cashew Gate Insert Benefits Include:

- Improves product surface quality
- Enables smaller diameters in the gate area
- Provides automatic separation of runner from part
- Suitable for flat or thin-walled part applications
- Available off-the-shelf to reduce mold build time and costs
- Easy to replace, allowing maximum mold uptime

Cashew Gate Features Include:

- Precision machined for accuracy
- Highly polished gate detail
- Hardened to 54 HRC for reliable performance
- Available in Round or Square insert styles
- 24 sizes to suit most applications
- Recommended for unfilled materials, including PS, PP, TPE and ABS

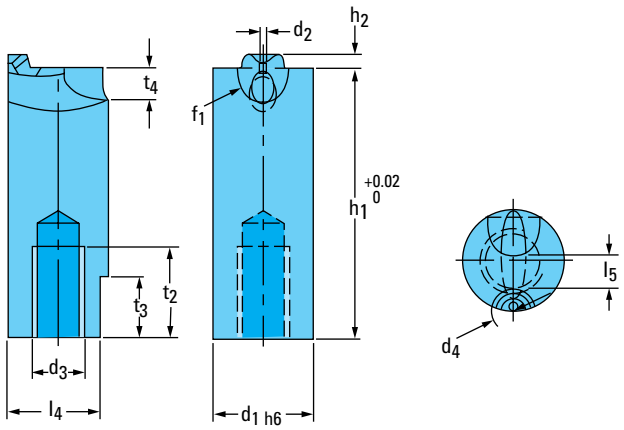
Material: 1.2767 Steel
Hardness: 54 ± 2 HRC
Dimensions: Shown in millimeters (mm)



The distance from the Sprue Puller Pin to the gate should be 4 to 7 x d depending on the viscosity of the plastic material.

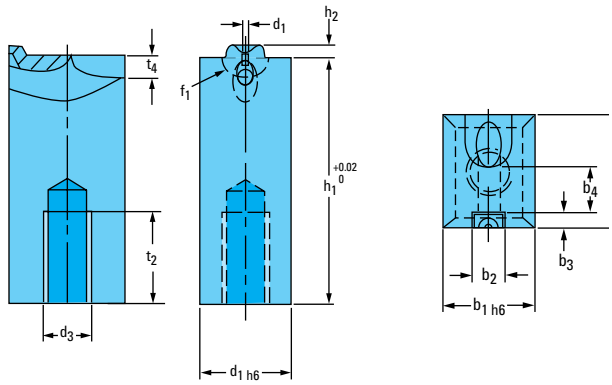
A longer guided runner (approx. length 2 to 5 x d) with retaining undercut is required for the Sprue Puller Pin.

Cashew Gate Inserts



Round Gate Insert – GIR

ITEM NUMBER	d1	h1	d2	h2	l5	l4	d4	d3	t4	t3	t2	r1
GIR061704	6	17-	0.4	0.8	2	5.5	2.6	M4	2	5	10	1.5
GIR061706	6	17-	0.6									
GIR061708	6	17-	0.8									
GIR082206	8	22-	0.6	0.8	3.5	7.5	2.8	M4	2	5	10	2
GIR082208	8	22-	0.8									
GIR082210	8	22-	1									
GIR102706	10	27-	0.6	0.8	4	9	3	M5	2.25	7	12	2.25
GIR102708	10	27-	0.8									
GIR102710	10	27-	1									
GIR122708	12	27-	0.8	0.8	4.5	11	3.5	M6	2.5	7	12	2.5
GIR122710	12	27-	1									
GIR122712	12	27-	1.2									



Square Gate Insert – GIS

ITEM NUMBER	l1	b1	h1	d1	h2	d3	b4	b3	b2	t4	t2	r1
GIS08061204	8	6	17-	0.4	0.8	M4	3.7	1.3	2.6	2	10	1.5
GIS08061706	8	6	17-	0.6								
GIS08061708	8	6	17-	0.8								
GIS10082206	10	8	22-	0.6	0.8	M4	4	1.4	2.8	2	10	2
GIS10082208	10	8	22-	0.8								
GIS10082210	10	8	22-	1								
GIS12102706	12	10	27-	0.6	0.8	M5	4.5	1.5	3	2.25	12	2.25
GIS12102708	12	10	27-	0.8								
GIS12102710	12	10	27-	1								
GIS15122708	15	12	27-	0.8	0.8	M6	5	1.75	3.5	2.5	12	2.5
GIS15122710	15	12	27-	1								
GIS15122712	15	12	27-	1.2								

Runner Shut-Off Inserts – Applications

U.S. Patent No. 5,208,053



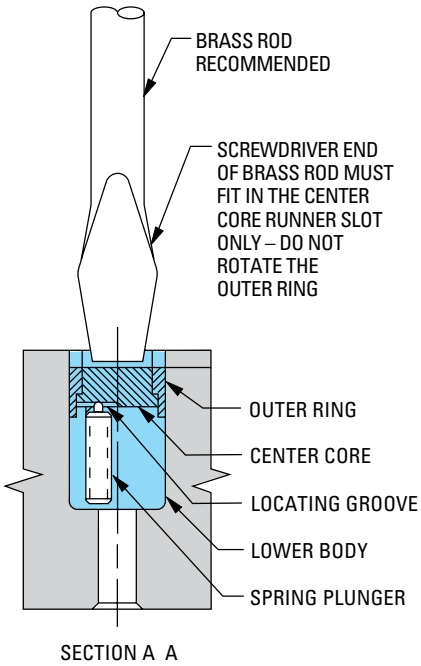
D-M-E Runner Shut-Off Inserts provide a precise method of blocking or directing material flow to one or more cavities in multi-cavity or family molds.

- Safer and more positive than the use of brass or ejector pins
- Saves material
- Reduces scrap and sorting
- Improves cycle time

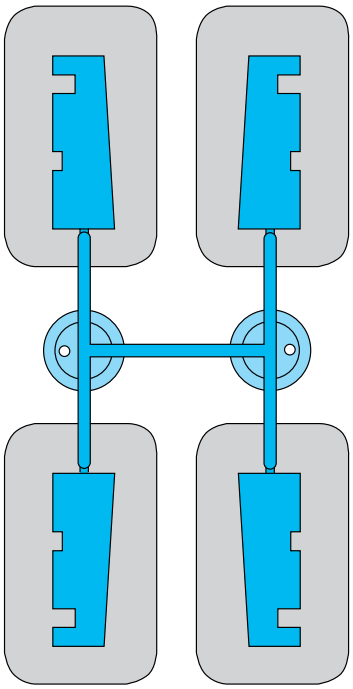
Inserts are supplied unmachined as shown in background of photo. Foreground shows sample runner machining, typically done with insert installed in mold.

Typical Applications

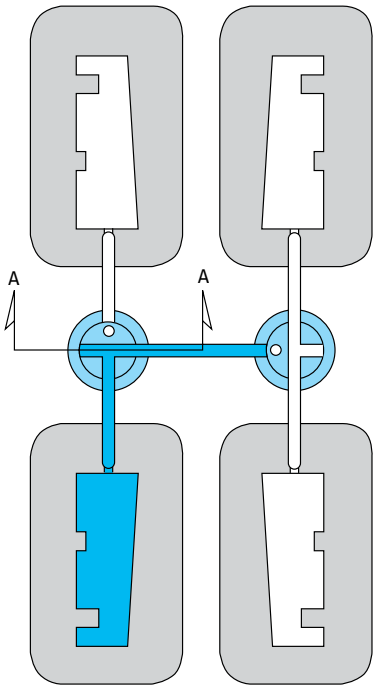
Shutting Off the Runner to One or Several Cavities



NOTE: Spring plunger in Runner Shut-Off Insert engages a locating groove in the center core. This holds the center core in position at each 90° rotation of the center core, thus providing several combinations of runner shut-off positions.



Runner Shut-Off Inserts are shown above in the open position, which allows material to flow to all cavities.



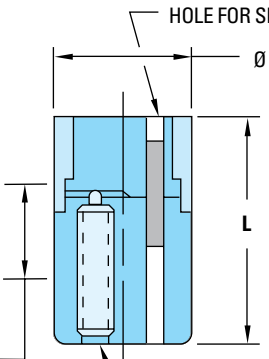
By rotating the center core of the Runner Shut-Off Insert 90° or 180° with the screwdriver end of a brass rod, material flow to one or several cavities can be shut off, as shown above.

Runner Shut-Off Inserts – MRS

ITEM NUMBER	Ø D	L LENGTH
MRS 0013	.5118 (13mm)	.885 (22.5mm)
MRS 0016	.6299 (16mm)	.885 (22.5mm)
MRS 0026	1.0236 (26mm)	1.260 (32mm)

All dimensions are in inches except for several parenthetical reference dimensions in millimeters.

INFORMATION KEY:
C = Depth of Runner
D = Diameter
L = Length
R = Radius
W = Width of Runner
Material: Stainless Steel
Hardness: 50 ± 3 HRC
Max. Temp: 120°C (250°F)
Dimensions: All dimensions are in inches, except as noted



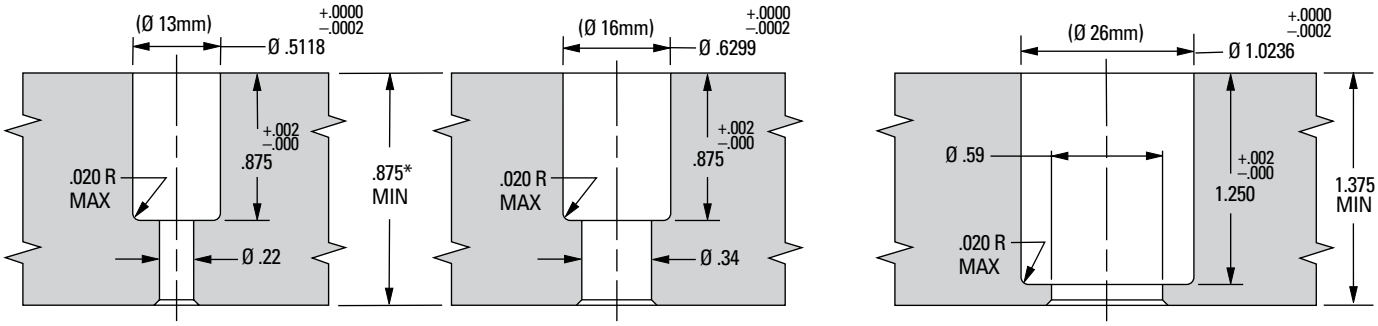
*MEASURE Ø **D** IN THIS AREA ONLY. TOP AND BOTTOM OF INSERT HAVE A VERY SLIGHT RELIEF FOR PROPER INSTALLATION AND OPERATION.

DO NOT ADJUST SPRING PLUNGER. IT HAS BEEN SUPPLIED INSTALLED TO THE CORRECT POSITION.

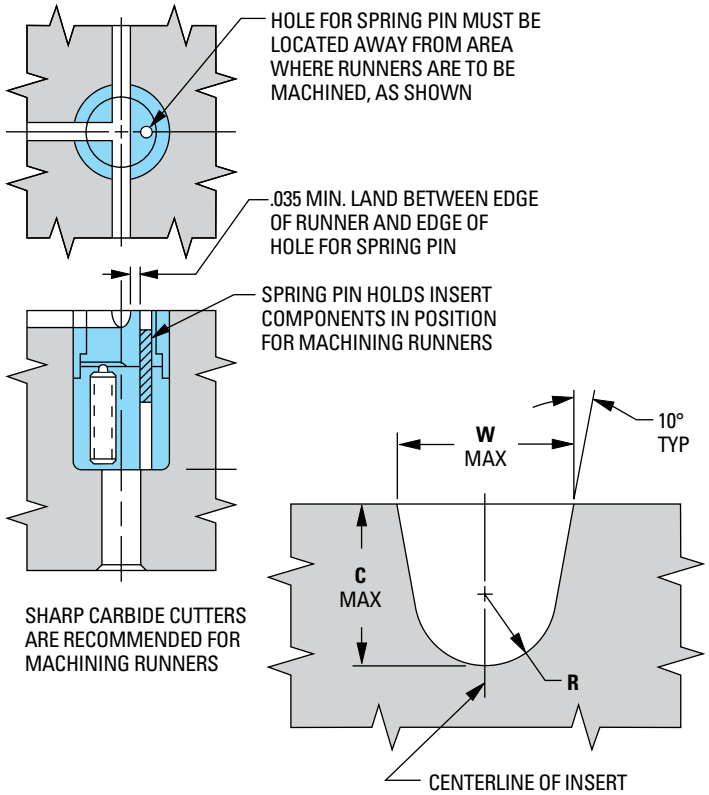
Runner Shut-Off Inserts – Machining Information

Dimensions for Machining Pocket for Runner Shut-off Inserts

- Pockets are typically bored in soft steel and jig ground in hardened steel
- Maintain a close tolerance press fit, as specified. Too loose a fit could allow the insert to move out of position, while too tight a press fit might prevent the center core from rotating when required



* When using a 7/8 thick plate with the MRS 0013 or MRS 0016 inserts, machine the .5118 or .6299 diameters through the plate. Inserts must seat against a supporting plate before any grinding or machining is done and during the molding process.



Dimensions for Machining Runners

RECOMMENDED RUNNER SIZES					
USE INSERT **ITEM NUMBER**	**W** MAX	**C** MAX	**R** RADIUS	EQUIV DIA	AREA SQ IN
MRS 0013 (MRS 0016 & 26)	.099	.091	.040	.095	.007
	.126	.120	.050	.123	.012
MRS 0016 (MRS 0026)	.150	.131	.062	.141	.016
	.168	.144	.070	.156	.019
	.186	.157	.078	.172	.023
	.206	.175	.086	.191	.029
MRS 0026	.260	.218	.109	.239	.045
	.298	.250	.125	.274	.059
	.334	.281	.140	.308	.074
	.372	.312	.156	.342	.092
	.410	.343	.172	.377	.112
	.446	.375	.187	.411	.133

NOTE: All runners should be machined along the center line of the insert and at 90° to the center line. If this is not done the runners will not align closely when rotated 90° or 180° to shut-off material flow to a cavity. All runners should be machined with inserts installed in the mold.

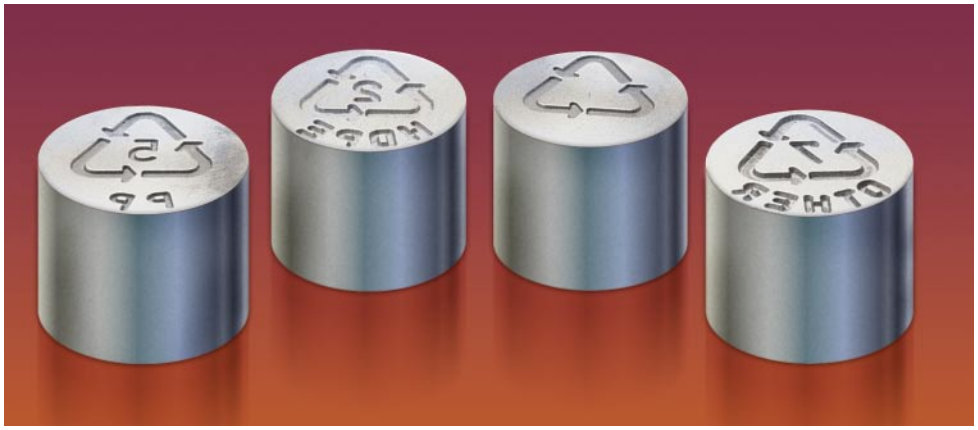
Mold and Runner Machining/Installation Data

Additional machining and installation data available. Contact D-M-E.

All dimensions are in inches except for a few metric reference dimensions that are in millimeters and are shown in parentheses.

Recycling Inserts

U.S. Patent No. D324,392

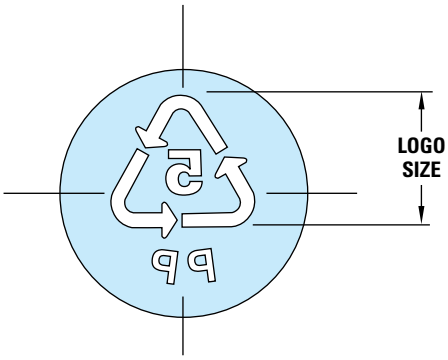


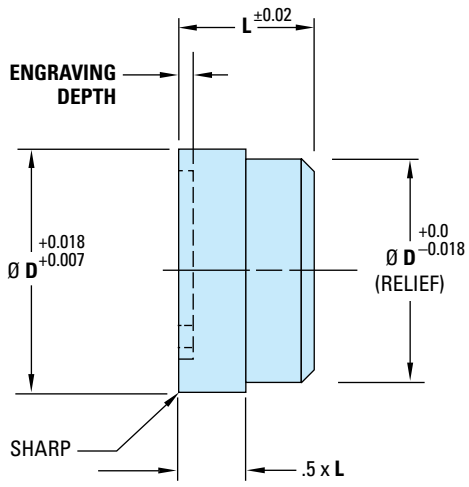
Benefits of Recycling Inserts

- Saves outsourcing and engraving costs
- Easily installed
- Easily interchanged
- Complies with SPI standards

Installation

- Press fit installation required.
- Maintain a close tolerance press fit. Too loose a fit could allow the insert to move out of position.
- Accurately measure the Ø **D** for each part and machine hole to provide about 0.005mm (.0002") press fit.





INFORMATION KEY:
D = Outside Diameter
L = Overall Length
Engraving Depth
Logo Size
Material: See chart below
Hardness: See chart below
Dimensions: All dimensions are in mm

Recycling Inserts (Metric) – MRI

ITEM NUMBER	MATERIAL CODES (SPI STANDARD)	MATERIAL	HARDNESS	ENGRAVED LETTERING	MATERIAL IDENTIFICATION	Ø D	L	ENGRAVING DEPTH	LOGO SIZE
MRI 0102	2	420 STAINLESS STEEL	48-52 HRC	HDPE	HIGH DENSITY POLYETHELENE	10	12	0.3	6
MRI 0105	5			PP	POLYPROPYLENE				
MRI 0107	7			OTHER	ALL OTHER RESINS				
MRI 0100	—			ARROW SYMBOL ONLY	—				
MRI 0202	2			HDPE	HIGH DENSITY POLYETHELENE	16	14	0.3	10
MRI 0205	5			PP	POLYPROPYLENE				
MRI 0207	7			OTHER	ALL OTHER RESINS				
MRI 0200	—			ARROW SYMBOL ONLY	—				
MRI 0602	2	7075-7651 ALUMINUM	145-155 BRINELL	HDPE	HIGH DENSITY POLYETHELENE	20	16	0.3	12
MRI 0605	5			PP	POLYPROPYLENE				
MRI 0607	7			OTHER	ALL OTHER RESINS				
MRI 0600	—			ARROW SYMBOL ONLY	—				

NOTE: Additional material codes are available. Contact D-M-E for quote.

A Comprehensive Line of Standard Components

D-M-E Standard Components: A Hallmark of the Plastics Industry

It's not uncommon for a mold designer, moldmaker, or molder to engineer a specialized component that is available as a standard, off-the-shelf product. D-M-E, a worldwide leader with its broad offering of standardized mold components, frequently invents new technologies, such as Innovative IN2 Interlocks with their interchangeable wear surfaces, and the Dual-Ring Mold-Dating Insert with its patented 'click-into-position' indexable mold dating technology. More options and faster delivery of basic components, such as advanced mold action products like D-M-E VectorForm Lifter Systems, have become a hallmark of today's molding industry.

The wide range of standard components available from D-M-E has one common theme: all are problem-solving devices that make life easier for the mold designer, moldmaker, and molder. Each component was originally created by a craftsperson in the field, but thanks to industrious ingenuity, the rest of us don't have to reinvent the wheel.

Following are a few of the latest industry innovations that were created to meet rising molding challenges.



Euro-Standard Mold Bases & Components. There is more than one standard around the world when it comes to mold bases. Molds built in Europe use a standard quite different from the Inch standard commonly used in North America. As molding programs accelerate in their frequency to move from one region of the world to another, D-M-E recognizes the importance of having easy access to the mold components that fit the mold that you are working on today. We offer Euro-Series mold bases and more than 4,000 Euro-Series mold components, as well as standard DIN and JIS products. *See the Mold Components section of this catalog for a myriad of product selections.*



Dual-Rod Lifter Systems. Most off-the-shelf lifter systems today are based upon the simple, single-rod lifter system. The dual-purpose (guiding and lifting) single-rod of a single-rod lifter system introduces an inordinate bending moment upon the dual-purpose single-rod. This results in the well-documented limitations of the single-rod systems: limited lift angles (generally 15˚ or less), inability to lift large lifter cores, inability to lift very small cores, difficulty in changing the speed of the lifter core, and inadequate cooling. On the other hand, a dual-rod, like the D-M-E VectorForm Lifter System, separates the lifting and guiding motions, dramatically reducing the bending moment and all but eliminates the aforementioned limitations. *See the Molding Undercuts section of this catalog for solutions to molding products with threads, dimples, undercuts, protrusions or cut-outs.*



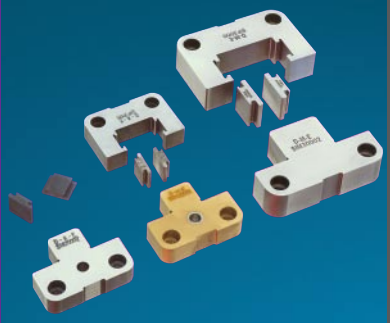
Plate Control Devices. Many of today's molds have multiple plates moving during the mold open and close sequence. Ensuring that these plate movements are coordinated and timed to avoid mold crashing is imperative. A positive and precise mechanism is generally preferred to other less optimal solutions such as springs. Springs wear with use, and do not provide the positive precision of mechanical plate control devices. Springs can allow plates to tilt during movement, placing undue stress and wear on the mold and its plate alignment components. *See the Plate and Pin Control section of this catalog for solutions, including Helical Gear Stack Mold Components, the Internal Latch Lock, and the Toggle-Lok.*

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

A Comprehensive Line of Standard Components



Two-Stage Ejectors. Complex molds commonly have multiple ejector plates. Timing multiple ejector plates can be accomplished by a variety of methods, including springs. Two-stage ejectors have been used in Europe for decades. They offer simplified design and installation into a mold, as well as the ability to provide long lasting, positive, precise positioning of ejector plates. D-M-E 2-Stage Ejectors can be offset from the mold center, encouraging their use in molds built in North America. *See the Plate and Pin Control section for 2-Stage Ejectors.*



Mold Interlocks. Originally offered in rectangular or round arrangements that were inserted from the parting line, mold interlocks that mount on the side of the mold are now available. These side interlocks have the advantage of maximizing the area inside of the mold. Additionally, a new D-M-E innovation — IN2 Interlocks with interchangeable wear surfaces — has recently been introduced that offer superior materials and the ability to interchange the wear surfaces rather than the entire interlock set during mold maintenance. *See the Plate and Pin Control section for a wide offering of D-M-E interlocks.*



Runner Shut-Offs. It is sometimes desirable to have the ability to selectively shut-off different cavities in a multi-cavity mold. Runner shut-off inserts are a simple way to achieve control of which cavities are to be active and which are to be idle in multi-cavity molds. Simple to install and even easier to operate, these devices are available in a variety of sizes and are easily customizable to virtually any style of cold runners. *See this Cavity and Core Components section for D-M-E Runner Shut-Off Inserts.*



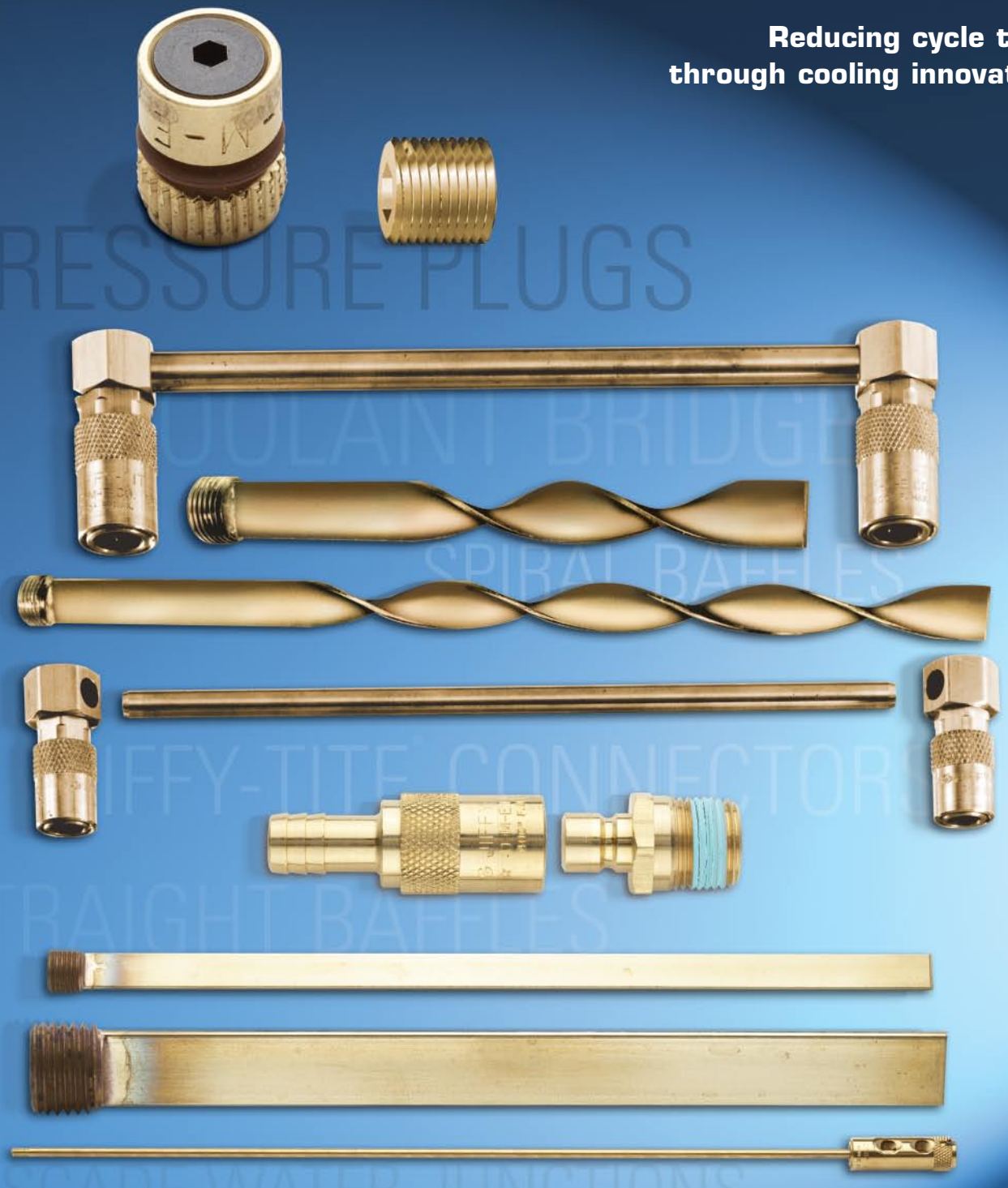
Venting. It's a fact — when plastic fills a cavity, trapped air must go somewhere. Burning and flow restrictions are the most common symptoms of this problem. In the past venting was accomplished by machining slots opposite the gate, or by putting flats on the leader pins — resulting in nonuniform venting and complicated remachining in the event of a repair. Advances in powder metallurgy have enabled the creation of standardized sintered, porous metallic vents. These venting plugs are composed of a large number of straight, parallel, uniform pores that allow trapped air or gas to escape the cavity. *See D-M-E Sintered Vents in this Cavity and Core Components section for your venting solutions.*



Slide Retainers. When the cam pin moves out of the slide upon mold opening, a method must be employed to ensure that the slide does not move back to its mold-closed position and damage the mold. Some mold designs employ a simple spring or a homemade component to prevent the slide from moving back. However, simple springs and homemade components may wear or break unpredictably. *D-M-E Slide Retainers, in the Slide Action Components section, make obsolete the cumbersome external spring or hydraulic methods.*

D-M-E Mold Cooling

Reducing cycle time
through cooling innovation

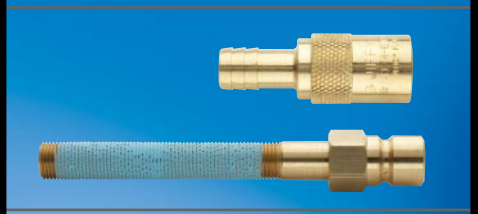


D-M-E
Every step of the way

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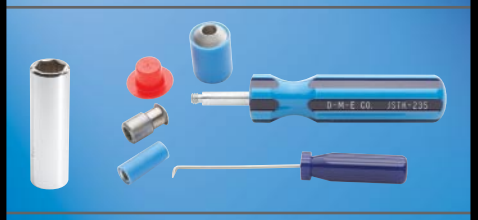
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Jiffy-Tite Connectors, Plugs, Extension Plugs 174-175



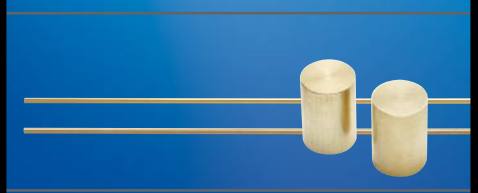
Jiffy-Lok® Connectors Sockets 176-178



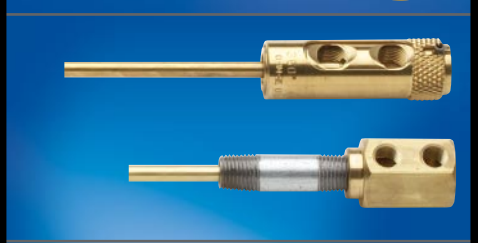
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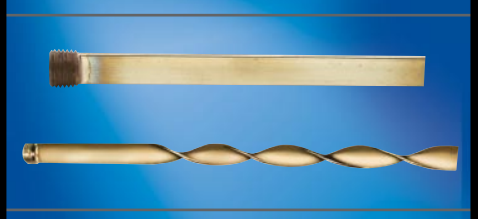
Coolant Bridges 180



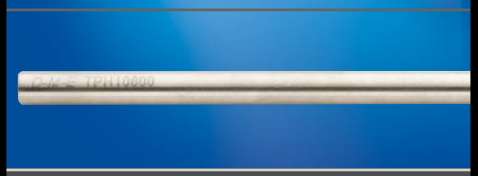
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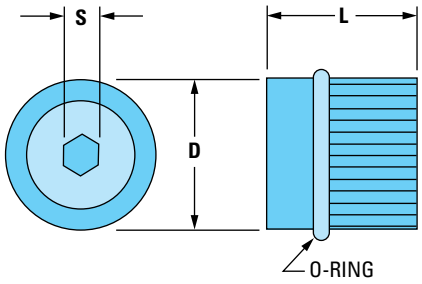
Online Price Guide

Go to www.dme.net/prices for the latest pricing guide.

Brass Pressure Plugs

Threadless Brass Pressure Plugs (Inch) – TBP





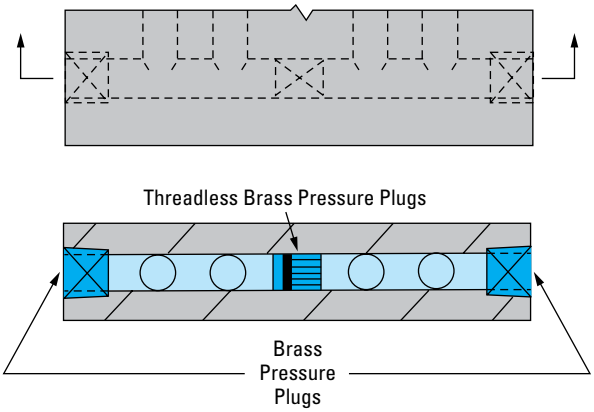
- Seals even in rough or corroded holes
- No tapping required
- Withstands pressures up to 72 psi

D-M-E Threadless Brass Pressure Plugs employ a time-saving expandable O-ring design. As the plug's socket head screw is tightened, the O-ring expands to provide a positive seal. No tapping is required and installation or removal is quick and easy. The smaller diameters are ideal for use in cavity inserts or slide blocks where space is limited. **(Not recommended for use in oil lines.)**

ITEM NUMBER	NOMINAL SIZE	LENGTH L	HEX SIZE S	DRILL SIZE D	VITON REPLACEMENT O-RINGS (PKG. OF 10)
TBP-10	1/8	.50	5/64	11/32	RCV0009
TBP-10-0S	1/8	.50	5/64	23/64	RCV0009
TBP-20	1/4	.56	1/8	7/16	RCV0011
TBP-20-0S	1/4	.56	1/8	29/64	RCV0011
TBP-40	3/8	.62	1/8	9/16	RCV0110
TBP-40-0S	3/8	.62	1/8	37/64	RCV0110
TBP-60	1/2	.62	1/8	11/16	RCV0112
TBP-60-0S	1/2	.62	1/8	45/64	RCV0112

NOTE: O-ring material is suitable for use with temperatures up to 300°F.

TYPICAL APPLICATIONS

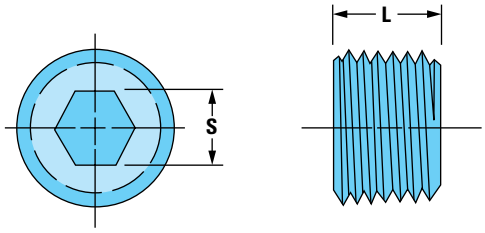


Brass Pressure Plugs (Inch) – BP



- For steam, water or oil lines
- Positive tapered seal
- Withstands pressures up to 600 psi

D-M-E Brass Pressure Plugs give a high-pressure seal through a deliberate difference of taper between the plug and the tapped hole. Flush seating is achieved through closer control of thread forms, sizes and taper.



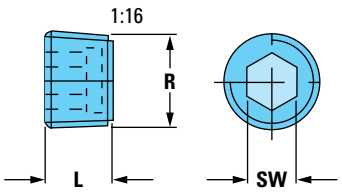
HIGH-PRESSURE SEAL
Dryseal thread form with 7/8 taper per foot. Install in standard 3/4 TPF tapped hole.

ITEM NUMBER	NOMINAL SIZE (NPT)	LENGTH L	HEX SIZE S	THREADS TAP INCH	TAP DRILL
BP-10	1/8	.250	3/16	27	21/64
BP-20	1/4	.406	1/4	18	27/64
BP-40	3/8	.406	5/16	18	9/16
BP-60	1/2	.531	3/8	14	11/16
BP-100	3/4	.531	9/16	14	57/64
BP-140	1	.656	5/8	11 1/2	1 1/8

QUANTITY DISCOUNTS: Threadless and Threaded Brass Pressure Plugs. Sizes may be mixed for quantity discounts. Discounts apply to current Net Prices. 50 to 99 Less 15%; 100 or more Less 20%

Brass Pressure Plugs (Metric) – AN



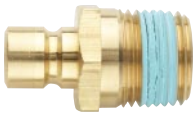


ITEM NUMBER	R	L	SW
AN-8	1/8" BSPT	8	5
AN-4	1/4" BSPT	10	7
AN-3	3/8" BSPT	10	8
AN-10	M 10 X 1	8	5
AN-2	1/2" BSPT	10	10

Jiffy-Tite® Connectors



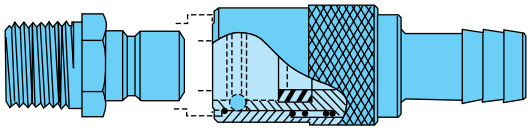
SOCKET



PLUG

D-M-E Jiffy-Tite plugs used with D-M-E Jiffy-Tite (flow-thru type) Sockets and D-M-E Jiffy-Matic (automatic shut-off type) Sockets are designed for use with plastics molds and die-cast dies in water, air or oil lines. They feature a combination brass and stainless steel leakproof construction; have a maximum rated capacity of 200 psi; and withstand temperatures up to 400°F, with supplied Viton seals. D-M-E Jiffy-Tite and Jiffy-Matic Sockets can be used interchangeably with the same Jiffy-Tite Plugs already in your mold or die. Comparable sizes of both type sockets have the same O.D., permitting interchangeability even when the plugs are flush mounted.

Jiffy-Tite® Sockets – JS
(Flow-Thru Type)

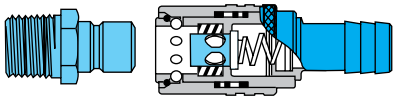


D-M-E Jiffy-Tite Sockets have a large thru hole to provide unrestricted flow. These quick-connection couplers are available with either straight, 45° or 90° hose stems, or standard female or male NPT threads.

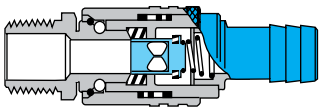
D-M-E Jiffy-Tite and Jiffy-Matic Sockets have the same O.D., permitting complete interchangeability with Jiffy-Tite Plugs installed in your mold or die.

The Jiffy-Tite or Jiffy-Matic Sockets can be used with either male, female or extension plugs.

Jiffy-Matic® Sockets – JS
(Automatic Shut-Off Type)

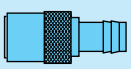
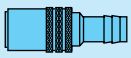
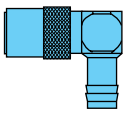
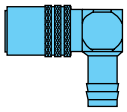
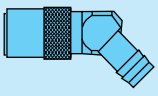
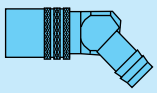
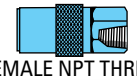
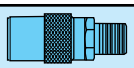


VALVE CLOSED



VALVE OPEN

D-M-E Jiffy-Matic Sockets open automatically when connected and shut off automatically when disconnected. Unlike most valve-type connectors, Jiffy-Matic Sockets are designed to keep flow restriction to a minimum.

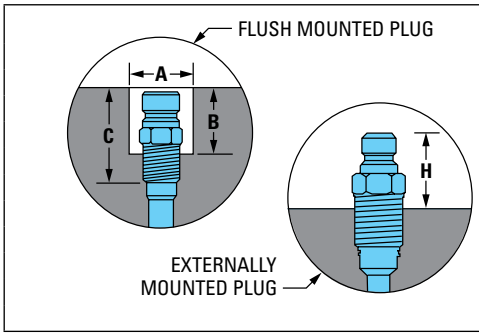
JIFFY-TITE SOCKETS					JIFFY-MATIC SOCKETS	
DESCRIPTION	**ITEM NUMBER**	FITS HOSE I.D. OR PIPE THREAD	HOSE STEM I.D. OR THRU HOLE	USED WITH STD MALE, FEMALE OR EXTENSION PLUGS	**ITEM NUMBER**	DESCRIPTION
	JS-204	1/4	3/16	JP-(F/B) 250 TO 253	JS-204-V	
	JS-205	5/16	1/4	JP-(F/B) 250 TO 253	JS-205-V	
	JS-206	3/8	1/4	JP-(F/B) 250 TO 253	JS-206-V	
	JS-306	3/8	1/4	JP-(F/B) 351 TO 354	JS-306-V	
	JS-308	1/2	3/8	JP-(F/B) 351 TO 354	JS-308-V	
	JS-504	1/2	3/8	JP-(F) 553 TO 556	JS-504-V	
STRAIGHT STEM	JS-506	3/4	5/8	JP-(F) 553 TO 556	JS-506-V	STRAIGHT STEM
	JS-214	1/4	3/16	JP-(F/B) 250 TO 253	JS-214-V	
	JS-215	5/16	1/4	JP-(F/B) 250 TO 253	JS-215-V	
	JS-216	3/8	1/4	JP-(F/B) 250 TO 253	JS-216-V	
	JS-316	3/8	1/4	JP-(F/B) 351 TO 354	JS-316-V	
	JS-318	1/2	3/8	JP-(F/B) 351 TO 354	JS-318-V	
	JS-514	1/2	3/8	JP-(F) 553 TO 556	JS-514-V	
90° STEM	JS-516	3/4	9/16	JP-(F) 553 TO 556	JS-516-V	90° STEM
	JS-224	1/4	3/16	JP-(F/B) 250 TO 253	JS-224-V	
	JS-225	5/16	1/4	JP-(F/B) 250 TO 253	JS-225-V	
	JS-226	3/8	1/4	JP-(F/B) 250 TO 253	JS-226-V	
	JS-326	3/8	1/4	JP-(F/B) 351 TO 354	JS-326-V	
	JS-328	1/2	3/8	JP-(F/B) 351 TO 354	JS-328-V	
	JS-524	1/2	3/8	JP-(F) 553 TO 556	JS-524-V	
45° STEM	JS-526	3/4	9/16	JP-(F) 553 TO 556	JS-526-V	45° STEM
	JS-200	1/8 NPT	1/4	JP-(F/B) 250 TO 253	JS-200-V	
	JS-300	1/4 NPT	3/8	JP-(F/B) 351 TO 354	JS-300-V	
FEMALE NPT THREAD	JS-500	1/2 NPT	5/8	JP-(F) 553 TO 556	JS-500-V	FEMALE NPT THREAD
	JS-201-M	1/8 NPT	1/4	JP-(F/B) 250 TO 253	JS-201-MV	
	JS-302-M	1/4 NPT	3/8	JP-(F/B) 351 TO 354	JS-302-MV	
MALE NPT THREAD	JS-504-M	1/2 NPT	9/16	JP-(F) 553 TO 556	JS-504-MV	MALE NPT THREAD

QUANTITY DISCOUNTS: Jiffy Sockets or Plugs. Discounts apply to current Net Prices. See List Price Adjustment. Standard sizes may be combined on one order for quantity discounts. 50 to 99 Less 15%; 100 or more Less 20%

Jiffy-Tite® Plugs and Extension Plugs

Jiffy-Tite® Plugs – JP

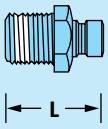
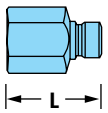
Male Plug Mounting Information

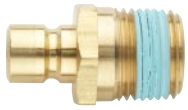


ITEM NUMBER	NPT	HEX SIZE	A	B	C	H
JP-250	1/16	7/16	11/16	11/16	1"	5/8
JP-251	1/8	7/16	11/16	11/16	1"	5/8
JP-252-(SV)	1/4	9/16	27/32	15/16	1 3/16	7/8
JP-253-(SV)	3/8	11/16	1.000	15/16	1 1/4	29/32
JP-351	1/8	9/16	1.000	15/16	1 1/4	7/8
JP-352-(SV)	1/4	9/16	1.000	1 3/32	1 7/16	1 1/32
JP-353-(SV)	3/8	11/16	1.000	1 1/8	1 7/16	1 1/16
JP-354-(SV)	1/2	7/8	1 3/16	1 1/4	1 9/16	1 3/16
JP-553	3/8	7/8	1 1/4	1 3/16	1 5/8	1 1/8
JP-554	1/2	7/8	1 1/4	1 1/2	1 13/16	1 7/16
JP-556	3/4	1 1/8	1 1/2	1 9/16	1 7/8	1 1/2

Jiffy-Tite Male – JP and Female Plugs – JPF

For Use with Jiffy-Tite or Jiffy-Matic Sockets (Including SV Series)

DESCRIPTION	LENGTH L	PIPE THREAD	Ø HOLE	HEX SIZE	ITEM NUMBER	USED WITH SOCKETS
 MALE PLUG (BRASS)	59/64	1/16 NPT	3/16	7/16	JP-250	JS-204-(V/SV) TO JS-226-(V/SV)
	59/64	1/8 NPT	1/4	7/16	JP-251	
	1 5/32	1/4 NPT	1/4	9/16	JP-252	
	1 3/16	3/8 NPT	1/4	11/16	JP-253	
	1 3/16	1/8 NPT	1/4	9/16	JP-351	JS-306-(V/SV) TO JS-328-(V/SV)
	1 25/64	1/4 NPT	3/8	9/16	JP-352	
	1 25/64	3/8 NPT	3/8	11/16	JP-353	
	1 37/64	1/2 NPT	3/8	7/8	JP-354	
	1 9/16	3/8 NPT	7/16	7/8	JP-553	JS-504-(V) TO JS-526-(V)
	1 3/4	1/2 NPT	5/8	7/8	JP-554	
	1 3/4	3/4 NPT	5/8	1 1/8	JP-556	
 FEMALE PLUG** (BRASS)	1"	1/16 NPT	1/4	1/2	JPF-0250	JS-204-(V/SV) TO JS-226-(V/SV)
	1"	1/8 NPT	1/4	1/2	JPF-0251	
	1 9/32	1/4 NPT	1/4	5/8	JPF-0252	
	1 13/32	3/8 NPT	1/4	3/4	JPF-0253	
	1 9/32	1/8 NPT	11/32	5/8	JPF-0351	JS-306-(V/SV) TO JS-328-(V/SV)
	1 31/64	1/4 NPT	3/8	5/8	JPF-0352	
	1 37/64	3/8 NPT	3/8	3/4	JPF-0353	
	1 49/64	1/2 NPT	3/8	15/16	JPF-0354	
	1 11/16	3/8 NPT	9/16	15/16	JPF-0553	JS-504-(V) TO JS-526-(V)
	1 49/64	1/2 NPT	5/8	15/16	JPF-0554	
	1 49/64	3/4 NPT	5/8	1 1/8	JPF-0556	



Male Plug



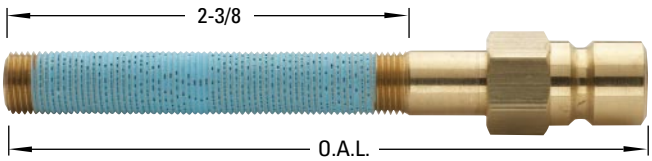
Female Plug

All Male Plugs (including SV-Series) and Extension Plugs are now supplied with Jiffy-Seal™ thread sealant. Eliminating the initial need for joint tape or compound, the sealant will withstand temperatures up to 400°F and pressures up to 200 psi.

Jiffy-Tite® Extension Plugs* – JPB

For Use with Jiffy-Tite or Jiffy-Matic Sockets (Including SV Series)

Threaded area with Jiffy-Seal Thread Sealant pre-applied.



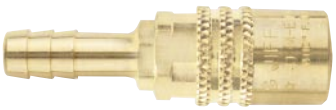
*Designed for use with existing or new NPT tapered pipe-tapped hole in mold or die. Straight threaded area allows easy length adjustment. Cut to suit. No tapering or re-tapping necessary.

PIPE THREAD*	HEX SIZE	O.A.L.	ITEM NUMBER	USED WITH SOCKETS
1/8	7/16	4"	JPB-2514	JS-204-(V/SV) TO JS-226-(V/SV)
1/8	7/16	6"	JPB-2516	
1/8	7/16	8"	JPB-2518	
1/4	9/16	4"	JPB-2524	
1/4	9/16	6"	JPB-2526	
1/4	9/16	8"	JPB-2528	
3/8	11/16	4"	JPB-2534	
3/8	11/16	6"	JPB-2536	
3/8	11/16	8"	JPB-2538	
1/8	9/16	4"	JPB-3514	JS-306-(V/SV) TO JS-328-(V/SV)
1/8	9/16	6"	JPB-3516	
1/8	9/16	8"	JPB-3518	
1/4	9/16	4"	JPB-3524	
1/4	9/16	6"	JPB-3526	
1/4	9/16	8"	JPB-3528	
3/8	11/16	4"	JPB-3534	
3/8	11/16	6"	JPB-3536	
3/8	11/16	8"	JPB-3538	

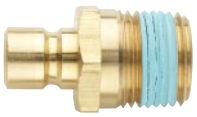
QUANTITY DISCOUNTS: Jiffy Sockets or Plugs. Discounts apply to current Net Prices. See List Price Adjustment. Standard sizes may be combined on one order for quantity discounts. 50 to 99 Less 15%; 100 or more Less 20%

SV-Series Jiffy-Matic® Connectors

SV-Series Jiffy-Matic® Connectors – JS
Two-Way Automatic Shut-Off Type



SOCKET



PLUG

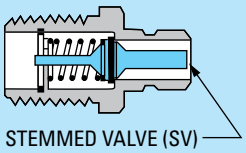
The D-M-E line of SV-Series Jiffy-Matic Connectors features a male plug and socket, each with an automatic shut-off steamed valve. These connectors are designed for use with plastic molds and die-cast dies in water, air or heat transfer oil lines. They feature a combination of brass and stainless steel in a leakproof construction, have a maximum rated capacity of 200 psi and will withstand temperatures up to 400°F with supplied Viton seals.

The SV-Series Jiffy-Matic Male Plugs adds the capability of automatic shut-off at the mold, thereby minimizing coolant loss.

D-M-E SV-Series Jiffy-Matic Sockets can be used interchangeably with the Jiffy-Tite plugs already in your mold or die. However, the SV-Series Jiffy-Matic Male Plugs can ONLY be used with the SV-Series Jiffy-Matic Sockets. Comparable sizes of both types of sockets and plugs have the same O.D., permitting interchangeability even when the plugs are flush-mounted.

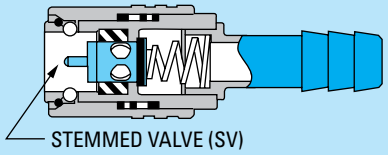
The SV-Series Male Plugs are now supplied with Jiffy Seal® thread sealant. Eliminating the initial need for joint tape or compound, the sealant will withstand temperatures up to 400°F and pressures up to 200 psi.

SV-Series Jiffy-Matic® Male Plugs
(Automatic Shut-Off Type with Stemmed Valve)



The D-M-E SV-Series Jiffy-Matic Male Plugs feature an automatic shut-off stemmed valve. This plug design adds the capability of automatic shut-off at the mold. The plug's shut-off stemmed valve minimizes mold coolant loss, thereby decreasing clean-up time and the possibility of rust occurring on the mold surface. The SV-Series Jiffy-Matic Male Plug can ONLY be used with the SV-Series Jiffy-Matic Socket.

SV-Series Jiffy-Matic® Sockets
(Automatic Shut-Off Type with Stemmed Valve)

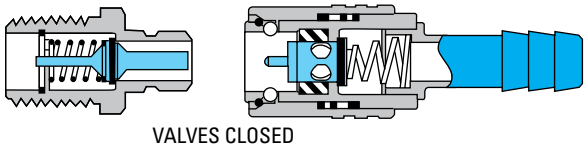


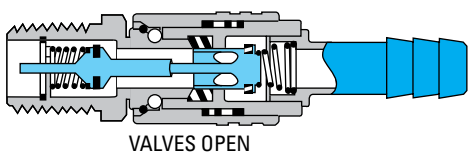
The D-M-E SV-Series Jiffy-Matic Sockets feature an automatic shut-off stemmed valve that is designed to work with the SV-Series Jiffy-Matic Male Plugs, as well as the standard male, female and extension plugs. The sockets open automatically when connected and shut-off automatically when disconnected. The SV-Series Jiffy-Matic Sockets are designed to keep flow restriction to a minimum and are available with either straight, 45° or 90° hose stems.

Operating Combinations

Two-Way Shut-Off*

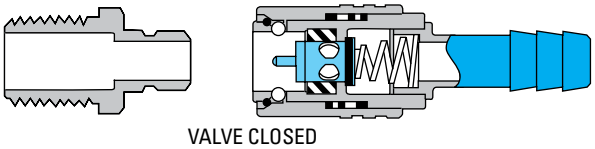
SV-SERIES* MALE PLUGS	WITH	SV-SERIES SOCKETS (EQUIVALENT SIZE)

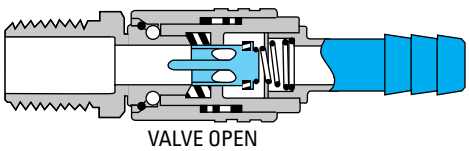




One-Way Shut-Off

STD. MALE, FEMALE OR EXTENSION PLUGS	WITH	SV-SERIES SOCKETS (EQUIVALENT SIZE)





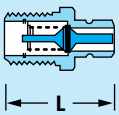
*The SV-Series Jiffy-Matic Male Plugs can only be used for two-way shut-offs and must be used with the SV-Series Jiffy-Matic Sockets.

SV-Series Jiffy-Matic® Connectors

SV-Series Jiffy-Matic Male Plugs* – JS
(Automatic Shut-Off Type with Stemmed Valve)



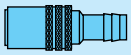
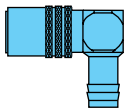
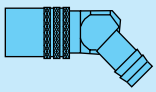
SOCKET PLUG

DESCRIPTION	LENGTH L	PIPE THREAD	Ø HOLE	HEX SIZE	ITEM NUMBER	USED WITH SOCKETS*
 L (BRASS)	1 5/32	1/4 NPT	1/4	9/16	JP-252-SV	JS-204-SV TO JS-226-SV
	1 3/16	3/8 NPT	1/4	11/16	JP-253-SV	
	1 25/64	1/4 NPT	3/8	9/16	JP-352-SV**	JS-306-SV TO JS-328-SV
	1 25/64	3/8 NPT	3/8	11/16	JP-353-SV	
	1 37/64	1/2 NPT	3/8	7/8	JP-354-SV	

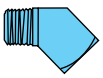
*The SV-Series Jiffy-Matic Male Plugs operate only with the SV-Series Jiffy-Matic Sockets. All SV-Series Jiffy-Matic Male Plugs are supplied with Viton seals for use in water, air and heat transfer oil applications that do not exceed 400°F and 200 psi.

**The JP-352-SV male plug has a stepped valve-seat due to the internal space limitations of the 1/4 NPT thread. Even so, it has a greater flow rate than the JP-252-SV male plug, which also has the 1/4 NPT thread.

SV-Series Jiffy-Matic Sockets – JS
(Automatic Shut-Off Type with Stemmed Valve)

DESCRIPTION	ITEM NUMBER	FITS HOSE I.D. OR PIPE THREAD	HOSE STEM I.D. OR THRU HOLE	USED WITH SV-MALE, STD MALE, FEMALE OR EXTENSION PLUGS
 STRAIGHT STEM	JS-204-SV	1/4	3/16	JP-(F/B) 250 TO 253 (SV)
	JS-205-SV	5/16	1/4	JP-(F/B) 250 TO 253 (SV)
	JS-206-SV	3/8	1/4	JP-(F/B) 250 TO 253 (SV)
	JS-306-SV	3/8	1/4	JP-(F/B) 351 TO 354 (SV)
	JS-308-SV	1/2	3/8	JP-(F/B) 351 TO 354 (SV)
 90° STEM	JS-214-SV	1/4	3/16	JP-(F/B) 250 TO 253 (SV)
	JS-215-SV	5/16	1/4	JP-(F/B) 250 TO 253 (SV)
	JS-216-SV	3/8	1/4	JP-(F/B) 250 TO 253 (SV)
	JS-316-SV	3/8	1/4	JP-(F/B) 351 TO 354 (SV)
	JS-318-SV	1/2	3/8	JP-(F/B) 351 TO 354 (SV)
 45° STEM	JS-224-SV	1/4	3/16	JP-(F/B) 250 TO 253 (SV)
	JS-225-SV	5/16	1/4	JP-(F/B) 250 TO 253 (SV)
	JS-226-SV	3/8	1/4	JP-(F/B) 250 TO 253 (SV)
	JS-326-SV	3/8	1/4	JP-(F/B) 351 TO 354 (SV)
	JS-328-SV	1/2	3/8	JP-(F/B) 351 TO 354 (SV)
 FEMALE NPT THREAD	JS-200-SV	1/8 NPT	1/4	JP-(F/B) 250 TO 253 (SV)
	JS-300-SV	1/4 NPT	3/8	JP-(F/B) 351 TO 354 (SV)
 MALE NPT THREAD	JS-201-MSV	1/8 NPT	1/4	JP-(F/B) 250 TO 253 (SV)
	JS-302-MSV	1/4 NPT	3/8	JP-(F/B) 351 TO 354 (SV)

90° and 45° NPT Elbows
(For Female and Male NPT Sockets Only)

DESCRIPTION	ITEM NUMBER	PIPE THREAD	THRU HOLE	USED WITH SOCKETS
 90° NPT ELBOW	200-90	1/8 NPT	7/32	JS-200 (-V/SV) TO JS-201M (V/SV)
	300-90	1/4 NPT	5/16	JS-300 (-V/SV) TO JS-302M (V/SV)
	500-90	1/2 NPT	9/16	JS-500 (-V) TO JS-504M (-V)
 45° NPT ELBOW	200-45	1/8 NPT	7/32	JS-200 (-V/SV) TO JS-201M (-V/SV)
	300-45	1/4 NPT	5/16	JS-300 (-V/SV) TO JS-302M (-V/SV)
	500-45	1/2 NPT	9/16	JS-500 (-V) TO JS-504M (-V)

These 90° and 45° NPT elbows can be used with either Jiffy-Tite or Jiffy-Matic, V or SV, female or male NPT sockets only.

QUANTITY DISCOUNTS: Jiffy Sockets or Plugs. Discounts apply to current Net Prices. See List Price Adjustment. Standard sizes may be combined on one order for quantity discounts. 50 to 99 Less 15%; 100 or more Less 20%

Jiffy-Lok® Connector Sockets



With Clampless Hose Stems for use with "Push-To-Lock" Type Hose

- For use with "Push-to-Lock" type hose only
- Saves set-up time by eliminating the need for hose clamps
- Hose stem barbs mate with "Push-to-Lock" style rubber hose
- Popular sizes for interchangeability with existing Jiffy-Tite, Jiffy-Matic and Jiffy-Matic SV Sockets
- More compact and consistently sized than competitive sockets
- Leakproof brass and stainless steel construction
- Replaceable seals and valves for long service life
- Socket connector seals are Viton

Jiffy-Lok SV-Series Valve Style* – JSL

DESCRIPTION	ITEM NUMBER	FITS HOSE I.D.	HOSE STEM I.D.	USED WITH: SV-MALE, STD. MALE, FEMALE OR EXTENSION PLUGS
STRAIGHT STEM	JSL0204-SV	1/4	3/16	JP-(F/B) 250 TO 253 (SV)
	JSL0206-SV	3/8	1/4	JP-(F/B) 250 TO 253 (SV)
	JSL0306-SV	3/8	1/4	JP-(F/B) 351 TO 354 (SV)
	JSL0308-SV	1/2	3/8	JP-(F/B) 351 TO 354 (SV)
90° STEM	JSL0214-SV	1/4	3/16	JP-(F/B) 250 TO 253 (SV)
	JSL0216-SV	3/8	1/4	JP-(F/B) 250 TO 253 (SV)
	JSL0316-SV	3/8	1/4	JP-(F/B) 351 TO 354 (SV)
	JSL0318-SV	1/2	3/8	JP-(F/B) 351 TO 354 (SV)
45° STEM	JSL0224-SV	1/4	3/16	JP-(F/B) 250 TO 253 (SV)
	JSL0226-SV	3/8	1/4	JP-(F/B) 250 TO 253 (SV)
	JSL0326-SV	3/8	1/4	JP-(F/B) 351 TO 354 (SV)
	JSL0328-SV	1/2	3/8	JP-(F/B) 351 TO 354 (SV)

*SV-Series male plugs must be used to obtain two-way shutoff. Installation data available. Contact D-M-E.

Jiffy-Lok Flow-Thru Style (Jiffy-Tite)

DESCRIPTION	ITEM NUMBER	FITS HOSE I.D.	HOSE STEM I.D.	USED WITH: STD. MALE, FEMALE OR EXTENSION PLUGS
STRAIGHT STEM	JSL0204	1/4	3/16	JP-(F/B) 250 TO 253
	JSL0206	3/8	1/4	JP-(F/B) 250 TO 253
	JSL0306	3/8	1/4	JP-(F/B) 351 TO 354
	JSL0308	1/2	3/8	JP-(F/B) 351 TO 354
	JSL0504	1/2	3/8	JP-(F) 553 TO 556
	JSL0506	3/4	5/8	JP-(F) 553 TO 556
90° STEM	JSL0214	1/4	3/16	JP-(F/B) 250 TO 253
	JSL0216	3/8	1/4	JP-(F/B) 250 TO 253
	JSL0316	3/8	1/4	JP-(F/B) 351 TO 354
	JSL0318	1/2	3/8	JP-(F/B) 351 TO 354
	JSL0514	1/2	3/8	JP-(F) 553 TO 556
	JSL0516	3/4	5/8	JP-(F) 553 TO 556
45° STEM	JSL0224	1/4	3/16	JP-(F/B) 250 TO 253
	JSL0226	3/8	1/4	JP-(F/B) 250 TO 253
	JSL0326	3/8	1/4	JP-(F/B) 351 TO 354
	JSL0328	1/2	3/8	JP-(F/B) 351 TO 354
	JSL0524	1/2	3/8	JP-(F) 553 TO 556
	JSL0526	3/4	5/8	JP-(F) 553 TO 556

Jiffy-Lok One-Way Valve Style (Jiffy-Matic)

DESCRIPTION	ITEM NUMBER	FITS HOSE I.D.	HOSE STEM I.D.	USED WITH: STD. MALE, FEMALE OR EXTENSION PLUGS
STRAIGHT STEM	JSL0204-V	1/4	3/16	JP-(F/B) 250 TO 253
	JSL0206-V	3/8	1/4	JP-(F/B) 250 TO 253
	JSL0306-V	3/8	1/4	JP-(F/B) 351 TO 354
	JSL0308-V	1/2	3/8	JP-(F/B) 351 TO 354
	JSL0504-V	1/2	3/8	JP-(F) 553 TO 556
	JSL0506-V	3/4	5/8	JP-(F) 553 TO 556
90° STEM	JSL0214-V	1/4	3/16	JP-(F/B) 250 TO 253
	JSL0216-V	3/8	1/4	JP-(F/B) 250 TO 253
	JSL0316-V	3/8	1/4	JP-(F/B) 351 TO 354
	JSL0318-V	1/2	3/8	JP-(F/B) 351 TO 354
	JSL0514-V	1/2	3/8	JP-(F) 553 TO 556
	JSL0516-V	3/4	5/8	JP-(F) 553 TO 556
45° STEM	JSL0224-V	1/4	3/16	JP-(F/B) 250 TO 253
	JSL0226-V	3/8	1/4	JP-(F/B) 250 TO 253
	JSL0326-V	3/8	1/4	JP-(F/B) 351 TO 354
	JSL0328-V	1/2	3/8	JP-(F/B) 351 TO 354
	JSL0524-V	1/2	3/8	JP-(F) 553 TO 556
	JSL0526-V	3/4	5/8	JP-(F) 553 TO 556

NOTE: Use "Push-to-Lock" type hose only. Jiffy-Lok Connector Sockets are for use with water and water-based coolants only. Although Jiffy-Lok Connector Sockets are suitable for temperatures to 400°F, observe the temperature ratings of your "push-to-lock" hose. Most "push-to-lock" hose has a temperature rating of 175°F or less. Never exceed 200 psi.

QUANTITY DISCOUNTS: Jiffy Sockets or Plugs. Discounts apply to current Net Prices. Standard sizes may be combined on one order for quantity discounts. 50 to 99 Less 15%; 100 or more Less 20%

Jiffy-Tite® Connector Seals, Seal Removal Tool Kit & Wrenches

Jiffy-Tite® Connector Seals

For Replacement in Either Jiffy-Tite or Jiffy-Matic Sockets

Jiffy-Tite and Jiffy-Matic Sockets are supplied with Viton seals for use with air, water or heat transfer oil applications that do not exceed 400°F and 200 psi. Seals should be replaced periodically as required to ensure leak-free connections.

MAXIMUM OPERATING TEMPERATURE/PRESSURE = 400°F/200 PSI			
FOR USE WITH	SEAL MATERIAL (I.D. COLOR)	**ITEM NUMBER***	USED WITH SOCKETS
AIR, WATER OR HEAT TRANSFER OIL	VITON (GREEN)	P200-8	JS-204-(V/SV) TO 226-(V/SV)
		P300-8	JS-306-(V/SV) TO 328-(V/SV)
		P500-8	JS-504-(V) TO 526-(V)

***Packs of 10 (sold in packs of 10 only).**



Includes handle, interchangeable tools for all socket sizes, seal pick and vinyl storage pouch.

Jiffy-Tite® Seal Removal Tool Kit – JSTK

The Jiffy-Tite Seal Removal Tool Kit can be used for removal of connector seals from Jiffy-Matic Sockets (including SV Series). Can also be used with Jiffy-Tite Sockets to provide easier seal removal.

ITEM NUMBER
JSTK-235

NOTE: This tool kit is not required for "the original" or current line of Jiffy-Matic Sockets with removable hose stems.

Jiffy-Tite® Wrenches – SJP

For Jiffy-Tite Male, Female and Extension Plugs and Jiffy-Matic SV Series Male Plugs

D-M-E Jiffy-Tite wrenches are accurately made from selected alloy steel, heat-treated and chrome-plated. They are specially designed for servicing flush-mounted plugs.



JIFFY-TITE WRENCHES FOR MALE AND EXTENSION PLUGS			
HEX SIZE	SQUARE DRIVE	**ITEM NUMBER**	FITS PLUGS
7/16	3/8	SJP-251	JP(B)-250, 251
9/16	3/8	SJP-252	JP(B)-252(SV) JP(B)-351, 352(SV)
11/16	3/8	SJP-253	JP(B)-253(SV) JP(B)-353(SV)
7/8	3/8	SJP-354	JP-354(SV)
7/8	1/2	SJP-554	JP-553, 554
1 1/8	1/2	SJP-556	JP-556

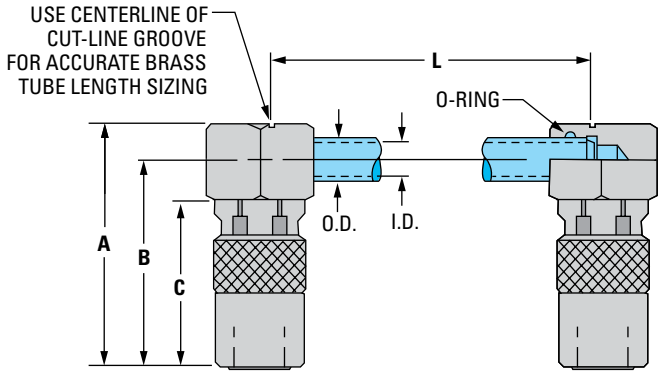
JIFFY-TITE WRENCHES FOR FEMALE PLUGS			
HEX SIZE	SQUARE DRIVE	**ITEM NUMBER**	FITS PLUGS
1/2	3/8	SJP-251F	JPF-0250, 0251
5/8	3/8	SJP-252F	JPF-0252 JPF-0351, 0352
3/4	3/8	SJP-253F	JPF-0253 JPF-0353
15/16	1/2	SJP-554F	JPF-0354 JPF-0553, 0554
1 1/8	1/2	SJP-556F	JPF-0556

Jiffy-Tite® and Jiffy-Matic® Coolant Bridges

For Compact Mold Connection of Adjacent Plugs without Use of Conventional Hose Loop

- Provides more compact port-to-port connections than conventional hose methods
- Coolant Bridge socket adapters allow quick connections to Jiffy-Tite (flow thru) or Jiffy-Matic (one- or two-way shutoff) plugs
- Socket adapter marked with cut-line groove for quick sizing of brass tube length
- Leakproof socket adapters have replaceable seals and valves for long service life
- Socket connector seals and O-ring seals are Viton





NOTES:

1. Coolant Bridge consists of two socket adapters (including O-rings) and one chamfered brass tube.
2. Coolant Bridge socket adapters and tubes to be ordered separately.
3. Tubes are 18" long. Cut to suit for specific application using cut-line grooves. Then, chamfer and deburr tube as indicated in installation data.
4. Coolant Bridge Jiffy-Matic socket adapters will provide one-way shutoff when used with standard male, female and extension plugs and two-way shutoff when used with SV-Series Male Plugs.
5. Maximum temperature rating is 400°F. Maximum PSI rating is 200.

Installation data available. Contact D-M-E.

Jiffy-Tite® and Jiffy-Matic® Coolant Bridges – JCB, JBT

COOLANT BRIDGE SOCKET ADAPTERS (TWO REQUIRED PER ASSEMBLY)							BRASS TUBE 18" LONG		
STYLE	ITEM NUMBER	A	B	C	L	USED WITH STD. MALE, FEMALE OR EXTENSION PLUGS	ITEM NUMBER	I.D.	O.D.
JIFFY-TITE FLOW-THRU	JCB0200	1.74	1.47	1.20	18" MAX.	JP(F/B)-250 TO 253	JBT0450	.214	.312
	JCB0300	2.26	1.94	1.63	18" MAX.	JP(F/B)-351 TO 354	JBT0570	.307	.437
JIFFY-MATIC ONE- OR TWO-WAY* SHUTOFF	JCB0200-SV	1.74	1.47	1.20	18" MAX.	JP(F/B)-250 TO 253 (SV)	JBT0450	.214	.312
	JCB0300-SV	2.26	1.94	1.63	18" MAX.	JP(F/B)-351 TO 354 (SV)	JBT0570	.307	.437

*SV-Series male plugs must be used to obtain two-way shutoff.

REPLACEMENT O-RINGS FOR SOCKET ADAPTERS		
ITEM NUMBER	DESCRIPTION	BAG
JCB0011	VITON O-RING FOR 200 SERIES SOCKET ADAPTER	10/PKG.
JCB0013	VITON O-RING FOR 300 SERIES SOCKET ADAPTER	10/PKG.

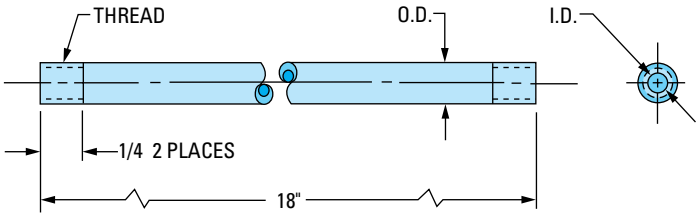
Bubbler Tubes and Brass Diverting Plugs & Rods

Bubbler Tubes

Available in brass or 304 stainless steel



D-M-E Bubbler Tubes are used for cooling cores in molds or dies. They are supplied threaded at both ends, thus permitting two threaded tubes to be cut from the 18" length supplied. They can be used as replacement tubes in Cascade Water Junctions.



Brass Bubbler Tubes – BT

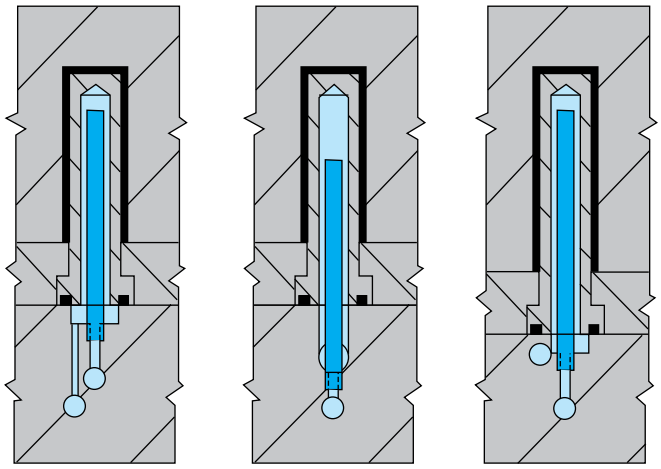
ITEM NUMBER	O.D.	I.D.	THREAD	Ø CHANNEL
BT-105	.125 $^{+.000}_{-.004}$	.069	NO. 5-44	.144
BT-210	.190 $^{+.000}_{-.004}$	.126	NO. 10-32	.228
BT-340	.250 $^{+.000}_{-.005}$	.170	1/4-28	.302
BT-450	.312 $^{+.000}_{-.006}$	.214	5/16-24	.377
BT-570	.437 $^{+.000}_{-.006}$	.307	7/16-20	.531

304 Stainless Steel Bubbler Tubes – BTS

ITEM NUMBER	O.D.	I.D.	THREAD	Ø CHANNEL
BTS-100	.093 $^{+.000}_{-.004}$	.078	NONE*	.120
BTS-105	.125 $^{+.000}_{-.004}$	.069	NO. 5-44	.144
BTS-210	.190 $^{+.000}_{-.004}$	.126	NO. 10-32	.228
BTS-340	.250 $^{+.000}_{-.005}$	.170	1/4-28	.302
BTS-450	.312 $^{+.000}_{-.006}$	.214	5/16-24	.377
BTS-570	.437 $^{+.000}_{-.006}$	.307	7/16-20	.531

*Press fit

Typical Applications



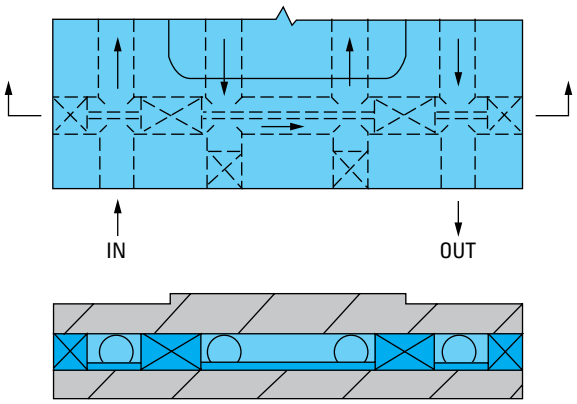
Brass Diverting Plugs and Rod for Steam and Waterlines

D-M-E Brass Diverting Plugs and Rods are used to redirect water flow through waterlines drilled in a mold or die.

The plugs are pushed into the waterline, and the rods are cut to appropriate lengths to serve as spacers or stops between the plugs. All plugs are proportionately longer than their diameter to ensure that they will pass by intersecting waterlines without twisting into them.



Typical Application



Brass Diverting Plugs – BF

ITEM NUMBER	DIA ±.002	LENGTH
BF-50	5/16	.62
BF-70	7/16	.62
BF-90	9/16	.75
BF-110	11/16	.87
BF-150	15/16	1.25

Brass Rod – BFR

(1/8 dia. x 18" long)

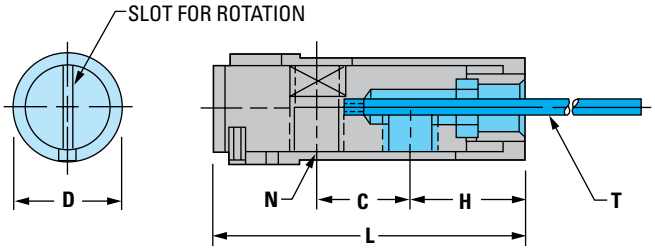
ITEM NUMBER
BFR-18

Jiffy-Tite® Cascade Water Junctions

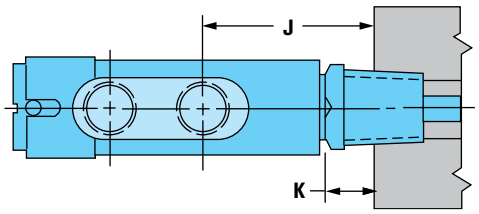
- Compact design
- 360° seal – leak proof
- Accurate predetermination of port locations
- Easy "one-piece" installation and removal



For cascade-type cooling applications, the Jiffy-Tite Cascade Water Junctions provide the utmost in versatility and ease of use. Their compact design makes them ideal for cooling inserted cores or spot cooling in hard to reach areas of molds or dies. They can be rotated a full 360° without affecting their positive Jiffy-Tite seal and are easily connected and disconnected – even when installed internally.



Final location of the ports on the body of the Water Junction can be accurately predetermined, thus ensuring proper lateral alignment with pipe clearance holes. Waterlines may be connected to the same side or opposing sides of the Water Junction. A slot on the end of the Water Junction body indicates port position and can be turned with a screwdriver to align the ports with pipe clearance holes.



The brass tube has the rigidity to maintain uniform spacing inside the water channel and is threaded into the body for firm support.

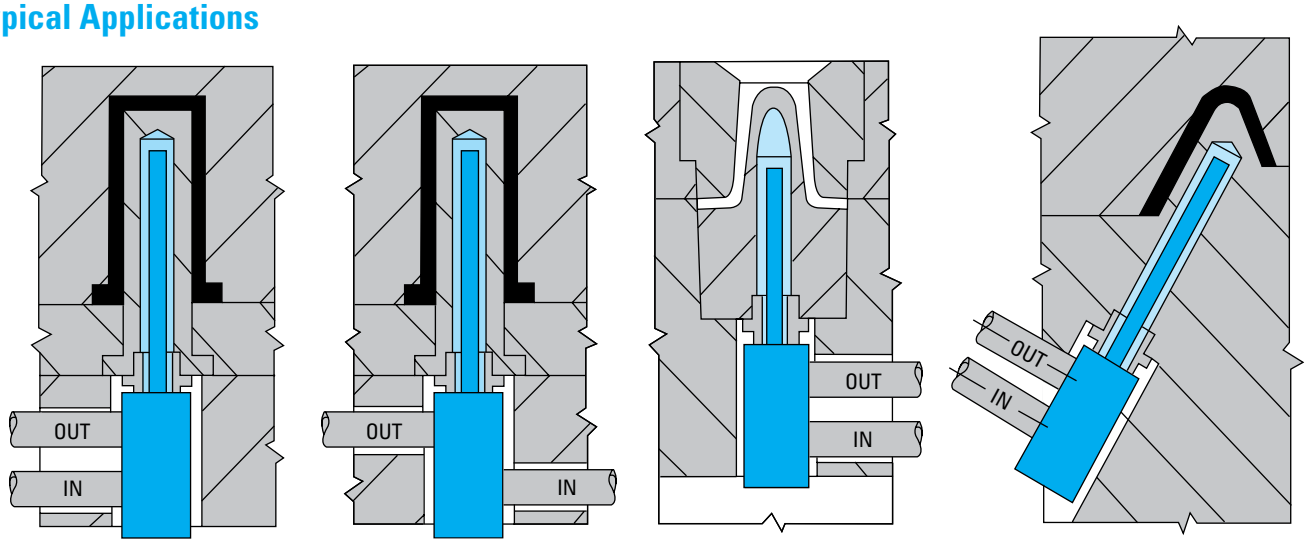
Jiffy-Tite® Cascade Water Junctions (JW)

ITEM NUMBER	D	L	C	H	N N.P.T. (3 PLACES)	T 18" LONG TUBE SUPPLIED		
						O.D.	I.D.	THREAD
JW-220	.70	2.12	.69	.77	1/8	.190	.126	NO. 10-32
JW-320	.96	2.38	.69	1.03	1/8	.250	.170	1/4-28
JW-321	.96	2.69	1.00	1.03	1/8	.250	.170	1/4-28
JW-541	1.19	3.13	1.00	1.28	1/4	.437	.307	7/16-20

NOTES:
1. Bubbler Tubes may be used as replacements in Water Junctions above.
2. The 200, 300 and 500 Series Water Junctions are equipped with 200, 300 and 500 series Viton seals respectively, rated at 200 psi and suitable for temperatures up to 400°F.

REFERENCE DIMENSIONS FOR PORT LOCATION			
WATER JUNCTION ITEM NO	MATING JIFFY-TITE PLUG	J	K
JW-220	JP-251	.99	.21
	JP-252	1.24	.46
	JP-253	1.28	.50
JW-320 AND JW-321	JP-352	1.48	.42
	JP-353	1.51	.45
	JP-354	1.63	.56
JW-541	JP-554	1.96	.66
	JP-556	2.02	.72

Typical Applications



Cascade Water Junctions

D-M-E Cascade Water Junctions are ideal for cooling plastics molds and die-cast dies where drilled waterlines through the block are not possible due to interference with ejector pins, sprue puller pins, etc.

The brass tube has the rigidity to maintain uniform spacing inside the water channel and is threaded into the body for firm support. Waterlines may be connected to the same side or opposing sides of the brass hexagonal body.

The Nipple Type Water Junction provides low-cost rigid installation. The 2" long pipe nipple can be replaced with a longer pipe nipple to suit the application.

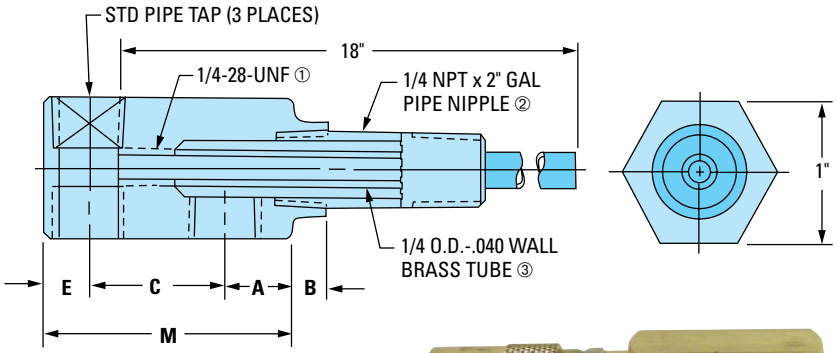
The Jiffy-Tite Socket Type is more easily connected and disconnected when mold is set-up, transported or stored. The socket is equipped with internal Viton seals (P300-8).

NOTE: Bubbler Tubes may be used as replacements in Water Junctions.



NIPPLE TYPE

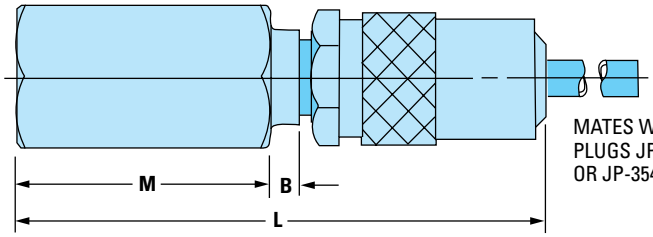
Nipple Type – DC (Includes pipe nipple and brass bubbler tube)





JIFFY-TITE SOCKET TYPE

Jiffy-Tite Socket Type – JSC (Includes brass bubbler tube)

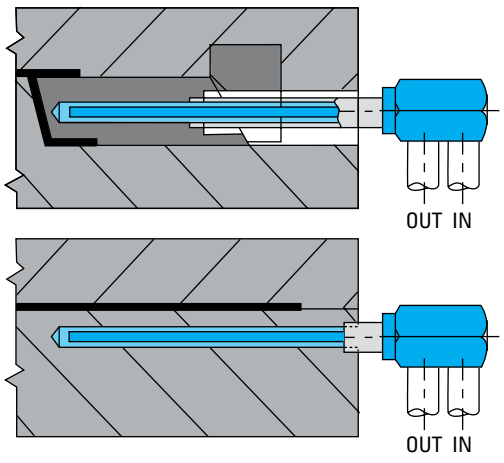


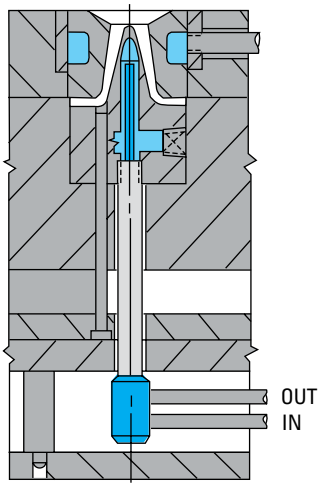
MATES WITH JIFFY-TITE PLUGS JP-352(F), JP-353(F) OR JP-354(F).

NIPPLE TYPE ITEM NUMBER	STD. PIPE TAP (3 PLACES)	M	E	A	B	C	L	JIFFY-TITE SOCKET TYPE ITEM NUMBER
DC-131	1/8	1.34	.33	.33	.22	.69	—	—
DC-131-A	1/4	1.34	.33	.33	.22	.69	3.29	JSC-304
DC-132	1/8	1.84	.34	.50	.25	1.00	—	—
DC-132-A	1/4	1.84	.34	.50	.25	1.00	3.82	JSC-314
DC-136-A*	1/4	1.84	.34	.50	.25	1.00	—	—

*SPECIFICATIONS for DC-136-A (see drawing above): ① 5/16-24 UNF ② 3/8 NPT x 2" ③ 5/16 O.D. - .040 WALL

Typical Applications





Straight Brass Plug Baffles

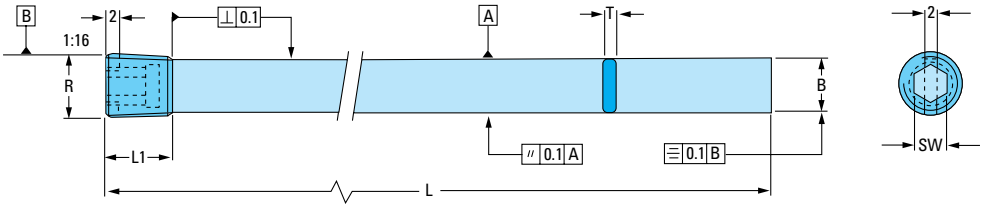
D-M-E Brass Plug Baffles, available in both straight and spiral styles, are constructed entirely of high-quality brass with blades brazed to the plugs for long, dependable service. They provide a high-pressure seal through a deliberate difference of taper between the plug and the tapped hole.

Straight Baffles



The function of the baffle is to split the drilled waterline into two equal channels. As the heating or cooling medium enters, the baffle diverts the flow to travel up to and over the end of the baffle and down the other side.

Clearance must be provided between the end of the baffle and the end of the drilled channel to provide adequate flow. See Dimension "C" for approximate clearances.

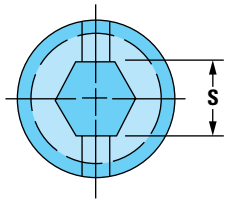


NOTE: A drilled hole (finish d^{H13}) is adequate. Don't ream the hole.

Thread Size

THREAD LENGTHS	
NOMINAL PLUG SIZE	THREAD $^{+.000}_{-.015}$ LENGTH
1/16 & 1/8	.250
1/4 & 3/8	.406
1/2 & 3/4	.531
1"	.656

Hex Size

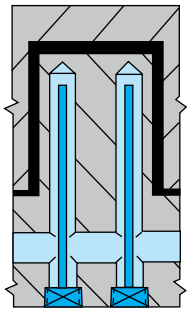


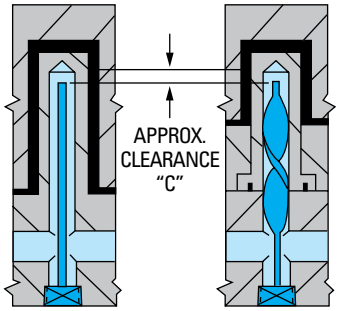
Slot indicates Baffle Position

Straight Brass Plug Baffles (Inch) – BB

ITEM NUMBER	NOMINAL PLUG SIZE	HEX SIZE S	NOMINAL LENGTH OVERALL	BAFFLE THICKNESS	BAFFLE WIDTH $^{-.005}_{-.015}$	DRILL SIZE	C
BB-05-4	1/16	5/32	4"	.050	1/4	1/4	.10
BB-05-8	1/16	5/32	8"	.050	1/4	1/4	.10
BB-10-4	1/8	3/16	4"	1/16	5/16	5/16	.12
BB-10-8	1/8	3/16	8"	1/16	5/16	5/16	.12
BB-20-5	1/4	1/4	5"	3/32	7/16	7/16	.17
BB-20-10	1/4	1/4	10"	3/32	7/16	7/16	.17
BB-40-6	3/8	5/16	6"	3/32	9/16	9/16	.21
BB-40-12	3/8	5/16	12"	3/32	9/16	9/16	.21
BB-60-8	1/2	3/8	8"	3/32	11/16	11/16	.26
BB-60-16	1/2	3/8	16"	3/32	11/16	11/16	.26
BB-100-12	3/4	9/16	12"	1/8	15/16	15/16	.35
BB-100-20	3/4	9/16	20"	1/8	15/16	15/16	.35
BB-140-16	1	5/8	16"	1/8	1 1/8	1 1/8	.42
BB-140-24	1	5/8	24"	1/8	1 1/8	1 1/8	.42

Typical Applications





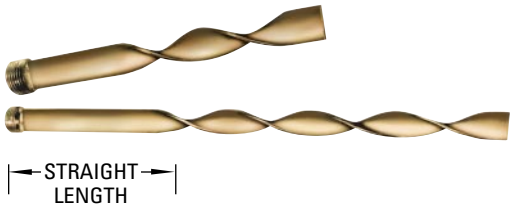
Straight Brass Plug Baffles (Metric) – BB

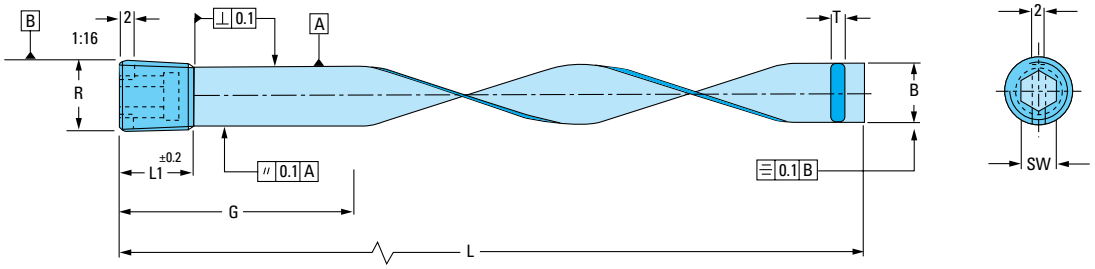
ITEM NUMBER	R	SW	B	L	L1	T	d
BB-100-18	1/8" BSP	5	8.2	100	8	2.0	8.5
BB-200-18	1/8" BSP	5	8.2	200	8	2.0	8.5
BB-125-14	1/4" BSP	6	11.2	125	10	2.5	11.5
BB-250-14	1/4" BSP	6	11.2	250	10	2.5	11.5
BB-150-38	3/8" BSP	8	14.7	150	10	2.5	15.0
BB-300-38	3/8" BSP	8	14.7	300	10	2.5	15.0
BB-200-12	1/2" BSP	10	18.2	200	10	2.5	18.5
BB-400-12	1/2" BSP	10	18.2	400	10	2.5	18.5
BB-300-34	3/4" BSP	12	23.2	300	12	3.0	23.5
BB-500-34	3/4" BSP	12	23.2	500	12	3.0	23.5

Spiral Brass Plug Baffles

Spiral Baffles

Spiral baffles improve cooling balance by creating turbulent action in the channel, reducing laminar or straight-layered flow patterns and providing efficient coolant movement.





NOTE: A drilled hole (finish d1^{H13}) is adequate. Don't ream the hole.

Spiral Brass Plug Baffles (Inch) – BBS

ITEM NUMBER	NOMINAL PLUG SIZE	HEX SIZE S	NOMINAL LENGTH OVERALL	STRAIGHT LENGTH	BAFFLE THICKNESS	BAFFLE WIDTH -.005 -.015	DRILL SIZE	C
BBS-05-04	1/16	5/32	4"	2"	.050	1/4	1/4	.10
BBS-05-08	1/16	5/32	8"	4"	.050	1/4	1/4	.10
BBS-10-04	1/8	3/16	4"	2"	1/16	5/16	5/16	.12
BBS-10-08	1/8	3/16	8"	4"	1/16	5/16	5/16	.12
BBS-20-05	1/4	1/4	5"	2"	3/32	7/16	7/16	.17
BBS-20-10	1/4	1/4	10"	4"	3/32	7/16	7/16	.17
BBS-40-06	3/8	5/16	6"	2"	3/32	9/16	9/16	.21
BBS-40-12	3/8	5/16	12"	4"	3/32	9/16	9/16	.21
BBS-60-08	1/2	3/8	8"	3"	3/32	11/16	11/16	.26
BBS-60-16	1/2	3/8	16"	5"	3/32	11/16	11/16	.26
BBS-100-12	3/4	9/16	11 7/8	4"	1/8	15/16	15/16	.35
BBS-100-20	3/4	9/16	19 7/8	6"	1/8	15/16	15/16	.35
BBS-140-16	1	5/8	15 7/8	5"	1/8	1 1/8	1 1/8	.42
BBS-140-24	1	5/8	23 7/8	8"	1/8	1 1/8	1 1/8	.42

Spiral Brass Plug Baffles (Metric) – BBS

ITEM NUMBER	R	G	SW	B	L	L1	T	d1
BBS-100-116	1/16"	51	4	6.5	101	8	1.6	6.8
BBS-200-116	1/16"	102	4	6.5	203	8	1.6	6.8
BBS-100-18	1/8"	51	5	8.5	101	8	1.6	8.8
BBS-200-18	1/8"	102	5	8.5	203	8	1.6	8.8
BBS-125-14	1/4"	51	7	11.5	127	10	2.4	11.8
BBS-250-14	1/4"	102	7	11.5	254	10	2.4	11.8
BBS-150-38	3/8"	51	8	15.0	152	10	2.4	15.3
BBS-300-38	3/8"	102	8	15.0	305	10	2.4	15.3
BBS-200-12	1/2"	76	10	18.5	203	10	2.4	18.8
BBS-400-12	1/2"	127	10	18.5	406	10	2.4	18.8
BBS-300-34	3/4"	102	12	23.5	305	12	3.2	23.8
BBS-500-34	3/4"	153	12	23.5	508	12	3.2	23.8
BBS-400-1	1"	127	12	28.5	406	12	3.2	28.8
BBS-600-1	1"	203	12	28.5	610	12	3.2	28.8

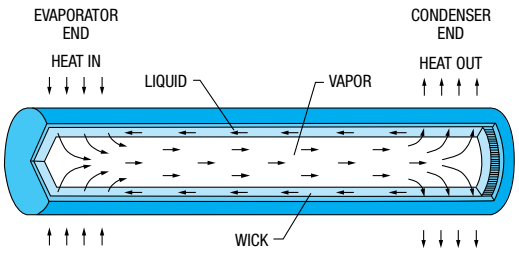
Heat Pipes

How and where heat pipes work

The D-M-E Heat Pipe is a heat transfer device specifically designed for optimal performance in plastic injection molds. It consists of a vacuum-tight copper tube containing a wick and a non-toxic working fluid. One end of the heat pipe is an evaporator, the opposite end is a condenser. Thermal energy is gathered at the evaporator end, vaporizing the working fluid. This vapor then travels through the Heat Pipe to the condenser end. At the condenser end the vapor condensates back into a liquid, giving up its latent heat in the process. To complete the cycle the condensed liquid then travels along the wick, via capillary action, back to the evaporator section. This process repeats itself continuously, transferring heat many times faster than pure copper.

How heat pipes are used

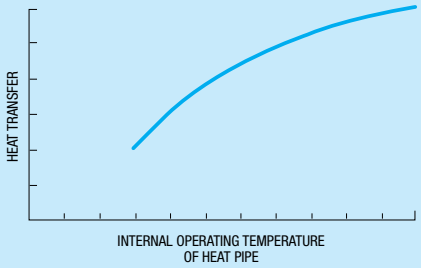
Available in a variety of standard lengths and diameters, D-M-E Heat Pipes are used in cores, core slides, cavities and other areas of a mold or die requiring cooling or controlled temperatures. Commonly used in place of bubblers, baffles, fountains or blades, Heat Pipes transfer heat rapidly to the coolant, rather than requiring the coolant to flow into the heated area. They are also used to transfer heat to a cooler portion of the mold (which serves as a heat sink) or to open air, thereby permitting cooling of otherwise inaccessible areas and eliminating potential coolant leakage.



Standard injection molding heat pipes

The standard line of Heat Pipes for injection molding includes both a low-temperature (TPL) and a high-temperature (TPH) series. The TPL Series works most efficiently between the temperatures of 40° and 200°F with a coolant temperature of approximately 60° to 80°F, and the TPH Series between 150° and 400°F with a coolant temperature of approximately 90° to 110°F. The sealed end of each heat conductor is color-coded (BLACK for the TPL Series and WHITE for the TPH Series). Selection of the appropriate series is based on the application's melt, mold surface and coolant temperatures to which the Heat Pipe will be subjected.





MAXIMIZING EFFICIENCY WITH WARM COOLANT
Heat Pipes work best when the coolant is between 60° and 110°F, and sometimes higher. The graph illustrates how the Heat Pipe's heat transfer capability is dependent upon its internal operating temperature. It is best to start with the coolant temperature high, then reduce it if necessary.

Benefits of heat pipes

Cool molds faster and reduce cycle time

The Heat Pipe's ability to cool molds faster and thus reduce cycle time is due to a number of factors. First, waterlines throughout the entire mold can be larger in diameter, permitting a higher coolant velocity, which transfers heat faster. Second, the larger volume of fluid flowing through the waterline results in a lower overall coolant temperature rise, so that the last Heat Pipe in the system will transfer heat as efficiently as the first. Third, the extension of the Heat Pipe into the waterline promotes turbulent flow, which transfers heat faster than laminar flow. Fourth, the ability to transfer heat away from inaccessible areas improves the overall cooling rate and reduces cycle time, even if extension into a remote waterline is impractical or impossible.

Improve Part Quality

As the Heat Pipe transfers heat to the coolant, air or mold component, it also dissipates heat evenly along its entire length. This isothermal action provides faster and more uniform cooling, thus eliminating hot spots, which cause sink marks, pulling and spotting.

Simplify Mold Design and Lower Costs

With Heat Pipes, waterline design is greatly simplified since coolant flow into the heated area of the mold is not required. In addition, the ability to locate heat conductors in areas inaccessible to other cooling devices can further simplify the overall mold design. In most cases, the machining and construction time required for the mold is reduced, lowering moldmaking costs.

Heat Pipes

Reduce Maintenance and Operating Costs

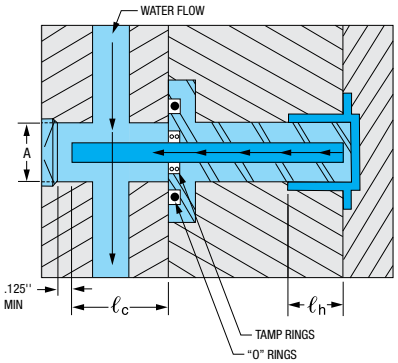
The increased waterline diameter, coolant velocity and heat capacity effectively eliminate scale formation, calcium deposits and the plugging up of small waterlines and ports. In addition, Heat Pipes operate in any coolant without corroding.

Upgrade Existing Molds and Dies

Heat Pipes effectively solve cooling, cycle time or part quality problems in existing molds. They can be retrofitted as replacements for bubblers or baffles and to provide heat transfer in previously uncooled areas.

Salvage Damaged Molds and Dies

In certain applications, Heat Pipes can even be used to salvage or repair molds that would otherwise have to be scrapped or extensively reworked.



Selecting the right size, shape and temperature range

The standard diameters, lengths and temperature ranges of TPL and TPH Series Heat Pipes will satisfy most applications.

TPL & TPH SERIES	TOLERANCES
DIAMETER (O.D.)	±.004
LENGTH	±.020

NOTE: Heat Pipes cannot be used as ejector pins and parts cannot be molded or cast against them. Also, Heat Pipes cannot be cut, machined, bent or plated. If a special size is required, contact D-M-E to discuss your application.

QUANTITY DISCOUNTS:
Discounts for all Heat Pipe sizes and series apply to current net prices.

8 to 20 . . . . . Less 5%
21 to 35 . . . . . Less 10%
36 to 60 . . . . . Less 15%
71 or more Quoted by request

QUANTITY DISCOUNTS:
(Heat Transfer Compounds)
Discounts apply to current net prices.

2 to 5 . . . . . Less 5%
6 to 9 . . . . . Less 10%
10 or more . . . . . Less 15%

Quantities of silver and copper compound may be combined for discounts.

TPL and TPH heat pipes for injection molding

For low-temperature Heat Pipes (40°-200°F) use TPL (color-coded BLACK) as a prefix in front of item number in the chart below. For high-temperature Heat Pipes (150°-400°F) use TPH (color-coded WHITE) as the prefix.
Examples: TPL8-600; TPH6-500.

LENGTH (INCHES)	TPL & TPH DIAMETER & ITEM NUMBER					
	1/8	3/16	1/4	5/16	3/8	1/2
3	4-300	6-300	8-300	10-300	12-300	16-300
4	4-400	6-400	8-400	10-400	12-400	16-400
5	4-500	6-500	8-500	—	—	—
6	4-600	6-600	8-600	10-600	12-600	16-600
7	4-700	6-700	8-700	—	—	—
8	4-800	6-800	8-800	10-800	12-800	16-800
10	—	—	—	10-1000	12-1000	16-1000
12	—	—	—	—	—	16-1200

Silver heat transfer compound* – HTC-06S

For TPL and TPH Series Heat Pipes

ITEM NUMBER
HTC-06S

Contains micronic particles of silver to provide a thermal resistance of 4.75°C in/watt. The compound is supplied in a 5cc plastic syringe. (D-M-E recommends the Silver Heat Transfer Compound because it has eight times lower thermal resistance than the copper equivalent.)

Copper heat transfer compound* – HTC-30C

For TPL and TPH Series Heat Pipes

ITEM NUMBER
HTC-30C

Contains micronic particles of copper to provide a thermal resistance of 38°C in/watt. The compound is supplied in a 5cc plastic syringe.

* For .125" diameter Heat Pipes, do not use applicator tube supplied with Heat Transfer Compound. Apply desired amount of compound directly into core hole.

Tamp ring sets – TARS

Each set includes 32 silver alloy tamp rings (enough for installing 16 Heat Pipes) and one hollow tamping tube. Select the required tamp ring set by its I.D. to match the O.D. of the Heat Pipe being used.

ITEM NUMBER	TARS-04	TARS-06	TARS-08	TARS-10	TARS-12	TARS-16
RING I.D.	1/8	3/16	1/4	5/16	3/8	1/2

High-Temperature Insulator Sheets and Locating Rings

High-Temperature Insulator Sheets (HTIS) for Plastics Molds and Die-Cast Dies

- Asbestos-free material
- High compression strength
- Machinable with high-speed cutting tools

D-M-E High-Temperature Insulator Sheets are used on molds and dies between the top clamping plate and the stationary platen, and between the bottom of the ejector housing and the movable platen. The thermal insulating properties of this unique asbestos-free, glass-reinforced polymer composite inhibit heat transfer from the mold to the platen, or from the platen to the mold (depending on the application), which helps conserve energy and prolong machine life. These sheets have excellent non-deformation characteristics and a compressive strength,* which is higher than asbestos and mica materials. Compression molded for high impact strength, they are supplied micro-finished top and bottom, parallel within ±.002.

*49,400 psi at 75°F

ENERGY SAVINGS
1/4 THICK = 27,508 BTU/HR
1/2 THICK = 31,004 BTU/HR

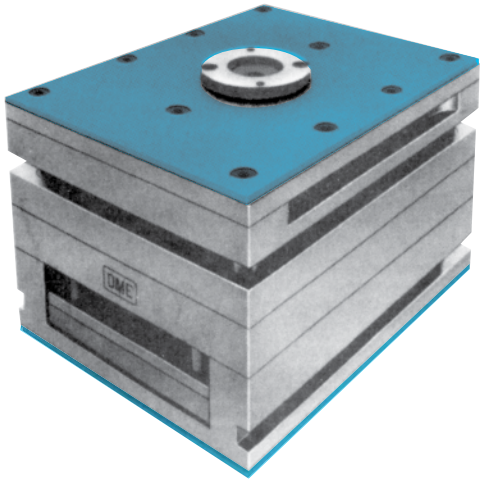
General Data

COMPRESSIVE STRENGTH	(ASTM D-229)	49,400 PSI at 75°F 27,200 PSI at 300°F 18,000 PSI at 400°F 17,100 PSI at 500°F 15,000 PSI at 550°F
MODULUS OF ELASTICITY IN COMPRESSION	(ASTM D-229	1.8 x 10^6 PSI at 75°F 2.9 x 10^6 PSI at 425°F
WATER ABSORPTION	(ASTM D-229)	0.2%
THERMAL CONDUCTIVITY (K FACTOR), (BTU/HR/FT²/IN/°F)	(ASTM C-177)	1.9 at 75°F 2.1 at 425°F
FLAME RESISTANCE	(UL SUBJECT 94)	94V-0
EXPANSION ACROSS THICKNESS EXPANSION ACROSS SURFACE		6.43 x 10^{-5} IN/IN/°F 1.24 x 10^{-5} IN/IN/°F
MAXIMUM RECOMMENDED SERVICE TEMPERATURE		550°F

High-Temperature Insulator Sheets – HTIS

THICKNESS ±.002	LENGTH ±.06	WIDTH ±.06	ITEM NUMBER	NET WEIGHT
1/4	36"	18"	HTIS-1836-2	12
		24"	HTIS-2436-2	16
		36"	HTIS-3636-2	24
1/4	96"	48"	HTIS-4896-2	105
1/2	36"	18"	HTIS-1836-4	24
		24"	HTIS-2436-4	32
		36"	HTIS-3636-4	48

NOTE: Special sizes available on special order: Max. length = 96", Max thickness = 1", Max. width = 48", Min. thickness = 1/8
Installation: Use 1/4-20 flat head screws. Drill and tap base to suit.

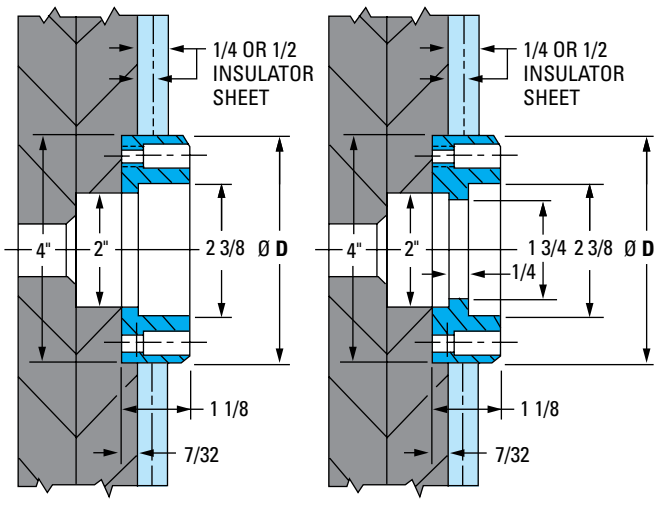


Locating Rings (6541, 6544) for use with Insulator Sheets

These thicker Locating Rings are used with Insulator Sheets 1/4 and 1/2 thick. They extend beyond the Insulator Sheet far enough to ensure more than 5/16 pilot engagement with the locating hole in the machine platen.

ITEM NUMBER	Ø D +.003 -.000	DESCRIPTION
6541	3.990	STANDARD SERIES
6544	3.990	CLAMP TYPE

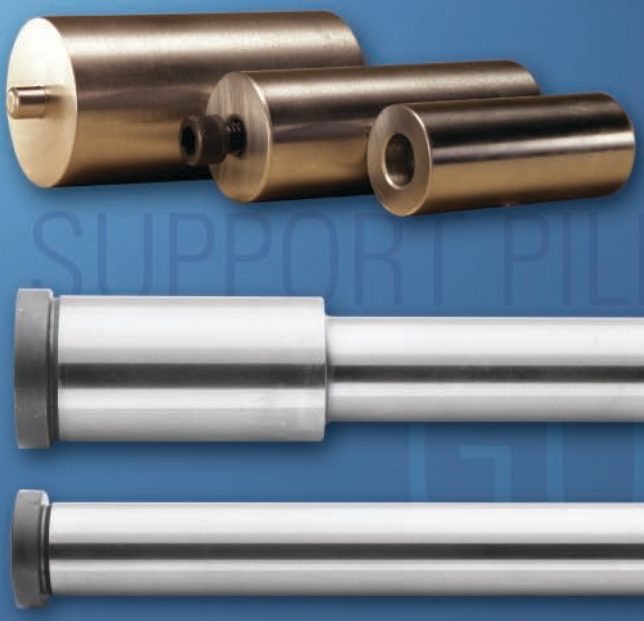
NOTE: Includes two 5/16-18 socket head cap screws.



ITEM NO. 6541
Ø D = 3.990
(STANDARD SERIES)

ITEM NO. 6544
Ø D = 3.990
(CLAMP TYPE)

D-M-E Mold Components



The world's first line of regional components for global molds

SUPPORT PILLARS
GUIDE PINS

Mold Components

BUSHINGS
STOP PINS
LOCATING RINGS



D-M-E
Every step of the way

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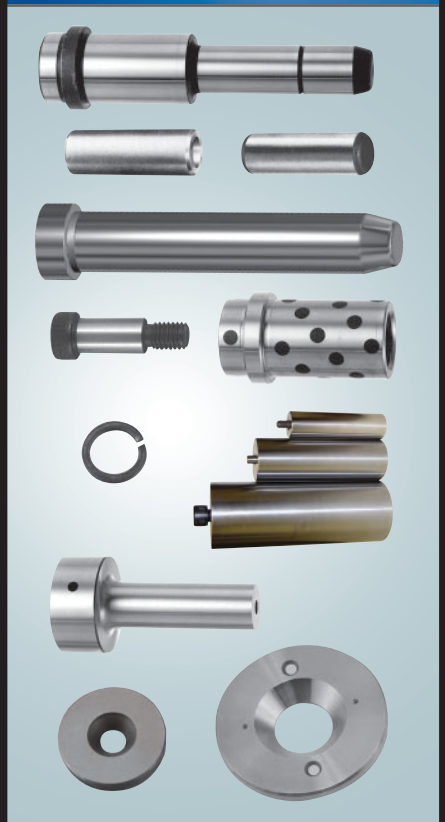
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A comprehensive line of standard inch mold components including:

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Shoulder Guide Pins
Shoulder and Straight Bushings
Self-Lubricating Bushings for Guide Pins
Bronze-Plated Bushings
Guided Ejection Systems
Mold Parts for 34R Mold Assemblies
Support Pillars
Sprue Bushings
Locating Rings
3-Plate Extension Bushings



Mold Components – Euro-Series.....219 to 238

A comprehensive line of more than 4,000 Euro-Series mold components including:

Guide Pins
Angle Pins
Guide Pin Bushings
Locating Rings
Support Pillars
Centering Bushings
Tubular Dowels
Sprue Bushings
Bolts, Screws and Lock Washers
Stop Disks

Online Price Guide

Go to www.dme.net/prices for the latest pricing guide.

D-M-E Mold Components – INCH

FEATURING HIGH-QUALITY
GUIDE PINS, BUSHINGS,
SUPPORT PILLARS, AND MORE

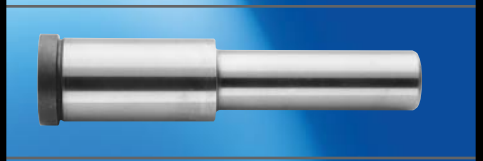


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A comprehensive line of Standard Mold Components



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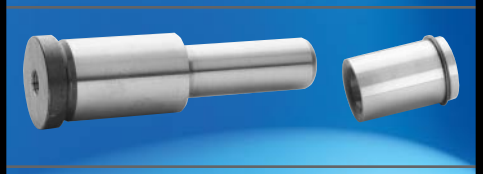
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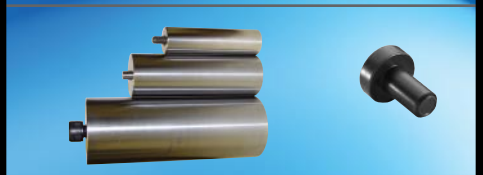
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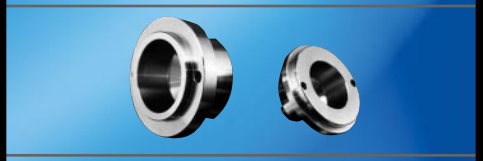
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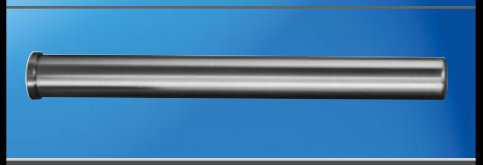
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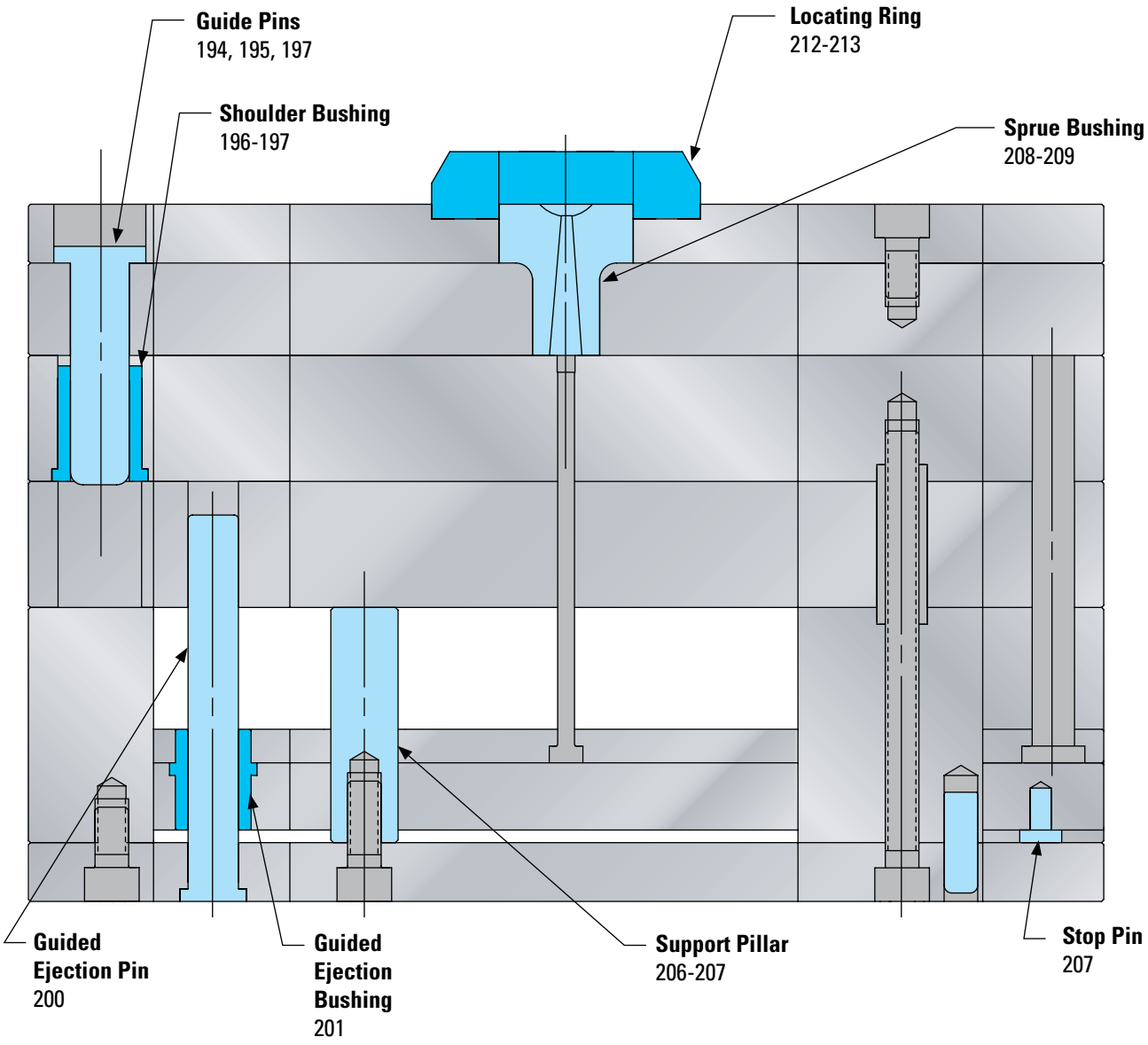


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Guide Pins – Hardened and Precision Ground

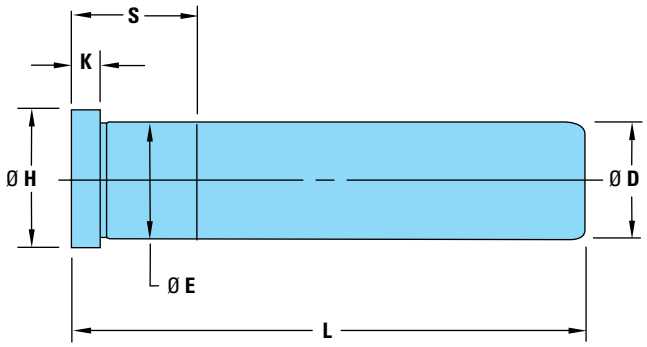
Guide Pins – GL

Hardened and Precision Ground



General Dimensions

NOMINAL DIA	Ø D +.0000 -.0005	Ø H +.000 -.030	K	Ø E +.0005 -.0000
3/4	.749	.990	3/16	.751
7/8	.874	1.115	1/4	.876
1"	.999	1.240	1/4	1.001
1 1/4	1.249	1.490	5/16	1.251
1 1/2	1.499	1.740	5/16	1.501



L LENGTH +.00 -.06	Ø D = 3/4 DIA .749 +.0000 -.0005		Ø D = 7/8 DIA .874 +.0000 -.0005		Ø D = 1" DIA .999 +.0000 -.0005		Ø D = 1 1/4 DIA 1.249 +.0000 -.0005		Ø D = 1 1/2 DIA 1.499 +.0000 -.0005		L LENGTH +.00 -.06
	S	ITEM NUMBER	S	ITEM NUMBER	S	ITEM NUMBER	S	ITEM NUMBER	S	ITEM NUMBER	
1 3/4	7/8	5000-GL	7/8	5099-GL	7/8	5198-GL	—	—	—	—	1 3/4
2 1/4	7/8	5001-GL	7/8	5100-GL	7/8	5199-GL	—	—	—	—	2 1/4
2 3/4	7/8	5002-GL	7/8	5101-GL	7/8	5200-GL	7/8	5300-GL	—	—	2 3/4
3 1/4	7/8	5003-GL	7/8	5102-GL	7/8	5201-GL	7/8	5301-GL	—	—	3 1/4
3 3/4	7/8	5004-GL	7/8	5103-GL	7/8	5202-GL	7/8	5302-GL	1 3/8	5402-GL	3 3/4
4 1/4	1 3/8	5005-GL	1 3/8	5104-GL	1 3/8	5203-GL	7/8	5303-GL	1 3/8	5403-GL	4 1/4
4 3/4	1 3/8	5006-GL	1 3/8	5105-GL	1 3/8	5204-GL	1 3/8	5304-GL	1 3/8	5404-GL	4 3/4
5 1/4	1 3/8	5007-GL	1 3/8	5106-GL	1 3/8	5205-GL	1 3/8	5305-GL	1 3/8	5405-GL	5 1/4
5 3/4	1 7/8	5008-GL	1 3/8	5107-GL	1 3/8	5206-GL	1 3/8	5306-GL	1 3/8	5406-GL	5 3/4
6 1/4	1 7/8	5009-GL	1 7/8	5108-GL	1 3/8	5207-GL	1 3/8	5307-GL	1 3/8	5407-GL	6 1/4
6 3/4	1 7/8	5010-GL	1 7/8	5109-GL	1 7/8	5208-GL	1 7/8	5308-GL	1 3/8	5408-GL	6 3/4
7 1/4	1 7/8	5011-GL	1 7/8	5110-GL	1 7/8	5209-GL	1 7/8	5309-GL	—	—	7 1/4
7 3/4	1 7/8	5012-GL	1 7/8	5111-GL	1 7/8	5210-GL	1 7/8	5310-GL	1 7/8	5410-GL	7 3/4
8 1/4	—	—	1 7/8	5112-GL	1 7/8	5211-GL	1 7/8	5311-GL	—	—	8 1/4
8 3/4	—	—	1 7/8	5113-GL	1 7/8	5212-GL	1 7/8	5312-GL	1 7/8	5412-GL	8 3/4
9 1/4	1 7/8	5015-GL	—	—	1 7/8	5213-GL	1 7/8	5313-GL	—	—	9 1/4
9 3/4	—	—	—	—	1 7/8	5214-GL	1 7/8	5314-GL	1 7/8	5414-GL	9 3/4
10 1/4	—	—	—	—	1 7/8	5215-GL	1 7/8	5315-GL	—	—	10 1/4
10 3/4	—	—	1 7/8	5117-GL	1 7/8	5216-GL	1 7/8	5316-GL	1 7/8	5416-GL	10 3/4
11 1/4	—	—	—	—	1 7/8	5217-GL	1 7/8	5317-GL	—	—	11 1/4
11 3/4	—	—	—	—	1 7/8	5218-GL	1 7/8	5318-GL	1 7/8	5418-GL	11 3/4
12 1/4	—	—	1 7/8	5120-GL	1 7/8	5219-GL	1 7/8	5319-GL	—	—	12 1/4
12 3/4	—	—	—	—	—	—	1 7/8	5320-GL	1 7/8	5420-GL	12 3/4
13 3/4	—	—	—	—	—	—	1 7/8	5322-GL	1 7/8	5422-GL	13 3/4
14 3/4	—	—	—	—	—	—	1 7/8	5324-GL	1 7/8	5424-GL	14 3/4
15 3/4	—	—	—	—	—	—	1 7/8	5326-GL	1 7/8	5426-GL	15 3/4

NOTE: Grooved guide pins also available on special order.

All items in stock.

QUANTITY DISCOUNTS: Leader Pins and Bushings. Discounts apply to current Net Prices. Any combination of pins and bushings may be mixed for quantity discounts. 16 to 27 Less 10%; 28 or more Less 15%

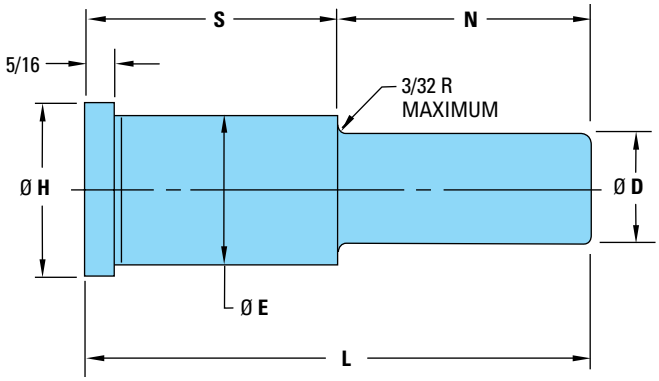
Shoulder Guide Pins – Hardened and Precision Ground

Shoulder Guide Pins – A-GL, C-GL, D-GL

Hardened and Precision Ground

D-M-E Standard Shoulder Pins are precision made of high-quality steel and are hardened and finished ground to close tolerances. This combination enables moldmakers to line-bore the guide pin and bushing hole.





General Dimensions

NOMINAL DIA	Ø D +.0000 -.0005	Ø E +.0005 -.0000	Ø H +.000 -.010
3/4	.749	1.126	1.228
1"	.999	1.376	1.510
1 1/4	1.249	1.626	1.791

S +.00 -.03	N +.00 -.03	L +.00 -.06	Ø D = 3/4 DIA ITEM NUMBER	Ø D = 1" DIA ITEM NUMBER	Ø D = 1 1/4 DIA ITEM NUMBER
7/8	7/8	1 3/4	A-0707-GL	—	—
	1 3/8	2 1/4	A-0713-GL	C-0713-GL	—
	1 7/8	2 3/4	A-0717-GL	C-0717-GL	—
	2 3/8	3 1/4	A-0723-GL	—	—
	2 7/8	3 3/4	A-0727-GL	C-0727-GL	—
1 3/8	7/8	2 1/4	A-1307-GL	C-1307-GL	—
	1 3/8	2 3/4	A-1313-GL	C-1313-GL	D-1313-GL
	1 7/8	3 1/4	A-1317-GL	C-1317-GL	—
	2 3/8	3 3/4	A-1323-GL	C-1323-GL	D-1323-GL
	2 7/8	4 1/4	A-1327-GL	C-1327-GL	—
	3 3/8	4 3/4	A-1333-GL	C-1333-GL	D-1333-GL
1 7/8	7/8	2 3/4	A-1707-GL	C-1707-GL	—
	1 3/8	3 1/4	A-1713-GL	C-1713-GL	D-1713-GL
	1 7/8	3 3/4	A-1717-GL	C-1717-GL	D-1717-GL
	2 3/8	4 1/4	A-1723-GL	C-1723-GL	D-1723-GL
	2 7/8	4 3/4	A-1727-GL	C-1727-GL	D-1727-GL
	3 3/8	5 1/4	A-1733-GL	C-1733-GL	D-1733-GL
	3 7/8	5 3/4	A-1737-GL	C-1737-GL	D-1737-GL
2 3/8	7/8	3 1/4	A-2307-GL	—	—
	1 3/8	3 3/4	A-2313-GL	C-2313-GL	D-2313-GL
	1 7/8	4 1/4	A-2317-GL	C-2317-GL	D-2317-GL
	2 3/8	4 3/4	A-2323-GL	C-2323-GL	D-2323-GL
	2 7/8	5 1/4	A-2327-GL	C-2327-GL	D-2327-GL
	3 3/8	5 3/4	—	C-2333-GL	D-2333-GL
	3 7/8	6 1/4	A-2337-GL	C-2337-GL	D-2337-GL
2 7/8	1 3/8	4 1/4	A-2713-GL	C-2713-GL	—
	1 7/8	4 3/4	A-2717-GL	C-2717-GL	D-2717-GL
	2 3/8	5 1/4	A-2723-GL	C-2723-GL	D-2723-GL
	2 7/8	5 3/4	A-2727-GL	C-2727-GL	D-2727-GL
	3 3/8	6 1/4	—	C-2733-GL	D-2733-GL
	3 7/8	6 3/4	A-2737-GL	C-2737-GL	D-2737-GL
	4 3/8	7 1/4	—	C-2743-GL	D-2743-GL
3 3/8	1 7/8	5 1/4	A-3317-GL	C-3317-GL	D-3317-GL
	2 3/8	5 3/4	A-3323-GL	C-3323-GL	D-3323-GL
	2 7/8	6 1/4	—	C-3327-GL	D-3327-GL
	3 3/8	6 3/4	A-3333-GL	C-3333-GL	D-3333-GL
	4 3/8	7 3/4	—	C-3343-GL	D-3343-GL
3 7/8	2 3/8	6 1/4	A-3723-GL	C-3723-GL	D-3723-GL
	2 7/8	6 3/4	A-3727-GL	C-3727-GL	D-3727-GL
	3 3/8	7 1/4	—	—	D-3733-GL
	3 7/8	7 3/4	—	C-3737-GL	D-3737-GL
	4 7/8	8 3/4	—	C-3747-GL	D-3747-GL
4 3/8	2 7/8	7 1/4	—	C-4327-GL	D-4327-GL
	3 3/8	7 3/4	—	—	D-4333-GL
	3 7/8	8 1/4	—	C-4337-GL	D-4337-GL
	4 3/8	8 3/4	—	C-4343-GL	—
	4 7/8	9 1/4	—	—	D-4347-GL
4 7/8	3 7/8	8 3/4	—	C-4737-GL	D-4737-GL
	4 3/8	9 1/4	—	C-4743-GL	D-4743-GL
	4 7/8	9 3/4	—	C-4747-GL	D-4747-GL
	5 7/8	10 3/4	—	—	D-4757-GL
5 7/8	3 7/8	9 3/4	—	C-5737-GL	D-5737-GL
	4 3/8	10 1/4	—	—	D-5743-GL
	4 7/8	10 3/4	—	C-5747-GL	D-5747-GL
	5 7/8	11 3/4	—	C-5757-GL	D-5757-GL

NOTE: Grooved guide pins also available on special order.

All items in stock.

QUANTITY DISCOUNTS: Shoulder Guide Pins. Discounts apply to current Net Prices. Any combination of pins and bushings may be mixed for quantity discounts. 16 to 27 Less 10%; 28 or more Less 15%

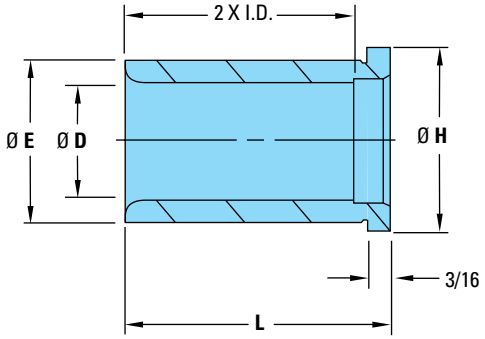
Shoulder Bushings and Straight Bushings Hardened and Precision Ground

Shoulder Bushings

General Dimensions

NOMINAL I.D.	Ø D +.0005 -.0000	Ø E +.0005 -.0000	Ø H +.000 -.030
3/4	.7505	1.1255	1.302
7/8	.8755	1.2505	1.427
1"	1.0005	1.3755	1.552
1 1/4	1.2505	1.6255	1.802
1 1/2	1.5005	2.0005	2.177





Surface Treatment: Case-hardened .030 to .040 deep

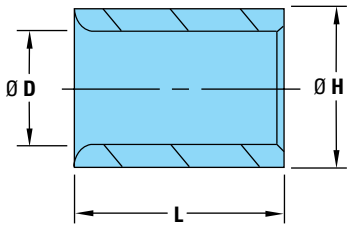
L LENGTH +.00 -.06	Ø D = 3/4 DIA .7505 +.0005 -.0000	Ø D = 7/8 DIA .8755 +.0005 -.0000	Ø D = 1" DIA 1.0005 +.0005 -.0000	Ø D = 1 1/4 DIA 1.2505 +.0005 -.0000	Ø D = 1 1/2 DIA 1.5005 +.0005 -.0000	L LENGTH +.00 -.06
	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER	
7/8	5700	5710	5730	5750	5770	7/8
1 3/8	5701	5711	5731	5751	5771	1 3/8
1 7/8	5702	5712	5732	5752	5772	1 7/8
2 3/8	5703	5713	5733	5753	5773	2 3/8
2 7/8	5704	5714	5734	5754	5774	2 7/8
3 3/8	5705	5715	5735	5755	5775	3 3/8
3 7/8	5706	5716	5736	5756	5776	3 7/8
4 3/8	5707	5717	5737	5757	5777	4 3/8
4 7/8	5708	5718	5738	5758	5778	4 7/8
5 7/8	5709	5720	5740	5760	5780	5 7/8

Straight Bushings

Surface Treatment: Case-hardened .030 to .040 deep

NOMINAL I.D.	Ø D +.0005 -.0000	L +.00 -.06 LENGTH	Ø H +.0005 -.0000	ITEM NUMBER
3/4	.7505	7/8	1.1255	5500
		1 3/8	1.1255	5501
7/8	.8755	1 3/8	1.2505	5502
1"	1.0005	1 3/8	1.3755	5503
1 1/4	1.2505	1 3/8	1.6255	5504
		1 7/8	1.6255	5505
1 1/2	1.5005	1 3/8	2.0005	5506
		1 7/8	2.0005	5507
2"	2.0005	3 7/8	2.5005	5508
2 1/2	2.5005	4 7/8	3.2505	5509
3"	3.0005	4 7/8	3.7505	5510





All items in stock.

QUANTITY DISCOUNTS: Shoulder and Straight Bushings. Discounts apply to current Net Prices. Any combination of pins and bushings may be mixed for quantity discounts. 16 to 27 Less 10%; 28 or more Less 15%

Guide Pins and Shoulder Bushings
2", 2.5" and 3" Diameter

Guide Pins – GL

Designed to satisfy the requirements of larger plastics molds and die-cast dies. They are made of the finest quality alloy steels and are hardened and precision ground.

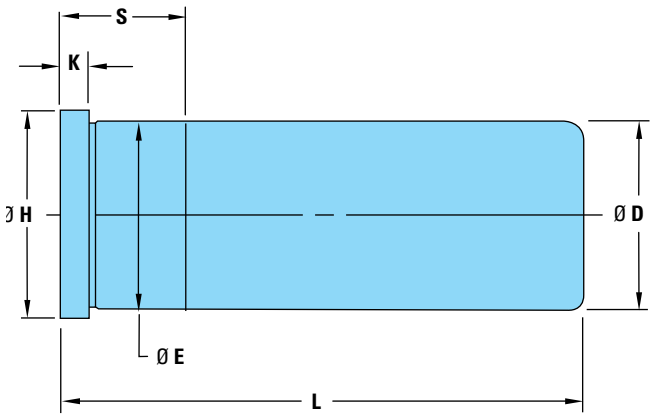


L LENGTH +.00 -.06	Ø D = 2" DIA 1.999 +.0000 -.0005		Ø D = 2 1/2 DIA 2.499 +.0000 -.0005		Ø D = 3" DIA 2.999 +.0000 -.0005	
	S	ITEM NUMBER	S	ITEM NUMBER	S	ITEM NUMBER
5 3/4	1 7/8	5606-GL	2 3/8	5806-GL	—	—
6 3/4	1 7/8	5608-GL	2 3/8	5808-GL	—	—
7 3/4	1 7/8	5610-GL	2 3/8	5810-GL	—	—
8 3/4	1 7/8	5612-GL	2 3/8	5812-GL	2 7/8	6012-GL
9 3/4	1 7/8	5614-GL	2 3/8	5814-GL	—	—
10 3/4	1 7/8	5616-GL	2 3/8	5816-GL	2 7/8	6016-GL
11 3/4	1 7/8	5618-GL	2 3/8	5818-GL	—	—
12 3/4	1 7/8	5620-GL	2 3/8	5820-GL	2 7/8	6020-GL
13 3/4	1 7/8	5622-GL	2 3/8	5822-GL	—	—
14 3/4	1 7/8	5624-GL	2 3/8	5824-GL	2 7/8	6024-GL
15 3/4	1 7/8	5626-GL	2 3/8	5826-GL	—	—
16 3/4	2 3/8	5628-GL	2 3/8	5828-GL	2 7/8	6028-GL
18 3/4	2 3/8	5632-GL	2 3/8	5832-GL	2 7/8	6032-GL

NOTE: Grooved guide pins also available on special order.

General Dimensions

NOMINAL DIA	Ø D +.0000 -.0005	Ø H +.000 -.030	Ø E +.0005 -.0000	K
2"	1.999	2.240	2.001	5/16
2 1/2	2.499	2.740	2.501	5/16
3"	2.999	3.365	3.001	1/2



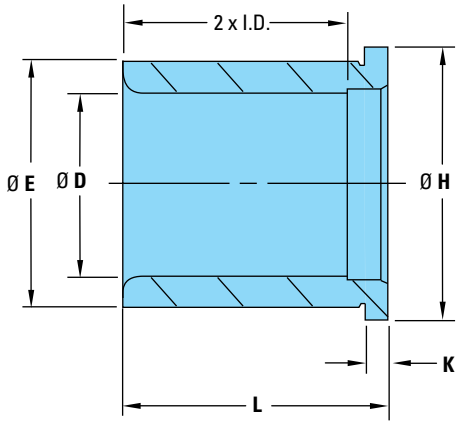


Shoulder Bushings

Made of the finest quality alloy steel. They are hardened and precision ground to reduce wear and give longer life under severe molding or die-casting conditions. The I.D. is ground to close tolerances in order to maintain a smooth, but firm, running fit with D-M-E's Standard Guide Pins.

General Dimensions

NOMINAL I.D.	Ø D +.0005 -.0000	Ø E +.0005 -.0000	Ø H +.000 -.030	K
2"	2.0005	2.5005	2.677	3/16
2 1/2	2.5005	3.2505	3.427	3/16
3"	3.0005	3.7505	3.990	1/2



Surface Treatment: Case-hardened .030 to .040 deep

L LENGTH +.00 -.06	Ø D = 2" I.D. 2.0005 +.0005 -.0000	Ø D = 2 1/2" I.D. 2.5005 +.0005 -.0000	Ø D = 3" I.D. 3.0005 +.0005 -.0000
	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER
1 3/8	5901	5951	—
1 7/8	5902	5952	—
2 3/8	5903	5953	—
2 7/8	5904	5954	—
3 3/8	5905	5955	—
3 7/8	5906	5956	5976
4 3/8	5907	5957	—
4 7/8	5908	5958	5978
5 7/8	5910	5960	5980
7 7/8	—	—	5984

All items in stock.

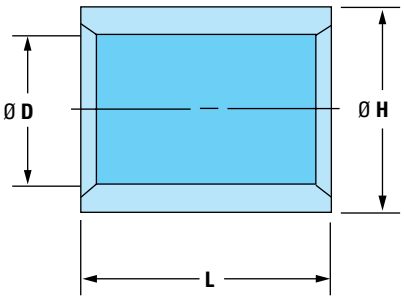
Self-Lubricating Bushings for Guide Pins

D-M-E Self-Lubricating Bushings can save time and money in the design, construction and operation of injection molds. They are ideal for clean-room conditions or any applications where the parts being molded prohibit the use of external lubricants, such as medical, electronic and food-related products. Their built-in lubrication capability also makes them a good choice for fast-cycling, high-production molds.



Self-Lubricating Straight Bushings – GBS

NOMINAL I.D.	Ø D +.0005 -.0000	L +.00 -.06 LENGTH	Ø H +.0005 -.0000	ITEM NUMBER
3/4	.7505	7/8	1.1255	GBS-06-07
		1 3/8	1.1255	GBS-06-13
7/8	.8755	1 3/8	1.2505	GBS-07-13
1"	1.0005	1 3/8	1.3755	GBS-08-13
1 1/4	1.2505	1 3/8	1.6255	GBS-10-13
		1 7/8	1.6255	GBS-10-17
1 1/2	1.5005	1 3/8	2.0005	GBS-12-13
		1 7/8	2.0005	GBS-12-17
2"	2.0005	3 7/8	2.5005	GBS-16-37
2 1/2	2.5005	4 7/8	3.2505	GBS-20-47
3"	3.0005	4 7/8	3.7505	GBS-24-47



NOTE: These bushings are interchangeable with comparably sized D-M-E steel or bronze-plated bushings.

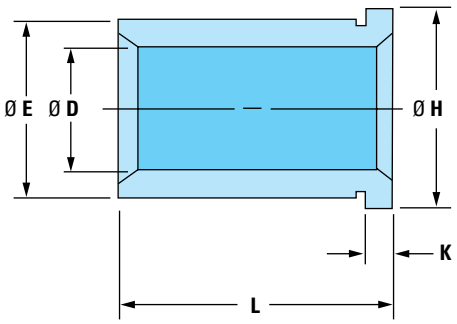
All items in stock.

- Aluminum-bronze alloy with oil-impregnated graphite plugs
- Saves design and moldmaking costs for lubrication and fittings
- Reduces wear and galling
- Lowers maintenance and repair costs
- Eliminates contamination… ideal for "clean-room" environments

Self-Lubricating Shoulder Bushings – GBF

General Dimensions

NOMINAL I.D.	Ø E +.0005 -.0000	Ø H +.000 -.030	K
3/4	1.1255	1.302	3/16
7/8	1.2505	1.427	
1"	1.3755	1.552	
1 1/4	1.6255	1.802	
1 1/2	2.0005	2.177	
2"	2.5005	2.677	
2 1/2	3.2505	3.427	
3"	3.7505	3.990	1/2



QUANTITY DISCOUNTS:
Self-Lubricating Bushings. Discounts apply to current Net Prices. Any combination of pins and bushings may be mixed for quantity discounts.
16 to 27 Less 10%;
28 or more Less 15%

L LENGTH +.00 -.06	Ø D = 3/4 I.D. .7505 +.0005 -.0000	Ø D = 7/8 I.D. .8755 +.0005 -.0000	Ø D = 1" I.D. 1.0005 +.0005 -.0000	Ø D = 1 1/4 I.D. 1.2505 +.0005 -.0000	Ø D = 1 1/2 I.D. 1.5005 +.0005 -.0000	Ø D = 2" I.D. 2.0005 +.0005 -.0000	Ø D = 2 1/2 I.D. 2.5005 +.0005 -.0000	Ø D = 3" I.D. 3.0005 +.0005 -.0000	L LENGTH +.00 -.06
	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER	
7/8	GBF-06-07	GBF-07-07	GBF-08-07	GBF-10-07	GBF-12-07	—	—	—	7/8
1 3/8	GBF-06-13	GBF-07-13	GBF-08-13	GBF-10-13	GBF-12-13	GBF-16-13	GBF-20-13	—	1 3/8
1 7/8	GBF-06-17	GBF-07-17	GBF-08-17	GBF-10-17	GBF-12-17	GBF-16-17	GBF-20-17	—	1 7/8
2 3/8	GBF-06-23	GBF-07-23	GBF-08-23	GBF-10-23	GBF-12-23	GBF-16-23	GBF-20-23	—	2 3/8
2 7/8	GBF-06-27	GBF-07-27	GBF-08-27	GBF-10-27	GBF-12-27	GBF-16-27	GBF-20-27	—	2 7/8
3 3/8	GBF-06-33	GBF-07-33	GBF-08-33	GBF-10-33	GBF-12-33	GBF-16-33	GBF-20-33	—	3 3/8
3 7/8	GBF-06-37	GBF-07-37	GBF-08-37	GBF-10-37	GBF-12-37	GBF-16-37	GBF-20-37	GBF-24-37	3 7/8
4 3/8	GBF-06-43	GBF-07-43	GBF-08-43	GBF-10-43	GBF-12-43	GBF-16-43	GBF-20-43	—	4 3/8
4 7/8	GBF-06-47	GBF-07-47	GBF-08-47	GBF-10-47	GBF-12-47	GBF-16-47	GBF-20-47	GBF-24-47	4 7/8
5 7/8	GBF-06-57	GBF-07-57	GBF-08-57	GBF-10-57	GBF-12-57	GBF-16-57	GBF-20-57	GBF-24-57	5 7/8
7 7/8	—	—	—	—	—	—	—	GBF-24-77	7 7/8

Bronze-Plated Shoulder and Straight Bushings

Bronze-Plated Shoulder Bushings – LBB

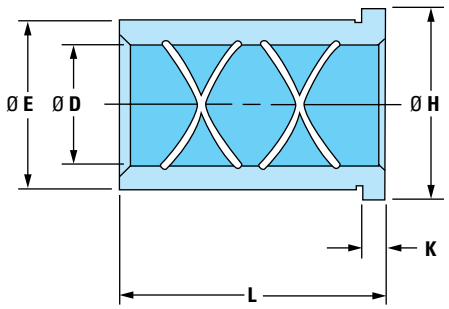


Precision Ground

D-M-E Standard Shoulder and Straight Bushings feature internal oil grooves and bronze-plating for smooth, non-galling operation.

General Dimensions

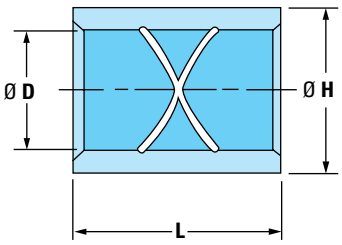
NOMINAL I.D.	Ø E +.0005 -.0000	Ø H +.000 -.030	K
3/4	1.1255	1.302	3/16
7/8	1.2505	1.427	
1"	1.3755	1.552	
1 1/4	1.6255	1.802	
1 1/2	2.0005	2.177	
2"	2.5005	2.677	
2 1/2	3.2505	3.427	
3"	3.7505	3.990	1/2



L LENGTH +.00 -.03	Ø D = 3/4 I.D. .7505 +.0005 -.0000	Ø D = 7/8 I.D. .8755 +.0005 -.0000	Ø D = 1" I.D. 1.0005 +.0005 -.0000	Ø D = 1 1/4 I.D. 1.2505 +.0005 -.0000	Ø D = 1 1/2 I.D. 1.5005 +.0005 -.0000	Ø D = 2" I.D. 2.0005 +.0005 -.0000	Ø D = 2 1/2 I.D. 2.5005 +.0005 -.0000	Ø D = 3" I.D. 3.0005 +.0005 -.0000
	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER
7/8	LBB-06-07	LBB-07-07	LBB-08-07	LBB-10-07	LBB-12-07	—	—	—
1 3/8	LBB-06-13	LBB-07-13	LBB-08-13	LBB-10-13	LBB-12-13	LBB-16-13	LBB-20-13	—
1 7/8	LBB-06-17	LBB-07-17	LBB-08-17	LBB-10-17	LBB-12-17	LBB-16-17	LBB-20-17	—
2 3/8	LBB-06-23	LBB-07-23	LBB-08-23	LBB-10-23	LBB-12-23	LBB-16-23	LBB-20-23	—
2 7/8	LBB-06-27	LBB-07-27	LBB-08-27	LBB-10-27	LBB-12-27	LBB-16-27	LBB-20-27	—
3 3/8	LBB-06-33	LBB-07-33	LBB-08-33	LBB-10-33	LBB-12-33	LBB-16-33	LBB-20-33	—
3 7/8	LBB-06-37	LBB-07-37	LBB-08-37	LBB-10-37	LBB-12-37	LBB-16-37	LBB-20-37	LBB-24-37
4 3/8	LBB-06-43	LBB-07-43	LBB-08-43	LBB-10-43	LBB-12-43	LBB-16-43	LBB-20-43	—
4 7/8	LBB-06-47	LBB-07-47	LBB-08-47	LBB-10-47	LBB-12-47	LBB-16-47	LBB-20-47	LBB-24-47
5 7/8	LBB-06-57	LBB-07-57	LBB-08-57	LBB-10-57	LBB-12-57	LBB-16-57	LBB-20-57	LBB-24-57
7 7/8	—	—	—	—	—	—	—	LBB-24-77

Bronze-Plated Straight Bushings – STB

Precision Ground





NOMINAL I.D.	Ø D +.0005 -.0000	L +.00 -.03 LENGTH	Ø H +.0005 -.0000	ITEM NUMBER
3/4	.7505	7/8	1.1255	STB-06-07
		1 3/8	1.1255	STB-06-13
7/8	.8755	1 3/8	1.2505	STB-07-13
1"	1.0005	1 3/8	1.3755	STB-08-13
1 1/4	1.2505	1 3/8	1.6255	STB-10-13
		1 7/8	1.6255	STB-10-17
1 1/2	1.5005	1 3/8	2.0005	STB-12-13
		1 7/8	2.0005	STB-12-17
2"	2.0005	3 7/8	2.5005	STB-16-37
2 1/2	2.5005	4 7/8	3.2505	STB-20-47
3"	3.0005	4 7/8	3.7505	STB-24-47

All items in stock.

QUANTITY DISCOUNTS: Bronze-Plated Shoulder and Straight Bushings. Discounts apply to current Net Prices. Any combination of pins and bushings may be mixed for quantity discounts. 16 to 27 Less 10%; 28 or more Less 15%

Guided Ejection Guide Pins

Guided Ejection Guide Pins – GL



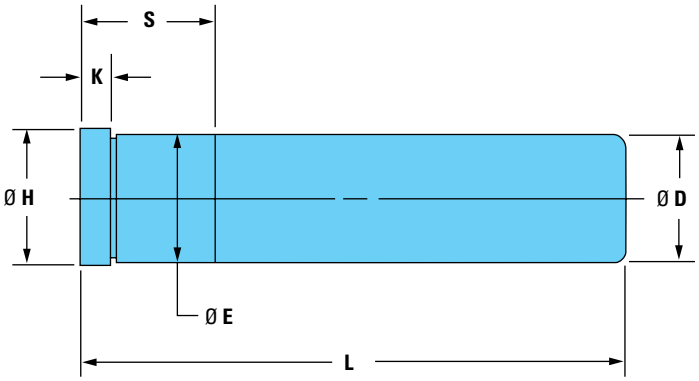
- Short press fit lengths for use in guided ejection applications
- Pins are hardened and precision ground

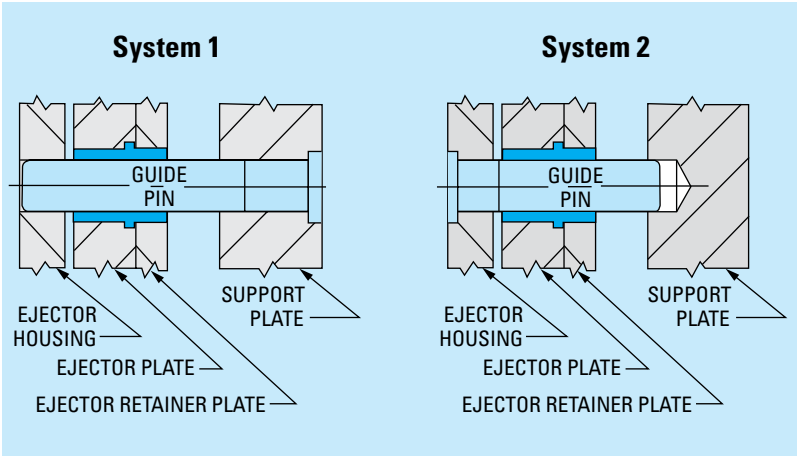
When pins are installed in the support plate, ejector housing can be removed from mold without removing ejector plates, permitting easy access to service the ejector system.

Pins installed in the ejector housing permit fast, low-cost installation. When ejector housing is removed from mold base, the complete ejector assembly is removed.

It is recommended that a minimum of four pins and bushings be installed. Size of the pins and bushings should be determined by the size of the mold. The Guided Ejection System is an inexpensive method to protect against wear and costly damage to a mold in production.

Properly installed, the D-M-E Guided Ejection System holds the ejector assembly in alignment and supports the weight of the ejector assembly throughout the entire machine cycle. This greatly reduces wear on ejection components and prevents possible cocking of the ejector plates.





General Dimensions

NOMINAL DIA	Ø D +.0000 -.0005	Ø H (MAX)	K	Ø E +.0005 -.0000
3/4	.749	.990	3/16	.751
7/8	.874	1.115	1/4	.876
1"	.999	1.240	1/4	1.001
1 1/4	1.249	1.490	5/16	1.251
1 1/2	1.499	1.740	5/16	1.501

L LENGTH +.00 -.06	Ø D = 3/4 I.D. .749 +.0000 -.0005		Ø D = 7/8 I.D. .874 +.0000 -.0005		Ø D = 1" I.D. .999 +.0000 -.0005		Ø D = 1 1/4 I.D. 1.249 +.0000 -.0005		Ø D = 1 1/2 I.D. 1.499 +.0000 -.0005	
	S	ITEM NUMBER	S	ITEM NUMBER	S	ITEM NUMBER	S	ITEM NUMBER	S	ITEM NUMBER
3 3/4	7/8	5004-GL	7/8	5103-GL	7/8	5202-GL	7/8	5302-GL	1 3/8	5402-GL
4 1/4	7/8	PF-5005-GL	7/8	PF-5104-GL	7/8	PF-5203-GL	7/8	5303-GL	1 3/8	5403-GL
4 3/4	7/8	PF-5006-GL	7/8	PF-5105-GL	7/8	PF-5204-GL	1 3/8	5304-GL	1 3/8	5404-GL
5 1/4	7/8	PF-5007-GL	7/8	PF-5106-GL	7/8	PF-5205-GL	1 3/8	5305-GL	1 3/8	5405-GL
5 3/4	7/8	PF-5008-GL	7/8	PF-5107-GL	7/8	PF-5206-GL	1 3/8	5306-GL	1 3/8	5406-GL
6 1/4	—	—	—	—	—	—	1 3/8	5307-GL	1 3/8	5407-GL

All items in stock.

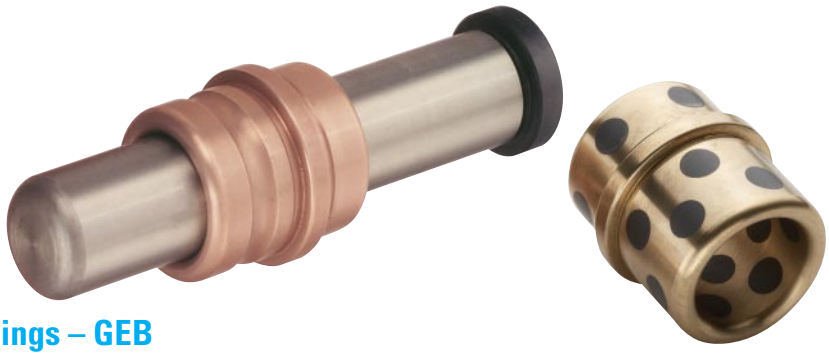
NOTES: 1. Select corresponding bronze-plated guided ejection bushings or self-lubricating guided ejection bushings in proper diameter for the application.

2. D-M-E Guided Ejection Systems are available installed in standard mold bases. For additional information and prices, contact D-M-E.

QUANTITY DISCOUNTS: Guide Pins. Discounts apply to current Net Prices. Any combination of pins and bushings may be mixed for quantity discounts. 16 to 27 Less 10%; 28 or more Less 15%

Guided Ejection Bushings

- Holds the ejector assembly in alignment
- Supports the weight of the ejector assembly throughout the entire cycle
- Reduces wear on ejection components
- Prevents cocking of the ejector plates



Bronze-Plated Guided Ejection Bushings – GEB

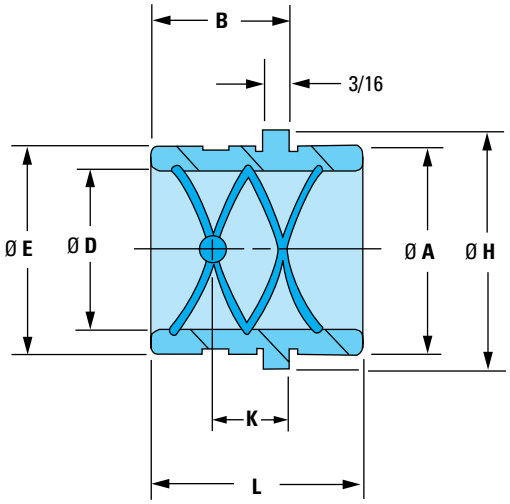
The Bronze-Plated Guided Ejection Bushings feature the strength of steel plus the nonscoring lubricity of bronze plating. Internal oil grooves and a lubrication hole help to ensure smoother mold operation.

It is recommended that a minimum of four bushings be installed. The size of the bushings should be determined by the size of the mold. The Guided Ejection System is inexpensive protection against wear and possible costly damage to a mold in production.

D-M-E Guided Ejection Systems are available installed in standard mold bases. For additional information and prices, contact D-M-E.

NOMINAL I.D.	Ø D +.0005 -.0000	Ø E +.0005 -.0000	Ø A +.000 -.001	Ø H +.000 -.010	L +.00 -.03	B	K	ITEM NUMBER
3/4	.751	1.1255	1.1240	1.302	1.50	1.00	.56	GEB-750
7/8	.876	1.2505	1.2490	1.427	1.50	1.00	.56	GEB-875
1"	1.001	1.3755	1.3740	1.552	1.75	1.12	.62	GEB-100
1 1/4	1.251	1.6255	1.6240	1.802	1.75	1.12	.62	GEB-125
1 1/2	1.501	2.0005	1.9990	2.177	1.75	1.12	.62	GEB-150

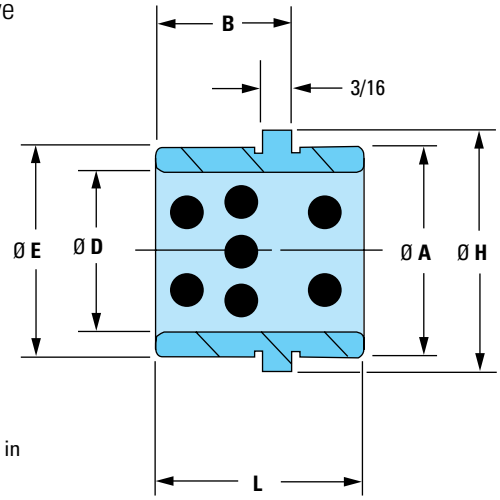
NOTE: Select corresponding guide pin in proper diameter and length for application.



Self-Lubricating Guided Ejection Bushings – GBE

It is recommended that a minimum of four bushings be installed. Bushing size should be determined by the size of the mold. The Guided Ejection System is inexpensive protection against wear and possible costly damage to a mold in production.

NOMINAL I.D.	Ø D +.0005 -.0000	Ø E +.0005 -.0000	Ø A +.000 -.001	Ø H +.000 -.030	L +.00 -.06	B	ITEM NUMBER
3/4	.751	1.1255	1.1240	1.302	1.50	1.00	GBE-0750
7/8	.876	1.2505	1.2490	1.427	1.50	1.00	GBE-0875
1"	1.001	1.3755	1.3740	1.552	1.75	1.12	GBE-1000
1 1/4	1.251	1.6255	1.6240	1.802	1.75	1.12	GBE-1250
1 1/2	1.501	2.0005	1.9990	2.177	1.75	1.12	GBE-1500
2"	2.001	2.5005	2.4990	2.687	2.25	1.62	GBE-2000



All items in stock.

QUANTITY DISCOUNTS: Guided Ejection Bushings. Discounts apply to current Net Prices. Any combination of pins and bushings may be mixed for quantity discounts.
16 to 27 Less 10%; 28 or more Less 15%

NOTES:
1. Select corresponding guide pin in proper diameter and length for application.
2. These bushings are interchangeable with comparably sized D-M-E bronze-plated guided ejection bushings. 2" I.D. size (GBE-2000) is available only in self-lubricating style.

Guided Ejection Systems

5-DAY SHIPPING

Guided Ejection Systems hold the ejector assembly in alignment and support the weight of the ejector assembly throughout the molding cycle – greatly reducing wear on ejection components and preventing cocking of the ejector assembly.

FOR QUOTING OR ORDERING, SPECIFY:

Guided Ejection System Type

- ❑ System 1
- ❑ System 2

Quantity (2 or 4): _____

Guided Ejection Bushing Type

- ❑ Bronze-Plated Steel Bushings
- ❑ Self-Lubricating Bushings

Guided Ejection

Position:

❑ **STD** ❑ **Specify**

Recommended position from table provided standard (see opposite page). If a different position is required, specify below.

GEx_____

GEy_____

Diameter:

❑ **STD** ❑ **Specify**

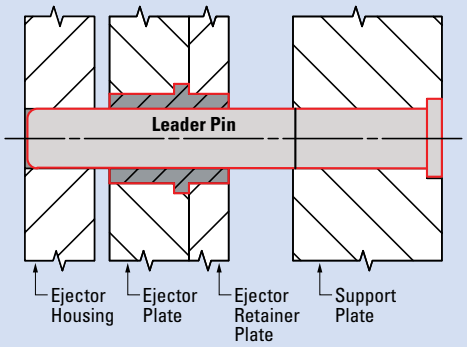
Recommended diameter from table provided standard. If a different diameter is required, it will require a positioning change; specify below.

Available diameters:

- ❑ 0.750
- ❑ 0.875
- ❑ 1.000
- ❑ 1.250

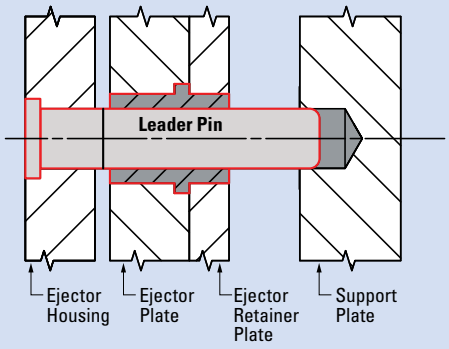
SYSTEM 1

When pins are installed in the support plate, the ejector housing can be removed from the mold without removing ejector plates. This permits easy access to service the ejector system.



SYSTEM 2

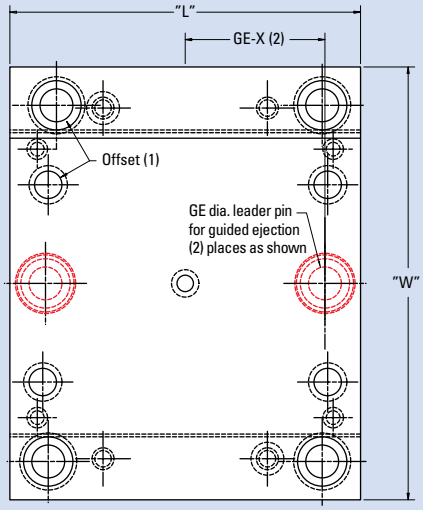
Pins installed in the ejector housing permit fast installation. When the ejector housing is removed from the mold base, the complete ejector assembly is removed.



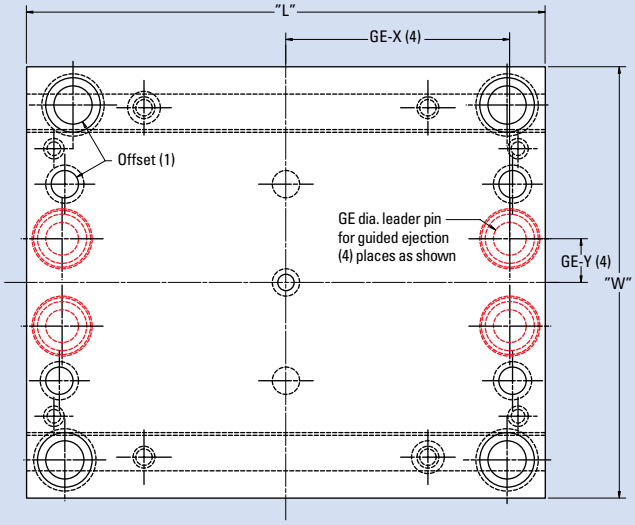


Guided Ejection Systems





**"B" HALF OF MOLD
FOR 88, 812 & 108 MOLD BASE
SIZE ONLY**



**"B" HALF OF MOLD
FOR 1012 – 2435 BASES**

Guided Ejection Positions

PIN DIAMETER (RECOMMENDED)	BASE SIZE	GEx	GEy
0.750	88	3.000	Center
	812	5.000	Center
	108	3.062	Center
	1012	5.000	1.000
	1016	7.062	1.000
	1020	9.062	1.000
	1112	5.062	1.625
	1114	6.062	1.625
	1118	8.062	1.625
	1123	10.812	1.625
0.875	212	5.000	1.750
	1215	6.500	1.750
	1220	9.000	1.750
	1223	10.750	1.750
	1315	6.500	2.375
	1318	8.000	2.375
	1321	9.375	2.375
	1323	10.750	2.375
	1326	12.000	2.375
	1329	13.750	2.375

PIN DIAMETER (RECOMMENDED)	BASE SIZE	GEx	GEy
1.000	1518	7.875	2.375
	1524	10.812	2.375
	1529	13.688	2.375
	1616	6.938	2.875
	1620	8.938	2.875
	1623	10.688	2.875
	1626	11.938	2.875
	1629	13.688	2.875
	1635	16.688	2.875
	1724	10.812	3.125
	1729	13.688	3.125
	1818	7.938	3.875
	1820	8.938	3.875
	1823	10.688	3.875
	1826	11.038	3.875
	1829	13.688	3.875
	1835	16.688	3.875
	1924	10.812	4.625
	1929	13.688	4.625
	1935	16.688	4.625
1.250	2424	10.688	6.125
	2429	13.562	6.125
	2435	16.562	6.125

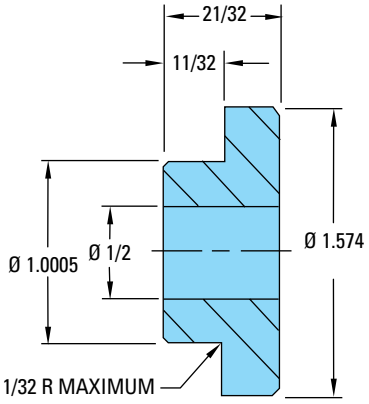
Mold Parts for 34R Mold Assemblies

Locating Rings

The large diameter of the locating ring is ground to close tolerances to mate with the platens of the Arburg C/4b Press.



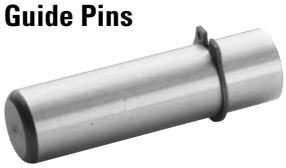
ITEM NUMBER
6534

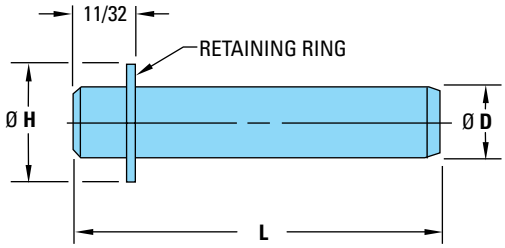


Guide Pins and Shoulder Bushings

Designed specifically to suit the 34R Series Mold Base. They are made of the finest quality steels and are hardened and precision ground.

Guide Pins

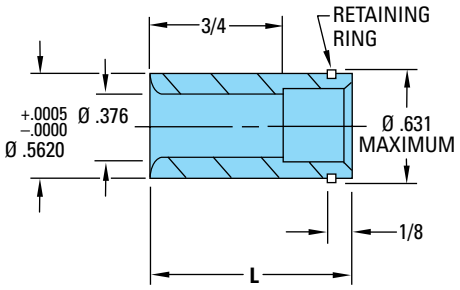




Ø D +.0003 -.0000	Ø H (MAX)	L +.00 -.03	ITEM NUMBER
.375	.610	1 3/8	4900
	.610	1 5/8	4901
	.610	2"	4902
	.610	2 1/4	4903
	.610	2 1/2	4904
	.610	3"	4906
.500	.740	1 3/8	4922

Shoulder Bushings



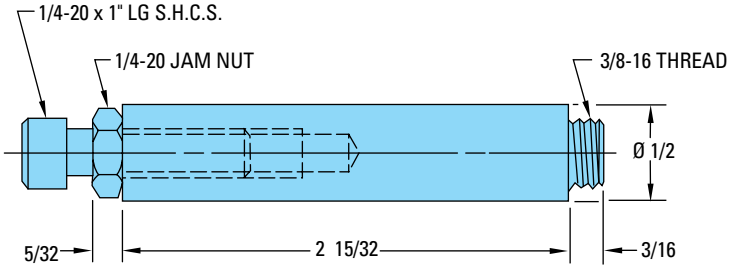


L +.00 -.03	ITEM NUMBER
7/8	4802
1 1/8	4804
1 3/8	4806

Adjustable Knock-Out Rods

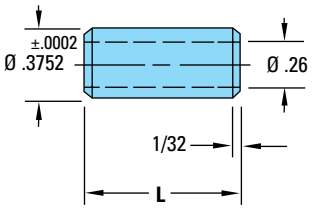
ITEM NUMBER
K-10





Tubular Dowels – for 34R Mold Bases

Hardened and precision ground to close tolerances.



NOMINAL DIA	L
3/8	3/8
	7/8

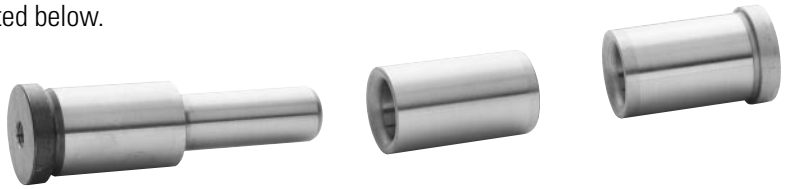
WHEN ORDERING, PLEASE SPECIFY:
1. Quantity
2. Nominal Diameter
3. Length

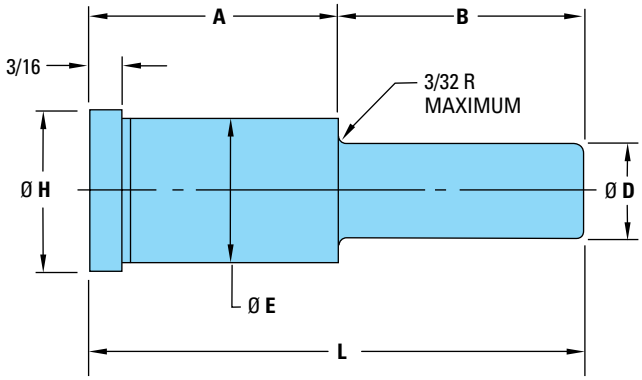
Shoulder Guide Pins and Bushings for 45R, 56N, 58N, 56U, 58U and 68SH Mold Assemblies

Shoulder Guide Pins

Shoulder diameter is of the same size and tolerance to match with the O.D. of Standard D-M-E Shoulder Bushings listed below.

A +.00 -.03	B +.00 -.03	L +.00 -.06	Ø D = 1/2 DIA ITEM NUMBER	Ø D = 17/32 DIA ITEM NUMBER
7/8	7/8	1 3/4	S-0707GL	T-0707GL
	1 3/8	2 1/4	S-0713GL	T-0713GL
	1 7/8	2 3/4	S-0717GL	T-0717GL
	2 3/8	3 1/4	S-0723GL	T-0723GL
1 3/8	7/8	2 1/4	S-1307GL	T-1307GL
	1 3/8	2 3/4	S-1313GL	T-1313GL
	1 7/8	3 1/4	S-1317GL	T-1317GL
1 7/8	7/8	2 3/4	S-1707GL	T-1707GL
	1 3/8	3 1/4	S-1713GL	T-1713GL
	1 7/8	3 3/4	S-1717GL	T-1717GL
2 3/8	7/8	3 1/4	S-2307GL	T-2307GL
	—	—	—	—
2 7/8	1 3/8	4 1/4	S-2713GL	T-2713GL
	—	—	—	—

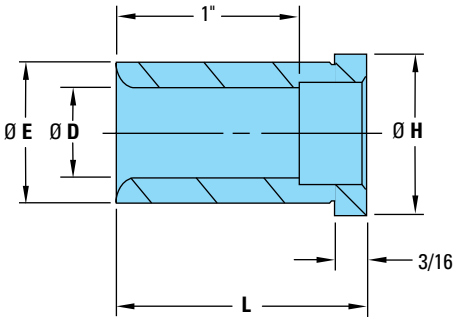




General Dimensions

NOMINAL DIA	Ø D +.0000 -.0005	Ø E +.0005 -.0000	Ø H (MAX)
1/2	.499	.751	.853
17/32	.530	.751	.853

Shoulder Bushings



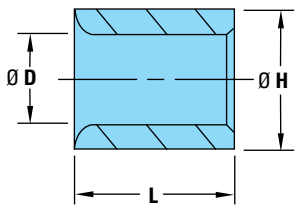
L +.00 -.06	Ø D = 1/2 DIA ITEM NUMBER	Ø D = 17/32 DIA ITEM NUMBER
7/8	S-5690	T-5690
1 3/8	S-5691	T-5691
1 7/8	S-5692	T-5692
2 3/8	S-5693	T-5693

Made of the finest quality steel, hardened and precision ground to reduce wear and give longer life.

General Dimensions

NOMINAL I.D.	Ø D +.0005 -.0000	Ø E +.0005 -.0000	Ø H (MAX)
1/2	.500	.7505	.853
17/32	.531	.7505	.853

Straight Bushings



L +.00 -.06	Ø D = 1/2 DIA ITEM NUMBER	Ø D = 17/32 DIA ITEM NUMBER
7/8	S-5498	T-5498
1 3/8	S-5499	T-5499

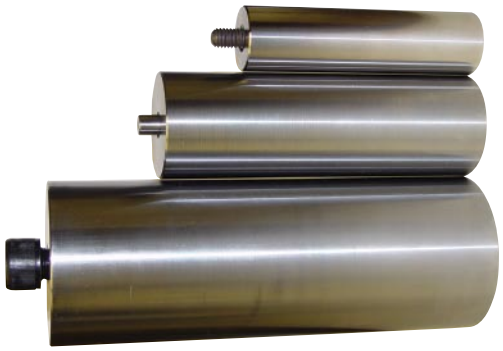
Support Pillars and Stop Pins

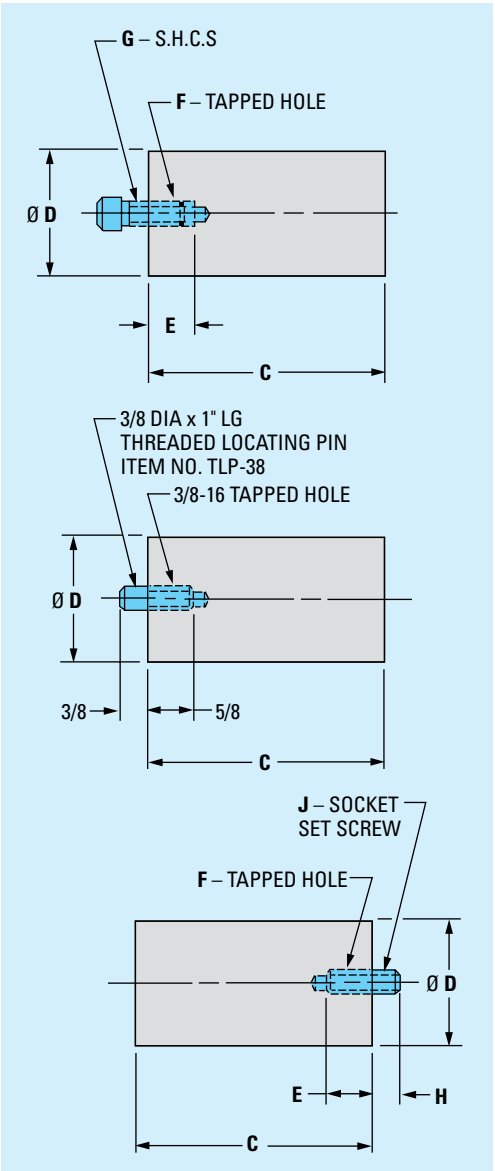
Support Pillars

S.A.E. 1040 Steel

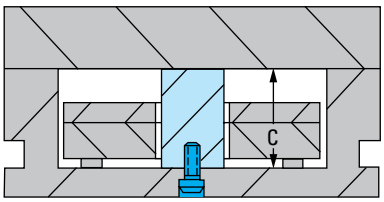
Pillar height (C dimension) is finished flat and parallel.

Support pillars should be used liberally since they greatly increase the capacity of the mold to support the projected area of the cavities, runner and sprue. By providing additional support, they prevent deflection of the mold. The absolute necessity of using support pillars is demonstrated by using standard strength of materials formulas. For example, an $11^{7}/_{8}$ x 15" mold base without support pillars and with a maximum permissible load on the support plate, will permit 14 square inches of cavity area without deflecting enough to cause flash. The use of one row of support pillars on center will quadruple this permissible cavity area to 56 square inches. Two rows will give nine times the area or 126 square inches. Please refer to the drawings below.

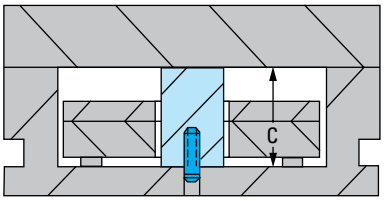




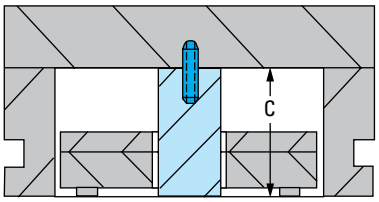
Cap Screw Application



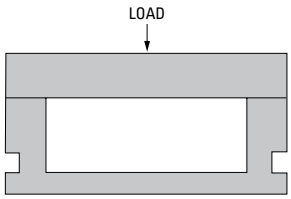
Threaded Locating Pin Application



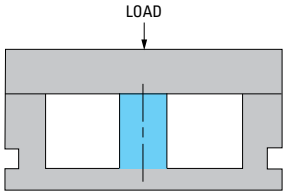
Socket Set Screw Application



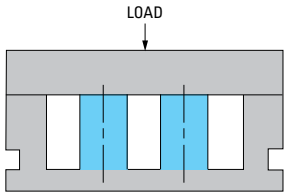
No support pillars



One row of support pillars increases the permissible cavity area 4 times



Two rows of support pillars increase the permissible cavity area 9 times

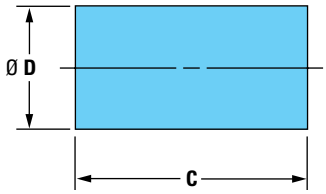


Material: S.A.E. 1040 Steel

Ø D	E	F	H (APPROX)	J SOCKET SET SCREW
1", $1^{1}/_{4}$, $1^{1}/_{2}$, 2"	$^{5}/_{8}$	$^{3}/_{8}$ – 16	$^{1}/_{2}$	ITEM NO. SSS-38114
3", 4"	$1^{1}/_{4}$	$^{5}/_{8}$ – 11	$^{3}/_{8}$	ITEM NO. SSS-582

NOTE: Order S.H.C.S. separately.

Support Pillars and Stop Pins



Material: S.A.E. 1040 Steel

Ø D +.000 -.060 DIAMETER	C +.001 -.000 HEIGHT	ITEM NUMBER
1"	2.500	6090
	3.000	6091
	3.500	6092
	4.000	6093
	4.500	6094
1 1/4	2.500	6130
	3.000	6131
	3.500	6132
	4.000	6133
	4.500	6134
	5.000	6135
	6.000	6136
1 1/2	2.500	6140
	3.000	6141
	3.500	6142
	4.000	6143
	4.500	6144
	5.000	6145
	6.000	6146
2"	2.500	6150
	3.000	6151
	3.500	6152
	4.000	6153
	4.500	6154
	5.000	6155
	6.000	6156
3"	5.000	6235
	6.000	6236
	8.000	6238
4"	5.000	6245
	6.000	6246
	8.000	6248

Support Pillars

Support pillars are universally adaptable for cap screw, threaded locating pin, or socket set screw applications.

Order pillars from chart at left and required "fasteners" as listed below.

Cap Screw (S.H.C.S.) Applications

3/8-16 or 5/8-11 socket head cap screws can be ordered in length required.

Threaded Locating Pin Applications

Locating pins unavailable for 3" and 4" diameter pillars.

Ø D PILLAR	ITEM NUMBER
1" to 2"	TLP-38

Socket Set Screw Applications

Order pins and screws in package lots only.

Ø D PILLAR	ITEM NUMBER	QTY PER PACKAGE
1" to 2"	SSS-38114	10
3" and 4"	SSS-582	5

QUANTITY DISCOUNTS:
Support Pillars. Discounts apply to current Net Prices. Sizes may be mixed for quantity discounts.
9 to 16 Less 10%;
17 or more Less 20%

Stop Pins

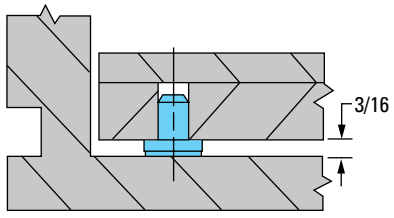
Although every D-M-E Mold Base assembly has flat stop pins welded to the underside of the ejector plate, many moldmakers require these dowel-type Stop Pins for special assemblies.

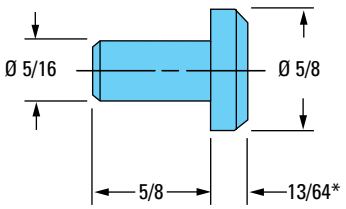


Order pins in package lots only.

ITEM NUMBER	QTY PER PACKAGE
7100	50

Typical Installation





*Head thickness .020 oversize to permit fitting at assembly.

Sprue Bushings

Sprue Bushings – A, B, LN and AR

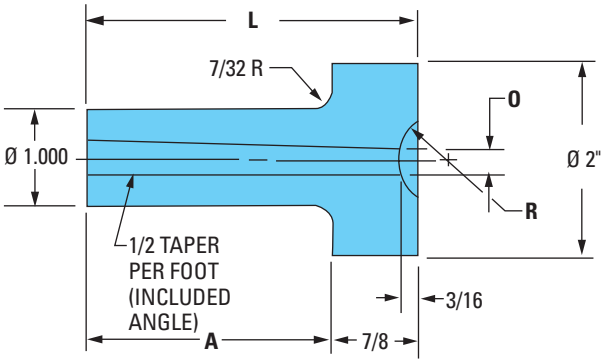
S.A.E. 6145 Steel
Hardened, Ground and Polished
(HRC 43-45, except "LN" Series – carburized .050-.060 deep to HRC 60-62, drillable with carbide-tipped drill.)



NOTE: 1/2" taper per foot = 2° 23' 13" included angle.

WHEN ORDERING SPRUE BUSHINGS, PLEASE SPECIFY:
1. Quantity
2. Item Number
3. "O" and "R" dimensions
3. Method of shipment

"B" Series

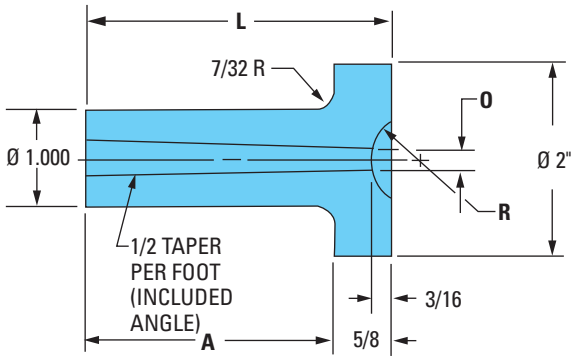


Available with **O** 5/32, 7/32, 9/32 or 11/32 **R** 1/2 or 3/4

ITEM NUMBER	A	L
B-6600	29/32	1 25/32
B-6601	1 13/32	2 9/32
B-6602	1 29/32	2 25/32
B-6603	2 13/32	3 9/32
B-6604	2 29/32	3 25/32
B-6605	3 13/32	4 9/32
B-6606	3 29/32	4 25/32
B-6607	4 13/32	5 9/32
B-6608	4 29/32	5 25/32
B-6610*	5 29/32	6 25/32
B-6612*	6 29/32	7 25/32

*B-6610: **O** 5/32 **R** 3/4
*B-6612: **O** 5/32 **R** 3/4 available on special order.

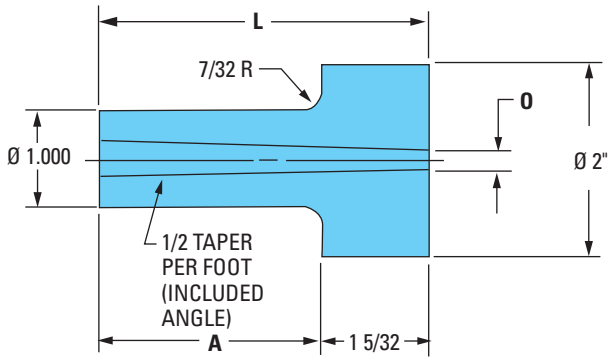
"A" Series



Available with **O** 5/32, 7/32, 9/32 or 11/32 **R** 1/2 or 3/4

ITEM NUMBER	A	L
A-6600	13/16	1 13/16
A-6601	1 11/16	2 5/16
A-6602	2 3/16	2 13/16
A-6603	2 11/16	3 5/16
A-6604	3 3/16	3 13/16
A-6605	3 11/16	4 5/16
A-6606	4 3/16	4 13/16

"LN" Series

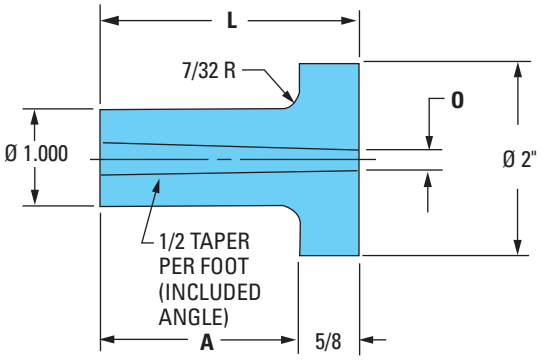


Available with **O** 5/32, 7/32 or 9/32 **R** No spherical radius

ITEM NUMBER	A	L
LN-6600	29/32	2 1/16
LN-6601	1 13/32	2 9/16
LN-6602	1 29/32	3 1/16
LN-6603	2 13/32	3 9/16
LN-6604	2 29/32	4 1/16
LN-6605	3 13/32	4 9/16

O 11/32 available on special order.

"AR" Series



Available with **O** 5/32 or 7/32 **R** No spherical radius

ITEM NUMBER	A	L
AR-6600	13/16	1 13/16
AR-6601	1 11/16	2 5/16
AR-6602	2 3/16	2 13/16

O 9/32 available on special order.

Sprue Bushings

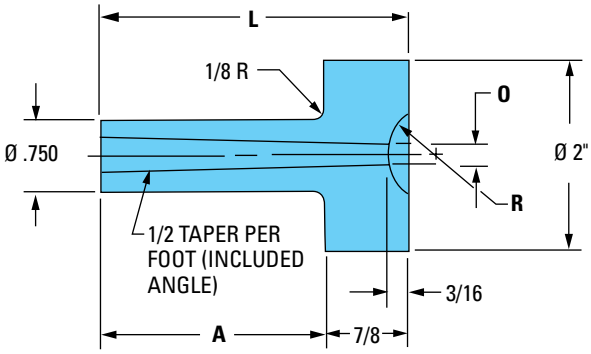
Sprue Bushings – U, UV, UR and L

S.A.E. 6145 Steel, HRC 43-45 Hardened, Ground and Polished

The wide range of Standard D-M-E Sprue Bushings allows mold to be installed in a variety of injection molding machines. The accuracy and interchangeability permit easy replacement if the mold is being transferred to another machine. It's wise to standardize … on D-M-E Sprue Bushings.

NOTE: "W" series sprue bushings (Watson-Stillman) available on special order. Other special sprue bushings will be quoted on request per your specifications.

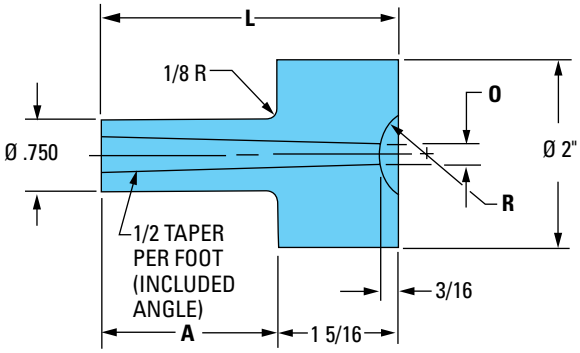
"U" Series – Newbury and Standard



ITEM NUMBER	A	L
U-6600	29/32	1 25/32
U-6601	1 13/32	2 9/32
U-6602	1 29/32	2 25/32
U-6603	2 13/32	3 9/32
U-6604	2 29/32	3 25/32

Available with
O 5/32, 7/32 or 9/32 **R** 1/2 or 3/4

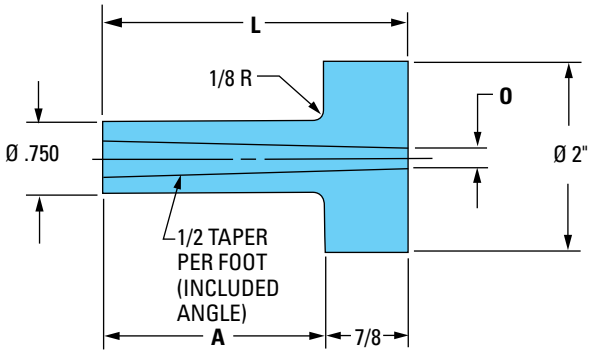
"UV" Series – Van Dorn and Moslo



ITEM NUMBER	A	L
UV-6600	29/32	2 7/32
UV-6601	1 13/32	2 23/32
UV-6602	1 29/32	3 7/32
UV-6603	2 13/32	3 23/32
UV-6604	2 29/32	4 7/32

Available with
O 5/32, 7/32 or 9/32 **R** 1/2
R 3/4 available on special order

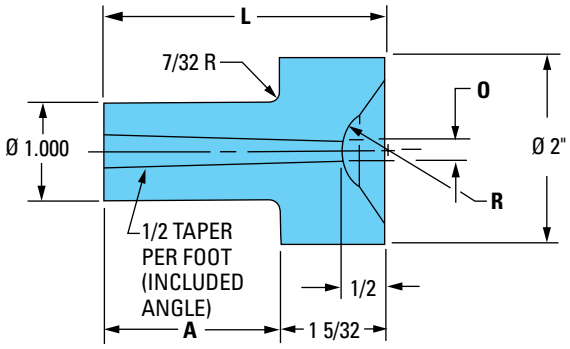
"UR" Series – Arburg



ITEM NUMBER	A	L
UR-6600	29/32	1 25/32
UR-6601	1 13/32	2 9/32
UR-6602	1 29/32	2 25/32
UR-6603	2 13/32	3 9/32
UR-6604	2 29/32	3 25/32

Available with
O 5/32, 7/32 or 9/32
R No spherical radius

"L" Series



ITEM NUMBER	A	L
L-6600	29/32	2 1/16
L-6601	1 13/32	2 9/16
L-6602	1 29/32	3 1/16
L-6604	2 29/32	4 1/16
L-6606	3 29/32	5 1/16
L-6612*	6 29/32	8 1/16

*L-6612: **O** 5/32 available on special order

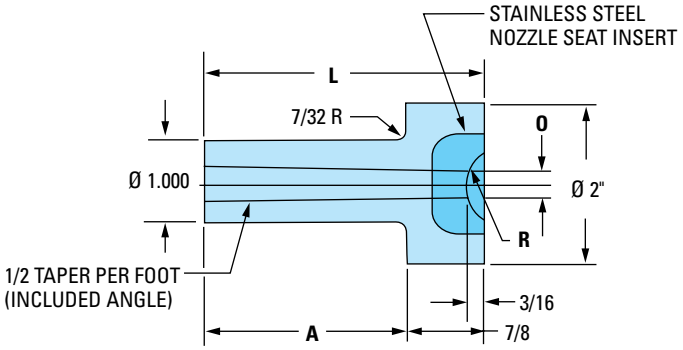
Available with
O 5/32, 7/32 or 9/32
R 1/2
O 11/32 available on special order
R 3/4 available on special order

Performance Sprue Bushings®

High-conductivity, corrosion-resistant, copper-based alloy bushing body with hardened 420 stainless steel nozzle seat insert

- Reduces sprue cooling time and cycle time
- Helps prevent sprue sticking or break-off within bushing
- Stainless steel nozzle seat provides wear resistance and insulates to reduce transference of heat from machine nozzle to the sprue area
- PSB Series is directly interchangeable with existing D-M-E "B" Series steel sprue bushings
- PSU Series is directly interchangeable with existing D-M-E "U" Series steel sprue bushings
- Reduces the need for water lines in the sprue area
- Reduces scrap caused by contact between hot sprue and finished parts on conveyor belt or drop chute area
- Provides a more rigid sprue for robotic part removal

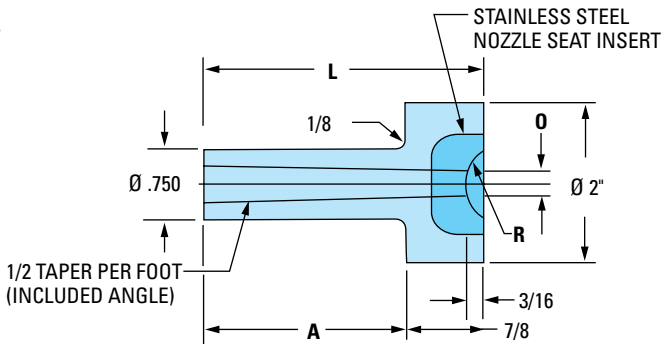
"PSB" Series with a 1.000" Diameter Stem
(Interchangeable with D-M-E "B" Series Sprue Bushings)



ITEM NUMBER	A	L	O	R
PSB-0251	1 29/32	2 25/32	5/32	1/2
PSB-0253	1 29/32	2 25/32	5/32	3/4
PSB-0271	1 29/32	2 25/32	7/32	1/2
PSB-0273	1 29/32	2 25/32	7/32	3/4
PSB-0291	1 29/32	2 25/32	9/32	1/2
PSB-0293	1 29/32	2 25/32	9/32	3/4
PSB-0451	2 29/32	3 25/32	5/32	1/2
PSB-0453	2 29/32	3 25/32	5/32	3/4
PSB-0471	2 29/32	3 25/32	7/32	1/2
PSB-0473	2 29/32	3 25/32	7/32	3/4
PSB-0491	2 29/32	3 25/32	9/32	1/2
PSB-0493	2 29/32	3 25/32	9/32	3/4
PSB-0651	3 29/32	4 25/32	5/32	1/2
PSB-0653	3 29/32	4 25/32	5/32	3/4
PSB-0671	3 29/32	4 25/32	7/32	1/2
PSB-0673	3 29/32	4 25/32	7/32	3/4
PSB-0691	3 29/32	4 25/32	9/32	1/2
PSB-0693	3 29/32	4 25/32	9/32	3/4
PSB-0851	4 29/32	5 25/32	5/32	1/2
PSB-0853	4 29/32	5 25/32	5/32	3/4
PSB-0871	4 29/32	5 25/32	7/32	1/2
PSB-0873	4 29/32	5 25/32	7/32	3/4
PSB-0891	4 29/32	5 25/32	9/32	1/2
PSB-0893	4 29/32	5 25/32	9/32	3/4

NOTE: All dimensions are specified in inches.

"PSU" Series with a .750" Diameter Stem
(Interchangeable with D-M-E "U" Series Sprue Bushings)



ITEM NUMBER	A	L	O	R
PSU-0251	1 29/32	2 25/32	5/32	1/2
PSU-0253	1 29/32	2 25/32	5/32	3/4
PSU-0271	1 29/32	2 25/32	7/32	1/2
PSU-0273	1 29/32	2 25/32	7/32	3/4
PSU-0291	1 29/32	2 25/32	9/32	1/2
PSU-0293	1 29/32	2 25/32	9/32	3/4
PSU-0451	2 29/32	3 25/32	5/32	1/2
PSU-0453	2 29/32	3 25/32	5/32	3/4
PSU-0471	2 29/32	3 25/32	7/32	1/2
PSU-0473	2 29/32	3 25/32	7/32	3/4
PSU-0491	2 29/32	3 25/32	9/32	1/2
PSU-0493	2 29/32	3 25/32	9/32	3/4
PSU-0651	3 29/32	4 25/32	5/32	1/2
PSU-0653	3 29/32	4 25/32	5/32	3/4
PSU-0671	3 29/32	4 25/32	7/32	1/2
PSU-0673	3 29/32	4 25/32	7/32	3/4
PSU-0691	3 29/32	4 25/32	9/32	1/2
PSU-0693	3 29/32	4 25/32	9/32	3/4
PSU-0851	4 29/32	5 25/32	5/32	1/2
PSU-0853	4 29/32	5 25/32	5/32	3/4
PSU-0871	4 29/32	5 25/32	7/32	1/2
PSU-0873	4 29/32	5 25/32	7/32	3/4
PSU-0891	4 29/32	5 25/32	9/32	1/2
PSU-0893	4 29/32	5 25/32	9/32	3/4

NOTE: All dimensions are specified in inches.



U.S. Patent No. 4,950,154

Performance Sprue Bushings® is a registered trademark of Performance Alloys & Services, Inc.

WHEN ORDERING, PLEASE SPECIFY:
1. **Quantity**
2. **Item Number (which indicates "O" and "R" dimensions)**
3. **Method of shipment**

Performance Sprue Bushings®

When High Performance is Mandatory, Performance Sprue Bushings® are in the Mold

Consistently recommended by a wide range of resin manufacturers, molders, moldmakers, designers and engineers, Performance Sprue Bushings® have a long-standing reputation as a product that exceeds expectations. Many users are so pleased with the overall performance of this product that Performance Sprue Bushings are now specified in all of the molds they build.

Here are several benefits of the Performance Sprue Bushing that users rave about:

- **Reduced sprue cooling and overall cycle time**
  Mold cycles are often limited or controlled by the length of time needed for solidification of the plastic sprue since it must be cool enough not to break or tear as the mold opens. This cycle limiting condition changes by using the Performance Sprue Bushing – without any other changes to the mold.

- **Helps prevent sprue sticking, break-off and corrosion**
  With conventional steel sprue bushings, many plastic resins, additives, colorants and combinations lead to corrosion and sticking problems. The inherent corrosion resistance and release properties of the copper alloy used in the Performance Sprue Bushing results in a significant increase in performance and product life compared to conventional steel sprue bushings.

- **Yields more rigid sprues with reduced sprue cool time for robotic removal of parts**
  The sprue is often used as the grab point in robotic removal of parts, sprues and runners. This requires that the sprue be rigid enough to resist the pressure of the robot fingers as well as the extraction forces. With conventional steel sprues, this often means added cooling time to the mold cycle. The Performance Sprue Bushing reducing sprue cool time, again without any other changes to the mold.

- **Molding problems caused by sprues are eliminated**
  Molders that use Performance Sprue Bushings in a variety of mold and resin applications say that they are able to control many sprue-related problems. As one molder who uses the product said, "I no longer struggle with sprue problems."

Performance Sprue Bushings are available in a number of popular standard sizes (see table on facing page), and as non-standards with quick delivery. Contact D-M-E with your next application to reduce sprue cooling and cycle time.

Property Comparisons: Performance Sprue Bushings' Copper Alloy and Steel Sprue Bushings Materials

MATERIAL	THERMAL CONDUCTIVITY AT 68°F BTU/(ft_hr_°F)	THERMAL DIFFUSIVITY AT 68°F ft²/hr
COPPER ALLOY	150	2.32
P20 TOOL STEEL	20	0.39
H13 TOOL STEEL	17	0.31



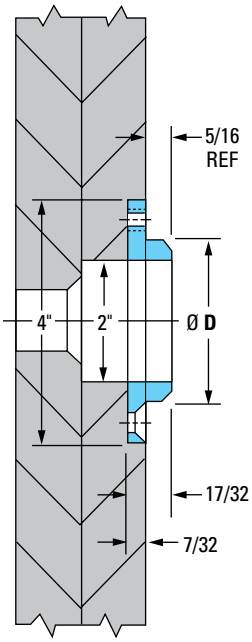
ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Locating Rings for Plastic Molds

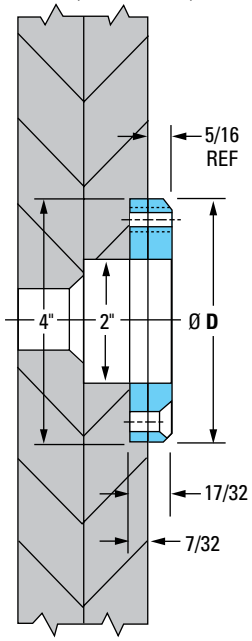
Locating Rings 6521 and 6524 are supplied with two $^{5}/_{16}$-18 Socket Head Cap Screws. All other Locating Rings supplied with two $^{5}/_{16}$-18 Flat Head Screws.



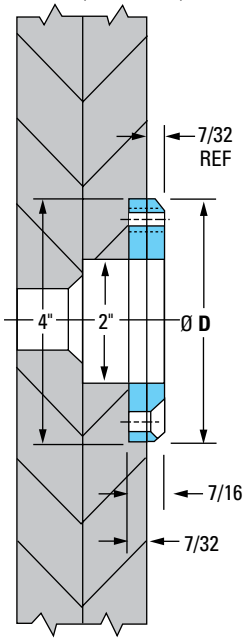
ITEM NO. 6500
Ø **D** = 2.615



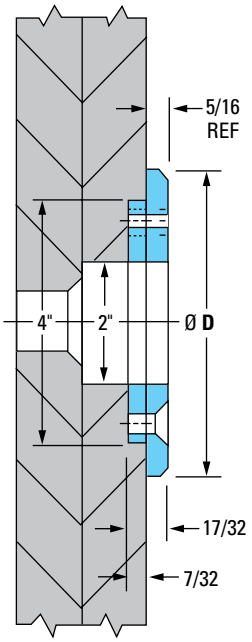
ITEM NO. 6501
Ø **D** = 3.990 (STD. SERIES)



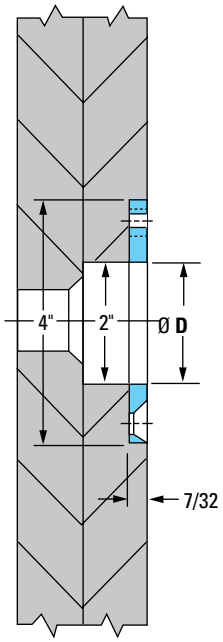
ITEM NO. 6501LN
Ø **D** = 3.990 (LN SERIES)



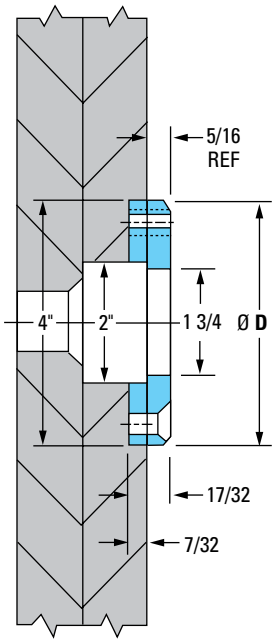
ITEM NO. 6502
Ø **D** = 4.990



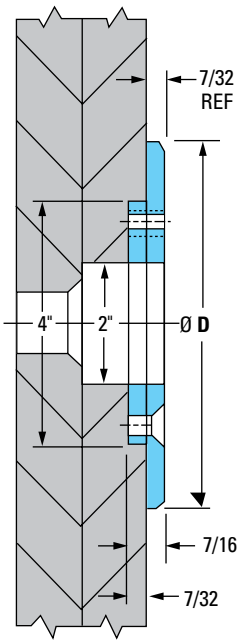
ITEM NO. 6503
Ø **D** = 2.000



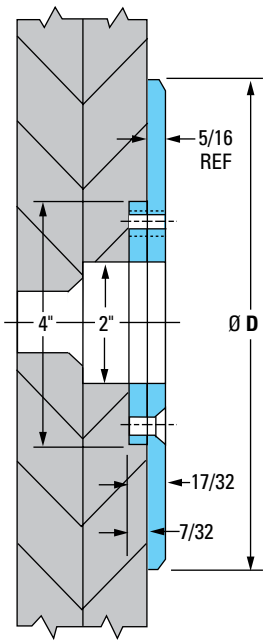
ITEM NO. 6504
Ø **D** = 3.990 (CLAMP TYPE)



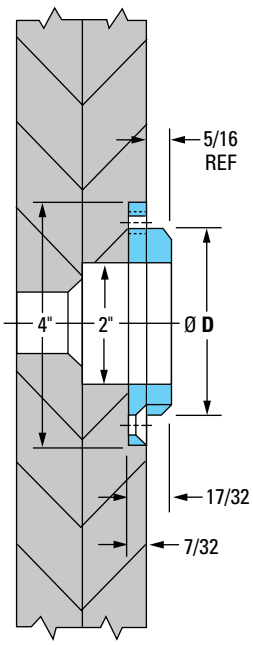
ITEM NO. 6505LN
Ø **D** = 5.990 (LN SERIES)



ITEM NO. 6510
Ø **D** = 7.995

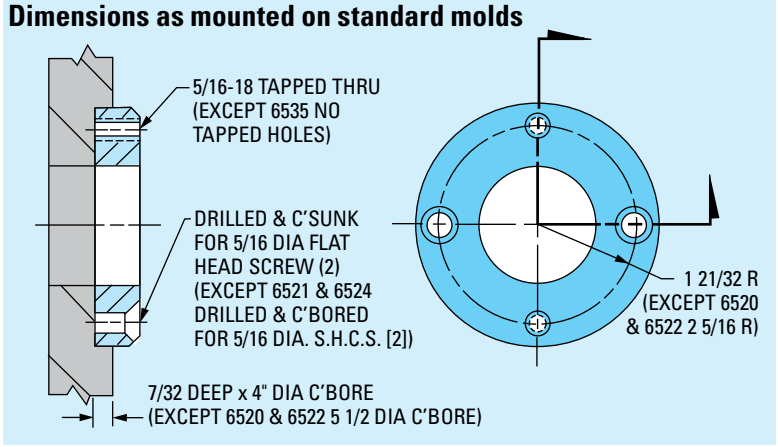


ITEM NO. 6511
Ø **D** = 2.990

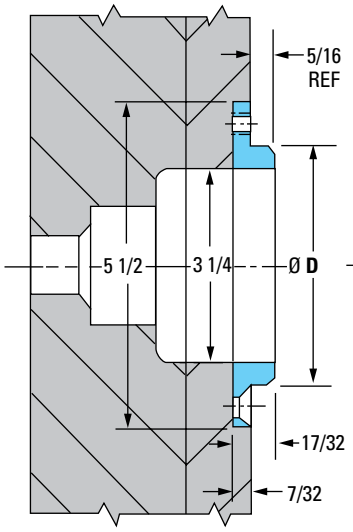


Locating Rings for Plastic Molds

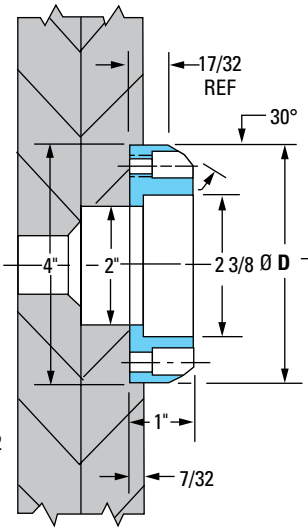
Dimensions as mounted on standard molds



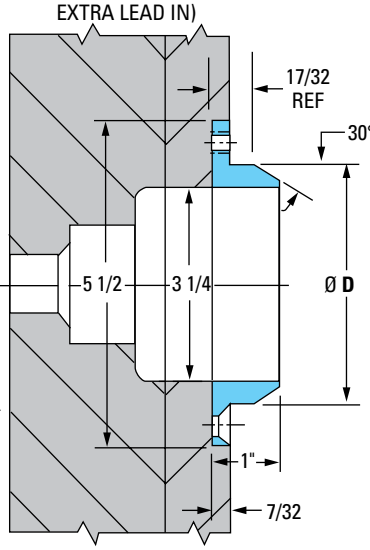
ITEM NO. 6520 Ø **D** = 3.990
(EXTENSION NOZZLE TYPE)



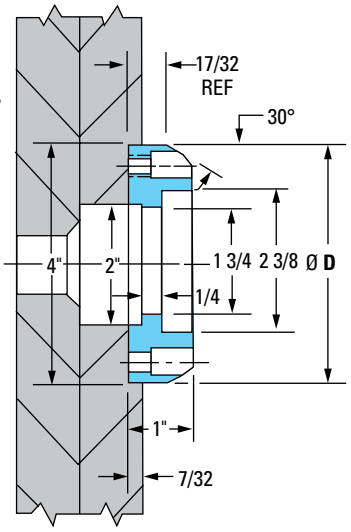
ITEM NO. 6521 Ø **D** = 3.990
(STANDARD SERIES
EXTRA LEAD IN)



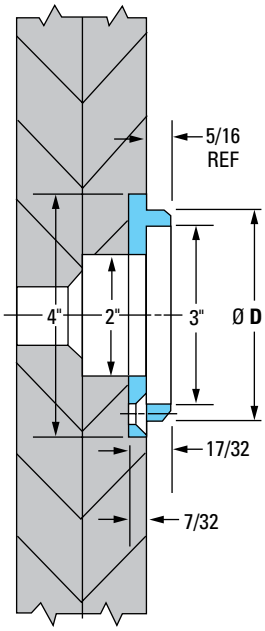
ITEM NO. 6522 Ø **D** = 3.990
(EXTENSION NOZZLE TYPE
EXTRA LEAD IN)



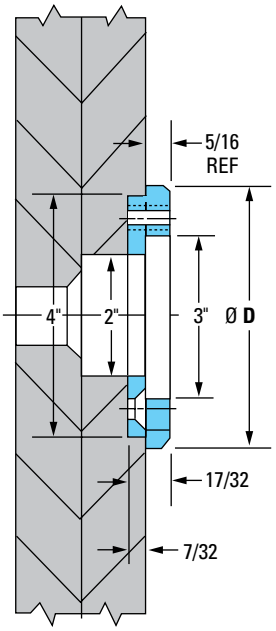
ITEM NO. 6524 Ø **D** = 3.990
(CLAMP TYPE
EXTRA LEAD IN)



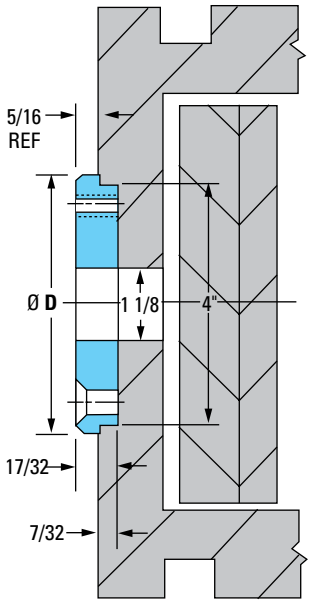
ITEM NO. 6535
Ø **D** = 3.541



ITEM NO. 6536
Ø **D** = 4.331 (TOP RING)



ITEM NO. 6537
Ø **D** = 4.331 (BOTTOM RING)

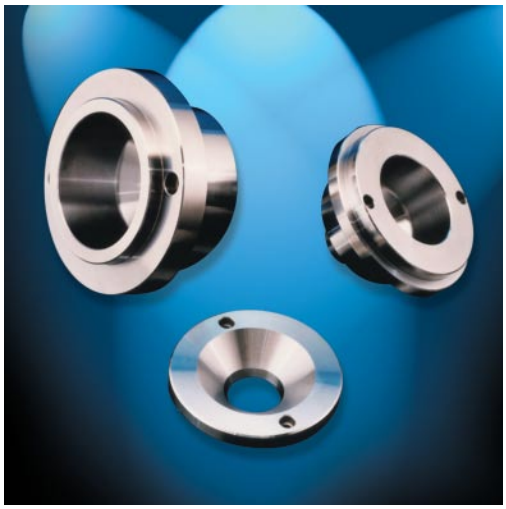


Locating Ring Options

ITEM NUMBER	Ø D	DESCRIPTION
6500	2.615	
6501	3.990	STANDARD SERIES
6501 LN	3.990	LN SERIES
6502	4.990	
6503	2.000	
6504	3.990	CLAMP TYPE
6505 LN	5.990	LN SERIES
6510	7.995	
6511	2.990	
6520	3.990	EXTENSION NOZZLE TYPE
6521	3.990	STANDARD SERIES
6522	3.990	EXTENSION NOZZLE TYPE
6524	3.990	CLAMP TYPE
6534**	1.574	TOP AND BOTTOM RING
6535	3.541	
6536	4.331	TOP RING
6537	4.331	BOTTOM RING
6541*	3.990	STANDARD SERIES
6542*	3.990	CLAMP TYPE

* For use with high-temperature insulator sheets.
** For use with 3.5 x 3.75 Arburg Mold Bases.

3-Plate Extension Bushings



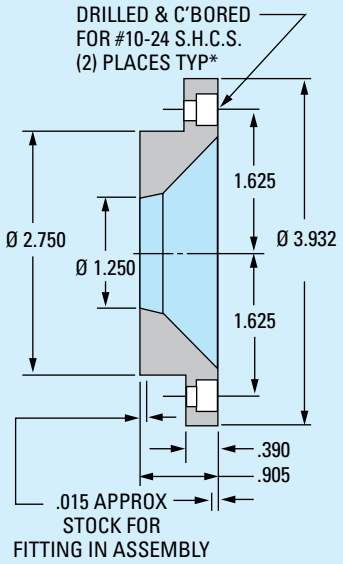
For use with "T-Series" 3-Plate Mold Bases

These 3-plate extension bushings can save material, reduce cycle time and help prevent runner hang-ups in 3-plate molds.

- Reduces sprue length to save material, reduce cycle time and aid in the ejection of the runner from the mold
- Easier, faster installation than competitive bushings … all grinding for final fit is on flat surfaces with no I.D. or O.D. angles to grind
- More sizes than competitive bushings to suit more applications
- Made from AISI 4140 steel, hardened to 28-32 HRC

Runner Stripper Plate Bushing

ITEM NO. TEB-0001



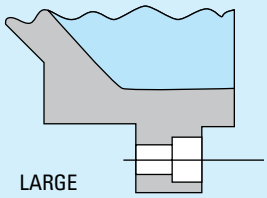
*#10-24 x 1/2 LONG S.H.C.S. (2) INCLUDED

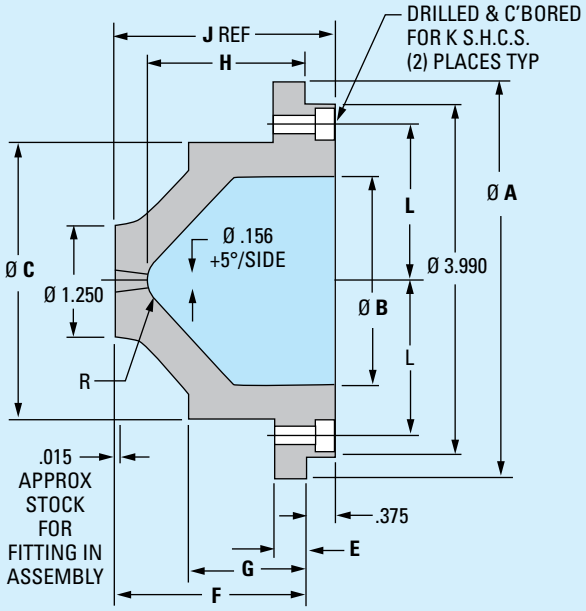
Extension Nozzle Bushings

ITEM NO. TEB-0002 thru TEB-0009

Small Bushings
TEB-0002 thru TEB-0005

Large Bushings
TEB-0006 thru TEB-0009





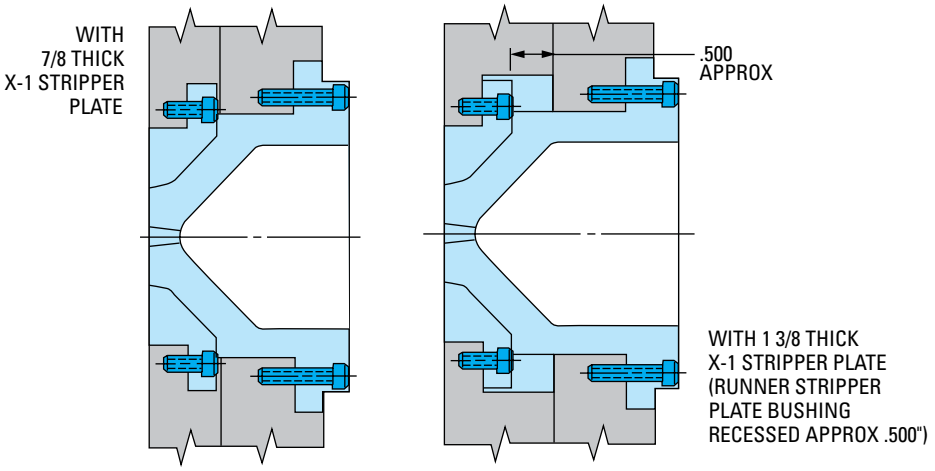
NOTES:
1. Stripper plate bushing TEB-0001 is used with all small and large extension nozzle bushings.
2. Appropriate S.H.C.S. are included with all bushings (TEB-0001 thru TEB-0009).
3. Select small or large bushing based on "A" clamping plate (A.C.P.) thickness, X-1 stripper plate thickness, machine nozzle spherical radius and machine nozzle clearance requirements.

ITEM NUMBER	R SPH RAD	Ø A	Ø B	Ø C	E	F	G	H	J	K	L
TEB-0002	1/2	4.490	2.375	3.120	.375	2.265	1.377	1.875	2.640	#10-24 X 7/8 LONG (2) INCLUDED	1.781
TEB-0003	3/4							1.812			
TEB-0004	1/2					2.765	1.877	2.375	3.140		
TEB-0005	3/4							2.312			
TEB-0006	1/2	5.490	3.250	3.932	.750	2.765	1.877	2.375	3.140	5/16-18 X 7/8 LONG (2) INCLUDED	2.312
TEB-0007	3/4							2.312			
TEB-0008	1/2					3.265	2.377	2.875	3.640		
TEB-0009	3/4							2.812			

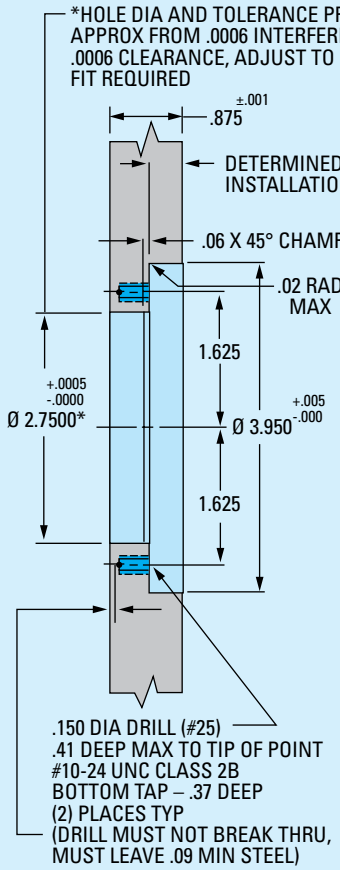
3-Plate Extension Bushings – Machining Dimensions

Suggested Mold Base Machining Dimensions

Typical Installations

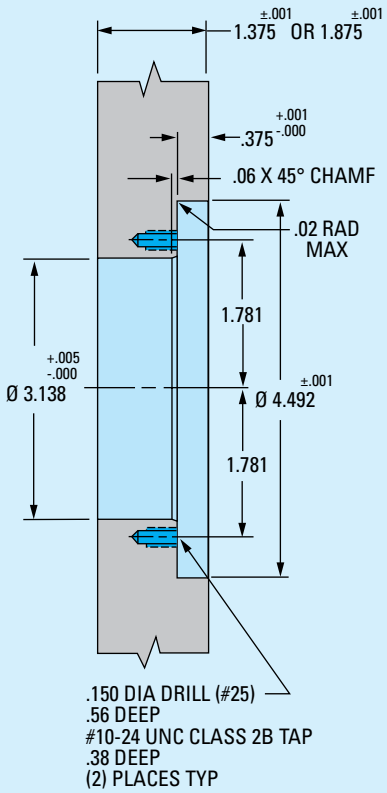


For Runner Stripper Plate Bushing TEB-0001 in X-1 Stripper Plate

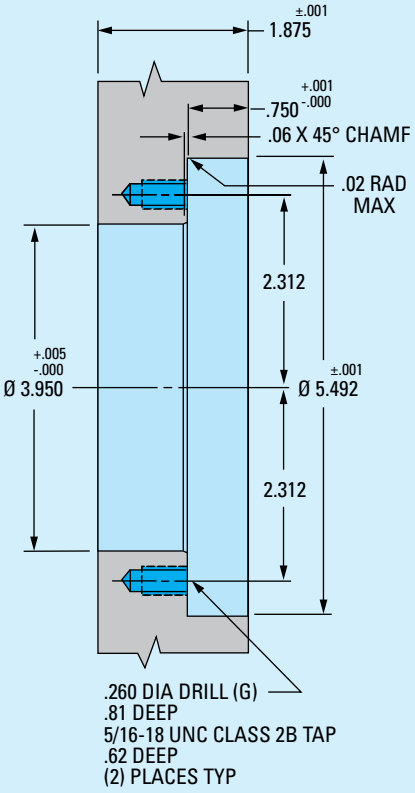


For Extension Nozzle Bushings in "A" Clamping Plate (A.C.P.)

TEB-0002 thru TEB-0005 (Small Bushings)



TEB-0006 thru TEB-0009 (Large Bushings)



Refer to installation data provided with product. Additional machining and installation data available. Contact D-M-E.

Guide Pins for Special Mold Tooling Needs

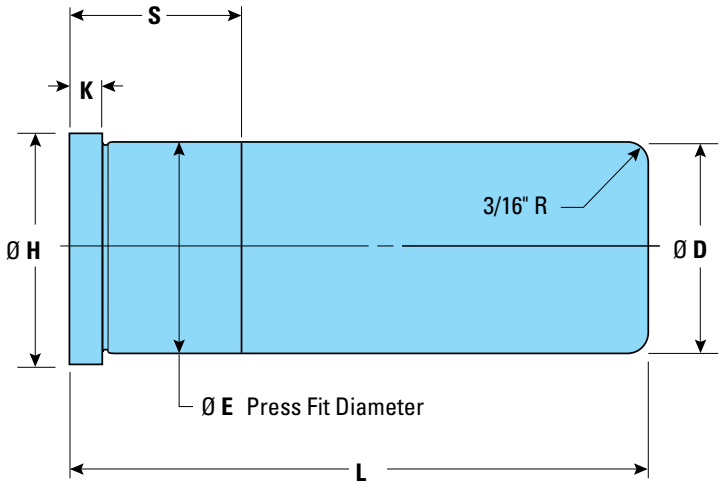
D-M-E Special Straight and Shoulder Guide Pins can be custom-ordered in a wide range of diameters and lengths to suit almost any mold tooling requirement. Made with case-hardened steel for dependable performance and long service life, D-M-E Special Guide Pins feature:

- Diameters up to 3"
- Lengths up to 33-1/2"
- Case-hardened steel (HRC 58-64)
- Close tolerances of .0005" on critical diameters

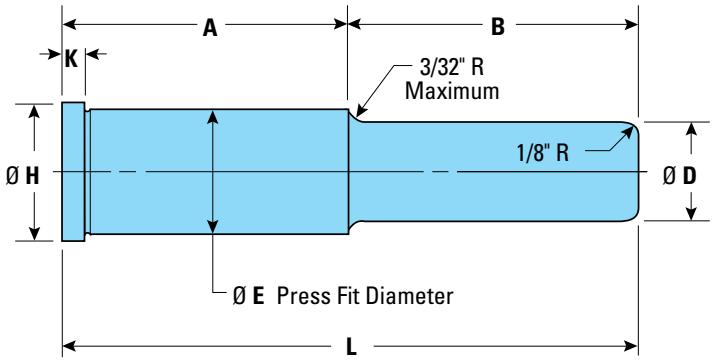
D-M-E operates a state-of-the-art manufacturing facility to ensure that your quality and delivery goals are met. Extensive resources and efficient processes provide rapid order fulfillment. Advanced manufacturing techniques and trained, dedicated personnel ensure quality.

Contact D-M-E for your special guide pin needs. We can quote your application and process your order immediately (see faxable quote form on next page).

Straight Guide Pins



Shoulder Guide Pins







Special Guide Pins – Faxable Quote Form

QUOTE FAX HOTLINES or visit www.dme.net

United States 888-808-4363 • Canada 800-461-9965 • International 248-398-7394

Company name: _____ **D-M-E account #:** _____

Contact name: _____ **P.O. #:** _____

Phone: _____ **FAX:** _____

Address: _____ **E-mail:** _____

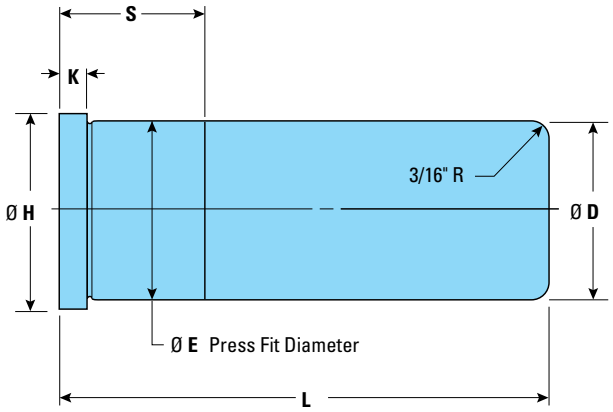
City: _____ **State/Province:** _____

ZIP/Postal Code: _____ **Country:** _____

Shipping method:

- ☐ UPS Ground
- ☐ UPS 2nd Day Air
- ☐ UPS Next Day
- ☐ FedEx
- ☐ Other_____

Straight Guide Pins

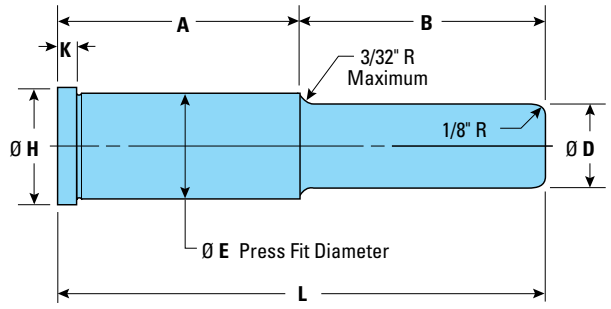


	Standard Dimensions (Circle Yes or No)	Requested Dimensions*	Inch Tolerances (Standard)
Ø D	Yes No		+.0000 –.0005
Ø E	Yes No		+.0005 –.0000
S	Yes No		+.00 –.06
Ø H	Yes No		+.00 –.03
L	Yes No		+.00 –.06
K	Yes No		+.003 –.005

*All requested dimensions must be specified for quoting.

Quantity: _____ **Pieces**

Shoulder Guide Pins



	Standard Dimensions (Circle Yes or No)	Requested Dimensions*	Inch Tolerances (Standard)
Ø D	Yes No		+.0000 –.0005
Ø E	Yes No		+.0005 –.0000
A	Yes No		+.00 –.03
B	Yes No		+.00 –.03
Ø H	Yes No		+.00 –.01
L	Yes No		+.00 –.06
K	Yes No		+.003 –.005

*All requested dimensions must be specified for quoting.

Quantity: _____ **Pieces**

Metric Equivalents and Conversions

Equivalents: Inch, fraction, decimal, millimeter

INCHES	MILLIMETERS	INCHES	MILLIMETERS
1	25.4	34	863.6
2	50.8	35	889.0
3	76.2	36	914.4
4	101.6	37	939.8
5	127.0	38	965.2
6	152.4	39	990.6
7	177.8	40	1016.0
8	203.2	41	1041.4
9	228.6	42	1066.8
10	254.0	43	1092.2
11	279.4	44	1117.6
12	304.8	45	1143.0
13	330.2	46	1168.4
14	355.6	47	1193.8
15	381.0	48	1219.2
16	406.4	49	1244.6
17	431.8	50	1270.0
18	457.2	51	1295.4
19	482.6	52	1320.8
20	508.0	53	1346.2
21	533.4	54	1371.6
22	558.8	55	1397.0
23	584.2	56	1422.4
24	609.6	57	1447.8
25	635.0	58	1473.2
26	660.4	59	1498.6
27	685.8	60	1524.0
28	711.2	61	1549.4
29	736.6	62	1574.8
30	762.0	63	1600.2
31	787.4	64	1625.6
32	812.8	65	1651.0
33	838.2	66	1676.4

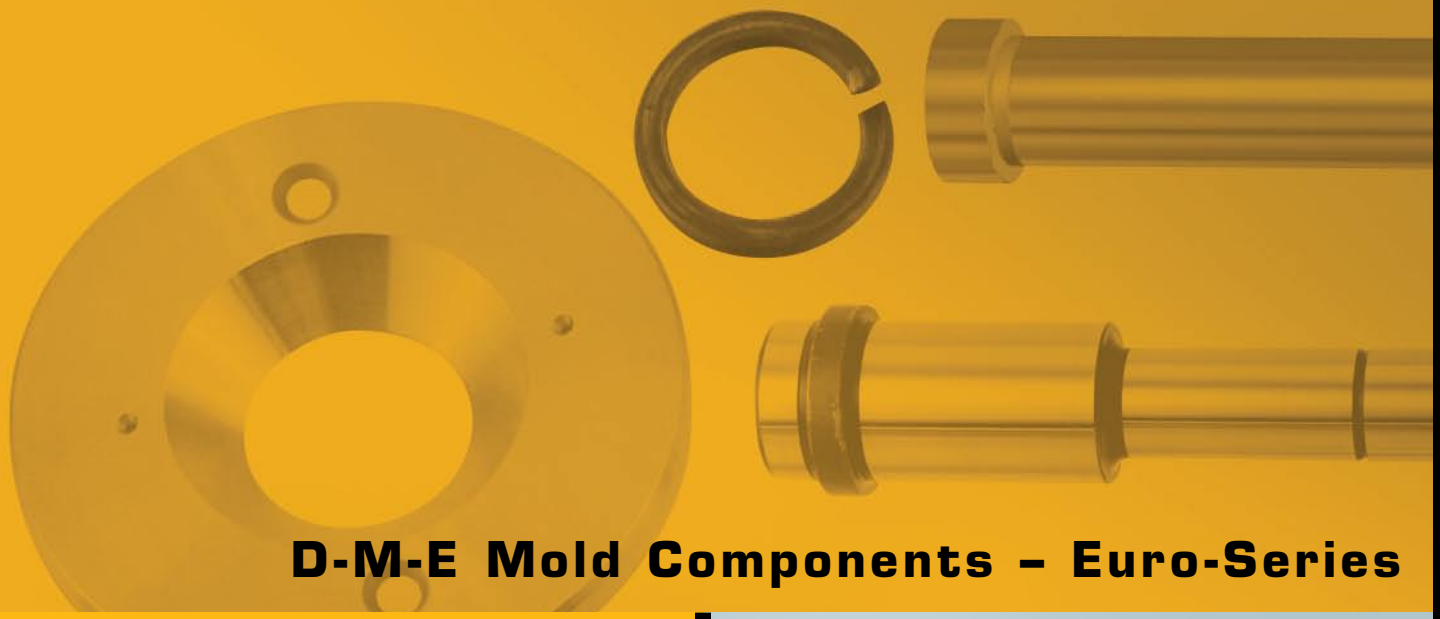
INCHES		MILLIMETERS	INCHES		MILLIMETERS
1/64	0.015625	0.396875	33/64	0.515625	13.096875
1/32	0.031250	0.793750	17/32	0.531250	13.493750
3/64	0.046875	1.190625	35/64	0.546875	13.890625
1/16	0.062500	1.587500	9/16	0.562500	14.287500
5/64	0.078125	1.984375	37/64	0.578125	14.684375
3/32	0.093750	2.381250	19/32	0.593750	15.081250
7/64	0.109375	2.778125	39/64	0.609375	15.478125
1/8	0.125000	3.175000	5/8	0.625000	15.875000
9/64	0.140625	3.571875	41/64	0.640625	16.271875
5/32	0.156250	3.968750	21/32	0.656250	16.668750
11/64	0.171875	4.365625	43/64	0.671875	17.065625
3/16	0.187500	4.762500	11/16	0.687500	17.462500
13/64	0.203125	5.159375	45/64	0.703125	17.859375
7/32	0.218750	5.556250	23/32	0.718750	18.256250
15/64	0.234375	5.953125	47/64	0.734375	18.653125
1/4	0.250000	6.350000	3/4	0.750000	19.050000
17/64	0.265625	6.746875	49/64	0.765625	19.446875
9/32	0.281250	7.143750	25/32	0.781250	19.843750
19/64	0.296875	7.540625	51/64	0.796875	20.240625
5/16	0.312500	7.937500	13/16	0.812500	20.637500
21/64	0.328125	8.334375	53/64	0.828125	21.034375
11/32	0.343750	8.731250	27/32	0.843750	21.431250
23/64	0.359375	9.128125	55/64	0.859375	21.828125
3/8	0.375000	9.525000	7/8	0.875000	22.225000
25/64	0.390625	9.921875	57/64	0.890625	22.621875
13/32	0.406250	10.318750	29/32	0.906250	23.018750
27/64	0.421875	10.715625	59/64	0.921875	23.415625
7/16	0.437500	11.112500	15/16	0.937500	23.812500
29/64	0.453125	11.509375	61/64	0.953125	24.209375
15/32	0.468750	11.906250	31/32	0.968750	24.606250
31/64	0.484375	12.303125	63/64	0.984375	25.003125
1/2	0.500000	12.700000	1	1.000000	25.400000

Equivalents: Decimal, millimeter

INCHES	MILLIMETERS	INCHES	MILLIMETERS	INCHES	MILLIMETERS
0.001	0.0254	0.01	0.254	0.1	2.54
0.002	0.0508	0.02	0.508	0.2	5.08
0.003	0.0762	0.03	0.762	0.3	7.62
0.004	0.1016	0.04	1.016	0.4	10.16
0.005	0.1270	0.05	1.270	0.5	12.70
0.006	0.1524	0.06	1.524	0.6	15.24
0.007	0.1778	0.07	1.778	0.7	17.78
0.008	0.2032	0.08	2.032	0.8	20.32
0.009	0.2286	0.09	2.286	0.9	22.86

Measurement conversions

MULTIPLY BY	FROM → TO → / ← TO ← FROM		MULTIPLY BY
0.03937	inch	millimeter	25.4
0.0016	inch^2	millimeter^2	645.16
0.061	inch^3	centimeter^3	16.3871
0.2642	gallon (U.S.)	liter	3.7854
0.03527	oz. (avdp.)	gram	28.3495
2.2044	pound	kilogram	0.4536
62.43	lbs/ft^3	g/cm^3	0.0160
0.145	psi	kPa	6.8948
14.2247	psi	kg/cm^2	0.0703
1.8°C + 32	°F	°C	(°F-32)/1.8



D-M-E Mold Components – Euro-Series

FEATURING HIGH-QUALITY
GUIDE PINS, BUSHINGS,
SUPPORT PILLARS, ETC.





ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

A comprehensive line of Euro-Series Mold Components



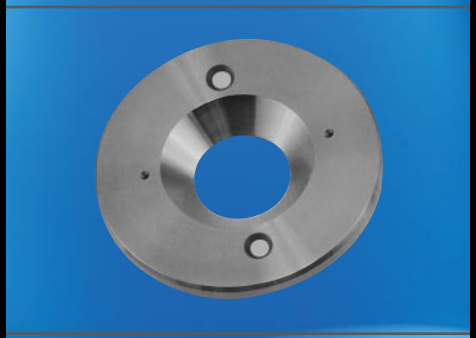
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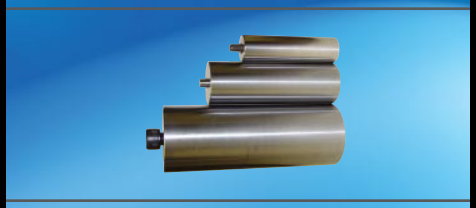
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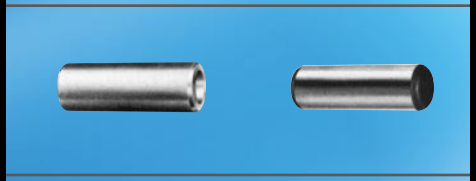
Guide Pin Bushings *228-229*



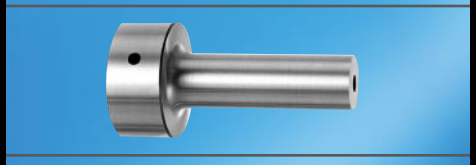
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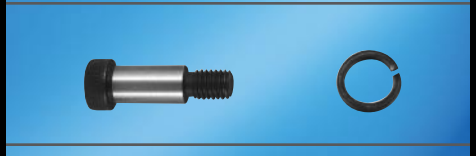
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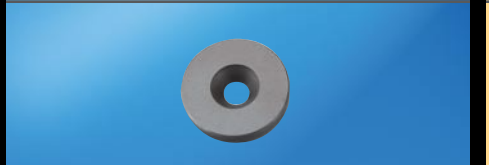
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Tubular Dowels & Dowels *230-231, 235*



Sprue Bushings *233*



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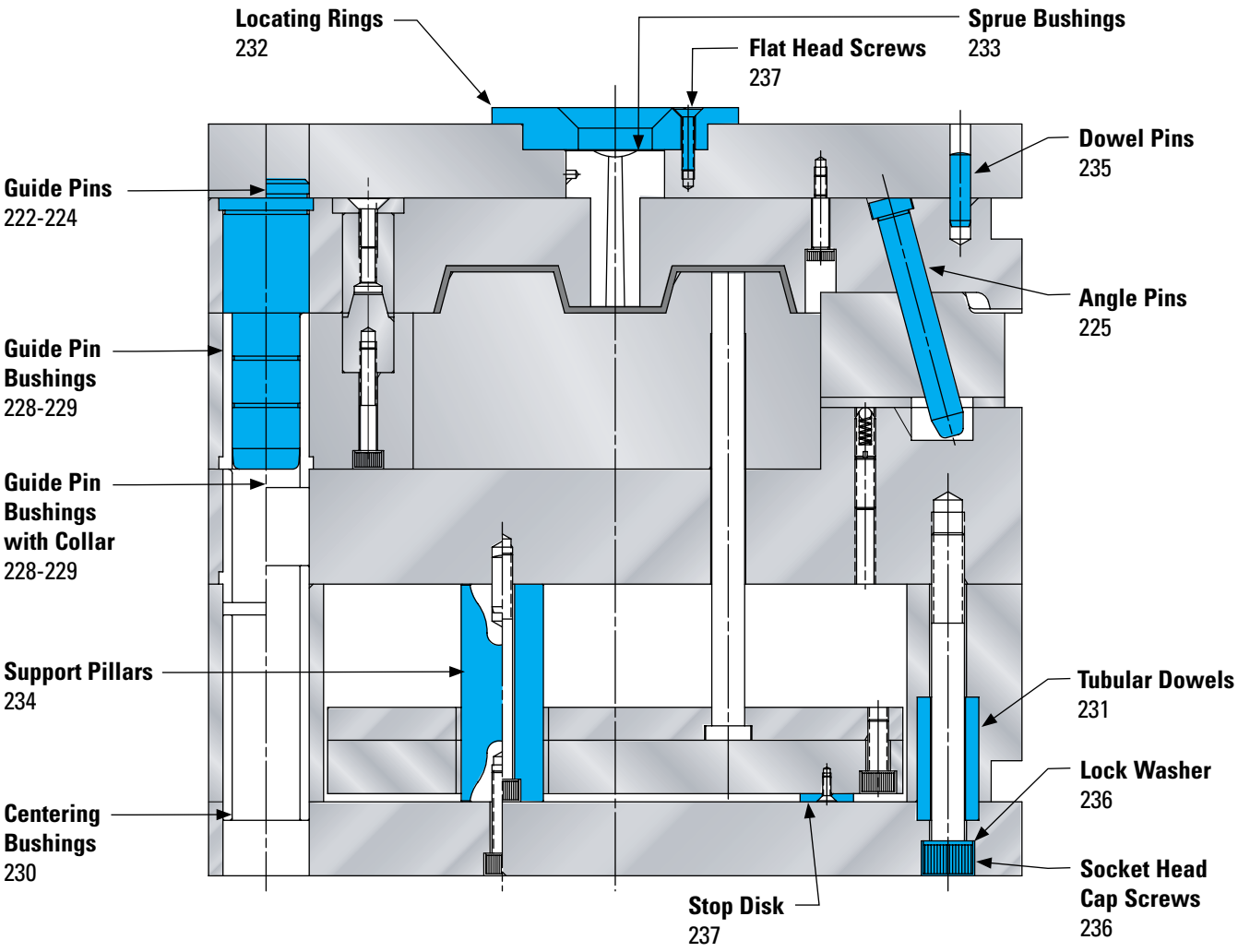


Stop Disk *237*

Online Price Guide

Go to www.dme.net/prices for the latest pricing guide.

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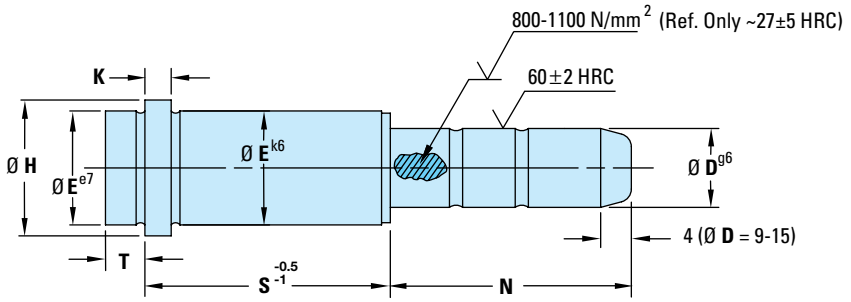
R18 (STOP DISK) 237

Guide Pins (with Collar)

Guide Pins (with Collar) – GDP-EC

Pernos guia con collar | Guias principais | Colonnes de guidage (avec épaulement) | Führungsbolzen (mit Bund)

INFORMATION KEY:
D = Pin Body Diameter
E = Shoulder Diameter
H = Head Diameter
K = Head Thickness
N = Pin Body Length
S = Shoulder Length
T = Collar Length
Standard: Euro-Series
Material: 1.7131 (AISI 5115 Type) Steel
Surface Treatment: Case Hardened
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	E	H	K	T	S	N																				
							020	025	030	035	045	050	055	060	065	070	075	085	090	095	105	110	125	135	145	150	155	165
GDP-EC (R02)*	09 OR 10	14	16	3	3	012		■			■				■													
						017	■		■			■				■												
						022		⚡		■			■				■			■								
						027	■		⚡			■				■			■									
						036		⚡			⚡				■			■										
						046			■		■					■												
						056				■				■														
GDP-EC (R02)*	14 OR 15	20	25	6	9	017				■			■				■			■								
						022			⚡			⚡				■			■			■			■			
						027			⚡		⚡				⚡						■		■		■			■
						036				⚡			⚡				■			■			■				■	
						046				⚡	⚡				⚡			■			■		■		■			
						056				⚡			⚡				■			■				■				
						066							⚡		■					■			■					
						076							■							■								
						086							■							■								
						096							■							■								
						116											■											

* "(R02)" is only a cross-reference to current D-M-E Europe Catalog item prefix numbers.

HOW TO ORDER: Specify Item Number with prefix, D diameter, S length, and N length. Include zeros and dashes but omit decimals, as shown.

Prefix		D		S		N
GDP-EC	-		-		-	

Example:
Prefix D S N
GDP-EC-09-027-020

Example:
Prefix D S N
GDP-EC-14-066-055

KEY TO CHART
⚡ **Items in stock**
2-3 week delivery
Contact D-M-E for quote

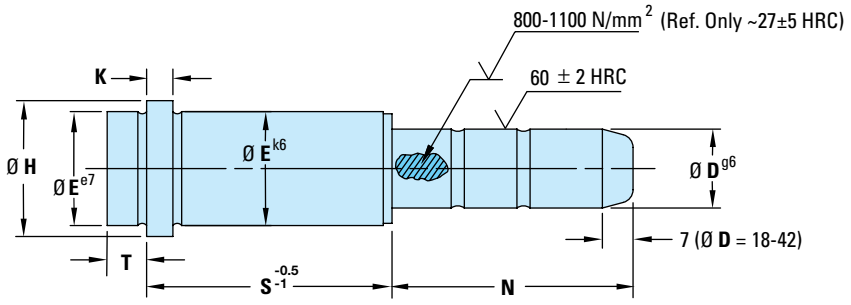
Guide Pins (with Collar)

Guide Pins (with Collar) – GDP-EC

Pernos guia con collar | Guias principais | Colonnes de guidage (avec épaulement) | Führungsbolzen (mit Bund)

INFORMATION KEY:

D = Pin Body Diameter
E = Shoulder Diameter
H = Head Diameter
K = Head Thickness
N = Pin Body Length
S = Shoulder Length
T = Collar Length
Standard: Euro-Series
Material: 1.7131 (AISI 5115 Type) Steel
Surface Treatment: Case Hardened
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	E	H	K	T	S	N																		
							035	045	055	065	075	085	095	105	115	120	125	130	135	145	155	165	205	225	245	255	285
GDP-EC (R02)*	18 OR 20	26	31	6	9	017																					
						022																					
						027	⚡	⚡		⚡		⚡															
						036	⚡		⚡		⚡		⚡														
						046	⚡	⚡		⚡		⚡		⚡													
						056	⚡		⚡		⚡		⚡														
						066			⚡		⚡																
						076			⚡		⚡																
						086																					
						096							⚡														
						116																					
						136																					
GDP-EC (R02)*	22 OR 24	30	35	6	9	017																					
						022																					
						027	⚡	⚡		⚡		⚡		⚡													
						036	⚡		⚡		⚡		⚡		⚡				⚡			⚡	⚡		⚡		
						046	⚡	⚡		⚡		⚡		⚡			⚡					⚡	⚡				
						056	⚡		⚡		⚡		⚡		⚡							⚡					
						066			⚡		⚡		⚡								⚡						
						076			⚡		⚡		⚡		⚡					⚡							
						086			⚡		⚡		⚡						⚡								
						096			⚡		⚡		⚡				⚡										
						116					⚡				⚡						⚡						
						136							⚡						⚡								
						156																					

* "(R02)" is only a cross-reference to current D-M-E Europe Catalog item prefix numbers.

HOW TO ORDER: Specify Item Number with prefix, D diameter, S length, and N length. Include zeros and dashes but omit decimals, as shown.

Prefix		D		S		N
GDP-EC	-		-		-	

Example:
Prefix D S N
GDP-EC-18-056-035

Example:
Prefix D S N
GDP-EC-22-116-155

KEY TO CHART

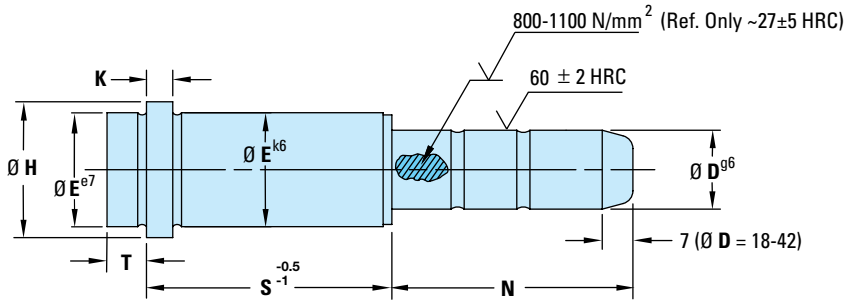
⚡ **Items in stock**
2-3 week delivery
Contact D-M-E for quote

Guide Pins (with Collar)

Guide Pins (with Collar) – GDP-EC

Pernos guia con collar | Guias principais | Colonnes de guidage (avec épaulement) | Führungsbolzen (mit Bund)

INFORMATION KEY:
D = Pin Body Diameter
E = Shoulder Diameter
H = Head Diameter
K = Head Thickness
N = Pin Body Length
S = Shoulder Length
T = Collar Length
Standard: Euro-Series
Material: 1.7131 (AISI 5115 Type) Steel
Surface Treatment: Case Hardened
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	E	H	K	T	S	N 045	055	065	075	085	095	105	115	125	135	155	165	175	185	195	205	215	225	235	245	285	295
GDP-EC (R02)*	30 OR 32	42	47	6	9	027																						
						036																						
						046																						
						056																						
						066																						
						076																						
						086																						
						096																						
						116																						
						136																						
						156																						
						196																						
						046																						
GDP-EC (R02)*	40 OR 42	54	60	10	12	056																						
						066																						
						076																						
						086																						
						096																						
						116																						
						136																						
						156																						
						196																						
						246																						

* "(R02)" is only a cross-reference to current D-M-E Europe Catalog item prefix numbers.

HOW TO ORDER: Specify Item Number with prefix, D diameter, S length, and N length. Include zeros and dashes but omit decimals, as shown

Prefix	D	S	N
GDP-EC	-	-	-

Example:
Prefix D S N
GDP-EC-30-096-075

Example:
Prefix D S N
GDP-EC-42-246-245

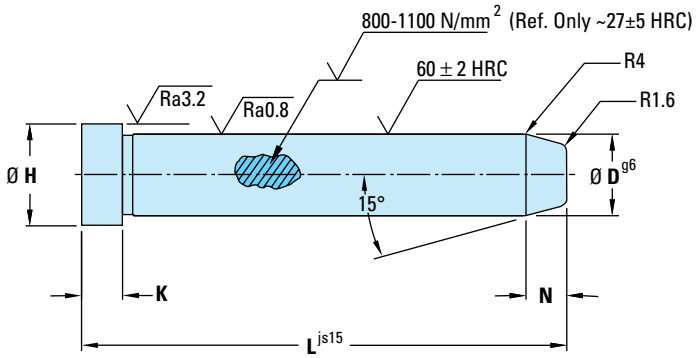
KEY TO CHART
- Items in stock
- 2-3 week delivery
- Contact D-M-E for quote

Angle Pins

Angle Pins – ADP

Pernos de ángulo | Guias de movimentos | Epingles anglees | Winkelstifte

INFORMATION KEY:
D = Pin Body Diameter
H = Head Diameter
K = Head Thickness
L = Pin Length
N = Lead in Taper Length
Standard: DIN Type
Material: 1.7131 (AISI 5115 Type) Steel
Surface Treatment: Case Hardened
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	H	K	N	L															
					040	060	080	100	120	140	160	180	200	210	220	230	240	250	270	300	360
APD	10	12	3	5	⚡		⚡			⚡											
	12	16	6	5			⚡	⚡	⚡	⚡	⚡										
	14	18	8	6					⚡	⚡	⚡	⚡	⚡		⚡						
	16	20	8	7				⚡	⚡	⚡	⚡	⚡	⚡		⚡						
	18	22	8	8							⚡	⚡	⚡			⚡					
	20	24	8	8					⚡	⚡	⚡	⚡	⚡				⚡				
	22	26	15	8																	
	24	28	15	8						⚡			⚡		⚡						
	30	34	15	8								⚡					⚡		⚡	⚡	
	40	48	15	10													⚡			⚡	
	50	58	15	10													⚡			⚡	⚡

HOW TO ORDER: Specify Item Number with prefix, D diameter and L length. Include zeros as shown, but omit all spaces (spaces are only shown here for easier reading).

Prefix	D	L
APD		

Example:
Prefix D L
APD 10 040

Example:
Prefix D L
APD 50 360

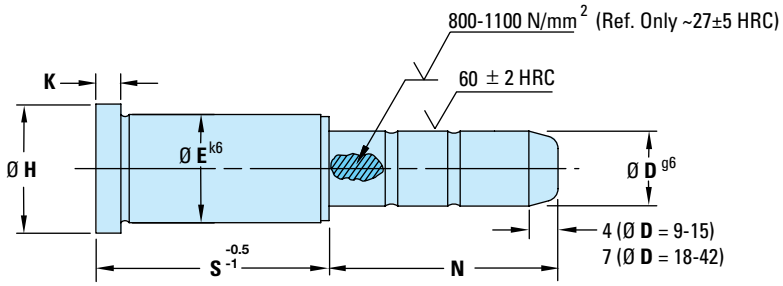
KEY TO CHART
⚡ **Items in stock**
2-3 week delivery
Contact D-M-E for quote

Guide Pins (without Collar)

Guide Pins (without Collar) – GDP-ES

Pernos guia | Guias | Colonnes de guidage (sans épaulement) | Führungsbolzen (ohne Bund)

INFORMATION KEY:
D = Pin Body Diameter
E = Shoulder Diameter
H = Head Diameter
K = Head Thickness
N = Pin Body Length
S = Shoulder Length
Standard: Euro-Series
Material: 1.7131 (AISI 5115 Type) Steel
Surface Treatment: Case Hardened
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	E	H	K	S	N																			
						020	025	030	035	040	045	050	055	060	065	070	075	080	085	090	095	105	110	115	125	135	165
GDP-ES (R01)*	09 or 10	14	16	3	017			■																		
					022		■		■				■														
					027			■				■														
					036		■				■															
					046			■			■															
GDP-ES (R01)*	14 or 15	20	25	6	022	■			■	■	■	■	■		■	■				■			■				
					027	■			■		■		⚡		⚡				■			■					
					036	■			⚡		⚡		⚡		■		■				■						
					046	■			■		■				■				■			■					
					056				■				■				■				■						
					066								■		■						■						
					076								■								■						
					086								■								■						
GDP-ES (R01)*	18 or 20	26	31	6	022	■			■		■	■	■	■	■	■		■	■					■			
					027	■			■		■		⚡		⚡			■	⚡			⚡			⚡		
					036	■			⚡		⚡		⚡		⚡		⚡				■			⚡		■	
					046	■					⚡				⚡				⚡			⚡				■	⚡
					056	■			⚡				⚡				■				■						
					066								⚡				■				■						
					076								■				■				■						
					086								■				■				■						
					096								■								■						
					116																			■			

* "(R01)" is only a cross-reference to current D-M-E Europe Catalog item prefix numbers.

HOW TO ORDER: Specify Item Number with prefix, D diameter, S length, and N length. Include zeros and dashes but omit decimals, as shown.

Prefix	D	S	N
GDP-ES	-	-	-

Example:

Prefix	D	S	N
GDP-ES-	14-	036-	035

Example:

Prefix	D	S	N
GDP-ES-	18-	046-	165

KEY TO CHART

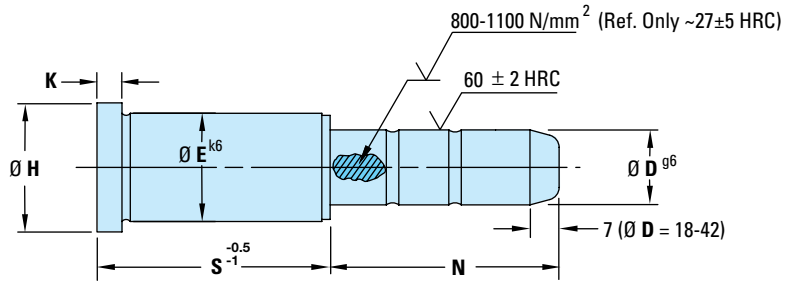
⚡ **Items in stock**
2-3 week delivery
Contact D-M-E for quote

Guide Pins (without Collar)

Guide Pins (without Collar) – GDP-ES

Pernos guia | Guias | Colonnes de guidage (sans épaulement) | Führungsbolzen (ohne Bund)

INFORMATION KEY:
D = Pin Body Diameter
E = Shoulder Diameter
H = Head Diameter
K = Head Thickness
N = Pin Body Length
S = Shoulder Length
Standard: Euro-Series
Material: 1.7131 (AISI 5115 Type) Steel
Surface Treatment: Case Hardened
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	E	H	K	S	N																			
						025	045	050	055	060	065	070	075	080	085	095	105	115	125	135	155	165	175	195	215	235
GDP-ES (R01)*	22 or 24	30	35	6	027		⚡																		
					036		⚡		⚡							⚡		⚡		⚡						
					046		⚡				⚡						⚡		⚡							
					056		⚡		⚡				⚡			⚡										
					066				⚡				⚡			⚡										
					076																					
					086																					
					096																					
					116																					
					136																					
GDP-ES (R01)*	30 or 32	42	47	6	027																					
					036																					
					046																					
					056				⚡				⚡													
					066				⚡				⚡													
					076								⚡													
					086				⚡				⚡													
					096																					
					116								⚡					⚡								
					136																					
					156																					
					196																					
GDP-ES (R01)*	40 or 42	54	60	10	056																					
					066																					
					076																					
					086																					
					096																					
					116																					
					136																					
					156																					
					196																					

* "(R01)" is only a cross-reference to current D-M-E Europe Catalog item prefix numbers.

HOW TO ORDER: Specify Item Number with prefix, D diameter, S length, and N length. Include zeros and dashes but omit decimals, as shown.

Prefix		D		S		N
GDP-ES	-		-		-	

Example:
Prefix D S N
GDP-ES-22-027-045

Example:
Prefix D S N
GDP-ES-40-115-156

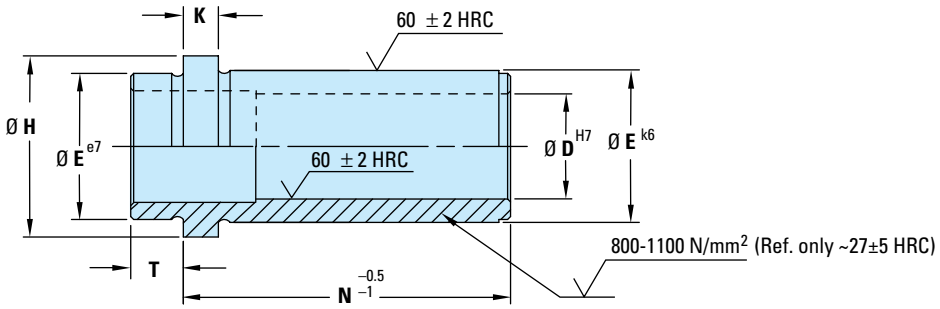
KEY TO CHART
⚡ Items in stock
2-3 week delivery
Contact D-M-E for quote

Guide Pin Bushings (with Collar)
Self-Lube Guide Pin Bushings (with Collar) – GDB-ECL

Guide Pin Bushings (with Collar) – GDB-ECS

Bujes guia con collar | Casquilhos | Douilles de guidage (avec épaulement) | Führungsbuchse (mit Bund)

INFORMATION KEY:
D = Inside Diameter
E = Outside Diameter
H = Head Diameter
K = Head Thickness
N = Bushing Length from Head
T = Collar Length
Standard: Euro-Series
Material: 1.7131 (AISI 5115 Type) Steel
Surface Treatment: Case Hardened
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	E	H	K	T	N 017	022	027	036	046	056	066	076	086	096	116	136	156	196	246
GDB-ECS (R04)*	14 OR 15	20	25	6	9		⚡	⚡	⚡	⚡	⚡									
	18 OR 20	26	31	6	9			⚡	⚡	⚡	⚡	⚡		⚡						
	22 OR 24	30	35	6	9			⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡					
	30 OR 32	42	47	6	9							⚡		⚡	⚡	⚡	⚡			
	40 OR 42	54	60	10	12															

* "(R04)" is only a cross-reference to current D-M-E Europe Catalog item prefix numbers.

HOW TO ORDER: Specify Item Number with prefix, D diameter, and N length. Include zeros and dashes but omit decimals, as shown.

Prefix | D | N
GDB-ECS - [ ] - [ ]

Example:
Prefix D N
GDB-ECS-18-036

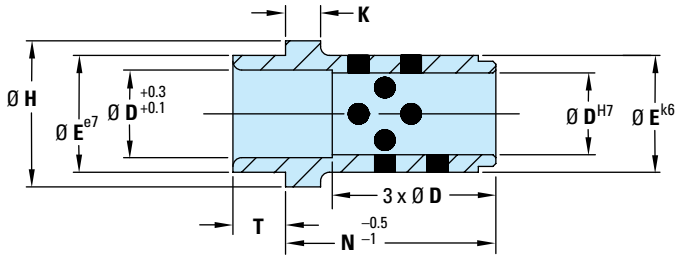
Example:
Prefix D N
GDB-ECS-32-116

KEY TO CHART
⚡ Items in stock
2-3 week delivery
Contact D-M-E for quote

Self-Lube Guide Pin Bushings (with Collar) – GDB-ECL

Bujes guia autolubricados, con collar | Casquilhos auto-lubrificantes con guiamento |
Douilles de Guidage autolubrifiantes à collerette | Selbstschmierende Führungsbuchsen (mit Bund)

INFORMATION KEY:
D = Inside Diameter
E = Outside Diameter
H = Head Diameter
K = Head Thickness
N = Bushing Length from Head
T = Collar Length
Standard: Euro-Series
Material: 2.0975 with Graphite Plugs 200HB
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	E	H	K	T	N 017	022	027	036	046	056	066	076	086	096	116	136	156
GDB-ECL (R04W)*	09 OR 10	14	16	3	3			⚡	⚡									
	14 OR 15	20	25	6	9			⚡	⚡	⚡								
	18 OR 20	26	31	6	9			⚡	⚡	⚡		⚡						
	22 OR 24	30	35	6	9			⚡	⚡	⚡		⚡	⚡					
	30 OR 32	42	47	6	9									⚡	⚡			
	40 OR 42	51	60	10														

* "(R04W)" is only a cross-reference to current D-M-E Europe Catalog item prefix numbers.

HOW TO ORDER: Specify Item Number with prefix, D diameter, and N length. Include zeros and dashes but omit decimals, as shown.

Prefix | D | N
GDB-ECL - [ ] - [ ]

Example:
Prefix D N
GDB-ECL-09-036

Example:
Prefix D N
GDB-ECL-30-096

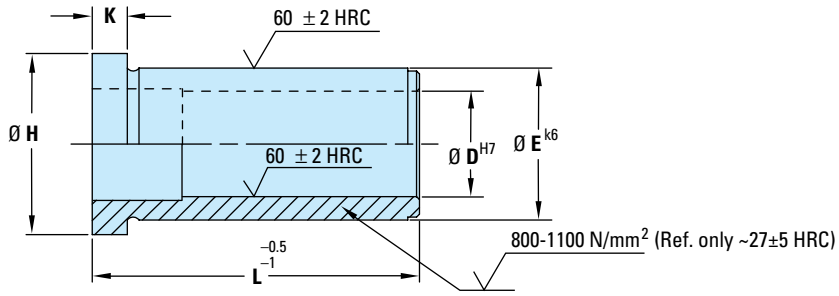
KEY TO CHART
⚡ Items in stock
2-3 week delivery
Contact D-M-E for quote

Guide Pin Bushings (without Collar)
Self-Lube Guide Pin Bushings (without Collar)

Guide Pins Bushings (without Collar) – GDB-ESS

Bujes guia | Casquilhos | Douilles de guidage (sans épaulement) | Führengsbuchse (ohne Bund)

INFORMATION KEY:
D = Inside Diameter
E = Outside Diameter
H = Head Diameter
K = Head Thickness
L = Bushing Length
Standard: Euro-Series
Material: 1.7131 (AISI 5115 Type) Steel
Surface Treatment: Case Hardened
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	E	H	K	L 009	012	017	022	027	036	046	056	066	076	086	096	116	136	156	246
GDB-ESS (R03)*	09 OR 10	14	16	6	■	■	■	■	■	■	■	■	■							
	14 OR 15	20	25	6		■	■	■	⚡	⚡	⚡	⚡	■	■	■	■				
	18 OR 20	26	31	6			■	■	⚡	⚡	⚡	⚡	⚡		⚡	■	⚡			
	22 OR 24	30	35	6			■	■	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	■		
	30 OR 32	42	47	6					■	■	⚡	■	■	■	⚡	⚡	■	⚡	■	
	40 OR 42	54	60	10							■	■	■	■	■	■	■	■	■	■

* "(R03)" is only a cross-reference to current D-M-E Europe Catalog item prefix numbers.

HOW TO ORDER: Specify Item Number with prefix, D diameter, and L length. Include zeros and dashes but omit decimals, as shown.

Prefix | D | L
GDB-ESS - [ ] - [ ]

Example:
Prefix D L
GDB-ESS-09-022

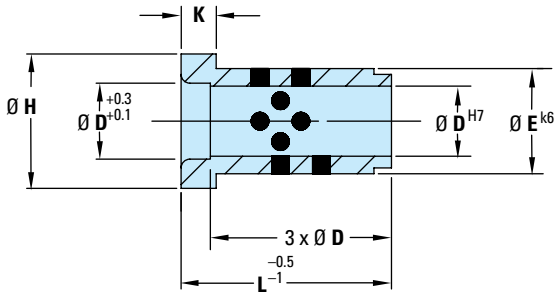
Example:
Prefix D L
GDB-ESS-32-136

KEY TO CHART
⚡ Items in stock
■ 2-3 week delivery
□ Contact D-M-E for quote

Self-Lube Guide Pin Bushings (without Collar) – GDB-ESL

Bujes guia autolubricados | Casquilhos auto-lubrificantes | Douilles de Guidage autolubrifiantes sans collerette | Selbstschmierende Führungsbuchsen (ohne Bund)

INFORMATION KEY:
D = Inside Diameter
E = Outside Diameter
H = Head Diameter
K = Head Thickness
L = Bushing Length
Standard: Euro-Series
Material: 2.0975 with Graphite Plugs 200HB
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	E	H	K	L 017	022	027	036	046	056	066	076	086	096	116	136
GDB-ESL (R03W)*	09 OR 10	14	16	3	■	■	■	■								
	14 OR 15	20	25	6	■	■	⚡	⚡	⚡	■						
	18 OR 20	26	31	6		■	⚡	⚡	⚡	■	⚡					
	22 OR 24	30	35	6		■	⚡	⚡	⚡	■	⚡	■				
	30 OR 32	42	47	6			■	■	■	■	■	■	⚡	⚡		
	40 OR 42	54	60	10						■	■	■	■	■	■	■

* "(R03W)" is only a cross-reference to current D-M-E Europe Catalog item prefix numbers.

HOW TO ORDER: Specify Item Number with prefix, D diameter, and L length. Include zeros and dashes but omit decimals, as shown.

Prefix | D | L
GDB-ESL - [ ] - [ ]

Example:
Prefix D L
GDB-ESL-10-036

Example:
Prefix D L
GDB-ESL-32-096

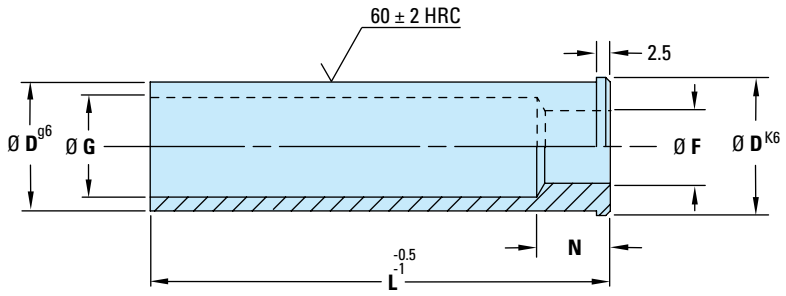
KEY TO CHART
⚡ Items in stock
■ 2-3 week delivery
□ Contact D-M-E for quote

Centering Bushing – Locating Sleeves

Centering Bushing (Locating Sleeves) – R05

Buje centrador | Casquilho central | Fourrure au centre | Mittelbuchse

INFORMATION KEY:
D = Outside Diameter
F = Inside Diameter
G = Inside Clearance Diameter
L = Length
N = Inside Length
Standard: Euro-Series
Material: 1.7131 (AISI 5115 Type) Steel
Surface Treatment: Case Hardened
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	F	G	N	L														
					020	030	040	050	060	070	080	100	120	140	160	180	200	240	280	300
R05	14	6	11	8																
	20	8	16	13					⚡		⚡	⚡								
	26	10	21	13					⚡		⚡	⚡	⚡	⚡						
	30	12	25	13					⚡		⚡	⚡	⚡	⚡						
	42	16	33	13								⚡	⚡	⚡						
	54	20	43	13																

HOW TO ORDER: Specify Item Number with prefix, D diameter and L length. Include zeros as shown, but omit all spaces (spaces are only shown here for easier reading).

Prefix	D	L
R05		

Example:
Prefix D L
R05 20 040

Example:
Prefix D L
R05 42 140

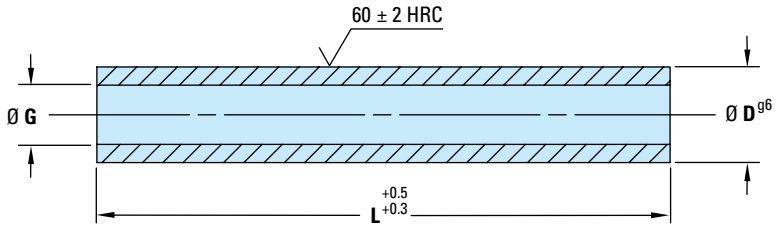
KEY TO CHART
⚡ **Items in stock**
2-3 week delivery
Contact D-M-E for quote

Tubular Dowels
Washer – Disk for Tubular Dowels

Tubular Dowels – R09

Registro tubular | Cavilha tubular | Douaires tubulaires | Paßhülsen

INFORMATION KEY:
D = Outside Diameter
G = Inside Diameter
L = Length
Standard: Euro-Series
Material: 1.7131 (AISI 5115 Type) Steel
Surface Treatment: Case Hardened
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	G	L													
			020	030	040	050	060	070	080	100	120	140	160	180	200	240	300
R09	10	6.2			⚡												
	14	8.5															
	18	10.5					⚡		⚡								
	24	13					⚡		⚡		⚡						
	30	17							⚡		⚡		⚡	⚡			

HOW TO ORDER: Specify Item Number with prefix, D diameter and L length. Include zeros as shown, but omit all spaces (spaces are only shown here for easier reading).

Prefix	D	L
R09		

Example:
Prefix D L
R09 10 040

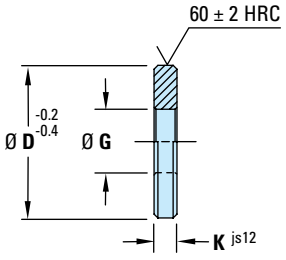
Example:
Prefix D L
R09 30 180

KEY TO CHART
⚡ **Items in stock**
2-3 week delivery
Contact D-M-E for quote

Washer (Disk for Tubular Dowel) – R091

Arandela – Registro tubular | Anilhas – para cavilha tubular |
Cachetage cylindrique – Douaires tubulaires | Scheibe – Paßhülsen

INFORMATION KEY:
D = Outside Diameter
G = Inside Diameter
K = Thickness
Standard: Euro-Series
Material: 1.7131 (AISI 5115 Type) Steel
Surface Treatment: Case Hardened
Dimensions: Shown in Millimeters (mm)



ITEM NUMBER	D	K	G	AVAILABILITY
R091 14 3	14	003	6.2	⚡
R091 18 4	18	004	8.5	⚡
R091 24 5	24	005	10.5	⚡
R091 30 6	30	006	13.0	⚡
R091 40 8	40	008	17.0	⚡

HOW TO ORDER: Specify Item Number. Include zeros as shown, but omit all spaces (spaces are only shown here for easier reading).

Prefix	D	K
RO91		

Example:
Prefix D K
R091 14 003

Example:
Prefix D K
R091 40 008

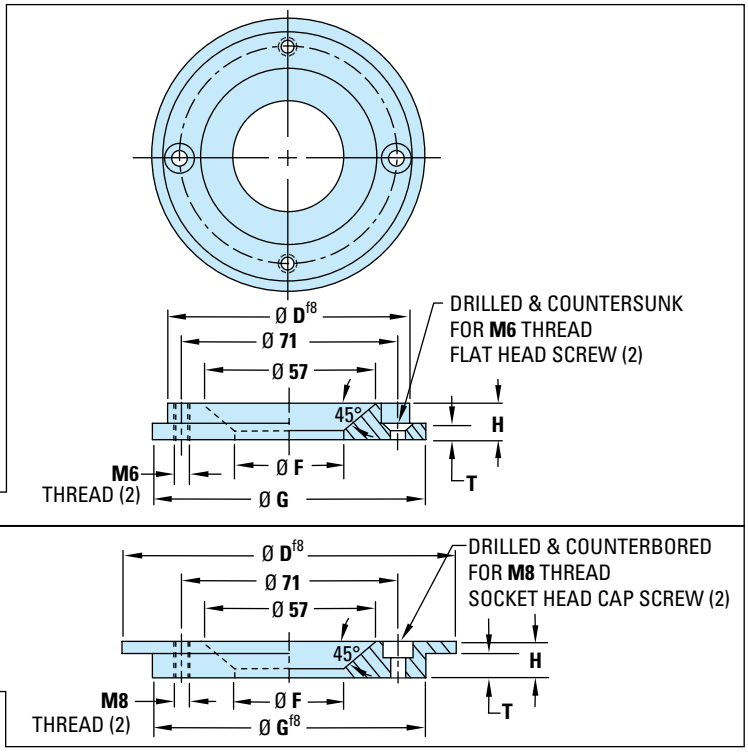
KEY TO CHART
⚡ **Items in stock**
2-3 week delivery
Contact D-M-E for quote

Locating Rings

Locating Ring with Mounting Holes – DHR21

Anillo centrador | Anéis de centragem | Rondelles de placement | Centrierflansche

INFORMATION KEY:
D = Platen-Side Diameter
F = Inside Diameter
G = Mold-Side Diameter
H = Overall Height
T = Mold-Side Step Height
Standard: Euro-Series
Material: 1.1730 Steel
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	G	F	D	H 12 / T 4	H 15 / T 7	H 17 / T 9	H 19 / T 11
DHR21	90	36	080				
	90	36	100				
	90	36	110			⚡	
	90	36	120		⚡	⚡	⚡
	90	36	160				
	90	36	175				

HOW TO ORDER: Specify Item Number with prefix, D diameter, and H height. Include zeros where shown, but omit all spaces (spaces are only shown here for easier reading).

Prefix	D	H
DHR21		

Example: Prefix D H — DHR21 060 19

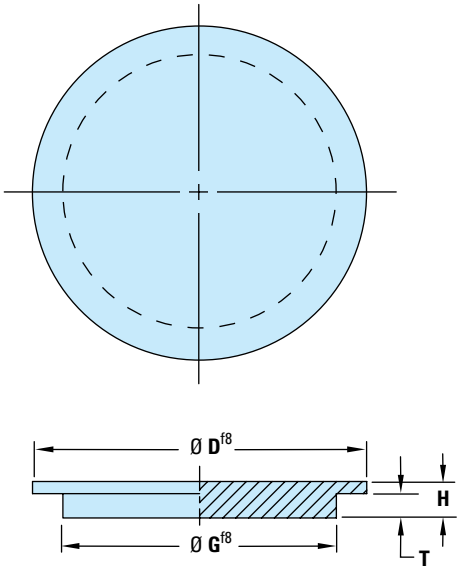
Example: Prefix D H — DHR21 120 15

KEY TO CHART
⚡ Items in stock
2-3 week delivery
Contact D-M-E for quote

Locating Ring (Solid) – R20

Anillo centrador | Anéis de centragem | Rondelles de placement | Centrierflansche

INFORMATION KEY:
D = Platen-Side Diameter
G = Mold-Side Diameter
H = Overall Height
T = Mold-Side Step Height
Standard: Euro-Series
Material: 1.1730 Steel
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	G	D	H 8 / T 4	H 12 / T 4	H 15 / T 7	H 17 / T 9	H 19 / T 11
R20	90	100					
	90	110		⚡		⚡	
	90	120		⚡	⚡	⚡	⚡
	90	125		⚡	⚡	⚡	⚡
	90	160					
	90	175					

HOW TO ORDER: Specify Item Number with prefix, D diameter, and H height. Include zeros where shown, but omit all spaces (spaces are only shown here for easier reading).

Prefix	D	H
R20		

Example: Prefix D H — R20 100 15

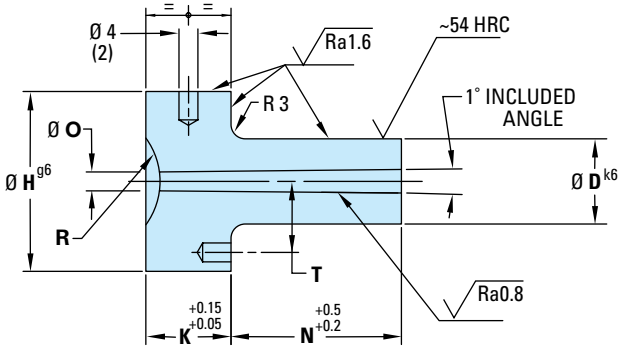
Example: Prefix D H — R20 120 19

KEY TO CHART
⚡ Items in stock
2-3 week delivery
Contact D-M-E for quote

Sprue Bushings – Hardened

Boquillas de inyeccion – templadas | Injectores do gito – temperados | Buses d'injection – trempé | Angießbuchsen – gehärtet

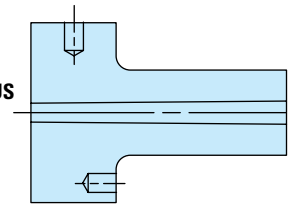
INFORMATION KEY:
D = Outside Diameter of Stem
H = Head Diameter
K = Head Thickness
N = Stem Length
O = Sprue Orifice Diameter
Standard: Euro-Series
Material: 1.2826 Steel
Surface Treatment: None (Through Hardened)
Dimensions: Shown in Millimeters (mm)



R = No Radius – DHR74

Material: 1.2826 Steel **Hardness:** ~54 HRC

ITEM PREFIX	D	N								O	H	K	T
		022	027	036	046	056	076	096	116				
DHR74	12	⚡	⚡	⚡	⚡					2,5	28	13	11
			⚡	⚡	⚡	⚡				3,5			
	18				⚡	⚡	⚡	⚡		3	38	18	15
						⚡	⚡	⚡	⚡	4			



HOW TO ORDER: Specify Item Number with prefix, D diameter, N length, and O diameter. Include zeros and commas only where shown, but omit all spaces (spaces are only shown here for easier reading).

Prefix	D	N	O
DHR74			

Example:
Prefix D N O
DHR74 12 022 2,5

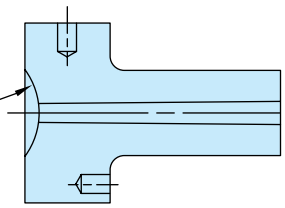
Example:
Prefix D N O
DHR74 18 056 3

KEY TO CHART
⚡ Items in stock
2-3 week delivery
Contact D-M-E for quote

R = 15.5mm Radius – DHR76

Material: 1.2826 Steel **Hardness:** ~54 HRC

ITEM PREFIX	D	N								O	H	K	T
		022	027	036	046	056	076	096	116				
DHR76	12									2,5	28	13	11
				⚡	⚡					3,5			
	18									3,0	38	18	15
						⚡	⚡	⚡	⚡	4,0			



HOW TO ORDER: Specify Item Number with prefix, D diameter, N length, O diameter, and R radius = 15. Include zeros and commas where shown, but omit all spaces (spaces are only shown here for easier reading).

Prefix	D	N	O	R
DHR76				15

Example:
Prefix D N O R
DHR76 12 036 3,5 15

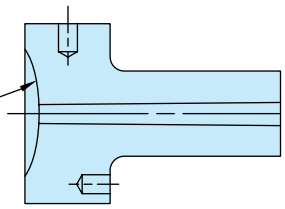
Example:
Prefix D N O R
DHR76 18 056 4,0 15

KEY TO CHART
⚡ Items in stock
2-3 week delivery
Contact D-M-E for quote

R = 40.0mm Radius – DHR78

Material: 1.2826 Steel **Hardness:** ~54 HRC

ITEM PREFIX	D	N								O	H	K	T
		022	027	036	046	056	076	096	116				
DHR78	12									2,5	28	13	11
			⚡	⚡	⚡	⚡				3,5			
	18				⚡	⚡	⚡	⚡		3,0	38	18	15
						⚡	⚡	⚡	⚡	4,0			



HOW TO ORDER: Specify Item Number with prefix, D diameter, N length, O diameter, and R radius = 40. Include zeros and commas where shown, but omit all spaces (spaces are only shown here for easier reading).

Prefix	D	N	O	R
DHR78				40

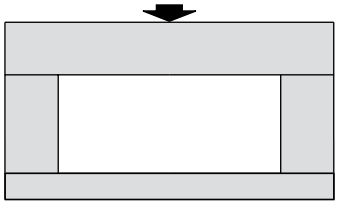
Example:
Prefix D N O R
DHR78 12 027 3,5 40

Example:
Prefix D N O R
DHR78 18 056 4,0 40

KEY TO CHART
⚡ Items in stock
2-3 week delivery
Contact D-M-E for quote

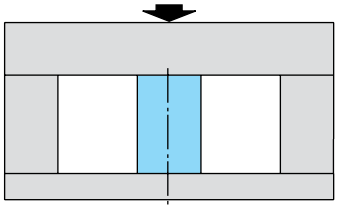
Support Pillars

Load • Carga • Charge • Carga • Druck



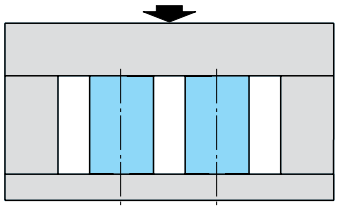
- No support pillars
- Sin pilares de apoyo
- Sans colonnes de support
- Sem colunas de suporte
- Ohne Stutzbolzen

Load • Carga • Charge • Carga • Druck



- One row of support pillars increases the permissible cavity area 4 times.
- Una fila de pilares de apoyo aumenta el area permisible de la cavidad cuatro veces.
- Une rangee de colonnes de support augmente la surface d'empreinte admissible de 4 fois.
- Uma fileira de colunas de suporte aumenta em 4 vezes a area de cavidade permitida.
- Eine Reihe Stutzbolzen erhoht die Belastbarkeit der Kavitatflache um das 4-Fache.

Load • Carga • Charge • Carga • Druck

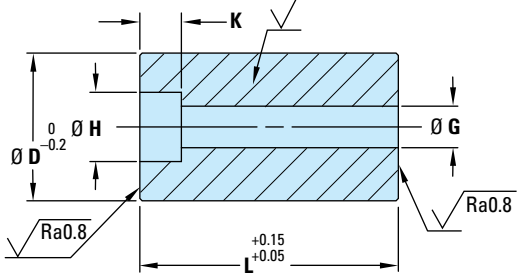


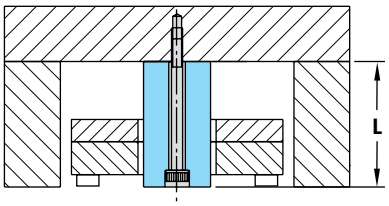
- Two rows of support pillars increase the permissible cavity area 9 times.
- Una fila de pilares de apoyo aumenta el area permisible de la cavidad nueve veces.
- Deux rangees de colonnes de support augmentent la surface d'empreinte admissible de 9 fois.
- Duas fileiras de colunas de suporte aumentam em 9 vezes a area de cavidade permitida.
- Zwei Reihen Stutzbolzen erhohen die Belastbarkeit der Kavitatsflache um das 9-Fache.

Support Pillars with Drilled & Counterbored Hole – FW28

Pilares de apoyo | Suportes | Colonnes de support | Stützbolzen

640 N/mm² (Ref. only ~91 HRB)





INFORMATION KEY:
D = Outside Diameter
G = Through Hole Diameter
H = Counterbore Diameter
K = Counterbore Depth
L = Length
Standard: DIN Type
Material: 1.1730 Steel
Surface Treatment: None
Dimensions: Shown in Millimeters (mm)

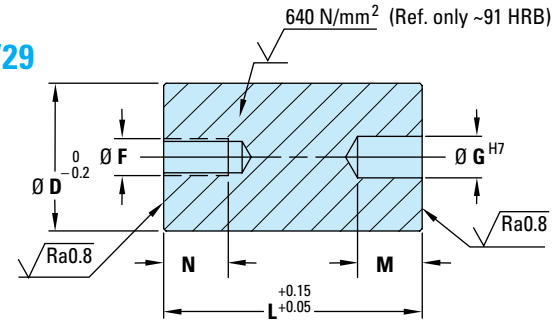
ITEM PREFIX	D	G	H	K	L 046	056	076	096	116	136
FW28	32	9	15	9		⚡	⚡			
	40	11	18	11		⚡	⚡	⚡		
	50	13	20	13			⚡	⚡		
	63	13	20	13				⚡		

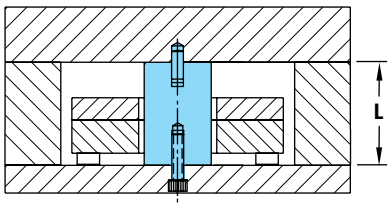
KEY TO CHART
⚡ Items in stock
2-3 week delivery
Contact D-M-E for quote

Support Pillars with Tapped Hole and Hole for Dowel – FW29

Pilares de apoyo | Suportes | Colonnes de support | Stützbolzen

640 N/mm² (Ref. only ~91 HRB)





INFORMATION KEY:
D = Outside Diameter
F = Tap Diameter
G = Dowel Locating Hole Diameter
L = Length
M = Locating Hole Depth (minimum)
N = Tap Depth (minimum)
Standard: DIN Type
Material: 1.1730 Steel
Surface Treatment: None
Dimensions: Shown in Millimeters (mm)

ITEM PREFIX	D	G	M	F	N	L 046	056	076	096	116
FW29	32	8	14	M8	14		⚡	⚡		
	40	10	18	M10	18		⚡	⚡	⚡	
	50	10	18	M10	18			⚡	⚡	
	63	10	18	M10	18				⚡	

KEY TO CHART
⚡ Items in stock
2-3 week delivery
Contact D-M-E for quote

HOW TO ORDER: Specify Item Number with prefix, D diameter and L length. Include zeros as shown, but omit all spaces (spaces are only shown here for easier reading).

Prefix | D | L

Example:
Prefix D L
FW28 32 076

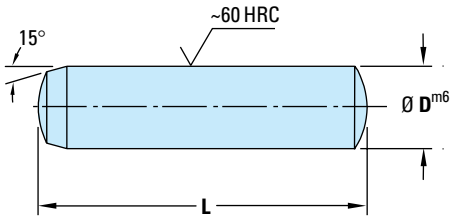
Example:
Prefix D L
FW29 63 096

Dowel Pins
Dowel Pins with Internal Thread – Pull Dowels

Dowel Pins – DP

Clavija | Cavilhas | Goupilles cylindriques | Zylinderstifte

INFORMATION KEY:
D = Pin Outside Diameter
L = Length
Standard: DIN 6325, ISO 8734
Material: Per DIN and ISO Specifications
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	L																		
		6	8	10	12	14	16	18	20	24	28	32	36	40	50	60	80	100	120	140
DP	2		⚡																	
	3			⚡																
	4																			
	5				⚡		⚡		⚡											
	6								⚡	⚡		⚡								
	8								⚡	⚡		⚡		⚡		⚡				
	10									⚡		⚡		⚡		⚡	⚡			
	12											⚡		⚡		⚡	⚡			
	16																			
	20															⚡				

HOW TO ORDER: Specify Item Number with prefix, D diameter and L length. Include zeros as shown, but omit all spaces (spaces are only shown here for easier reading).

Prefix	D	L
DP		

Example:
Prefix D L
DP 2 8

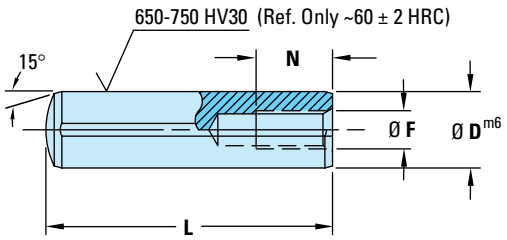
Example:
Prefix D L
DP 20 60

KEY TO CHART
- ⚡ **Items in stock**
- **2-3 week delivery**
- **Contact D-M-E for quote**

Dowel Pins with Internal Thread (Pull Dowels) – WZ7005

Clavija con cuerda interna | Cavilhas | Goupilles cylindriques | Zylinderstifte

INFORMATION KEY:
D = Pin Outside Diameter
F = Tap Diameter
L = Length
N = Tap Depth
Standard: DIN EN 28735 – Type A
Material: Per DIN Specification
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	F	N	L									
				020	024	028	032	036	040	050	060	080	100
WZ7005	06	M4	6	⚡			⚡		⚡				
	08	M5	8						⚡	⚡	⚡		
	10	M6	10						⚡		⚡		
	12	M6	12						⚡		⚡		
	14	M8	12										
	16	M8	16										
	20	M10	20										

HOW TO ORDER: Specify Item Number with prefix, D diameter and L length. Include zeros as shown, but omit all spaces (spaces are only shown here for easier reading).

Prefix	D	L
WZ7005		

Example:
Prefix D L
WZ7005 06 020

Example:
Prefix D L
WZ7005 12 040

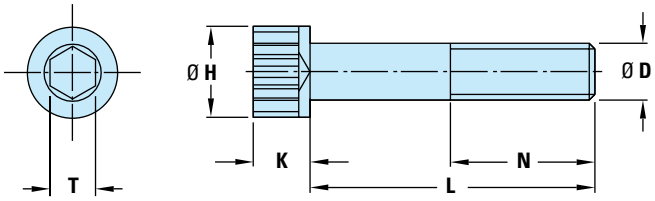
KEY TO CHART
- ⚡ **Items in stock**
- **2-3 week delivery**
- **Contact D-M-E for quote**

Socket Head Cap Screws
Lock Washers – Spring Washers

Socket Head Cap Screws – M

Tornillos cabeza allen | Parafuso de cabeça sextavada | Vis 6-pans téte cylindrique | Zylinderkopfschrauben

INFORMATION KEY:
D = Thread Diameter
H = Head Diameter
K = Head Height
L = Length
N = Thread Length
T = Hex Socket Size (Across Flats)
Standard: DIN 912-12.9
Material: Per DIN Specification
Dimensions: Shown in Millimeters (mm)



D	N	H	K	T	L																						
					8	10	12	16	20	25	30	40	50	60	70	80	90	100	110	120	130	140	150	160	180	200	220	240	260
M4	12	7	4	3																								
M6	18	10	6	5																								
M8	22	13	8	6																								
M10	25	16	10	8																								
M12	28	18	12	10																								
M16	38	24	16	14																								
M16	44	24	16	14																								
M16	57	21	10	14																								
M20	52	30	20	17																								
M20	65	30	20	17																								

HOW TO ORDER: Specify D diameter and L length. Include zeros as shown, but omit all spaces (spaces are only shown here for easier reading).

D L

Example:
D L
M6 30

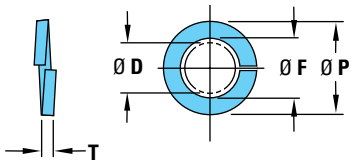
Example:
D L
M20 200

KEY TO CHART
- Items in stock
- 2-3 week delivery
- Contact D-M-E for quote

Lock Washers (Spring Washers) – R54

Rondanas de Presion | Freios | Rondelles de retenue | Sicherungsscheibe (Federscheibe)

INFORMATION KEY:
D = For Screw Diameter
F = Inside Diameter
P = Outside Diameter
T = Thickness
Standard: DIN 7980
Material: Per DIN Specification
Dimensions: Shown in Millimeters (mm)



ITEM NUMBER	D	F	P	T	AVAILABILITY
R54 08 2	08	8.1	12.7	2.0	
R54 10 2,5	10	10.2	16	2.5	
R54 12 2,5	12	12.5	18	2.5	

HOW TO ORDER: Specify Item Number. Include zeros and commas but omit decimals and all spaces (spaces are only shown here for easier reading).

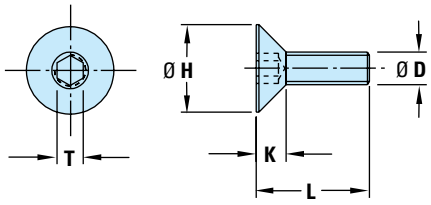
KEY TO CHART
- Items in stock
- 2-3 week delivery
- Contact D-M-E for quote

Flat Head Screws
Stop Disk for Ejector Plates

Flat Head Screws – SM

Tornillo de cabeza plana avellanada | Parafusos de cabeça cónica | Vis creuses | Senkkopfschrauben

INFORMATION KEY:
D = Thread Diameter
H = Head Diameter
K = Head Height
L = Length
T = Hex Socket Size (Across Flats)
Standard: DIN 7991-10.9
Material: Per DIN Specification
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	H	K	T	D	L 8	10	12	16	20	25	30	35	40	45	50
SM3	6	2.5	1.7	M3											
SM4	8	3	2.3	M4	⚡	⚡	⚡								
SM5	10	4	2.8	M5		⚡	⚡	⚡							
SM6	12	5	3.3	M6			⚡	⚡							
SM8	16	6	4.4	M8				⚡	⚡						
SM10	20	8	5.5	M10											
SM12	24	10	6.5	M12											

HOW TO ORDER: Specify Item Number with prefix and L length. Include zeros as shown, but omit all spaces (spaces are only shown here for easier reading).

Prefix **L**

Example: **Prefix** **L** SM3 10

Example: **Prefix** **L** SM8 16

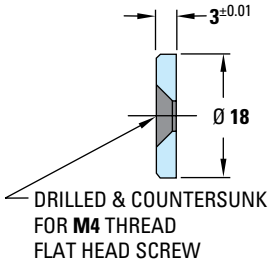
KEY TO CHART
⚡ **Items in stock**
2-3 week delivery
Contact D-M-E for quote

Stop Disk for Ejector Plates – R18

Arandela de Tope | Anilhas de encosto |
Repos d'épaisseur pour plaques d'éjection | Distanzscheibe für Auswerferplatte

INFORMATION KEY:
Standard: Euro-Series
Material: 1.1191 (AISI 1045 Type) Steel
Dimensions: Shown in Millimeters (mm)

ITEM NUMBER	AVAILABILITY
R18 18	⚡



HOW TO ORDER: Specify Item Number. Omit spaces (spaces are only shown here for easier reading).

Use with SM4 8 Flat Head Screw (M4 thread x 8mm long) which must be purchased separately.
See Flat Head Screws above.

KEY TO CHART
⚡ **Items in stock**
2-3 week delivery
Contact D-M-E for quote

Metric Equivalents and Conversions

Equivalents: Inch, fraction, decimal, millimeter

INCHES	MILLIMETERS	INCHES	MILLIMETERS
1	25.4	34	863.6
2	50.8	35	889.0
3	76.2	36	914.4
4	101.6	37	939.8
5	127.0	38	965.2
6	152.4	39	990.6
7	177.8	40	1016.0
8	203.2	41	1041.4
9	228.6	42	1066.8
10	254.0	43	1092.2
11	279.4	44	1117.6
12	304.8	45	1143.0
13	330.2	46	1168.4
14	355.6	47	1193.8
15	381.0	48	1219.2
16	406.4	49	1244.6
17	431.8	50	1270.0
18	457.2	51	1295.4
19	482.6	52	1320.8
20	508.0	53	1346.2
21	533.4	54	1371.6
22	558.8	55	1397.0
23	584.2	56	1422.4
24	609.6	57	1447.8
25	635.0	58	1473.2
26	660.4	59	1498.6
27	685.8	60	1524.0
28	711.2	61	1549.4
29	736.6	62	1574.8
30	762.0	63	1600.2
31	787.4	64	1625.6
32	812.8	65	1651.0
33	838.2	66	1676.4

INCHES		MILLIMETERS	INCHES		MILLIMETERS
1/64	0.015625	0.396875	33/64	0.515625	13.096875
1/32	0.031250	0.793750	17/32	0.531250	13.493750
3/64	0.046875	1.190625	35/64	0.546875	13.890625
1/16	0.062500	1.587500	9/16	0.562500	14.287500
5/64	0.078125	1.984375	37/64	0.578125	14.684375
3/32	0.093750	2.381250	19/32	0.593750	15.081250
7/64	0.109375	2.778125	39/64	0.609375	15.478125
1/8	0.125000	3.175000	5/8	0.625000	15.875000
9/64	0.140625	3.571875	41/64	0.640625	16.271875
5/32	0.156250	3.968750	21/32	0.656250	16.668750
11/64	0.171875	4.365625	43/64	0.671875	17.065625
3/16	0.187500	4.762500	11/16	0.687500	17.462500
13/64	0.203125	5.159375	45/64	0.703125	17.859375
7/32	0.218750	5.556250	23/32	0.718750	18.256250
15/64	0.234375	5.953125	47/64	0.734375	18.653125
1/4	0.250000	6.350000	3/4	0.750000	19.050000
17/64	0.265625	6.746875	49/64	0.765625	19.446875
9/32	0.281250	7.143750	25/32	0.781250	19.843750
19/64	0.296875	7.540625	51/64	0.796875	20.240625
5/16	0.312500	7.937500	13/16	0.812500	20.637500
21/64	0.328125	8.334375	53/64	0.828125	21.034375
11/32	0.343750	8.731250	27/32	0.843750	21.431250
23/64	0.359375	9.128125	55/64	0.859375	21.828125
3/8	0.375000	9.525000	7/8	0.875000	22.225000
25/64	0.390625	9.921875	57/64	0.890625	22.621875
13/32	0.406250	10.318750	29/32	0.906250	23.018750
27/64	0.421875	10.715625	59/64	0.921875	23.415625
7/16	0.437500	11.112500	15/16	0.937500	23.812500
29/64	0.453125	11.509375	61/64	0.953125	24.209375
15/32	0.468750	11.906250	31/32	0.968750	24.606250
31/64	0.484375	12.303125	63/64	0.984375	25.003125
1/2	0.500000	12.700000	1	1.000000	25.400000

Equivalents: Decimal, millimeter

INCHES	MILLIMETERS	INCHES	MILLIMETERS	INCHES	MILLIMETERS
0.001	0.0254	0.01	0.254	0.1	2.54
0.002	0.0508	0.02	0.508	0.2	5.08
0.003	0.0762	0.03	0.762	0.3	7.62
0.004	0.1016	0.04	1.016	0.4	10.16
0.005	0.1270	0.05	1.270	0.5	12.70
0.006	0.1524	0.06	1.524	0.6	15.24
0.007	0.1778	0.07	1.778	0.7	17.78
0.008	0.2032	0.08	2.032	0.8	20.32
0.009	0.2286	0.09	2.286	0.9	22.86

Measurement conversions

MULTIPLY BY	FROM → TO → / ← TO ← FROM		MULTIPLY BY
0.03937	inch	millimeter	25.4
0.0016	$inch^2$	$millimeter^2$	645.16
0.061	$inch^3$	$centimeter^3$	16.3871
0.2642	gallon (U.S.)	liter	3.7854
0.03527	oz. (avdp.)	gram	28.3495
2.2044	pound	kilogram	0.4536
62.43	lbs/ft^3	g/cm^3	0.0160
0.145	psi	kPa	6.8948
14.2247	psi	kg/cm^2	0.0703
1.8°C + 32	°F	°C	(°F-32)/1.8

D-M-E INCH, DIN, JIS



INCH, DIN, JIS

D-M-E
Every step of the way

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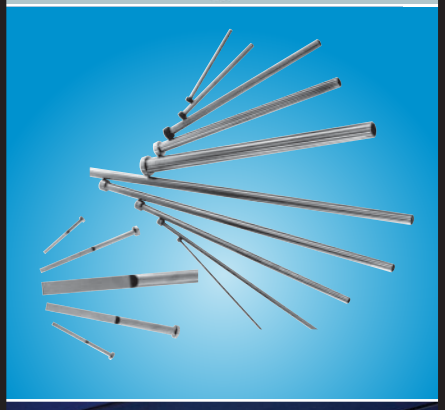
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A comprehensive line of INCH ejector products



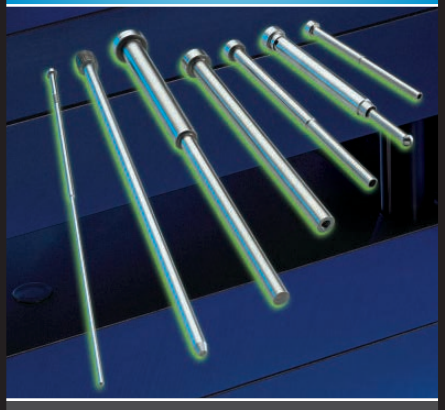
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A comprehensive line of DIN ejector products



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A comprehensive line of JIS ejector products



Special Pins and Sleeves 281-285

Rapid delivery, cost-effective solutions

Online Price Guide

Go to www.dme.net/prices for the latest pricing guide.

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D-M-E INCH Pins, Sleeves, Blades

FEATURING HIGH-QUALITY
EJECTOR PINS, SLEEVES, BLADES,
CORE PINS, RETURN PINS,
AND SPRUE PULLER PINS



A comprehensive line of Inch Ejector Products



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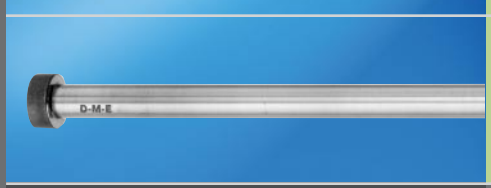
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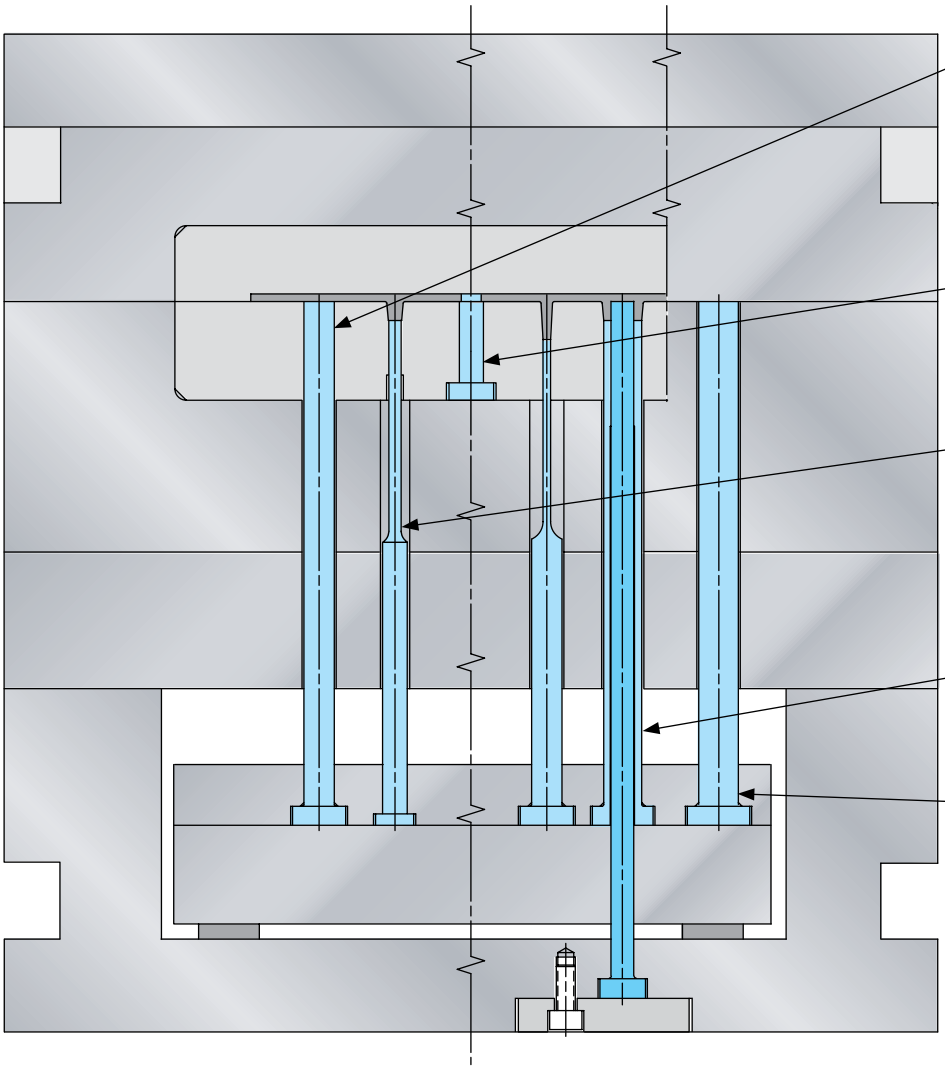


Sprue Puller Pins 259

Online Price Guide

Go to www.dme.net/prices for the latest pricing guide.

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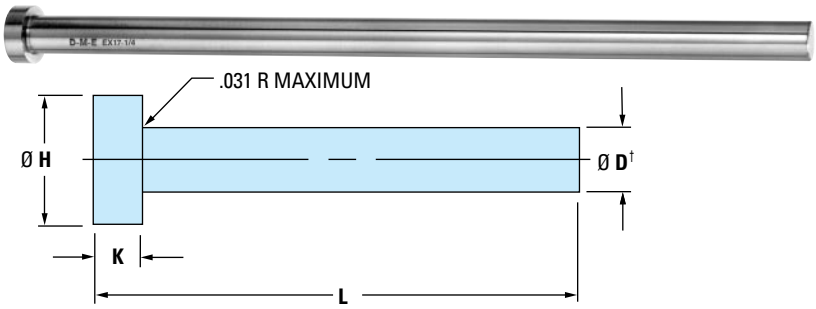
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INCH Ejector Pins – H13 Nitrided – Straight



- Precision made of superior quality H13 type thermal shock resisting hotwork die steel
- Hot-forged heads provide uniform grain flow, higher tensile strength
- Core hardness 40-45 HRC
- Outside diameter nitrided to 65-74 HRC hardness and finished to minimize wear
- Heads annealed for easy machining
- Centerless ground D diameter

INCH Ejector Pins – EX

ITEM NUMBER PREFIX	Ø D PIN DIA	Ø D† PIN DIA TOL	Ø H HEAD DIA	K HEAD THK	L = LENGTH 6 D STD	6 D .005 OVER SIZE	10 D STD	10 D .005 OVER SIZE	14 D STD	14 D .005 OVER SIZE	18 D STD	18 D .005 OVER SIZE	25 Ø D PIN DIA TOL -.0003 -.0008 D STD	36 D STD	45 D STD
EX3M__*__NS	3/64 (.0468)	-.000 -.001	.250	.125	⚡	⚡									
EX5M__*__NS	1/16 (.0625)		.250	.125	⚡	⚡									
EX6M__*__NS	5/64 (.0781)		.250	.125	⚡		⚡	⚡							
EX7M__*__NS	3/32 (.0937)		.250	.125	⚡	⚡	⚡	⚡							
EX8M__*__NS	7/64 (.1093)		.250	.125	⚡		⚡	⚡							
EX9M__*	1/8 (.1250)	-.0003 -.0006	.250	.125	⚡	⚡	⚡	⚡	⚡	⚡					
EX10M__*	9/64 (.1406)		.250	.125			⚡	⚡	⚡						
EX11M__*	5/32 (.1562)		.281	.156	⚡	⚡	⚡	⚡	⚡	⚡	⚡				
EX12M__*	11/64 (.1718)		.343	.187			⚡	⚡	⚡						
EX13M__*	3/16 (.1875)		.375	.187	⚡	⚡	⚡	⚡	⚡	⚡	⚡		⚡		
EX14M__*	13/64 (.2031)		.375	.187			⚡	⚡	⚡						
EX15M__*	7/32 (.2187)		.406	.187	⚡	⚡	⚡	⚡	⚡	⚡			⚡		
EX16M__*	15/64 (.2343)		.406	.187			⚡	⚡	⚡						
EX17M__*	1/4 (.2500)		.437	.187	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡		
EX18M__*	17/64 (.2656)		.437	.250			⚡	⚡	⚡				⚡		
EX19M__*	9/32 (.2812)		.437	.250	⚡	⚡	⚡	⚡	⚡	⚡	⚡		⚡		
EX20M__*	19/64 (.2968)		.500	.250			⚡	⚡	⚡						
EX21M__*	5/16 (.3125)		.500	.250	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡		
EX22M__*	21/64 (.3281)		.562	.250			⚡	⚡	⚡				⚡		
EX23M__*	11/32 (.3437)		.562	.250	⚡		⚡	⚡	⚡	⚡			⚡		
EX24M__*	23/64 (.3593)		.625	.250			⚡	⚡	⚡						
EX25M__*	3/8 (.3750)		.625	.250	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	
EX26M__*	25/64 (.3906)		.625	.250			⚡	⚡							
EX27M__*	13/32 (.4062)		.687	.250	⚡		⚡	⚡	⚡	⚡	⚡		⚡		
EX28M__*	27/64 (.4218)		.687	.250			⚡	⚡							
EX29M__*	7/16 (.4375)		.687	.250	⚡	⚡	⚡	⚡	⚡	⚡	⚡		⚡	⚡	
EX30M__*	29/64 (.4531)		.687	.250			⚡	⚡							
EX31M__*	15/32 (.4687)		.750	.250	⚡		⚡	⚡	⚡		⚡		⚡		
EX32M__*	31/64 (.4843)		.750	.250			⚡	⚡	⚡						
EX33M__*	1/2 (.5000)	-.0003 -.0008	.750	.250	⚡		⚡	⚡	⚡	⚡	⚡		⚡	⚡	⚡
EX34M__*	17/32 (.5312)		.750	.250	⚡		⚡		⚡						
EX35M__*	9/16 (.5625)		.812	.250	⚡		⚡		⚡		⚡		⚡		
EX37M__*	5/8 (.6250)		.875	.250	⚡		⚡		⚡		⚡		⚡	⚡	
EX39M__*	11/16 (.6875)		.937	.250	⚡		⚡		⚡		⚡		⚡		
EX41M__*	3/4 (.7500)		1.000	.250	⚡		⚡		⚡		⚡		⚡	⚡	⚡
EX45M__*	7/8 (.8750)		1.125	.250	⚡		⚡		⚡		⚡		⚡		
EX47M__*	1" (1.0000)		1.250	.250	⚡		⚡		⚡		⚡		⚡	⚡	⚡

***HOW TO ORDER: Specify Item Number by combining Item Number Prefix with the length (L dimension) desired.**

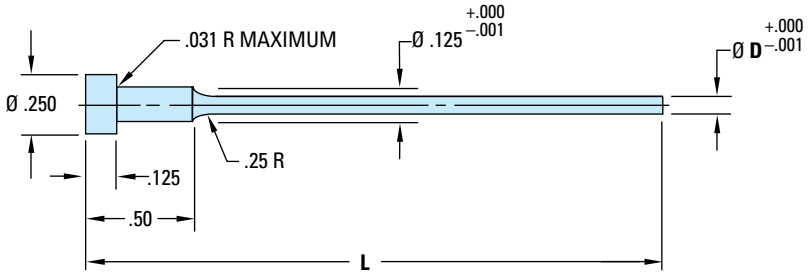
- **Omit spaces and dashes, as shown.** Examples: EX9M10, EX33M10
- **Add "OS" at end of Item Number for .005" oversize diameters.** Examples: EX3M6NSOS, EX25M14OS, EX33M10OS

NOTE: NS suffix shown in chart for No Shoulder for items EX3M through EX8M. Examples: EX3M6NS, EX7M10NS

KEY TO CHART

- ⚡ Items in stock
- 2-3 week delivery
- Contact D-M-E for quote

INCH Ejector Pins – H13 Nitrided – Shoulder



- Precision made of superior quality H13 type thermal shock resisting hotwork die steel
- Hot-forged heads provide uniform grain flow, higher tensile strength
- Core hardness 40-45 HRC
- Outside diameter nitrided to 65-74 HRC hardness and finished to minimize wear
- Heads annealed for easy machining
- Centerless ground D diameter

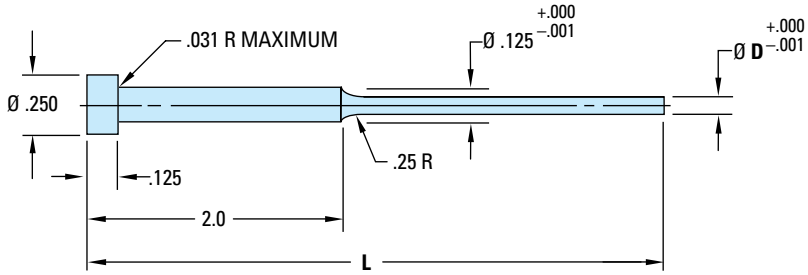
KEY TO CHART
- Items in stock
- 2-3 week delivery
- Contact D-M-E for quote

1/2" Shoulder Length – EX

ITEM NUMBER PREFIX	Ø D PIN DIA	L = LENGTH 6 D STD	6 D .005 OVER SIZE	10 D STD	10 D .005 OVER SIZE	14 D STD
EX2M_*_12SH	1/32 (.0312)	⚡	⚡			
EX3M_*_12SH	3/64 (.0468)	⚡		⚡	⚡	⚡
EX5M_*_12SH	1/16 (.0625)	⚡		⚡	⚡	⚡
EX6M_*_12SH	5/64 (.0781)	⚡		⚡	⚡	⚡
EX7M_*_12SH	3/32 (.0937)	⚡		⚡	⚡	⚡
EX8M_*_12SH	7/64 (.1093)	⚡		⚡	⚡	⚡

***HOW TO ORDER: Specify Item Number by combining Item Number Prefix and the length (L dimension) desired.**
- **Omit spaces and dashes, as shown.** Examples: EX2M612SH, EX8M1412SH
- **Add "OS" for .005" oversize diameters.** Examples: EX3M612SHOS, EX3M612SHOS

NOTE: 12SH suffix shown in chart for 1/2" Shoulder length. Examples: EX3M612SH, EX7M1012SH



2" Shoulder Length – EX

ITEM NUMBER PREFIX	Ø D PIN DIA	L = LENGTH 6 D STD	6 D .005 OVER SIZE	10 D STD	10 D .005 OVER SIZE	14 D STD
EX2M_*	1/32 (.0312)	⚡	⚡			
EX3M_*	3/64 (.0468)	⚡		⚡	⚡	⚡
EX5M_*	1/16 (.0625)	⚡		⚡	⚡	⚡
EX6M_*	5/64 (.0781)	⚡		⚡	⚡	⚡
EX7M_*	3/32 (.0937)	⚡		⚡	⚡	⚡
EX8M_*	7/64 (.1093)	⚡		⚡	⚡	⚡

NOTE: For 2" Shoulder Length, no suffix should be used (see example below).

QUANTITY DISCOUNTS:
Ejector pins, core pins, return pins and sprue puller pins. Discounts apply to current Net Prices. Standard sizes may be combined on one order for quantity discounts.

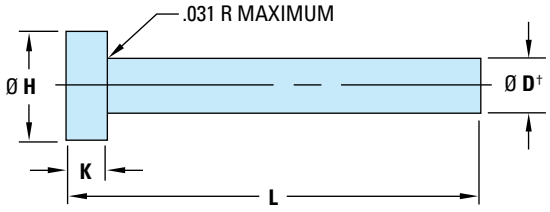
300 to 599 . . . . . Less 5%
600 or more . . . . . Less 10%

***HOW TO ORDER: Specify Item Number by combining Item Number Prefix and the length (L dimension) desired.**
- **Omit spaces and dashes, as shown.** Examples: EX2M6, EX8M14
- **Add "OS" for .005" oversize diameters.** Examples: EX2M6OS, EX5M10OS, EX8M10OS

NOTE: For 2" Shoulder, no suffix is used. Examples: EX3M6, EX7M10

KEY TO CHART
- Items in stock
- 2-3 week delivery
- Contact D-M-E for quote

INCH High-Hardness Ejector Pins – H13 Nitrided – Straight



- Higher core hardness makes the THX pins ideal for use in die cast dies or other high temperature applications
- Core hardness of 50-55 HRC minimizes nicking, dishing and bending
- Non-chipping surface treatment of 65-74 HRC alleviates flashing
- Annealed and finished heads permit easy machining
- Centerless ground D diameter
- Final finish minimizes wear and prolongs pin life

INCH High-Hardness Ejector Pins – THX

ITEM NUMBER PREFIX	Ø D PIN DIA	D† PIN DIA TOLERANCES	H HEAD DIA	K HEAD THICK	L = LENGTH 06 D STD	06 D .005 OVER-SIZE	10 D STD	10 D .005 OVER-SIZE	14 D STD	14 D .005 OVER-SIZE	18 D STD
THX03_*_NS	3/64 (.0468)		.250	.125	⚡	⚡					
THX05_*_NS	1/16 (.0625)		.250	.125	⚡	⚡					
THX06_*_NS	5/64 (.0781)	–.000 –.001	.250	.125	⚡		⚡	⚡			
THX07_*_NS	3/32 (.0937)		.250	.125	⚡	⚡	⚡	⚡			
THX08_*_NS	7/64 (.1093)		.250	.125	⚡		⚡	⚡			
THX09_*__	1/8 (.1250)		.250	.125	⚡	⚡	⚡	⚡	⚡	⚡	
THX10_*__	9/64 (.1406)		.250	.125			⚡	⚡	⚡		
THX11_*__	5/32 (.1562)		.281	.156	⚡	⚡	⚡	⚡	⚡	⚡	
THX12_*__	11/64 (.1718)		.343	.187			⚡	⚡	⚡		
THX13_*__	3/16 (.1875)		.375	.187	⚡	⚡	⚡	⚡	⚡	⚡	
THX14_*__	13/64 (.2031)		.375	.187			⚡	⚡	⚡		
THX15_*__	7/32 (.2187)		.406	.187	⚡	⚡	⚡	⚡	⚡	⚡	
THX16_*__	15/64 (.2343)		.406	.187			⚡	⚡	⚡		
THX17_*__	1/4 (.2500)		.437	.187	⚡	⚡	⚡	⚡	⚡	⚡	⚡
THX18_*__	17/64 (.2656)		.437	.250			⚡	⚡	⚡		
THX19_*__	9/32 (.2812)		.437	.250	⚡	⚡	⚡	⚡	⚡	⚡	
THX20_*__	19/64 (.2968)		.500	.250			⚡	⚡	⚡		
THX21_*__	5/16 (.3125)	–.0003 –.0006	.500	.250	⚡	⚡	⚡	⚡	⚡	⚡	⚡
THX22_*__	21/64 (.3281)		.562	.250			⚡	⚡	⚡		
THX23_*__	11/32 (.3437)		.562	.250	⚡		⚡	⚡	⚡	⚡	
THX24_*__	23/64 (.3593)		.625	.250			⚡	⚡	⚡		
THX25_*__	3/8 (.3750)		.625	.250	⚡	⚡	⚡	⚡	⚡	⚡	⚡
THX26_*__	25/64 (.3906)		.625	.250			⚡	⚡			
THX27_*__	13/32 (.4062)		.687	.250	⚡		⚡	⚡	⚡	⚡	
THX28_*__	27/64 (.4218)		.687	.250			⚡	⚡			
THX29_*__	7/16 (.4375)		.687	.250	⚡	⚡	⚡	⚡	⚡	⚡	
THX30_*__	29/64 (.4531)		.687	.250			⚡	⚡			
THX31_*__	15/32 (.4687)		.750	.250	⚡		⚡		⚡		
THX32_*__	31/64 (.4843)		.750	.250			⚡	⚡	⚡		
THX33_*__	1/2 (.5000)		.750	.250	⚡		⚡	⚡	⚡	⚡	⚡
THX34_*__	17/32 (.5312)		.750	.250	⚡		⚡		⚡		
THX35_*__	9/16 (.5625)		.812	.250	⚡		⚡		⚡		
THX37_*__	5/8 (.6250)	–.0003 –.0008	.875	.250	⚡		⚡		⚡		⚡
THX39_*__	11/16 (.6875)		.937	.250	⚡		⚡		⚡		
THX41_*__	3/4 (.7500)		1.000	.250	⚡		⚡		⚡		⚡
THX45_*__	7/8 (.8750)		1.125	.250	⚡		⚡		⚡		
THX47_*__	1" (1.0000)		1.250	.250	⚡		⚡		⚡		⚡

***HOW TO ORDER: Specify Item Number by combining Item Number Prefix and the length (L dimension) desired.**

- **Omit spaces & dashes, as shown.** Examples: THX0910, THX4118
- **Precede 6" length with a zero.** Examples: THX0906, THX3306
- **Add "OS" for .005" oversize diameters.** Examples: THX0306NSOS, THX0906OS, THX2514OS, THX3310OS

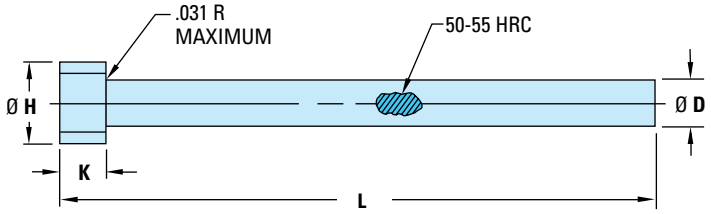
NOTE: NS suffix shown in chart for No Shoulder for items THX03 through THX08. Examples: THX306NS, THX710NS

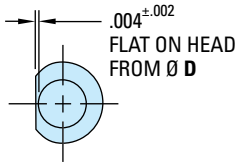
KEY TO CHART

- ⚡ Items in stock
- 2-3 week delivery
- Contact D-M-E for quote

Keyed Ejector Pins







Keyed Ejector Pins – THXK

Ø D PIN DIAMETER FRAC./DEC.	Ø D TOLERANCE	ITEM NUMBER	L LENGTH	Ø H HEAD DIA	Ø K HEAD THICKNESS
(1/8) .1250	-.0003 -.0006	THXK0906	6.00	.250	.125
		THXK0914	14.00		
(9/64) .1406	-.0003 -.0006	THXK1014	14.00	.250	.125
(5/32) .1562	-.0003 -.0006	THXK1114	14.00	.281	.156
(3/16) .1875	-.0003 -.0006	THXK1306	6.00	.375	.187
		THXK1314	14.00		
(7/32) .2187	-.0003 -.0006	THXK1514	14.00	.406	.187
(1/4) .2500	-.0003 -.0006	THXK1706	6.00	.437	.187
		THXK1714	14.00		
(5/16) .3125	-.0003 -.0006	THXK2106	6.00	.500	.250
		THXK2114	14.00		
(3/8) .3750	-.0003 -.0006	THXK2506	6.00	.625	.250
		THXK2514	14.00		
	-.0003 -.0008	THXK2525	25.00		
(7/16) .4375	-.0003 -.0006	THXK2914	14.00	.687	.250
(1/2) .5000	-.0003 -.0008	THXK3314	14.00	.750	.250
(5/8) .6250	-.0003 -.0008	THXK3714	14.00	.875	.250
(3/4) .7500	-.0003 -.0008	THXK4114	14.00	1.000	.250
		THXK4125	25.00		
(1") 1.000	-.0003 -.0008	THXK4714	14.00	1.250	.250
		THXK4725	25.00		

INFORMATION KEY:
D = Pin Diameter
H = Head Diameter
K = Head Thickness
L = Length
Material: H-13 / 1.2344 / SKD61
Surface Treatment: Nitrided
Surface Hardness: 65 min. HRC
Core Hardness: 50-55 HRC

- Precision-machined flat on head keeps pin from rotating
- Made from superior quality thermal shock-resisting hotwork steel
- Core hardness of 50-55 HRC makes these pins ideal for use in die-cast dies or other high temperature applications
- Annealed hot-forged heads provide uniform grain flow while allowing for easier machining

INCH Close Tolerance M-2 Through-Hardened Ejector Pins

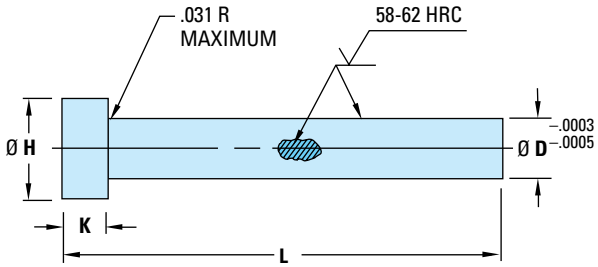
INFORMATION KEY:
D = Pin Body Diameter
H = Head Diameter
K = Head Thickness
L = Length
S = Shoulder Length
Tolerance on Ø D: -.0003/-.0005
Material: M2 / 1.3343 / SKH51
Heat Treat: Hardened 58-62 HRC
Surface Treatment: None (Through-Hard)

- **Industry-leading .0002" tolerance band**
- Centerless ground D diameter
- Precision made of superior quality M-2 high-speed tool steel
- Superior wear resistance
- Exceptional performance at elevated temperatures
- Hot-forged heads provide uniform grain flow, higher tensile strength



Straight Ejector Pins – EJP-IMH

ITEM NUMBER PREFIX (WITH DIAMETER)	Ø D PIN BODY DIAMETER	Ø H HEAD DIAMETER	K HEAD THICKNESS	L = 06 LENGTH (Inches)	L = 10 LENGTH (Inches)
EJP-IMH-0062-__*	1/16 (0.0625)	.250	.125	⚡	
EJP-IMH-0093-__*	3/32 (0.0937)	.250	.125	⚡	
EJP-IMH-0125-__*	1/8 (0.1250)	.250	.125	⚡	⚡
EJP-IMH-0187-__*	3/16 (0.1875)	.375	.187		⚡
EJP-IMH-0250-__*	1/4 (0.2500)	.437	.187	⚡	⚡



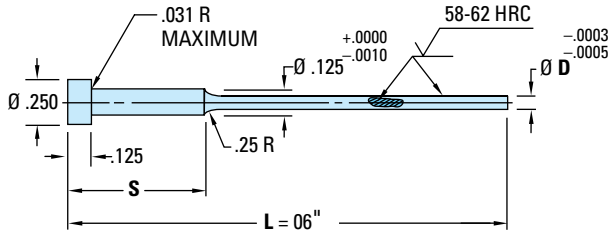
***HOW TO ORDER:** Specify Item Number by adding L length in inches (06 or 10) after Item Number Prefix.
▪ **Include zeros and dashes, as shown.**
Examples: EJP-IMH-0062-06; EJP-IMH-0125-10; EJP-IMH-0250-10

KEY TO CHART
⚡ **Items in stock**
2-3 week delivery
Contact D-M-E for quote



2" Shoulder Ejector Pins – EJP-IMH

ITEM NUMBER (WITH DIAMETER, LENGTH & SHOULDER LENGTH)	Ø D PIN BODY DIAMETER	L = 06 LENGTH (Inches)	S SHOULDER LENGTH
EJP-IMH-0062-06-200	1/16 (0.0625)	⚡	2.00
EJP-IMH-0078-06-200	5/64 (0.0781)	⚡	2.00
EJP-IMH-0093-06-200	3/32 (0.0937)	⚡	2.00



***HOW TO ORDER:** Specify Item Number including zeros and dashes, as shown.
Examples: EJP-IMH-0062-06-200; EJP-IMH-0093-06-200

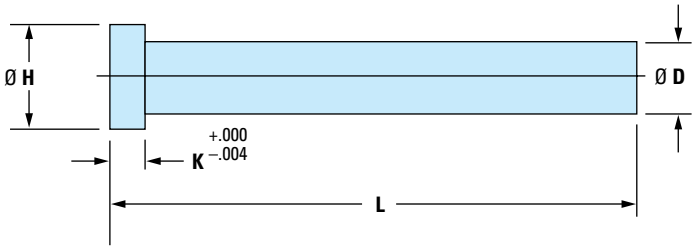
All dimensions are specified in inches.

KEY TO CHART
⚡ **Items in stock**
2-3 week delivery
Contact D-M-E for quote

QUANTITY DISCOUNTS:
Ejector pins, core pins, return pins and sprue puller pins. Discounts apply to current Net Prices. Standard sizes may be combined on one order for quantity discounts.

300 to 599 . . . . . Less 5%
600 or more . . . . . Less 10%

MoldBasics™ INCH Ejector Pins – Straight – Nitrided



Manufactured from superior quality, thermal shock-resistant hotwork steel. Pin heads are hot forged and annealed for toughness. The pin surface is nitrided for wear resistance.

Fabricados en acero de calidad superior resistente a choque termico. Las cabezas son forjadas en caliente y aleadas para mejor resistencia. La superfice del perno es nitrurada para resistencia al desgaste.

MoldBasics Inch Ejector Pins – Straight – Nitrided
Pernos Expulsores Rectos Nitrurados – (MB-EJP-IHN

ITEM NUMBER PREFIX (WITH DIAMETER) PREFIJO NÚMERO (CON DIÁMETRO)	D (INCH)	H (INCH)	K (INCH)	L = LENGTH (INCH)			
				06	10	14	18
MB-EJP-IHN-0062-__*	0.0625 (1/16)	0.250	0.125	⚡	⚡		
MB-EJP-IHN-0078-__*	0.0781 (5/64)	0.250	0.125	⚡	⚡		
MB-EJP-IHN-0093-__*	0.0937 (3/32)	0.250	0.125	⚡	⚡		
MB-EJP-IHN-0125-__*	0.1250 (1/8)	0.250	0.125	⚡	⚡		
MB-EJP-IHN-0156-__*	0.1562 (5/32)	0.281	0.156	⚡	⚡		
MB-EJP-IHN-0187-__*	0.1875 (3/16)	0.375	0.187	⚡	⚡	⚡	
MB-EJP-IHN-0250-__*	0.2500 (1/4)	0.437	0.187	⚡	⚡	⚡	
MB-EJP-IHN-0312-__*	0.3125 (5/16)	0.500	0.250	⚡	⚡	⚡	⚡
MB-EJP-IHN-0375-__*	0.3750 (3/8)	0.625	0.250	⚡	⚡	⚡	⚡
MB-EJP-IHN-0500-__*	0.5000 (1/2)	0.750	0.250	⚡	⚡	⚡	⚡
MB-EJP-IHN-0625-__*	0.6250 (5/8)	0.875	0.250		⚡	⚡	⚡
MB-EJP-IHN-0750-__*	0.7500 (3/4)	1.000	0.250		⚡	⚡	⚡

EJECTOR PIN SPECIFICATION		
Ø D	BODY DIAMETER DIÁMETRO PERNO	–0.0002 –0.0008
Ø H	HEAD DIAMETER DIÁMETRO CABEZA	
|↔| K	HEAD THICKNESS ESPESOR CABEZA	
|↔| L	LENGTH LONGITUD	
M	MATERIAL MATERIAL	SKD61/2344/H13
H	HEAT TREATMENT TRATAMIENTO TERMICO	HARDENED HRC 40-45
S	SURFACE TREATMENT TRATAMIENTO SUPERFICIE	NITRIDED HRC 65 MINIMUM

QUANTITY DISCOUNTS:
Ejector pins, core pins, return pins and sprue puller pins. Discounts apply to current Net Prices. Standard sizes may be combined on one order for quantity discounts.

300 to 599 . . . . . Less 5%
600 or more . . . . . Less 10%

***HOW TO ORDER: Specify Item Number starting with the Item Number Prefix (with Diameter), then add L length. Include zeros and dashes.**

Examples: MB-EJP-IHN-0062-06, MB-EJP-IHN-0500-14

***PARA ORDENAR: Especifique el número del articulo empezando con el número del prefijo, D Diámetro, y L Longitud, incluya ceros y guiones.**

Examples: MB-EJP-IHN-0062-06, MB-EJP-IHN-0500-14

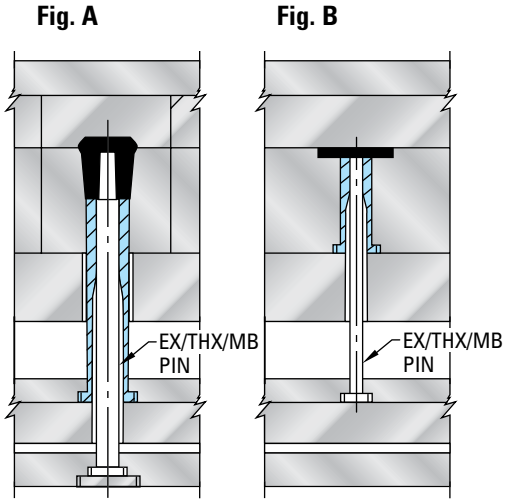
KEY TO CHART
- ⚡ Items in stock
- 2-3 week delivery
- Contact D-M-E for quote

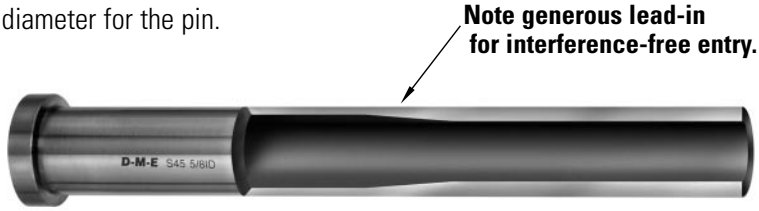
INCH Ejector Sleeves – Nitrided O.D.

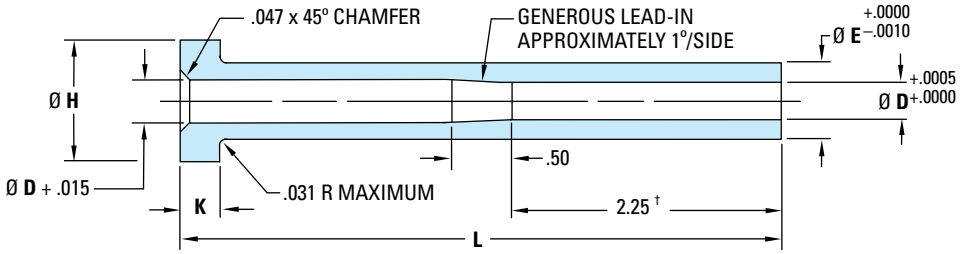
Ejector sleeve applications

Figure A shows a typical Ejector Sleeve application for plastics molding or die casting where the sleeve is used to eject the piece part.

Figure B shows an application where the sleeve serves as a bushing for the ejector pin. This allows replacement without machining if wear occurs. This practice is also desirable where the ejector pin is located between cavity inserts. Using a sleeve as a bushing provides a full bearing diameter for the pin.







- Precision made of superior quality thermal shock resisting hotwork die steel
- Hot-forged heads provide uniform grain flow, higher tensile strength
- Outside diameter nitrided to 65-74 HRC hardness and finished to minimize wear
- Centerless ground and polished outer diameter
- Inside bearing diameter is 30-35 HRC hardness and finished honed
- Lead-in taper designed to allow interference-free entry of the ejector pin into the sleeve

QUANTITY DISCOUNTS:
Ejector pins, sleeves, core pins, return pins and sprue puller pins. Discounts apply to current Net Prices. Standard sizes may be combined on one order for quantity discounts.

300 to 599 . . . . . Less 5%
600 or more . . . . . Less 10%

INCH Ejector Sleeves – S

ITEM NUMBER PREFIX	Ø D I.D.	Ø E O.D.	Ø H HEAD DIA	K HEAD THICK	L = LENGTH 3	4	5	6	7	8	9	10	11	12	14
†S13M_*	3/32 (.0937)	3/16 (.1875)	.375	.187	⚡	⚡	⚡	⚡	⚡						
†S15M_*	1/8 (.1250)	7/32 (.2187)	.406	.187	⚡	⚡	⚡	⚡	⚡						
S17M_*	5/32 (.1562)	1/4 (.2500)	.437	.187		⚡	⚡	⚡	⚡	⚡	⚡	⚡			
S21M_*	3/16 (.1875)	5/16 (.3125)	.500	.250		⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡
S23M_*	7/32 (.2187)	11/32 (.3437)	.562	.250		⚡	⚡	⚡	⚡	⚡	⚡	⚡			⚡
S25M_*	1/4 (.2500)	3/8 (.3750)	.625	.250		⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡
S29M_*	5/16 (.3125)	7/16 (.4375)	.687	.250		⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡
S33M_*	3/8 (.3750)	1/2 (.5000)	.750	.250		⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡
S37M_*	7/16 (.4375)	5/8 (.6250)	.875	.250		⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡
S39M_*	1/2 (.5000)	11/16 (.6875)	.937	.250		⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡
S41M_*	9/16 (.5625)	3/4 (.7500)	1.000	.250		⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡
S45M_*	5/8 (.6250)	7/8 (.8750)	1.125	.250		⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡
S47M_*	3/4 (.7500)	1 (1.0000)	1.250	.250		⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡

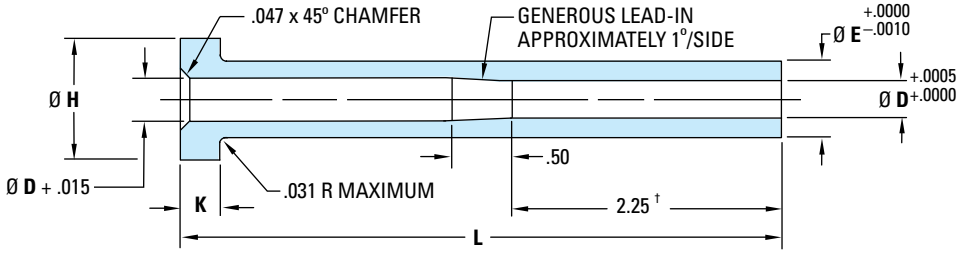
†S13 and S15 have a 1.75 bearing length.
All sleeves are for use with D-M-E Inch Ejector Pins.

KEY TO CHART
⚡ Items in stock
2-3 week delivery
Contact D-M-E for quote

***HOW TO ORDER: Combine Item Prefix and the length (L dimension) desired.**
Examples: S15M6, S39M10

INCH Ejector Sleeves – Nitrided O.D. & I.D.





- Precision made of superior quality thermal shock resisting hotwork die steel
- Hot-forged heads provide uniform grain flow, higher tensile strength
- Outside diameter nitrided to 65-74 HRC hardness and finished to minimize wear
- Centerless ground and polished outer diameter
- Inside bearing diameter is nitrided to 65-74 HRC hardness and finished honed
- Lead-in taper designed to allow interference-free entry of the ejector pin into the sleeve
- SND sleeve I.D. is nitrided for prolonged wear resistance and improved lubricity

INCH Ejector Sleeves – SND

ITEM NUMBER PREFIX	Ø D I.D.	Ø E O.D.	Ø H HEAD DIA	K HEAD THICK	L = LENGTH									
					3	4	5	6	7	8	9	10	11	12
†SND13_*	3/32 (.0937)	3/16 (.1875)	.375	.187	⚡	⚡	⚡	⚡	⚡					
†SND15_*	1/8 (.1250)	7/32 (.2187)	.406	.187	⚡	⚡	⚡	⚡	⚡					
SND17_*	5/32 (.1562)	1/4 (.2500)	.437	.187		⚡	⚡	⚡	⚡	⚡	⚡	⚡		
SND21_*	3/16 (.1875)	5/16 (.3125)	.500	.250		⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡
SND23_*	7/32 (.2187)	11/32 (.3437)	.562	.250		⚡	⚡	⚡	⚡	⚡	⚡	⚡		
SND25_*	1/4 (.2500)	3/8 (.3750)	.625	.250		⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡
SND29_*	5/16 (.3125)	7/16 (.4375)	.687	.250		⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡
SND33_*	3/8 (.3750)	1/2 (.5000)	.750	.250		⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡
SND37_*	7/16 (.4375)	5/8 (.6250)	.875	.250		⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡
SND39_*	1/2 (.5000)	11/16 (.6875)	.937	.250		⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡
SND41_*	9/16 (.5625)	3/4 (.7500)	1.000	.250		⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡
SND45_*	5/8 (.6250)	7/8 (.8750)	1.125	.250		⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡
SND47_*	3/4 (.7500)	1 (1.0000)	1.250	.250		⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡

†S13 and S15 have a 1.75 bearing length.
All sleeves are for use with D-M-E Inch Ejector Pins.

***HOW TO ORDER: Combine Item Prefix and the length (L dimension) desired.**
- **Precede single digit lengths with a zero.**

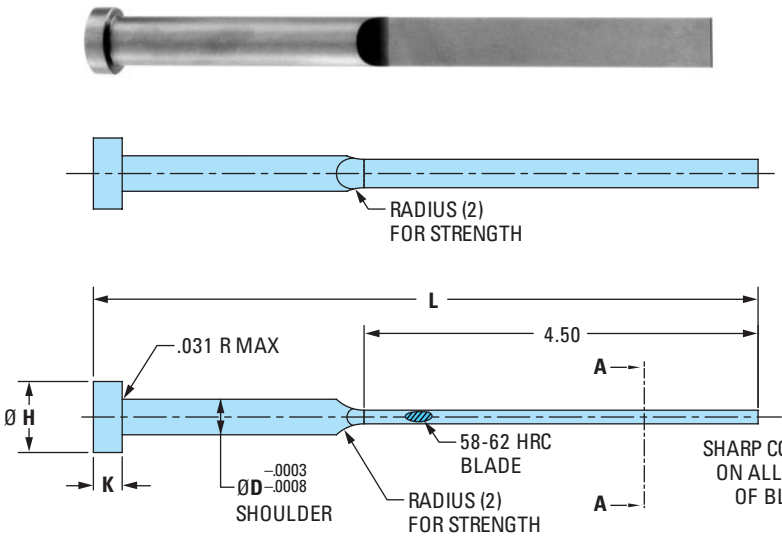
Examples: SND2506, SND1710

KEY TO CHART
- ⚡ Items in stock
- 2-3 week delivery
- Contact D-M-E for quote

QUANTITY DISCOUNTS:
Ejector pins, sleeves, core pins, return pins and sprue puller pins. Discounts apply to current Net Prices. Standard sizes may be combined on one order for quantity discounts.

300 to 599 . . . . . Less 5%
600 or more . . . . . Less 10%

INCH Ejector Blades



- Blade thickness and width are held to close tolerance: +.0000/-.0003
- Precision made of superior quality M2 high-speed tool steel
- Through-hardened to 58-62 HRC for superior wear resistance
- Heads annealed for easy machining
- One-piece construction for increased strength and rigidity

INFORMATION KEY:
D = Shoulder Diameter
H = Head Diameter
K = Head Thickness
L = Overall Length
T = Blade Thickness
W = Blade Width
Material: M2 / 1.3343 / SKH51
Surface Treatment: None (Through-Hard)

INCH Ejector Blades – EJB-IMH

ITEM NUMBER	T BLADE THICKNESS	W BLADE WIDTH	Ø D SHOULDER DIAMETER	Ø H HEAD DIAMETER	K HEAD THICKNESS	L OVERALL LENGTH
EJB-IMH-024-100-065	0.0240	0.1000	0.1250	0.250	0.125	6.50
EJB-IMH-032-100-065	0.0320	0.1000	0.1250	0.250	0.125	6.50
EJB-IMH-032-100-075	0.0320	0.1000	0.1250	0.250	0.125	7.50
EJB-IMH-046-100-065	0.0460	0.1000	0.1250	0.250	0.125	6.50
EJB-IMH-046-100-075	0.0460	0.1000	0.1250	0.250	0.125	7.50
EJB-IMH-024-140-065	0.0240	0.1400	0.1562	0.281	0.156	6.50
EJB-IMH-032-140-065	0.0320	0.1400	0.1562	0.281	0.156	6.50
EJB-IMH-046-140-075	0.0320	0.1400	0.1562	0.281	0.156	7.50
EJB-IMH-032-140-085	0.0320	0.1400	0.1562	0.281	0.156	8.50
EJB-IMH-046-140-065	0.0460	0.1400	0.1562	0.281	0.156	6.50
EJB-IMH-046-140-075	0.0460	0.1400	0.1562	0.281	0.156	7.50
EJB-IMH-046-140-085	0.0460	0.1400	0.1562	0.281	0.156	8.50
EJB-IMH-024-172-065	0.0240	0.1720	0.1875	0.375	0.187	6.50
EJB-IMH-032-172-065	0.0320	0.1720	0.1875	0.375	0.187	6.50
EJB-IMH-032-172-075	0.0320	0.1720	0.1875	0.375	0.187	7.50
EJB-IMH-032-172-085	0.0320	0.1720	0.1875	0.375	0.187	8.50
EJB-IMH-046-172-065	0.0460	0.1720	0.1875	0.375	0.187	6.50
EJB-IMH-046-172-075	0.0460	0.1720	0.1875	0.375	0.187	7.50
EJB-IMH-046-172-085	0.0460	0.1720	0.1875	0.375	0.187	8.50
EJB-IMH-062-172-065	0.0620	0.1720	0.1875	0.375	0.187	6.50
EJB-IMH-062-172-075	0.0620	0.1720	0.1875	0.375	0.187	7.50
EJB-IMH-062-172-085	0.0620	0.1720	0.1875	0.375	0.187	8.50
EJB-IMH-032-234-065	0.0320	0.2340	0.2500	0.437	0.187	6.50
EJB-IMH-032-234-075	0.0320	0.2340	0.2500	0.437	0.187	7.50
EJB-IMH-032-234-085	0.0320	0.2340	0.2500	0.437	0.187	8.50
EJB-IMH-046-234-065	0.0460	0.2340	0.2500	0.437	0.187	6.50
EJB-IMH-046-234-075	0.0460	0.2340	0.2500	0.437	0.187	7.50
EJB-IMH-046-234-085	0.0460	0.2340	0.2500	0.437	0.187	8.50
EJB-IMH-062-234-065	0.0620	0.2340	0.2500	0.437	0.187	6.50
EJB-IMH-062-234-075	0.0620	0.2340	0.2500	0.437	0.187	7.50
EJB-IMH-062-234-085	0.0620	0.2340	0.2500	0.437	0.187	8.50
EJB-IMH-062-234-095	0.0620	0.2340	0.2500	0.437	0.187	9.50
EJB-IMH-032-296-065	0.0320	0.2960	0.3125	0.500	0.250	6.50
EJB-IMH-032-296-075	0.0320	0.2960	0.3125	0.500	0.250	7.50
EJB-IMH-032-296-085	0.0320	0.2960	0.3125	0.500	0.250	8.50
EJB-IMH-032-296-095	0.0320	0.2960	0.3125	0.500	0.250	9.50

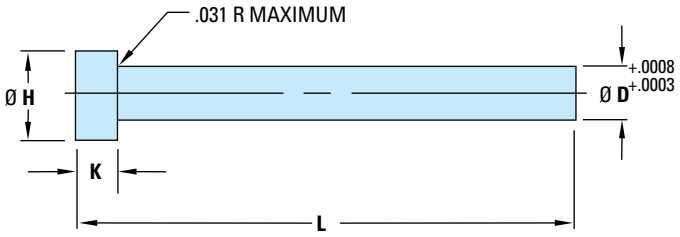
All items in stock. Specify item number and quantity.

INCH Ejector Blades

ITEM NUMBER	T BLADE THICKNESS	W BLADE WIDTH	Ø D SHOULDER DIAMETER	Ø H HEAD DIAMETER	K HEAD THICKNESS	L OVERALL LENGTH
EJB-IMH-046-296-065	0.0460	0.2960	0.3125	0.500	0.250	6.50
EJB-IMH-046-296-075	0.0460	0.2960	0.3125	0.500	0.250	7.50
EJB-IMH-046-296-085	0.0460	0.2960	0.3125	0.500	0.250	8.50
EJB-IMH-046-296-095	0.0460	0.2960	0.3125	0.500	0.250	9.50
EJB-IMH-062-296-065	0.0620	0.2960	0.3125	0.500	0.250	6.50
EJB-IMH-062-296-075	0.0620	0.2960	0.3125	0.500	0.250	7.50
EJB-IMH-062-296-085	0.0620	0.2960	0.3125	0.500	0.250	8.50
EJB-IMH-062-296-095	0.0620	0.2960	0.3125	0.500	0.250	9.50
EJB-IMH-078-296-065	0.0780	0.2960	0.3125	0.500	0.250	6.50
EJB-IMH-078-296-075	0.0780	0.2960	0.3125	0.500	0.250	7.50
EJB-IMH-078-296-085	0.0780	0.2960	0.3125	0.500	0.250	8.50
EJB-IMH-078-296-095	0.0780	0.2960	0.3125	0.500	0.250	9.50
EJB-IMH-032-359-065	0.0320	0.3590	0.3750	0.625	0.250	6.50
EJB-IMH-032-359-075	0.0320	0.3590	0.3750	0.625	0.250	7.50
EJB-IMH-032-359-085	0.0320	0.3590	0.3750	0.625	0.250	8.50
EJB-IMH-032-359-095	0.0320	0.3590	0.3750	0.625	0.250	9.50
EJB-IMH-046-359-065	0.0460	0.3590	0.3750	0.625	0.250	6.50
EJB-IMH-046-359-075	0.0460	0.3590	0.3750	0.625	0.250	7.50
EJB-IMH-046-359-085	0.0460	0.3590	0.3750	0.625	0.250	8.50
EJB-IMH-046-359-095	0.0460	0.3590	0.3750	0.625	0.250	9.50
EJB-IMH-062-359-065	0.0620	0.3590	0.3750	0.625	0.250	6.50
EJB-IMH-062-359-075	0.0620	0.3590	0.3750	0.625	0.250	7.50
EJB-IMH-062-359-085	0.0620	0.3590	0.3750	0.625	0.250	8.50
EJB-IMH-062-359-095	0.0620	0.3590	0.3750	0.625	0.250	9.50
EJB-IMH-078-359-065	0.0780	0.3590	0.3750	0.625	0.250	6.50
EJB-IMH-078-359-075	0.0780	0.3590	0.3750	0.625	0.250	7.50
EJB-IMH-078-359-085	0.0780	0.3590	0.3750	0.625	0.250	8.50
EJB-IMH-078-359-095	0.0780	0.3590	0.3750	0.625	0.250	9.50
EJB-IMH-094-422-065	0.0940	0.4220	0.4375	0.687	0.250	6.50
EJB-IMH-094-422-075	0.0940	0.4220	0.4375	0.687	0.250	7.50
EJB-IMH-094-422-085	0.0940	0.4220	0.4375	0.687	0.250	8.50
EJB-IMH-094-422-095	0.0940	0.4220	0.4375	0.687	0.250	9.50
EJB-IMH-078-484-065	0.0780	0.4840	0.5000	0.750	0.250	6.50
EJB-IMH-078-484-075	0.0780	0.4840	0.5000	0.750	0.250	7.50
EJB-IMH-078-484-085	0.0780	0.4840	0.5000	0.750	0.250	8.50
EJB-IMH-078-484-095	0.0780	0.4840	0.5000	0.750	0.250	9.50
EJB-IMH-094-484-065	0.0940	0.4840	0.5000	0.750	0.250	6.50
EJB-IMH-094-484-075	0.0940	0.4840	0.5000	0.750	0.250	7.50
EJB-IMH-094-484-085	0.0940	0.4840	0.5000	0.750	0.250	8.50
EJB-IMH-094-484-095	0.0940	0.4840	0.5000	0.750	0.250	9.50
EJB-IMH-078-547-065	0.0780	0.5470	0.5625	0.812	0.250	6.50
EJB-IMH-078-547-075	0.0780	0.5470	0.5625	0.812	0.250	7.50
EJB-IMH-078-547-085	0.0780	0.5470	0.5625	0.812	0.250	8.50
EJB-IMH-078-547-095	0.0780	0.5470	0.5625	0.812	0.250	9.50
EJB-IMH-094-547-065	0.0940	0.5470	0.5625	0.812	0.250	6.50
EJB-IMH-094-547-075	0.0940	0.5470	0.5625	0.812	0.250	7.50
EJB-IMH-094-547-085	0.0940	0.5470	0.5625	0.812	0.250	8.50
EJB-IMH-094-547-095	0.0940	0.5470	0.5625	0.812	0.250	9.50
EJB-IMH-078-609-065	0.0780	0.6090	0.6250	0.875	0.250	6.50
EJB-IMH-078-609-075	0.0780	0.6090	0.6250	0.875	0.250	7.50
EJB-IMH-078-609-085	0.0780	0.6090	0.6250	0.875	0.250	8.50
EJB-IMH-078-609-095	0.0780	0.6090	0.6250	0.875	0.250	9.50
EJB-IMH-094-609-065	0.0940	0.6090	0.6250	0.875	0.250	6.50
EJB-IMH-094-609-075	0.0940	0.6090	0.6250	0.875	0.250	7.50
EJB-IMH-094-609-085	0.0940	0.6090	0.6250	0.875	0.250	8.50
EJB-IMH-094-609-095	0.0940	0.6090	0.6250	0.875	0.250	9.50

INCH Core Pins – H13 – Standard Medium Hardness





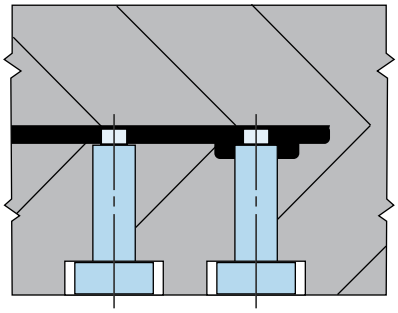
- Precision made of superior quality hotwork die steel standard hardness 30-35 HRC
- Heads are hot-forged for uniform grain flow, higher tensile strength, then annealed to permit easier machining and stamping
- +.0008"/+.0003" tolerance on pin diameter ensures a close fit for coring purposes
- Pin body and head are finish ground
- Centerless ground and polished outer diameter

INCH Core Pins – C

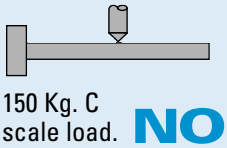
ITEM PREFIX	Ø D PIN DIA	Ø H HEAD DIA	K HEAD THICK	L = LENGTH 3†	6	10	14
C7M_*	3/32 (.0937)	.250	.125	⚡	⚡	⚡	
C8M_*	7/64 (.1093)	.250	.125	⚡	⚡	⚡	
C9M_*	1/8 (.1250)	.250	.125	⚡	⚡	⚡	⚡
C10M_*	9/64 (.1406)	.250	.125	⚡	⚡	⚡	⚡
C11M_*	5/32 (.1562)	.281	.156	⚡	⚡	⚡	⚡
C12M_*	11/64 (.1718)	.343	.187	⚡	⚡	⚡	⚡
C13M_*	3/16 (.1875)	.375	.187	⚡	⚡	⚡	⚡
C14M_*	13/64 (.2031)	.375	.187	⚡	⚡	⚡	⚡
C15M_*	7/32 (.2187)	.406	.187	⚡	⚡	⚡	⚡
C17M_*	1/4 (.2500)	.437	.187	⚡	⚡	⚡	⚡
C19M_*	9/32 (.2812)	.437	.250	⚡	⚡	⚡	⚡
C21M_*	5/16 (.3125)	.500	.250	⚡	⚡	⚡	⚡
C23M_*	11/32 (.3437)	.562	.250	⚡	⚡	⚡	⚡
C25M_*	3/8 (.3750)	.625	.250	⚡	⚡	⚡	⚡
C27M_*	13/32 (.4062)	.687	.250	⚡	⚡	⚡	⚡
C29M_*	7/16 (.4375)	.687	.250	⚡	⚡	⚡	⚡
C31M_*	15/32 (.4687)	.750	.250	⚡	⚡	⚡	⚡
C33M_*	1/2 (.5000)	.750	.250	⚡	⚡	⚡	⚡
C35M_*	9/16 (.5625)	.812	.250		⚡	⚡	⚡
C37M_*	5/8 (.6250)	.875	.250		⚡	⚡	⚡
C41M_*	3/4 (.7500)	1.000	.250		⚡	⚡	⚡

†Heads of 3"-length pins are not annealed. If annealed heads on 3"-length pins are required, they must be special ordered. (Alternately, you may purchase 6" pins and cut to required length.)

Typical application



Hardness checking guidelines



If checking hardness of core pins, do not use method "NO" above, since it will provide an inaccurately low reading. The preferred method is to stand the pin on its head and check the cut end using the A scale, 60 Kg. load as shown above.

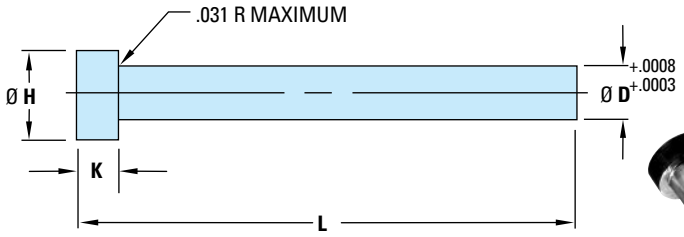
PRECAUTIONS:
The cut end must be parallel to head end, with stem length of 2" minimum. Use cutting fluid to avoid overheating and localized annealing. Position indentation in middle of pin diameter.

***HOW TO ORDER: Combine Item Number Prefix and the length (L dimension) desired.**
Examples: C9M3, C33M10

KEY TO CHART
- ⚡ Items in stock
- 2-3 week delivery
- Contact D-M-E for quote

INCH Core Pins – High Hardness







- Precision made of superior quality hotwork die steel in high hardness 50-55 HRC
- Heads are hot-forged for uniform grain flow, higher tensile strength, then annealed to permit easier machining and stamping
- +.0008"/+.0003"- tolerance on pin diameter ensures a close fit for coring purposes
- Pin body and head are finish ground
- Centerless ground and liquid polished

INCH Core Pins – CX

ITEM PREFIX	Ø D PIN DIA	Ø H HEAD DIA	K HEAD THICK	LENGTH 3†	6	10	14
CX7M_*_	3/32 (.0937)	.250	.125	⚡	⚡	⚡	
CX8M_*_	7/64 (.1093)	.250	.125	⚡	⚡	⚡	
CX9M_*_	1/8 (.1250)	.250	.125	⚡	⚡	⚡	⚡
CX10M_*_	9/64 (.1406)	.250	.125	⚡	⚡	⚡	⚡
CX11M_*_	5/32 (.1562)	.281	.156	⚡	⚡	⚡	⚡
CX12M_*_	11/64 (.1718)	.343	.187	⚡	⚡	⚡	⚡
CX13M_*_	3/16 (.1875)	.375	.187	⚡	⚡	⚡	⚡
CX14M_*_	13/64 (.2031)	.375	.187	⚡	⚡	⚡	⚡
CX15M_*_	7/32 (.2187)	.406	.187	⚡	⚡	⚡	⚡
CX17M_*_	1/4 (.2500)	.437	.187	⚡	⚡	⚡	⚡
CX19M_*_	9/32 (.2812)	.437	.250	⚡	⚡	⚡	⚡
CX21M_*_	5/16 (.3125)	.500	.250	⚡	⚡	⚡	⚡
CX23M_*_	11/32 (.3437)	.562	.250	⚡	⚡	⚡	⚡
CX25M_*_	3/8 (.3750)	.625	.250	⚡	⚡	⚡	⚡
CX27M_*_	13/32 (.4062)	.687	.250	⚡	⚡	⚡	⚡
CX29M_*_	7/16 (.4375)	.687	.250	⚡	⚡	⚡	⚡
CX31M_*_	15/32 (.4687)	.750	.250	⚡	⚡	⚡	⚡
CX33M_*_	1/2 (.5000)	.750	.250	⚡	⚡	⚡	⚡
CX35M_*_	9/16 (.5625)	.812	.250		⚡	⚡	⚡
CX37M_*_	5/8 (.6250)	.875	.250		⚡	⚡	⚡
CX41M_*_	3/4 (.7500)	1.000	.250		⚡	⚡	⚡

†Heads of 3"-length pins are not annealed. If annealed heads on 3"-length pins are required, they must be special ordered. (Alternately, you may purchase 6" pins and cut to required length.)

Specials available.
See "Special Pins and Sleeves."

QUANTITY DISCOUNTS:
Ejector pins, sleeves, core pins, return pins and sprue puller pins. Discounts apply to current Net Prices. Standard sizes may be combined on one order for quantity discounts.

300 to 599 . . . . . Less 5%
600 or more . . . . . Less 10%

***HOW TO ORDER: Combine Item Number Prefix and the length (L dimension) desired.**
Examples: CX9M3, CX33M10

KEY TO CHART
- ⚡ Items in stock
- 2-3 week delivery
- Contact D-M-E for quote

Performance Core Pins® – High Conductivity Pins



- Reduces cycle times
- Ten times better conductivity than steel
- Moldstar 150® (C18000) beryllium-free copper-based alloy
- Hardness of 90-98 Rockwell B
- Available in 21 diameters and four lengths

D-M-E's Performance Core Pins® are precision made using a high-strength, beryllium-free copper alloy, rather than traditional steels used in core pins. This alloy provides several advantages, including better conductivity, increased strength, reduced wear and resistance to rusting. Performance Core Pins are ideal for use in high-volume applications where part quality, fit and finish are critical.

Reduced cycle time

It is often difficult or expensive to adequately cool the area surrounding the core pin in a mold, especially when molding thick-walled parts. Depending on the design of the mold, it may even be impossible to run water lines near the pin, thus greatly increasing cycle times.

The copper-based alloy used in Performance Core Pins can significantly reduce mold cycle times by increasing the rate of heat transfer. The Performance Core Pin, when used in place of traditional C- or CX-type pins, will provide up to 10 times the rate of heat transfer. Heat is transferred at twice the rate of pins made of a beryllium-copper alloy.

In addition, the low-adhesion characteristics of the pins make part ejection faster and easier. All of these advantages combine to reduce the overall cycle time and increase productivity.

Improved part quality

The excellent thermal diffusivity of the pins provide a homogenous temperature profile throughout the core surface. Uniform temperatures result in reduced post-mold shrinkage and warpage, improving the quality of the part. Also, because of the low-adhesion characteristics of the pin, parts are not damaged by adhesion to the pin during part ejection.

Lower machining costs

The high thermal conductivity of Performance Core Pins reduces the need for complex cooling designs that can require hours of additional machining. Plus, the pins require no additional heat treatment and can be machined using conventional methods or EDM.

Longer service life

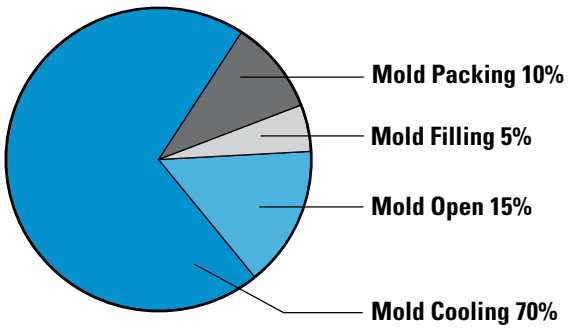
Performance Core Pins have a high resistance to thermal stress, wear and abrasion. This assures long life under virtually any molding conditions. With appropriate alteration to pin diameter, they can be used in conjunction with standard ejector sleeves. The dissimilar metals and compatible coefficient of friction will reduce metal-to-metal pick up and wear.

Wide range of sizes

Performance Core Pins are available in 18 pin diameters from 3/32- to 3/4- and 3-, 6-, 14- or 20-inch lengths.

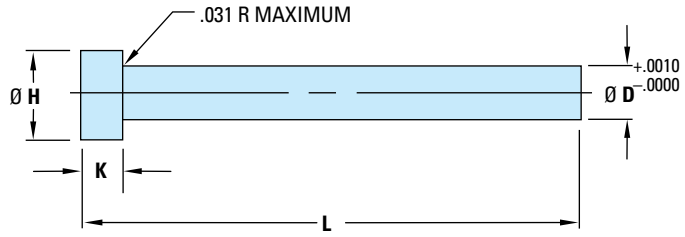
Typical Mold

As shown in the pie chart, mold cooling comprises the largest part of the mold cycle. Performance Core Pins can significantly reduce this mold cooling portion to reduce overall cycle time!



Performance Core Pins® – High Conductivity Pins





- Moldstar 150® (C18000) beryllium-free copper-based alloy
- Ten times better conductivity than steel
- Reduces cycle times
- Hardness of 90-98 Rockwell B
- Specials are also available upon request

PCL Performance Core Pins – PCL

ITEM PREFIX	Ø D PIN DIA	Ø H HEAD DIA	K HEAD THICK	L = LENGTH 3	6	14	20
PCL07_*__	3/32 (.0937)	.250	.125	⚡	⚡	⚡	
PCL09_*__	1/8 (.1250)	.250	.125	⚡	⚡	⚡	⚡
PCL11_*__	5/32 (.1562)	.281	.156	⚡	⚡	⚡	⚡
PCL12_*__	11/64 (.1718)	.343	.187	⚡	⚡	⚡	
PCL13_*__	3/16 (.1875)	.375	.187	⚡	⚡	⚡	⚡
PCL14_*__	13/64 (.2031)	.375	.187	⚡	⚡	⚡	
PCL15_*__	7/32 (.2187)	.406	.187	⚡	⚡	⚡	⚡
PCL17_*__	1/4 (.2500)	.437	.187	⚡	⚡	⚡	⚡
PCL19_*__	9/32 (.2812)	.437	.250	⚡	⚡	⚡	
PCL21_*__	5/16 (.3125)	.500	.250	⚡	⚡	⚡	⚡
PCL23_*__	11/32 (.3437)	.562	.250	⚡	⚡	⚡	
PCL25_*__	3/8 (.3750)	.625	.250	⚡	⚡	⚡	⚡
PCL27_*__	13/32 (.4062)	.687	.250	⚡	⚡	⚡	
PCL29_*__	7/16 (.4375)	.687	.250	⚡	⚡	⚡	
PCL33_*__	1/2 (.5000)	.750	.250	⚡	⚡	⚡	
PCL35_*__	9/16 (.5625)	.812	.250	⚡	⚡	⚡	
PCL37_*__	5/8 (.6250)	.875	.250	⚡	⚡	⚡	
PCL41_*__	3/4 (.7500)	1.000	.250	⚡	⚡	⚡	

Performance Core Pins® are produced by Performance Alloys & Services, Inc. under U.S. Patent Number 5,020,770.

Issue date June 4, 1991.
Foreign patents pending.

QUANTITY DISCOUNTS:
Ejector pins, sleeves, core pins, return pins and sprue puller pins. Discounts apply to current Net Prices. Standard sizes may be combined on one order for quantity discounts.

300 to 599 ..... Less 5%
600 or more ..... Less 10%

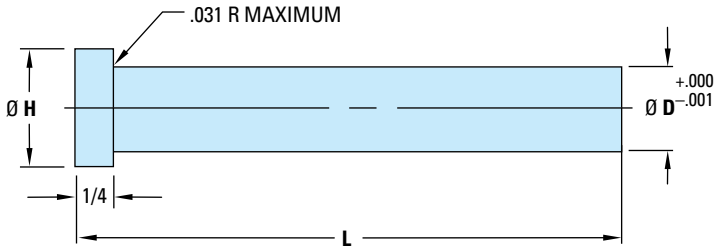
***HOW TO ORDER: Combine Item Number Prefix and the length (L dimension) desired.**
- **Precede single digit lengths with a zero**

Examples: PCL2514, PCL0703, PCL2520

KEY TO CHART
- ⚡ Items in stock
- 2-3 week delivery
- Contact D-M-E for quote

INCH Return Pins





- Precision made of superior quality thermal shock resisting hotwork die steel
- Hot-forged heads provide uniform grain flow, higher tensile strength
- Outside diameter nitrided to 65-74 HRC hardness and finished to minimize wear
- Centerless ground and polished outer diameter

.500 (1/2") Diameter Series

ITEM NUMBER	Ø D PIN DIA	Ø H HEAD DIA	L PIN LENGTH
7410	.500	.750	3.563
7411			4.063
7412			4.563
7413			5.063
7414			5.563
7415			6.063
7416			6.563

For longer lengths, use EX33 Ejector Pins.

.625 (5/8") Diameter Series

ITEM NUMBER	Ø D PIN DIA	Ø H HEAD DIA	L PIN LENGTH
7510	.625	.875	4.063
7511			4.563
7512			5.063
7513			5.563
7514			6.063
7515			6.563
7516			7.063
7517			7.563
7518			8.063

For longer lengths, use EX37 Ejector Pins.

.750 (3/4") Diameter Series

ITEM NUMBER	Ø D PIN DIA	Ø H HEAD DIA	L PIN LENGTH
7610	.750	1.000	4.938
7611			5.438
7612			5.938
7613			6.438
7614			6.938
7615			7.438
7616			7.938
7617			8.438
7618			8.938
7619			9.438

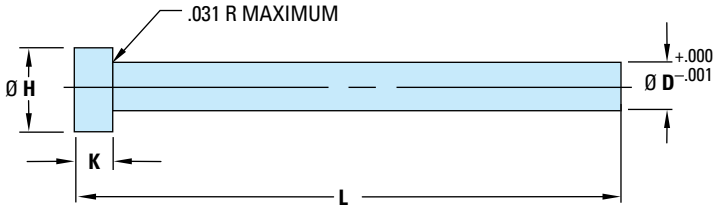
For longer lengths, use EX41 Ejector Pins.

Use Item Number in charts above for ordering. All items in stock.



INCH Sprue Puller Pins





- Precision made of superior quality thermal shock resisting hotwork die steel
- Hot-forged heads provide uniform grain flow, higher tensile strength
- Outside diameter nitrided to 65-74 HRC hardness and finished to minimize wear
- Heads annealed for easy machining
- Centerless ground and polished outer diameter

.250 (1/4") Diameter Series

ITEM NUMBER	Ø D PIN DIA	Ø H HEAD DIA	K HEAD THICK	L PIN LENGTH
7110	.250	.437	.187	3.44
7111				3.94
7112				4.44
7113				4.94
7114				5.44
7115				5.94
7116				6.44

For longer lengths, use EX17 Ejector Pins.

.375 (3/8") Diameter Series

ITEM NUMBER	Ø D PIN DIA	Ø H HEAD DIA	K HEAD THICK	L PIN LENGTH
7210	.375	.625	.250	3.88
7211				4.38
7212				4.88
7213				5.38
7214				5.88
7215				6.38
7216				6.88
7217				7.38
7218				7.88
7219				8.38
7220				8.88
7221				9.38

For longer lengths, use EX25 Ejector Pins.

Use Item Number in charts above for ordering. All items in stock.

QUANTITY DISCOUNTS:
Ejector pins, sleeves, core pins, return pins and sprue puller pins. Discounts apply to current Net Prices. Standard sizes may be combined on one order for quantity discounts.

300 to 599 . . . . . Less 5%
600 or more . . . . . Less 10%

Comparison Chart

DESCRIPTION	DIAMETER	MATERIAL	HARDNESS	BODY CONDITION	HEAD CONDITION
EX Ejector Pins EX2 (1/32) through EX8 (7/64)	+.0003 –.0006	H13	Surface 65-74 HRC Core 40-45 HRC	Nitrided Minimum .001 deep	Annealed
EX Ejector Pins EX9 (1/8) through EX32 (31/64) lengths – 6" through 18"	–.0003 –.0006	H13	Surface 65-74 HRC Core 40-45 HRC	Nitrided Minimum .001 deep	Annealed
EX Ejector Pins EX9 (1/8) through EX32 (31/64) lengths – 25" through 36"	–.0003 –.0008	H13	Surface 65-74 HRC Core 40-45 HRC	Nitrided Minimum .001 deep	Annealed
EX Ejector Pins EX33 (1/2) through EX47 (1")	–.0003 –.0008	H13	Surface 65-74 HRC Core 40-45 HRC	Nitrided Minimum .001 deep	Annealed
THX Ejector Pins THX03 (3/64) through THX08 (7/64)	–.000 –.001	H13	Surface 65-74 HRC Core 50-55 HRC	Nitrided Minimum .001 deep	Annealed
THX Ejector Pins THX09 (1/8) through THX32 (31/64) lengths – 6" through 18"	–.0003 –.0006	H13	Surface 65-74 HRC Core 50-55 HRC	Nitrided Minimum .001 deep	Annealed
THX Ejector Pins THX33 (1/2) through THX47 (1")	–.0003 –.0008	H13	Surface 65-74 HRC Core 50-55 HRC	Nitrided Minimum .001 deep	Annealed
Keyed Ejector Pins –.0003 | –.0003 –.0006 | –.0008		H13	Surface 65 min HRC Core 50-55 HRC	Nitrided	Annealed
EJP-IMH Close Tolerance Ejector Pins	–.0003 –.0005	M2	Core 58-62 HRC		Annealed
MoldBasics Ejector Pins	–.0002 –.0008	H13	Core 65 HRC MIN 40-45 HRC		
S Ejector Sleeves	O.D. +.0000 –.0010 I.D. +.0005 +.0000	H13	O.D. 65-74 HRC I.D. 30-35 HRC	Nitrided O.D. Minimum .001 deep	Annealed
SND Nitrided I.D. Ejector Sleeves	O.D. +.0000 –.0010 I.D. +.0005 +.0000	H13	O.D. 65-74 HRC I.D. 65-74 HRC	Nitrided O.D. & I.D. Minimum .001 deep	Annealed
Ejector Blades		M2	58-62 HRC		Annealed
C Core Pins	+.0008 –.0003	H13	Core 30-35 HRC	Through Hardened	3" length – Hard 6"-14" lengths – Annealed
CX High Hardness Core Pins	+.0008 –.0003	H13	Core 50-55 HRC	Through Hardened	3" length – Hard 6"-14" lengths – Annealed
PCL Performance High Conductivity Core Pins	+.0010 –.0000	Moldstar 150® (C18000)	90-98 HRB	not applicable	not applicable
Return Pins	+.0000 –.001	H13	Surface 65-74 HRC Core 40-55 HRC	Nitrided Minimum .001 deep	Annealed
Sprue Puller Pins	+.000 –.001	H13	Surface 65-74 HRC Core 40-45 HRC	Nitrided Minimum .001 deep	Annealed

Hardness Conversion Table and D-M-E Hardness Data

HARDNESS RANGE OF D-M-E STANDARDS	BRINELL 3000 Kg	ROCKWELL C 150 Kg LOAD	ROCKWELL B 100 Kg LOAD	ROCKWELL 15-N SUPER-FICIAL	SHORE SCLERO-SCOPE NO.	TENSILE STRENGTH (APPROX. P.S.I.)
		80		96.5		
		78		96.0		
		76		95.5		
EX, THX EJECTOR PINS **Surface Hardness**		74		95.0		
		72		94.5		
		70		94.0		
		69		93.5	96	
		67		93.0	95	
		66		92.5	92	
		65		92.0	91	
		64			88	
		63		91.5	87	
EJP-IMH EJECTOR PINS EJB-IMH EJECTOR BLADE **Core Hardness**		62		91.0	85	
		61		90.5	83	
	614	60		90.0	81	
	600	59		89.5	80	
	587	58			78	
	573	57		89.0	76	
	560	56		88.5	75	
CX CORE PINS, THX EJ. PINS, KEYED EJ. PINS **Core Hardness**	547	55		88.0	74	301,000
	534	54		87.5	72	291,000
	522	53		87.0	71	282,000
	509	52		86.5	69	273,000
	496	51		86.0	68	264,000
	484	50		85.5	67	255,000
	472	49		85.0	66	246,000
	460	48		84.5	64	237,000
	448	47		84.0	63	229,000
	437	46		83.5	62	221,000
EX EJECTOR PINS **Core Hardness**	426	45		83.0	60	214,000
	415	44		82.5	58	207,000
	404	43		82.0	57	200,000
	393	42		81.5	56	194,000
	382	41		81.0	55	188,000
	372	40		80.5	54	182,000

HARDNESS RANGE OF D-M-E STANDARDS	BRINELL 3000 Kg	ROCKWELL C 150 Kg LOAD	ROCKWELL B 100 Kg LOAD	ROCKWELL 15-N SUPER-FICIAL	SHORE SCLERO-SCOPE NO.	TENSILE STRENGTH (APPROX. P.S.I.)
	362	39		80.0	52	177,000
	352	38		79.5	51	171,000
	342	37		79.0	50	166,000
	332	36		78.5	49	162,000
C CORE PINS	322	35		78.0	48	157,000
	313	34		77.0	47	153,000
	305	33		76.5	46	148,000
	297	32		76.0	44	148,000
	290	31		75.5	43	140,000
	283	30		75.0	42	136,000
	276	29		74.5	41	132,000
	270	28		74.0	—	129,000
	265	27		73.5	40	126,000
	260	26		72.5	38	123,000
	255	25		72.0	—	120,000
	250	24		71.5	37	117,000
	245	23	100	71.0	36	115,000
	240	22	99	70.5	35	112,000
PCL PERFOR-MANCE CORE PINS	235	20	98	69.5	34	108,000
	230	20	98	69.5	34	108,000
	201		94		31	98,000
	197		93		30	95,000
	192		92		29	93,000
	187		91		—	90,000
	183		90		28	89,000
	179		89		27	87,000
	174		88		27	87,000
	170		87		26	83,000
	167		86		—	81,000
	163		85		25	79,000
	156		83		24	76,000
	149		81		23	73,000
	143		79		22	71,000
	137		76		21	67,000
	131		74		—	65,000

Custom Pins and Sleeves – Faxable Quote Form

QUOTE FAX HOTLINES or visit www.dme.net

United States: 888-808-4363 • Canada: 800-461-9965 • International: 248-398-7394

Custom Pins

Quantity: _____

Choose a pin type:

- ☐ **EX** (35 - 43 HRC core hardness with 65 - 70 HRC case hardness)
- ☐ **THX** (50 HRC - 55 HRC core hardness with 65 - 70 HRC case hardness)
- ☐ **CX** (50 - 55 HRC through hard)
- ☐ **C** (30 - 35 HRC through hard)

Material H-13 ☐

Other _____

Hardness _____RC

Nitrided Yes ☐ No ☐

Comments _____

_____

Custom Sleeves

Quantity: _____

☐ Nitride on OD (S)

☐ Nitride on OD + ID (SND)

Material H-13 ☐

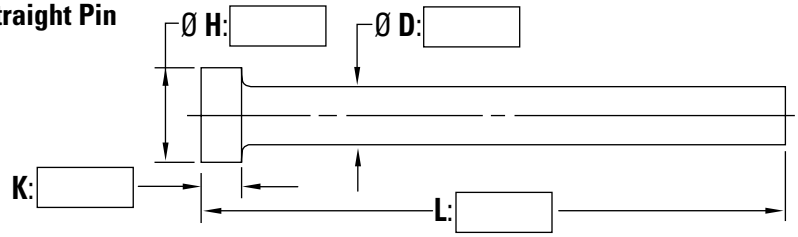
Other _____

Hardness _____RC

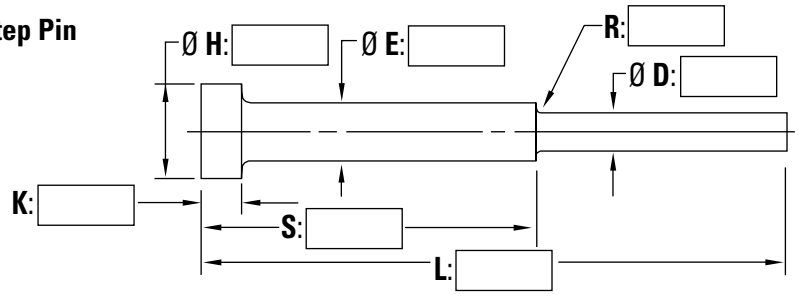
Comments _____

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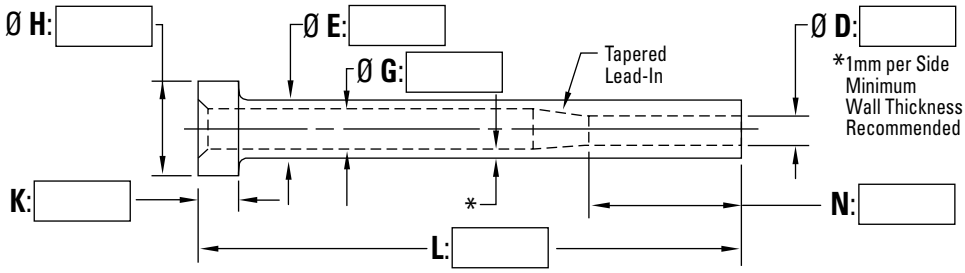
Straight Pin



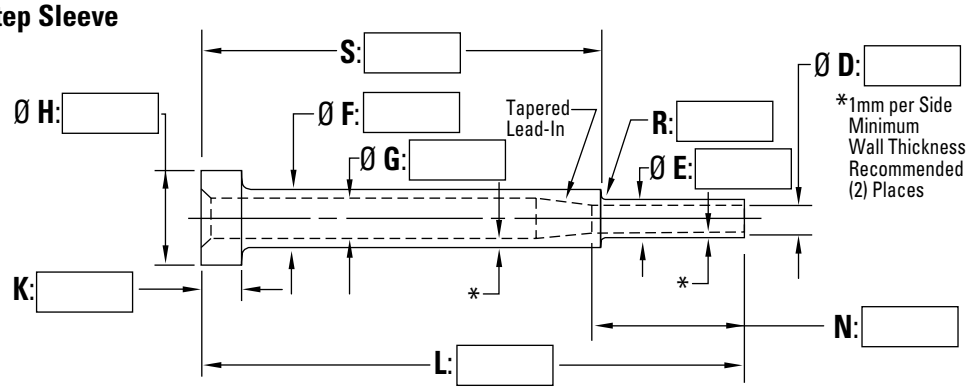
Step Pin



Sleeve



Step Sleeve



Company name:	**D-M-E account #:**
Contact name:	**P.O. #:**
Phone:	**FAX:**
Address:	**E-mail:**
City:	**State/Province:**
ZIP/Postal Code:	**Country:**

Shipping method:

- ☐ **UPS Ground**
- ☐ **UPS 2nd Day Air**
- ☐ **UPS Next Day**
- ☐ **FedEx**
- ☐ **Other**_____

D-M-E DIN Pins, Sleeves, Blades

A COMPREHENSIVE LINE
OF DIN EJECTOR PRODUCTS



EJECTOR PINS

EJP-EHN (NITRIDED) 264
EJP-ELH (HARDENED) 265

SHOULDER EJECTOR PINS

EJP-EHN (NITRIDED) 266
EJP-ELH (HARDENED) 267

EJECTOR SLEEVES

EJS-EHN (NITRIDED) 268
EJS-ELH (HARDENED) 269

EJECTOR BLADES

EJB-EHN (NITRIDED) 270
EJB-ELH (HARDENED) 271

CORE PINS

CRP-EHH (HARDENED) 272
CRP-ECS (PERFORMANCE) 273

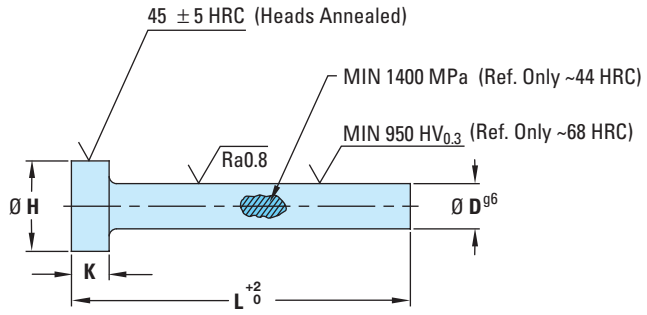
FAX ORDER FORM – SPECIAL DIN PINS & SLEEVES

FAXABLE QUOTE REQUEST FORM 275-276

DIN Ejector Pins – Nitrided

DIN Ejector Pins – EJP-EHN Expulsores | Extractores | Ejecteurs Epingles | Auswerferstifte

INFORMATION KEY:
D = Pin Body Diameter
H = Head Diameter
K = Head Thickness
L = Length
Standard: DIN/ISO Type
Material: 1.2344 (AISI H13 Type) Steel
Surface Treatment: Nitrided
Max. Temp.: 500˚-550˚C (932˚-1022˚F)
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	H	K	L										
				0100	0125	0160	0200	0250	0315	0400	0500	0630	0800	1000
EJP-EHN (EA)*	01.2	3	1.5											
	01.5	3	2											
	02.0	4	2			⚡								
	02.2	4	2											
	02.5	5	2											
	02.7	5	3											
	03.0	6	3			⚡	⚡	⚡						
	03.2	6	3											
	03.5	7	3											
	03.7	7	3											
	04.0	8	3			⚡	⚡	⚡	⚡					
	04.2	8	3											
	04.5	8	3											
	05.0	10	3			⚡		⚡		⚡				
	05.2	10	3											
	05.5	10	3											
	06.0	12	5			⚡		⚡		⚡	⚡			
	06.2	12	5											
	06.5	12	5											
	07.0	12	5											
	08.0	14	5			⚡		⚡		⚡	⚡	⚡		
	08.2	14	5											
	08.5	14	5											
	09.0	14	5											
	10.0	16	5			⚡		⚡		⚡		⚡		
	10.2	16	5											
	10.5	16	5											
	11.0	16	5											
	12.0	18	7			⚡		⚡		⚡		⚡		
	12.2	18	7											
	12.5	18	7											
	14.0	22	7											
	16.0	22	7			⚡		⚡		⚡		⚡		
	18.0	24	7											
	20.0	26	8					⚡		⚡		⚡		
	25.0	32	10							⚡		⚡		
	32.0	40	10											

* "(EA)" is only a cross-reference to current D-M-E Europe Catalog item prefix numbers.

HOW TO ORDER: Specify Item Number with prefix, D diameter, and L length. Include zeros and dashes but omit decimals, as shown.

Prefix: EJP-EHN - D - L

Example: Prefix D L — EJP-EHN-030-0160

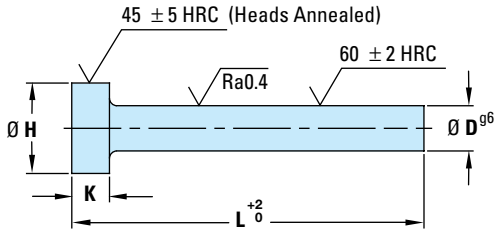
Example: Prefix D L — EJP-EHN-120-0630

KEY TO CHART
⚡ Items in stock
2-3 week delivery
Contact D-M-E for quote

DIN Ejector Pins – Hardened

DIN Ejector Pins – EJP-EHH Expulsores I Extractores I Ejecteurs epingles I Auswerferstifte

INFORMATION KEY:
D = Pin Body Diameter
H = Head Diameter
K = Head Thickness
L = Length
Standard: DIN/ISO Type
Material: 1.2210 (AISI L2 Type) Steel
Surface Treatment: None (Through-Hardened)
Max. Temp.: 250˚C (482˚F)
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	H	K	L 0040	0080	0100	0125	0160	0200	0250	0315	0400
EJP-ELH (AH)*	01.5	3	1.5			⚡		⚡	⚡			
	01.6	3	1.5									
	01.7	3	1.5									
	01.8	3	1.5									
	02.0	4	2			⚡		⚡	⚡	⚡		
	02.2	4	2									
	02.5	5	2			⚡		⚡	⚡	⚡		
	02.7	5	2									
	03.0	6	3			⚡		⚡	⚡	⚡		
	03.2	6	3									
	03.5	7	3									
	03.7	7	3									
	04.0	8	3					⚡	⚡	⚡		
	04.2	8	3									
	04.5	8	3									
	04.7	8	3									
	05.0	10	3					⚡		⚡		
	05.2	10	3									
	05.5	10	3									
	06.0	12	5									
	06.2	12	5									
	06.5	12	5									
	07.0	12	5									
	08.0	14	5									
	08.2	14	5									
	08.5	14	5									
	09.0	14	5									
	10.0	16	5									
	10.2	16	5									
	10.5	16	5									
	11.0	16	5									
	12.0	18	7									
	12.2	18	7									
	12.5	18	7									
	14.0	22	7									
	16.0	22	7									
	18.0	24	7									
	20.0	26	8									

* "(AH)" is only a cross-reference to current D-M-E Europe Catalog item prefix numbers.

HOW TO ORDER: Specify Item Number with prefix, D diameter, and L length. Include zeros and dashes but omit decimals, as shown.

Prefix	D	L
EJP-ELH -		-

Example:
Prefix D L
EJP-ELH-015-0200

Example:
Prefix D L
EJP-ELH-050-0100

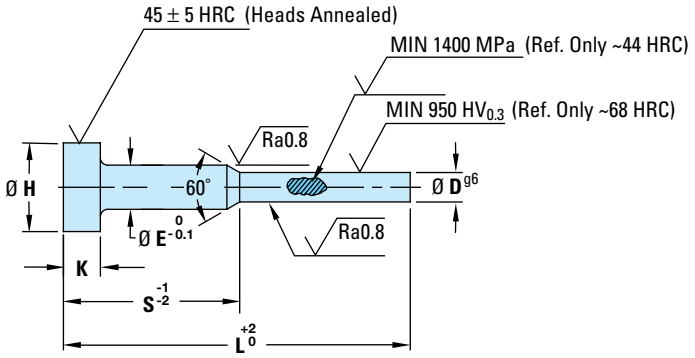
KEY TO CHART
⚡ Items in stock
2-3 week delivery
Contact D-M-E for quote

DIN Shoulder Ejector Pins – Nitrided

DIN Shoulder Ejector Pins – EJP-EHN

Expulsores con hombro | Extractores | Ejecteurs epingles | Auswerferstifte

INFORMATION KEY:
D = Pin Body Diameter
E = Shoulder Diameter
H = Head Diameter
K = Head Thickness
L = Length
S = Shoulder Length
Standard: DIN/ISO Type
Material: 1.2344 (AISI H13 Type) Steel
Surface Treatment: Nitrided
Max. Temp.: 500°-550°C (932°-1022°F)
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	E	H	K	L 0080 / S 0035	L 0100 / S 0050	L 0125 / S 0050	L 0160 / S 0050	L 0160 / S 0075	L 0200 / S 0075	L 0250 / S 0075
EJP-EHN (C)*	00.7	2	4	2							
	00.8	2	4	2							
	00.9	2	4	2							
	01.0	2	4	2		⚡	⚡	⚡		⚡	
	01.1	2	4	2							
	01.2	2	4	2		⚡	⚡		⚡	⚡	
	01.3	2	4	2							
	01.4	2	4	2							
	01.5	3	6	3		⚡	⚡	⚡		⚡	
	01.6	3	6	3							
	01.7	3	6	3							
	01.8	3	6	3							
	01.9	3	6	3							
	02.0	3	6	3		⚡	⚡		⚡	⚡	
	02.1	3	6	3							
	02.2	3	6	3							
	02.4	3	6	3							
	02.5	3	6	3			⚡		⚡	⚡	
	02.7	3	6	3							
	03.0	4	8	3							
	03.2	4	8	3							
	03.5	4	8	3							

* "(C)" is only a cross-reference to current D-M-E Europe Catalog item prefix numbers.

HOW TO ORDER: Specify Item Number with prefix, D diameter, L length, and S length. Include zeros and dashes but omit decimals, as shown.

Prefix **EJP-EHN** - D - L - S

Example:
Prefix D L S
EJP-EHN-010-0160-0050

Example:
Prefix D L S
EJP-EHN-025-0200-0075

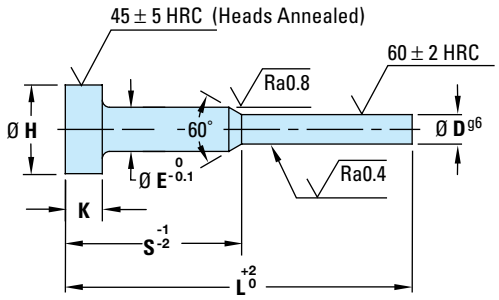
KEY TO CHART
⚡ Items in stock
2-3 week delivery
Contact D-M-E for quote

DIN Shoulder Ejector Pins – Hardened

DIN Shoulder Ejector Pins – EJP-ELH

Expulsores con hombro | Extractores | Ejecteurs epingles | Auswerferstifte

INFORMATION KEY:
D = Pin Body Diameter
E = Shoulder Diameter
H = Head Diameter
K = Head Thickness
L = Length
S = Shoulder Length
Standard: DIN/ISO Type
Material: 1.2210 (AISI L2 Type) Steel
Surface Treatment: None (Through-Hardened)
Max. Temp.: 250˚C (482˚F)
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	E	H	K	0080	0100	0125	0200	0250
					0035	0050	0050	0075	0100
EJP-ELH (CH)*	00.8	2	4	2					
	00.9	2	4	2					
	01.0	2	4	2		⚡	⚡		
	01.1	2	4	2					
	01.2	2	4	2		⚡	⚡		
	01.3	2	4	2					
	01.4	2	4	2					
	01.5	3	6	3		⚡	⚡	⚡	
	01.6	3	6	3					
	01.7	3	6	3					
	01.8	3	6	3					
	01.9	3	6	3					
	02.0	3	6	3		⚡	⚡	⚡	
	02.1	3	6	3					
	02.2	3	6	3					
	02.3	3	6	3					
	02.4	3	6	3					
	02.5	3	6	3				⚡	

* "(CH)" is only a cross-reference to current D-M-E Europe Catalog item prefix numbers.

HOW TO ORDER: Specify Item Number with prefix, D diameter, L length and S length. Include zeros and dashes but omit decimals, as shown.

Prefix EJP-ELH - D - L - S

Example:
Prefix D L S
EJP-ELH-010-0100-0050

Example:
Prefix D L S
EJP-ELH-025-0125-0050

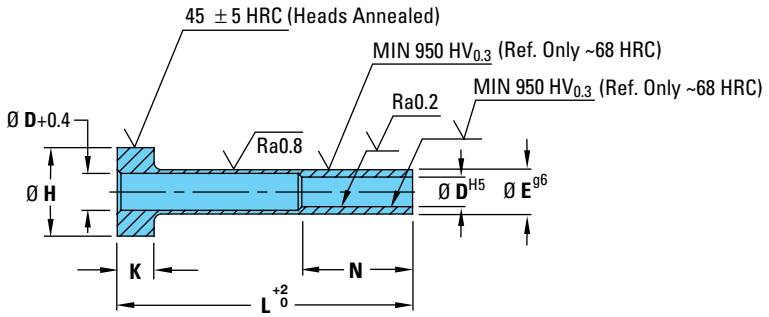
KEY TO CHART
⚡ Items in stock
2-3 week delivery
Contact D-M-E for quote

DIN Ejector Sleeves – Nitrided

DIN Ejector Sleeves – EJS-EHN

Mangas expulsoras | Extractores tubulares | Ejecteurs tubulaires | Auswerferhülsen

INFORMATION KEY:
D = Inside Diameter
E = Outside Diameter
H = Head Diameter
K = Head Thickness
L = Length
N = Bearing Length
Standard: DIN/ISO Type
Material: 1.2344 (AISI H13 Type) Steel
Surface Treatment: Nitrided
Max. Temp.: 500°-550°C (932°-1022°F)
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	E	H	K	N	L										
						0075	0100	0125	0150	0175	0200	0225	0250	0275	0300	0350
EJS-EHN (S)*	01.5	03.0	6	3	35											
	01.7	03.0	6	3	35											
	02.0	04.0	8	3	35			⚡	⚡							
	02.2	04.0	8	3	35											
	02.5	05.0	10	3	35			⚡	⚡							
	02.7	05.0	10	3	45											
	03.0	05.0	10	3	45		⚡	⚡	⚡	⚡						
	03.2	05.0	10	3	45											
	03.5	06.0	12	5	45		⚡	⚡	⚡	⚡						
	03.7	06.0	12	5	45											
	04.0	06.0	12	5	45		⚡	⚡	⚡	⚡	⚡					
	04.2	08.0	14	5	45											
	04.5	08.0	14	5	45											
	05.0	08.0	14	5	45		⚡	⚡	⚡	⚡	⚡					
	05.2	08.0	14	5	45											
	06.0	10.0	16	5	45			⚡	⚡	⚡	⚡	⚡	⚡			
	06.2	10.0	16	5	45											
	06.5	10.0	16	5	45											
	08.0	12.0	18	7	45			⚡	⚡	⚡	⚡	⚡	⚡	⚡		
	08.2	12.0	18	7	45											
	08.5	12.0	18	7	45											
	10.0	14.0	22	7	45			⚡	⚡	⚡	⚡	⚡	⚡	⚡		
	10.5	14.0	22	7	55											
	11.0	14.0	22	7	55											
	12.0	16.0	22	7	55			⚡	⚡	⚡	⚡	⚡	⚡	⚡		
	12.5	16.0	22	7	55											
	14.0	18.0	24	9	55											
	16.0	20.0	26	9	55											
	18.0	22.0	28	9	55											

*** "(S)" is only a cross-reference to current D-M-E Europe Catalog item prefix numbers.**

HOW TO ORDER: Specify Item Number with prefix, D diameter, and L length. Include zeros and dashes but omit decimals, as shown.

Prefix	D	L
EJS-EHN -		-

Example:
Prefix D L
EJS-EHN-020-0075

Example:
Prefix D L
EJS-EHN-120-0250

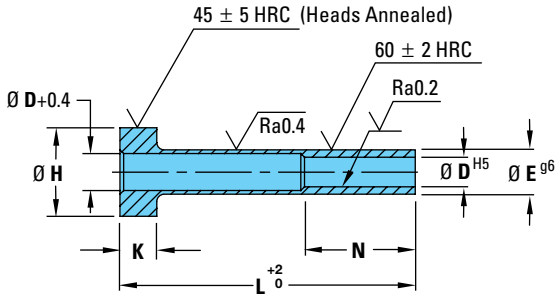
KEY TO CHART
⚡ **Items in stock**
2-3 week delivery
Contact D-M-E for quote

DIN Ejector Sleeves – Hardened

DIN Ejector Sleeves – EJS-ELH

Mangas expulsoras | Extractores tubulares | Ejecteurs tubulaires | Auswerferhülsen

INFORMATION KEY:
D = Inside Diameter
E = Outside Diameter
H = Head Diameter
K = Head Thickness
L = Length
N = Bearing Length
Standard: DIN/ISO Type
Material: 1.2210 (AISI L2 Type) Steel
Surface Treatment: None (Through-Hardened)
Max. Temp.: 250°C (482°F)
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	E	H	K	N	L													
						0075	0100	0125	0150	0175	0200	0225	0250	0275	0300	0350	0400	0450	0500
EJS-ELH (KS)*	01.5	03.0	6	3	35	■	■	■	■		■		■						
	01.7	03.0	6	3	35	■	■	■	■										
	02.0	04.0	8	3	35	■	■	■	■	■	■	■	■						
	02.2	04.0	8	3	35	■	■	■	■	■	■	■							
	02.5	05.0	10	3	35	■	■	■	■	■	■	■	■	■					
	02.7	05.0	10	3	45	■	■	■	■	■	■	■	■	■					
	03.0	05.0	10	3	45	■	■	■	■	■	■	■	■	■					
	03.2	05.0	10	3	45	■	■	■	■	■	■	■	■	■					
	03.5	06.0	12	5	45	■	■	■	■	■	■	■	■	■	■				
	03.7	06.0	12	5	45	■	■	■	■	■	■	■	■	■	■				
	04.0	06.0	12	5	45	■	■	■	■	■	■	■	■	■	■	■	■		
	04.2	08.0	14	5	45	■	■	■	■	■	■	■	■	■	■				
	04.5	08.0	14	5	45	■	■	■	■		■	■	■						
	05.0	08.0	14	5	45	■	■	■	■	■	■	■	■	■	■	■			
	05.2	08.0	14	5	45	■	■	■	■	■	■	■	■	■	■				
	05.5	08.0	14	5	45	■	■	■	■		■	■	■	■	■				
	06.0	10.0	16	5	45	■	■	■	■	■	■	■	■	■	■	■			
	06.2	10.0	16	5	45	■	■	■	■	■	■	■	■	■	■	■			
	06.5	10.0	16	5	45	■	■	■	■	■	■	■	■	■	■	■			
	08.0	12.0	18	7	45	■	■	■	■	■	■	■	■	■	■	■	■		
	08.2	12.0	18	7	45	■	■	■	■	■	■	■	■	■	■	■	■		
	08.5	12.0	18	7	45	■	■	■	■	■	■	■	■	■	■	■	■		
	10.0	14.0	22	7	45	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	10.5	14.0	22	7	55	■	■	■	■	■	■	■	■	■	■	■	■	■	
	11.0	14.0	22	7	55	■	■	■	■	■	■	■	■	■	■	■	■	■	
	12.0	16.0	22	7	45	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	12.5	16.0	22	7	55	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	14.0	18.0	24	9	55	■	■	■	■		■	■	■	■	■	■	■	■	
	16.0	20.0	26	9	55	■	■	■	■		■	■	■	■	■				
	18.0	22.0	28	9	55	■	■	■	■		■	■	■	■	■				

*** "(KS)" is only a cross-reference to current D-M-E Europe Catalog item prefix numbers.**

HOW TO ORDER: Specify Item Number with prefix, D diameter, and L length. Include zeros and dashes but omit decimals, as shown.

Prefix **EJS-ELH** - D - L

Example:
Prefix D L
EJS-ELH-020-0125

Example:
Prefix D L
EJS-ELH-120-0150

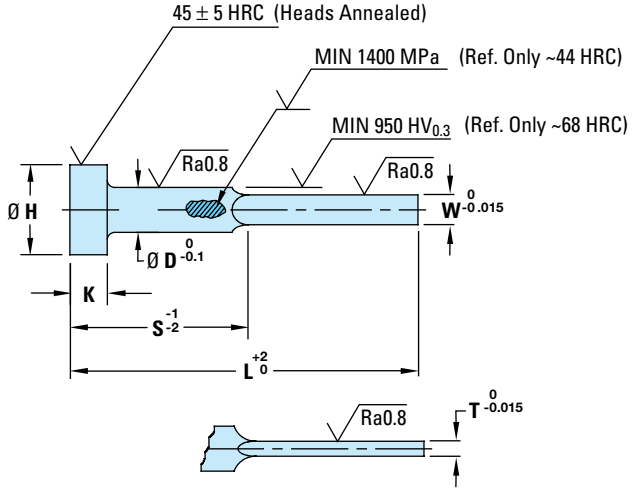
KEY TO CHART
- Items in stock
- 2-3 week delivery
- Contact D-M-E for quote

DIN Ejector Blades – Nitrided

DIN Ejector Blades – EJB-EHN

Expulsores planos I Extractores laminares I Ejecteurs lames I Auswerferklingen

INFORMATION KEY:
D = Shoulder Diameter
H = Head Diameter
K = Head Thickness
L = Length
S = Shoulder Length
T = Blade Thickness
W = Blade Width
Standard: DIN/ISO Type
Material: 1.2344 (AISI H13 Type) Steel
Surface Treatment: Nitrided
Max. Temp.: 500°-550°C (932°-1022°F)
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	T	W	D	H	K	L 0060 S 30	L 0080 S 40	L 0100 S 50	L 0125 S 63	L 0160 S 80	L 0200 S 100	L 0250 S 125	L 0315 S 160	L 0400 S 200
EJB-EHN (FW)*	01.0	03.5	4	8	3									
	01.0	03.8	4.2	8	3				⚡	⚡				
	01.0	04.5	5	10	3				⚡	⚡				
	01.0	05.5	6	12	5				⚡	⚡				
	01.2	03.5	4	8	3									
	01.2	03.8	4.2	8	3									
	01.2	04.5	5	10	3									
	01.2	05.5	6	12	5				⚡	⚡				
	01.2	07.5	8	14	5				⚡	⚡				
	01.5	04.5	5	10	5									
	01.5	05.5	6	12	5				⚡	⚡	⚡			
	01.5	07.5	8	14	5					⚡	⚡	⚡		
	01.5	09.5	10	16	3						⚡	⚡	⚡	
	01.8	09.5	10	16	5									
	02.0	05.5	6	12	5				⚡	⚡	⚡			
	02.0	07.5	8	14	5					⚡	⚡		⚡	
	02.0	09.5	10	16	5						⚡			
	02.0	11.5	12	18	7						⚡		⚡	
	02.0	12.0	12.5	18	7									
	02.0	15.5	16	22	7									
	02.5	11.5	12	20	7						⚡		⚡	
	02.5	12.0	12.5	18	7									
	02.5	15.5	16	22	7									

* "(FW)" is only a cross-reference to current D-M-E Europe Catalog item prefix numbers.

HOW TO ORDER: Specify Item Number with prefix, T thickness, W width, and L length. Include zeros and dashes but omit decimals, as shown.

Prefix EJB-EHN - T - W - L

Example:
Prefix T W L
EJB-EHN-010-038-0125

Example:
Prefix T W L
EJB-EHN-020-115-0200

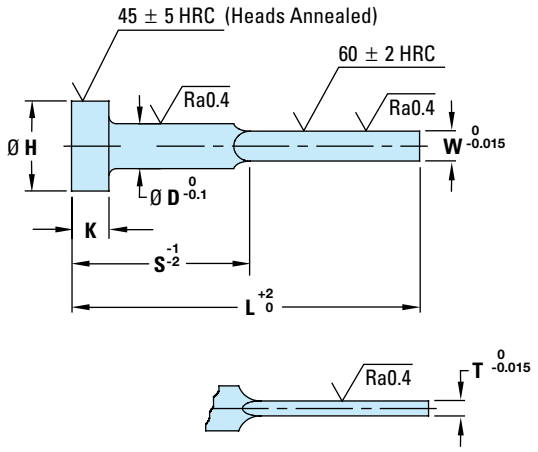
KEY TO CHART
⚡ Items in stock
2-3 week delivery
Contact D-M-E for quote

DIN Ejector Blades – Hardened

DIN Ejector Blades – EJB-ELH

Expulsores planos I Extractores laminares I Ejecteurs lames I Auswerferklingen

INFORMATION KEY:
D = Shoulder Diameter
H = Head Diameter
K = Head Thickness
L = Length
S = Shoulder Length
T = Blade Thickness
W = Blade Width
Standard: DIN/ISO Type
Material: 1.2210 (AISI L2 Type) Steel
Surface Treatment: None (Through-Hardened)
Max. Temp.: 250°C (482°F)
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	T	W	D	H	K	L 0060 / S 30	0080 / 40	0100 / 50	0125 / 63	0160 / 80	0200 / 100	0250 / 125	0315 / 160	0400 / 200
EJB-ELH (FK)*	01.0	03.5	4	8	3	■	■	■	■	■				
	01.0	03.8	4.2	8	3	■	■	■	■	■				
	01.0	04.5	5	10	3		■	■	■	■	■			
	01.0	05.5	6	12	5		■	■	■	■	■			
	01.2	03.8	4.2	8	3	■	■	■	■	■	■			
	01.2	04.5	5	10	3		■	■	■	■	■			
	01.2	05.5	6	12	5		■	■	■	■	■			
	01.2	07.5	8	14	5			■	■	■	■	■		
	01.5	04.5	5	10	3		■	■	■	■	■			
	01.5	05.5	6	12	5		■	■	■	■	■			
	01.5	07.5	8	14	5			■	■	■	■	■		
	01.5	09.5	10	16	5					■	■	■	■	
	02.0	05.5	6	12	5		■	■	■	■	■			
	02.0	07.5	8	14	5			■	■	■	■	■	■	
	02.0	09.5	10	16	5					■	■	■	■	■
	02.0	11.5	12	18	7						■	■	■	■
	02.0	15.5	16	22	7						■	■	■	■
	02.5	11.5	12	18	7						■	■	■	■
	02.5	15.5	16	22	7						■	■	■	■

*** "(FK)" is only a cross-reference to current D-M-E Europe Catalog item prefix numbers.**

HOW TO ORDER: Specify Item Number with prefix, T thickness, W width, and L length. Include zeros and dashes but omit decimals, as shown.

Prefix		T		W		L
EJB-ELH	-		-		-	

Example:

Prefix	T	W	L
EJB-ELH-	010-	035-	0060

Example:

Prefix	T	W	L
EJB-ELH-	020-	115-	0200

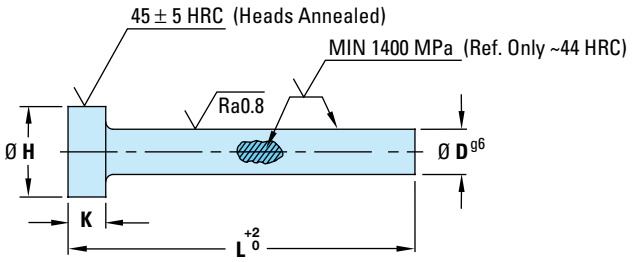
KEY TO CHART
- Items in stock
- 2-3 week delivery
- Contact D-M-E for quote

DIN Core Pins – Hardened

DIN Core Pins – CRP-EHH

Pernos moldeadores | Pernos moldantes | Epingles au centre | Kernstifte

INFORMATION KEY:
D = Pin Body Diameter
H = Head Diameter
K = Head Thickness
L = Length
Standard: DIN/ISO Type
Material: 1.2344 (AISI H13 Type) Steel
Surface Treatment: None (Through-Hardened)
Max. Temp.: 500°-550°C (932°-1022°F)
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	H	K	L											
				0080	0100	0125	0160	0200	0250	0315	0400	0500	0630	0800	1000
CRP-EHH (AHX)*	02.0	4	2		⚡			⚡							
	02.2	4	2												
	02.5	5	2												
	02.7	5	2												
	03.0	6	3		⚡			⚡							
	03.2	6	3												
	03.5	7	3												
	03.7	7	3												
	04.0	8	3		⚡			⚡		⚡					
	04.2	8	3												
	04.5	8	3												
	05.0	10	3		⚡			⚡			⚡				
	05.2	10	3												
	05.5	10	3												
	06.0	12	5		⚡			⚡			⚡				
	06.2	12	5												
	06.5	12	5												
	07.0	12	5												
	08.0	14	5		⚡			⚡			⚡				
	08.2	14	5												
	08.5	14	5												
	09.0	14	5												
	10.0	16	5					⚡			⚡				
	10.2	16	5												
	10.5	16	5												
	11.0	16	5												
	12.0	18	7					⚡			⚡				
	12.2	18	7												
	12.5	18	7												
	14.0	22	7												
	16.0	22	7								⚡		⚡		
	18.0	24	7												
	20.0	26	8								⚡		⚡		
	25.0	32	10								⚡		⚡		
	32.0	40	10												

* "(AHX)" is only a cross-reference to current D-M-E Europe Catalog item prefix numbers.

HOW TO ORDER: Specify Item Number with prefix, D diameter, and L length. Include zeros and dashes but omit decimals, as shown.

Prefix		D		L
CRP-EHH	-		-	

Example:
Prefix D L
CRP-EHH-020-0200

Example:
Prefix D L
CRP-EHH-250-0315

KEY TO CHART
⚡ Items in stock
2-3 week delivery
Contact D-M-E for quote

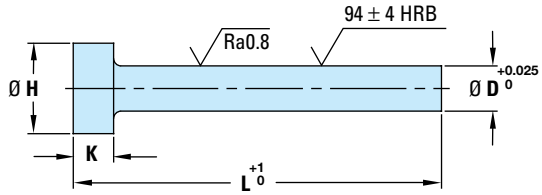
DIN Core Pins – Performance

DIN Core Pins – CRP-ECS

Pernos moldeadores I Pernos moldantes I Epingles au centre I Kernstifte

INFORMATION KEY:

D = Pin Body Diameter
H = Head Diameter
K = Head Thickness
L = Length
Standard: DIN/ISO Type
Material: Beryllium-free Copper based alloy
Surface Treatment: None
Max. Temp.: 350°C (662°F)
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	H	K	L 0100	L 0160	L 0250	L 0315
CRP-ECS (PCM)*	01.5	3	1.5				
	02.0	4	2				
	02.5	5	2				
	03.0	6	3				
	03.5	7	3				
	04.0	8	3		⚡		⚡
	04.5	8	3				
	05.0	10	3		⚡		⚡
	06.0	12	5		⚡		⚡
	07.0	12	5				
	08.0	14	5		⚡		⚡
	10.0	16	5		⚡		⚡
	12.0	18	7				⚡
	14.0	22	7				
	16.0	22	7				

HIGH THERMAL CONDUCTIVITY PINS

Advantages:

- Reduced cycle time
- 5 times better conductivity than steel
- Improved part quality
- Lower machining costs
- Longer service life

* "(PCM)" is only a cross-reference to current D-M-E Europe Catalog item prefix numbers.

HOW TO ORDER: Specify Item Number with prefix, D diameter, and L length. Include zeros and dashes but omit decimals, as shown.

Prefix CRP-ECS - D [ ] - L [ ]

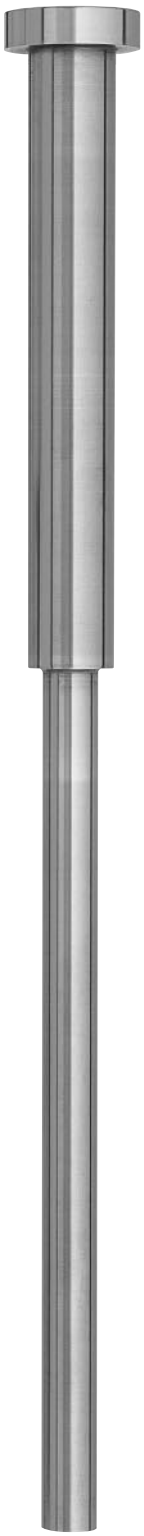
Example: Prefix D L — CRP-ECS-030-0160

Example: Prefix D L — CRP-ECS-120-0315

KEY TO CHART

- ⚡ Items in stock
- 2-3 week delivery
- Contact D-M-E for quote

DIN Pins and Sleeves for Special Applications



Complex part geometries, thin-wall molding, family molds, high-cavitation molds, increasingly large parts – every day, challenging new applications and materials are forcing moldmakers to develop creative new tooling solutions. D-M-E is here to help, with comprehensive capabilities for manufacturing special pins and sleeves – quickly and cost-effectively. We offer a wide range of custom features, including:

Manufacturing expertise

Extensive resources and efficient processes guarantee rapid order fulfillment and prompt delivery. Advanced manufacturing techniques and trained, dedicated personnel ensure quality.



Quality you can count on

D-M-E starts with only the best materials for its pins and sleeves. Our proprietary hot-forging technology and in-house nitriding guarantees the finest finished components. The industry's finest surface finish provides low-friction performance for long service life.



Need innovation? Choose D-M-E

For more than seven decades, moldmakers, molders and designers have trusted D-M-E for innovative, reliable solutions to their needs. Nobody beats D-M-E for quality products, quality service and quick delivery. D-M-E delivers your special pin and sleeve needs.



Contact D-M-E for pads of faxable quote request forms.
(See next page)



Special DIN Pins – Faxable Quote Form

QUOTE FAX HOTLINES or visit www.dme.net

United States: 888-808-4363 • Canada: 800-461-9965 • International: 248-398-7394

Special Pins

Quantity:_____

Type of Pin: _____
(specify item prefix)

Material:
- ❒ 1.2344 (AISI H13 Type) Steel
- ❒ 1.2210 (AISI L2 Type) Steel
- ❒ Other_____

Hardness:
- ❒ Standard (as specified by item prefix)
- ❒ Other_____ HRC
(specify)

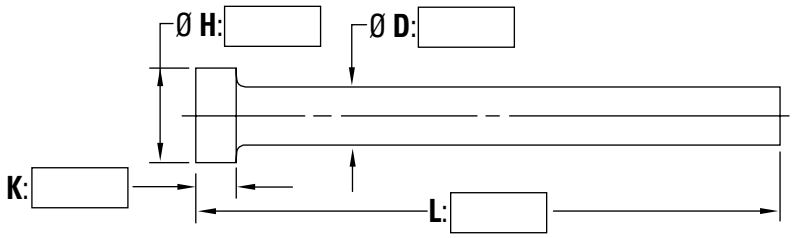
Nitrided: ❒ Yes ❒ No

Heads are Annealed
(unless otherwise specified)_____

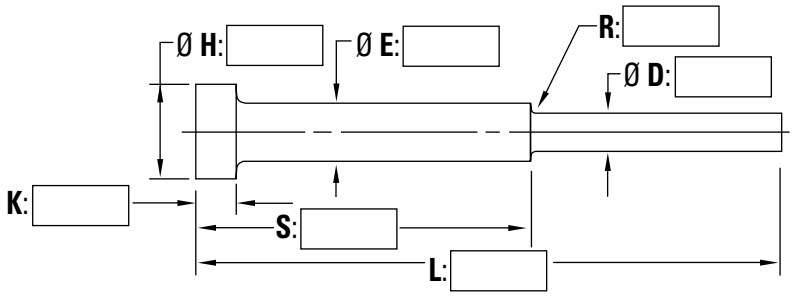
Desired Delivery: _____

Tolerances:
- ❒ As indicated in item drawing
- ❒ Other (specify on drawing)

Straight Pin



Step Pin



Company name:	**D-M-E account #:**
Contact name:	**P.O. #:**
Phone:	**FAX:**
Address:	**E-mail:**
City:	**State/Province:**
ZIP/Postal Code:	**Country:**

Shipping method:
- ☐ UPS Ground
- ☐ UPS 2nd Day Air
- ☐ UPS Next Day
- ☐ FedEx
- ☐ Other_____

Special DIN Sleeves – Faxable Quote Form

QUOTE FAX HOTLINES or visit www.dme.net

United States: 888-808-4363 • Canada: 800-461-9965 • International: 248-398-7394

Special Sleeves

Quantity:_____

Type of Sleeve: _____
(specify item prefix)

Material:
- ❒ 1.2344 (AISI H13 Type) Steel
- ❒ 1.2210 (AISI L2 Type) Steel
- ❒ Other_____

Hardness:
- ❒ Standard (as specified by item prefix)
- ❒ Other_____ HRC
(specify)

Nitrided O.D.: ❒ Yes ❒ No

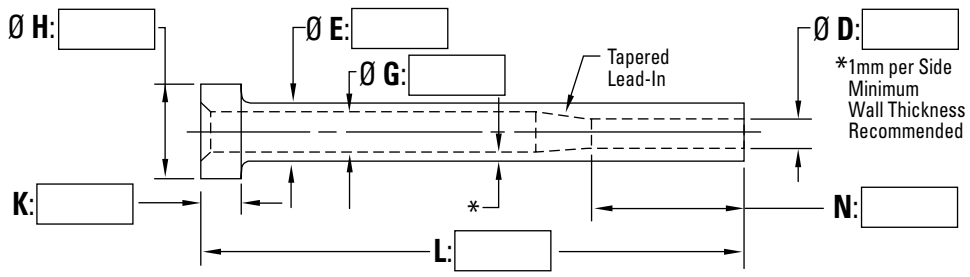
Nitrided I.D.: ❒ Yes ❒ No

Heads are Annealed

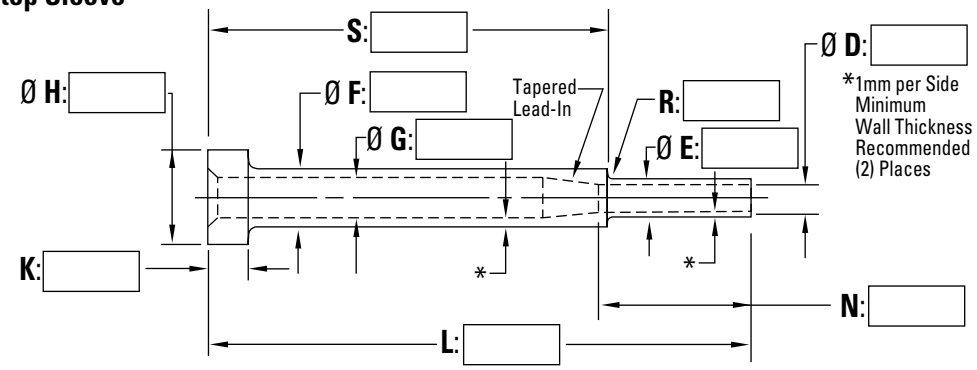
Desired Delivery: _____

Tolerances:
- ❒ As indicated in item drawing
- ❒ Other (specify on drawing)

Sleeve



Step Sleeve



Company name:	**D-M-E account #:**
Contact name:	**P.O. #:**
Phone:	**FAX:**
Address:	**E-mail:**
City:	**State/Province:**
ZIP/Postal Code:	**Country:**

Shipping method:
- ☐ UPS Ground
- ☐ UPS 2nd Day Air
- ☐ UPS Next Day
- ☐ FedEx
- ☐ Other_____

D-M-E JIS Pins, Sleeves, Blades

A COMPREHENSIVE LINE
OF JIS EJECTOR PRODUCTS



JIS EJECTOR PINS

STRAIGHT EJECTOR PINS..... 278

JIS EJECTOR SLEEVES

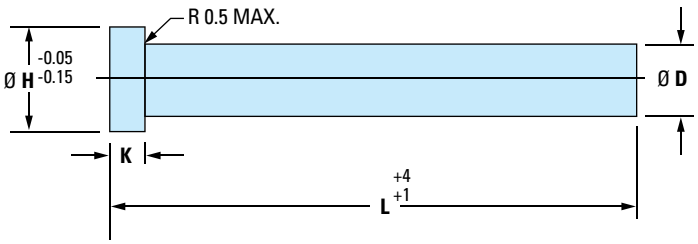
EJECTOR SLEEVES 279

JIS EJECTOR BLADES

EJECTOR BLADES..... 280

JIS Ejector Pins – Straight

JIS Ejector Pins – JFX



INFORMATION KEY:
D = Pin Body Diameter
H = Head Diameter
K = Head Thickness
L = Length
Standard: JIS
Material: SKD61 (H-13)
Surface Treatment: Nitrided
Surface Hardness: 70-72 Rc (HV 1000 ± 100)
Core Hardness: 40 HRC±2

Ø D PIN DIA	Ø H HEAD DIA	K HEAD THK	ITEM NUMBER (LENGTH L)										
			L=100	L=150	L=200	L=250	L=300	L=350	L=400	L=450	L=500	L=550	L=600
1.0	5	4	JFX010100	JFX010150									
1.5	5	4	JFX015100	JFX015150	JFX015200								
2	5	4	JFX020100	JFX020150	JFX020200	JFX020250							
2.5	6	4	JFX025100	JFX025150	JFX025200	JFX025250	JFX025300	JFX025350	JFX025400	JFX025450	JFX025500	JFX025550	JFX025600
3	6	4	JFX030100	JFX030150	JFX030200	JFX030250	JFX030300	JFX030350	JFX030400	JFX030450	JFX030500	JFX030550	JFX030600
3.5	7	4	JFX035100	JFX035150	JFX035200	JFX035250	JFX035300	JFX035350	JFX035400	JFX035450	JFX035500	JFX035550	JFX035600
4	8	6	JFX040100	JFX040150	JFX040200	JFX040250	JFX040300	JFX040350	JFX040400	JFX040450	JFX040500	JFX040550	JFX040600
4.5	8	6	JFX045100	JFX045150	JFX045200	JFX045250	JFX045300	JFX045350	JFX045400	JFX045450	JFX045500	JFX045550	JFX045600
5	9	6	JFX050100	JFX050150	JFX050200	JFX050250	JFX050300	JFX050350	JFX050400	JFX050450	JFX050500	JFX050550	JFX050600
5.5	10	6	JFX055100	JFX055150	JFX055200	JFX055250	JFX055300	JFX055350	JFX055400	JFX055450	JFX055500	JFX055550	JFX055600
6	10	6	JFX060100	JFX060150	JFX060200	JFX060250	JFX060300	JFX060350	JFX060400	JFX060450	JFX060500	JFX060550	JFX060600
6.5	11	6	JFX065100	JFX065150	JFX065200	JFX065250	JFX065300	JFX065350	JFX065400	JFX065450	JFX065500	JFX065550	JFX065600
7	11	6	JFX070100	JFX070150	JFX070200	JFX070250	JFX070300	JFX070350	JFX070400	JFX070450	JFX070500	JFX070550	JFX070600
8	13	8	JFX080100	JFX080150	JFX080200	JFX080250	JFX080300	JFX080350	JFX080400	JFX080450	JFX080500	JFX080550	JFX080600
9	15	8	JFX090100	JFX090150	JFX090200	JFX090250	JFX090300	JFX090350	JFX090400	JFX090450	JFX090500		
10	15	8	JFX100100	JFX100150	JFX100200	JFX100250	JFX100300	JFX100350	JFX100400	JFX100450	JFX100500	JFX100550	JFX100600
12	17	8	JFX120100	JFX120150	JFX120200	JFX120250	JFX120300	JFX120350	JFX120400	JFX120450	JFX120500	JFX120550	JFX120600
15	20	8	JFX150100	JFX150150	JFX150200	JFX150250	JFX150300	JFX150350	JFX150400	JFX150450	JFX150500	JFX150550	JFX150600

Ø D PIN DIA	Ø H HEAD DIA	K HEAD THK	ITEM NUMBER (LENGTH L)						
			L=650	L=700	L=750	L=800	L=900	L=1000	L=1200
2.5	6	4	JFX025650						
3	6	4	JFX030650	JFX030700					
3.5	7	4	JFX035650	JFX035700	JFX035750				
4	8	6	JFX040650	JFX040700	JFX040750				
4.5	8	6	JFX045650	JFX045700	JFX045750				
5	9	6	JFX050650	JFX050700	JFX050750				
6	10	6	JFX060650	JFX060700	JFX060750	JFX060800			
7	11	6	JFX070650	JFX070700	JFX070750	JFX070800			
8	13	8	JFX080650	JFX080700	JFX080750	JFX080800	JFX080900	JFX0801000	JFX0801200
10	15	8	JFX100650	JFX100700	JFX100750	JFX100800	JFX100900	JFX1001000	JFX1001200
12	17	8	JFX120650	JFX120700	JFX120750	JFX120800	JFX120900	JFX1201000	JFX1201200
15	20	8	JFX150650	JFX150700	JFX150750	JFX150800	JFX150900	JFX1501000	JFX1501200

NOTE: All dimensions are in mm.

JIS TOLERANCES		
PIN DIA Ø D	Ø D	TOL
	1.0 TO 1.5	-0.005 -0.012
	2 TO 15	-0.01 -0.02
HEAD THICK K	THI	TOL
	4	0 -0.020
	6 TO 8	0 -0.030

KEY TO CHART

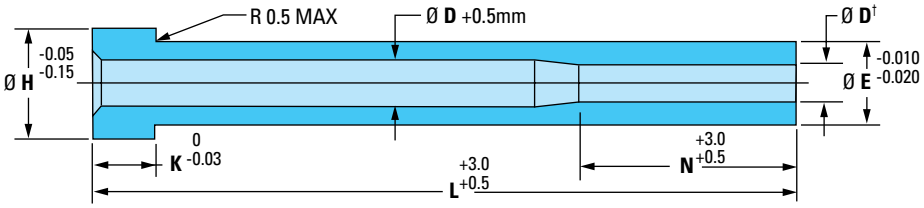
Items in stock

Contact D-M-E for quote

HOW TO ORDER: Use Item Number in charts above for ordering.

JIS Ejector Sleeves

JIS Ejector Sleeves – JFS



INFORMATION KEY:

D = Pin Inner Diameter
E = Pin Body Diameter
H = Head Diameter
K = Head Thickness
L = Length
N = ID Bearing Length
Standard: JIS
Material: SKD61 (H-13)
Surface Treatment: Nitrided
Surface Hardness: 70-72 Rc (HV 1000 ± 100)
Core Hardness: 32 HRC ±2

Ø D† I.D.	Ø E O.D.	Ø H HEAD DIA	K HEAD THK	ITEM NUMBER (LENGTH L)											
				L=80	L=100	L=125	L=150	L=175	L=200	L=225	L=250	L=275	L=300	L=325	L=350
				N=30	N=40		N=50		N=60		N=70			N=80	
1.5	4	8	6	JFS0101	JFS0201	JFS0301									
2.0	4	8	6	JFS0102	JFS0202	JFS0302	JFS0402								
	4.5	8	6		JFS0203	JFS0303	JFS0403								
	5	9	6		JFS0204	JFS0304	JFS0404	JFS0504	JFS0604						
	6	10	6		JFS0205	JFS0305	JFS0405	JFS0505	JFS0605						
2.5	5	9	6		JFS0206	JFS0306	JFS0406	JFS0506	JFS0606	JFS0706					
	6	10	6		JFS0207	JFS0307	JFS0407	JFS0507	JFS0607	JFS0707	JFS0807				
	6.5	11	6		JFS0208	JFS0308	JFS0408	JFS0508	JFS0608	JFS0708	JFS0808				
3.0	5	9	6		JFS0209	JFS0309	JFS0409	JFS0509	JFS0609						
	6	10	6		JFS0210	JFS0310	JFS0410	JFS0510	JFS0610	JFS0710	JFS0810	JFS0910	JFS1010		
	6.5	11	6		JFS0211	JFS0311	JFS0411	JFS0511	JFS0611	JFS0711	JFS0811	JFS0911	JFS1011		
	7	11	6		JFS0212	JFS0312	JFS0412	JFS0512	JFS0612	JFS0712	JFS0812	JFS0912	JFS1012		
3.5	6	10	6		JFS0213	JFS0313	JFS0413	JFS0513	JFS0613	JFS0713	JFS0813				
	6.5	11	6		JFS0214	JFS0314	JFS0414	JFS0514	JFS0614	JFS0714	JFS0814	JFS0914	JFS1014		
	7	11	6		JFS0215	JFS0315	JFS0415	JFS0515	JFS0615	JFS0715	JFS0815	JFS0915	JFS1015	JFS1115	JFS1215
4.0	6	10	6		JFS0216	JFS0316	JFS0416	JFS0516	JFS0616						
	6.5	11	6		JFS0217	JFS0317	JFS0417	JFS0517	JFS0617	JFS0717	JFS0817				
	7	11	6		JFS0218	JFS0318	JFS0418	JFS0518	JFS0618	JFS0718	JFS0818	JFS0918	JFS1018	JFS1118	JFS1218
	8	13	8		JFS0219	JFS0319	JFS0419	JFS0519	JFS0619	JFS0719	JFS0819	JFS0919	JFS1019	JFS1119	JFS1219
4.5	7	11	6		JFS0220	JFS0320	JFS0420	JFS0520	JFS0620	JFS0720	JFS0820				
	8	13	8		JFS0221	JFS0321	JFS0421	JFS0521	JFS0621	JFS0721	JFS0821	JFS0921	JFS1021	JFS1121	JFS1221
5.0	8	13	8		JFS0222	JFS0322	JFS0422	JFS0522	JFS0622	JFS0722	JFS0822	JFS0922	JFS1022	JFS1122	JFS1222
	10	15	8		JFS0223	JFS0323	JFS0423	JFS0523	JFS0623	JFS0723	JFS0823	JFS0923	JFS1023	JFS1123	JFS1223
5.5	8	13	8		JFS0224	JFS0324	JFS0424	JFS0524	JFS0624	JFS0724	JFS0824				
	10	15	8		JFS0225	JFS0325	JFS0425	JFS0525	JFS0625	JFS0725	JFS0825	JFS0925	JFS1025	JFS1125	JFS1225
6.0	10	15	8		JFS0226	JFS0326	JFS0426	JFS0526	JFS0626	JFS0726	JFS0826	JFS0926	JFS1026	JFS1126	JFS1226
	12	17	8		JFS0227	JFS0327	JFS0427	JFS0527	JFS0627	JFS0727	JFS0827	JFS0927	JFS1027	JFS1127	JFS1227
6.5	10	15	8		JFS0228	JFS0328	JFS0428	JFS0528	JFS0628	JFS0728	JFS0828	JFS0928	JFS1028	JFS1128	JFS1228
	12	17	8		JFS0229	JFS0329	JFS0429	JFS0529	JFS0629	JFS0729	JFS0829	JFS0929	JFS1029	JFS1129	JFS1229
8.0	12	17	8		JFS0230	JFS0330	JFS0430	JFS0530	JFS0630	JFS0730	JFS0830	JFS0930	JFS1030	JFS1130	JFS1230
8.5	12	17	8		JFS0231	JFS0331	JFS0431	JFS0531	JFS0631	JFS0731	JFS0831	JFS0931	JFS1031	JFS1131	JFS1231

†JIS TOLERANCES

Ø D I.D.	TOL	Ø E I.D.	TOL
Ø D SLEEVE I.D.	1.5 TO 3	+0.010 0	Ø E SLEEVE I.D. ALL SIZES	-0.010 -0.020
	3.5 TO 5	+0.012 0		
	5.5 TO 8.5	+0.015 0		

NOTE: All dimensions are in mm.

KEY TO CHART

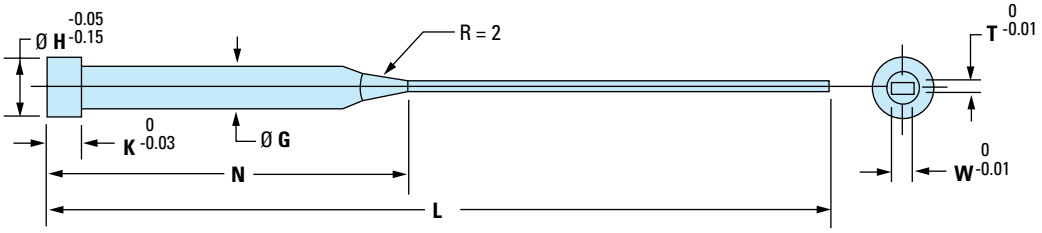
Items in stock

Contact D-M-E for quote

HOW TO ORDER: Use Item Number in charts above for ordering.

JIS Ejector Blades

JIS Ejector Blades – JEB



INFORMATION KEY:
D = Pin Body Diameter
H = Head Diameter
K = Head Thickness
L = Length
N = ID Bearing Length
T = Blade Thickness
W = Blade Width
Material: SKS21
Surface Treatment: Nitrided
Surface Hardness: 58 HRC ±2

K HEAD THICK	Ø H HEAD DIA	Ø D PIN DIA	W BLADE WIDTH	T BLADE THICK	ITEM NUMBER (LENGTH L) L=100 N=40	L=125 N=50	L=150 N=60	L=175 N=70
4	5	2	1.2	0.4	JEB120402	JEB120403		
			1.5	0.4	JEB150402	JEB150403		
				0.5	JEB150502	JEB150503		
	6	2.5	2	0.4	JEB200402	JEB200403		
				0.5	JEB200502	JEB200503		
				0.6	JEB200602	JEB200603		
	7	3.5	3	0.6	JEB350602	JEB350603	JEB350604	
				0.8	JEB350802	JEB350803	JEB350804	
				1.0	JEB351002	JEB351003	JEB351004	
				1.2	JEB351202	JEB351203	JEB351204	
6	8	4		0.6	JEB300602	JEB300603	JEB300604	
				0.8	JEB300802	JEB300803	JEB300804	
				1.0	JEB301002	JEB301003	JEB301004	
				1.2	JEB301202	JEB301203	JEB301204	
	9	5	4	0.8	JEB400802	JEB400803	JEB400804	JEB400805
				1.0	JEB401002	JEB401003	JEB401004	JEB401005
				1.2		JEB401203	JEB401204	JEB401205
				1.5		JEB401503	JEB401504	JEB401505
	10	6	5	0.8		JEB500803	JEB500804	JEB500805
				1.0		JEB501003	JEB501004	JEB501005
				1.2		JEB501203	JEB501204	JEB501205
				1.5		JEB501503	JEB501504	JEB501505
				1.8		JEB501803	JEB501804	JEB501805
				2.0		JEB502003	JEB502004	JEB502005
	11	7	6	0.8		JEB600803	JEB600804	JEB600805
				1.0		JEB601003	JEB601004	JEB601005
				1.2		JEB601203	JEB601204	JEB601205
				1.5		JEB601503	JEB601504	JEB601505
				1.8		JEB601803	JEB601804	JEB601805
				2.0		JEB602003	JEB602004	JEB602005
8	15	10	8	0.8		JEB800803	JEB800804	JEB800805
				1.0		JEB801003	JEB801004	JEB801005
				1.2		JEB801203	JEB801204	JEB801205
				1.5		JEB801503	JEB801504	JEB801505
				1.8		JEB801803	JEB801804	JEB801805
				2.0		JEB802003	JEB802004	JEB802005
	17	12	10	1.0			JEB101004	JEB101005
				1.2			JEB101204	JEB101205
				1.5			JEB101504	JEB101505
				1.8			JEB101804	JEB101805
				2.0			JEB102004	JEB102005

ITEM NUMBER (LENGTH L)		
L=200 N=80	L=250 N=100	L=300 N=120
JEB500806		
JEB501006		
JEB501206		
JEB501506		
JEB501806		
JEB502006		
JEB600806		
JEB601006		
JEB601206		
JEB601506		
JEB601806		
JEB602006		
JEB800806	JEB800808	
JEB801006	JEB801008	JEB801010
JEB801206	JEB801208	JEB801210
JEB801506	JEB801508	JEB801510
JEB801806	JEB801808	JEB801810
JEB802006	JEB802008	JEB802010
JEB101006	JEB101008	JEB101010
JEB101206	JEB101208	JEB101210
JEB101506	JEB101508	JEB101510
JEB101806	JEB101808	JEB101810
JEB102006	JEB102008	JEB102010

KEY TO CHART
Items in stock
Contact D-M-E for quote

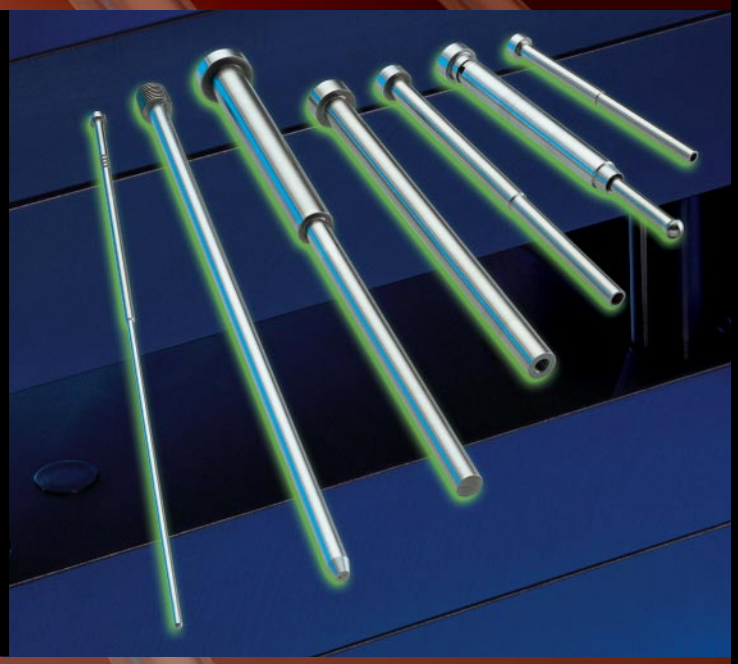
JIS TOLERANCES		
	Ø G	TOL
Ø G PIN DIA	2 TO 2.5	-0.008 -0.018
	3.5 TO 5	-0.010 -0.020
	6 TO 7	-0.015 -0.025
	10 TO 12	-0.020 -0.030

NOTE: All dimensions are in mm.

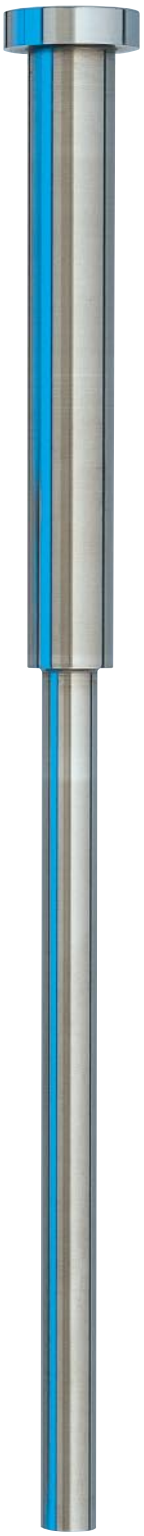
HOW TO ORDER: Use Item Number in charts above for ordering.

D-M-E Special Pins and Sleeves

RAPID DELIVERY,
COST-EFFECTIVE
SOLUTIONS



Pins and Sleeves for Special Applications



Every day, challenging new applications and materials are forcing moldmakers to develop creative new tooling solutions. D-M-E is here to help, with comprehensive capabilities for manufacturing special pins and sleeves – quickly and cost-effectively. We offer a wide range of custom features, including:

- Custom diameters (up to 3") and lengths (up to 72")
- Steps
- Profiles
- Custom shoulders
- O-ring grooves
- Non-standard core hardness
- Flats
- Threaded I.D. or O.D.
- Non-standard materials (non H-13)
- Surface coatings – more than 100 available, including titanium nitriding, chromium, etc.
- And many other options

Quick Custom pins

Our new Quick Custom pins program covers a wide range of custom pin configurations with standard heads in any pin diameter. The D-M-E Quick Custom program includes over 7,500 options (the most common custom pins) and features *immediate pricing and shipment in 5 working days or less*. New applications are being added daily, so please contact D-M-E directly to learn more about the offerings in the Quick Custom program.

Full Custom pins and sleeves

If your needs are more complex, or if you need special sleeves, contact D-M-E for a Full Custom quote. Even when you select a Full Custom pin or sleeve, you still get the industry's *fastest pricing and delivery* at a competitive price.

Industry-leading delivery lead times

You can count on D-M-E delivery for your special pin and sleeve needs. Quick Custom pins *ship in 5 working days or less*. For Full Custom pins and sleeves, your D-M-E representative can provide you with a precise completion date for your project – a date D-M-E guarantees.

Pins and Sleeves for Special Applications

Complex part geometries, thin-wall molding, family molds, high-cavitation molds, increasingly large parts – every day, challenging new applications and materials are forcing moldmakers to develop creative new tooling solutions. D-M-E offers comprehensive capabilities for manufacturing special pins and sleeves – quickly and cost-effectively.

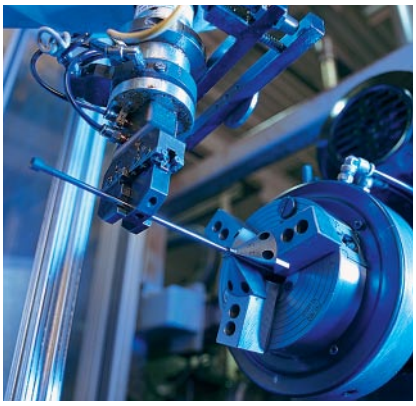
Quality you can count on

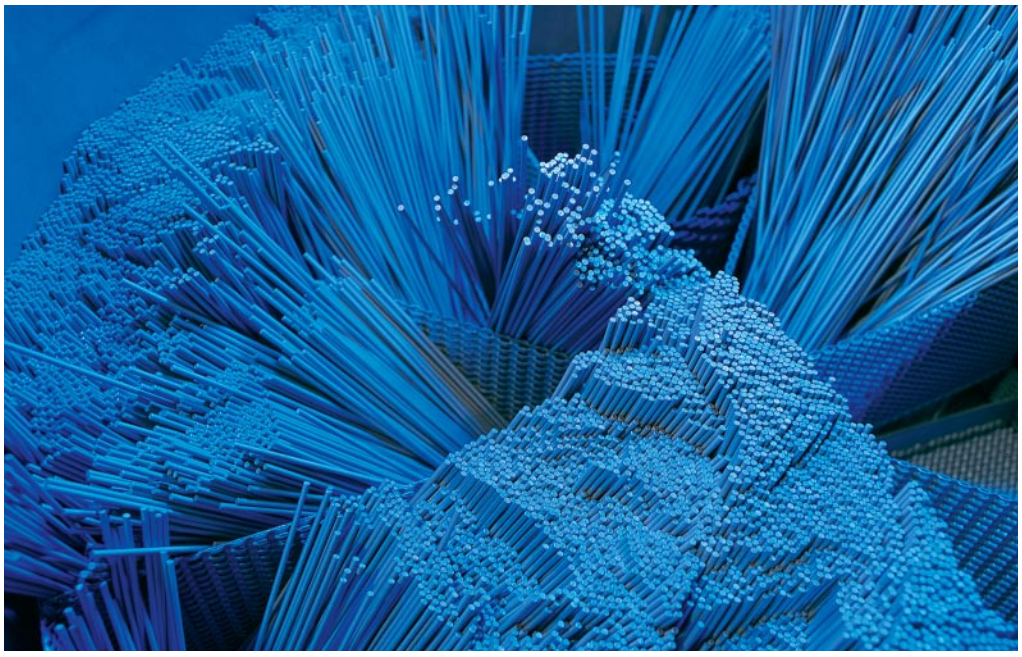
D-M-E starts with only the best materials for its pins and sleeves. Our proprietary hot forging technology and nitriding guarantees the finest finished components. The industry's finest surface finish provides low-friction performance for long service life.

Need innovation? Choose D-M-E.

For over seven decades, moldmakers, molders and designers have trusted D-M-E for innovative, reliable solutions to their needs. Nobody beats D-M-E for quality products, quality service and quick delivery. D-M-E delivers your special pin and sleeve needs.







D-M-E Quick Custom Pins





Cover a wide range of applications with shipment in 5 working days or less

D-M-E's Quick Custom series of pins meet the needs of many common special pin applications – with the shortest lead time in the industry. The Quick Custom pins program covers an extensive collection of our most frequently requested special pins. To see if your application is offered in the D-M-E Quick Custom pin program, just check the list below. Then contact D-M-E and we can quote your application and take your order immediately.

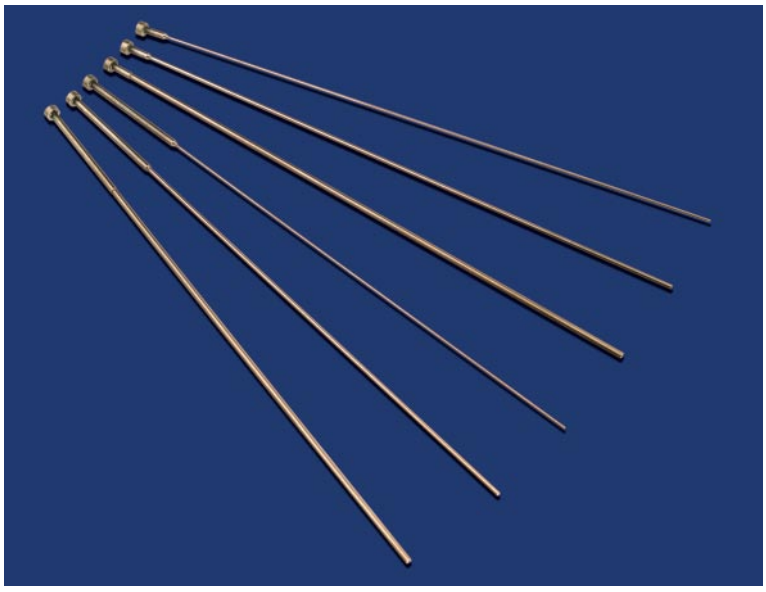
Straight pins

- L dimensions from 2" to 14" (overall length)
- Ø D dimensions from .0320" to 1" (pin diameter)
- All standard H dimensions (head diameter)
- All standard K dimensions (head thickness)
- H-13 material
  - Standard D-M-E C pin material
  - Standard D-M-E CX pin material
  - Standard D-M-E EX pin material
  - Standard D-M-E THX pin material

Step pins

- E dimension of .125" (shoulder diameter)
- All standard H dimensions (head diameter)
- All standard K dimensions (head thickness)
- S dimensions – standard 1/2" or 2", or customer specified shoulder length
- L dimensions from 2" to 14" (overall length)
- Ø D dimensions from .0320" to .1094" (pin diameter)
- H-13 material
  - Standard D-M-E C pin material
  - Standard D-M-E CX pin material
  - Standard D-M-E EX pin material
  - Standard D-M-E THX pin material





Quick Custom Pins – Faxable Quote Form

QUOTE FAX HOTLINES or visit www.dme.net

United States: 888-808-4363 • Canada: 800-461-9965 • International: 248-398-7394

Custom Pins

Quantity: _____

Choose a pin type:

- ☐ **EX** (35 HRC - 43 HRC core hardness with 65 HRC - 70 HRC case hardness)
- ☐ **THX** (50 HRC - 55 HRC core hardness with 65 HRC - 70 HRC case hardness)
- ☐ **CX** (50 HRC - 55 HRC through hard)
- ☐ **C** (30 HRC - 35 HRC through hard)

Material H-13 ☐

Other _____

Hardness _____RC

Nitrided Yes ☐ No ☐

Comments _____

_____

Custom Sleeves

Quantity: _____

☐ Nitride on OD

☐ Nitride on OD + ID

Material H-13 ☐

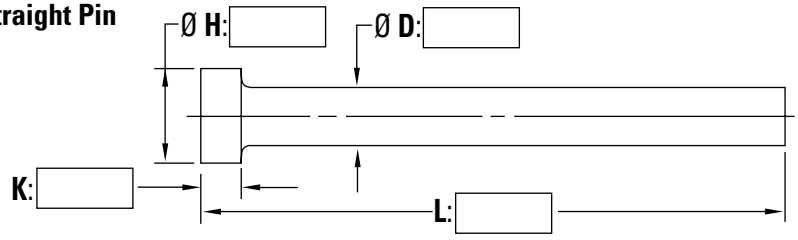
Other _____

Hardness _____RC

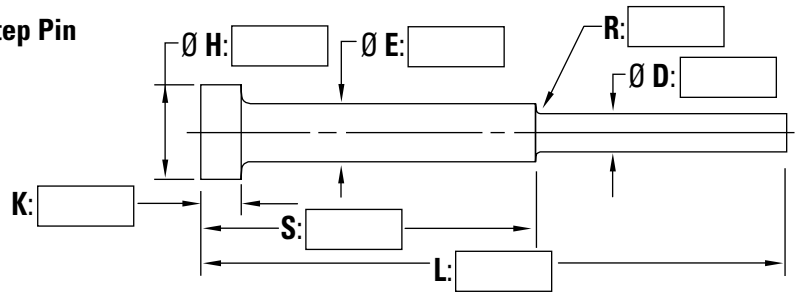
Comments _____

_____

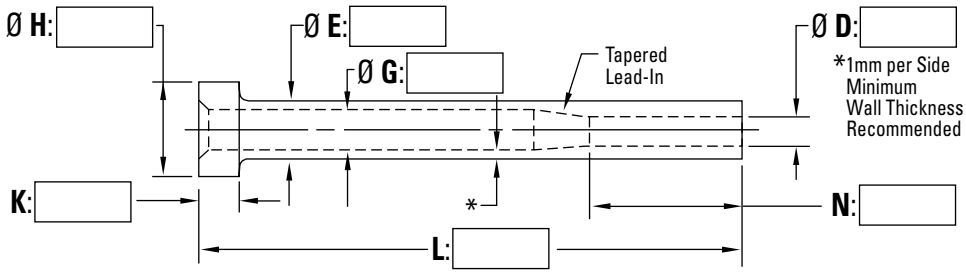
Straight Pin



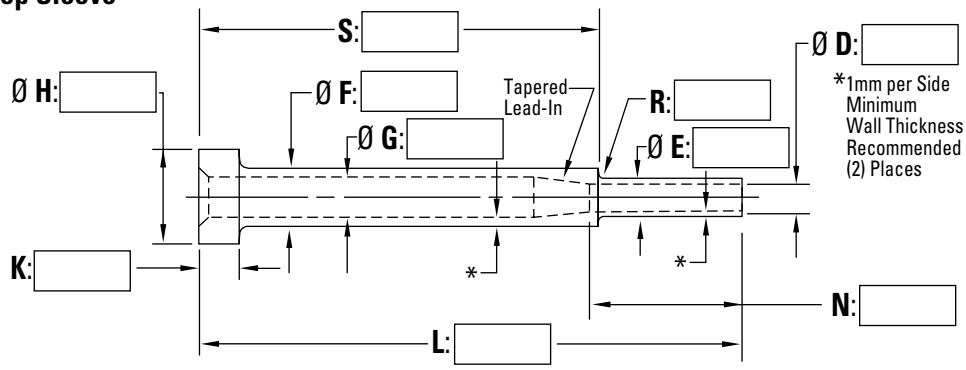
Step Pin



Sleeve



Step Sleeve



Company name: _____ **D-M-E account #:** _____

Contact name: _____ **P.O. #:** _____

Phone: _____ **FAX:** _____

Address: _____ **E-mail:** _____

City: _____ **State/Province:** _____

ZIP/Postal Code: _____ **Country:** _____

Shipping method:

- ☐ **UPS Ground**
- ☐ **UPS 2nd Day Air**
- ☐ **UPS Next Day**
- ☐ **FedEx**
- ☐ **Other**_____

D-M-E Ejector and Core Pin Diameters Table

PIN DIA	FRACTION OR METRIC SIZE	EJECTOR		CORE	
		ITEM NUMBER	STANDARD LENGTHS: inch or mm	ITEM NUMBER	LENGTHS: inch or mm
.0312	1/32	EX2-1/2 SH	6	—	—
.0312	1/32	EX2 (2 SH)	6	—	—
.0315	0.8MM	EC-0.8	80, 100, 125, 160	—	—
.0354	0.9MM	EC-0.9	80, 100, 125, 160	—	—
.0362	1/32 OS	EX2-1/2 SH OS	6	—	—
.0362	1/32 OS	EX2 OS (2SH)	6	—	—
.0394	1MM	EC-1	80, 100, 125, 160, 200	—	—
.0394	1.1MM	JFX-010	100, 150	—	—
.0433	3/64	EC-1.1	80, 100, 125, 160	—	—
.0469	3/64	EX3 NS	6	—	—
.0469	3/64	EX3-1/2 SH	6, 10, 14	—	—
.0469	3/64	EX3 (2SH)	6, 10, 14	—	—
.0469	1.2MM	THX03	6	—	—
.0469	1.3MM	EC-1.2	80, 100, 125, 160	—	—
.0472	3/64 OS	EC-1.3	80, 100, 125, 160	—	—
.0512	3/64 OS	EX3 NS OS	6	—	—
.0519	3/64 OS	EX3-1/2 SH OS	10	—	—
.0519	3/64 OS	EX3 OS (2 SH)	10	—	—
.0519	1.4MM	THX03 OS	6	—	—
.0519	1.5MM	EC-1.4	80, 100, 125, 160	—	—
.0551	1.5MM	EC-1.5	80, 100, 125, 160, 200, 250	AH-1.5	100, 125, 160
.0591	1/16	JFX-015	100, 150, 200	—	—
.0591	1/16	EX5 NS	6	—	—
.0625	1/16	EX5-1/2 SH	6, 10, 14	—	—
.0625	1/16	EX5 (2 SH)	6, 10, 14	—	—
.0625	1/16	THX05	6	—	—
.0625	1/16	CT5 NS	6	—	—
.0625	1/16	CT5 (2 SH)	6	—	—
.0630	1.6MM	EC-1.6	80, 100, 125, 160, 200	AH-1.6	40, 60, 80, 100, 125, 160, 200
.0669	1.7MM	EC-1.7	80, 100, 125, 160, 200	—	—
.0675	1/16 OS	EX5 NS OS	6	—	—
.0675	1/16 OS	EX5-1/2 SH OS	10	—	—
.0675	1/16 OS	EX5 OS (2 SH)	10	—	—
.0675	1/16 OS	THX05 OS	6	—	—
.0709	1.8MM	EC-1.8	80, 100, 125, 160, 200	—	—
.0748	1.9MM	EC-1.9	80, 100, 125, 160, 200	—	—
.0781	5/64	EX6 NS	6, 10	—	—
.0781	5/64	EX6-1/2 SH	6, 10, 14	—	—
.0781	5/64	EX6 (2 SH)	6, 10, 14	—	—
.0781	5/64	THX06	6, 10	—	—
.0781	5/64	CT6 NS	6	—	—
.0781	5/64	CT6 (2 SH)	6	—	—
.0787	2MM	E-2	160, 250	AH-2	40, 60, 80, 100, 125, 160, 200, 250
.0787	2MM	EC-2	80, 100, 125, 160, 200, 250	—	—
.0787	2MM	JFX-020	100, 150, 200, 250	—	—
.0831	5/64 OS	EX6 NS OS	10	—	—
.0831	5/64 OS	EX6-1/2 SH OS	10	—	—
.0831	5/64 OS	EX6 OS (2 SH)	10	—	—
.0831	5/64 OS	THX06 OS	10	—	—
.0866	2.2MM	E-2.2	160	AH-2.2	100, 125, 160, 200, 250
.0866	2.2MM	EC-2.2	80, 100, 125, 160, 200	—	—
.0938	3/32	EX7 NS	6, 10	C/CX-7	3, 6, 10
.0938	3/32	EX7-1/2 SH	6, 10, 14	—	—
.0938	3/32	EX7 (2 SH)	6, 10, 14	—	—
.0938	3/32	THX07	6, 10	—	—
.0938	3/32	CT7 NS	6	—	—
.0938	3/32	CT7 (2 SH)	6	—	—
.0984	2.5MM	E-2.5	160, 250, 315	AH-2.5	40, 60, 80, 100, 125, 160, 200, 250
.0984	2.5MM	EC-2.5	100, 125, 160, 200, 250	—	—
.0984	2.5MM	JFX-025	100 THROUGH 650	—	—
.0988	3/32 OS	EX7 NS OS	6, 10	—	—
.0988	3/32 OS	EX7-1/2 SH OS	10	—	—
.0988	3/32 OS	EX7 OS (2 SH)	10	—	—
.0988	3/32 OS	THX07 OS	6, 10	—	—
.1063	2.7MM	E-27	160	—	—
.1094	7/64	EX8 NS	6, 10	C/CX-8	3, 6, 10
.1094	7/64	EX8-1/2 SH	6, 10, 14	—	—
.1094	7/64	EX8 (2 SH)	6, 10	—	—
.1094	7/64	THX08	6, 10	—	—
.1094	7/64	CT8 NS	6	—	—
.1094	7/64	CT8 (2 SH)	6	—	—
.1144	7/64 OS	EX8 NS OS	10	—	—
.1144	7/64 OS	EX8-1/2 SH OS	10	—	—
.1144	7/64 OS	THX08 OS	10	—	—
.1181	3MM	E-3	160, 250, 315, 400, 500	AH-3	40, 60, 80, 100, 125, 160, 200, 250
.1181	3MM	JFX-030	100 THROUGH 700	AHX-3	100, 200, 315
.125	1/8	EX9	6, 10, 14	C/CX-9	3, 6, 10, 14

Description of Pin Abbreviations:

1/2 SH = 1/2" Shoulder

2 SH = 2" Shoulder

NS = No Shoulder

THX = No Shoulder

OS = Oversize

Ejector Pins – INCH:

EX = Hotwork Ejector Pins

THX = Through-Hardened Ejector Pins

CT = Close-Tolerance Through-Hardened Ejector Pins

Ejector Pins – DIN:

E = DIN Ejector Pins

EC = DIN Ejector Pins; Shoulder

JFX = DIN Ejector Pins; JIS Standard

Core Pins – INCH & DIN:

C = Core Pins; Standard Hardness

CX = Core Pins; High Hardness

AHX = DIN Core Pins; Standard Through-Hardened

AH = DIN Core Pins; High Through-Hardened

D-M-E Ejector and Core Pin Diameters Table

PIN DIA	FRACTION OR METRIC SIZE	EJECTOR		CORE	
		ITEM NUMBER	STANDARD LENGTHS: inch or mm	ITEM NUMBER	LENGTHS: inch or mm
.125	1/8	THX09	6, 10, 14	—	—
.125	1/8	CT9	6	—	—
.1260	3.2MM	E-3.2	160, 250, 315, 400	AH-3.2	100, 125, 160, 200, 250
.130	1/8 OS	EX9 OS	6, 10, 14	—	—
.130	1/8 OS	THX09 OS	6, 10, 14	—	—
.1378	3.5MM	E-3.5	160, 250, 315, 400	AH-3.5	100, 125, 160, 200, 250
.1378	3.5MM	JFX-035	100 THROUGH 750	—	—
.1406	9/64	EX10	10, 14	C/CX-10	3, 6, 10, 14
.1406	9/64	THX10	10, 14	—	—
.1456	9/64 OS	EX10 OS	10	—	—
.1456	9/64 OS	THX10 OS	10	—	—
.1457	3.7MM	E-3.7	160, 250, 315, 400	AH-3.7	100, 125, 160, 200, 250
.1562	5/32	EX11	6, 10, 14, 18	C/CX-11	3, 6, 10 14
.1562	5/32	THX11	6, 10, 14	—	—
.1562	5/32	CT11	6	—	—
.1575	4MM	E-4	160, 250, 315, 400, 500	AH-4	40, 60, 80, 100, 125, 160, 200, 250, 315
.1575	4MM	JFX-040	100 THROUGH 750	AHX-4	100, 200, 315
.1612	5/32 OS	EX11 OS	6, 10, 14	—	—
.1612	5/32 OS	THX11 OS	6, 10, 14	—	—
.1654	4.2MM	E-4.2	160, 250, 315, 400	AH-4.2C/ CX-12	100, 125, 160, 200, 250, 315
.1719	11/64	EX12	10, 14	—	3, 6, 10, 14
.1719	11/64	THX12	10, 14	—	—
.1769	11/64 OS	EX12 OS	10	—	—
.1769	11/64 OS	THX12 OS	10	AH-4.5	—
.1772	4.5MM	E-4.5	160, 250, 315, 400	—	100, 125, 160, 200
.1772	4.5MM	JFX-045	100 THROUGH 750	C/CX-13	—
.1875	3/16	EX13	6, 10, 14, 18, 25	—	3, 6, 10, 14
.1875	3/16	THX13	6, 10, 14	—	—
.1925	3/16 OS	EX13 OS	6, 10, 14	—	—
.1925	3/16 OS	THX13 OS	6, 10, 14	AH-5	—
.1969	5MM	E-5	160, 250, 315, 400, 500, 630	AHX-5	40, 60, 80, 100, 125, 160 200, 250, 315
.1969	5MM	JFX-050	100 THROUGH 750	C/CX-14	100, 200, 315
.2031	13/64	EX14	10, 14	—	3, 6, 10, 14
.2031	13/64	THX14	10, 14	AH-5.2	—
.2047	5.2MM	E-5.2	160, 250, 315, 400, 500	—	100, 125, 160, 200, 250, 315
.2081	13/64 OS	EX14 OS	10	—	—
.2081	13/64 OS	THX14 OS	10	—	—
.2165	5.5MM	E-5.5	160, 250, 315, 400, 500	AH-5.5	—
.2165	5.5MM	JFX-055	100 THROUGH 600	C/CX-15	100, 125, 160, 200
.2188	7/32	EX15	6, 10, 14, 25	—	3, 6, 10, 14
.2188	7/32	THX15	6, 10, 14	—	—
.2238	7/32 OS	EX15 OS	6, 10, 14	—	—
.2238	7/32 OS	THX15 OS	6, 10, 14	—	—
.2344	15/64	EX16	10, 14	—	—
.2344	15/64	THX16	10, 14	AH-6	—
.2362	6MM	E-6	160, 250, 315, 400, 500, 630	AHX-6	40, 60, 80, 100, 125, 160, 200, 250, 315
.2362	6MM	JFX-060	100 THROUGH 800	—	100, 200, 315
.2394	15/64 OS	EX16 OS	10	—	—
.2394	15/64 OS	THX16 OS	10	—	—
.2441	6.2MM	E-6.2	160, 250, 315, 400, 500	AH-6.2	100, 125, 160, 200, 250, 315
.250	1/4	EX17	6, 10, 14, 18, 25	C/CX-17	3, 6, 10, 14
.250	1/4	THX17	6, 10, 14, 18	—	—
.255	1/4 OS	EX17 OS	6, 10, 14, 18	—	—
.255	1/4 OS	THX17 OS	6, 10, 14	—	—
.2559	6.5MM	E-6.5	160, 250, 315, 400, 500	AH-6.5	100, 125, 160, 200, 250
.2559	6.5MM	JFX-065	100 THROUGH 600	—	—
.2656	17/64	EX18	10, 14, 25	—	—
.2656	17/64	THX18	10, 14	—	—
.2706	17/64 OS	EX18 OS	10	—	—
.2706	17/64 OS	THX18 OS	10	—	—
.2756	7MM	E-7	160, 250, 315, 400, 500	AH-7	100, 125, 160, 200, 250
.2756	7MM	JFX-070	100 THROUGH 800	—	—
.2812	9/32	EX19	6, 10, 14, 18, 25	C/CX-19	3, 6, 10, 14
.2812	9/32	THX19	6, 10, 14	—	—
.2862	9/32 OS	EX19 OS	6, 10, 14	—	—
.2862	9/32 OS	THX19 OS	6, 10, 14	—	—
.2969	19/64	EX20	10, 14	—	—
.2969	19/64	THX20	10, 14	—	—
.3019	19/64 OS	EX20 OS	10	—	—
.3019	19/64 OS	THX20 OS	10	—	—
.3125	5/16	EX21	6, 10, 14, 18, 25	C/CX-21	3, 6, 10, 14
.3125	5/16	THX21	6, 10, 14, 18	—	—
.3150	8MM	E-8	160, 250, 315, 400, 500, 630, 800	AH-8	60, 80, 100, 125, 160, 200, 250, 315
.3150	8MM	JFX-080	100 THROUGH 1200	AHX-8	100, 200, 315
.3175	5/16 OS	EX21 OS	6, 10, 14, 18	—	—
.3175	5/16 OS	THX21 OS	6, 10, 14	—	—
.3228	8.2MM	E-8.2	160, 250, 315, 400, 500, 630	AH-8.2	100, 125, 160, 200, 250, 315
.3281	21/64	EX22	10, 14, 25	—	—
.3281	21/64	THX22	10, 14	—	—
.3331	21/64 OS	EX22 OS	10	—	—
.3331	21/64 OS	THX22 OS	10	—	—
.3346	8.5MM	E-8.5	160, 250, 315, 400, 500, 630	—	—
.3438	11/32	EX23	6, 10, 14, 25	C/CX-23	3, 6, 10, 14
.3438	11/32	THX23	6, 10, 14	—	—
.3488	11/32 OS	EX23 OS	10, 14	—	—
.3488	11/32 OS	THX23 OS	10, 14	—	—
.3543	9MM	E-9	160, 250, 315, 400, 500, 630	—	—
.3543	9MM	JFX-090	100 THROUGH 500	—	—
.3594	23/64	EX24	10, 14	—	—
.3594	23/64	THX24	10, 14	—	—
.3644	23/64 OS	EX24 OS	10	—	—
.3644	23/64 OS	THX24 OS	10	—	—
.375	3/8	EX25	6, 10, 14, 18, 25, 36	C/CX-25	3, 6, 10, 14
.375	3/8	THX25	6, 10, 14, 18	—	—
.380	3/8 OS	EX25 OS	6, 10, 14, 18	—	—
.380	3/8 OS	THX25 OS	6, 10, 14	—	—
.3906	25/64	EX26	10	—	—

D-M-E Ejector and Core Pin Diameters Table

PIN DIA	FRACTION OR METRIC SIZE	EJECTOR		CORE	
		ITEM NUMBER	STANDARD LENGTHS: inch or mm	ITEM NUMBER	LENGTHS: inch or mm
.3906	25/64	THX26	10	—	—
.3937	10MM	E-10	160, 250, 315, 400, 500, 630, 800, 1000	AH-10	80, 100, 125, 160, 200, 250, 315
.3937	10MM	JFX-100	100 THROUGH 1200	AHX-10	100, 200, 315
.3956	25/64 OS	EX26 OS	10	—	—
.3956	25/64 OS	THX26 OS	10	—	—
.4016	10.2MM	E-10.2	160, 250, 315, 400, 500, 630	AH-10.2	100, 125, 160, 200, 250, 315
.4062	13/32	EX27	6, 10, 14, 18, 25	C/CX-27	3, 6, 10, 14
.4062	13/32	THX27	6, 10, 14	—	—
.4112	13/32 OS	EX27 OS	10, 14	—	—
.4112	13/32 OS	THX27 OS	10, 14	—	—
.4134	10.5MM	E-10.5	160, 250, 315, 400, 500, 630	AH-10.5	100, 125, 160, 200, 250, 315
.4219	27/64	EX28	10	—	—
.4219	27/64	THX28	10	—	—
.4269	27/64 OS	EX28 OS	10	—	—
.4269	27/64 OS	THX28 OS	10	—	—
.4331	11MM	E-11	160, 250, 315, 400, 500, 630	—	—
.4375	7/16	EX29	6, 10, 14, 18, 25, 36	C/CX-29	3, 6, 10, 14
.4375	7/16	THX29	6, 10, 14	—	—
.4425	7/16 OS	EX29 OS	6, 10, 14	—	—
.4425	7/16 OS	THX29 OS	6, 10, 14	—	—
.4531	29/64	EX30	10	—	—
.4531	29/64	THX30	10	—	—
.4581	29/64 OS	EX30 OS	10	—	—
.4581	29/64 OS	THX30 OS	10	—	—
.4688	15/32	EX31	6, 10, 14, 18, 25		3, 6, 10, 14
.4688	15/32	THX31	6, 10, 14	—	—
.4724	12MM	EX-12	160, 250, 315, 400, 500, 630	C/CX-31	80, 100, 125, 160, 200, 250, 315
.4724	12MM	JFX-120	100 THROUGH 1200	AH-12	100, 200, 315
.4738	15/32 OS	EX31 OS	10	—	—
.4803	12.2MM	E-12.2E	160, 250, 315, 400	—	—
.4844	31/64	X32	10, 14	—	—
.4844	31/64	THX32	10, 14	—	—
.4894	31/64 OS	EX32 OS	10	—	—
.4894	31/64 OS	THX32 OS	10	—	—
.4921	12.5MM	E-12.5	160, 250, 315, 400, 500, 630, 800	AH-12.5	100, 125, 160, 200, 250, 315
.500	1/2	EX33	6, 10 14, 18, 25, 36	C/CX-33	3, 6, 10, 14
.500	1/2	THX33	6, 10, 14, 18	—	—
.505	1/2 OS	EX33 OS	10, 14	—	—
.505	1/2 OS	THX33 OS	10, 14	—	—
.5312	17/32	EX34	6, 10, 14	—	—
.5312	17/32	THX34	6, 10, 14	—	—
.5512	14MM	E-14	160, 250, 315, 400, 500, 630, 800, 1000	AH-14	100, 125, 160, 200, 250, 315
.5625	9/16	EX35	6, 10, 14, 18, 25	C/CX-35	6, 10, 14
.5625	9/16	THX35	6, 10, 14	—	—
.5906	15MM	JFX-150	100 THROUGH 1200	—	—
.625	5/8	EX37	6, 10, 14, 18, 25, 36	C/CX-37	6, 10, 14
.625	5/8	THX37	6, 10, 14, 18	—	—
.6299	16MM	E-16	160, 250, 315, 400, 500, 630, 800, 1000	AH-16	100, 125, 160, 200, 250, 315
.6875	11/16	EX39	6, 10, 14, 18, 25	—	—
.6875	11/16	THX39	6, 10, 14	—	—
.7087	18MM	E-18	160, 250, 315, 400, 500, 630	—	—
.750	3/4	EX41	6, 10, 14, 18, 25, 36	C/CX-41	6, 10, 14
.750	3/4	THX41	6, 10, 14, 18	—	—
.7874	20MM	E-20	160, 250, 315, 400, 500, 630, 800, 1000	—	—
.875	7/8	EX45	6, 10, 14, 18, 25	—	—
.875	7/8	THX45	6, 10, 14	—	—
.9843	25MM	E-25	250, 315, 400, 500, 630, 800, 1000	—	—
1.000	1"	EX47	6, 10, 14, 18, 25, 36	—	—
1.000	1"	THX47	10, 14, 18	—	—
1.2598	32MM	E-32	250, 315, 400, 500, 630, 800, 1000	—	—

Description of Pin Abbreviations:

1/2 SH = 1/2" Shoulder

2 SH = 2" Shoulder

NS = No Shoulder

THX = No Shoulder

OS = Oversize

Ejector Pins – INCH:

EX = Hotwork Ejector Pins

THX = Through-Hardened Ejector Pins

CT = Close-Tolerance Through-Hardened Ejector Pins

Ejector Pins – DIN:

E = DIN Ejector Pins

EC = DIN Ejector Pins; Shoulder

JFX = DIN Ejector Pins; JIS Standard

Core Pins – INCH & DIN:

C = Core Pins; Standard Hardness

CX = Core Pins; High Hardness

AHX = DIN Core Pins; Standard Through-Hardened

AH = DIN Core Pins; High Through-Hardened

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

D-M-E Mold Assembly

Standardized components for specialized mold assembly



BELLEVILLE WASHERS

DOWEL PINS





HOIST RINGS

LOCK WASHERS

METRIC SET SCREWS



SOCKET HEAD CAP SCREWS



SOCKET HEAD STRIPPER BOLTS



SPRINGS



TUBULAR DOWELS



TUBULAR DOWEL WASHERS

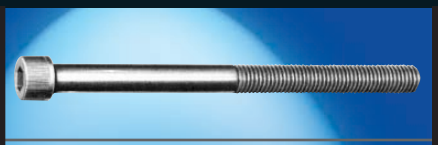


D-M-E

Every step of the way

Mold Assembly

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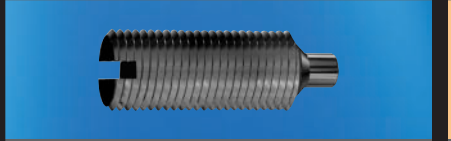
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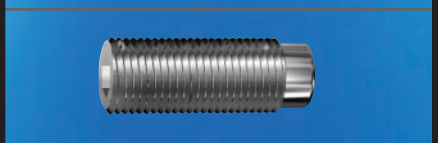
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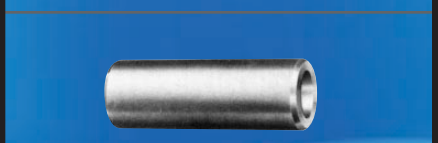
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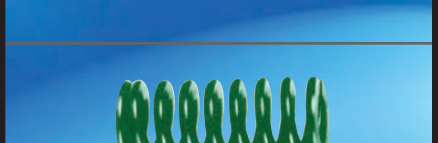
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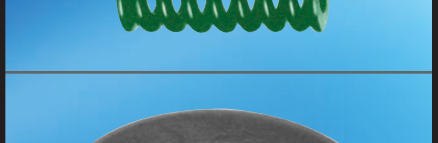
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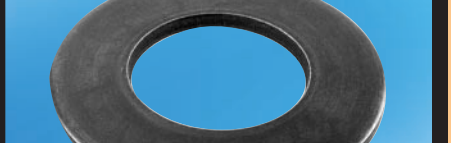
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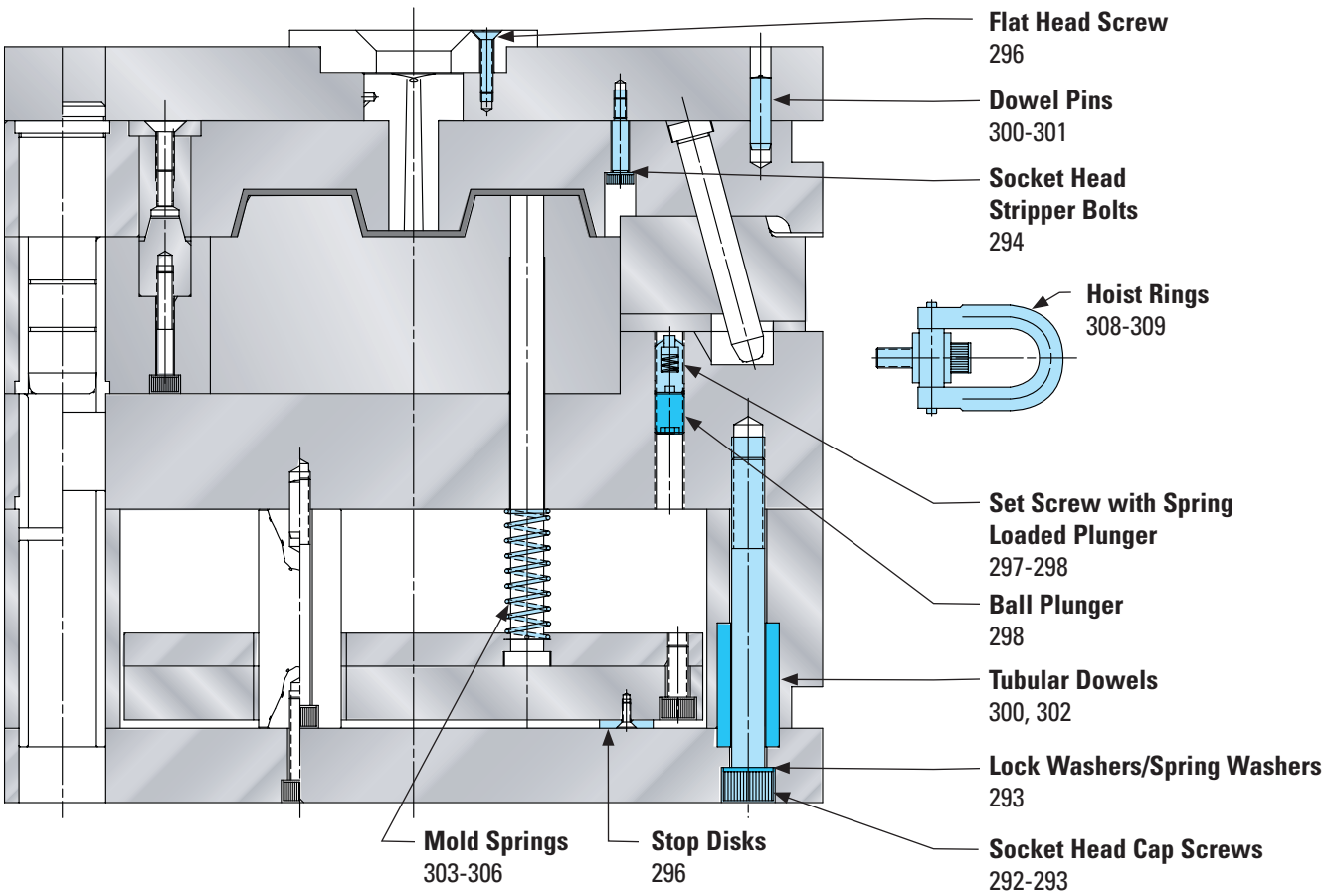


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Online Price Guide

Go to www.dme.net/prices for the latest pricing guide.

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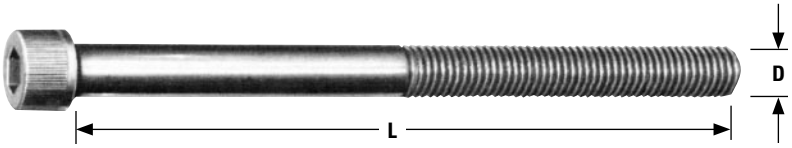
APPENDICES

MIN. RECOMMENDED ADDITIONAL SHCS 312-313

Socket Head Cap Screws – Inch

Up to 12" Long

High-grade alloy steel, heat treated to 38-45 HRC.
Tensile strength: 180,000 psi minimum.



D = DIAMETER OF SCREWS													
		NO. 6	NO. 8	NO. 10	1/4	5/16	3/8	1/2	5/8	3/4	1		
DECIMAL EQUIVALENT		.138	.164	.190	.250	.3125	.375	.500	.625	.750	1.000	DECIMAL EQUIVALENT	
THREADS PER INCH NATIONAL COARSE		32	32	24	20	18	16	13	11	10	8	THREADS PER INCH NATIONAL COARSE	
L = LENGTH UNDER THE HEAD	1/4	●	●									1/4	L = LENGTH UNDER THE HEAD
	3/8	●	●	●	●	●						3/8	
	1/2	●	●	●	●	●	●	●				1/2	
	5/8	●	●	●	●	●	●	●				5/8	
	3/4	●	●	●	●	●	●	●				3/4	
	7/8	●	●	●	●	●	●	●				7/8	
	1	●	●	●	●	●	●	●	●			1	
	1 1/4		●	●	●	●	●	●	●			1 1/4	
	1 1/2		●	●	●	●	●	●	●			1 1/2	
	1 3/4			●	●	●	●	●	●			1 3/4	
	2			●	●	●	●	●	●	●	●	2	
	2 1/4				●	●	●	●	●	●		2 1/4	
	2 1/2				●	●	●	●	●	●	●	2 1/2	
	2 3/4				●	●	●	●	●	●		2 3/4	
	3				●	●	●	●	●	●	●	3	
	3 1/4					●	●	●	●	●		3 1/4	
	3 1/2					●	●	●	●	●	●	3 1/2	
	4						●	●	●	●	●	4	
	4 1/2						●	●	●	●		4 1/2	
	5						●	●	●	●	●	5	
	5 1/4							●				5 1/4	
	5 1/2							●	●	●	●	5 1/2	
	5 3/4							●				5 3/4	
	6						●	●	●	●	●	6	
	6 1/2							●	●	●	●	6 1/2	
	7							●	●	●	●	7	
	7 1/2							●	●			7 1/2	
	8							●	●	●	●	8	
	9							●				9	
	10							●	●	●		10	
	12							●	●	●		12	
MAX HEAD DIAMETER		.226	.270	5/16	3/8	15/32	9/16	3/4	5/16	1 1/8	1 1/2	MAX HEAD DIAMETER	
MAX HEAD HEIGHT		.138	.164	.190	1/4	5/16	3/8	1/2	5/8	3/4	1	MAX HEAD HEIGHT	
SIZE OF HEX HOLE		7/64	9/64	5/32	3/16	1/4	5/16	3/8	1/2	5/8	3/4	SIZE OF HEX HOLE	

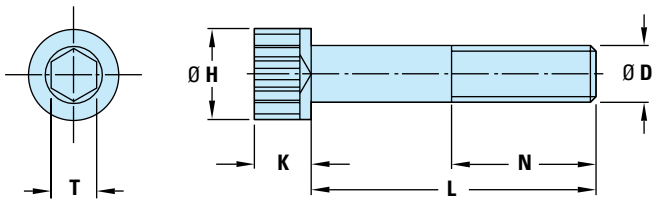
● = in stock

Socket Head Cap Screws – Metric
Lock Washers (Spring Washers) – Metric

Socket Head Cap Screws – M

Tornillos cabeza allen | Parafuso de cabeça sextavada | Vis 6-pans téte cylindrique | Zylinderkopfschrauben

INFORMATION KEY:
D = Thread Diameter
H = Head Diameter
K = Head Height
L = Length
N = Thread Length
T = Hex Socket Size (Across Flats)
Standard: DIN 912-12.9
Material: Per DIN Specification
Dimensions: Shown in Millimeters (mm)



D	N	H	K	T	L																							
					8	10	12	16	20	25	30	40	50	60	70	80	90	100	110	120	130	140	150	160	180	200	220	240	260
M4	12	7	4	3		■			■		■																	
M6	18	10	6	5	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■				■					
M8	22	13	8	6		■	■	■	■	■	■	■	■	■	■	⚡		⚡		⚡				■	■				
M10	25	16	10	8			■	■	■	⚡	⚡	■	■	■	■	⚡	■	■	⚡	⚡	⚡		⚡	⚡	■	■	■	■	■
M12	28	18	12	10					■	■	⚡	■	■	■	■	⚡	■	⚡	■	⚡	⚡	⚡	⚡	⚡	⚡	⚡	■	■	■
M16	38	24	16	14							■	■	⚡	■	■	⚡	■	⚡	■	⚡						■	■	■	■
M16	44	24	16	14																	⚡	⚡	⚡	⚡	⚡				
M16	57	21	10	14																						⚡	■	⚡	■
M20	52	30	20	17																						■	■	■	■
M20	65	30	20	17										■						■		■	■	■	■				

HOW TO ORDER: Specify D diameter and L length. Include zeros as shown, but omit all spaces (spaces are only shown here for easier reading).

D **L**

Example:
D L
M6 30

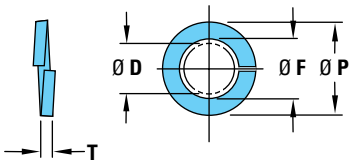
Example:
D L
M20 200

KEY TO CHART
⚡ **Items in stock**
2-3 week delivery
Contact D-M-E for quote

Lock Washers/Spring Washers – R54

Rondanas de Presion | Freios | Rondelles de retenue | Sicherungsscheibe (Federscheibe)

INFORMATION KEY:
D = For Screw Diameter
F = Inside Diameter
P = Outside Diameter
T = Thickness
Standard: DIN 7980
Material: Per DIN Specification
Dimensions: Shown in Millimeters (mm)



ITEM NUMBER	D	F	P	T	AVAILABILITY
R54 08 2	08	8.1	12.7	2.0	⚡
R54 10 2,5	10	10.2	16	2.5	⚡
R54 12 2,5	12	12.5	18	2.5	⚡

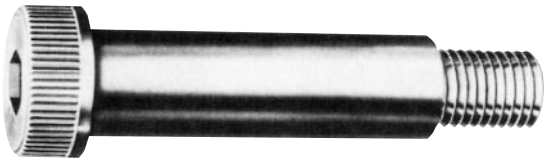
HOW TO ORDER: Specify Item Number. Include zeros and commas but omit decimals and all spaces (spaces are only shown here for easier reading).

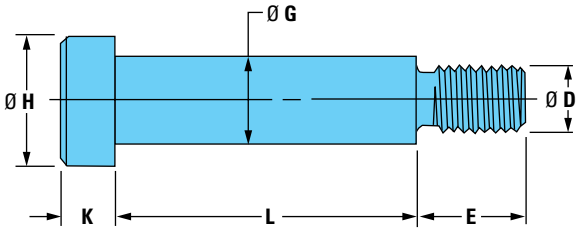
KEY TO CHART
⚡ **Items in stock**
2-3 week delivery
Contact D-M-E for quote

Socket Head Stripper Bolts – Inch
Keys and Key Kits – Inch

Socket Head Stripper Bolts

These Socket Head Stripper Bolts (Shoulder Screws) are made from high-grade alloy steel, heat treated to 36 HRC minimum. Tensile strength: 160,000 psi.





- Concentricity between diameters G and H is within .005" T.I.R.
- Tolerance of Ø G is $^{-.002}_{-.004}$

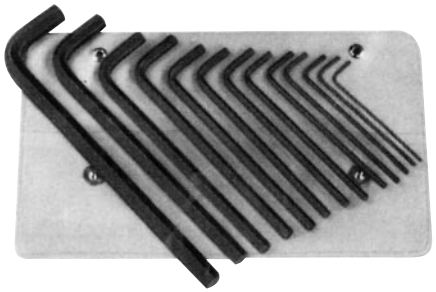
G SHOULDER DIAMETER	1/4	5/16	3/8	1/2	5/8	3/4
D THREAD	NO. 10-24	1/4-20	5/16-18	3/8-16	1/2-13	5/8-11
E THREAD LENGTH	3/8	7/16	1/2	5/8	3/4	7/8
H HEAD DIAMETER	3/8 +.000 -.018	7/16 +.000 -.019	9/16 +.000 -.019	3/4 +.000 -.021	7/8 +.000 -.022	1" +.000 -.023
K HEAD HEIGHT	3/16 +.000 -.006	7/32 +.000 -.006	1/4 +.000 -.006	5/16 +.000 -.006	3/8 +.000 -.007	1/2 +.000 -.008
HEX HOLE ACROSS FLATS	1/8	5/32	3/16	1/4	5/16	3/8

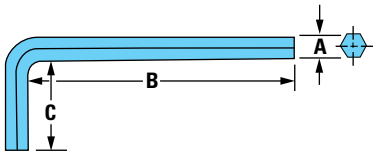
L SHOULDER LENGTH	SHOULDER DIA. G					
	1/4	5/16	3/8	1/2	5/8	3/4
1	●	●	●	●		
1 1/4	●	●	●	●	●	
1 1/2	●	●	●	●	●	●
1 3/4		●	●	●	●	●
2		●	●	●	●	●
2 1/4			●	●	●	●
2 1/2			●	●	●	●
2 3/4			●	●	●	●
3			●	●	●	●
3 1/4			●	●	●	●
3 1/2			●	●	●	●
3 3/4			●	●	●	●
4			●	●	●	●
4 1/4				●	●	●
4 1/2				●	●	●
4 3/4				●	●	●
5				●	●	●
5 1/2					●	●
6					●	●
7						●

● = in stock

Keys and Key Kits – KK, LAK

The .050 to 3/8 keys are sold in a 13-piece kit; 1/2 to 3/4 keys are sold individually as detailed at right.



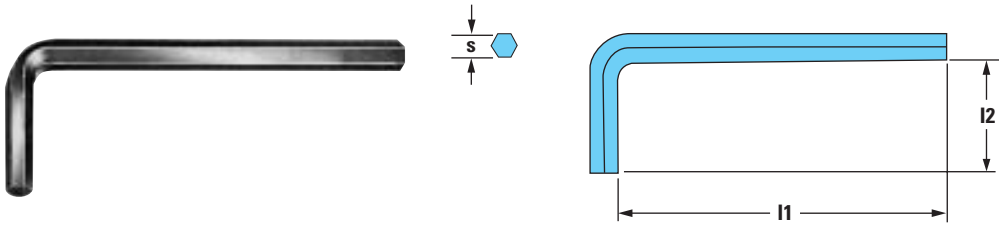


CAP SCREW	STRIPPER BOLT	PRESS. PLUG	A	B	C	ITEM NUMBER
NO. 0			.050	2.844	.531	KK-13 (13-PIECE KIT, .050 TO 3/8 ACROSS FLATS AS DETAILED)
NO. 1			1/16	3.000	.562	
NO. 2 & 3			5/64	3.188	.609	
NO. 4 & 5			3/32	3.375	.656	
NO. 6			7/64	3.562	.703	
	1/4		1/8	3.750	.750	
NO. 8			9/64	3.960	.796	
NO. 10	5/16		5/32	4.125	.844	
1/4	3/8	1/8	3/16	4.500	.938	
			7/32	4.875	1.031	
5/16	1/2	1/4	1/4	5.250	1.125	
3/8	5/8	3/8	5/16	6.000	1.250	
1/2	3/4	1/2	3/8	6.750	1.375	
5/8			1/2	8.250	1.625	LAK-12
		3/4	9/16	9.000	1.750	LAK-916
3/4		1"	5/8	9.750	1.875	LAK-58
1"			3/4	11.250	2.125	LAK-34

Keys – Metric
Shoulder Bolts (Stripper Bolts) – Metric

Metric Keys – SE630

Extra long hexagon socket screw keys – chrome plated | Sechskant-Stiftschlüssel, Lange Ausführung – chromatisiert
Extra lange inbussleutels – verchroomd | Clés mâles coudées pour vis à six pans creux extra longues – chromés



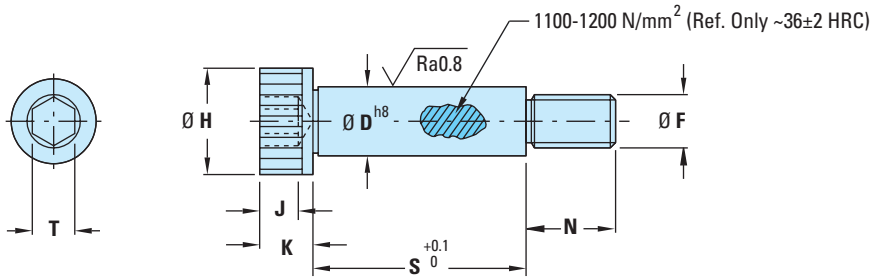
Material: 50 CrV4 – DIN 911

REF s	l1	l2	DIN 912	DIN 913-915	DIN 7991
SE 630 2	100	16	M2.5	M4	
SE 630 3	126	20	M4	M6	M5
SE 630 4	140	25	M5	M8	M6
SE 630 5	160	28	M6	M10	M8
SE 630 6	180	32	M8	M12-M14	M10
SE 630 8	200	36	M10	M16	M12
SE 630 10	224	40	M12	M18-M20	M14-M16
SE 630 12	250	45	M14	M22-M24	M18-M20
SE 630 14	280	55	M16-M18		M22-M24

Shoulder Bolts/Stripper Bolts – PM

Tornillos de hombro | Parafusos limitador | Vis épaulées | Paßschrauben

INFORMATION KEY:
D = Shoulder Diameter
F = Thread Diameter
H = Head Diameter
J = Socket Depth
K = Head Thickness
N = Thread Length
S = Shoulder Length
T = Socket Hex Size (Across Flats)
Standard: AFNOR E 27-192 Class 12.9
Material: AFNOR 35 NC 6 (AISI 3135 Type) Steel
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	H	K	N	E	T	J	F	S																					
								6	8	10	12	14	16	20	25	30	40	50	60	70	80	90	100	110	120	140	160	200	250
PM5	9	4	8	6	3	2.5	M5				⚡		⚡		⚡		⚡												
PM6	11	5	10	8	4	3	M6				⚡		⚡	⚡	⚡		⚡												
PM8	14	6	12	10	5	4	M8						⚡	⚡	⚡	⚡	⚡	⚡					⚡						
PM10	18	8	16	12	6	5	M10							⚡		⚡	⚡				⚡		⚡		⚡				
PM12	22	10	20	16	8	6	M12								⚡	⚡	⚡		⚡		⚡		⚡		⚡				
PM16	28	12	25	20	10	8	M16										⚡		⚡		⚡		⚡						
PM20	36	16	32	25	14	11	M29												⚡										
PM24	45	20	40	32	17	12	M24																						

HOW TO ORDER: Specify Item Number with prefix and S length. Include zeros as shown, but omit all spaces (spaces are only shown here for easier reading).

Prefix **S**

Example:
Prefix S
PM8 20

Example:
Prefix S
PM24 120

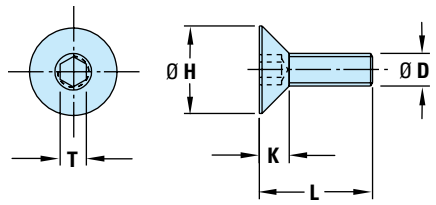
KEY TO CHART
⚡ **Items in stock**
2-3 week delivery
Contact D-M-E for quote

Flat Head Screws – Metric
Stop Disk (for Ejector Plates) – Metric

Flat Head Screws – SM

Tornillo de cabeza plana avellanada | Parafusos de cabeça cónica | Vis creuses | Senkkopfschrauben

INFORMATION KEY:
D = Thread Diameter
H = Head Diameter
K = Head Height
L = Length
T = Hex Socket Size (Across Flats)
Standard: DIN 7991-10.9
Material: Per DIN Specification
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	H	K	T	D	L										
					8	10	12	16	20	25	30	35	40	45	50
SM3	6	2.5	1.7	M3											
SM4	8	3	2.3	M4	⚡	⚡	⚡								
SM5	10	4	2.8	M5		⚡	⚡	⚡							
SM6	12	5	3.3	M6			⚡	⚡							
SM8	16	6	4.4	M8				⚡	⚡						
SM10	20	8	5.5	M10											
SM12	24	10	6.5	M12											

HOW TO ORDER: Specify Item Number with prefix and L length. Include zeros as shown, but omit all spaces (spaces are only shown here for easier reading).

Prefix **L**

Example:
Prefix **L**
SM3 10

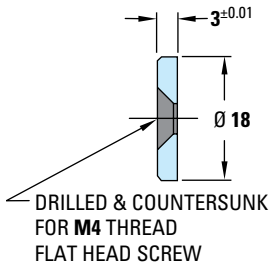
Example:
Prefix **L**
SM8 16

KEY TO CHART
⚡ **Items in stock**
2-3 week delivery
Contact D-M-E for quote

Stop Disk for Ejector Plates – R18

Arandela de Tope | Anilhas de encosto | Repos d'épaisseur pour plaques d'éjection | Distanzscheibe für Auswerferplatte

INFORMATION KEY:
Standard: Euro-Series
Material: 1.1191 (AISI 1045 Type) Steel
Dimensions: Shown in Millimeters (mm)



ITEM NUMBER	AVAILABILITY
R18 18	⚡

HOW TO ORDER: Specify Item Number. Omit spaces (spaces are only shown here for easier reading).

Use with SM4 8 Flat Head Screw (M4 thread x 8mm long) which must be purchased separately. See Flat Head Screws above.

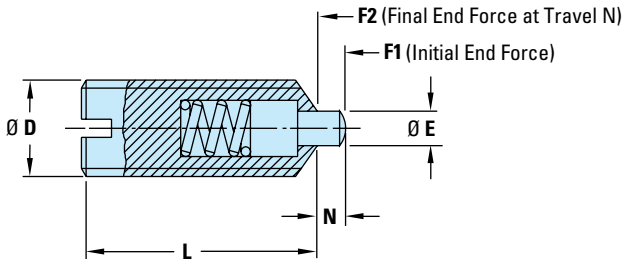
KEY TO CHART
⚡ **Items in stock**
2-3 week delivery
Contact D-M-E for quote

Set Screws with Spring Loaded Plunger – Metric

Set Screws with Spring Loaded Plunger – FM

Tornillos de presión con resorte (embolo) | Pernos roscados de cilindro | Butées à ressort | Federnde Druckstifte

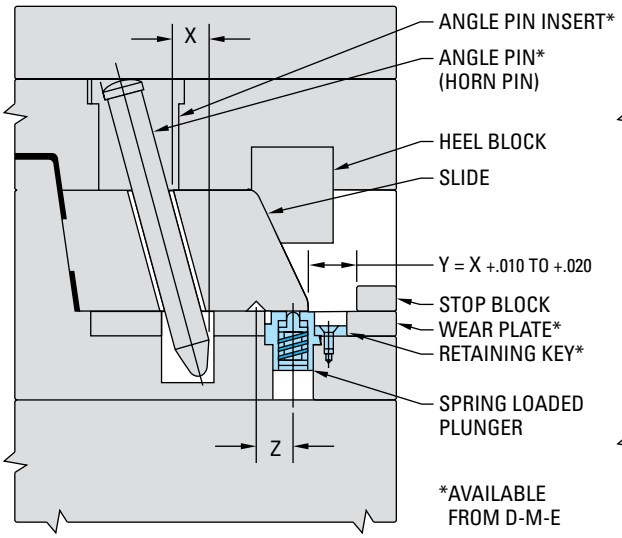
INFORMATION KEY:
D = Thread Diameter
E = Plunger End Diameter
L = Body Length
N = Plunger Maximum Travel
F1 = Initial End Force (Force in Newtons)
F2 = Final End Force (Force in Newtons)
Material: 1.0716 Steel
Max. Temp.: 250°C (482°F)
Dimensions: Other metric units of measure



ITEM NUMBER	AVAILABILITY	D	L	E	N	F1 (INITIAL)	F2 (FINAL)
FM 04 09		M4	9	1.8	1.5	6	16
FM 05 12		M5	12	2.4	2	6	17
FM 06 14		M6	14	2.7	2	7	18
FM 08 16		M8	16	4	2	20	35
FM 10 19	⚡	M10	19	4.5	2.5	20	45
FM 12 22		M12	22	6	3.5	25	60
FM 16 24	⚡	M16	24	8.5	4.5	50	95
FM 20 30		M20	30	10	6.5	80	140
FM 24 34		M24	34	12	8	100	180

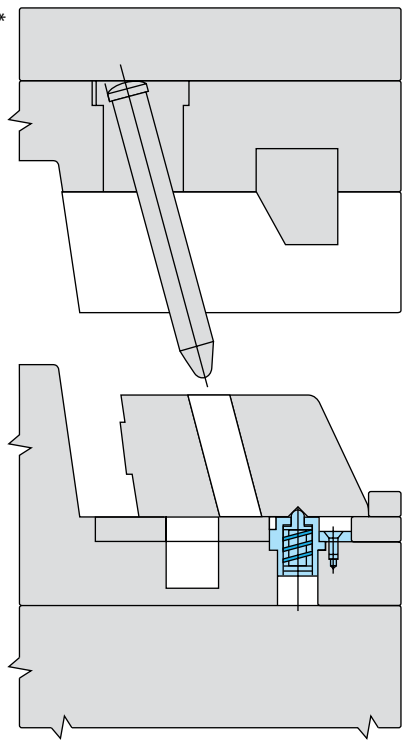
KEY TO CHART
⚡ Items in stock
2-3 week delivery
Contact D-M-E for quote

HOW TO ORDER: Specify Item Number. Omit spaces (spaces are only shown here for easier reading).



MOLD CLOSED

X = SLIDE TRAVEL CAUSED BY ANGLE PIN
Z = V-GROOVE LOCATION IN SLIDE FROM CENTERLINE OF SLIDE RETAINER
X = Z
Y = STOP BLOCK LOCATION



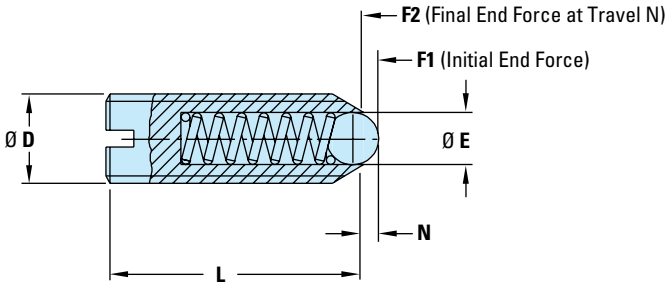
MOLD OPEN

Set Screws with Spring Loaded Ball Plunger (Regular and High Temperature) – Metric

Set Screws with Spring Loaded Ball Plunger – FD

Tornillos de presión con resorte | Pernos roscados de esfera | Butées à ressort à bille | Federnde Druckstifte

INFORMATION KEY:
D = Thread Diameter
E = Ball Diameter
L = Body Length
N = Ball Plunger Maximum Travel
F1 = Initial End Force (Force in Newtons)
F2 = Final End Force (Force in Newtons)
Material: 1.0716 Steel
Max. Temp.: 100°C (212°F)
Dimensions: Shown in Millimeters (mm)



ITEM NUMBER	AVAILABILITY	D	L	E	N	F1 (INITIAL)	F2 (FINAL)
FD 4 9		M4	9	2.5	0.8	4	10
FD 5 12		M5	12	3	0.9	6	11
FD 6 14		M6	14	3.5	1	9	15
FD 8 16	⚡	M8	16	5	1.5	18	30
FD 10 19	⚡	M10	19	6	2	20	40
FD 12 22		M12	22	8	2.5	30	55
FD 16 24	⚡	M16	24	10	3.5	65	120
FD 20 30		M20	30	12	4.5	90	140
FD 24 34		M24	34	15	5.5	125	180

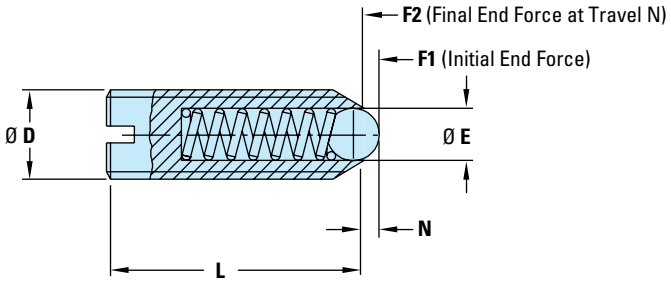
KEY TO CHART
⚡ Items in stock
2-3 week delivery
Contact D-M-E for quote

HOW TO ORDER: Specify Item Number. Omit spaces (spaces are only shown here for easier reading).

Set Screws with Spring Loaded Ball Plunger (High Temperature) – FDV

Tornillos de presión con resorte (alta temperatura) | Pernos roscados de esfera (alta temperatura)
Butées à ressort à bille (à haute température) | Federnde Druckstifte (Hochtemperatur)

INFORMATION KEY:
D = Thread Diameter
E = Ball Diameter
L = Body Length
N = Ball Plunger Maximum Travel
F1 = Initial End Force (Force in Newtons)
F2 = Final End Force (Force in Newtons)
Material: 1.4305 (AISI 303 Type) Stainless Steel
Max. Temp.: 250°C (482°F)
Dimensions: Shown in Millimeters (mm)



ITEM NUMBER	AVAILABILITY	D	L	E	N	F1 (INITIAL)	F2 (FINAL)
FDV 5 12		M5	12	3	0.9	6	11
FDV 6 14		M6	14	3.5	1	9	15
FDV 8 16	⚡	M8	16	5	1.5	18	30
FDV 10 19	⚡	M10	19	6	2	20	40
FDV 12 22		M12	22	8	2.5	30	55
FDV 16 24	⚡	M16	24	10	3.5	65	120
FDV 20 30		M20	30	18	4.5	90	140
FDV 24 34		M24	34	15	5.5	125	180

KEY TO CHART
⚡ Items in stock
2-3 week delivery
Contact D-M-E for quote

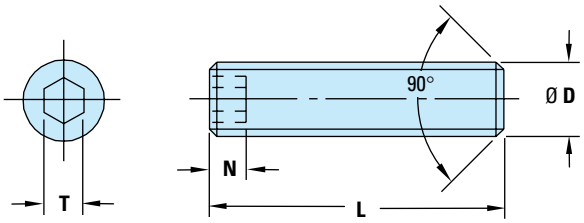
HOW TO ORDER: Specify Item Number. Omit spaces (spaces are only shown here for easier reading).

Set Screws with Flat Point (Grub Screws) – Metric
Set Screws with Dog Point (Allen Head) – Metric

Set Screws with Flat Point (Grub Screws) – GS913

Tornillo sin cabeza | Pernos roscados | Vis de réglage sans tête | Gewindestifte

INFORMATION KEY:
D = Thread Diameter
L = Length
N = Hex Socket Depth
T = Hex Socket Size (Across Flats)
Standard: DIN 913-45H
Material: Per DIN Specification
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	T	N	D	L											
				004	005	006	008	010	012	016	020	025	030	040	050
GS913	1.5	2.5	M03												
	2	2.5	M04												
	2.5	3	M05												
	3	3.5	M06					⚡							
	4	5	M08							⚡					
	5	6	M10								⚡		⚡	⚡	
	6	8	M12									⚡	⚡	⚡	⚡
	6	10	M16												

HOW TO ORDER: Specify Item Number with prefix, D diameter and L length. Include zeros as shown, but omit all spaces (spaces are only shown here for easier reading).

Prefix	D	L
GS913		

Example: **Prefix D L** GS913 M08 016

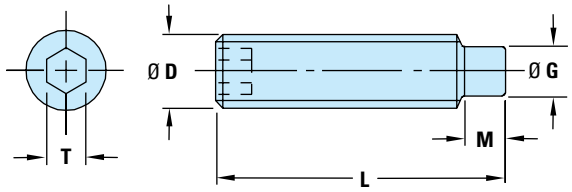
Example: **Prefix D L** GS913 M12 050

KEY TO CHART
⚡ **Items in stock**
2-3 week delivery
Contact D-M-E for quote

Set Screws with Dog Point (Allen Head) – GS915

Tornillo sin cabeza | Parafusos de regulagem – cabeça Allen | Vis de réglage sans tête | Gewindestifte mit Zapfen

INFORMATION KEY:
D = Thread Diameter
G = Dog Point Diameter
L = Length
M = Dog Point Length
T = Hex Socket Size (Across Flats)
Standard: DIN 915-45H
Material: Per DIN Specification
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	T	G	M	D	L							
					010	016	020	025	030	040	050	060
GS915	2	2.5	3	M04								
	3	4	3.5	M06		⚡		⚡				
	4	5.5	5	M08								
	5	7	5.5	M10								
	6	8.5	7	M12								
	8	12	9	M16								

HOW TO ORDER: Specify Item Number with prefix, D diameter and L length. Include zeros as shown, but omit all spaces (spaces are only shown here for easier reading).

Prefix	D	L
GS915		

Example: **Prefix D L** GS915 MO6 016

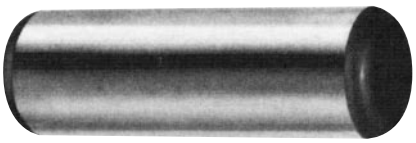
Example: **Prefix D L** GS915 M12 050

KEY TO CHART
⚡ **Items in stock**
2-3 week delivery
Contact D-M-E for quote

Dowel Pins and Tubular Dowels – Inch

Dowel Pins

D-M-E Dowel Pins are made from high-grade alloy steel, hardened and precision ground.



LENGTH	DIAMETER									LENGTH
	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1	
3/8	●	—	—	—	—	—	—	—	—	3/8
1/2	●	●	●	—	—	—	—	—	—	1/2
3/4	●	●	●	—	●	●	—	—	—	3/4
1	●	●	●	●	●	●	—	—	—	1
1 1/4	—	—	●	●	●	●	—	—	—	1 1/4
1 1/2	—	●	●	●	●	●	●	—	—	1 1/2
2	●	●	●	●	●	●	●	●	●	2
2 1/2	—	—	●	—	●	●	●	●	—	2 1/2
3	—	—	—	—	●	●	●	●	●	3
4	—	—	—	—	—	●	●	●	●	4
5	—	—	—	—	—	—	●	●	●	5

● = in stock

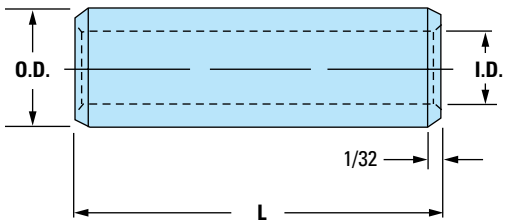
WHEN ORDERING, PLEASE SPECIFY:
1. Quantity
2. Diameter
3. Length

Tubular Dowels

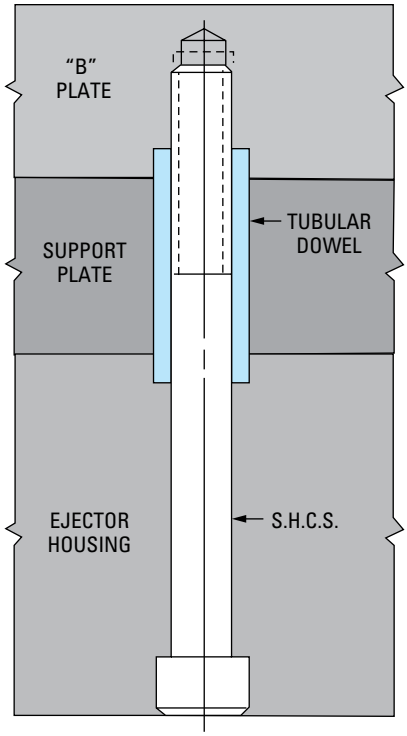
D-M-E Tubular Dowels are hardened and precision ground. They are used in D-M-E mold base assemblies to accurately align the "B" plate, support plate and the ejector housing.



The use of D-M-E Tubular Dowels allows more room for waterlines by superimposing the dowel pin and cap screw as shown at the right.



AS USED IN MOLD BASE ASSEMBLIES



NOM. DIA	O.D. ± .0002	I.D.	L STANDARD LENGTHS (PRICE EACH)						
			3/8	1/2	7/8	1 3/8	1 7/8	2 3/8	2 7/8
3/8	.3752	.260	●	—	●	—	—	—	—
5/8	.6252	.385	—	●	—	●	●	●	—
3/4	.7502	.510	●	●	—	●	●	●	●
7/8	.8752	.635	—	●	—	—	—	●	●

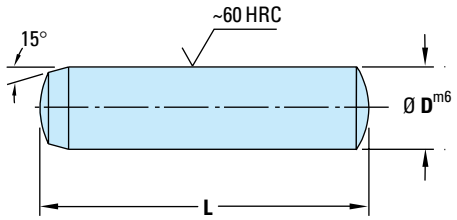
● = in stock

Dowel Pins – Metric
Dowel Pins with Internal Thread (Pull Dowels)

Dowel Pins – DP

Clavija | Cavilhas | Goupilles cylindriques | Zylinderstifte

INFORMATION KEY:
D = Pin Outside Diameter
L = Length
Standard: DIN 6325, ISO 8734
Material: Per DIN and ISO Specifications
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	L																		
		6	8	10	12	14	16	18	20	24	28	32	36	40	50	60	80	100	120	140
DP	2		⚡																	
	3			⚡																
	4																			
	5				⚡		⚡		⚡											
	6								⚡	⚡		⚡								
	8								⚡	⚡		⚡		⚡		⚡				
	10									⚡		⚡		⚡		⚡	⚡			
	12											⚡		⚡		⚡	⚡			
	16																			
	20															⚡				

HOW TO ORDER: Specify Item Number with prefix, D diameter and L length. Include zeros as shown, but omit all spaces (spaces are only shown here for easier reading).

Prefix	D	L
DP		

Example:
Prefix D L
DP 2 8

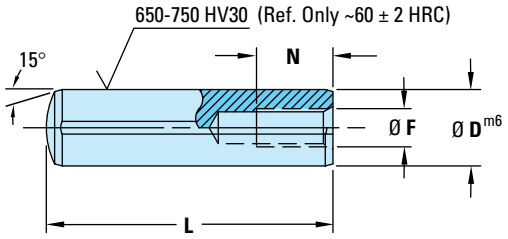
Example:
Prefix D L
DP 20 60

KEY TO CHART
- ⚡ **Items in stock**
- **2-3 week delivery**
- **Contact D-M-E for quote**

Dowel Pins with Internal Thread/Pull Dowels – WZ7005

Clavija con cuerda interna | Cavilhas | Goupilles cylindriques | Zylinderstifte

INFORMATION KEY:
D = Pin Outside Diameter
F = Tap Diameter
L = Length
N = Tap Depth
Standard: DIN EN 28735 – Type A
Material: Per DIN Specification
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	F	N	L									
				020	024	028	032	036	040	050	060	080	100
WZ7005	06	M4	6	⚡			⚡		⚡				
	08	M5	8						⚡	⚡	⚡		
	10	M6	10						⚡		⚡		
	12	M6	12						⚡		⚡		
	14	M8	12										
	16	M8	16										
	20	M10	20										

HOW TO ORDER: Specify Item Number with prefix, D diameter and L length. Include zeros as shown, but omit all spaces (spaces are only shown here for easier reading).

Prefix	D	L
WZ7005		

Example:
Prefix D L
WZ7005 06 020

Example:
Prefix D L
WZ7005 12 040

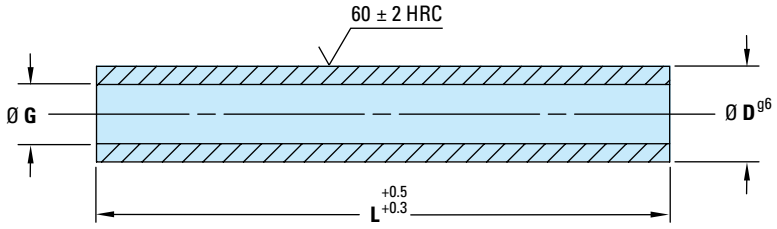
KEY TO CHART
- ⚡ **Items in stock**
- **2-3 week delivery**
- **Contact D-M-E for quote**

Tubular Dowels; Washer/Tubular Dowel (Disk for Tubular Dowels) – Metric

Tubular Dowels – R09

Registro tubular | Cavilha tubular | Douaires tubulaires | Paßhülsen

INFORMATION KEY:
D = Outside Diameter
G = Inside Diameter
L = Length
Standard: Euro-Series
Material: 1.7131 (AISI 5115 Type) Steel
Surface Treatment: Case Hardened
Dimensions: Shown in Millimeters (mm)



ITEM PREFIX	D	G	L													
			020	030	040	050	060	070	080	100	120	140	160	180	200	240	300
R09	10	6.2			⚡												
	14	8.5															
	18	10.5					⚡		⚡								
	24	13					⚡		⚡		⚡						
	30	17							⚡		⚡		⚡	⚡			

HOW TO ORDER: Specify Item Number with prefix, D diameter and L length. Include zeros as shown, but omit all spaces (spaces are only shown here for easier reading).

Prefix	D	L
R09		

Example:
Prefix D L
R09 10 040

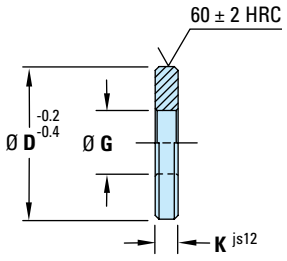
Example:
Prefix D L
R09 30 180

KEY TO CHART
⚡ **Items in stock**
2-3 week delivery
Contact D-M-E for quote

Washer/Tubular Dowel (Disk for Tubular Dowels) – R091

Arandela – Registro tubular | Anilhas – para cavilha tubular
Cachetage cylindrique – Douaires tubulaires | Scheibe – Paßhülsen

INFORMATION KEY:
D = Outside Diameter
G = Inside Diameter
K = Thickness
Standard: Euro-Series
Material: 1.7131 (AISI 5115 Type) Steel
Surface Treatment: Case Hardened
Dimensions: Shown in Millimeters (mm)



ITEM NUMBER	D	K	G	AVAILABILITY
R091 14 3	14	003	6.2	⚡
R091 18 4	18	004	8.5	⚡
R091 24 5	24	005	10.5	⚡
R091 30 6	30	006	13.0	⚡
R091 40 8	40	008	17.0	⚡

HOW TO ORDER: Specify Item Number. Include zeros as shown, but omit all spaces (spaces are only shown here for easier reading).

Prefix	D	K
RO91		

Example:
Prefix D K
R091 14 003

Example:
Prefix D K
R091 40 008

KEY TO CHART
⚡ **Items in stock**
2-3 week delivery
Contact D-M-E for quote

Mold and Die Springs
Medium Duty (Color-Coded Blue)

Medium Duty Mold and Die Springs (Blue) – SMD

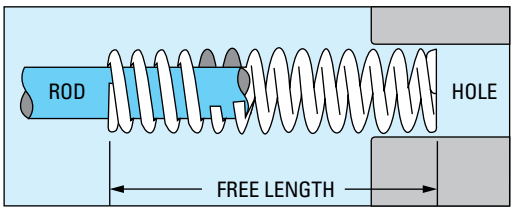


Maximum Deflection: 50% of Free Length

Efficient Operating Range: 25% to 35% of Free Length

Manufactured by Raymond® from a special rectangular-shaped, round-cornered chromium alloy. Provides high resistance to shock loads, increased deflection, wider operating temperatures and longer life. Color-coded by work range to simplify selection and specification.

(LBS x .454 = kg)



HOLE DIA	ROD DIA	ITEM NUMBER	FREE LENGTH INCH	FREE LENGTH MM	APPROX LOAD AT 1/10" DEFLEC. (LBS)	LOAD AT 50% DEFLEC. (LBS)
3/8 9.5MM	3/16 4.7MM	SMD1004	1.00	25.40	6.0	30.0
		SMD1005	1.25	31.75	5.4	33.8
		SMD1006	1.50	38.10	4.0	30.0
		SMD1007	1.75	44.45	3.4	29.8
		SMD1008	2.00	50.80	2.8	28.0
		SMD1010	2.50	63.50	2.4	30.0
		SMD1012	3.00	76.20	2.1	31.5
WIRE .039 X .070		SMD1048	12.00	304.80	0.6	36.0
1/2 13MM	9/32 7MM	SMD2004	1.00	25.40	11.0	55.0
		SMD2005	1.25	31.75	8.2	51.3
		SMD2006	1.50	38.10	6.8	51.0
		SMD2007	1.75	44.45	6.0	52.5
		SMD2008	2.00	50.80	5.5	55.0
		SMD2010	2.50	63.50	4.5	56.3
		SMD2012	3.00	76.20	3.5	52.5
		SMD2014	3.50	88.90	3.0	52.5
		SMD2018	4.50	114.30	2.5	56.3
		SMD2022	5.50	139.70	2.1	57.8
		SMD2026	6.50	165.10	1.4	45.5
WIRE .052 X .093		SMD2030	7.50	190.50	1.2	45.0
		SMD2048	12.00	304.80	0.7	42.0
5/8 16MM	11/32 8.7MM	SMD3004	1.00	25.40	16.4	82.0
		SMD3005	1.25	31.75	12.8	80.0
		SMD3006	1.50	38.10	10.8	81.0
		SMD3007	1.75	44.45	9.6	84.0
		SMD3008	2.00	50.80	8.8	88.0
		SMD3010	2.50	63.50	6.0	75.0
		SMD3012	3.00	76.20	5.6	84.0
		SMD3014	3.50	88.90	4.8	84.0
WIRE .069 X .109		SMD3016	4.00	101.60	4.4	88.0
		SMD3048	12.00	304.80	1.6	96.0
3/4 19.5MM	3/8 9.5MM	SMD4004	1.00	25.40	31.2	156.0
		SMD4005	1.25	31.75	25.6	160.0
		SMD4006	1.50	38.10	20.0	150.0
		SMD4007	1.75	44.45	17.6	154.0
		SMD4008	2.00	50.80	14.4	144.0
		SMD4010	2.50	63.50	12.0	150.0
		SMD4012	3.00	76.20	9.6	144.0
		SMD4014	3.50	88.90	8.0	140.0
		SMD4016	4.00	101.60	7.2	144.0
		SMD4018	4.50	114.30	6.4	144.0
		SMD4020	5.00	127.00	6.0	150.0
		SMD4022	5.50	139.70	5.5	151.3
		SMD4024	6.00	152.40	5.0	150.0
		SMD4026	6.50	165.10	4.5	146.3
WIRE .075 X .165		SMD4030	7.50	190.50	3.8	142.5
		SMD4048	12.00	304.80	2.4	144.0
1 25.5MM	1/2 13MM	SMD5004	1.00	25.40	55.0	275.0
		SMD5005	1.25	31.75	45.0	281.3
		SMD5006	1.50	38.10	35.0	262.5
		SMD5007	1.75	44.45	30.0	262.5
		SMD5008	2.00	50.80	26.0	260.0
		SMD5010	2.50	63.50	20.0	250.0

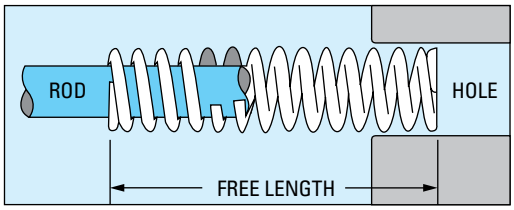
HOLE DIA	ROD DIA	ITEM NUMBER	FREE LENGTH INCH	FREE LENGTH MM	APPROX LOAD AT 1/10" DEFLEC. (LBS)	LOAD AT 50% DEFLEC. (LBS)
1" 25.5MM	1/2 13MM	SMD5012	3.00	76.20	16.5	247.5
		SMD5014	3.50	88.90	15.0	262.5
		SMD5016	4.00	101.60	12.0	240.0
		SMD5018	4.50	114.30	10.4	234.0
		SMD5020	5.00	127.00	9.6	240.0
		SMD5022	5.50	139.70	8.8	242.0
		SMD5024	6.00	152.40	8.0	240.0
		SMD5028	7.00	177.80	7.2	252.0
WIRE .100 X .215		SMD5032	8.00	203.20	6.0	240.0
		SMD5048	12.00	304.80	4.0	240.0
1 1/4 32MM	5/8 16MM	SMD6006	1.50	38.10	49.6	372.0
		SMD6007	1.75	44.45	42.4	371.0
		SMD6008	2.00	50.80	35.2	352.0
		SMD6010	2.50	63.50	28.8	360.0
		SMD6012	3.00	76.20	24.0	360.0
		SMD6014	3.50	88.90	20.0	350.0
		SMD6016	4.00	101.60	17.6	352.0
		SMD6018	4.50	114.30	16.0	360.0
		SMD6020	5.00	127.00	13.6	340.0
		SMD6022	5.50	139.70	12.8	352.0
		SMD6024	6.00	152.40	12.0	360.0
		SMD6028	7.00	177.80	10.4	364.0
		SMD6032	8.00	203.20	8.8	352.0
WIRE .115 X .285		SMD6040	10.00	254.00	7.2	360.0
		SMD6048	12.00	304.80	6.0	360.0
1 1/2 38.5MM	3/4 19.5MM	SMD7008	2.00	50.80	53.0	530.0
		SMD7010	2.50	63.50	45.0	562.5
		SMD7012	3.00	76.20	36.0	540.0
		SMD7014	3.50	88.90	30.0	525.0
		SMD7016	4.00	101.60	27.0	540.0
		SMD7018	4.50	114.30	23.0	517.5
		SMD7020	5.00	127.00	21.0	525.0
		SMD7022	5.50	139.70	18.5	508.8
		SMD7024	6.00	152.40	17.0	510.0
		SMD7028	7.00	177.80	14.5	507.5
		SMD7032	8.00	203.20	12.8	512.0
WIRE .135 X .345		SMD7040	10.00	254.00	10.0	500.0
		SMD7048	12.00	304.80	8.0	480.0
2 51MM	1 25.5MM	SMD8010	2.50	63.50	100.0	1250.0
		SMD8012	3.00	76.20	83.0	1245.0
		SMD8014	3.50	88.90	64.8	1134.0
		SMD8016	4.00	101.60	60.0	1200.0
		SMD8018	4.50	114.30	53.0	1192.5
		SMD8020	5.00	127.00	47.0	1175.0
		SMD8022	5.50	139.70	39.2	1078.0
		SMD8024	6.00	152.40	39.0	1170.0
		SMD8028	7.00	177.80	31.2	1092.0
		SMD8032	8.00	203.20	28.5	1140.0
WIRE .195 X .468		SMD8040	10.00	254.00	20.8	1040.0
		SMD8048	12.00	304.80	17.5	1050.0

QUANTITY DISCOUNTS: Discounts available at 25, 50 and 100 pieces. Contact D-M-E for prices.

Mold and Die Springs
Medium Heavy Duty (Color-Coded Red)

Medium Heavy Duty Mold and Die Springs (Red) – SMH





Maximum Deflection: 37% of Free Length

Efficient Operating Range: 20% to 25% of Free Length

Manufactured by Raymond® from a special rectangular-shaped, round-cornered chromium alloy. Provides high resistance to shock loads, increased deflection, wider operating temperatures and longer life. Color-coded by work range to simplify selection and specification.

(LBS x .454 = kg)

HOLE DIA	ROD DIA	ITEM NUMBER	FREE LENGTH INCH	FREE LENGTH MM	APPROX LOAD AT 1/10" DEFLEC. (LBS)	LOAD AT 37% DEFLEC. (LBS)
3/8 9.5MM	3/16 4.7MM	SMH1004	1.00	25.40	9.0	33.3
		SMH1005	1.25	31.75	7.3	33.8
		SMH1006	1.50	38.10	6.7	37.2
		SMH1007	1.75	44.45	5.8	37.6
		SMH1008	2.00	50.80	5.0	37.0
		SMH1010	2.50	63.50	4.2	38.9
WIRE .046 X .073		SMH1012	3.00	76.20	3.0	33.3
		SMH1048	12.00	304.80	0.9	40.0
1/2 13MM	9/32 7MM	SMH2004	1.00	25.40	16.8	62.2
		SMH2005	1.25	31.75	13.0	60.1
		SMH2006	1.50	38.10	9.5	52.7
		SMH2007	1.75	44.45	8.5	55.0
		SMH2008	2.00	50.80	7.5	55.5
		SMH2010	2.50	63.50	6.0	55.5
		SMH2012	3.00	76.20	5.7	63.3
WIRE .061 X .093		SMH2014	3.50	88.90	4.0	51.8
		SMH2048	12.00	304.80	1.2	53.3
5/8 16MM	11/32 8.7MM	SMH3004	1.00	25.40	30.0	111.0
		SMH3005	1.25	31.75	21.5	99.4
		SMH3006	1.50	38.10	19.0	105.5
		SMH3007	1.75	44.45	16.8	108.8
		SMH3008	2.00	50.80	14.8	109.5
		SMH3010	2.50	63.50	11.5	106.4
		SMH3012	3.00	76.20	10.0	111.0
		SMH3014	3.50	88.90	8.5	110.1
WIRE .081 X .123		SMH3016	4.00	101.60	7.6	112.5
		SMH3048	12.00	304.80	2.7	119.9
3/4 19.5MM	3/8 9.5MM	SMH4004	1.00	25.40	50.0	185.0
		SMH4005	1.25	31.75	38.0	175.8
		SMH4006	1.50	38.10	32.0	177.6
		SMH4007	1.75	44.45	28.8	186.5
		SMH4008	2.00	50.80	24.8	183.5
		SMH4010	2.50	63.50	19.2	177.6
		SMH4012	3.00	76.20	14.4	159.8
		SMH4014	3.50	88.90	12.8	165.8
		SMH4016	4.00	101.60	12.0	177.6
		SMH4018	4.50	114.30	11.2	186.5
		SMH4020	5.00	127.00	9.0	166.5
		SMH4022	5.50	139.70	8.0	162.8
WIRE .093 X .156		SMH4024	6.00	152.40	7.5	166.5
		SMH4048	12.00	304.80	3.6	159.8
1" 25.5MM	1/2 13MM	SMH5004	1.00	25.40	76.0	281.2
		SMH5005	1.25	31.75	62.4	288.6
		SMH5006	1.50	38.10	49.6	275.3
		SMH5007	1.75	44.45	44.0	284.9
		SMH5008	2.00	50.80	40.0	296.0
		SMH5010	2.50	63.50	31.0	286.8
		SMH5012	3.00	76.20	25.0	277.5
		SMH5014	3.50	88.90	21.6	279.7
		SMH5016	4.00	101.60	18.4	272.3
		SMH5018	4.50	114.30	17.0	283.1
		SMH5020	5.00	127.00	14.4	266.4
		SMH5022	5.50	139.70	12.8	260.5
		SMH5024	6.00	152.40	12.0	266.4
		SMH5028	7.00	177.80	10.0	259.0
WIRE .115 X .218		SMH5032	8.00	203.20	8.8	260.5
		SMH5048	12.00	304.80	6.2	275.3

HOLE DIA	ROD DIA	ITEM NUMBER	FREE LENGTH INCH	FREE LENGTH MM	APPROX LOAD AT 1/10" DEFLEC. (LBS)	LOAD AT 37% DEFLEC. (LBS)
1 1/4 32MM	5/8 16MM	SMH6006	1.50	38.10	114.4	634.9
		SMH6007	1.75	44.45	100.8	652.7
		SMH6008	2.00	50.80	86.4	639.4
		SMH6010	2.50	63.50	62.4	577.2
		SMH6012	3.00	76.20	51.2	568.3
		SMH6014	3.50	88.90	44.0	569.8
		SMH6016	4.00	101.60	36.8	544.6
		SMH6018	4.50	114.30	32.0	532.8
		SMH6020	5.00	127.00	29.0	536.5
		SMH6022	5.50	139.70	26.4	537.2
		SMH6024	6.00	152.40	25.0	555.0
		SMH6028	7.00	177.80	20.0	518.0
		SMH6032	8.00	203.20	18.4	544.6
WIRE .156 X .281		SMH6040	10.00	254.00	14.5	536.5
		SMH6048	12.00	304.80	12.4	550.6
1 1/2 38.5MM	3/4 19.5MM	SMH7008	2.00	50.80	108.0	799.2
		SMH7010	2.50	63.50	85.6	791.8
		SMH7012	3.00	76.20	62.4	692.6
		SMH7014	3.50	88.90	52.8	683.8
		SMH7016	4.00	101.60	48.0	710.4
		SMH7018	4.50	114.30	43.2	719.3
		SMH7020	5.00	127.00	36.8	680.8
		SMH7022	5.50	139.70	34.4	700.0
		SMH7024	6.00	152.40	30.4	674.9
		SMH7028	7.00	177.80	26.4	683.8
		SMH7032	8.00	203.20	22.0	651.2
WIRE .187 X .312		SMH7040	10.00	254.00	17.6	651.2
		SMH7048	12.00	304.80	14.4	639.4
2 51MM	1 25.5MM	SMH8010	2.50	63.50	118.4	1095.2
		SMH8012	3.00	76.20	96.0	1065.6
		SMH8014	3.50	88.90	80.0	1036.0
		SMH8016	4.00	101.60	66.4	982.7
		SMH8018	4.50	114.30	60.0	999.0
		SMH8020	5.00	127.00	56.0	1036.0
		SMH8022	5.50	139.70	50.4	1025.6
		SMH8024	6.00	152.40	47.2	1047.8
		SMH8028	7.00	177.80	40.0	1036.0
		SMH8032	8.00	203.20	35.2	1041.9
WIRE .225 X .437		SMH8040	10.00	254.00	26.0	962.0
		SMH8048	12.00	304.80	22.4	994.6

QUANTITY DISCOUNTS: Discounts available at 25, 50 and 100 pieces. Contact D-M-E for prices.

The word "RAYMOND" and the gold, red, green and blue color coding of mold and die springs in the heavy duty, medium heavy duty, extra heavy duty and medium duty load ranges, respectively, are registered trademarks of the Barnes Group, Inc.

Mold and Die Springs
Heavy Duty (Color-Coded Gold)

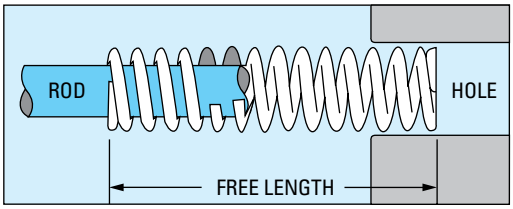
Heavy Duty Mold and Die Springs (Gold) – SHD

Maximum Deflection: 30% of Free Length

Efficient Operating Range: 15% to 20% of Free Length

Manufactured by Raymond® from a special rectangular-shaped, round-cornered chromium alloy. Provides high resistance to shock loads, increased deflection, wider operating temperatures and longer life. Color-coded by work range to simplify selection and specification.





(LBS x .454 = kg)

HOLE DIA	ROD DIA	ITEM NUMBER	FREE LENGTH INCH	FREE LENGTH MM	APPROX LOAD AT 1/10" DEFLEC. (LBS)	LOAD AT 30% DEFLEC. (LBS)
3/8 9.5MM	3/16 4.7MM	SHD1004	1.00	25.40	11.0	33.0
		SHD1005	1.25	31.75	9.8	36.8
		SHD1006	1.50	38.10	8.0	36.0
		SHD1007	1.75	44.45	8.4	44.1
		SHD1008	2.00	50.80	7.2	43.2
		SHD1010	2.50	63.50	5.5	41.3
WIRE .054 X .072		SHD1012	3.00	76.20	4.2	37.8
		SHD1048	12.00	304.80	1.2	43.2
1/2 13MM	9/32 7MM	SHD2004	1.00	25.40	23.6	70.8
		SHD2005	1.25	31.75	18.6	69.8
		SHD2006	1.50	38.10	15.5	69.8
		SHD2007	1.75	44.45	13.8	72.5
		SHD2008	2.00	50.80	11.0	66.0
		SHD2010	2.50	63.50	8.4	63.0
		SHD2012	3.00	76.20	7.4	66.6
WIRE .072 X .095		SHD2014	3.50	88.90	6.0	63.0
		SHD2048	12.00	304.80	1.6	57.6
5/8 16MM	11/32 8.7MM	SHD3004	1.00	25.40	42.4	127.2
		SHD3005	1.25	31.75	29.6	111.0
		SHD3006	1.50	38.10	27.2	122.4
		SHD3007	1.75	44.45	24.0	126.0
		SHD3008	2.00	50.80	20.8	124.8
		SHD3010	2.50	63.50	17.0	127.5
		SHD3012	3.00	76.20	14.4	129.6
		SHD3014	3.50	88.90	12.2	128.1
WIRE .093 X .125		SHD3016	4.00	101.60	10.8	129.6
		SHD3048	12.00	304.80	3.0	108.0
3/4 19.5MM	3/8 9.5MM	SHD4004	1.00	25.40	108.0	324.0
		SHD4005	1.25	31.75	88.0	330.0
		SHD4006	1.50	38.10	65.6	295.2
		SHD4007	1.75	44.45	60.0	315.0
		SHD4008	2.00	50.80	49.6	297.6
		SHD4010	2.50	63.50	40.0	300.0
		SHD4012	3.00	76.20	34.0	306.0
		SHD4014	3.50	88.90	28.0	294.0
		SHD4016	4.00	101.60	25.0	300.0
		SHD4018	4.50	114.30	22.0	297.0
		SHD4020	5.00	127.00	19.5	292.5
		SHD4022	5.50	139.70	17.0	280.5
WIRE .125 X .165		SHD4024	6.00	152.40	16.0	288.0
		SHD4048	12.00	304.80	8.0	288.0
1 25.5MM	1/2 13MM	SHD5004	1.00	25.40	208.0	624.0
		SHD5005	1.25	31.75	171.2	642.0
		SHD5006	1.50	38.10	118.4	532.8
		SHD5007	1.75	44.45	104.0	546.0
		SHD5008	2.00	50.80	90.0	540.0
		SHD5010	2.50	63.50	68.0	510.0
		SHD5012	3.00	76.20	54.4	489.6
		SHD5014	3.50	88.90	45.6	478.8
		SHD5016	4.00	101.60	40.0	480.0
		SHD5018	4.50	114.30	35.2	475.2
		SHD5020	5.00	127.00	31.2	468.0
		SHD5022	5.50	139.70	28.8	475.2
		SHD5024	6.00	152.40	25.6	460.8
		SHD5028	7.00	177.80	22.4	470.4
WIRE .158 X .225		SHD5032	8.00	203.20	19.2	460.8
		SHD5048	12.00	304.80	12.0	432.0

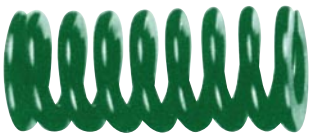
HOLE DIA	ROD DIA	ITEM NUMBER	FREE LENGTH INCH	FREE LENGTH MM	APPROX LOAD AT 1/10" DEFLEC. (LBS)	LOAD AT 30% DEFLEC. (LBS)
1 1/4 32MM	5/8 16MM	SHD6006	1.50	38.10	212.0	954.0
		SHD6007	1.75	44.45	181.6	953.4
		SHD6008	2.00	50.80	149.6	897.6
		SHD6010	2.50	63.50	117.6	882.0
		SHD6012	3.00	76.20	95.2	856.8
		SHD6014	3.50	88.90	75.2	789.6
		SHD6016	4.00	101.60	66.4	796.8
		SHD6018	4.50	114.30	58.4	788.4
		SHD6020	5.00	127.00	53.0	795.0
		SHD6022	5.50	139.70	47.2	778.8
		SHD6024	6.00	152.40	42.4	763.2
		SHD6028	7.00	177.80	36.8	772.8
		SHD6032	8.00	203.20	32.8	787.2
WIRE .200 X .295		SHD6040	10.00	254.00	25.6	768.0
		SHD6048	12.00	304.80	20.8	748.8
1 1/2 38.5MM	3/4 19.5MM	SHD7008	2.00	50.80	190.4	1142.4
		SHD7010	2.50	63.50	155.0	1162.5
		SHD7012	3.00	76.20	130.0	1170.0
		SHD7014	3.50	88.90	106.4	1117.2
		SHD7016	4.00	101.60	91.2	1094.4
		SHD7018	4.50	114.30	78.4	1058.4
		SHD7020	5.00	127.00	71.2	1068.0
		SHD7022	5.50	139.70	64.0	1056.0
		SHD7024	6.00	152.40	58.4	1051.2
		SHD7028	7.00	177.80	49.6	1041.6
		SHD7032	8.00	203.20	43.2	1036.8
WIRE .225 X .350		SHD7040	10.00	254.00	34.4	1032.0
		SHD7048	12.00	304.80	28.8	1036.8
2 51MM	1 25.5MM	SHD8010	2.50	63.50	260.0	1950.0
		SHD8012	3.00	76.20	200.0	1800.0
		SHD8014	3.50	88.90	170.0	1785.0
		SHD8016	4.00	101.60	150.0	1800.0
		SHD8018	4.50	114.30	120.0	1620.0
		SHD8020	5.00	127.00	110.0	1650.0
		SHD8022	5.50	139.70	100.0	1650.0
		SHD8024	6.00	152.40	94.0	1692.0
		SHD8028	7.00	177.80	82.0	1722.0
		SHD8032	8.00	203.20	73.0	1752.0
WIRE .280 X .470		SHD8040	10.00	254.00	55.0	1650.0
		SHD8048	12.00	304.80	42.0	1512.0

QUANTITY DISCOUNTS: Discounts available at 25, 50 and 100 pieces. Contact D-M-E for prices.

The word "RAYMOND" and the gold, red, green and blue color coding of mold and die springs in the heavy duty, medium heavy duty, extra heavy duty and medium duty load ranges, respectively, are registered trademarks of the Barnes Group, Inc.

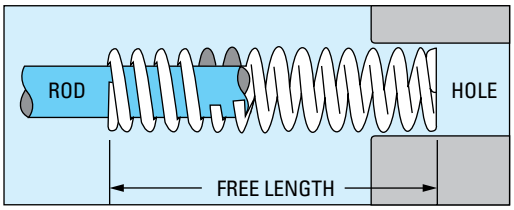
Mold and Die Springs
Extra Heavy Duty (Color-Coded Green)

Extra Heavy Duty Mold and Die Springs (Green) – SEH



Maximum Deflection: 25% of Free Length
Efficient Operating Range: 15% of Free Length

Manufactured by Raymond® from a special rectangular-shaped, round-cornered chromium alloy. Provides high resistance to shock loads, increased deflection, wider operating temperatures and longer life. Color-coded by work range to simplify selection and specification.



(LBS x .454 = kg)

HOLE DIA	ROD DIA	ITEM NUMBER	FREE LENGTH INCH	FREE LENGTH MM	APPROX LOAD AT 1/10" DEFLEC. (LBS)	LOAD AT 25% DEFLEC. (LBS)
3/8 9.5MM	3/16 4.7MM	SEH1004	1.00	25.40	22.0	55.0
		SEH1005	1.25	31.75	16.0	50.0
		SEH1006	1.50	38.10	12.5	46.9
		SEH1007	1.75	44.45	11.5	50.3
		SEH1008	2.00	50.80	9.0	45.0
		SEH1010	2.50	63.50	7.0	43.8
WIRE .059 X .080		SEH1012	3.00	76.20	6.5	48.8
		SEH1048	12.00	304.80	1.5	45.0
1/2 13MM	9/32 7MM	SEH2004	1.00	25.40	32.0	80.0
		SEH2005	1.25	31.75	24.0	75.0
		SEH2006	1.50	38.10	20.0	75.0
		SEH2007	1.75	44.45	17.0	74.4
		SEH2008	2.00	50.80	14.0	70.0
		SEH2010	2.50	63.50	11.5	71.9
		SEH2012	3.00	76.20	9.0	67.5
WIRE .084 X .097		SEH2014	3.50	88.90	8.0	70.0
		SEH2048	12.00	304.80	2.5	75.0
5/8 16MM	11/32 8.7MM	SEH3004	1.00	25.40	63.0	157.5
		SEH3005	1.25	31.75	47.0	146.9
		SEH3006	1.50	38.10	38.0	142.5
		SEH3007	1.75	44.45	32.0	140.0
		SEH3008	2.00	50.80	29.0	145.0
		SEH3010	2.50	63.50	22.0	137.5
		SEH3012	3.00	76.20	19.0	142.5
		SEH3014	3.50	88.90	16.0	140.0
WIRE .110 X .126		SEH3016	4.00	101.60	13.5	135.0
		SEH3048	12.00	304.80	4.5	135.0
3/4 19.5MM	3/8 9.5MM	SEH4004	1.00	25.40	140.0	350.0
		SEH4005	1.25	31.75	110.0	343.8
		SEH4006	1.50	38.10	89.0	333.8
		SEH4007	1.75	44.45	75.0	328.1
		SEH4008	2.00	50.80	68.0	340.0
		SEH4010	2.50	63.50	50.0	312.5
		SEH4012	3.00	76.20	40.5	303.8
		SEH4014	3.50	88.90	34.5	301.9
		SEH4016	4.00	101.60	30.0	300.0
		SEH4018	4.50	114.30	26.5	298.1
		SEH4020	5.00	127.00	23.5	293.8
		SEH4022	5.50	139.70	21.5	295.6
WIRE .135 X .165		SEH4024	6.00	152.40	19.5	292.5
		SEH4048	12.00	304.80	9.5	285.0
1" 25.5MM	1/2 13MM	SEH5006	1.50	38.10	160.0	600.0
		SEH5008	2.00	50.80	116.0	580.0
		SEH5010	2.50	63.50	89.6	560.0
		SEH5012	3.00	76.20	73.6	552.0
		SEH5014	3.50	88.90	62.4	546.0
		SEH5016	4.00	101.60	55.2	552.0
		SEH5018	4.50	114.30	48.8	549.0
		SEH5020	5.00	127.00	43.2	540.0
WIRE .188 X .225		SEH5024	6.00	152.40	36.0	540.0
		SEH5048	12.00	304.80	17.6	528.0

HOLE DIA	ROD DIA	ITEM NUMBER	FREE LENGTH INCH	FREE LENGTH MM	APPROX LOAD AT 1/10" DEFLEC. (LBS)	LOAD AT 25% DEFLEC. (LBS)
1 1/4 32MM	5/8 16MM	SEH6008	2.00	50.80	192.0	960.0
		SEH6010	2.50	63.50	144.0	900.0
		SEH6012	3.00	76.20	118.4	888.0
		SEH6014	3.50	88.90	100.8	882.0
		SEH6016	4.00	101.60	84.0	840.0
		SEH6018	4.50	114.30	78.4	882.0
		SEH6020	5.00	127.00	68.0	850.0
		SEH6024	6.00	152.40	56.0	840.0
		SEH6032	8.00	203.20	41.6	832.0
WIRE .225 X .295		SEH6040	10.00	254.00	33.6	840.0
		SEH6048	12.00	304.80	26.4	792.0
1 1/2 38.5MM	3/4 19.5MM	SEH7008	2.00	50.80	376.0	1880.0
		SEH7010	2.50	63.50	294.4	1840.0
		SEH7012	3.00	76.20	231.2	1734.0
		SEH7014	3.50	88.90	196.0	1715.0
		SEH7016	4.00	101.60	171.2	1712.0
		SEH7018	4.50	114.30	148.0	1665.0
		SEH7020	5.00	127.00	136.0	1700.0
		SEH7024	6.00	152.40	110.4	1656.0
		SEH7032	8.00	203.20	80.8	1616.0
WIRE .300 X .350		SEH7040	10.00	254.00	67.2	1680.0
		SEH7048	12.00	304.80	54.4	1632.0
2 51MM	1 25.5MM	SEH8010	2.50	63.50	381.6	2385.0
		SEH8012	3.00	76.20	312.0	2340.0
		SEH8014	3.50	88.90	254.4	2226.0
		SEH8016	4.00	101.60	220.0	2200.0
		SEH8018	4.50	114.30	188.8	2124.0
		SEH8020	5.00	127.00	172.8	2160.0
		SEH8024	6.00	152.40	141.6	2124.0
		SEH8032	8.00	203.20	100.0	2000.0
WIRE .365 X .460		SEH8040	10.00	254.00	84.0	2100.0
		SEH8048	12.00	304.80	71.2	2136.0

QUANTITY DISCOUNTS: Discounts available at 25, 50 and 100 pieces. Contact D-M-E for prices.

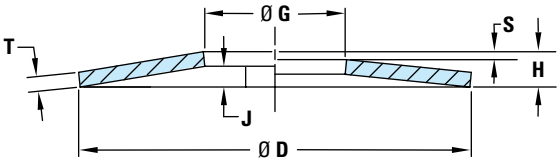
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Belleville Washers (Disc Springs) – Metric

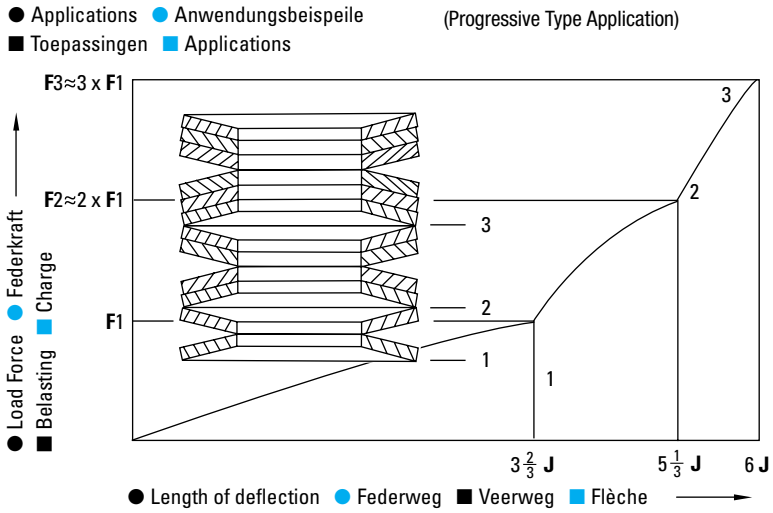
Belleville Washers (Disc Springs) – WZ8050

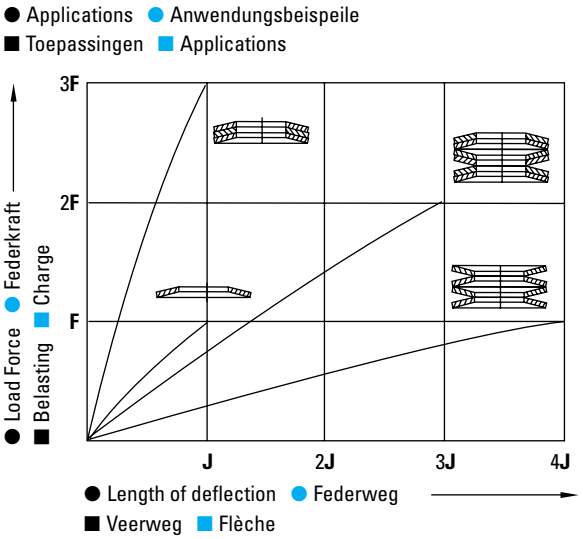
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Anilhas Belleville | Tellerfedern





Spring Load versus Deflection Data





INFORMATION KEY:

D = Outside Diameter
F = Load Force in Newtons (at specified "S" Deflections)
G = Inside Diameter
H = Overall Height (of one unloaded washer)
J = Maximum Theoretical Deflection to flat
S = Deflection (shown for % of Maximum Theoretical Deflection J)
T = Thickness
Standard: DIN 2093
Material: DIN 50 CrV 4 (AISI 6150 Type) Steel
Max. Temp.: 300°C (572°F)
Dimensions: Shown in Millimeters (mm)

ITEM NUMBER	Ø D	Ø G	T	H	J	S = 0.25 X J		S = 0.5 X J		S = 0.75 X J		AVAIL
						S	F	S	F	S	F	
WZ8050 160 082 090	16.0	08.2	0.90	1.25	0.35	0.087	363	0.175	697	0.262	1013	⚡
WZ8050 180 092 100	18.0	09.2	1.00	1.40	0.4	0.1	451	0.2	865	0.3	1254	⚡
WZ8050 200 102 110	20.0	10.2	1.10	1.55	0.45	0.112	548	0.225	1050	0.337	1521	⚡
WZ8050 250 122 090	25.0	12.2	0.90	1.60	0.7	0.175	367	0.35	644	0.525	862	⚡
WZ8050 315 163 125	31.5	16.3	1.25	2.15	0.9	0.225	791	0.45	1409	0.675	1913	⚡
WZ8050 400 204 225	40.0	20.4	2.25	3.15	0.9	0.225	2336	0.45	4481	0.675	6500	⚡
WZ8050 500 254 250	50.0	25.4	2.50	3.90	1.4	0.35	3473	0.7	6437	1.05	9063	⚡
WZ8050 500 254 300	50.0	25.4	3.00	4.10	1.1	0.275	4255	0.55	8214	0.825	11,976	⚡

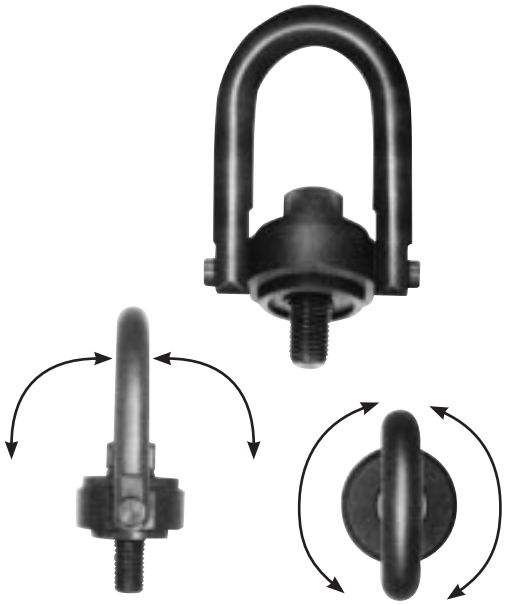
HOW TO ORDER: Specify Item Number. Omit spaces (spaces are only shown here for easier reading).

KEY TO CHART

⚡ Items in stock
2-3 week delivery
Contact D-M-E for quote

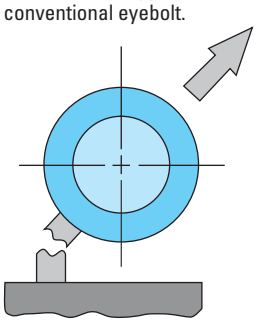
Hoist Rings – Inch

Whether you're hoisting an 800-pound mold base or a 15,000-pound piece of molding room equipment, D-M-E Hoist Rings can add a margin of performance and convenience to the job at hand. The inherent danger posed by conventional static eyebolts (side-load breakage and hook disengagement) combined with stricter safety regulations make D-M-E Hoist Rings an important addition to any mold shop or molding plant. Unlike eyebolts, these Hoist Rings will not yield to heavy side loads within their rated capacity and can pivot 180° and swivel 360° to compensate for pitch, roll and sway when lifting heavy, unbalanced loads. As with all mechanical devices, regular inspection for wear, and strict adherence to installation and operating guidelines is necessary to prevent failure due to misuse.



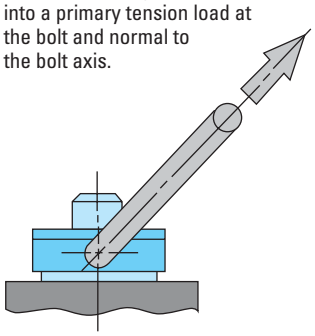
- Safer and stronger than conventional eyebolts
- Pivots and swivels to compensate for pitch, roll and sway when lifting heavy or unbalanced loads
- Prevents accidents caused by eyebolt breakage or lifting hook disengagement
- Will not yield to heavy side loads when used in accordance with manufacturer's instructions
- Manufactured from high-quality alloy steel (certified heat treatment)
- Meets or exceeds MIL-STD-1365 (OR-11) and MIL-STD-209C
- Seven sizes to handle loads from 800 to 15,000 pounds
- Safety factor is 5 times the rated load capacity in any direction

See what happens when heavy side loads are applied to a conventional eyebolt.



EXCESSIVE SIDE LOADS CAN CAUSE BOLT FAILURE.

The same load applied to a D-M-E Hoist Ring is translated into a primary tension load at the bolt and normal to the bolt axis.



HIGH-TENSION LOADS ARE WELL WITHIN THE DESIGNED SAFETY LIMITS OF THE STRESSED HOIST RING.



Hoist Rings – Inch
Installation and Ordering Information

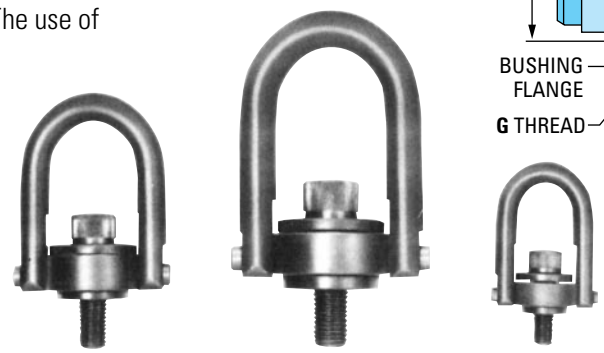
Material: Alloy steel (certified heat treatment), black oxide
Safety Factor: 5 times rated load in any direction
Range of Movement.: 360° swivel; 180° pivot
Dimensions: Shown in inches (in)

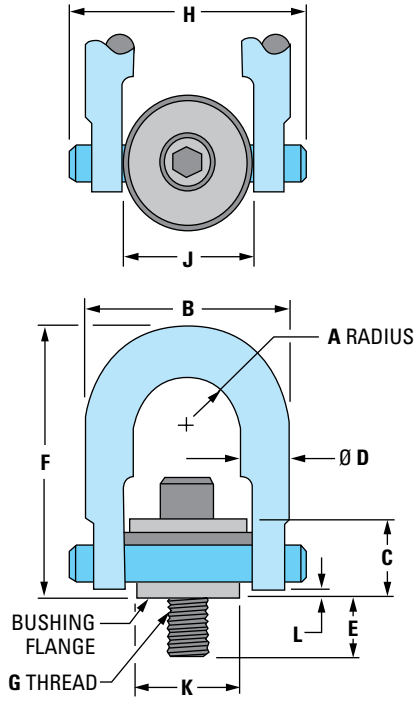
Installation Data

Tap workpiece for hoist ring bolt with axis vertical to mounting surface. Work surface should be flat and smooth to provide full 360° flush seating for the bushing flange. For installation in ferrous materials, the screw should be tightened to the full torque loading recommended in column TL below, +25% – 0.

(SAFETY NOTE: Some loosening may develop after prolonged service in a permanent installation. It is advisable to periodically retighten the mounting bolt to maintain the specified torque value.)

For maximum safety with soft metal workpieces such as aluminum, use extra length bolts with minimum effective thread engagement of 2 times thread diameter. The use of free fit spacers between the bushing flange and mounting surface is not recommended, as this will reduce the safe load rating on angularly applied loads. Hoist ring must be free to swivel 360° and pivot 180° at all times.





NOTE: Additional hoist ring sizes and bolt lengths (including metric versions) are also available on request.

Hoist Rings – SHR (includes bolt and retaining ring)

ITEM NUMBER	RATED LOAD (LBS)	A RADIUS	B	C	Ø D	E EFFECTIVE THREAD PROJECTION	F	G	H CLEARANCE DIMENSION	J	K	L	TL** FOOT LBS	WEIGHT
SHR0001	800	7/16	1 5/8	41/64	3/8	9/16	2 5/8	5/16-18	2	1	3/4	3/32	7	5 OZ.
SHR0002	1,000	7/16	1 5/8	41/64	3/8	9/16	2 5/8	3/8-16	2	1	3/4	3/32	12	5 OZ.
SHR0003	2,500	7/8	3 1/4	1 5/32	3/4	3/4	4 3/4	1/2-13	3 5/8	2	1 1/2	3/32	28	2 LB. 5 OZ.
SHR0004	4,000	7/8	3 1/4	1 5/32	3/4	1	4 3/4	5/8-11	3 5/8	2	1 1/2	3/32	60	2 LB. 7 OZ.
SHR0005	5,000	7/8	3 1/4	1 5/32	3/4	1	4 3/4	3/4-10	3 5/8	2	1 1/2	3/32	100	2 LB. 9 OZ.
SHR0006	10,000	1 13/32	4 13/16	1 11/16	1	1 1/2	6 1/2	1"-8	5 1/8	3	2 5/16	17/64	230	7 LB.
SHR0007	15,000	1 3/4	6	2 1/8	1 1/4	1 7/8	8 3/4	1 1/4-7	6 1/2	3 3/4	3 1/4	11/32	470	14 LB.

**Recommended torque load +25% – 0

Replacement Bolt Kits – SHK (includes bolt and retaining ring)

ITEM NUMBER	USED WITH	SIZE	E
SHK0001	SHR0001	5/16-18 X 1 1/4	9/16
SHK0002	SHR0002	3/8-16 X 1 1/4	9/16
SHK0003	SHR0003	1/2-13 X 2	3/4
*SHK0004		1/2-13 X 2 1/4	1
SHK0005	SHR0004	5/8-11 X 2 1/4	1
*SHK0006		5/8-11 X 2 1/2	1 1/4
SHK0007	SHR0005	3/4-10 X 2 1/4	1
*SHK0008		3/4-10 X 2 3/4	1 1/2
SHK0009	SHR0006	1"-8 X 3 1/4	1 1/2
*SHK0010		1"-8 X 3 3/4	2
SHK0011	SHR0007	1 1/4-7 X 4	1 7/8



QUANTITY DISCOUNTS:
Discounts apply to current Net Prices. Ring and replacement bolts counted separately for quantity discounts. Different sizes may be combined.
25 to 49 ..... Less 10%
50 to 99 ..... Less 13%
100 or more Quoted by request

NOTES:
E = Effective Thread Projection
*Bolts not marked with an asterisk (*) are identical to those supplied with hoist rings. Bolts marked with an asterisk are longer, to provide thread projection of twice the bolt diameter, recommended for use with softer metals.

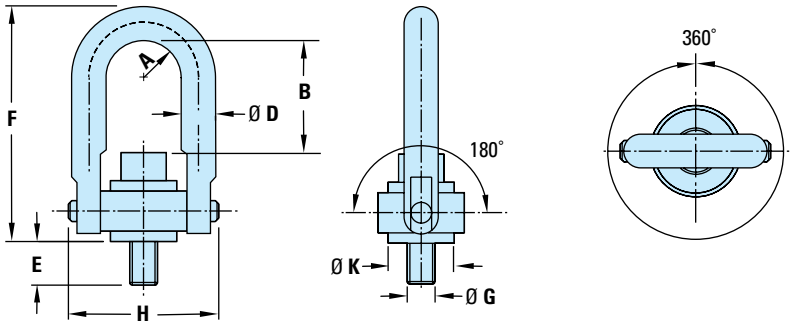
Hoist Rings – Metric

Hoist Rings – SHM, SHMR

Anillos elevadores | Olhais de suspensão articulados | Anneaux de levage articulés | Sicherheitsringschrauben

INFORMATION KEY:

A = U-Bar Inside Radius
B = Inside U-Bar Clearance
D = U-Bar Diameter
E = Thread Length Projection
F = U-Bar Height
G = Thread Diameter and Pitch
H = Dimension Over Pins
K = Flange Diameter
Material: See Features below
Max. Temp.: 200°C (392°F)
Dimensions: Shown in Millimeters (mm)



HOIST RING ASSEMBLY												REPLACEMENT KIT	
ITEM NUMBER	A	B	D	E	F	G	H	K	TL* (Kgm)	P* (Kg)	W* (Kg)	ITEM NUMBER	G
SHM 0001	10.9	32.0	9.7	12.5	67.8	M8 X 1.25	46.7	19.0	1.0	400	0.17	SHMR 0001	M8 X 1.25
SHM 0002	10.9	30.0	9.7	17.5	67.8	M10 X 1.50	46.7	19.0	1.7	450	0.17	SHMR 0002	M10 X 1.50
SHM 0003	22.4	60.5	19.0	19.0	121.4	M12 X 1.75	89.4	38.1	3.8	1050	1.08	SHMR 0003	M12 X 1.75
SHM 0004	22.4	56.5	19.0	29.0	121.4	M16 X 2.00	89.4	38.1	8.2	1900	1.12	SHMR 0004	M16 X 2.00
SHM 0005	22.4	52.5	19.0	34.0	121.4	M20 X 2.50	89.4	38.1	13.6	2150	1.19	SHMR 0005	M20 X 2.50
SHM 0006	35.6	69.0	25.4	37.0	165.6	M24 X 3.00	130.6	58.7	31.0	4200	3.10	SHMR 0006	M24 X 3.00
SHM 0007	44.5	107.4	31.7	41.9	221.7	M30 X 3.50	165.1	81.0	60.0	7000	6.30	SHMR 0007	M30 X 3.50
SHM 0009	57.2	166.5	44.4	63.5	316.7	M36 X 4.00	217.2	106.4	100.0	11000	15.50	SHMR 0009	M36 X 4.00
SHM 0010	57.2	160.5	44.4	68.0	316.7	M42 X 4.50	217.2	106.4	100.0	12500	16.00	SHMR 0010	M42 X 4.50
SHM 0011	57.2	154.5	44.4	82.4	316.7	M48 X 5.00	217.2	106.4	100.0	13500	16.80	SHMR 0011	M48 X 5.00
SHM 0012	76.2	210.0	57.15	101.6	419.1	M64 X 6.00	297.6	146.0	290.0	22500	40.0	SHMR 0012	M64 X 6.00

REPLACEMENT KIT INCLUDES SCREW AND RETAINING RING

HOW TO ORDER: Specify Item Number. Omit spaces (spaces are only shown here for easier reading).
NOTE: All hoist ring assemblies and replacement kits listed in chart are in stock. (No specials available.)

FEATURES
- Pivots and swivels to compensate for pitch, roll and sway when lifting heavy or unbalanced loads.
- High-strength alloy steel with minimum tensile strength of 1,250 MPa (125 kg/mm²).
- Certified heat treatment with 100% Magnaflux inspection.
- Corrosion-resistant plating.
- Maximum operating temperature 200°C (392°F).
- Safety factor is 5 times the rated load in any direction.

***NOTE**
- Standard tolerance ± 0.8mm.
- **E** = the use of spacers between bushing flange and mounting surface is not recommended as this will reduce the safety load rating.
- **TL** = recommended torque load + 25% - 0.
- **P** = rated.
- **W** = weight (of Hoist Ring Assembly)

CARACTERÍSTICAS
- Gira y pivotea para compensar la inclinación, el rodaje y la oscilación al levantar cargas pesadas o sin equilibrio.
- Aleación de acero de gran resistencia con fuerza elástica mínima de 1,250 MPa (125 kg/mm²).
- Tratamiento de calor certificado con inspección Magnaflux del 100%.
- Enchapado resistente a la corrosión.
- Temperatura máxima de operacion: 200°C.
- El factor de seguridad es 5 veces la carga calificada en cualquier direccion.

***NOTA**
- Tolerancia estándar ±0.8mm.
- **E** = el uso de espaciadores entre el reborde del cojinete y la superficie de montaje no se recomienda ya que esto reducirá la calificación de seguridad de la carga.
- **TL** = carga de torsión recomendada + 25% - 0.
- **P** = carga nominal.
- **W** = peso.

MERKMALE
- Gleichmäßiges anheben von schweren oder einseitigen Lasten durch Drehgelenke und Abstandsausgleichung. Keine Abweichung nach der schweren Lastseite.
- Legierter Spezialstahl mit min. Streckgrenze von 1.250 MPa (125 Kg/mm²)
- Beglaubigte Wärmebehandlung mit 100% iger Magnaflux.
- Kontrolle Korrosionsbeständiger Oberflächenschutz.
- Alle Materialangaben gelten bis zu einer Temp. bis max. 200°C.
- Alle Heberinge sind in allen Richtungen mit 5-facher Sicherheit ausgelegt.

***BEMERKUNGEN**
- Allgemeine Toleranzen ± 0.8mm.
- **E** = zwischen Flansch und Montageoberfläche keine Distanzscheibe einlegen: dadurch wird die Sicherheit der Hebeleistung reduziert.
- **TL** = empfohlene Drehmomentbelastung.
- **P** = Nennlast.
- **W** = Gewicht.

CARACTÉRISTIQUES
- Ils pivotent et tournent pour amortir le balancement des charges lourdes ou deséquilibrées. Résistent aux charges latérales.
- Acier allié avec une résistance de 1.250 MPa (125 kg/mm²).
- Une trempe garantie par une inspection Magnaflux de 100%.
- Résiste à la corrosion grâce à un traitement de surface.
- Température de fonctionnement 200°C.
- Coefficient de sécurité 5:1 quelle que soit l'orientation de la charge.

***NOTE**
- Tolérance standard ± 0.8 mm.
- **E** = L'emploi d'une rondelle de réglage entre l'anneau et la surface d'appui est à déconseiller. Elle réduirait le coefficient de sécurité.
- **TL** = couple de serrage + 25% - 0.
- **P** = charge maximum.
- **W** = Poids en kg.

CARACTERÍSTICAS
- Eles se articulam e giram para compensar a inclinação, rolagem e balanço de cargas pesadas ou desequilibradas.
- Liga de aço de alta resistencia de 1.250 MPa (125 kg/mm²).
- Tratamento a calor, certificado por inspeção 100% Magnaflux.
- Revestimento resistente à corrosão.
- Temperatura máxima operacional de 200°C.
- Coeficiente de segurança de 5 vezes a carga nominal, em qualquer direção.

***NOTA**
- Tolerancia padrão: ± 0.8mm.
- **E** = nao se recomenda o uso de espaçadores entre o flange da bucha e a superficie de montagem, pois isto reduziria o valor da carga nominal de segurança.
- **TL** = carga recomendada de torque + 25% - 0.
- **P** = carga nominal.
- **W** = peso.

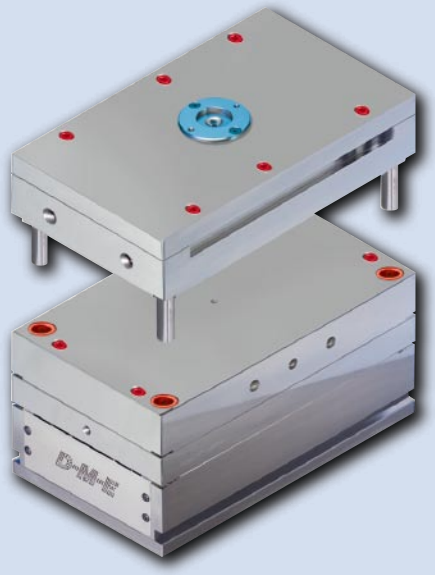
Lifting Holes

Lifting Holes can be used to install hoist rings for ease of handling. Mold base can be configured only with Lifting Holes which are appropriate for the specific mold base size. Refer to the preceding pages for a comprehensive selection of hoist rings.

5-DAY SHIPPING

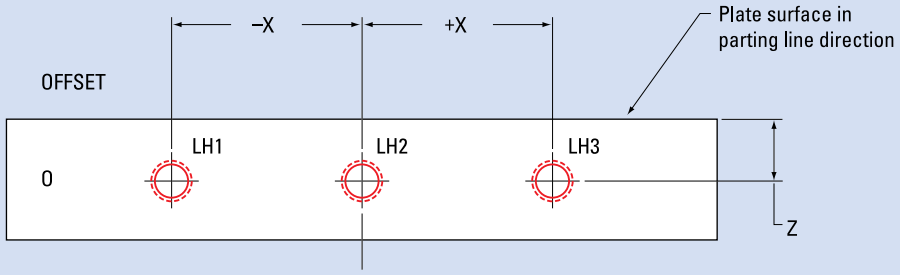
Lifting Hole Diameters

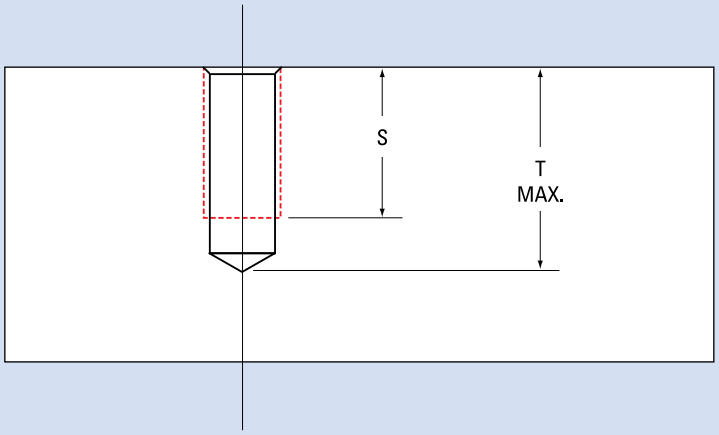
BASE SIZE	PLATE THICKNESS	
	0.875	1.375
88-1118	1/2-13 UNC	1/2-13 UNC
1123-1524	5/8-11 UNC	5/8-11 UNC
1529-1829	5/8-11 UNC	3/4-10 UNC
1835-2429	5/8-11 UNC	1"-8 UNC
2435	N/A	1"-8 UNC



Lifting Holes

THREAD SIZE	S	T MAX.
1/2-13	1.00	1.38
5/8-11	1.25	1.75
3/4-10	1.50	2.00
1"-8	2.00	2.62





FOR QUOTING OR ORDERING, SPECIFY:

Lifting Holes

Lifting holes can be selected up to three per plate edge. They are available in top clamp plate, A-plate, B-plate, support plate, and bottom clamp plate.

Note that for safety reasons, only the recommended hole diameters (or larger) shown in the table are offered.

Diameter _____

Quantity in each plate _____

Plates with lift holes _____

_____

_____

_____

_____

(Prints required if not on center)

Minimum Recommended Additional Assembly SHCS

MOLD BASE SIZE	A PLATE THICKNESS	EXISTING TOTAL NUMBER OF SHCS	MOLDING MACHINE FORCE (TONS) / MOLD OPENING FORCE (LBS.)										
			15 THROUGH 400 3000 THROUGH 80,000	425 85,000	450 90,000	475 95,000	500 100,000	525 105,000	550 110,000	575 115,000	600 120,000	625 125,000	650 130,000
88	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
812	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
108	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1012	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1016	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1020	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1112	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1114	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1118	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1123	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1212	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1215	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1220	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1223	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1315	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1318	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1321	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1323	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1326	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1329	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1518	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1524	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1529	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1616	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1620	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1623	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1626	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1629	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1635	.0875	12	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	12	0	0	0	0	0	0	0	0	0	0	0
1724	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1729	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1818	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1820	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1823	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1826	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1829	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1835	.0875	12	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	12	0	0	0	0	0	0	0	0	0	0	0
1924	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1929	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1935	.0875	12	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	12	0	0	0	0	0	0	0	0	0	0	0
2424	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
2429	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
2435	.0875	12	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	12	0	0	0	0	0	0	0	0	0	0	0

NOTES:

1. Blue color configurations require additional assembly screws.
2. Numbers of additional assembly screws suggested are minimum required.
3. No safety factor considered. The moldmaker is entirely responsible for the chosen configuration.

KEY:

- = No additional assembly screws required
- = Add screws as noted (+)
- N/A = Not available/not recommended

Minimum Recommended Additional Assembly SHCS

MOLD BASE SIZE	A PLATE THICKNESS	EXISTING TOTAL NUMBER OF SHCS	MOLDING MACHINE FORCE (TONS) / MOLD OPENING FORCE (LBS.)													
			675 135,000	700 140,000	725 145,000	750 150,000	775 155,000	800 160,000	825 165,000	850 170,000	875 175,000	900 180,000	925 185,000	950 190,000	975 195,000	1000 200,000
88	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	N/A +4	N/A +4	N/A +4
812	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	N/A +4	N/A +4	N/A +4
108	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	N/A +4	N/A +4	N/A +4
1012	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	N/A +4	N/A +4	N/A +4
1016	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	N/A +4	N/A +4	N/A +4
1020	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	N/A +4	N/A +4	N/A +4
1112	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	N/A +4	N/A +4	N/A +4
1114	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	N/A +4	N/A +4	N/A +4
1118	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	N/A +4	N/A +4	N/A +4
1123	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1212	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+6 +4	+6 +4	+6 +4
1215	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+6 +4	+6 +4	+6 +4
1220	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+6 +4	+6 +4	+6 +4
1223	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1315	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+6 +4	+6 +4	+6 +4
1318	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+6 +4	+6 +4	+6 +4
1321	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+6 +4	+6 +4	+6 +4
1323	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1326	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1329	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1518	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+6 +4	+6 +4	+6 +4
1524	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1529	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1616	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+6 +4	+6 +4	+6 +4
1620	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+6 +4	+6 +4	+6 +4
1623	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1626	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1629	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1635	.0875 1.375 TO 5.875	12 12	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
1724	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1729	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1818	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+6 +4	+6 +4	+6 +4
1820	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+6 +4	+6 +4	+6 +4
1823	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1826	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1829	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1835	.0875 1.375 TO 5.875	12 12	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
1924	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1929	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1935	.0875 1.375 TO 5.875	12 12	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
2424	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
2429	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
2435	.0875 1.375 TO 5.875	12 12	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0

NOTES:
1. Blue color configurations require additional assembly screws.
2. Numbers of additional assembly screws suggested are minimum required.
3. No safety factor considered. The moldmaker is entirely responsible for the chosen configuration.

KEY:
- = No additional assembly screws required
- = Add screws as noted (+)
- N/A = Not available/not recommended

MUD Quick-Change™ Components



Customize MUD frames and insert molds with a full range of components

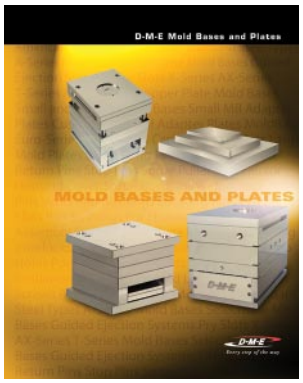
MUD® Quick-Change frames and companion insert mold series are available with a full range of components. These components permit tailoring MUD frames and insert molds to every injection molding machine up to 500 tons. This makes the cost-saving benefits and time-saving advantages of the Master Unit Die Concept available to virtually every mold maker and plastic molder in the industry.

See the MUD Quick-Change Systems catalog for all of the standard parts installed in the MUD basic Quick-Change frames and companion insert molds. U, H and Double H frame components include sprue bushings, locating rings and guide posts. Components for T style and standard style insert molds include leader pins and bushings, ejector plates and ear plates.

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Every step of the way

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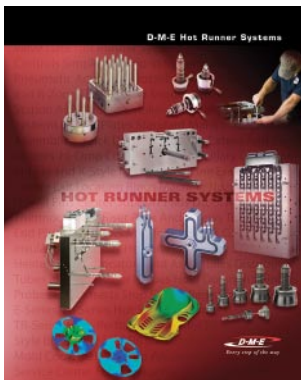
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MUD Quick-Change Systems From D-M-E

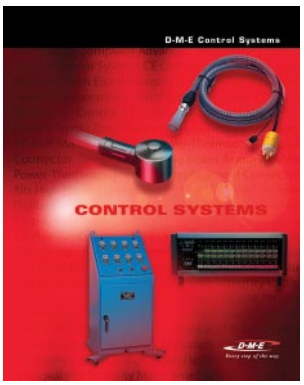
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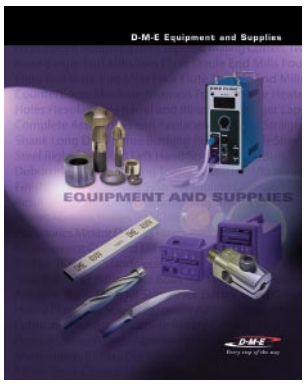
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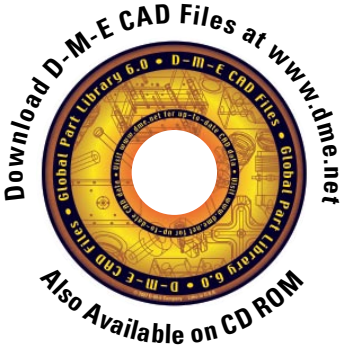
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From powerful, online resources available 24/7, to our team of trained, experienced experts committed to helping customers achieve maximum productivity, reliable operation, and better performance, D-M-E's goal is simple: to be an essential resource for your molding challenges every step of the way.

D-M-E, an essential resource to the customers it serves worldwide, offers the industry's broadest range of market-leading products, unsurpassed knowledge and expertise, a global logistics infrastructure that ensures speed and accuracy, and a support organization unrivaled for its ability to assist customers when and where they need it. A complete line of hot runner systems, control systems, mold bases, MUD quick-change mold systems, mold components, moldmaking and molding equipment supplies, and technical services helps customers compete every step of the way.





D-M-E
Every step of the way

World Headquarters
D-M-E Company
29111 Stephenson Highway
Madison Heights, MI 48071
800-626-6653 *toll-free tel*
248-398-6000 *tel*
888-808-4363 *toll-free fax*
www.dme.net *web*
info@dme.net *e-mail*

D-M-E of Canada, Ltd.
6210 Northwest Drive
Mississauga, Ontario
Canada L4V 1J6
800-387-6600 *toll-free tel*
905-677-6370 *tel*
800-461-9965 *toll-free fax*
dme_canada@dme.net *e-mail*

D-M-E Europe C.V.B.A.
Industriepark Noord
B-2800 Mechelen Belgium
32-15-215011 *tel*
32-15-218235 *fax*
sales@dmeeu.com *e-mail*

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ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

D-M-E Hot Runner Systems

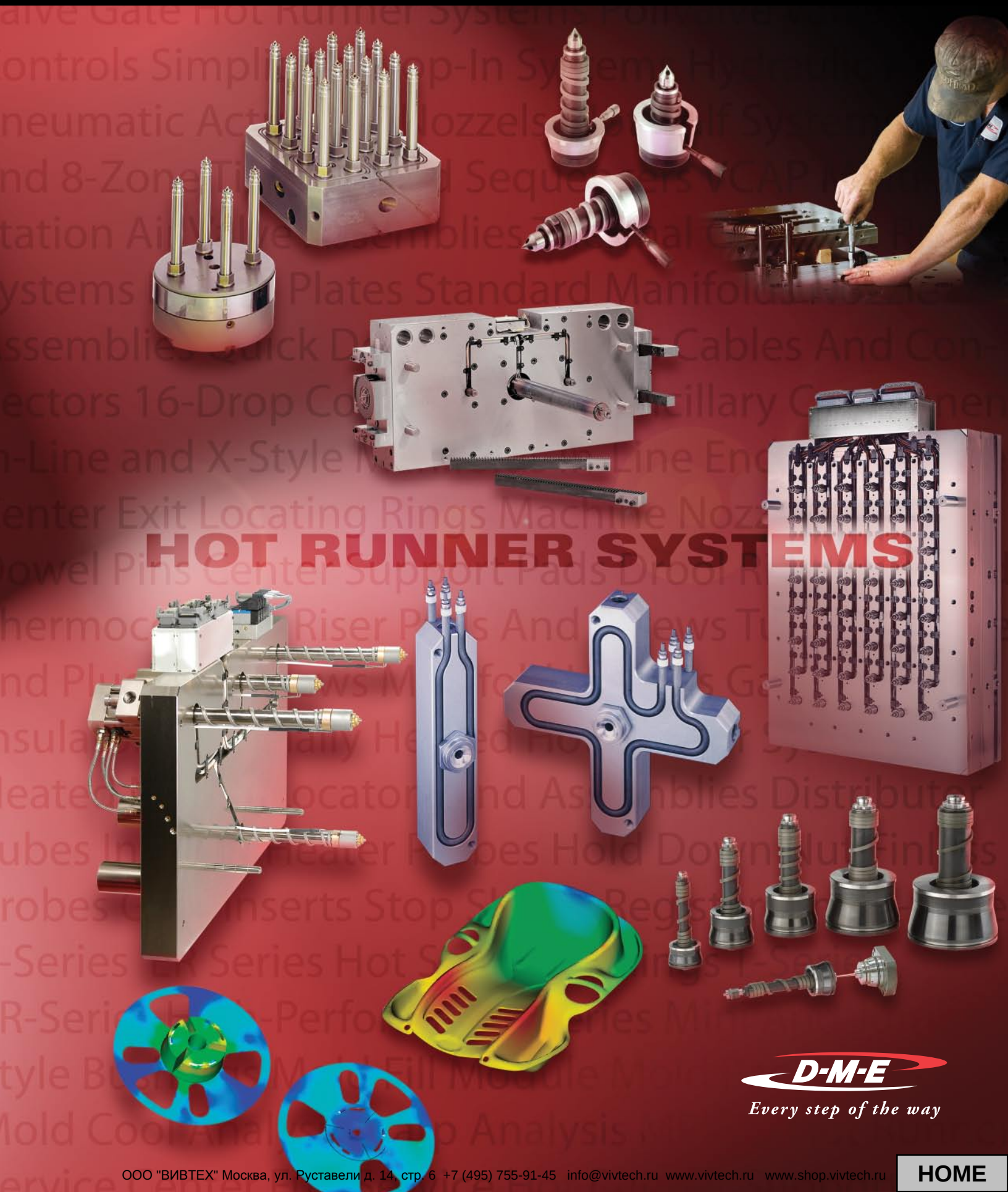


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Customer Commitment

Applications Engineering

When you call D-M-E with a new application for a hot runner system, many systems go into action. D-M-E has its own design and applications engineering group consisting of professional engineers and experienced designers. After you have given us the information necessary for proper application design and analysis, the D-M-E applications engineering team goes to work diligently analyzing, designing and manufacturing a hot runner system that will best suit your needs and requirements.

Technical Service

D-M-E is proud to say that it is an industry model for technical service coverage and response. The D-M-E technical service department covers the entire United States and Canada, with additional service representatives in Europe, Asia and throughout the world. Because D-M-E knows you need assistance starting, operating, and maintaining hot runner systems it has made a great effort to strategically staff a Technical Service Department that is responsible for the success of D-M-E's molding systems.

Field Sales and Customer Service

When you need a knowledgeable person to help you order parts and components, D-M-E has you covered. Our direct field sales force puts a local sales representative in your area. One who understands your business and can offer valuable assistance in helping you select the molding system best suited to your application and your budget. In addition, D-M-E provides a customer service department that has been extensively trained on all of D-M-E's products and systems, making it easier for you to order and have your questions answered. We can provide you price and delivery information on all D-M-E items quickly and accurately.

To take advantage of any or all of these services, or if you have any questions, problems, or ideas please call D-M-E at:

- 800-626-6653 (U.S.)
- 800-387-6600 (Canada)

Part prints or system design prints may be sent in the following ways:

- appl_eng@dme.net
- 248-544-5707 (U.S.) fax
- 905-677-5280 (Canada) fax

D-M-E offers you a wide range of services from component selection to on-site system installation. Our ever-growing list of services include the ability to:

- Analyze the best system to fit your needs
- Assist in system design
- Perform computerized system analysis and resin qualification before any metal is cut
- Marry your system to the mold base, plates and components required
- Provide quotations for and perform all of the special machining required
- Assemble and wire the system
- Check mechanical fit of all components and perform electrical load testing
- Assist with system start-up and maintenance

All of which gives you ... more time to concentrate on cavities and cores!

Terms and Conditions of Sale

1. **FOB POINT / PRICES:** Products are sold F.O.B. point of origin. Any taxes are in addition to the prices and may be invoiced later.
2. **SHIPPING SCHEDULE:** The shipping schedule is our current estimate of delivery dates and we agree to use reasonable efforts to comply with the schedule.
3. **WARRANTY:**
   (a) Any D-M-E trademarked or tradenamed product or part thereof manufactured by or for us which, under normal operating conditions in the plant of the Buyer thereof, proves defective in material or workmanship, as determined by our inspection, within 12 months from the date of shipment will be replaced or repaired free of charge to Buyer.

   This warranty is contingent upon the following conditions: *that we promptly receive notice of the defect; that Buyer establish that the product has been properly installed, maintained, and operated within the limits of related and normal usage as specified by us; and that, upon our request, Buyer will return to us at our expense the defective product or part thereof.*

   (b) The terms of this warranty do not in any way extend to any product or part thereof which have a life, under normal usage, inherently shorter than 12 months.
   (c) The conditions of actual production in each end user's plant vary considerably. Therefore, descriptions of the production or performance capabilities of any product or software materials are estimates only and are not warranted.
4. **EXCLUSIONS OF WARRANTIES:** THE WARRANTIES TO REPAIR OR REPLACE DEFECTIVE PRODUCTS OR PARTS AS SET FORTH IN PARAGRAPH 3, AND ANY ADDITIONAL WARRANTY EXPRESSLY STATED TO BE A WARRANTY AND SET FORTH IN WRITING AS PART OF THESE TERMS HEREIN ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
5. **LIMITATION OF REMEDIES AND LIABILITIES:**
   UNDER NO CIRCUMSTANCES SHALL WE OR ANY AFFILIATE OF OURS HAVE ANY LIABILITY WHATSOEVER FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES HOWSOEVER CAUSED OR ARISING (INCLUDING CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE), such as, but not limited to, loss of profit or revenue; loss of use of the product, part thereof; cost of capital; cost of replacement equipment; or claims resulting from contracts between Buyer, its customers and/or suppliers. Unless expressly provided for herein, in no event shall we or any affiliate of ours assume responsibility or liability for (a) penalties, penalty clauses or liquidated damages clauses of any description, (b) certifications or (c) indemnification of Buyer or others for costs, damages or expenses arising out of or related to the product or part thereof.
6. **CANCELLATION:** Unless otherwise agreed, Buyer may cancel all or any part of the order by written notice received by us before our completion of the order or applicable portion of the order. On receipt of such notice, all work on the order or part thereof canceled will be stopped as promptly as is reasonably possible. Buyer will then be invoiced for and will pay to us a cancellation charge. For completed items, the charge will be equal to their established prices. For items not completed, the charge will be equal to our full cost plus a premium in addition to a charge for any packing and storage and less a credit for the balance of the material as scrap.
7. **PAYMENT TERMS:** Payment is due in accordance with any applicable progress, advance or other agreed upon payment schedule, or, if no such schedule has been agreed to, upon Acceptance as specified in Paragraph 8, but in no event later than 30 days from the date of invoice. No cash discount is provided. If, in our judgment, Buyer's financial condition changes, we may stop work until financial arrangements satisfactory to us are made.
8. **ACCEPTANCE OF PRODUCT:** Each such product shall be deemed to be accepted within seven days after delivery of the product to the Buyer, unless we receive written notification of rejection for cause from Buyer within the seven day period.

   "Returned Goods": No goods are returnable without prior approval, prepaid transportation and an issued RMA number. All items are subject to our inspection before credit will be allowed. Special mold bases or steel, items involving custom work, or items not shown in our catalog are considered non-returnable. A minimum service charge of 10% will be made on all returned goods.
   NO GOODS ARE RETURNABLE LATER THAN THIRTY DAYS AFTER RECEIPT OF MERCHANDISE.
9. **PATENT INDEMNITY:** We shall defend any suit or proceeding brought against Buyer and pay all costs and damages awarded against Buyer provided that:
   (a) The suit or proceeding is based upon a claim that the product or part thereof is an infringement of any claim of a presently existing U.S. patent;
   (b) The claim of infringement is not based, directly or indirectly, upon (i) the manufacture, use, or sale of any product furnished by us which has been modified without our consent; or, (ii) the manufacture, use, or sale of any combination of a product furnished by us with products not furnished by us; or (iii) performance of a patented process using a product furnished by us or production thereby of a patented product; and,
   (c) We are notified promptly and given information and assistance (at our expense) and the authority to defend the suit or proceeding. We shall not be responsible hereunder for any settlement made without our written consent nor shall we be responsible for costs or expenses incurred without our written consent. If our product is adjudicated to be an infringement and its use in the U.S. by Buyer is enjoined, we shall, at our own expense, either:
      (i) procure for Buyer the right to continue using our product;
      (ii) replace it with a noninfringing product;
      (iii) modify it so it becomes noninfringing;
      (iv) remove the product or part thereof and refund Buyer's net book value and transportation costs attributable to it.

   The foregoing states our entire liability with respect to any patent infringement by our products or any parts thereof. To the extent that our product or any part thereof is supplied according to specifications and designs furnished by Buyer, Buyer agrees to indemnify us in the manner and to the extent set forth above insofar as the terms thereof are appropriate.
10. **FORCE MAJEURE:** We shall not be liable for any delay in performance or nonperformance which is due to war, fire, flood, acts of God, acts of third parties, acts of governmental authority or any agency or commission thereof, accident, breakdown of equipment, differences with employees or similar or dissimilar causes beyond our reasonable control, including but not limited to, those interfering with production, supply or transportation of products, raw materials or components or our ability to obtain, on terms we deem reasonable, material, labor, equipment or transportation.
11. **ACCEPTANCE OF ORDERS:** Buyer agrees that all orders, including any arising from our Proposal, shall include these terms and conditions only, notwithstanding any different or additional terms that may be embodied in Buyer's order. All orders are subject to our acceptance and we reserve the right to reject orders as, in our sole judgement, mandated by business conditions. We reserve the right to not proceed with any order until all necessary information is received from Buyer.
12. **MERGER CLAUSE:** This Agreement entirely supersedes any prior oral representations, correspondence, proposal, quotation, or agreement. This writing constitutes the final and total expression of such agreement between the parties, and it is a complete and exclusive statement of the terms of that agreement.
13. **ASSIGNMENT:** Neither party may assign this Agreement without the written consent of the other party, except that we may assign this Agreement to a third party that acquires substantially all of our assets or we may assign the flow of funds arising out of this Agreement.
14. **GOVERNING LAW:** This Agreement shall be governed by and construed in accordance with the laws of the State of Michigan.

Sales and Ordering Information

U.S.A.

TERMS AND CONDITIONS OF SALE: See previous page.

PHONE ORDERS – TOLL FREE: 800-626-6653. D-M-E's Customer Service Dept. operates Monday through Friday from 8 a.m. to 8 p.m. E.S.T. Calls can be made from anywhere in the continental U.S. and Puerto Rico (Puerto Rico: use "137" prefix instead of "1"). Our Customer Service Representatives will be happy to answer your questions on D-M-E products or services, provide on-the-spot feedback on product availability and shipping details, or take any messages you wish relayed to your local D-M-E sales, manufacturing or technical service representatives.

MAIL ORDERS: If you prefer to order by mail, please address your order to:

- D-M-E Company, 29111 Stephenson Highway, Madison Heights, Michigan 48071-2330
  ATTN: Customer Service Dept.

FAX: You may fax your order to:

- D-M-E Customer Service
  248-398-6174 • 888-808-4363

CHECKS OR MONEY ORDERS: When paying invoices by check or money order, please make payable to *D-M-E Company.* Include remittance copy of invoice and mail to:

- D-M-E Company, Department Lock Box 78242, P.O. Box 78000, Detroit, Michigan 48278-0242

WALK-IN ORDERS, PICK-UPS AND RETURNS: If desired, ordered products in stock at your nearest D-M-E Service Center can be picked up rather than shipped. Walk-in orders at Service Center locations can also be processed while you wait. Products being returned for repair or exchange should be processed through Customer Service prior to being returned.

SPECIAL MACHINING SERVICES: Prints for quotation on special machining work can be sent by EDI to dme_cad@dme.net or mailed to the Estimating Department of the D-M-E manufacturing location nearest you. Call our toll-free number if desired to clarify location which serves your area.

Estimating locations are:

- 70 East Hillis Street, Youngwood, Pa 15697, FAX: 724-925-2424
- 1117 Fairplains Street, Greenville, MI 48338, Tel. 616-754-4601, FAX: 616-225-3924
- 3275 Deziel Drive, Windsor, Ont N8W 5A5, Tel. 519-948-5001, FAX: 519-948-4652
- 464-466 Windy Point Drive, Glendale Heights, IL 60139, Tel. 630-469-4280, FAX: 630-469-4740 (estimating only)

Please add "D-M-E Company" and "Attn: Estimating Dept." to above addresses when mailing prints. To obtain prices and delivery on special mold base orders or to check status of special work in progress please contact Customer Service.

CANADA

TERMS AND CONDITIONS OF SALE: See previous page.

PHONE ORDERS: Contact our Mississauga, Ontario office at 800-387-6600, FAX: 800-461-9965.

MAIL ORDERS: Send to: D-M-E of Canada, Ltd., 6210 Northwest Drive, Mississauga, Ontario L4V 1J6.

CHECK OR MONEY ORDERS: Make payable to *D-M-E of Canada, Ltd.* Include remittance copy of invoice and mail to Mississauga address above.

WALK-IN ORDERS, PICK-UPS, RETURNS, AND SPECIAL MACHINING: Contact our Mississauga office.

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Hot Runner Warranty

D-M-E
Every step of the way

D-M-E Company
29111 Stephenson Highway, Madison Heights, MI 48071
Tel. 248/398-6000 ▪ FAX 248/398-6174

D-M-E Hot Runner Systems and Temperature Controllers are warranted pursuant to D-M-E Company's standard terms and conditions (see page 5) for the time periods set forth below. The warranty (i) *covers items sold and shipped [supplied in accordance with orders placed by the customer with D-M-E on or after JULY 1, 2003,* (ii) *applies only to the original D-M-E customer and,* (iii) *is not transferable to subsequent owners of the product except as specifically set forth herein (see Transferability below for conditions).*

WARRANTY PERIODS APPLICABLE TO SPECIFIED D-M-E PRODUCTS; COVERAGE STARTS UPON DATE OF SHIPMENT:

Item	Coverage
D-M-E Hot Runner Package Systems (plates designed, machined & assembled by D-M-E, **excluding Electrical Parts**)	Three (3) years
Galaxy & Stellar Hot Runner Package Systems Only (plates designed, machined & assembled by D-M-E, **excluding Electrical Parts**)	Plastic leakage within hot runner plates covered for Three (3) years; **excluding Gate Detail. (Galaxy & Stellar Hot Runner Package Systems Only)**
D-M-E Hot Runner Systems supplied as Manifold and Components Only (neither plates nor assembly supplied by D-M-E, **excluding Electrical Parts**)	One (1) year
D-M-E Electrical Parts (all heaters and thermocouples)	One (1) year
D-M-E Mold Controls (Temperature, Valve Gate & Cavity Pressure Controls, **excluding Fuses & Triacs**)	Three (3) years

Replacement or repair will be made at the election of D-M-E; implemented at a D-M-E facility and/or by shipment of replacement parts to the customer for installation and/or return of defective parts to D-M-E for repair.

Transferability:

This warranty may be transferred by the original D-M-E Customer to a subsequent owner of the product *if all of the following conditions exist:* (i) the original D-M-E Customer purchased the product for purposes of re-sale or other immediate transfer and D-M-E was made aware of these purposes at the time of purchase in writing, (ii) within thirty (30) days from the date of invoice, D-M-E is notified in writing of the transfer and provided with the name of the new owner (hereafter "Transferee"), the contact person of the Transferee and the Transferee's address.

Exclusions:

- Normal wear of the system and components including, but not limited to: Nozzle Tips, Gate Shell Insulators, Nozzle Seal Rings, O-rings, Piston Seals, Valve Stems and Electrical connectors
- Damage to the critical seal-off areas on the manifold, nozzle bodies, or in the mating cavities or cavity inserts caused by improper assembly, operation, disassembly and maintenance
- Wear or damage resulting from corrosion or processing of abrasive/aggressive resins
- Damage due to failure to follow recommended operation and maintenance procedures specified in the D-M-E Hot Runner Manual, Hot Runner Nameplate, Service Bulletins, User Manuals or failure to follow standard industry operation and maintenance procedure
- Damage caused by abuse, neglect, and failure to adhere to D-M-E instructions and operational recommendations
- Damage caused by improper installation, operation and maintenance
- Damage resulting from modifications to the product or component parts, abuse or neglect
- Failure caused by modifications made to the product without the prior written approval of D-M-E
- Damage resulting from operation of products at injection pressures greater than 20,000 psi (1360 bar) on 250, 375, and 625 Series, Gate-Mate 4, Valve Gate, Galaxy and Stellar Systems; unless specifically designed and manufactured for higher pressure applications in agreement with manufacturer
- Damage or failure caused by the product's inability to perform as a component of a system design not supplied by D-M-E
- Operator absence or operator error
- Operator maintenance and training capability
- Electrical interruptions
- Events beyond the control of D-M-E
- Errors or actions by a third party
- Non-compliance with local laws, codes, ordinances or regulations codes or bylaws unless D-M-E is informed of them by our customer at the time of order placement

D-M-E Hot Runner...



D-M-E
Every step of the way

Whether your application requires best-in-class components or a turnkey hot-half system, D-M-E has a hot runner solution that meets your needs.

D-M-E: An Essential Resource for Hot Runner Productivity

Moldmakers, molders and mold designers worldwide look to D-M-E for essential hot runner solutions — whether that is a single, best-in-class component or a complete, fully functioning hot half system. Offering the industry's broadest range of hot runner products and services as well as an unsurpassed knowledge and expertise, D-M-E is committed to helping customers achieve maximum productivity, reliable operation, and better performance.

System Solutions

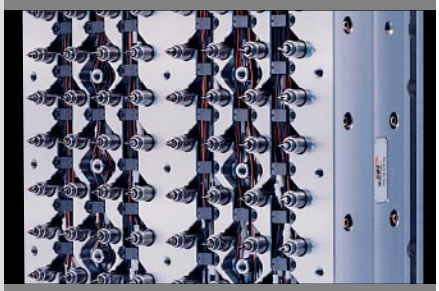
D-M-E offers a comprehensive family of hot runner systems built on our modular architecture making custom configuration easy and quick. Systems include:

- **Galaxy™ High Cavitation Systems** proven successful on 96-cavity molds
- **Gate-Mate™ Lite Nozzles** the most economical choice for direct gating
- **Stellar™ Micromolding Systems** engineered for tight pitch molding
- **The Hot One**
- **The Cool One**

Quick Delivery Systems

From hot halves to standard manifolds, several of D-M-E's hot runner systems are available for rapid shipment to help you meet the demands of your business.

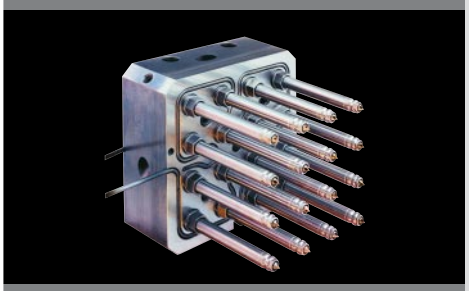
- **Stellar Quick Delivery Systems** for the challenges of tight pitch molding; ship in as little as three weeks
- **Meteor™ Quick Delivery Systems** full range of hot runners from simple nozzle-and manifold systems up to turnkey hot halves



Galaxy Systems offer reliable high cavitation solutions



A wide range of D-M-E nozzles allows versatility in system selection



Stellar multi-nozzle assemblies provide application flexibility

...from components and manifolds to turnkey hot halves



Our goal is simple: to be an essential resource for your molding challenges.
Every step of the way.

Specialized Systems

As one of the world's leading hot runner manufacturers, we recognize that some application challenges demand specialized solutions. Offerings include:

- **Stack Mold Systems** double molding machine output to optimize utilization; available in a wide range of actuation methods
- **Polivalve Valve Gate Systems** for improved part cosmetics and more precise control of mold filling

Knowledge That Gives You an Advantage

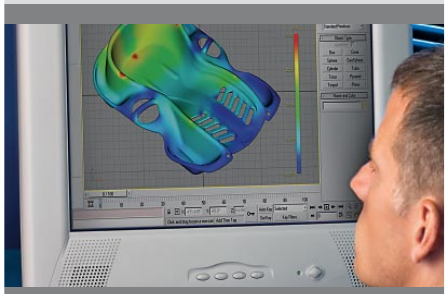
Our team of trained, experienced experts can help you with needs analysis, design, configuration, operation, and all the other services that enable you to focus on your core business.

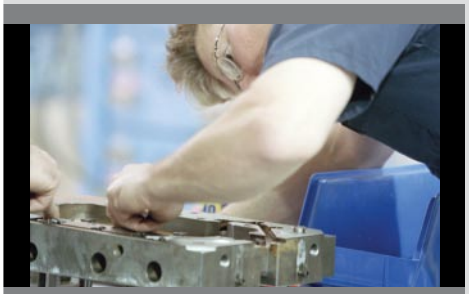
- **Applications engineering**
- **Moldflow analysis**

Service and Support to Keep You Productive

D-M-E provides essential support to keep your hot runner systems in-service. Our dedicated hot runner service center is staffed by trained, experienced technicians who support D-M-E systems, as well as other brands, to provide help when and where you need it, every step of the way.


Meteor Systems are custom configured for quick delivery


Moldflow predictive analysis optimizes part design and lowers costs


D-M-E Hot Runner Service Center provides total support for your hot runner system

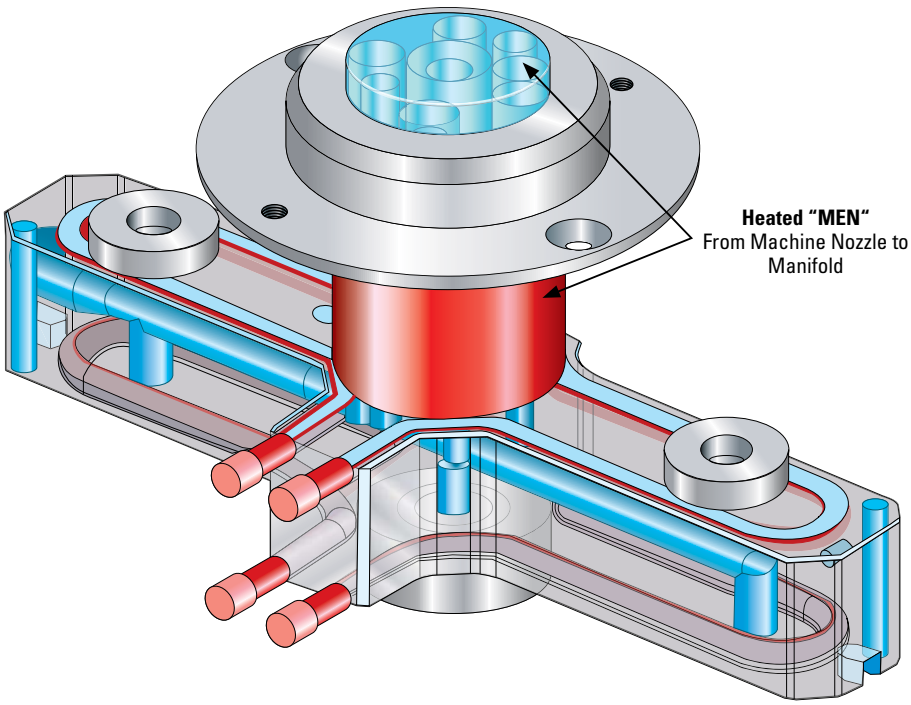
Standard Global Manifold and Components

D-M-E Global Manifolds and Components are standardized worldwide to ensure that even the smallest detail provides operational excellence regardless of where D-M-E hot runner products are used. Whether you're relying on a quick-delivery manifold or an applications-engineered, custom manifold, the D-M-E Global Manifold Standard ensures optimal hot runner performance no matter where in the world it was built.

Key Features of the D-M-E Global Manifold Include:

- Flexible tubular heaters
- Locating rings that fit virtually any injection press platen hole diameters
- Heated Manifold Extension Nozzles that match up to different locating ring diameters and machine nozzle radii
- High-tolerance, press-fit heaters
- Upper and center Manifold supports constructed of high-strength, low-heat conductive titanium that minimizes heat loss and maintains an even heat profile
- J-type thermocouples are black-and-white, coinciding with the IEC 584-3 International Standard
- Flow channel sizes range from 6mm to 16mm

D-M-E customers are assured that D-M-E Manifold Systems are designed and built with a global standard that ensures efficient molding anywhere in the world. And, since replacement parts are identical worldwide, they are readily available wherever your mold is operating, not just where it was built. All D-M-E nozzles, including Galaxy, Stellar, Gate-Mate and the Hot One, perform flawlessly with the D-M-E Global Manifold Standard.



Available in all balanced design layout patterns up to 64 nozzle drops*, including inline, X, Y, H, Double H & Multiple Level Systems.

*Contact D-M-E for Higher Cavitation

MANIFOLD DESIGN, SPECIFICATION & TOLERANCE STANDARDS HARMONIZED FOR GLOBAL PRODUCT OFFERING

AMERICAS – EUROPE – ASIA – AUSTRALIA / NEW ZEALAND

U.S. 800-626-6653 ▪ Canada 800-387-6600 ▪ www.dme.net
ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

D-M-E Hot Runner Technology Selection Guide

www.dme.net

Every step of the way

Resin Application Key

- Good
- Contact D-M-E Applications Engineering or Technical Service for resin application guidance
- Not recommended for resin application

Gate Diameter Key

- ◆ Remachine Standard Gate Orifice
- ▲ Modify Thru-Hole Orifice
- ■ Modify Thru-Hole Orifice (unfilled)
- ❑ Modify Thru-Hole Orifice (filled and unfilled)

Polymer Viscosity Key

L = Low M = Medium H = High

NOZZLE	TIP	Recommended Gate Diameter Range Min (mm)	Max (mm)	Min (inch)	Max (inch)	Flow Capacity (Grams) Gate Diameter mm	inch	Viscosity Low MFI >16	Medium MFI 7-16	High MFI .02-7	Color Change Capability	Filled Resin Yes/No	PVC (Flex Vinyl) [A] *	TPE (Elastomer) [A]	PUR (Urethane) [A]	PE (Polyethylene) [C]	PE GF (Polyethylene) [C]	PS (Polystyrene) [C]	PS GF (Polystyrene) [A]	SAN [A]	TPO [C]	PP (Polypropylene) [C]	PP GF (Polypropylene) [C]	PP TF (Polypropylene) [C]	ABS [A]	ABS/PC [A]	PMMA (Acrylic) [A]	POM (Acetal) [C]	PA (Nylon) [C]	PA GF (Nylon) [C]	PA MF GF (Minlon) [C]	PPE [A]	PS/PPE (Noryl) [A]	PS/PPE GF (Noryl) [A]	PBT Polyester [C]	PBT GF Polyester [C]	PET [C]	PC (Polycarbonate) [A]	PC GF (Polycarbonate) [A]	PPS [C]	PSU [A]	PSU GF [A]	LCP [C]	PEI (Ultem) [A]	PEI GF (Ultem) [A]	PEEK [C]
													M	L	L	L	H	M	H	M	L	M	H	M	M	H	H	M	L	H	H	H	H	H	H	H	L	H	H	M	H	H	L	H	H	H
Polivalve 50 Series Low Watt Coil Heater	Topless (Bodiless) Tip	1.5	2.5	0.060	0.100	2.5	0.098	400	200	120	Valve pin requires longer color change time.	Yes																																			
	Standard (Full Body) Tip	1.5	2.0	0.060	0.080	2.0	0.079	800	600	400																																			
	Extended (Sprue) Tip	1.5	2.0	0.060	0.080	2.0	0.079	800	600	400																																			
Polivalve 200 Series Low Watt Coil Heater	Topless (Bodiless) Tip	2.0	4.0	0.080	0.160	4.0	0.157	800	400	200																																			
	Standard (Full Body) Tip	2.0	3.0	0.080	0.120	3.0	0.118	1600	1200	800																																			
	Extended (Sprue) Tip	2.0	3.0	0.080	0.120	3.0	0.118	1600	1200	800																																			
Polivalve 500 Series Low Watt Coil Heater	Topless (Bodiless) Tip	2.5	5.0	0.100	0.200	5.0	0.197	2400	1600	1200																																			
	Standard (Full Body) Tip	2.5	4.0	0.100	0.155	4.0	0.157	3200	2400	1600																																			
	Extended (Sprue) Tip	2.5	4.0	0.100	0.155	4.0	0.157	3200	2400	1600																																			
Polivalve 800 Series Low Watt Coil Heater	Topless (Bodiless) Tip	2.5	6.0	0.100	0.235	6.0	0.236	4800	3200	2400																																			
	Standard (Full Body) Tip	2.5	5.0	0.100	0.200	5.0	0.197	6400	4800	3200																																			
	Extended (Sprue) Tip	2.5	5.0	0.100	0.200	5.0	0.197	6400	4800	3200																																			
Polivalve 1000 Series Low Watt Coil Heater	Topless (Bodiless) Tip	3.5	8.0	0.140	0.315	8.0	0.315	7200	4800	3200																																			
	Standard (Full Body) Tip	3.5	6.5	0.140	0.255	6.5	0.256	8000	6400	4800																																			
	Extended (Sprue) Tip	3.5	6.5	0.140	0.255	6.5	0.256	8000	6400	4800																																			
Stellar Sleeved Coil Heater	Sprue Tip	2.0	2.0	0.080	0.080	2.0	0.080	40	30	20	Good color change capability.	Yes																																			
	Wear Resistant Point Tip	0.8	1.5	0.030	0.062	1.0 1.6	0.040 0.062	10 10	10 10	5 10																																			
	Thru-Hole Wear Resistant Tip	0.8	1.5	0.030	0.062	0.7 1.1	❑ 0.028 ■ 0.041	10 10	10 10	7 10																																			
Galaxy Sleeved Coil Heater	Wear Resistant Point Tip	1.0	2.0	0.040	0.080	1.0 1.5 2.0	0.040 0.060 0.080	125 170 225	70 90 125	40 60 95	Good color change capability. Improve color change speed with gate shell insulators.	Yes																																			
	Thru-Hole Wear Resistant Tip	1.0	2.0	0.040	0.080	0.7 1.3	❑ 0.028 ■ 0.050	100 135	60 80	35 50																																			
Gate-Mate Lite Coil Heater	Point Tip	1.0	2.2	0.040	0.087	1.0 2.0	0.040 0.080	100 180	55 100	30 75	Good color change capability.	No																																		
	Thru-Hole Tip	1.0	2.2	0.040	0.087	1.0 1.5	0.040 0.060	100 135	60 80	35 50																																			
Gate-Mate Coil Heater	Gate Mate 4 Wear Resistant Point Tip	1.0	2.0	0.040	0.080	1.0 2.0	0.040 0.080	125 225	70 125	40 95	Good color change capability. Improve color change speed with gate shell insulators.	Yes																																			
	Gate Mate 4 Thru-Hole Wear Resistant	1.0	2.0	0.040	0.080	1.0 1.5	0.040 ▲ 0.060	100 135	60 80	35 50																																			
	Wear Resistant Mini Point Gate	0.8	2.0	0.030	0.080	0.8	0.030	85	50	30																																			
	Jumbo Point Gate Wear Resistant	1.8	2.5	0.070	0.100	1.8 2.5	0.070 0.100	340 450	200 270	120 160																																			
	Jumbo Thru-Hole Wear Resistant	1.8	2.5	0.070	0.100	1.8 2.5	0.070 0.100	270 360	160 215	100 130																																			

The values expressed in grams are for reference only and are determined by using a nominal wall thickness of 1.8mm (.070") and unfilled polypropylene.
Part dimension, wall thickness, length of fill within part, mold conditions and molding parameters must also be considered.

NOTE: If flame retardant is present in the desired resin grade, please contact D-M-E for product suitability or application guidance.

*Special nozzles and manifolds.

a Milacron Company

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

D-M-E
Every step of the way

D-M-E Hot Runner Technology Selection Guide

www.dme.net

Resin Application Key
- Good
- Contact D-M-E Applications Engineering or Technical Service for resin application guidance
- Not recommended for resin application

Gate Diameter Key
- ◆ Remachine Standard Gate Orifice
- ▲ Modify Thru-Hole Orifice
- ■ Modify Thru-Hole Orifice (unfilled)
- ❑ Modify Thru-Hole Orifice (filled and unfilled)

Polymer Viscosity Key
L = Low M = Medium H = High

NOZZLE FLOW CAPACITY RECOMMENDATIONS

GENERIC POLYMER NAME (TRADE NAME) [A = AMORPHOUS or C = CRYSTALLINE]

NOTE: THE CHART BELOW SHOWS COMMODITY RESINS IN BLUE TYPE; ALL OTHERS ARE ENGINEERING RESINS.

NOZZLE	TIP	Recommended Gate Diameter Range Min (mm)	Max (mm)	Min (inch)	Max (inch)	Flow Capacity (Grams) Gate Diameter mm	inch	Viscosity Low MFI >16	Medium MFI 7-16	High MFI .02-7	Color Change Capability	Filled Resin Yes/No	PVC (Flex Vinyl) [A]*	TPE (Elastomer) [A]	PUR (Urethane) [A]	PE (Polyethylene) [A]	PE GF (Polyethylene) [C]	PS (Polystyrene) [C]	PS GF (Polystyrene) [C]	PS (Polystyrene) [A]	PS GF (Polystyrene) [A]	SAN [A]	TPO [C]	PP (Polypropylene) [C]	PP GF (Polypropylene) [C]	PP TF (Polypropylene) [C]	ABS [A]	ABS/PC [A]	PMMA (Acrylic) [A]	POM (Acetal) [C]	PA (Nylon) [C]	PA GF (Nylon) [C]	PA MF GF (Minlon) [C]	PPE [A]	PS/PPE (Noryl) [A]	PS/PPE GF (Noryl) [A]	PBT Polyester [C]	PBT GF Polyester [C]	PET [C]	PC (Polycarbonate) [A]	PC GF (Polycarbonate) [A]	PPS [C]	PSU [A]	PSU GF [A]	LCP [C]	PEI (Ultem) [A]	PEI GF (Ultem) [A]	PEEK [C]
													M	L	L	L	H	M	H	M	L	M	H	M	M	H	H	M	L	H	H	H	H	H	H	H	L	H	H	M	H	H	L	H	H	H
Hot One 250 Series Coil Heater	Sprue Tip	2.0	3.2	0.080	0.125	2.0 3.2	0.080 ◆ 0.125	500 625	375 475	250 315		Yes																																					
	Wear Resistant Point Tip	0.7	2.0	0.028	0.080	1.0 2.0	0.040 0.080	100 200	70 150	35 100																																						
	Ring w/Wear Resistant Point (special tip)	1.5	2.0	0.060	0.080	1.5 2.0	0.060 0.080	150 200	100 150	50 100																																						
Hot One 250 Series Cast-In Heater	Sprue Tip	2.0	3.2	0.080	0.125	2.0 3.2	0.080 ◆ 0.125	500 625	375 475	250 315		Yes																																					
	Wear Resistant Point Tip	0.7	2.0	0.028	0.080	1.0 2.0	0.040 0.080	100 200	70 150	35 100																																						
	Ring w/Wear Resistant Point (special tip)	1.5	2.0	0.060	0.080	1.5 2.0	0.060 0.080	150 200	100 150	50 100																																						
Hot One 375 Series Coil Heater	Sprue Tip	3.2	6.4	0.125	0.250	3.2 4.7	0.125 ◆ 0.187	1000 1250	750 1000	500 750	Good color change capability.	Yes																																						
	Wear Resistant Point Tip	0.7	2.5	0.028	0.100	1.5 2.5	0.060 0.100	190 310	100 200	75 130																																						
	Ring w/Wear Resistant Point (special tip)	2.0	2.5	0.080	0.100	2.0 2.5	0.080 0.100	250 310	150 200	100 130																																						
Hot One 375 Series Cast-In Heater	Sprue Tip	3.2	6.4	0.125	0.250	3.2 4.7	0.125 ◆ 0.187	1000 1250	750 1000	500 750		Yes																																					
	Wear Resistant Point Tip	0.7	2.5	0.028	0.100	1.5 2.5	0.060 0.100	190 310	100 200	75 130																																						
	Ring w/Wear Resistant Point (special tip)	2.0	2.5	0.080	0.100	2.0 2.5	0.080 0.100	250 310	150 200	100 130																																						
Hot One 625 Series Coil Heater	Sprue Tip	4.7	7.9	0.187	0.312	4.7 7.9	0.187 ◆ 0.312	1250 1900	1000 1500	750 1000		Yes																																					
	Wear Resistant Point Tip	3.2	4.0	0.125	0.160	3.2 4.0	0.125 0.160	600 800	400 550	300 400																																						
	Ring w/Wear Resistant Point (special tip)	3.2	4.0	0.125	0.160	3.2 4.0	0.125 ◆ 0.160	600 800	400 550	300 400																																						
Hot Sprue	S-Series & T-Series	4.1	4.1	0.160	0.160	4.0	0.160	700	500	300	Good color change capability.	Yes																																						
	E-Series	1.5	1.5	0.060	0.060	1.5	0.060	300	150	50																																						
	ER-Series & TR-Series	3.2	3.2	0.125	0.125	3.2	0.125	500	300	200																																						
	High Performance Series	1.6	3.2	0.062	0.125	1.5 3.2	0.060 0.125	300 500	150 300	50 200																																						
Cool-One	AFIP3 Tip	0.8	2.5	0.030	0.100	2.5	0.100	20	15	N/A	Color change not recommended.	Yes																																						
	AFIP4 Tip	1.0	2.5	0.040	0.100	2.5	0.100	40	20	N/A																																						
	AFIP5 Tip	1.0	2.5	0.040	0.100	2.5	0.100	150	60	N/A																																						
	AFP/AFPN	1.0	2.5	0.040	0.100	2.5	0.100	300	160	80																																						
	AFPN-Large	1.0	2.5	0.040	0.100	2.5	0.100	400	250	125																																						

The values expressed in grams are for reference only and are determined by using a nominal wall thickness of 1.8mm (.070") and unfilled polypropylene.
Part dimension, wall thickness, length of fill within part, mold conditions and molding parameters must also be considered.

NOTE: If flame retardant is present in the desired resin grade, please contact D-M-E for product suitability or application guidance.

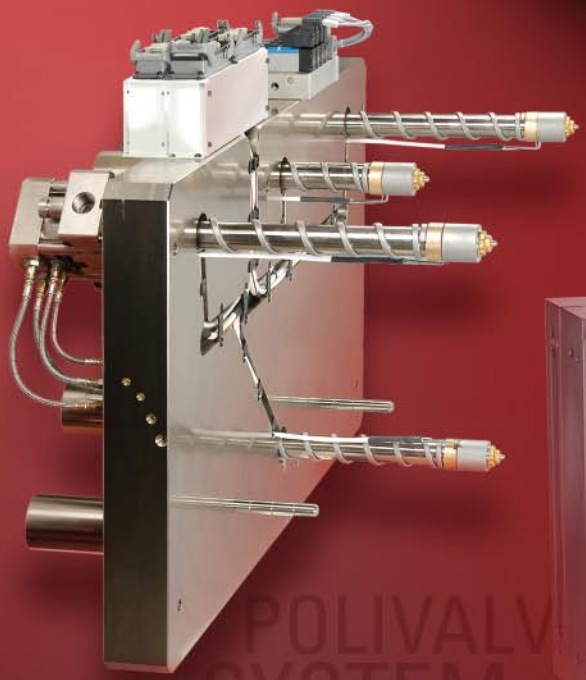
*Special nozzles and manifolds.

a Milacron Company

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D-M-E Valve Gate Hot Runner Systems

Fully integrated valve gate systems for superior gate cosmetics and sequential part filling













D-M-E
Every step of the way

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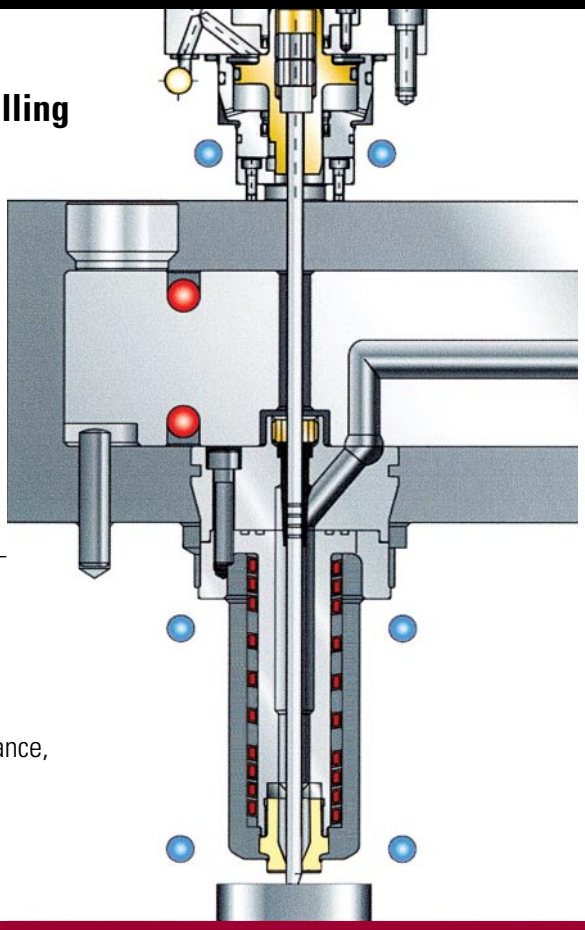
Multi-use Valve Gate Systems

For superior gate cosmetics and sequential part filling

When surface quality is important for both small and large part applications, the D-M-E Polivalve series is an ideal choice. Available in two versions, Hot Half and *Simplicity* Drop-In Systems, Polivalve provides a fully integrated multi-use valve gate system featuring a wide variety of nozzles.

Available in hydraulic and pneumatic actuation, the Polivalve series offers many benefits:

- **Excellent for sequential filling and family mold applications** – improves part quality, reduces costs, increases part design options, opens process windows, and eliminates knit lines
- **Zero gate vestige on molded parts** – improves cosmetics and eliminates secondary trimming operations
- **Side-entry nozzle flow channel** – ensures minimum flow disturbance, improves system reliability, and results in less pressure loss
- **Front- and rear-loaded nozzle heater options**
- **"A" dimension range from 52 to 500mm**



Polivalve provides excellent surface finish for small- and large-part molding …



A wide range of nozzles can be used in the Polivalve system.

Polivalve is a registered trademark of polimold® INDUSTRIAL S.A.

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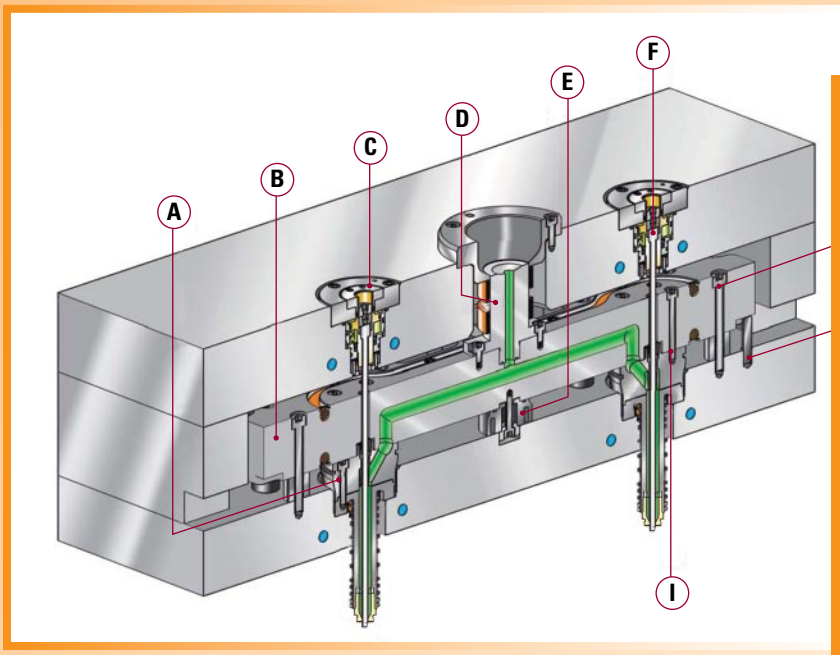
Multi-use Valve Gate Systems

Polivalve Hot Half Systems

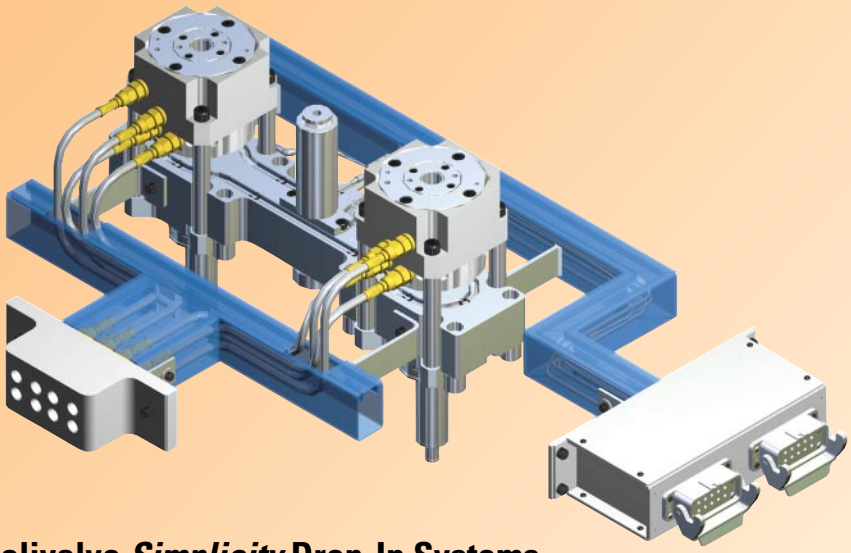
Available in V50, V200, V500, V800 and V1000 Series

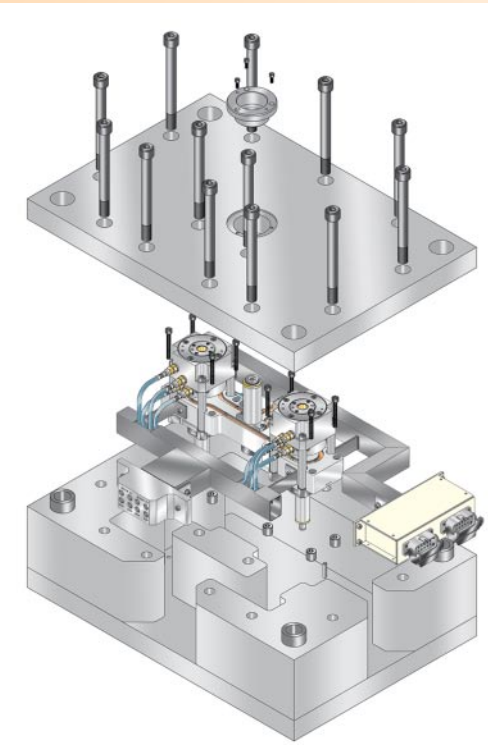
- Hydraulic or pneumatic actuation
- Ideal for small to large part applications
- Zero gate vestige
- Fill sequencing to eliminate weld lines
- Improved product finish and quality due to reduced shear rates

SYSTEM COMPONENTS	
A	NOZZLE ASSEMBLY
B	MANIFOLD
C	HYDRAULIC CYLINDER
D	NOZZLE SEAT
E	CENTRAL SUPPORT
F	VALVE PIN
G	MANIFOLD ASSEMBLY SCREW
H	DOWEL PIN
I	NOZZLE ASSEMBLY SCREW



… and is ideal for products that require different production volumes.





Polivalve *Simplicity* Drop-In Systems

Available in V500, V800 and V1000 Series

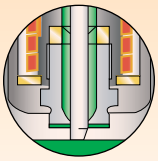
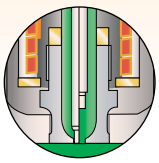
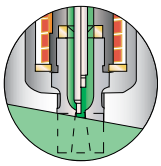
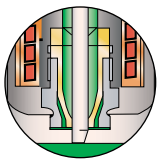
- Well-suited for larger part applications
- Easy access
- Ready for installation
- Quick assembly of the cooling/actuation/heating/control circuits

Material Compatibility and Flow Capacity

Polivalve nozzles are offered in 4 tip styles.

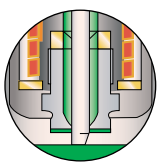
The following are guidelines for selecting tip style.

Nozzle tip and plastic material compatibility

NOZZLE TIP	THERMOPLASTIC RESIN TYPE																								
	AMORPHOUS								SEMI-CRYSTALLINE																
	SB	PUR	PEI	PVC – FLEX	SAN	PS	PC	PPO	PE	PP	PEEK	PPS	PET	PBT	PA	TPE	POM	PMMA	ABS	TPO	ABS/PC	PPE/PS	PSU	LCP
 Bodiless	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
 Standard Full Body	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
 Sprue Gate	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
 High Performance	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

● Recommended ● Contact D-M-E for assistance ● Not Recommended

Maximum flow capacity

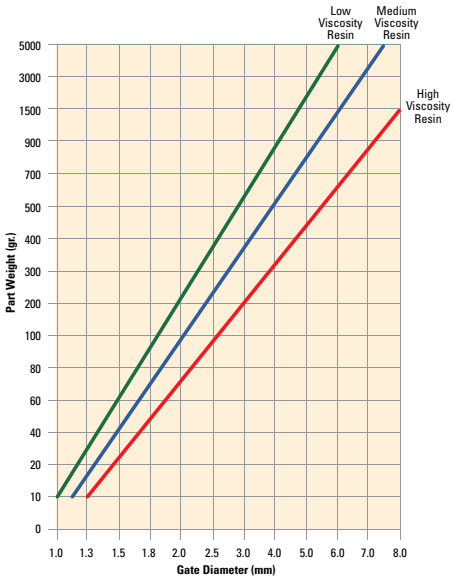
MAXIMUM SHOT WEIGHT IN GRAMS WITH MAXIMUM GATE DIAMETER						
NOZZLE TIP	RESIN VISCOSITY	V50 SERIES	V200 SERIES	V500 SERIES	V800 SERIES	V1000 SERIES
	LOW	400	800	2400	4800	7200
	MEDIUM	200	400	1600	3200	4800
	HIGH	120	200	1200	2400	3200

Hot Runner Applications

Definition of material input

The optimal gate diameter will vary according to the resin viscosity and part weight. Please refer to the chart for guidelines. Other factors to consider when defining gate requirements for a D-M-E Polivalve System are:

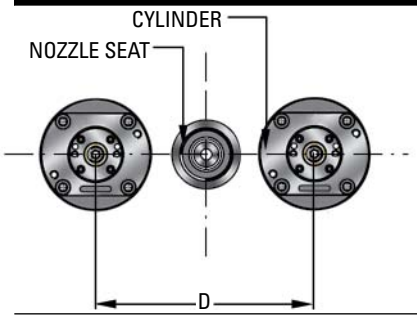
- Product geometry
- Polymer type
- Mold and injection machine conditions



Minimum center-to-center distances

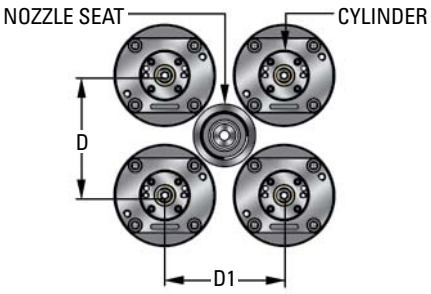
To determine the minimum dimensions between nozzles, consider nozzle series type, support and nozzle seat configuration, and cylinder type and size.

Minimum Center-to-Center Distance (with Center Support & Nozzle Seat)



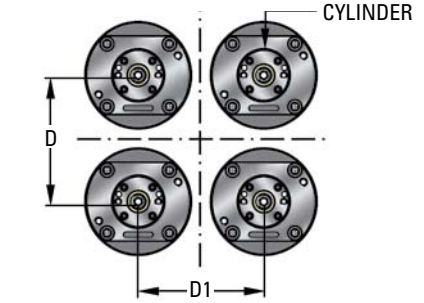
SERIES	HYDRAULIC		PNEUMATIC	
	HOT HALF	SIMPLICITY	HOT HALF	SIMPLICITY
	D	D	D	D
V50	125	—	—	—
V200	133	—	137	—
V500	133	155	137	155
V800	162	170	162	170
V1000	162	170	162	170

Minimum Center-to-Center Distance (with Center Support & Nozzle Seat)



SERIES	HYDRAULIC				PNEUMATIC			
	HOT HALF		SIMPLICITY		HOT HALF		SIMPLICITY	
	D	D1	D	D1	D	D1	D	D1
V50	88	88	—	—	—	—	—	—
V200	100	100	—	—	100	100	—	—
V500	100	100	140	140	100	100	140	140
V800	115	115	160	160	115	115	160	160
V1000	115	115	160	160	115	115	160	160

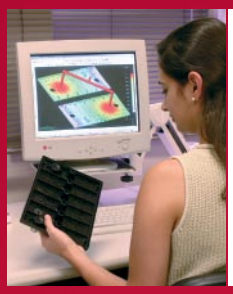
Minimum Center-to-Center Distance per Quadrant (No Center Support)

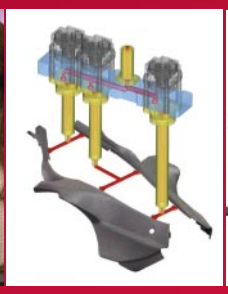


SERIES	HYDRAULIC				PNEUMATIC			
	HOT HALF		SIMPLICITY		HOT HALF		SIMPLICITY	
	D	D1	D	D1	D	D1	D	D1
V50	72	72	—	—	—	—	—	—
V200	80	80	—	—	85	85	—	—
V500	80	80	110	110	85	85	110	110
V800	110	110	120	120	110	110	120	120
V1000	110	110	120	120	110	110	120	120

NOTES: For applications other than those shown here, please contact D-M-E.

Application Versatility







Choose Polivalve for a high-quality surface finish

Polivalve systems provide a superior surface finish with zero gate vestige. This valve gate system is ideal for producing parts ranging in size as well as volume.



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D-M-E Valve Gate Controls

ENERGY EFFICIENT, RELIABLE
AND COMPACT HYDRAULIC AND
PNEUMATIC CONTROLS



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4-Zone and 8-Zone Timer-Based Sequencers

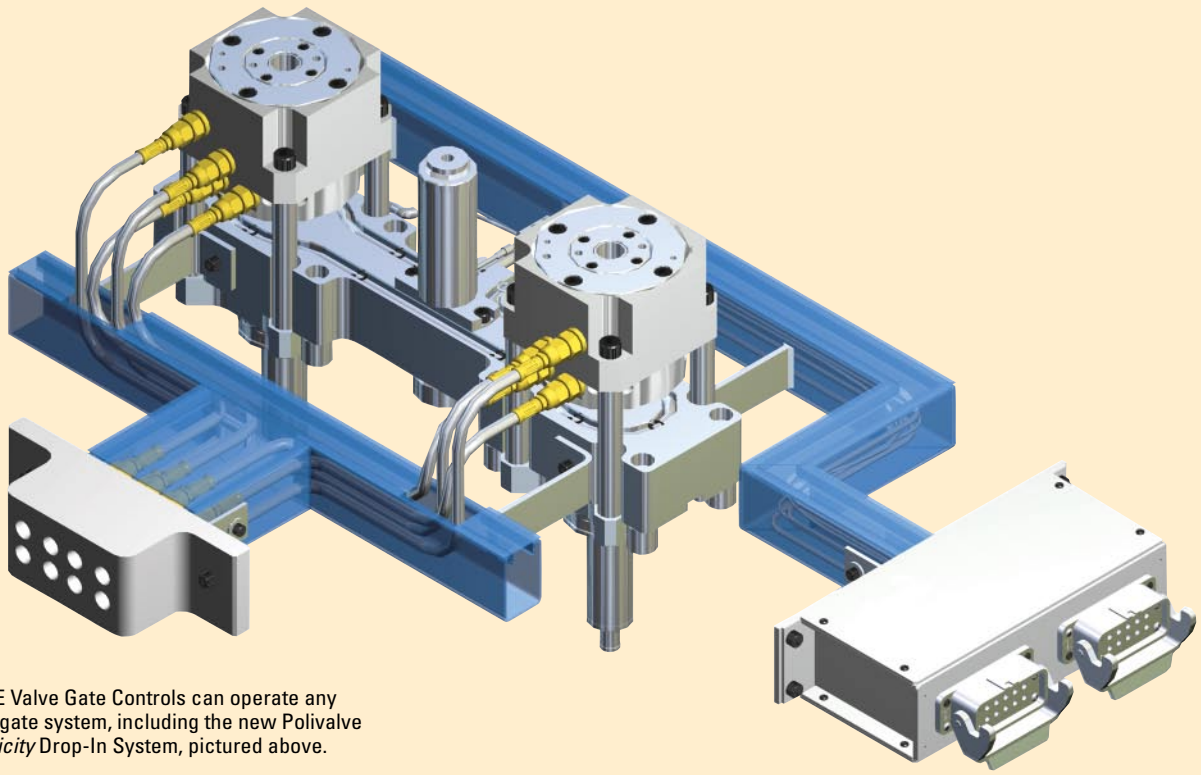
- Solid-state timers and relays have a life rating of 10 million cycles
- Robust power supply
- User-friendly auto-reset function
- Individual test buttons for each zone provide precise time control to .01 second
- Compact design takes up minimal space
- Air-powered operation runs on 120 VAC and an air line
- Accumulator stores precharged oil, allowing for instantaneous operation

Hydraulic and pneumatic valve gate controls provide reliable, accurate and efficient control

Valve gate sequencers from D-M-E are available in pneumatic or hydraulic control for timer-based actuation of up to eight valve gates. Offering faster response than typical valve gate controllers and greatly reduced electrical use over the life of the unit, D-M-E Valve Gate Controls provide reliable, accurate, highly efficient time control for years of use.

Controllers feature highly accurate (resolution to 1/100 of a second) DIN-style solid state timers, individually fused against faults, to provide long life and high reliability. Each timer is capable of dual time functions, allowing each zone to be programmed with a delay-time and an on-time. Test functions for each zone assist in determining the correct hookup of each valve.

The controllers operate from a wide supply of operating voltages (88 to 264 volts AC), making them easy to relocate between different plants or even different countries. The standard product is offered with a 125 volt AC plug (North American Standard). This plug can be removed and replaced with any number of 240 VAC plugs.



D-M-E Valve Gate Controls can operate any valve gate system, including the new Polivalve *Simplicity* Drop-In System, pictured above.

4-Zone and 8-Zone Timer-Based Sequencers

VCTH4000 and VCTH8000: 4-zone and 8-zone hydraulic control

The VCTH4000 provides four zones of hydraulic actuation and the VCTH8000 provides eight zones of actuation.

Hydraulic connections on the back of each controller allow for quick connect and disconnect of the hydraulic lines from the controller. This air-powered unit runs on 88 to 264 volts with a single air line. Because the VCTH pumps only when pressure build-up is required, operation is energy efficient, providing a low-cost energy solution. This style of pump also prevents degradation of hydraulic oil.

A hydraulic accumulator stores precharged oil, which provides on-demand flow for fast actuation of hydraulic cylinders. This powerful hydraulic system can provide up to 10 times the incoming air pressure.

ITEM NUMBER	DESCRIPTION
VCTH4000	4-ZONE HYDRAULIC CONTROLLER
VCTH8000	8-ZONE HYDRAULIC CONTROLLER
VCAH1500	15-FT. LONG HYDRAULIC HOSE ASSEMBLY

Note: Hydraulic hose assemblies and trigger signal cable included with each controller.



D-M-E Valve Gate controllers provide an extended life cycle, energy savings and more accurate time settings.

Compact 4-zone pneumatic or hydraulic control unit

The VCTB4000 Valve Gate Controller is designed to provide timer-based control of up to four 24 volt DC valves used to actuate pneumatic valve gate cylinders as well as some hydraulic valves, and features a user-friendly auto-reset feature. Its compact size makes it extremely portable and requires minimal space. A single DB-025 cable connects the controller to up to four remotely located valves, minimizing wiring and air connections.

ITEM NUMBER	DESCRIPTION
VCTB4000	4-ZONE PNEUMATIC HYDRAULIC CONTROLLER
VCPT0100	100-FT. LENGTH OF PNEUMATIC TUBING

Note: Trigger signal cable included with controller.



Highly accurate D-M-E solid state timers feature resolution to 1/100 of a second, far exceeding the industry standard of 1/10 of a second.

VCAP Air Valve Assemblies

VCAP multi-station air valve assemblies

The VCAP series offers 4-station (0400), 6-station (0600), 8-station (0800), 10-station (1000), and 12-station (1200) valve assemblies. The single-solenoid valves are spring returned and designed to run from 24 VDC +/- 10%. The air supply (maximum rated pressure 145 PSI) can be lubricated or non-lubricated — dry air is preferred but the valve is designed to tolerate some moisture.

Quick connects are provided on all air outputs to accept standard 1/4" tubing. The de-energized outputs, used for closing valve gates, feature check valves to ensure that unused valves do not leak air.

ITEM NUMBER	DESCRIPTION
VCAP0400	4-STATION AIR VALVE ASSEMBLY
VCAP0600	6-STATION AIR VALVE ASSEMBLY
VCAP0800	8-STATION AIR VALVE ASSEMBLY
VCAP1000	10-STATION AIR VALVE ASSEMBLY
VCAP1200	12-STATION AIR VALVE ASSEMBLY

Note: Each valve assembly includes a valve cable.



D-M-E Thermal Gate Hot Runner Systems

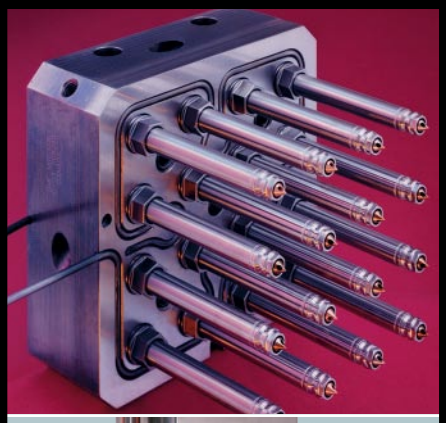
Proven externally heated systems that achieve outstanding processing results



D-M-E
Every step of the way

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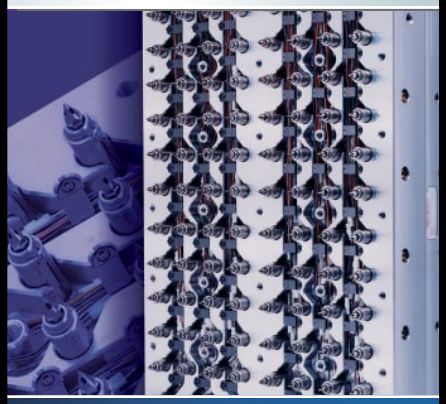
Stellar Micromolding Hot Runner Systems...25 to 28

The best solution for precision thermoplastic micromolding



Stellar Quick Delivery Systems.....29 to 36

A wide variety of configurations with rapid delivery



Galaxy High Cavitation Systems .....37 to 40

Powerful and proven performance for multi-cavity applications



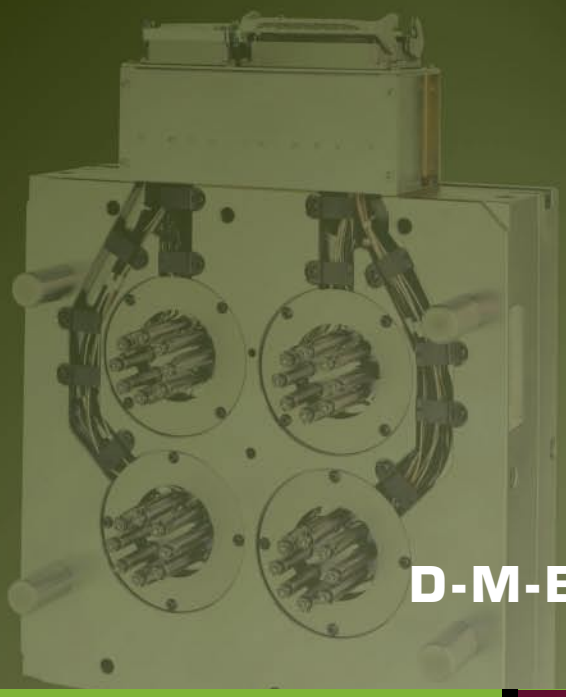
D-M-E Hot One Hot Runner Technology.....41 to 43

A long-standing industry standard in user-friendliness and affordability

Hot Runner Quote Request Form..... 44

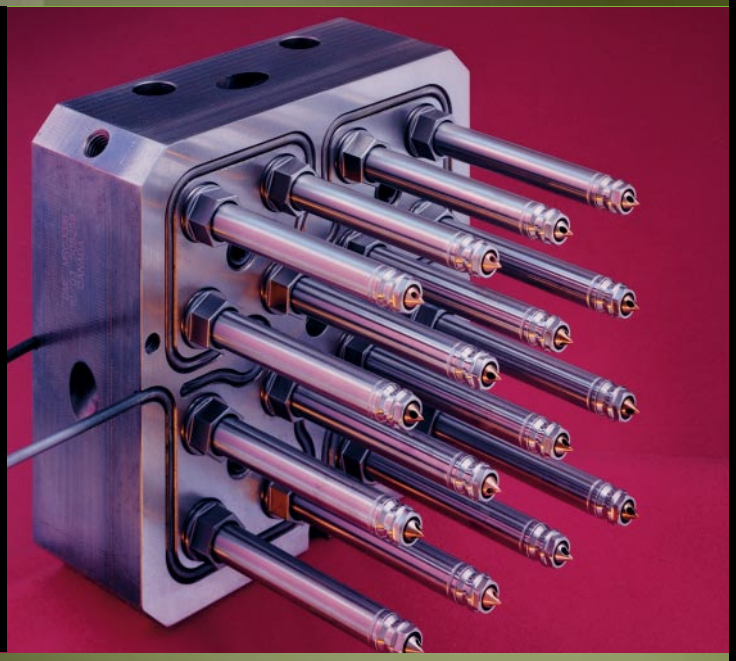
Online Price Guide

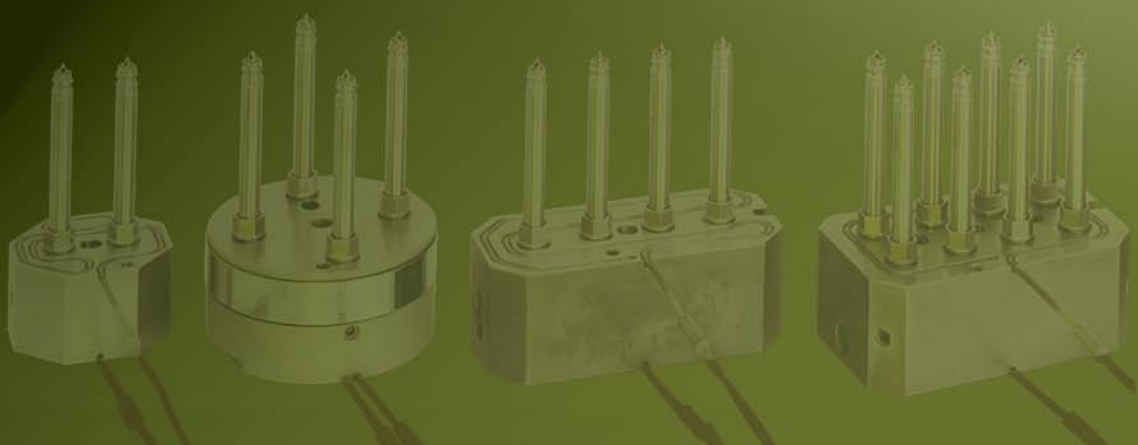
Go to www.dme.net/prices for the latest pricing guide.



D-M-E Stellar Micromolding Hot Runner Systems

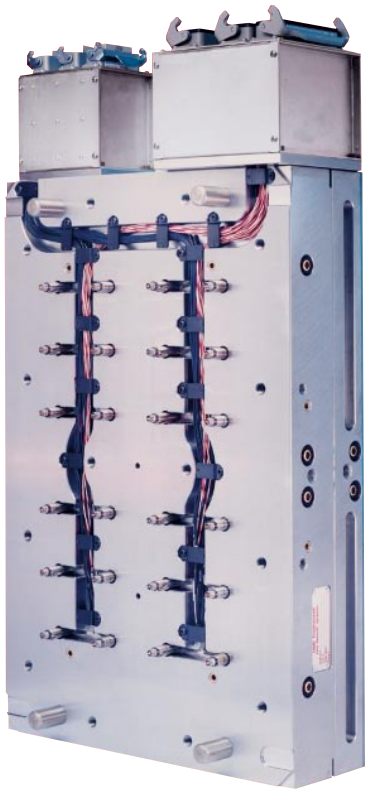
PROVEN SOLUTIONS FOR PRECISION THERMOPLASTIC MICROMOLDING





ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Stellar Hot Runner Systems – Benefits



Engineered for the Challenges of Tight Pitch Molding

The D-M-E Stellar™ Hot Runner System brings high performance, exacting precision and flexible, cost-effective modular construction to very small part molding. With as little as 17mm between centers, Stellar is also ideal for high-cavitation molding.

Demand the Best – Demand D-M-E

D-M-E has been a leader in mold technologies for seven decades. Nobody beats D-M-E for quality products, quality service and quick delivery. Like all D-M-E products, Stellar Hot Runner Systems come with your satisfaction 100% guaranteed.

Get the Modular Advantage

Stellar is based on new D-M-E hot runner system architecture to deliver tremendous flexibility. Seven different "A" dimensions, two interchangeable tip options, and a choice of manifold styles enable D-M-E to easily configure a Stellar solution that matches your application. Quickly, cost-effectively and with optimal results.



For a Wide Range of Applications

Stellar is perfect for today's rapidly expanding array of micromolding projects. Stellar was designed to perform in a broad spectrum of applications – including electrical, electronic, medical, and cosmetic packaging. And, Stellar was designed to process demanding engineering resins without property degradation.

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Stellar Hot Runner Systems – Benefits

CUSTOMER DESIGN CRITERIA FORMS

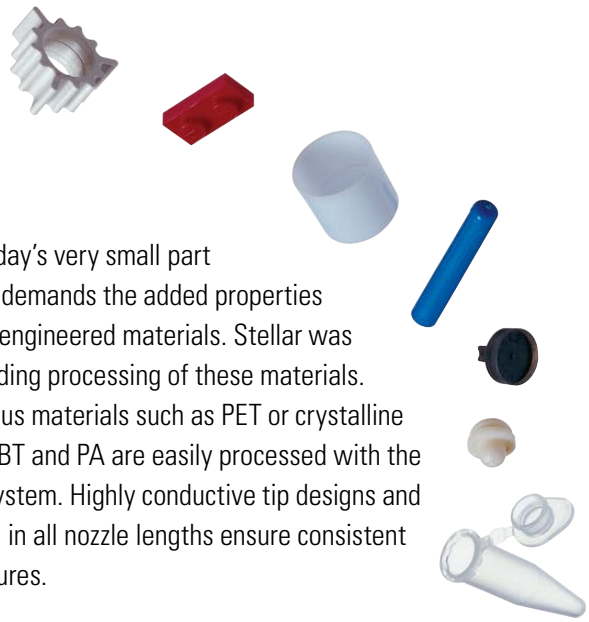
CDC

To provide your Stellar™ application specifications, visit www.dme.net/cdc





Excellent Results with Engineering Thermoplastics



The complexity of today's very small part molding applications demands the added properties of high performance engineered materials. Stellar was designed for outstanding processing of these materials. Challenging amorphous materials such as PET or crystalline materials including PBT and PA are easily processed with the Stellar Hot Runner System. Highly conductive tip designs and precise heat profiling in all nozzle lengths ensure consistent processing temperatures.

Modularity Increases Application Flexibility



The Stellar Hot Runner System from D-M-E is built on a standardized architecture of modular components. Key features include:

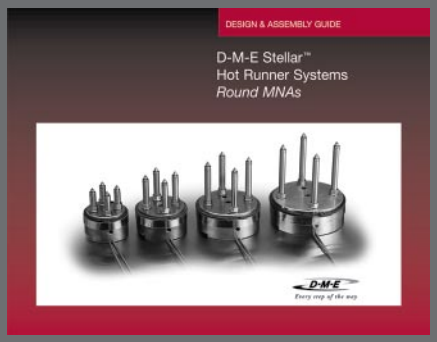
- Choice of balanced multi-nozzle assemblies (MNAs) for stand-alone use or under a manifold for higher cavitation molds
- Threaded nozzle connection for standard manifolds and compression nozzle connection for custom manifolds
- Seven different "A" dimensions from 45-105mm are available
- Two interchangeable tip styles – point gate and sprue gate



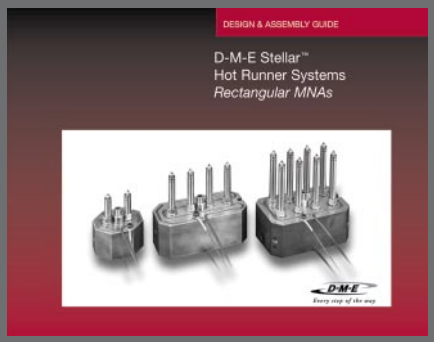
Stellar Hot Runner Systems – Technical Guides



Stellar Hot Runner Systems
Round & Rectangular MNAs – Quick Reference Guide



Stellar Hot Runner Systems
Round MNAs – Design and Assembly Guide



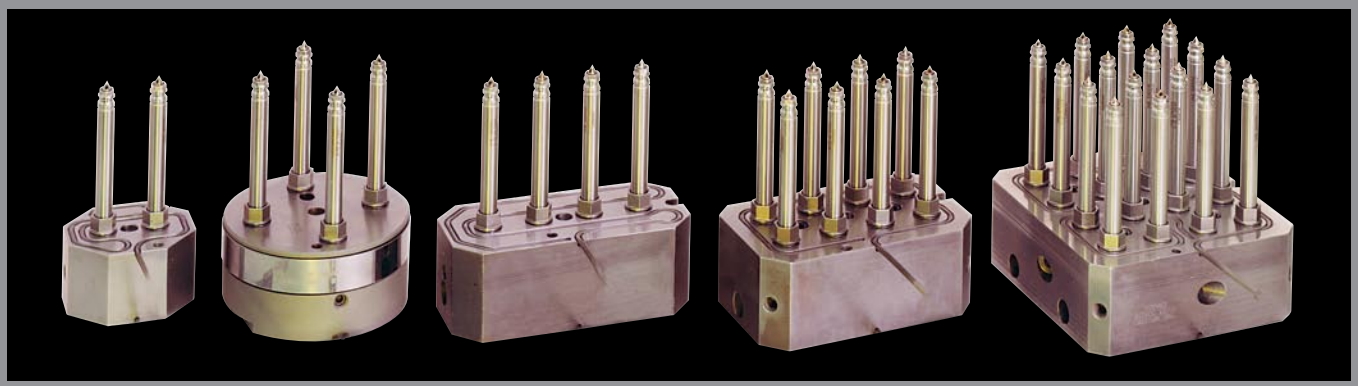
Stellar Hot Runner Systems
Rectangular MNAs – Design and Assembly Guide

Detailed Design and Assembly Guides

Stellar Hot Runner Systems are supported by detailed application guides that assist users in applying proven D-M-E micromolding technology to a variety of applications. The Stellar Quick Reference Guide is intended to provide options for gating, nozzle selection and layout. The Stellar Round MNA Design and Assembly Guide and the Stellar Rectangular MNA Design and Assembly Guide provide more precise information, including item numbers and machining specifications.

The Stellar Quick Reference Guide overviews the gate details for D-M-E Point Gate and Sprue Gate Tips. In addition to assisting with nozzle selection, the document provides manifold options for both Stellar Round and Rectangular MNAs, as well as general assembly information for the systems.

The Stellar Round MNA Design and Assembly Guide offers detailed pre-assembly and machining guidelines, and provides both inch and metric dimensional information. The Stellar Rectangular MNA Design and Assembly information offers similarly detailed pre-assembly and machining guidelines for both inch and metric. The document provides these guidelines for 2-drop, 4-drop, 6-drop, 8-drop, 12-drop and 16-drop multi-nozzle assemblies.





D-M-E Stellar Quick Delivery Systems

THE INDUSTRY'S BROADEST
RANGE OF STANDARD MANIFOLDS
WITH RAPID DELIVERY





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Stellar Hot Runner Systems Benefits

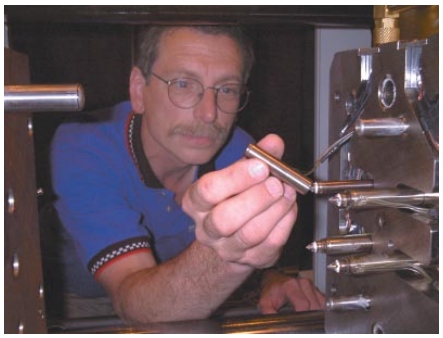
High Process Temperature Capability with Precision Heat Profiling

Today's engineered materials challenge hot runner systems with high processing temperatures – often with very narrow operating windows. Stellar hot runner nozzles utilize reliable profiled mini-tubular heaters to ensure optimal heat distribution. In addition, Stellar nozzles are engineered with low conductivity heads and high conductivity tips for consistent thermal performance.



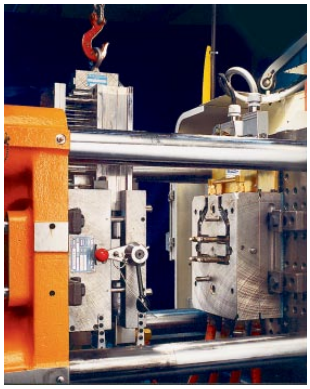
Easy Serviceability – Right in the Machine

Productivity is especially critical when micromolding thousands of parts per hour. Every Stellar Hot Runner System can be rapidly serviced for maximum uptime. Nozzle tips, retainers, mini-tubular heaters and thermocouples are all front-loaded and easily replaced with the mold in the press.



A Winning Combination – Stellar Hot Runners and Master Unit Die Quick-Change™ Systems

If you need maximum molding productivity with frequent tooling changes, Stellar standard MNAs fit MUD quick-change systems for plastics tooling, enabling mold insert changes in less than five minutes.



Tested – for the Real World

D-M-E operates a fully equipped testing laboratory to ensure every Stellar hot runner system performs at its peak. The D-M-E hot runner laboratory thoroughly verifies system design and tests applications with a wide range of thermoplastics.

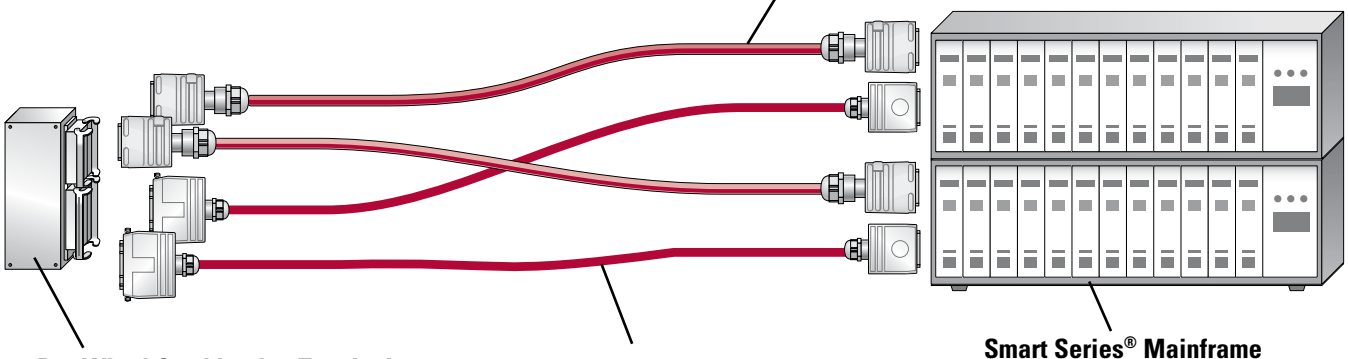
Multi-Nozzle Assemblies



Stellar offers the industry's broadest line of standard manifolds. A wide variety of Multiple Nozzle Assemblies (MNAs) is available in standardized configurations of 2, 3, 4, 6, 8, 12 and 16 drops. MNAs are flow balanced and can be used either as stand-alone systems or underneath custom manifolds.

Smart Series® and Integrity™ — 16-Drop Configurations

Standard Smart Series® Cables and Connectors



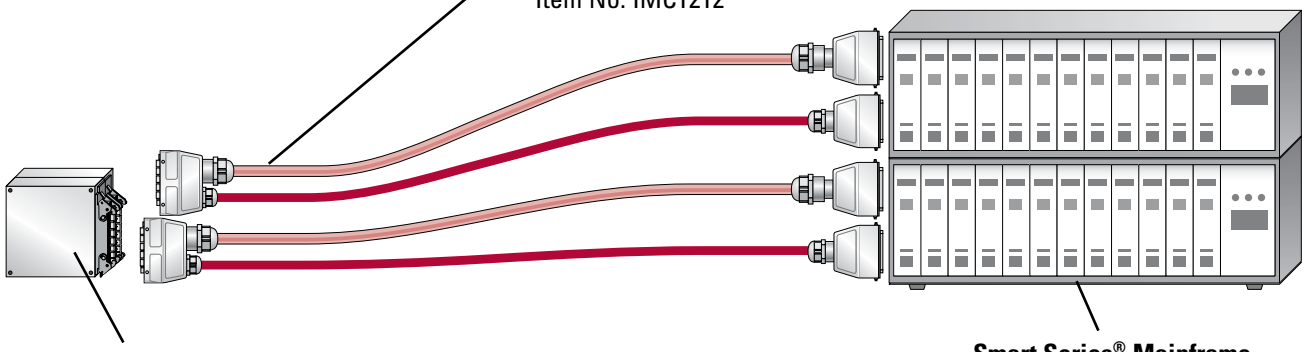
Mold Power Cable
Quantity: 2 required
Item No. MPC12C10G

Pre-Wired Combination Terminal Mounting Box
Quantity: 1 required
Item No. PTC24TBGTS

Thermocouple Cable
Quantity: 2 required
Item No. TC12C10G

Smart Series® Mainframe

Integrity™ Cables and Connectors



"Y" Cable
12 zone, Type J, 15ft
Quantity: 2 required
Item No. IMC1212

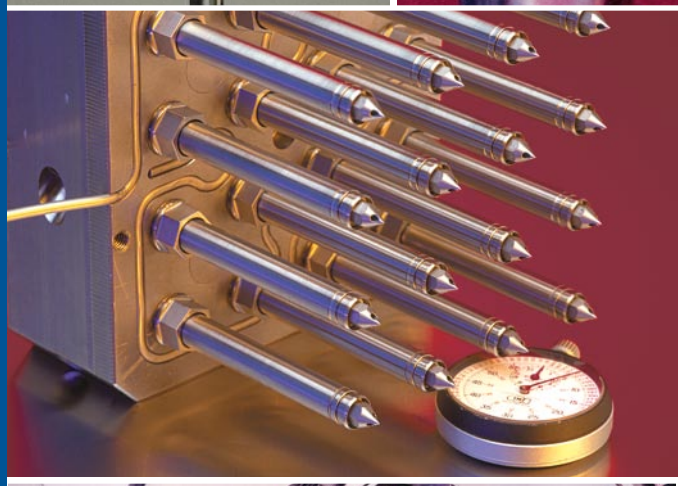
Integrity™ Mounting Box
Quantity: 2 required
Item No. IMB1200

Smart Series® Mainframe

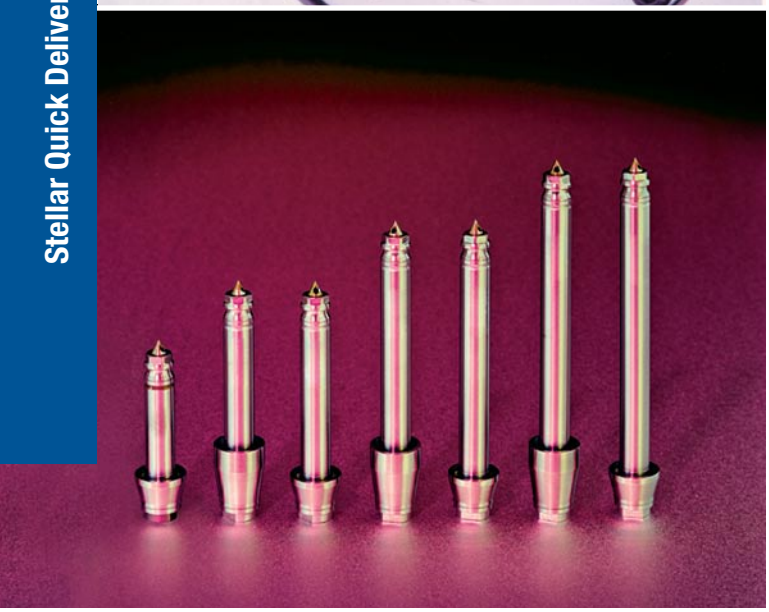
Stellar Quick Delivery Systems Advantages











Get the Stellar Edge – Now Even Faster

D-M-E introduces a new quick-delivery program for Stellar Hot Runner Systems. Three configurations are available to meet your needs.

Stellar 1: 4-, 8- and 16-drop multi-nozzle assemblies (MNAs) shipped in only 3-5 days

Stellar 2: 4-, 8- and 16-drop MNA package systems with standard nozzle plate thickness shipped in 5 days

Stellar 3: 4-, 8- and 16-drop MNA package systems with custom nozzle plate thickness shipped in 10 days

Key Advantages of Stellar Hot Runner Systems

- Outstanding performance with challenging engineered materials – amorphous material like PET or crystalline resins like PBT and PA are no problem with Stellar's high conductivity tip material and precise heat profiling
- Ideal for high-cavitation – well-suited for medical, electrical/electronic and cosmetic packaging applications
- A choice of four tip styles – Point gate and sprue gate tips enable customization to meet your needs
- A choice of three nozzle A dimensions – 65, 85, and 105mm
- Industry-leading choice of MNAs – Stellar features the industry's broadest line of standard manifolds
- Easy serviceability – front-loaded nozzle tips, mini-tubular heaters and thermocouples are easily replaced with the mold in the machine
- Extended warranty – D-M-E now offers a 3-year, leak-proof warranty on all Stellar package systems

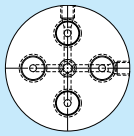


Program Overview

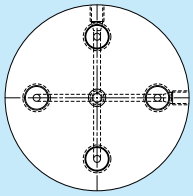
Stellar 1 Round MNAs – Manifold Options

Quick Delivery Lead Time 3-5 Days

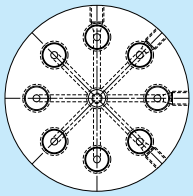
Gate Circle Diameter



4-Drop / 40mm



4-Drop / 70mm

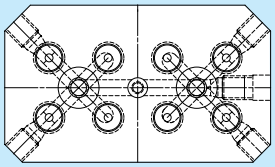


8-Drop / 70mm

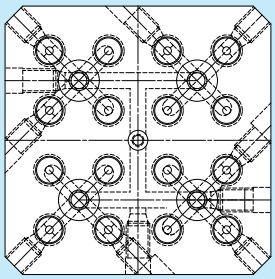
Stellar 1 Rectangular MNAs – Manifold Options

Quick Delivery Lead Time 3-5 Days

Pitch



8-Drop / 30mm



16-Drop / 30mm

Stellar 2 Hot Half

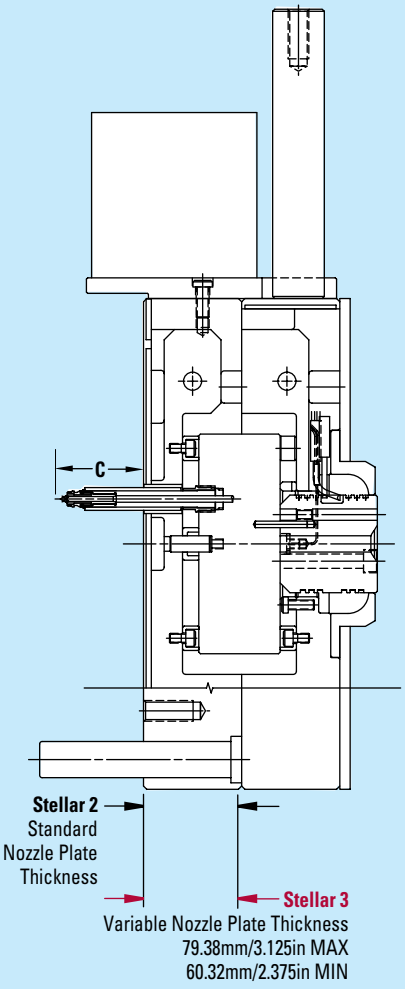
STANDARD NOZZLE PLATE THICKNESS

Quick Delivery Lead Time 5 Days

Stellar 3 Hot Half

VARIABLE NOZZLE PLATE THICKNESS

Quick Delivery Lead Time 10 Days



Stellar Quick Delivery Systems

DESCRIPTION	STELLAR 1 MNA QUICK DELIVERY LEAD TIME 3-5 DAYS	STELLAR 2 HOT HALF QUICK DELIVERY LEAD TIME 3-5 DAYS	STELLAR 3 HOT HALF QUICK DELIVERY LEAD TIME 10 DAYS
ROUND	ITEM NO.	ITEM NO.	ITEM NO.
4-DROP 40mm	SRD4004	SRD4004-2-0808	SRD4004-3-0808
4-DROP 70mm	SRD7004	SRD7004-2-1012	SRD7004-3-1012
8-DROP 70mm	SRD7008	SRD7008-2-1012	SRD7008-3-1012
RECTANGULAR	ITEM NO.	ITEM NO.	ITEM NO.
8-DROP 30mm	SRC3308	SRC3308-2-1012	SRC3308-3-1012
16-DROP 30mm	SRC3316	SRC3316-2-1012	SRC3316-3-1012

Recommended Nozzle Flow Capacities

DESCRIPTION		FLOW CAPACITY IN GRAMS			
ITEM NO.	GATING STYLE	GATE DIAMETER	LOW VISCOSITY MFI > 16	MEDIUM VISCOSITY MFI 7-16	HIGH VISCOSITY MFI .02-7
SXT4010	STELLAR POINT GATE TIP	1.0mm/0.040in 1.5mm/0.060in	12 16	12 16	5 12
SXT1040	STELLAR SPRUE GATE TIP	2.0mm/0.080in	40	30	20

*Minimum gate diameter Ø1.27mm/.050in for filled resins; Ø0.71mm/.028in for unfilled resins

Nozzle Cold Tip Length "C"

NOZZLE SUB-ASSEMBLY	STELLAR 2	STELLAR 3
ITEM NO.	FIXED LENGTH	VARIABLE LENGTH
SXY8065	31.12mm/1.225in	13.00mm/0.512in MIN 31.12mm/1.225in MAX
SXY8085	51.12mm/2.013in	32.07mm/1.263in MIN 51.12mm/2.013in MAX
SXY8105	71.12mm/2.800in	52.07mm/2.050in MIN 71.12mm/2.800in MAX

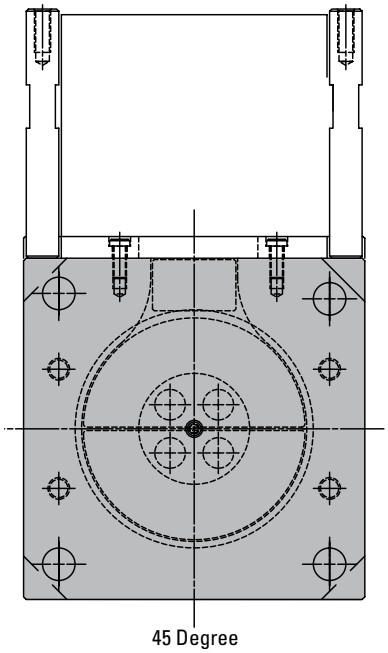
APPLICATION NOTES

1. Stellar systems are recommended for filled or unfilled resins; material process temperatures below 400°C/750°F
2. For Stellar MNA Application Guides, visit www.dme.net
3. To request CAD files, please contact appl_eng@dme.net

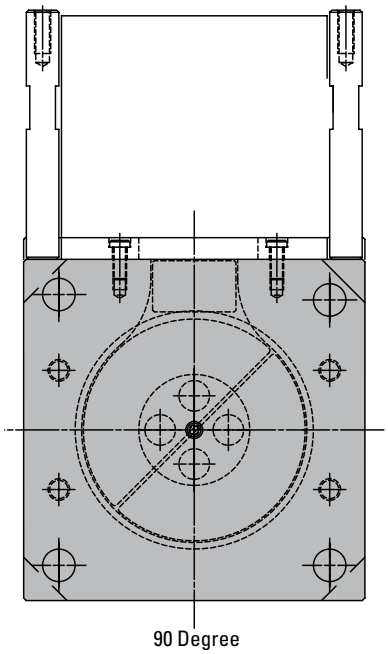
Stellar 2 and 3 — Round MNA Configurations

4-Drop Ø40mm

Mold Base Size 7 7/8" x 7 7/8"



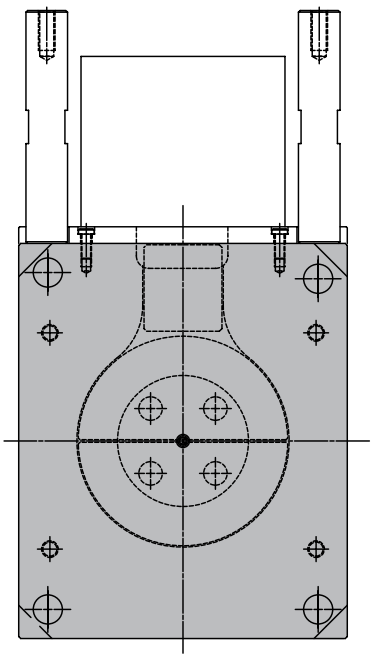
45 Degree



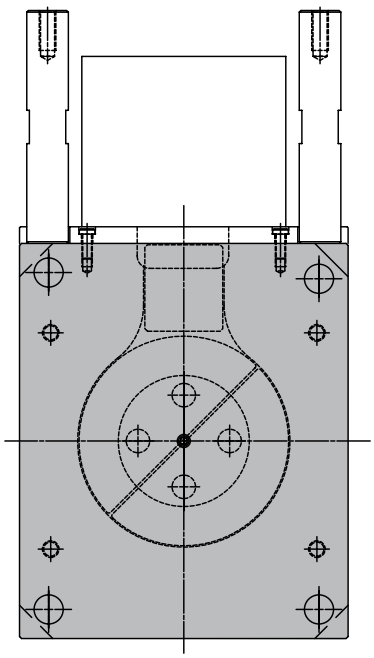
90 Degree

4-Drop Ø70mm

Mold Base Size 9 7/8" x 11 7/8"



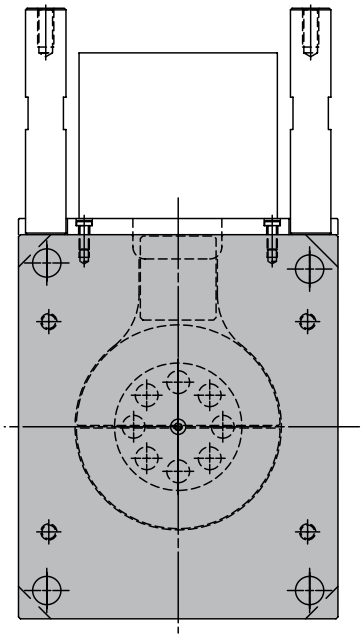
45 Degree



90 Degree

8-Drop Ø70mm

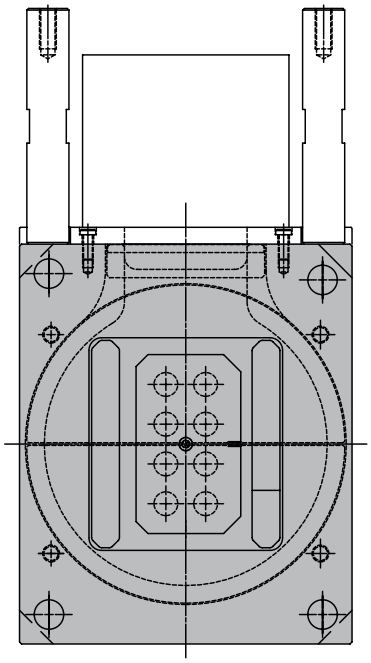
Mold Base Size 9 7/8" x 11 7/8"



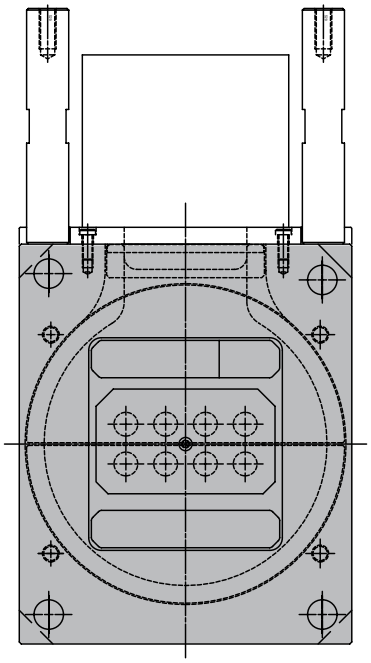
Stellar 2 and 3 — Rectangle MNA Configurations

8-Drop 30mm Pitch

Mold Base Size 9⅞" x 11⅞"



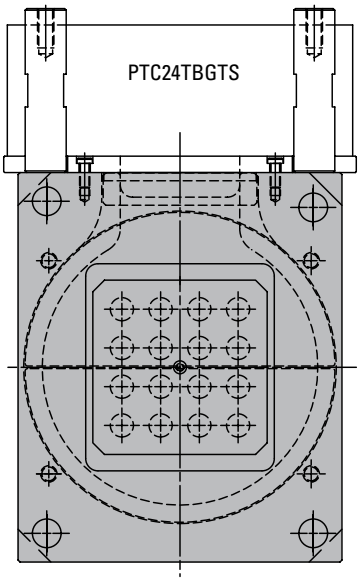
Vertical



Horizontal

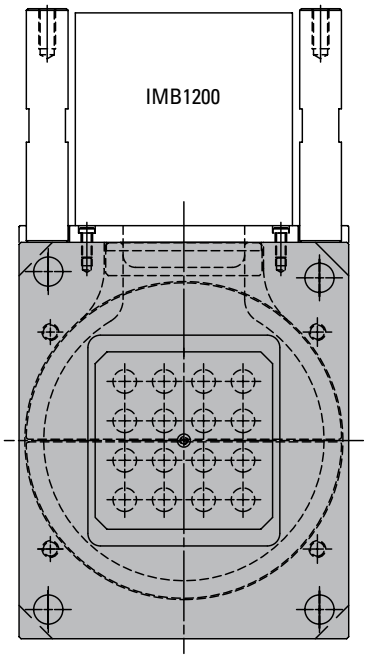
16-Drop 30mm Pitch

Mold Base Size 9⅞" x 11⅞"



Version 1

Smart Series® Cables and Connectors
Separate power and
thermocouple connectors



Version 2

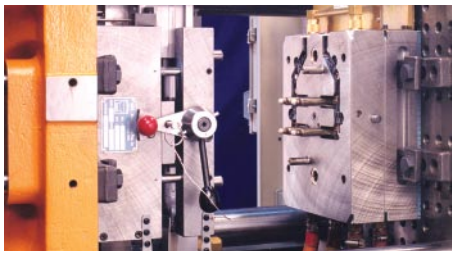
Integrity™ Cables and Connectors
Combination power and
thermocouple connectors

Hot Runner-Infused Quick-Change™ Systems

Increase Productivity and Reduce Molding Costs With Hot Runner-Infused Quick-Change Systems

Now the production efficiencies of hot runner molding can be further enhanced when combined with a Master Unit Die (MUD) Quick-Change Frame. An unlimited number of different parts can be produced with this industry-leading combination of hot runners within a quick-change system because only the MUD Companion Insert Mold is swapped out. The MUD Frame/Hot Runner System remains in the mold.

Combining D-M-E Hot Runners with MUD Quick-Change Systems provides many advantages to virtually any injection molding operation, including:

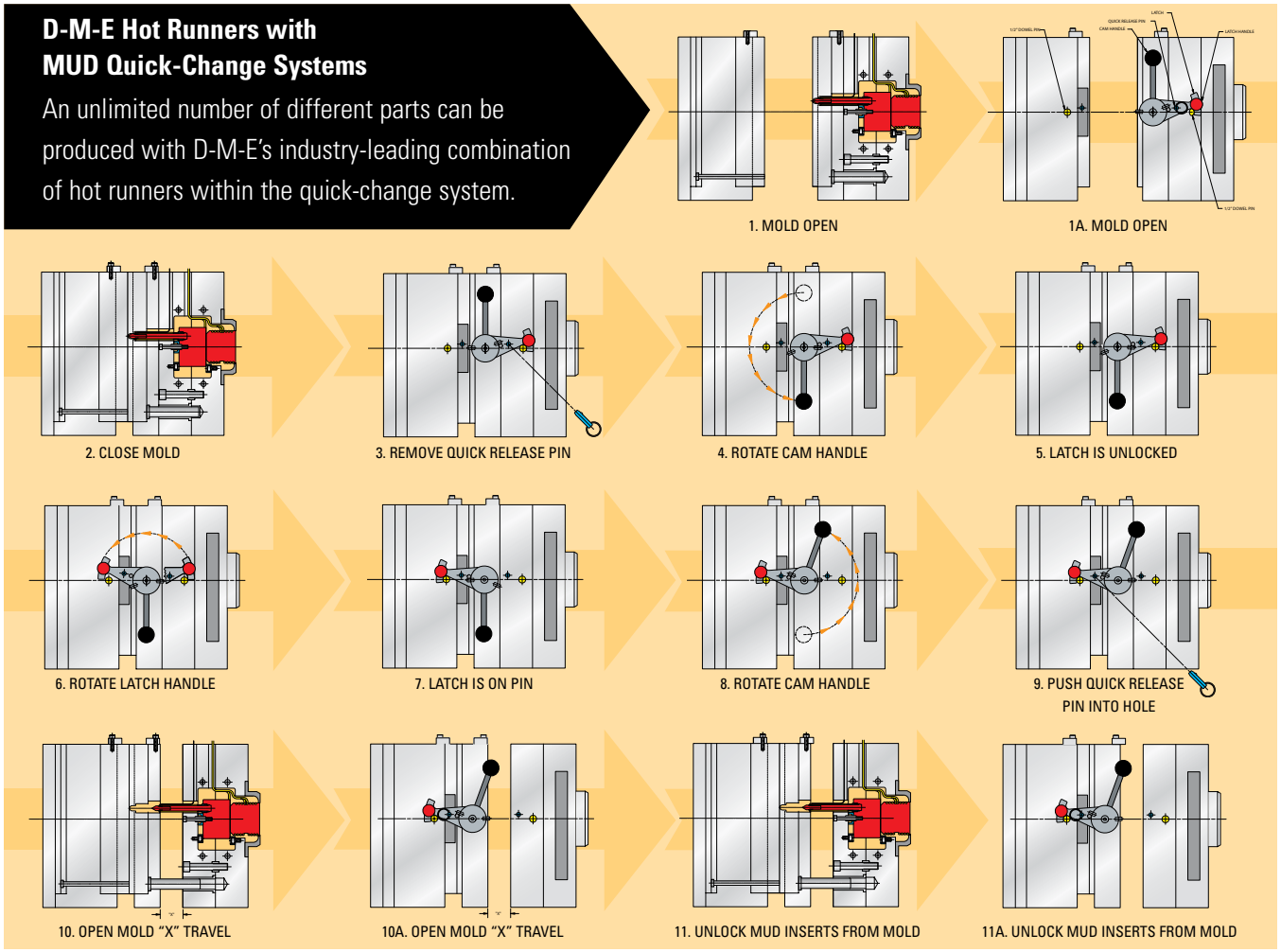


- Enables molders to use the same D-M-E Hot Runner System with many different cavity and core configurations with MUD Companion Insert Molds
- Quickens production changeovers, often in as little as five minutes
- Provides cost justification for the Hot Runner System and/or the MUD Quick-Change System for multiple tooling projects
- Simplifies design with the use of the MUD Quick-Change Latch Handle

Contact your D-M-E representative or call us today to find out more about how the combination of a D-M-E Hot Runner System and the MUD Quick-Change System will not only substantially increase your production efficiency but significantly reduce your molding costs. Many companies incorporate the D-M-E hot runner/quick-change combo into their Lean initiatives.

D-M-E Hot Runners with MUD Quick-Change Systems

An unlimited number of different parts can be produced with D-M-E's industry-leading combination of hot runners within the quick-change system.



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Galaxy

Hot Runner Systems

COST-EFFECTIVE SOLUTIONS

FOR HIGH CAVITATION



Galaxy Hot Runner Systems

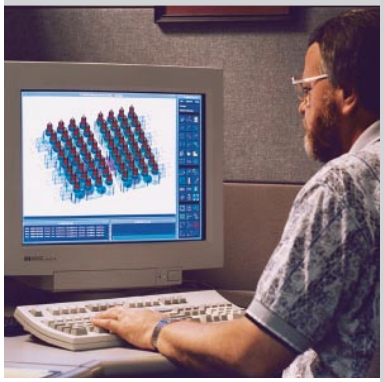
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Features and Benefits

Galaxy Hot Runner Systems are backed by:

- The best service in the industry
- Global technical support
- Rapid manufacturing capabilities
- Value-added applications engineering
- Your satisfaction guaranteed



Each Galaxy Hot Half System is fully assembled and tested prior to shipment to optimize performance.

Performance and reliability for high cavitation molding

D-M-E, the leader in mold technologies, introduces a hot runner solution tailor-made for high cavitation molding — the Galaxy™ Hot Runner System.

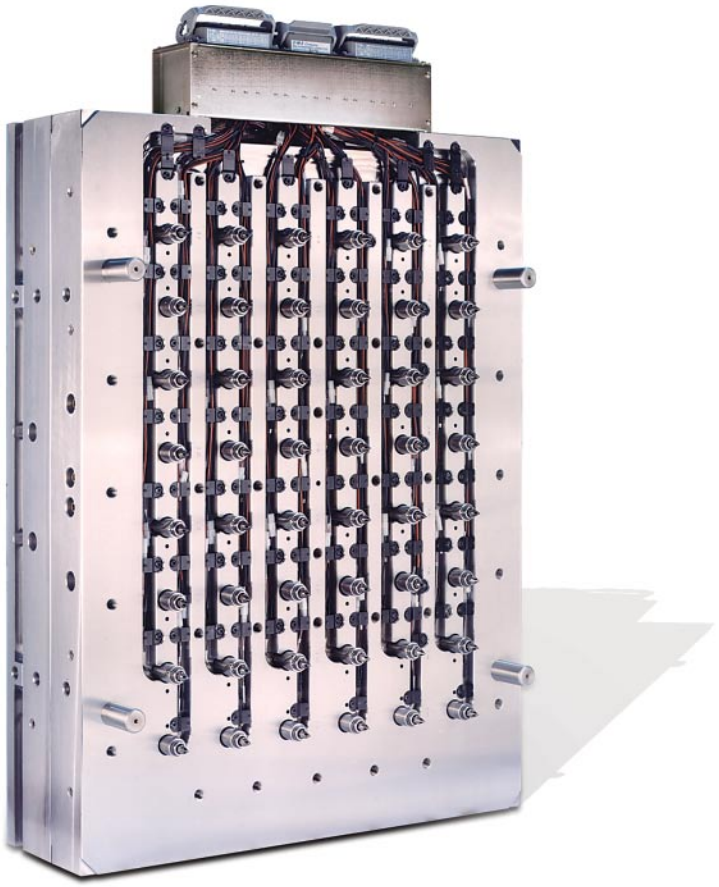
By applying over 30 years of D-M-E hot runner system expertise, Galaxy systems address the performance, reliability and serviceability demands of today's molder. Perfect for a wide range of applications — including caps and closures, cosmetic packaging, cutlery and small medical, electronic and automotive parts.

Engineered for your application

Our Applications Engineering Team carefully reviews the requirements of each project and then designs a Galaxy Hot Runner System — using the most advanced engineering tools available — to optimize molding performance.

All from a partner you can count on — D-M-E

For seven decades, D-M-E has been giving injection molders a competitive edge. Nobody beats D-M-E for quality products, quality service and quick delivery.



Features and Benefits

Tested for optimum reliability

D-M-E utilizes its fully equipped testing laboratory to ensure maximum reliability for your application. Each Galaxy Hot Half System is fully assembled and tested prior to shipment to optimize performance in multi-cavity applications.

High quality

D-M-E uses only the highest quality materials to ensure the best performance and long-lasting durability.

Fast, easy serviceability

When you're running thousands of parts per hour, uptime is a critical part of the productivity equation. Galaxy systems are designed to maximize production and shorten set-up and service time.

All nozzle tips, heaters and thermocouples are front loaded and easily replaced right in the machine. Heater and thermocouple leads are routed to a connector adjacent to the nozzle body to simplify access.

Modular nozzles deliver flexibility

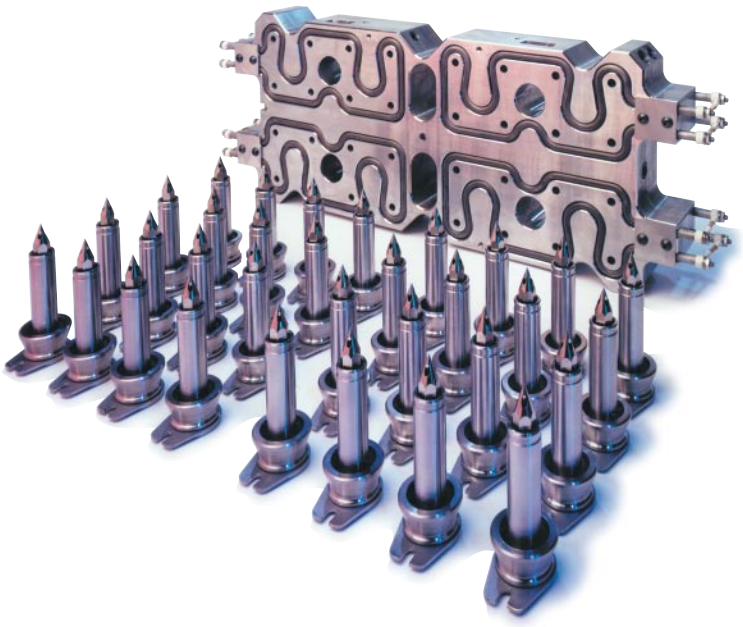
Galaxy nozzles offer a choice of tips including standard, wear-resistant and thru-hole styles. All tips are easily replaceable, using a standard wrench, right in the machine.

Minimal gate vestige

Galaxy nozzles feature a refined tip design that is manufactured from highly conductive material which transfers precise heat to the gate area — for minimal gate vestige and excellent gate cosmetics.

High performance

Galaxy is designed for high cavity applications, without performance compromises. Close center-to-center dimensions deliver more parts per cycle. Short end plugs reduce system mass for predictable thermal performance. And, our mini-tubular nozzle heaters enable uniform, controlled heating for optimum melt temperature in a compact form factor.



All tips are easily replaceable, using a standard wrench, right in the machine.

Features and Benefits

CUSTOMER DESIGN CRITERIA FORMS

CDC

To provide your Galaxy™ application specifications, visit www.dme.net/cdc

Galaxy Hot Runner Systems: performance, reliability, service

Whether you're a moldmaker, a molder, an OEM, or a mold designer, D-M-E Galaxy Hot Runner Systems deliver performance, reliability and serviceability to improve your productivity.

Custom manifolds are engineered for evenly distributed heat and balanced flow — optimizing pressure drop, shear rate and residence time.

Modular nozzles enable a wide range of nozzle lengths to suit a variety of mold stack heights.

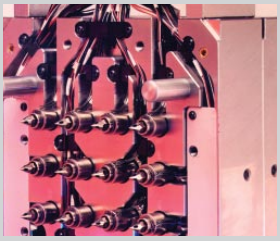
Nozzle tips are designed for fast cycle times, quick color changes and low gate vestiges.







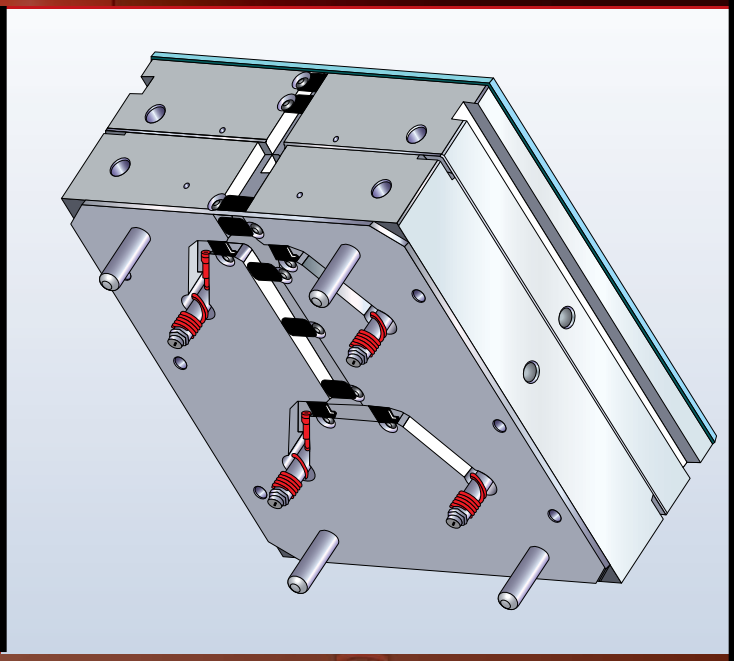


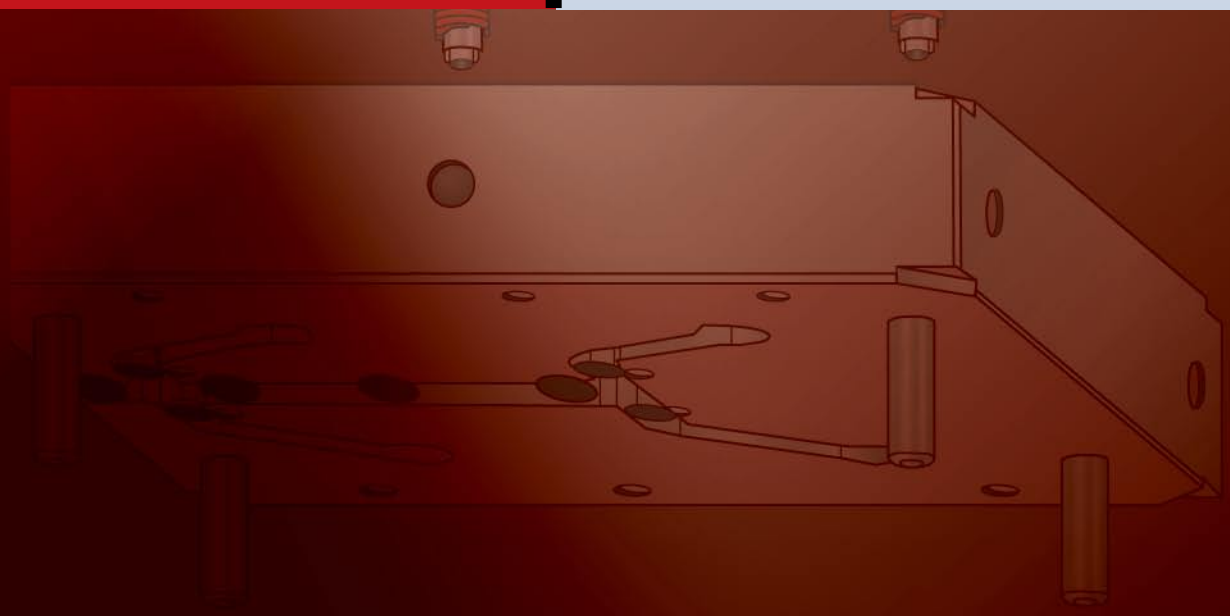




D-M-E Hot One Hot Runner Technology

A LONG-STANDING
INDUSTRY STANDARD
IN USER-FRIENDLINESS
AND AFFORDABILITY

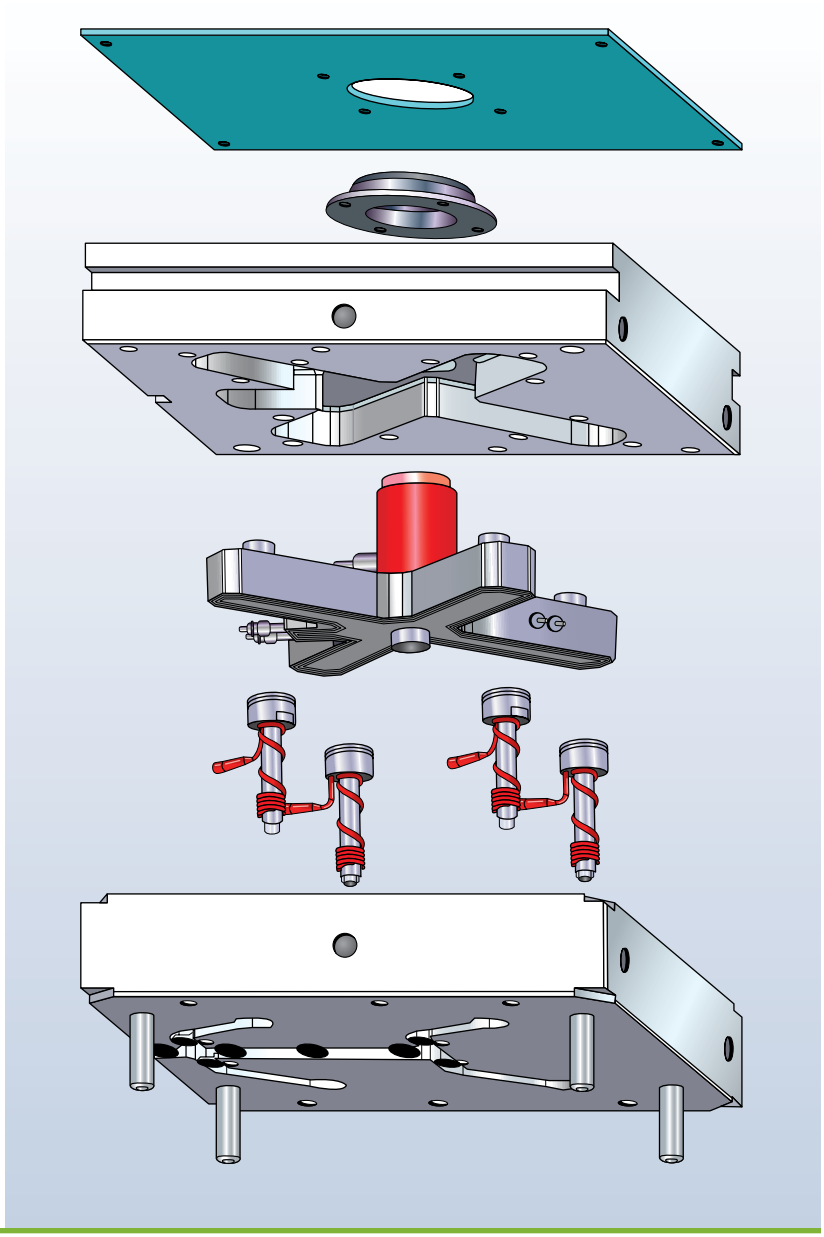




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Features and Benefits

Our ongoing customer-driven philosophy has fostered many new and innovative systems and components, allowing you to take advantage of more than seven decades of leadership in injection molding technology. The D-M-E Hot One has become an industry standard in technology, user-friendliness, and affordability. Available in two styles — Tubular and Cartridge Heated — The Hot One is also available as a complete Hot Half System.



Tubular Heated Systems

Using exclusive, distributed wattage Tubular Heaters, the D-M-E Hot One System can process many engineering grade resins. Tubular Heaters reduce the number of zones of heat required, providing the added benefit of lowering your temperature control costs.

Cartridge Heated Systems

If the application would be better served using Cartridge Heaters, D-M-E has the resources to accomplish the task. Cartridge Heaters have been used in hot runner systems for years and still offer some clear advantages... they are available off-the-shelf and are supplied in many different lengths, diameters and wattages.

CUSTOMER DESIGN CRITERIA FORMS

CDC

To provide your Hot One® application specifications, visit www.dme.net/cdc

The D-M-E Hot One, a long-standing industry standard in technology, user-friendliness and affordability, is available in two styles — Tubular and Cartridge Heated — and as a complete Hot Half System.

Nozzles and Tips





Nozzles

The D-M-E Hot-One is accompanied by a nozzle offering that allows versatility in system selection to best suit the material and molded part configuration. D-M-E offers three different styles of nozzles: The "EHA" series, using square coil heaters; The "CIA" High Performance series, using cast-in heaters; and the Gate-Mate™. Each nozzle series has its own characteristics and advantages.

For example, the "EHA" series of nozzles can be used for many applications using commodity resins with low crystallinity. The "CIA" series, with cast-in heaters developed exclusively for D-M-E, can be used for all applications, especially engineering grade resins with a high degree of crystallinity. The Gate-Mate series is commonly applied to applications using commodity grade resins and close center-to-center dimensions.

Nozzle Tips

As applications in the plastics industry have become increasingly complex and more demanding, D-M-E engineers have risen to the task to provide tip technology to suit a variety of applications. A variety of interchangeable tip styles are available for both the "EHA"/"CIA" series and the Gate-Mate series nozzles.



Gate-Mate Tips, L to R: Standard, Wear Resistant, Super Sharp, Thru Hole, No Hole

Gate-Mate Tips

- *Standard and Wear Resistant* – Used in applications calling for low vestige. Its unique design provides for good gate cosmetics and fast cycle times. The wear resistant version is suited for abrasive or filled materials.
- *Super Sharp* – Used for the same applications as the Standard Tip, it offers better annular flow and optimum gate cosmetics.
- *Thru Hole* – Used in applications with longer flow lengths and more viscous resins.
- *No Hole* – Where the orifice details of other tips is not suitable, this tip allows for machining of a customized orifice to suit your application.

EHA"/"CIA" Tips



- *Sprue Gate/Extended Sprue Gate* – Used primarily in applications where gate vestige is not a concern. Offers minimal flow resistance and handles most resins very effectively. Extended style provides additional stock for machining of runner profiles or part contours.



- *Point Gate* – Used for applications needing optimum gate cosmetics, this tip can run a wide range of resins. It has two interchangeable needles, standard and wear resistant. The wear resistant needle is especially useful for abrasive or filled material applications.



- *Ring Gate* – Used for low vestige, commodity grade resin applications. The Ring Gate features a sealed tip for efficient shut-off at the parting line.

Ordering Options: Use this information and our design and machining guidelines to build your system, or take advantage of D-M-E Applications Engineering services to help you select the system best suited to your requirements. Then, either order the steel and components to construct your system or let D-M-E do all of the machining, assembly and wiring for you.

Hot Runner Quote Request Form

**Fax your completed Hot Runner Quote Request Form to 248-544-5707
or call to discuss your application with D-M-E.**

Date:	Account #
Bill to:	Ship to:
Contact name (First & Last):	
Phone #	Fax #
Extension	Email

Please provide the following information:

What is the material?	
Are there any fillers?	
Does it require a color change?	
How many cavities/drops?	
What type of gate is needed?	
Is balance needed?	
What is the part weight?	
What is the wall thickness?	
How far does the nozzle extend into the "A" plate?	
What is the mold base size?	
Is there anything special we should be aware of?	

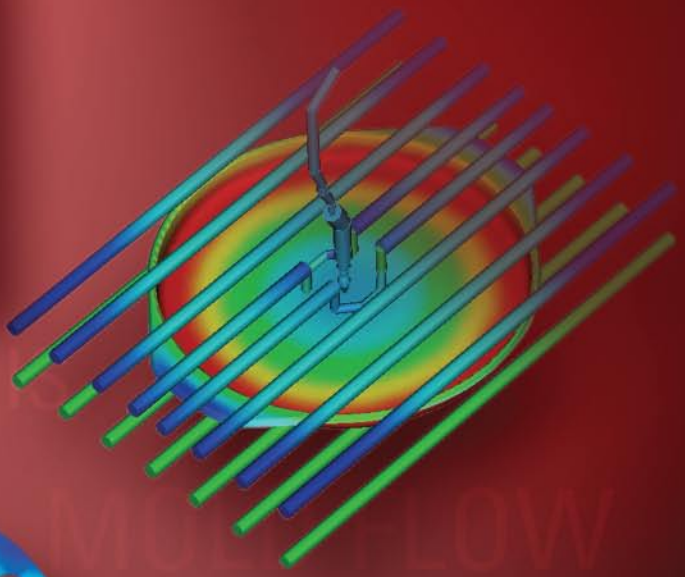
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D-M-E Hot Runner Services

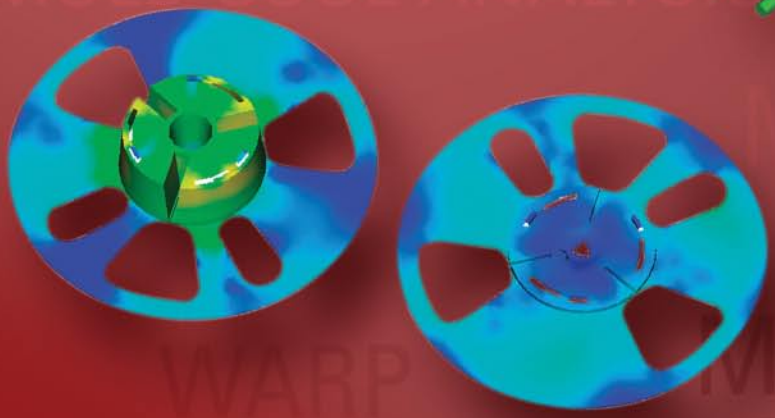
HOT RUNNER
SERVICE CENTER

Total support for your hot runner systems





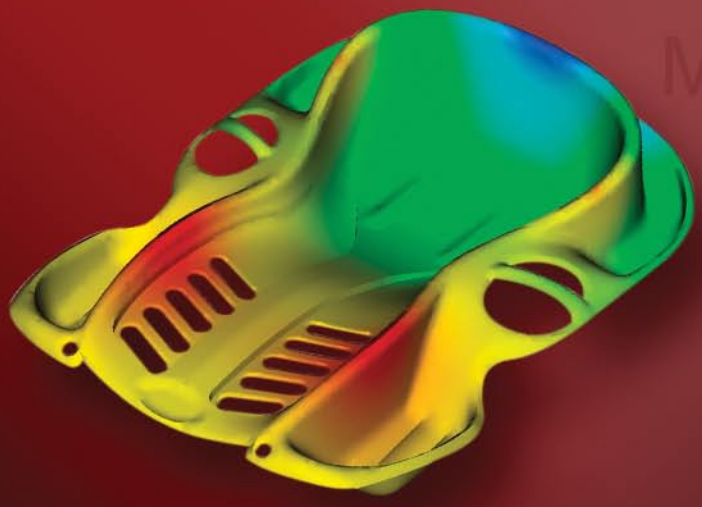
MOLD COOL ANALYSIS



MOLD FLOW
SERVICES

WARP
ANALYSIS

MOLD PACK
ANALYSIS

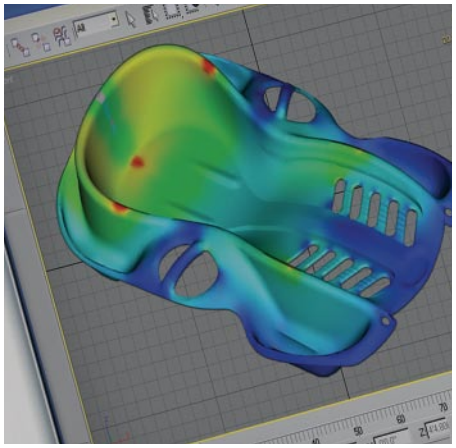


MOLD FILL
ANALYSIS

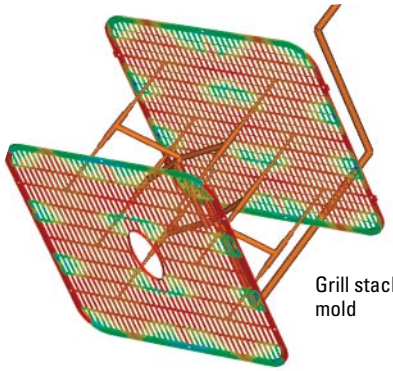
D-M-E
Every step of the way

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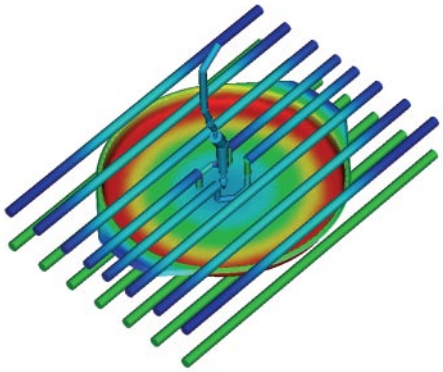
Moldflow™ Services — Optimize Part and Mold Design







Grill stack mold



Comprehensive Analysis and Modeling

With today's shrinking time-to-market window, development speed is essential. As part of its commitment to the molding industry, D-M-E is now offering Moldflow™ analysis to help optimize part and mold design – especially for hot runner molds. D-M-E is the first mold technologies supplier to earn Moldflow's silver certification in this advanced technology.

A Competitive Advantage

Predictive analysis, utilizing Moldflow software, yields tremendous benefits, including:

- Optimize part design
- Reduce time-to-market
- Save cost and time on mold tryouts
- Lower development and production costs
- Provide a framework to establish reputable processes
- Improve product quality
- Decrease cycle times

What is Moldflow?

D-M-E uses Moldflow Plastics Insight™ (MPI) software which is an integrated suite of analysis tools that utilize CAD files and apply advanced Finite Element Analysis (FEA) techniques to quickly and easily enable a virtual "what if" design environment before initiating mold construction. MPI provides in-depth part/mold design and process parameter optimization. This is in contrast to Moldflow Plastics Advisor™ (MPA) which is primarily useful for parts with low to medium complexity, conceptual designs, and quick part design validation. D-M-E is a certified, licensed provider of Moldflow analysis services.

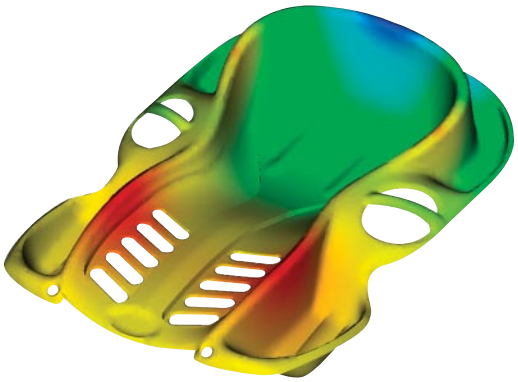
Mold Fill Analysis

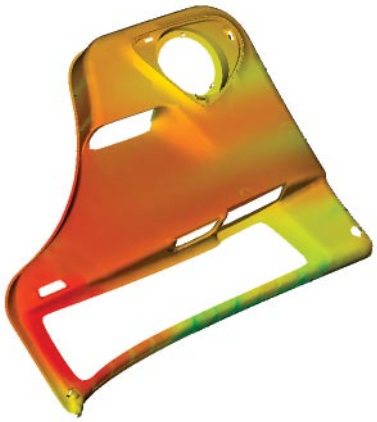
The Mold Fill module uses predictive technology to simulate the filling process. Key analyses include:

- Optimize the number, size, and location of gates
- Balance the runner system design
- Reduce material stress levels

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Moldflow™ Services — Optimize Part and Mold Design







- Predict weld line locations
- Validate pressure and temperature distribution within the mold
- Optimize processing conditions – including melt temperature, injection rate, and cavity pressure

Mold Pack Analysis

Building on the results of a Mold Fill analysis, the Mold Pack module optimizes the packing phase to ensure a uniform packing condition. As an indication of part warpage, volumetric shrinkage is evaluated and the pack pressure profile is optimized. The result is minimized warpage with an improved surface appearance.

Mold Cool Analysis

The Cool Analysis module assesses an existing cooling layout to determine potential molding problems. Steel types, cooling channel sizes, bubblers, baffles, coolant temperatures, and flow rates are all evaluated. Using this analysis, the Mold Cool module recommends practical tooling design changes to ensure uniform cooling. Mold Cool takes into account:

- Number, location, depth, and pitch of cooling channels
- Steel types
- Cooling circuit layouts
- Coolant temperatures and flow rates
- Cycle times

Warp Analysis

Using the results from the Fill and Cool analyses, the Warp Analysis module enables prediction of plastic part shrinkage and warpage. Warp Analysis diagnoses the cause(s) of warping and recommends the appropriate solution, such as gate location changes, design parameter changes, and reduction of wall thickness variations.

MPI 3D

MPI 3D addresses a class of problems previously unsolvable using traditional finite element analysis techniques. In thick-walled parts, molten plastic can flow in all directions. Using a proven methodology based on a solid tetrahedral, finite element volume mesh, MPI 3D enables true, three-dimensional simulations on thick-walled parts.

Where Do I Start?

Contact your D-M-E representative for more information regarding MoldFlow Services. The D-M-E Applications Engineering Department is available to provide a customized MoldFlow analysis and assist you in maximizing the results of your next application.

D-M-E Hot Runner Service Center – Ensuring the Productivity of every Hot Runner System





Full-Service Hot Runner Support

Mold technology leader D-M-E – known for our innovative family of hot runner systems including Galaxy, Meteor, and Stellar – now also provides total support for your hot runner systems. Whether it's a D-M-E system or not, we can repair, reconfigure – even totally rebuild it to help ensure maximum uptime and performance of your system.

A Dedicated Center for Hot Runner Systems

Our new Hot Runner Service Center, located in Madison Heights, Michigan, is exclusively dedicated to supporting your hot runner systems. Staffed by a team whose sole focus is hot runner systems, we're quickly able to get your system operating at maximum efficiency. This group has over three decades of experience installing, assembling, and repairing hot runner systems. And, because we're centrally located, we can get your system back in your shop quickly and cost-effectively. If appropriate, we can also perform many basic operations in one of our D-M-E regional centers – further speeding turnaround.

A Wide Range of Services

D-M-E recognizes the value of your time – that's why we've developed a comprehensive suite of hot runner services to provide a single source for maintenance and optimization of your system. Key services include:

- Repairs – including expedited service
- System cleaning – including complete bake-out
- Total system rebuild
- Re-configuration
- Operator training
- Mold tryouts

Repairs Get You Back Up Quickly

Time is money. When a critical tool is out of commission, productivity is lost and production schedules can be threatened. We understand this at D-M-E. That's why our team of hot runner repair specialists are always available to get you back in service.

Whether you're experiencing leaks, heating issues, flow problems, or would simply like a system bake-out, we'll repair your system quickly and cost-effectively.

Standard turnaround for repairs on systems from 1-12 drops (depending on parts availability for non-D-M-E systems) is 5 working days or less. If your system has over 12 drops, contact us for an estimated turnaround time. And, we offer emergency 24-hour turnaround service.

D-M-E Hot Runner Service Center – Ensuring the Productivity of every Hot Runner System

Rebuilds Ensure Performance

After tens of thousands of cycles you may have noticed your system just doesn't perform the way it used to. Or maybe you've run high-temperature engineered materials and the tolerances just aren't as tight. Key benefits of system rebuilds include:

- Cost savings of at least 40% as compared to new systems
- Extended life for your tool
- Maximizing system uptime and performance
- Improved finished part quality

Whether you need a total system rebuild, or a simple cleaning and inspection D-M-E can help. System rebuilds can be performed on any brand of hot runner system and typically include:

- Complete bake-out cleaning
- Check and replace heaters and thermocouples
- Inspect and correct wiring
- Replace seals and bushings
- Clean or replace nozzle components
- Check all dimensions and re-assemble system

Cost-Effective Reconfiguration

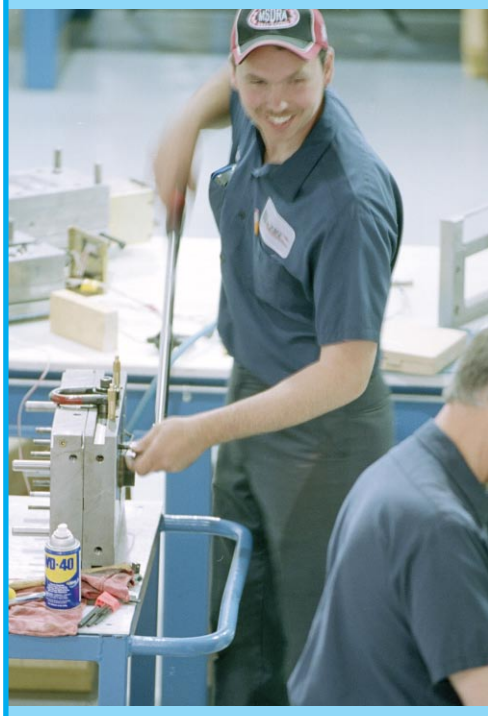
When your process needs change, without a significant tooling change, we can adapt your hot runner to the new process. Whether it's a material switch, or a part design change, D-M-E can help reconfigure your existing system.

Training Maximizes Productivity, Speeds Set-Up

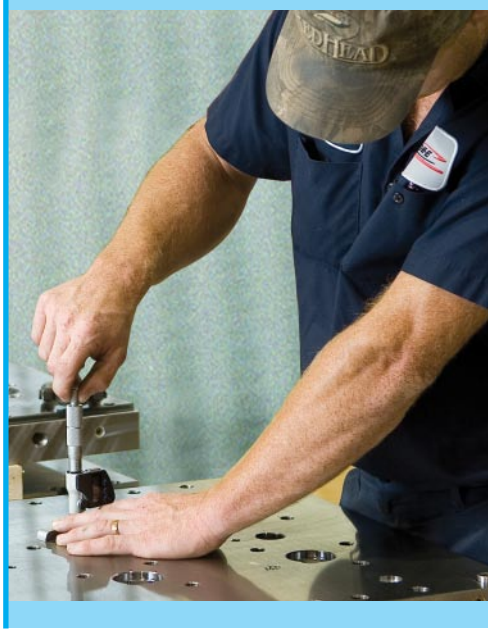
The D-M-E Hot Runner Service Center can provide comprehensive operator training in start-up or prototyping. Our hands-on programs help your operators get up-to-speed, or stay current on hot runner technology.

Mold Tryouts

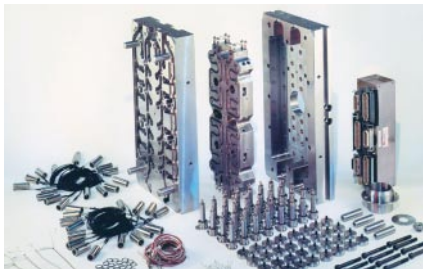
We also offer mold tryouts at the Hot Runner Service Center. Injection molding machines from 110 to 1,000 tons are available to run your mold and ensure proper performance.

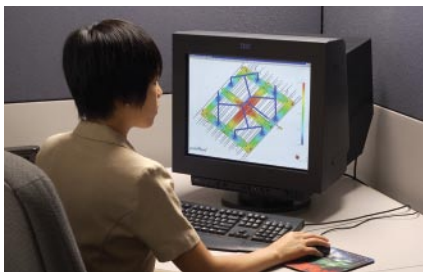






Hot Runner Services Overview











Unrivaled Support When and Where You Need It

Since the 1970s, D-M-E has developed and marketed a full spectrum of hot runner systems and components. From Moldflow analysis to turnkey hot half systems and everything in between, the D-M-E family of hot runner products and services offers a comprehensive array of solutions for a wide range of applications. Whether your need is for standard, off-the-shelf components, customer engineered manifolds, or fully assembled systems ready for bolt-on installation, D-M-E has a proven solution to match your application.

Moldflow Services

As the first mold technologies supplier to earn Moldflow's silver certification, D-M-E is highly adept at applying Finite Element Analysis (FEA) techniques to help optimize part and mold design. Whether you need Mold Fill, Mold Pack, Mold Cool or Warp analyses, D-M-E can assist you in maximizing the results of your next application.

Applications Engineering and Technical Service

Our dedicated and experienced team of mold designers and applications engineers assists D-M-E customers with product selection, system design, performance analysis and technical advice. D-M-E technical service representatives are globally located for complete coverage and quick availability no matter where your hot runner production takes place. Technical experts employed worldwide are available for start-ups, personnel training or system service.

Research and Development Expertise

The D-M-E Technology Center features a development lab that tests hot runner systems, manifolds and modular components within a real-world environment to validate that your D-M-E hot runner system performs efficiently at peak performance levels.

Comprehensive Hot Runner Service

Staffed by a team whose sole focus is hot runner systems, the D-M-E Hot Runner Service Center offers a single source for hot runner system optimization and maintenance. Our services include expedited repairs, system cleaning, system rebuilds, re-configuration and mold tryouts for virtually any type of hot runner system.

D-M-E Standard Hot Runner Systems

Solutions for a wide range of applications



D-M-E
Every step of the way

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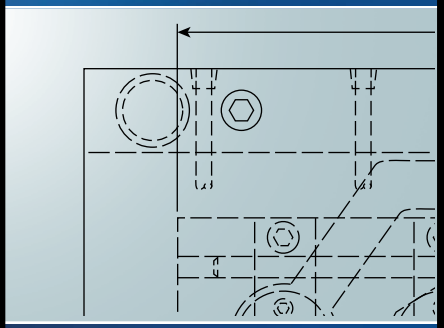
Stellar MNA Quick Reference Guide .....53 to 58
Provides multi-nozzle-assembly options for gating, nozzle selection, and layout



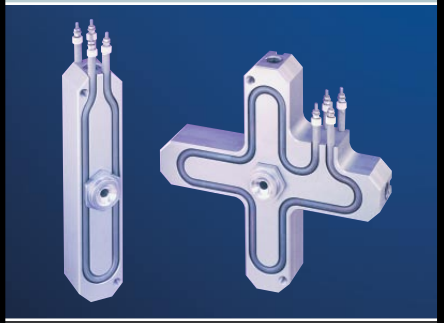
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The Hot One Technical Specifications.....79 to 92
The Hot One Manifold System designing and machining guidelines for externally heated systems



Meteor™ Hot Runner Systems .....93 to 106
Custom-configured manifolds, manifold and component systems, and complete hot half assemblies for quick delivery

Online Price Guide
Go to www.dme.net/prices for the latest pricing guide.



D-M-E Stellar MNA Systems

QUICK REFERENCE GUIDE
FOR MULTI-NOZZLE ASSEMBLY
DESIGN OPTIONS



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Gating Style Selection and Nozzle Selection

The D-M-E Stellar Multi-Nozzle-Assembly Quick Reference Guide is intended to provide options for gating, nozzle selection, and layout. For detailed information, including item numbers, please refer to the Stellar Round or Rectangular MNA Assembly Guides.

Table 1 Gating Style Item Numbers

	ITEM NO.	DESCRIPTION
	SXG4010	POINT GATE TIP SUB-ASSEMBLY
SUB-ASSEMBLY CONSISTS OF THESE ITEMS	SXT4010	POINT GATE TIP
	SXF4000	POINT GATE RETAINER
	SXT1040	SPRUE GATE TIP

Fig. 1 Point Gate Tip Sub-assembly

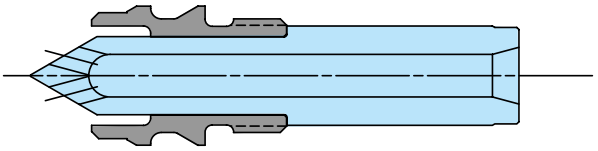


Fig. 2 Retainer

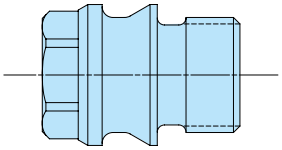
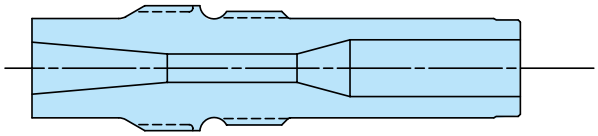


Fig. 3 Sprue Gate Tip



Nozzle Selection

Fig. 4

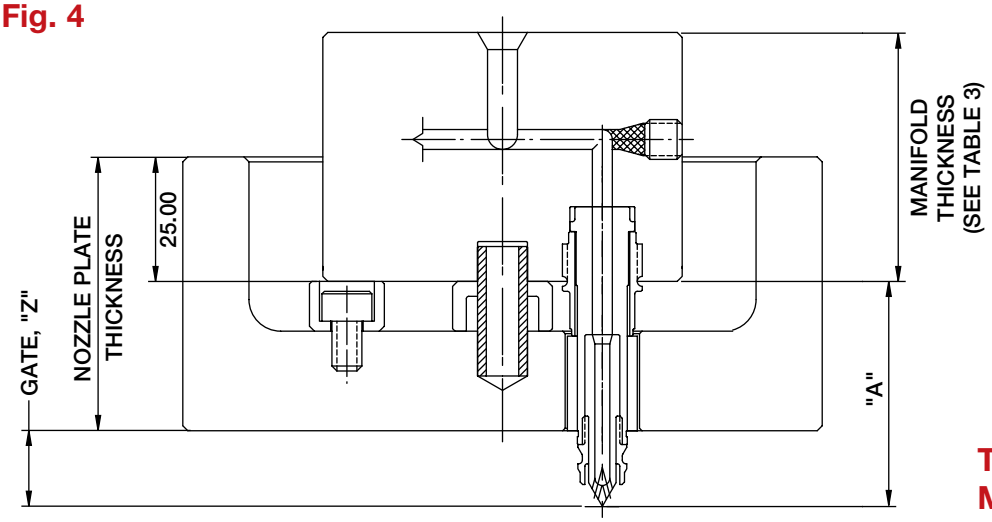


Table 2 "A" Dimensions for Gating Styles

POINT GATE "A"	SPRUE GATE "A"
65.10	65.10
85.10	85.10
105.10	105.10

Table 3 Manifold Thickness

CONFIGURATION	MANIFOLD THICKNESS
ALL 2 DROPS, 4 (17x21) AND 4 (30)	40.00
6 DROP	45.00
4(30) INLINE, 8, 12 AND 16 DROP	50.00
ALL ROUND MNAs	50.00

NOTES:

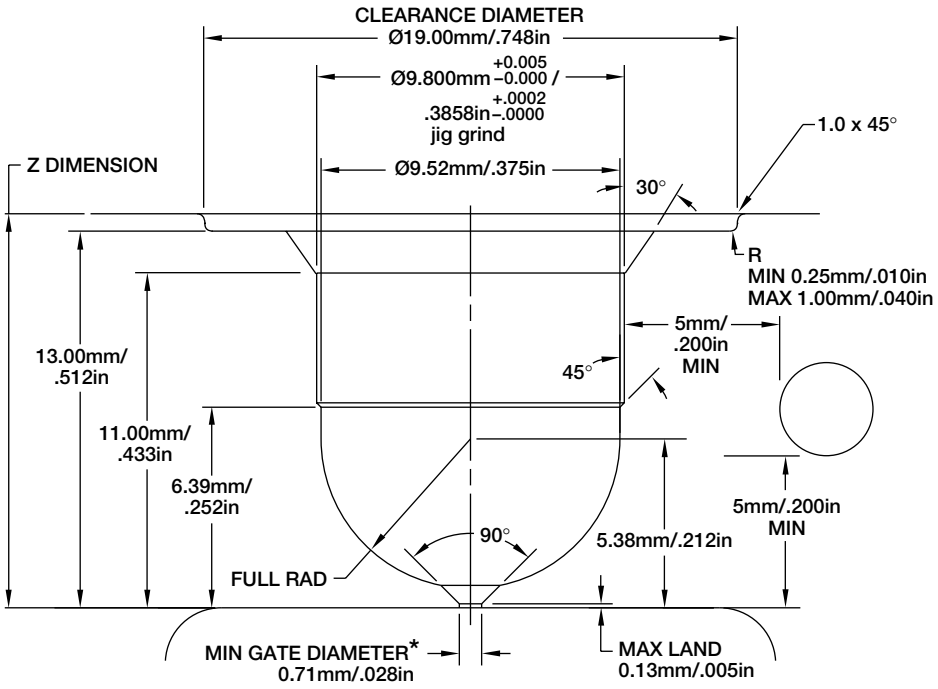
1. All units are in mm.
2. The minimum "Z" dimension is 13.00 for the point gate and sprue gate. The maximum "Z" dimension is 75.00 for the point gate and sprue gate.

Gate Details for use with Hardened Steel (50HRC min.)

NOTE: Position gate detail within ±0.013mm/.0005in from nominal.

Fig. 5 Point Gate Tips Standard Gate Detail

If standard gate detail does not properly fit the application, contact D-M-E for assistance about gate detail options.

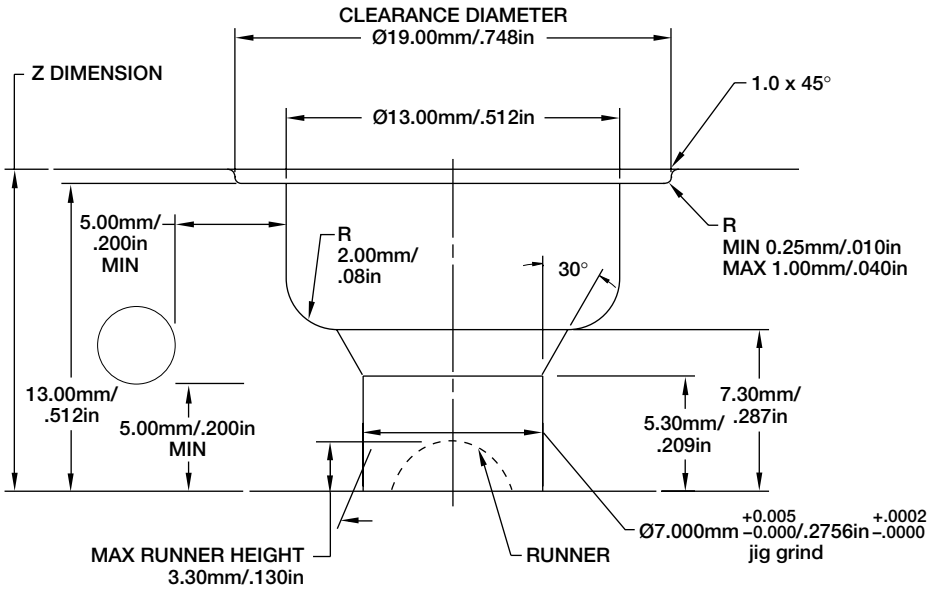


Please note that the gate diameter can be opened by the customer to suit the application. Also, the land must be re-machined to the maximum dimension after increasing the gate diameter.

NOTES:

1. Water lines are required in “A” plate for proper gate cooling.
2. Position water lines as close as possible and maintain minimum distance shown to provide a safe steel condition.

Fig. 6 Sprue Gate Tips Gate Detail



Manifold Options – Round MNAs

NOTE: Position gate detail within ±0.013mm/.0005in from nominal.

Fig. 7

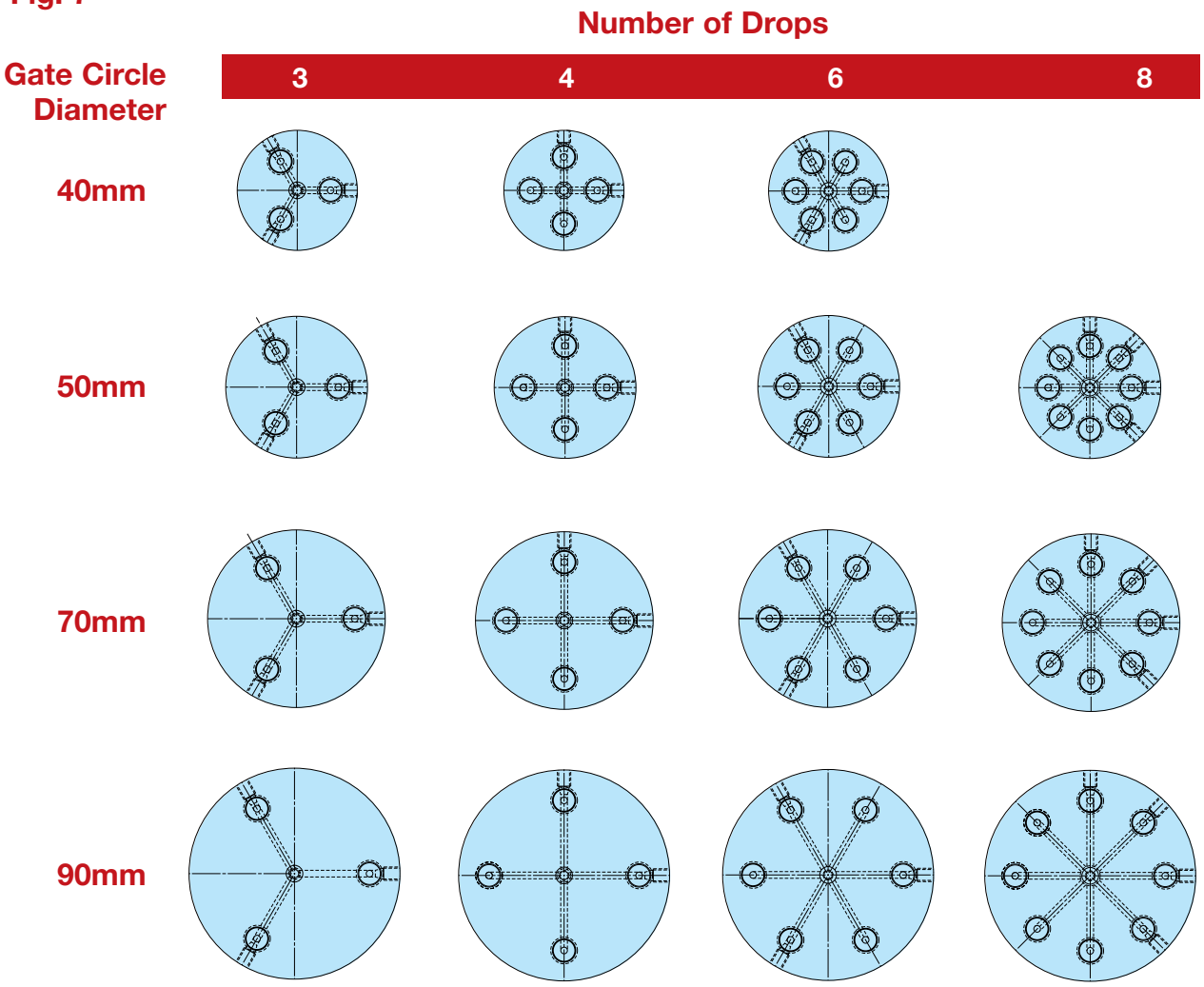


Table 4
Number of Drops for Each Gate Circle Diameter

	Number of Drops			
Gate Circle Diameter (mm)	3	4	6	8
40	✓	✓	✓	—
50	✓	✓	✓	✓
70	✓	✓	✓	✓
90	✓	✓	✓	✓

Table 5
Round MNA Outside Diameters

Description	O.D.
Ø40 3-Drop	Ø72.00 [2.835]
Ø40 4-Drop	
Ø40 6-Drop	
Ø50 3-Drop	Ø85.00 [3.346]
Ø50 4-Drop	
Ø50 6-Drop	
Ø50 8-Drop	

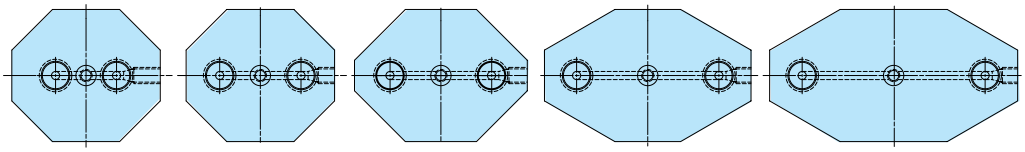
Description	O.D.
Ø70 3-Drop	Ø106.50 [4.193]
Ø70 4-Drop	
Ø70 6-Drop	
Ø70 8-Drop	
Ø90 3-Drop	Ø126.50 [4.980]
Ø90 4-Drop	
Ø90 6-Drop	
Ø90 8-Drop	

Manifold Options – Rectangular MNAs

NOTE: Position gate detail within ±0.013mm/.0005in from nominal.

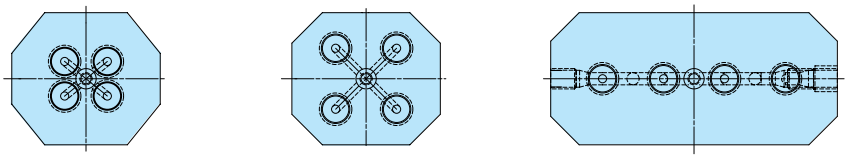
Fig. 8

2 Drop



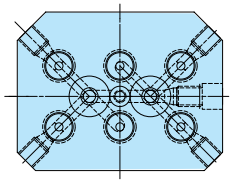
30mm pitch | 40mm pitch | 50mm pitch | 70mm pitch | 90mm pitch

4 Drop



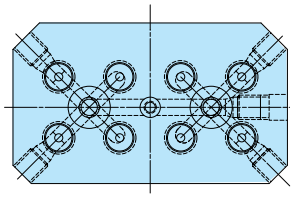
17x21mm pitch | 30x30mm pitch | 30mm pitch

6 Drop



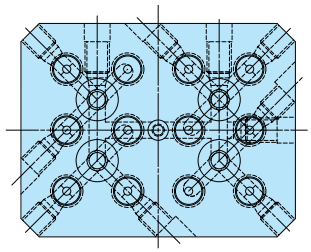
30mm pitch

8 Drop



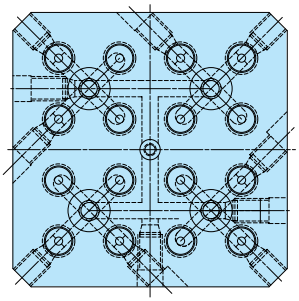
30mm pitch

12 Drop



30mm pitch

16 Drop



30mm pitch

Table 6: Rectangular MNA Dimensions

Description	Dimensions (Length x Width)	
	Millimeters	Inches
2-Drop 30	73.02 x 65.00	2.875 x 2.559
2-Drop 40	83.00 x 65.00	3.268 x 2.559
2-Drop 50	92.00 x 65.00	3.622 x 2.559
2-Drop 70	101.60 x 65.00	4.000 x 2.559
2-Drop 90	122.00 x 65.00	4.803 x 2.559
4-Drop 17x21	79.02 x 65.00	3.111 x 2.559
4-Drop 30x30	73.02 x 65.00	2.875 x 2.559
4-Drop Inline	141.00 x 65.00	5.551 x 2.559
6-Drop 30	101.00 x 78.00	3.976 x 3.071
8-Drop 30	135.00 x 79.00	5.315 x 3.110
12-Drop 30	135.00 x 105.00	5.315 x 4.134
16-Drop 30	135.00 x 135.00	5.315 x 5.315

General Assembly – MNAs
Heated and Unheated MEN Options

Fig. 9
Round Section View

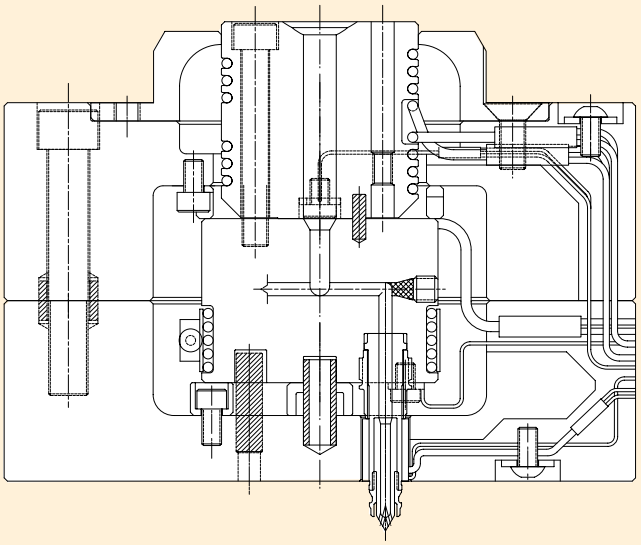


Fig. 10
Rectangular Section View

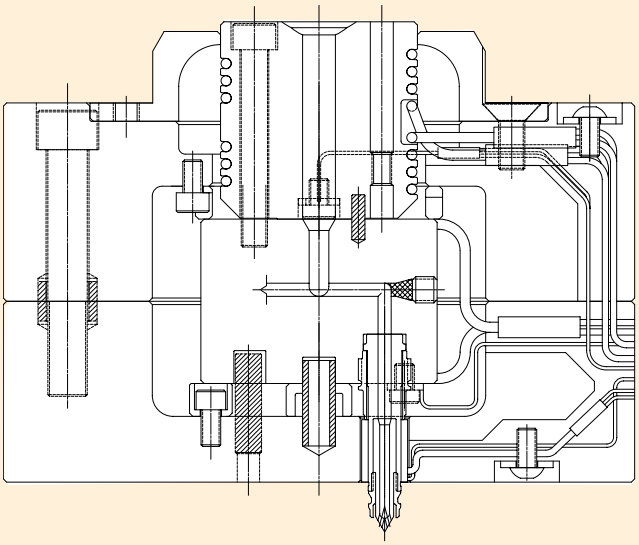


Fig. 11
Heated MEN Design

Preferred for most applications.

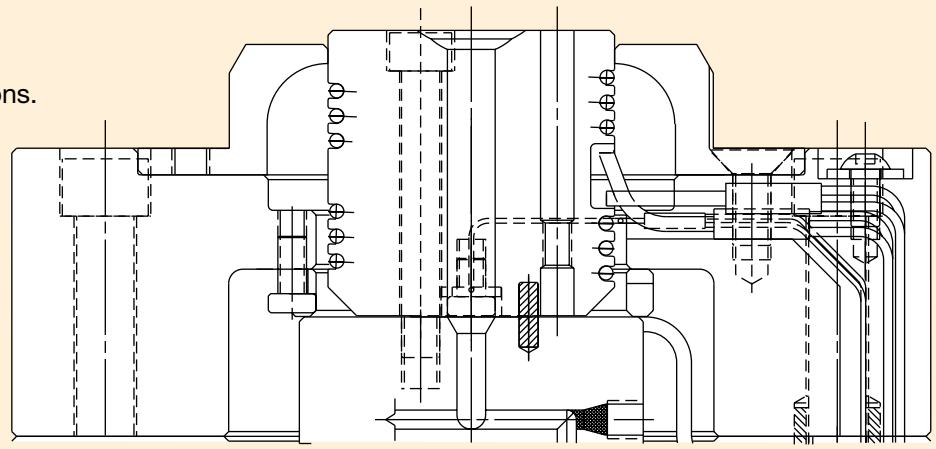
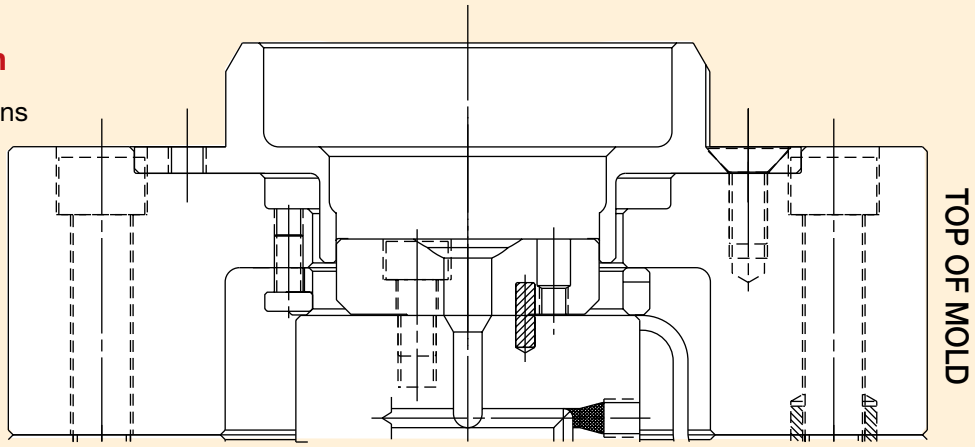


Fig. 12
Unheated MEN Design

For use with commodity resins only, i.e., PE, PP, PS.



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ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru



Gate-Mate™ Nozzles

COST-EFFECTIVE SOLUTIONS
FOR DIRECT-GATED,
THIN-WALLED PARTS



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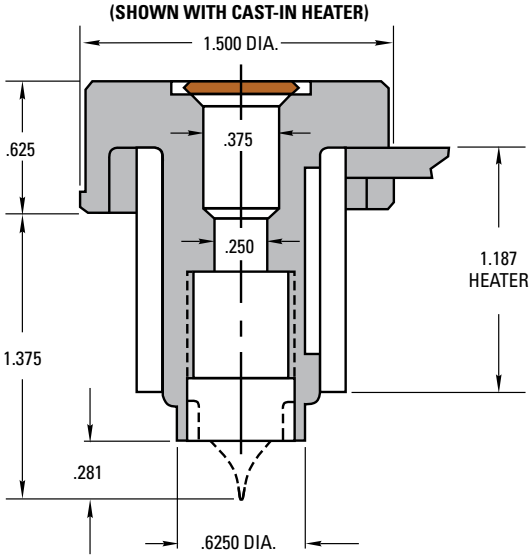


Mini Gate-Mate™ Nozzles

The Mini Gate-Mate Nozzles are ideal for fast cycling multi-cavity molds. The compact design permits shorter overall stack-up of the "A" side mold plates. The Mini Gate-Mate Nozzles are provided with either a square coil heater or a cast-in heater. Thermocouple placement provides better heater control, and the overall body design improves thermal insulation. Square coil heater, thermocouple and tip are all replaceable.



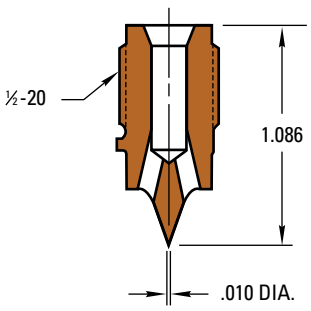
NOZZLE SUB-ASSEMBLIES (SHOWN WITH CAST-IN HEATER)



NOTES:
1. Heaters are 240 VAC, 36" Leads, 34" fiberglass lead protection
2. Cast-in integral thermocouple and TCG style thermocouple are type J
3. TCG style thermocouple has 36" leads, 34" fiberglass lead protection
4. Seal ring (for replacement) is sold in packs of 4 only

NOZZLE SUB-ASSEMBLY (ORDER TIP SEPARATELY)		INCLUDES				
		1	2		3	4
ITEM NUMBER	HEATER TYPE	NOZZLE BODY	HEATER	WATTS	THERMO-COUPLE	SEAL RING
GMB0110	CAST-IN	GMB0105	CIH0100	250	N/A (INTEGRAL)	EHR7155
GMB0118	SQUARE COIL	GMB0105	SCH0004	250	TCG0100	

Mini Gate-Mate™ Tips





ITEM NUMBER	TIP STYLE
GMT0100	STANDARD
GMT4101	WEAR RESISTANT

Contact D-M-E for tip recommendations and assistance with your application.

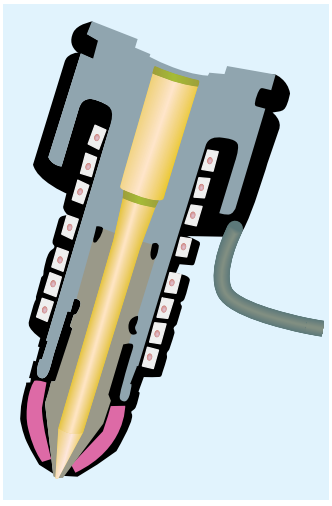
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ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Gate-Mate™ 4 Nozzles

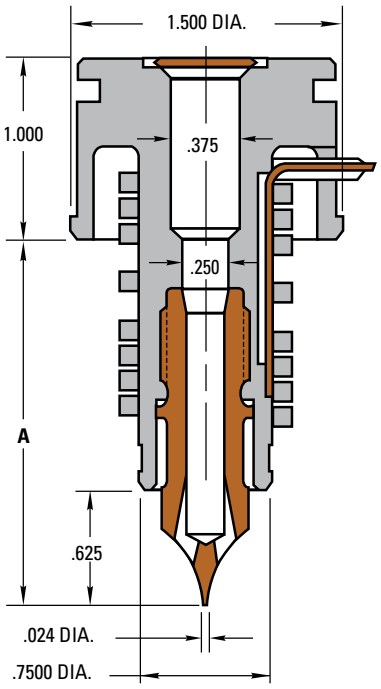
The Gate-Mate 4 Nozzle is ideal for fast-cycling multi-cavity molds and thin-walled parts. Its compact design permits closer centerline distances for use in smaller molds, or increased cavitation in larger molds. Thermocouple placement provides better heater control, and the overall nozzle design gives improved thermal insulation. Heater, thermocouple and tips are all replaceable. The nozzles are available in three versions: A complete assembly with standard tip, a sub-assembly with tip ordered separately and a sub-assembly with front load heater which allows heater replacement to be performed without having to remove the mold from the machine. Front load heaters include integral thermocouples.



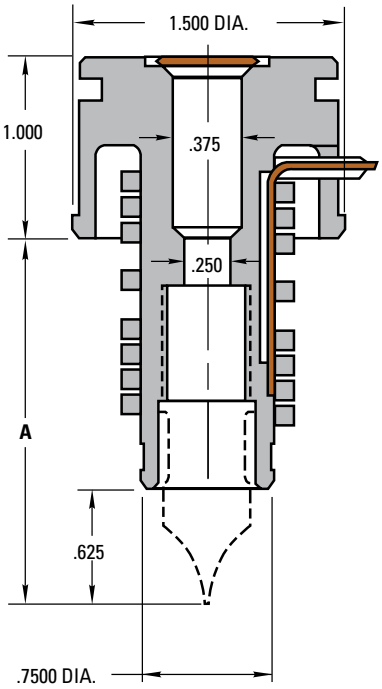




NOZZLE ASSEMBLY (INCLUDES GMT-2 TIP)



NOZZLE SUB-ASSEMBLY (TIP ORDERED SEPARATELY)



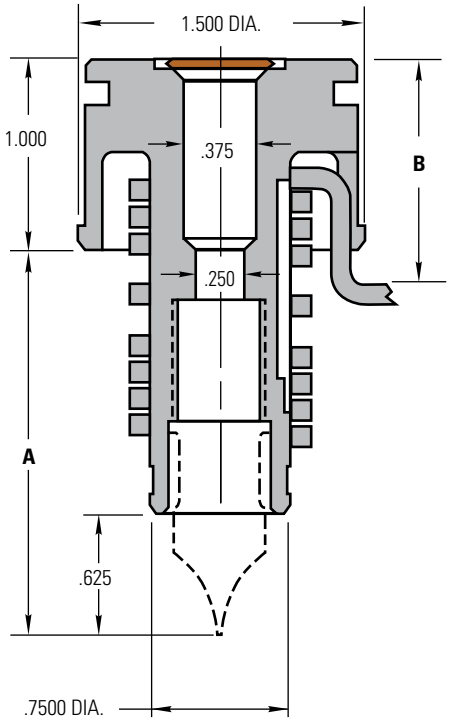
Improved tip insulation, elimination of material degradation in threaded area of tip, and faster color changes can be achieved through use of a Gate Shell Insulator.

A	NOZZLE ASSEMBLY (INCLUDES GMT-2 TIP)	NOZZLE SUB ASSEMBLY (TIP ORDERED SEPARATELY)	INCLUDES				
			1	2		3	4
			NOZZLE BODY	SQUARE COIL HEATER	WATTS	THERMO-COUPLE	SEAL RING
2.000	GMB0050	GMB0150	GMB0060	SCH0060	250	TCG0060	EHR7155
2.500	GMB0051	GMB0151	GMB0061	SCH0061	300	TCG0061	
3.000	GMB0052	GMB0152	GMB0062	SCH0062	350	TCG0062	
3.500	GMB0053	GMB0153	GMB0063	SCH0063	400	TCG0063	
4.000	GMB0054	GMB0154	GMB0064	SCH0064	425	TCG0064	
5.000	GMB0055	GMB0155	GMB0065	SCH0065	500	TCG0065	
6.000	GMB0056	GMB0156	GMB0066	SCH0066	500	TCG0066	

NOTES:
1. Items 1 thru 4 are available separately for replacement purposes
2. Items 2 is 240 VAC, 36" leads, 34" fiberglass lead protection
3. Item 3 is type J, with 36" leads, 34" fiberglass lead protection
4. Item 4 (for replacement) is sold in packs of 4 only

Gate-Mate™ 4 Nozzles and Tips

NOZZLE SUB-ASSEMBLY WITH FRONT LOAD HEATER (TIP ORDERED SEPARATELY)



Gate-Mate™ 4 Nozzles

A	B	NOZZLE SUB ASSEMBLY (TIP ORDERED SEPARATELY)	INCLUDES 1 NOZZLE BODY	INCLUDES 2 FRONT LOAD HEATER	INCLUDES 2 WATTS	INCLUDES 3 SEAL RING
2.000	1.250	GMB1050	GMB0060	SCH1060	250	EHR0155
2.500	1.250	GMB1051	GMB0061	SCH1061	300	
	1.750	GMB2051		SCH2061		
3.000	1.250	GMB1052	GMB0062	SCH1062	350	
	1.750	GMB2052		SCH2062		
3.500	1.250	GMB1053	GMB0063	SCH1063	400	
	1.750	GMB2053		SCH2063		
4.000	1.250	GMB1054	GMB0064	SCH1064	425	
	1.750	GMB2054		SCH2064		
5.000	1.250	GMB1055	GMB0065	SCH1065	500	
	1.750	GMB2055		SCH2065		
6.000	1.250	GMB1056	GMB0066	SCH1066	500	
	1.750	GMB2056		SCH2066		

NOTES:
1. Items 1, 2 and 3 are available separately for replacement purposes
2. Item 2 is 240 VAC, type J thermocouple, 36" leads, 34" Teflon lead protection
3. Item 3 (for replacement) is sold in packs of 4 only

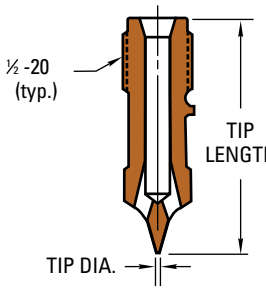
Gate-Mate 4™ Tips

TIP STYLE	TIP ITEM NUMBER	O DIA.	TIP LENGTH	TIP DIA.	HOLE DIA.
STANDARD	GMT-2	.044 MIN.	1.730	.024	N/A
WEAR RESISTANT	GMT0400	.055 MIN.			
SUPER SHARP	GMT0301	.030 MIN.		.010	
SUPER SHARP WEAR RESISTANT	GMT0401	.055 MIN.			
THRU HOLE	GMT0302*	.030 MIN. .050 MAX	1.690	.090	.050
THRU HOLE WEAR RESISTANT	GMT0402*	.055 MIN.			
NO HOLE	GMT0303	.044 MIN.	1.730	.024	N/A

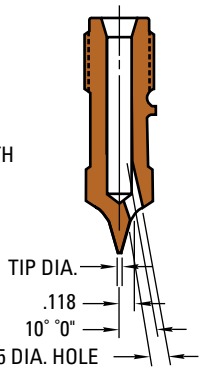
NOTES:
1. Thru hole tip is designed .040 shorter in length to be a direct replacement for the standard tip; use a .030 to .060 diameter gate
2. A .030 minimum diameter gate is recommended when using the super sharp tip
3. Contact D-M-E for tip recommendations and assistance with your application

*Contact D-M-E for details to modify thru hole tips for larger "O" diameters

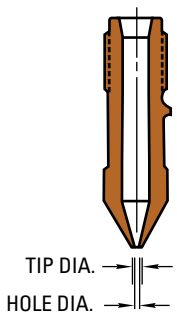
STANDARD
WEAR RESISTANT
SUPER SHARP
SUPER SHARP WEAR RESISTANT



NO HOLE



THRU HOLD AND
THRU HOLD WEAR RESISTANT

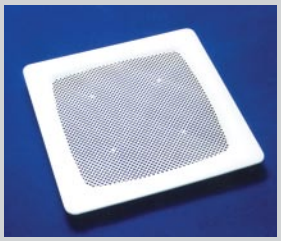


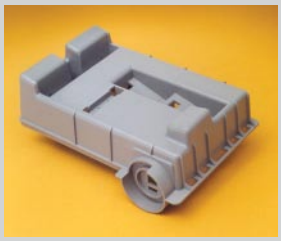
MOLDMAKER TO MACHINE

Gate-Mate™ Lite Features and Benefits















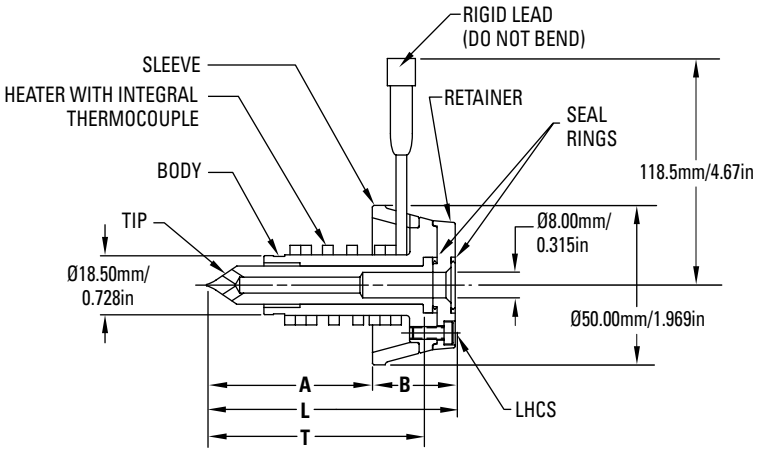
Delivers consistent performance — economically

Gate-Mate Lite is a very cost-effective solution for thin-walled parts, direct-gating, and high-cavitation molding.

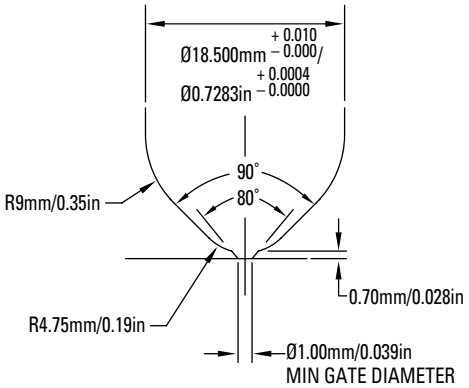
Key features include:

- **Available in 10 nozzle lengths (42-130mm)** — flexibility to suit your application requirements
- **Bodiless designs** — leaves no witness lines on the finished molded part
- **Precise temperature control** — advanced design, square-coil heater and integrated thermocouple ensure accurate temperature control
- **Excellent gate control** — highly conductive, full-length, beryllium copper tip delivers heat to ensure proper gate control, minimum vestige, and better part appearance
- **Easy installation and operation** — set-up and production are streamlined and simple
- **Suitable for multi-cavity molds** — provides optimum gate cosmetics in parts up to 225 grams.
  For part weights greater than 225 grams, contact D-M-E for review of the application. For maximum throughput to the hot runner system and cavities, the machine nozzle tip orifice must be equal to the nozzle seat orifice on the manifold extension nozzle.
- **Compatible with a wide range of unfilled materials** — easily processes POM, TPE, TPO, PE, PP, PS, SAN, ABS, PA, PPO, PMMA, and PC

Point Gate Nozzle Assembly

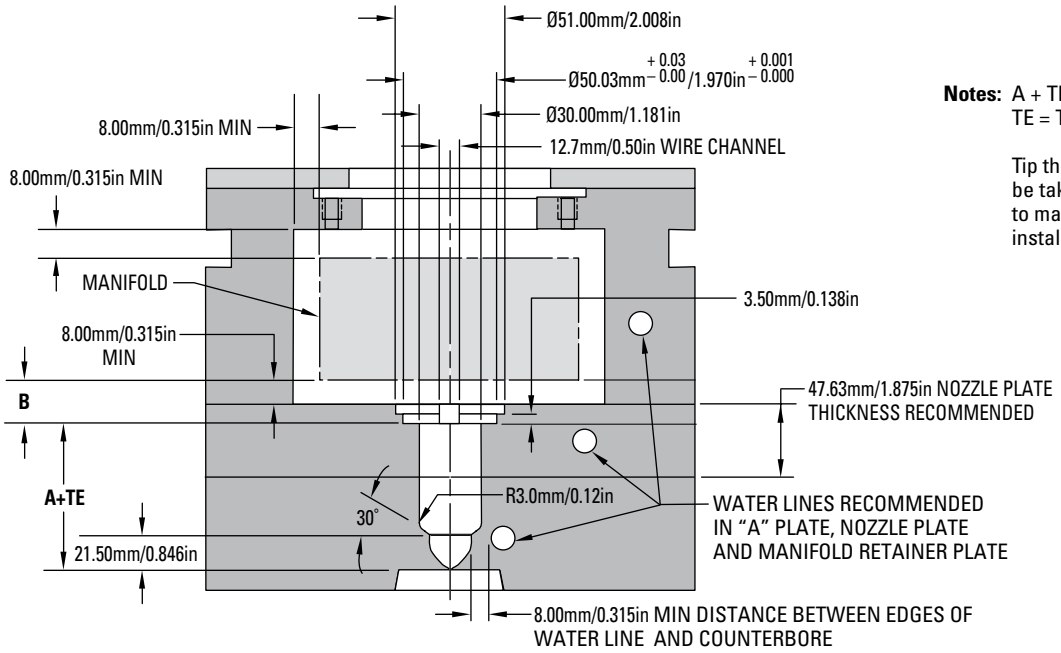


Gate Detail



Gate-Mate™ Lite Hot Runner Nozzles

Nozzle Plate and "A" Plate Machining Dimensions



Notes: A + TE = Tip position, hot where TE = Tip thermal expansion

Tip thermal expansion must be taken into account prior to machining plates and installing nozzle into the mold.

The formula for determining thermal expansion is: TE (mm) = "T" dimension (mm) x .0000175mm x [Nozzle Setpoint Temperature (°C) - 20] or TE (in) = "T" dimension (in) x .0000097in x [Nozzle Setpoint Temperature (°F) - 68]

EXAMPLE: For GML1070: "A" = 70.00mm, "T" = 86.00mm, Setpoint = 260°C
"TE" = 86.00 x .0000175 x (260-20) = .36 ... thus "A" + "TE" = 70.00 + .36 = 70.36

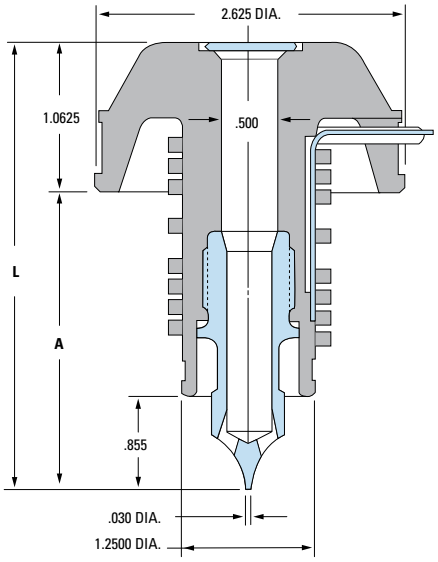
NOZZLE ASSEMBLY	A DIM		T DIM		L DIM		B DIM		BODY ITEM NO	TIP ITEM NO	HEATER ITEM NO	SLEEVE ITEM NO	RETAINER ITEM NO	SEAL RING ITEM NO	LHCS ITEM NO
	MM	INCH	MM	INCH	MM	INCH	MM	INCH							
GML1042	42.00	1.654	68.00	2.677	78.00	3.071	36.00	1.417	GMC0162	GMT0015	GMH1940	GMS0163	GMR0052	EHR7155 (2 REQUIRED)	M410LH (3 REQUIRED)
GML1052	52.00	2.047	68.00	2.677	78.00	3.071	26.00	1.024	GMC0162	GMT0015	GMH1940	GMS0162			
GML1060	60.00	2.362	86.00	3.386	96.00	3.780	36.00	1.417	GMC0163	GMT0017	GMH1950	GMS0163			
GML1070	70.00	2.756	86.00	3.386	96.00	3.780	26.00	1.024	GMC0163	GMT0017	GMH1950	GMS0162			
GML1080	80.00	3.150	106.00	4.173	116.00	4.567	36.00	1.417	GMC0164	GMT0019	GMH1960	GMS0163			
GML1090	90.00	3.543	106.00	4.173	116.00	4.567	26.00	1.024	GMC0164	GMT0019	GMH1960	GMS0162			
GML1100	100.00	3.937	126.00	4.961	136.00	5.354	36.00	1.417	GMC0165	GMT0021	GMH1970	GMS0163			
GML1110	110.00	4.331	126.00	4.961	136.00	5.354	26.00	1.024	GMC0165	GMT0021	GMH1970	GMS0162			
GML1120	120.00	4.724	146.00	5.748	156.00	6.142	36.00	1.417	GMC0166	GMT0023	GMH1980	GMS0163			
GML1130	130.00	5.118	146.00	5.748	156.00	6.142	26.00	1.024	GMC0166	GMT0023	GMH1980	GMS0162			

For ancillary hot runner components and temperature controls, contact D-M-E.

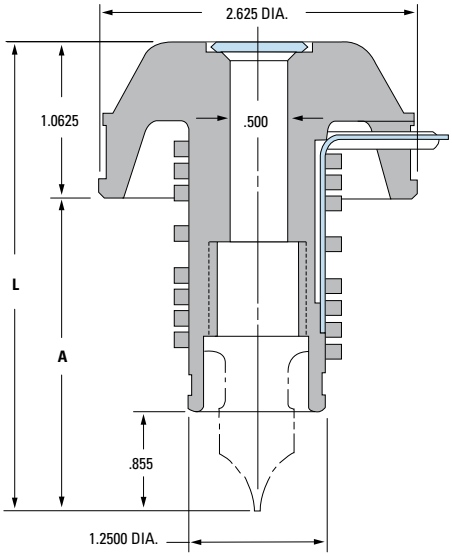
Jumbo Gate-Mate™ Nozzles

As an alternative to the Hot One Nozzles, the Jumbo Gate-Mate Nozzles provide the advantage of replaceable coil heaters and thermocouples. In addition, the thermocouple placement provides for better heater control. The coil heaters have a square cross section for improved heat transfer.

Nozzle Assembly
(include GMT0004 TIP)



Nozzle Sub-Assembly
(TIP ordered separately)



A	L	NOZZLE ASSEMBLY (INCLUDES GMT0004 TIP)	NOZZLE SUB ASSEMBLY (TIP ORDERED SEPARATELY)	INCLUDES*				
				1	2		3	4
				NOZZLE BODY	SQUARE COIL HEATER	WATTS	THERMO-COUPLE	SEAL RING
2.500	3.562	GMB0018	GMB0119	GMC0016	SCH0002	600	TC0002	EHR7001
3.500	4.562	GMB0019	GMB0120	GMC0017	SCH0001	800	TC0001	

***NOTES:**
1. Items 1 thru 4 are available separately for replacement purposes
2. Item 2 is 240 VAC, 42" leads
3. Item 3 is type J
4. Item 4 (for replacement) is sold in packs of 4 only

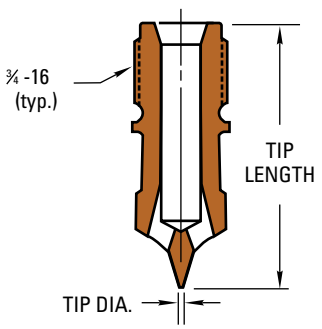
Jumbo Gate-Mate™ Tips

TIP STYLE	ITEM NUMBER	TIP LENGTH	TIP DIA.	HOLE DIA.
STANDARD	GMT0004	1.855	.030	N/A
WEAR RESISTANT	GMT0406			
THRU HOLE	GMT0007	1.815	.140	.100
THRU HOLE WEAR RESISTANT	GMT0407			

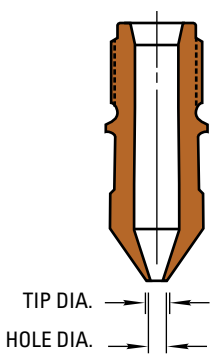
1. Thru hole tip designed .040 shorter in length to be a direct replacement for the standard tip; use a .080 to .125 diameter gate
2. Contact D-M-E for tip recommendations and assistance with your application

Improved tip insulation, elimination of material degradation in threaded area of tip, and faster color changes can be achieved through use of a Gate Shell Insulator.

STANDARD
WEAR RESISTANT



THRU HOLE
THRU HOLE WEAR RESISTANT



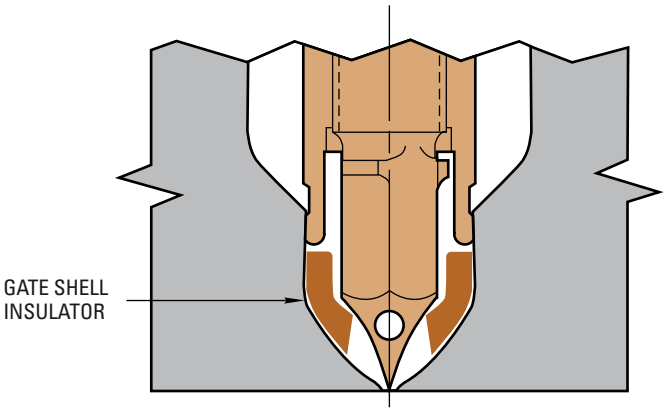
Gate Shell Insulators

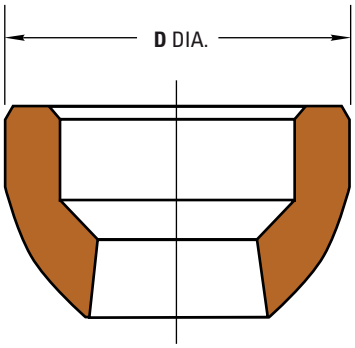
Gate Shell Insulators



- Improves insulation in the tip area
- Provides seal-off to eliminate material degradation in threaded area of tip
- Minimizes material in gate area to allow for faster color changes
- Withstands temperatures up to 550° F

Typical Application





FOR BUSHING OR NOZZLE STYLE	FOR TIP STYLE	ITEM NUMBER
Gate-Mate 4 Nozzle	Standard, Super Sharp, No Hole	GSI0001
	Thru Hole	GSI0002
Jumbo Gate-Mate Bushing or Nozzle	Standard	GSI0003
	Thru Hole	GSI0004
Medium Gate-Mate Bushing	Standard, Super Sharp, No Hole	GSI0005
	Thru Hole	GSI0006

D DIA.	ITEM NUMBER
.748	GSI0001
	GSI0002
1.248	GSI0003
	GSI0004
.748	GSI0005
	GSI0006

APPLICATION NOTES:

1. Use only with bushings, nozzles and tip styles shown in the reference chart above
2. Gate machining must be done according to D-M-E specifications
3. Nozzle tip cannot be altered in any way for the Gate Shell Insulator to perform properly
4. If dissimilar resins are to be processed in the same mold, it is recommended that their processing temperatures be within a similar range
5. For best results, the outer surface of the tip should be free from all resin before the Gate Shell Insulator is installed or used



D-M-E Hot One Nozzles

ENABLING VERSATILITY
IN SYSTEM SELECTION



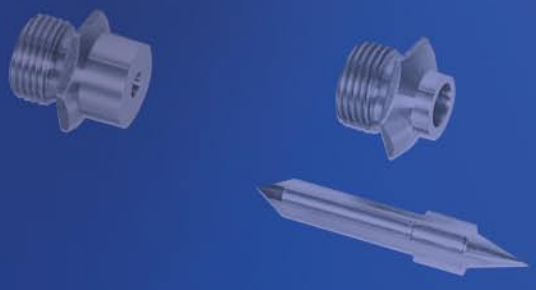
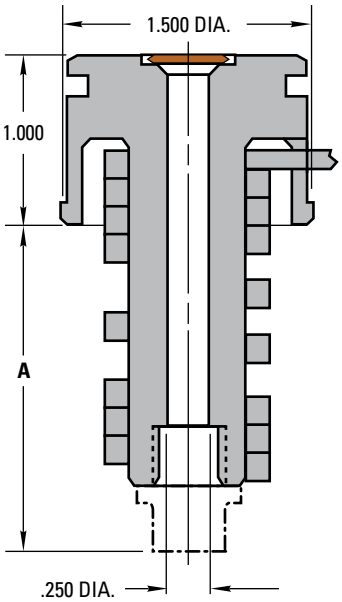


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250 Series Nozzles (.250 Diameter Flow Channel)

Nozzle Sub-Assemblies



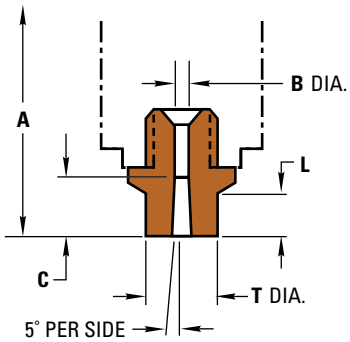
NOZZLE SUB-ASSEMBLY		INCLUDES			
		1	2		3
A	ITEM NUMBER	NOZZLE BODY	SQ. COIL HEATER	WATTS	SEAL RING
2.000	EHA0001	CIB1359	SCH0081	300	EHR7154
2.500	EHA0002	CIB1360	SCH0082	350	
3.000	EHA0003	CIB1361	SCH0083	400	
3.500	EHA0004	CIB1362	SCH0084	425	
4.000	EHA0005	CIB1363	SCH0085	500	
5.000	EHA0006	CIB1364	SCH0086	500	
6.000	EHA0007	CIB1365	SCH0087	550	

(Add .750 to A dimension for extended sprue gate tips.)

NOTES:
1. Nozzle body, square coil heater and seal rings are available separately for replacement purposes
2. Square coil heater is 240 VAC T/C type J, 36" leads, 34" fiberglass lead protection
3. Seal rings are sold in packs of 4 only



Tip Sub-Assemblies

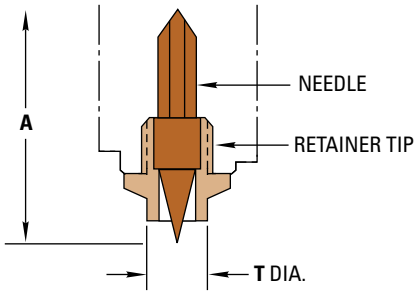


Sprue Gate/Extended Sprue Gate

TIP	ITEM NUMBER	B DIA.	T DIA.	L	C
SPRUE GATE	EHT0010	.080	.500	.250	.375
	EHT0011		.750		
	EHT0012		1.000	.100	
EXTENDED SPRUE GATE	EHT0013		.500	1.000	1.125
	EHT0014		.750		
	EHT0015		1.000	.850	

(Add .750 to A dimension for extended sprue gate tips.)



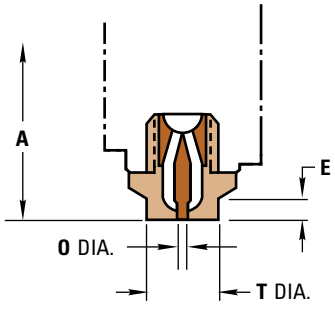


Point Gate

TYPE	ITEM NUMBER	INCLUDES		T DIA.
		NEEDLE	RETAINER TIP	
STANDARD	EHT0005	EHN0015	EHT0024	.375
	EHT1314		EHT0324	
WEAR RESISTANT	EHT1308	EHN0401	EHT0324	
	EHT1313		EHT1324	

Contact D-M-E for tip recommendations, and assistance with your application.





Ring Gate

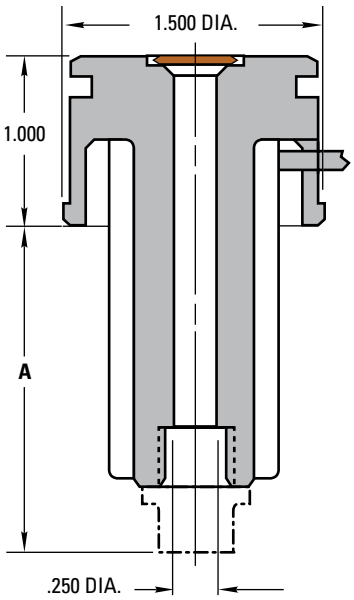
ITEM NUMBER	T DIA.	O DIA.	E	INCLUDES	
				NEEDLE	RETAINER TIP
EHT0001	.375	.060	.187	EHN0007	EHT0026
EHT0002		.080			EHT0027
EHT0003	.500	.060			EHT0028
EHT0004		.080			EHT0029



For installation and mold machining data, see the Hot One Design and Machining Guidelines at the end of this Hot One Nozzles section.

250 Series High Performance Nozzles (.250 Diameter Flow Channel)

Nozzle Sub-Assemblies



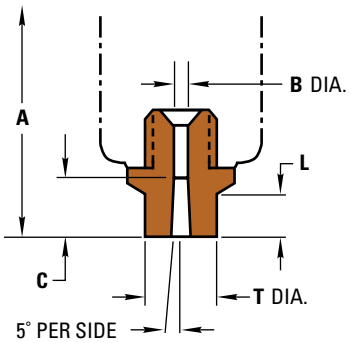
NOZZLE SUB-ASSEMBLY		INCLUDES			
		1	2		3
A	ITEM NUMBER	NOZZLE BODY	CAST-IN HEATER	WATTS	SEAL RING
2.000	CIA0001	CIB1359	CIH0081	440	EHR7154
2.500	CIA0002	CIB1360	CIH0082	350	
3.000	CIA0003	CIB1361	CIH0083	400	
3.500	CIA0004	CIB1362	CIH0084	565	
4.000	CIA0005	CIB1363	CIH0085	500	
5.000	CIA0006	CIB1364	CIH0086	500	
6.000	CIA0007	CIB1365	CIH0087	550	

(Add .750 to A dimension for extended sprue gate tips.)

NOTES: 1. Cast-in heater is 240 VAC T/C type J, 36" leads, 34" fiberglass lead protection
2. Seal rings are sold in packs of 4 only



Tip Sub-Assemblies

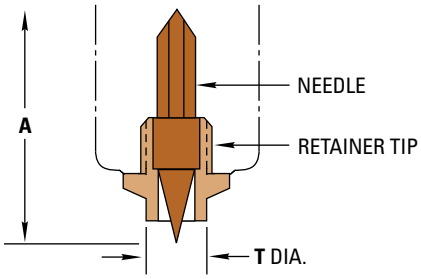


Sprue Gate/Extended Sprue Gate

TIP	ITEM NUMBER	B DIA.	T DIA.	L	C
SPRUE GATE	EHT0010	.080	.500	.250	.375
	EHT0011		.750		
	EHT0012		1.000	.100	
EXTENDED SPRUE GATE	EHT0013		.500	1.000	1.125
	EHT0014		.750		
	EHT0015		1.000	.850	

(Add .750 to A dimension for extended sprue gate tips.)





Point Gate

TYPE	ITEM NUMBER	INCLUDES		T DIA.
		NEEDLE	RETAINER TIP	
STANDARD	EHT0005	EHN0015	EHT0024	.375
	EHT1314		EHT0324	
WEAR RESISTANT	EHT1308	EHN0401	EHT0324	
	EHT1313		EHT1324	

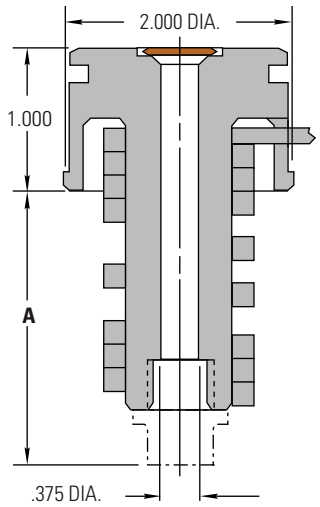
Contact D-M-E for tip recommendations, and assistance with your application.



For installation and mold machining data, see the Hot One Design and Machining Guidelines at the end of this Hot One Nozzles section.

375 Series Nozzles (.375 Diameter Flow Channel)

Nozzle Sub-Assemblies



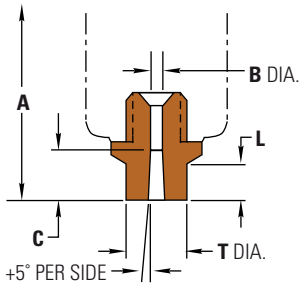
NOZZLE SUB-ASSEMBLY		INCLUDES			
A	ITEM NUMBER	1	2		3
		NOZZLE BODY	SQ. COIL HEATER	WATTS	SEAL RING
2.000	EHA0008	CIB1366	SCH0088	400	EHR7155
2.500	EHA0009	CIB1367	SCH0089	450	
3.000	EHA0010	CIB1368	SCH0090	550	
3.500	EHA0011	CIB1369	SCH0091	700	
4.000	EHA0012	CIB1370	SCH0092	800	
5.000	EHA0013	CIB1371	SCH0093	900	
6.000	EHA0014	CIB1372	SCH0094	1000	
7.000	EHA0015	CIB1373	SCH0095	1100	

(Add .750 to A dimension for extended sprue gate tips.)

NOTES: 1. Nozzle body, square coil heater and seal rings are available separately for replacement purposes.
2. Square coil heater is 240 VAC T/C type J, 36" leads, 34" fiberglass lead protection.
3. Seal rings are sold in packs of 4 only.



Tip Sub-Assemblies

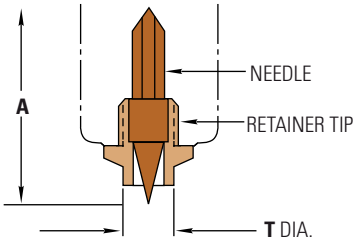


Sprue Gate/Extended Sprue Gate

TIP	ITEM NUMBER	B DIA.	T DIA.	L	C
SPRUE GATE	EHT0016	.125	.500	.250	.375
	EHT0017		.750		
	EHT0018		1.000		
EXTENDED SPRUE GATE	EHT0019		.500	1.000	1.125
	EHT0020		.750		
	EHT0021		1.000		

(Add .750 to A dimension for extended sprue gate tips.)



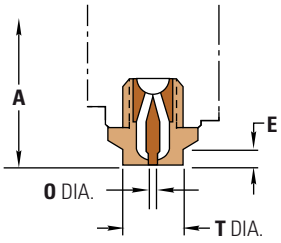


Point Gate

TYPE	ITEM NUMBER	INCLUDES		T DIA.
		NEEDLE	RETAINER TIP	
STANDARD	EHT0039	EHN0016	EHT0025	.500
	EHT1312		EHT0325	
WEAR RESISTANT	EHT1303	EHN0400	EHT1325	
	EHT1309		EHT0325	

Contact D-M-E for tip recommendations, and assistance with your application.





Ring Gate

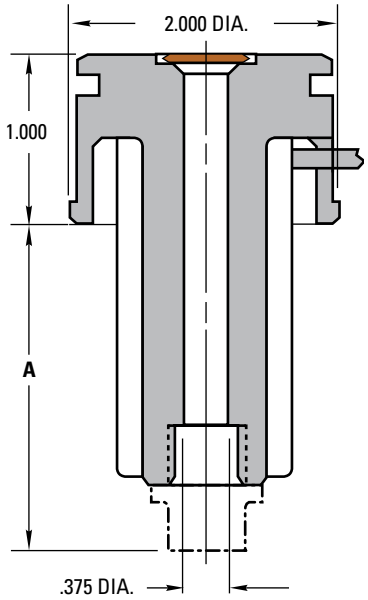
ITEM NUMBER	T DIA.	O DIA.	E	INCLUDES	
				NEEDLE	RETAINER TIP
EHT0006	.500	.080	.230	EHN0008	EHT0030
EHT0007		.100			EHT0031
EHT0008	.750	.080			EHT0032
EHT0009		.100			EHT0033
EHT0037	1.000	.080			EHT0034
EHT0038		.100			EHT0035



For installation and mold machining data, see the Hot One Design and Machining Guidelines at the end of this Hot One Nozzles section.

375 Series High Performance Nozzles (.375 Diameter Flow Channel)

Nozzle Sub-Assemblies



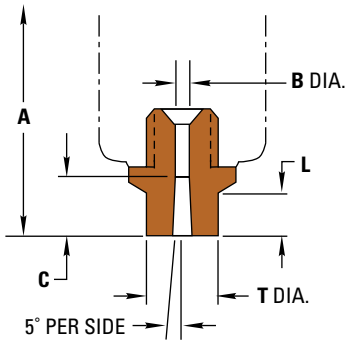
NOZZLE SUB ASSEMBLY		INCLUDES			
		1	2		3
A	ITEM NUMBER	NOZZLE BODY	CAST-IN HEATER	WATTS	SEAL RING
2.000	CIA0008	CIB1366	CIH0088	400	EHR7155
2.500	CIA0009	CIB1367	CIH0089	450	
3.000	CIA0010	CIB1368	CIH0090	550	
3.500	CIA0011	CIB1369	CIH0091	700	
4.000	CIA0012	CIB1370	CIH0092	800	
5.000	CIA0013	CIB1371	CIH0093	900	
6.000	CIA0014	CIB1372	CIH0094	1000	
7.000	CIA0015	CIB1373	CIH0095	1100	

(Add .750 to A dimension for extended sprue gate tips.)

NOTES: 1. Cast-in heater is 240 VAC T/C type, 36" leads, 34" fiberglass lead protection
2. Seal rings are sold in packs of 4 only



Tip Sub-Assemblies

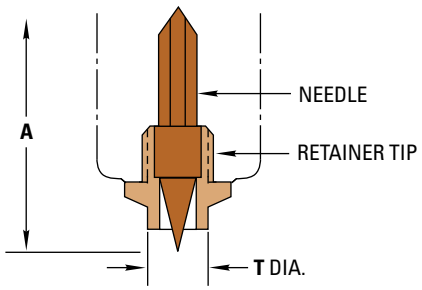


Sprue Gate/Extended Sprue Gate

TIP	ITEM NUMBER	B DIA.	T DIA.	L	C
SPRUE GATE	EHT0016	.125	.500	.250	.375
	EHT0017		.750		
	EHT0018		1.000		
EXTENDED SPRUE GATE	EHT0019		.500	1.000	1.125
	EHT0020		.750		
	EHT0021		1.000		

(Add .750 to A dimension for extended sprue gate tips.)





Point Gate

TYPE	ITEM NUMBER	INCLUDES		T DIA.
		NEEDLE	RETAINER TIP	
STANDARD	EHT0039	EHN0016	EHT0025	.500
	EHT1312		EHT0325	
WEAR RESISTANT	EHT1303	EHN0400	EHT1325	
	EHT1309		EHT0325	

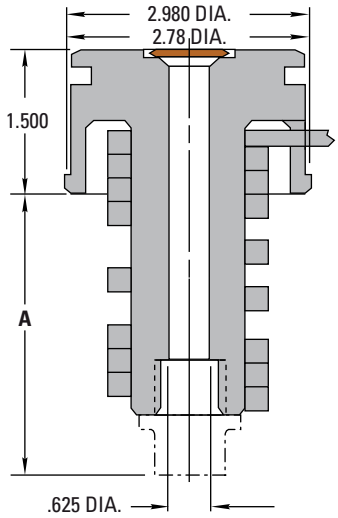
Contact D-M-E for tip recommendations and assistance with your application.



For installation and mold machining data, see the Hot One Design and Machining Guidelines at the end of this Hot One Nozzles section.

625 Series Nozzles (.625 Diameter Flow Channel)

Nozzle Sub-Assemblies



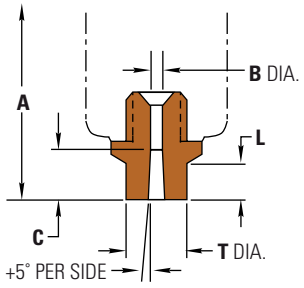
NOZZLE SUB-ASSEMBLY		INCLUDES			
		1	2		3
A	ITEM NUMBER	NOZZLE BODY	SQ. COIL HEATER	WATTS	SEAL RING
4.000	EHA0016	EHB0074	SCH0096	1000	EHR7156
5.000	EHA0017	EHB0075	SCH0097	1030	
6.000	EHA0018	EHB0076	SCH0098	1100	
7.500	EHA0019	EHB0077	SCH0099	1000	
8.000	EHA0020	EHB0078	SCH0100	1200	
9.000	EHA0021	EHB0079	SCH0101	1200	
10.000	EHA0022	EHB0080	SCH0102	1200	

(Add .750 to A dimension for extended sprue gate tips.)

NOTES: 1. Nozzle body, square coil heater and seal rings are available separately for replacement purposes.
2. Square coil heater is 240 VAC T/C type J, 36" leads, 34" fiberglass lead protection.
3. Seal rings are sold in packs of 4 only.



Tip Sub-Assemblies

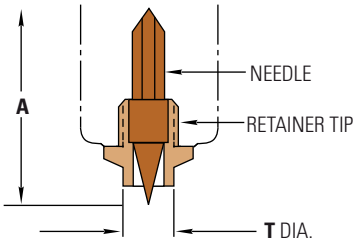


Sprue Gate/Extended Sprue Gate

TIP	ITEM NUMBER	B DIA.	T DIA.	L	C
SPRUE GATE	EHT0022	.187	1.000	.250	.500
EXTENDED SPRUE GATE	EHT0023			1.000	1.250

(Add .750 to A dimension for extended sprue gate tips.)



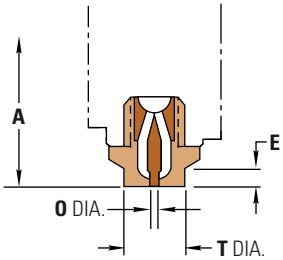


Point Gate

TYPE	ITEM NUMBER	INCLUDES		T DIA.
		NEEDLE	RETAINER TIP	
STANDARD	EHT1306	EHN0019	EHT1354	.6245
	EHT1311		EHT0326	
WEAR RESISTANT	EHT1307	EHN0402	EHT0326	
	EHT1310		EHT1354	

Contact D-M-E for tip recommendations and assistance with your application.





Ring Gate

ITEM NUMBER	T DIA.	O DIA.	E	INCLUDES	
				NEEDLE	RETAINER TIP
EHT0040	1.000	.125	.250	EHN0009	EHT0036



For installation and mold machining data, see the Hot One Design and Machining Guidelines at the end of this Hot One Nozzles section.

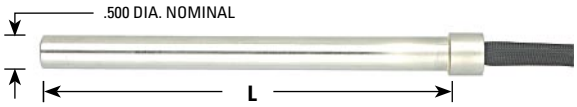
Manifold Heaters & Thermocouples

240 VAC, 36" Leads with 6" of Lead Protection

Cartridge Heater



Shoulder Style Cartridge Heater



Although these heaters do not employ integral thermocouples, they're designed and constructed to run at higher molding temperatures and provide longer life than conventional heaters.

Cartridge Heaters

Can be installed in through hole or installed using retainer plate construction.

Shoulder Style Cartridge Heaters

These heaters are used in conjunction with heater pullers Insures easy removal of blind or through hole installations.

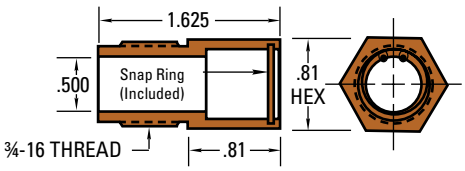
Shoulder Style Cartridge Heaters

ITEM NUMBER	L IN INCHES	WATTS	WATTS PER LIN. IN.
CHS0119	4.0	500	125
CHS0120	4.5	575	128
CHS0121	5.0	650	130
CHS0122	5.5	725	132
CHS0123	6.0	800	133
CHS0124	6.5	875	135
CHS0125	7.0	950	136
CHS0126	7.5	1025	137
CHS0127	8.0	1100	138
CHS0128	8.5	1175	138
CHS0129	9.0	1200	133
CHS0130	10.0	1350	135
CHS0131	11.0	1500	136
CHS0132	12.0	1650	137
CHS0133	15.0	2050	137
CHS0134	18.0	2500	139

Heater puller to be ordered separately.

Heater Puller (with Snap Ring)

Provides trouble-free removal of Shoulder Style Cartridge Heater.





PULLER WITH RING

ITEM NUMBER
EHP0250

REPLACEMENT SNAP RINGS

ITEM NUMBER*
EHP0001

*Pkg. of 25

Manifold Thermocouples

Installed in manifold to maintain precise temperature control.

Flat Washer Type

Utilized in limited space applications.

ITEM NUMBER
ETC0168



Threaded Type

Installed between heat source and flow channel for more precise control.

ITEM NUMBER
ETC0251



Cartridge Heaters

	ITEM NUMBER	LENGTH L	WATTS	WATTS PER LIN. IN.
	ECH0103	4.0	500	125
	ECH0119	4.0	750	188
	ECH0104	4.5	575	128
*	ECH0138	5.0	500	100
	ECH0105	5.0	650	130
*	ECH0139	5.0	750	150
	ECH0120	5.0	1000	200
*	ECH0148	5.5	500	91
	ECH0106	5.5	725	132
*	ECH0140	6.0	750	125
	ECH0107	6.0	800	133
	ECH0121	6.0	1000	167
	ECH0108	6.5	875	135
*	ECH0141	7.0	600	86
	ECH0109	7.0	950	136
	ECH0122	7.0	1000	143
*	ECH0149	7.5	1000	133
	ECH0110	7.5	1025	137
*	ECH0142	8.0	1000	125
	ECH0111	8.0	1100	138
	ECH0123	8.0	1500	188
	ECH0124	8.0	2000	250
	ECH0112	8.5	1175	138
	ECH0113	9.0	1200	133
	ECH0114	10.0	1350	135
	ECH0125	10.0	1500	150
	ECH0126	11.0	1000	91
	ECH0115	11.0	1500	136
	ECH0128	12.0	1000	83
	ECH0127	12.0	1500	125
	ECH0116	12.0	1650	137
*	ECH0144	12.0	2000	167
*	ECH0146	14.0	1000	71
*	ECH0145	14.0	2300	164
	ECH0129	15.0	1500	100
	ECH0117	15.0	2050	137
*	ECH0147	18.0	1500	83
	ECH0130	18.0	1700	94
	ECH0118	18.0	2500	139

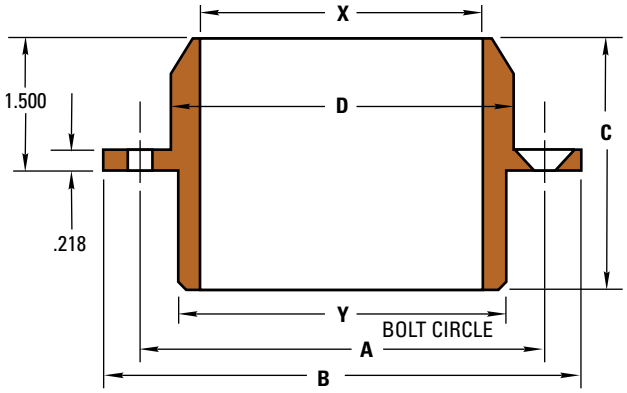
NOTE: Sizes preceded by a * are the newest additions

See the Hot One Design and Machining Guidelines at the end of this Hot One Nozzles section for manifold size recommendation and installation drawings.

Components for Externally Heated Manifold Systems

To expedite the design and construction of the Hot One System, D-M-E has standardized the following components used in most hot manifold designs.

Locating Rings





ITEM NUMBER	D DIA.	X DIA.	Y DIA.	A	B DIA.	C
EHL0252	2.990	2.000	2.500	3.312	3.990	2.875
EHL0253	3.990	3.250	3.750	4.625	5.495	2.875
EHL0254	2.990	2.000	2.500	3.312	3.990	4.500
EHL0255	3.990	3.250	3.750	4.625	5.495	4.500

*Includes (2) ½ inch long, 5⁄16 Flat Head Cap Screws.

Nozzle Seats

Provides a replaceable and interchangeable interface between manifold and machine nozzle. New style accommodates both cartridge heated and tubular manifolds. Interchangeable with previous styles in existing molds.

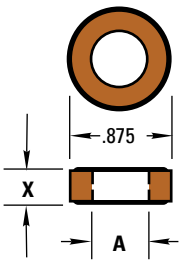




Spacer Rings

Maintains spacing between manifold and support plate.



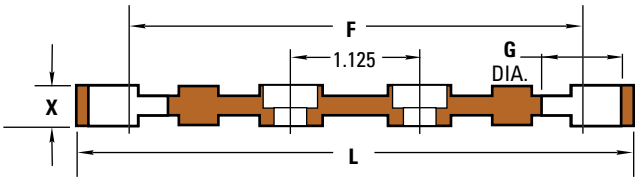


ITEM NUMBER	X DIM. +.010 −.000	A DIM.	USED WITH S.H.C.S.
ESR0157	.250	.406	3/8-16
ESR0158	.750		
ESR0159	.250	.531	1/2-13
ESR0160	.750		

Riser Pads

Supports manifold opposite nozzles and prevents heat loss.





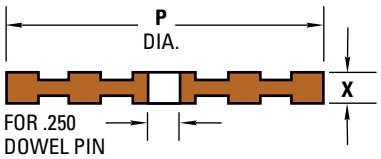
ITEM NUMBER*	X DIM. +.010 −.000	L DIM.	F DIM.	G DIM.	USED WITH
ERP0163	.250	4.000	3.250	.625	GATE MATE 4 250 SERIES AND 375 SERIES
ERP0167	.375				
ERP0164	.750				
ERP0165	.250	5.000	4.000	.781	625 SERIES
ERP0168	.375				
ERP0166	.750				

*Includes (2) No. 10-24 Low Head Cap Screws.

Center Support Pads

Supports manifold center spacing, while minimizing heat transfer from manifold.





ITEM NUMBER	P	X	ITEM NUMBER	P	X
ECB0161	2.500	+.010 −.000 .250	ECB0162	2.500	+.010 −.000 .750
ECB0163	1.500		ECB0164	1.500	

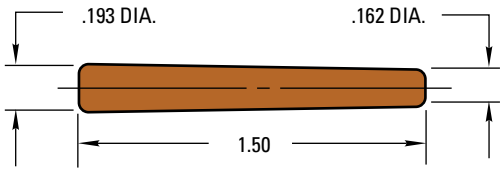
Components for Externally Heated Manifold Systems

Tapered Dowel Pin

This tapered dowel pin is used to align the end plug and prevent it from rotating. If constructed by the moldmaker from raw stock, it must conform to ANSI B18.8.2-1978 standard.



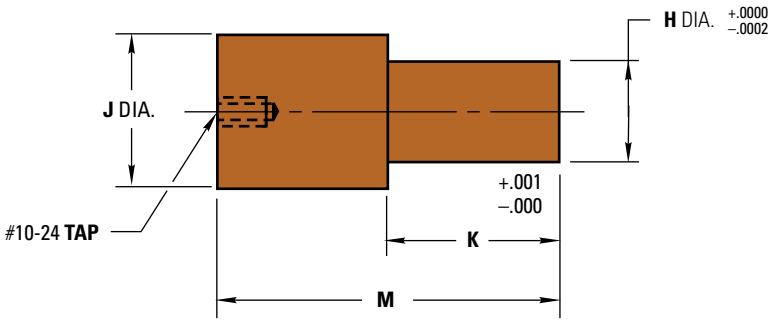
ITEM NUMBER
EDP0001



End Plugs

Used to plug and minimize leakage in horizontal flow channels.



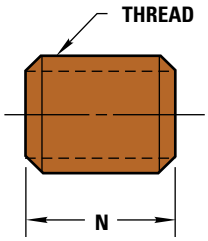


SERIES	ITEM NUMBER	H DIA.	J DIA.	K	M
GATE MATE 4	EEP0002	.5615	.800	.750	1.500
250	EEP0001	.4365	.675	.750	1.500
375	EEP0002	.5615	.800	.750	1.500
625	EEP0003	.6875	.894	1.125	1.875

End Plug Set Screws

Used to secure end plugs into manifold. Each end plug should be secured with two set screws. If purchased from another source, set screws must conform to the following standards: ANSI B1.1, ANSI B18.3 and ASTM F912.





SERIES	ITEM NUMBER	THREAD	N
GATE MATE 4	SSS7878	$^{7}/_{8}$ -14 UNF-3A	.875
250	SSS3434	$^{3}/_{4}$ -16 UNF-3A	.750
375	SSS7878	$^{7}/_{8}$ -14 UNF-3A	.875
625	SSS11	1 -12 UNF-3A	1.000

For design and machining guidelines, see end of this Hot One Nozzles section.

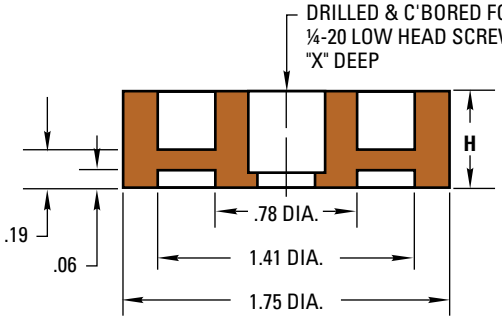
Components for Externally Heated Manifold Systems

Used primarily with tubular heated manifolds, these components are made from a non-magnetic material with low thermal conductivity. They provide the higher efficiency and performance required for tubular manifold applications.

Riser Pads

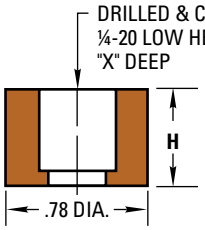
Supports manifold opposite nozzles and prevents heat loss.





ITEM NUMBER	H	X
ERP1001	.500	.405
ERP1002	.750	.655



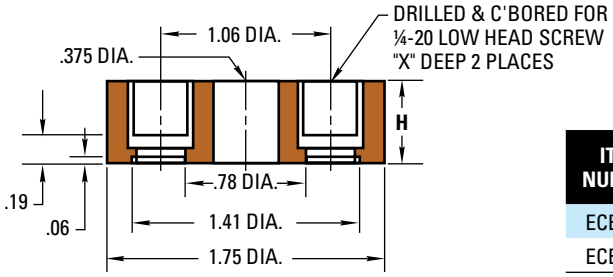


ITEM NUMBER	H	X
ERP1011	.500	.405
ERP1012	.750	.655

Center Support Pads and Tubular Dowels

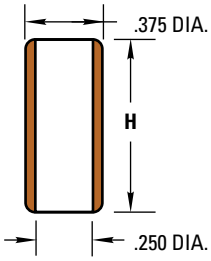
Supports manifold center spacing, while minimizing heat transfer from manifold.





ITEM NUMBER	H	X
ECB1001	.500	.405
ECB1002	.750	.655





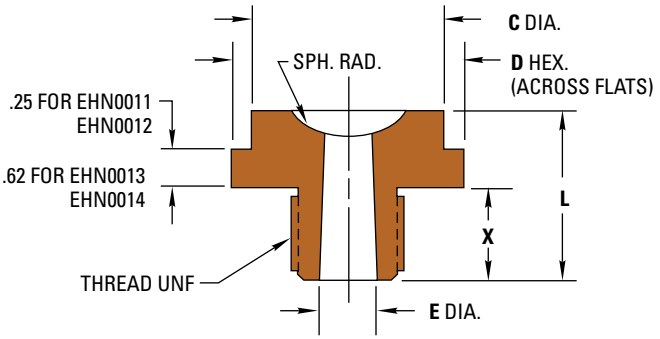
ITEM NUMBER	L LENGTH
3834TD	.750
38114TD	1.250

Components for Externally Heated Manifold Systems

These components are used with both cartridge heated and tubular heated manifolds. The nozzle seats shown are interchangeable with previously available nozzle seats.

Nozzle Seats

Provides a replaceable and interchangeable interface between manifold and machine nozzle.

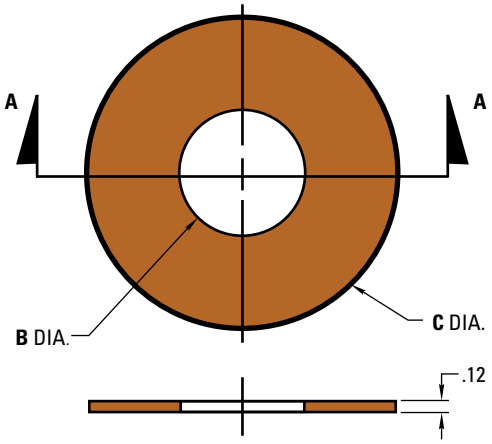




ITEM NUMBER	SPH. RAD.	X	L	C DIA.	D HEX.	E DIA.	THREAD
EHN0011	.500	.62	1.250	1.250	1.50	.363	$^{3}/_{4}$-16
EHN0012	.750						
EHN0013	.500	.75	1.750	1.500	1.88	.457	1 -12
EHN0014	.750						

Drool Rings

Used in conjunction with nozzle seat and locating ring to prevent nozzle purging and drooling from entering manifold area.







ITEM NUMBER	B DIA.	C DIA.
EHL1001	1.38	2.19
EHL1002	1.62	
EHL1003	1.38	3.44
EHL1004	1.62	

See application information at the end of this Hot One Nozzles section for appropriate use of nozzle seats, drool rings and locating rings.

Application Information

Use of Locating Ring and Nozzle Seat

The design shown in Figure 1 is used with cartridge heated manifolds only. The manifold is counterbored for the locating ring as shown.

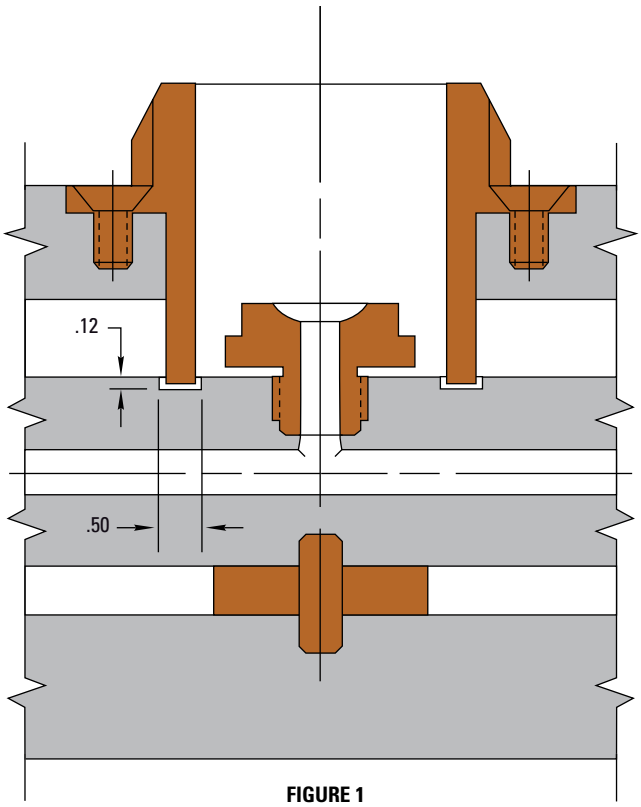


FIGURE 1

Use of Locating Ring, Drool Ring and Nozzle Seat

The design shown in Figure 2 can be used with cartridge heated manifolds if desired to eliminate the need to counterbore the manifold.

For tubular heated manifolds, the design shown in Figure 2 must be used. Counterbore the locating ring as shown for the drool ring.

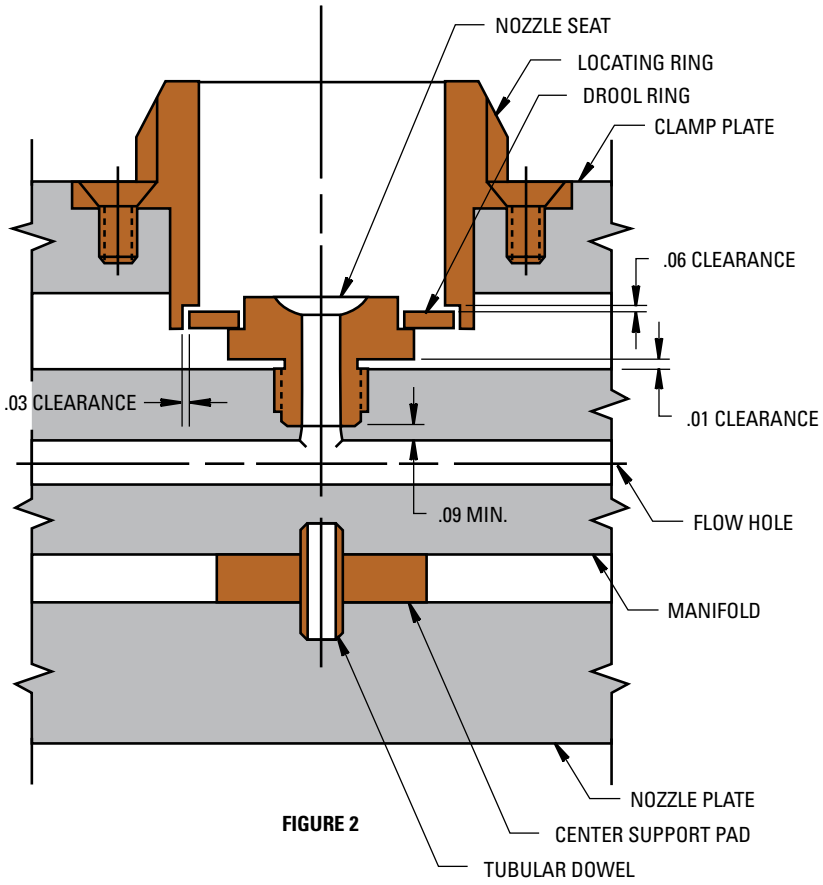


FIGURE 2

The Hot One® Manifold System Recommendations and Guidelines

NOZZLES

1. See details #2 thru 6 for help in nozzle selection
2. Nozzle choice is based on many factors including resin viscosity, shot size and fill time
3. Gate-Mate 4 nozzles are offered as sub-assemblies because there is a choice of tips. Please note that the tips must be ordered separately
4. All nozzles in the 250, 375 and 625 series plus the High Performance 250 and 375 series must be ordered as sub-assemblies. Tips must be ordered separately
5. High Performance 250 and 375 series nozzles are suitable for both filled and unfilled resins

TIPS

1. Contact D-M-E for recommended tip when application involves molding abrasive resins
2. The sprue gate tip has the lowest pressure drop due to the open flow channel design. A short sprue is left on the molded part
3. The ring gate tip is recommended to be used with unfilled commodity materials only
4. The standard point gate tip is also recommended to be used with unfilled materials only
5. Wear resistant point gate tips are recommended to be used with most filled materials

INSULATOR SHEET AND MANIFOLD HOUSING PLATE

1. Specify D-M-E 1/4" or 1/2" insulator sheet for manifold housing plate when designing hot manifold molds
2. Provide clearance holes for the manifold housing hold-down cap screws in the insulator sheet for ease of mold disassembly
3. Select D-M-E locating ring for use with insulator sheet, see detail #31
4. Alter locating ring flange length to mate with manifold
5. Manifold housing rails must equal the stackup dimensions of the riser pads, manifold and spacer rings with center support pad to within ±.0002

NOZZLE PLATE

1. A 1-7/8" nozzle plate is recommended (1-3/8" minimum). Water must circulate in the plate to control thermal expansion
2. Carefully follow the machining dimensions as illustrated in details #7 thru 12
3. Insure that all counterbores are in true position, perpendicular and concentric with the gate axis
4. Provide wire slots in nozzle plate, route leads away from manifold and nozzles

"A" PLATE AND GATE DIMENSIONS

1. Gate and nozzle must be concentric and machining details followed exactly
2. Gate-Mate 4 and point gate can be installed in the solid to avoid showing witness lines
3. Water must circulate in both cavity and "A" plate to remove heat radiated by nozzle heater

MANIFOLD

1. Select the appropriate height and width manifold for the nozzle series, see chart in details #13 thru 19
2. Calculate manifold volume in cubic inches (width × height × length) to determine watt density based on melt temperature, see chart in details #13 thru 19. Multiply watt density times cubic inches of manifold to determine the heater wattage for the manifold. Select heaters (see detail #32) to match the wattage calculated. Wattages have been calculated at 240 volts. If voltage supplied to the heaters is lower, then the wattages will be lower
3. Calculate thermal expansion factor for length between centerline of manifold to each vertical flow channel
4. Gun drill all horizontal flow channels
5. Insure that the minimum distance between last vertical flow channel and end of manifold is maintained
6. Machine end plug hole(s) and tap for set screws. See detail #24 for dimensions and tolerances
7. Install end plug(s) and hardened set screws, torque per chart. (see page 87)
8. Machine tapered dowel pin hole and install pin
9. Using a ball nose cutter, machine full radius on end plug(s) through the vertical flow channel hole(s)
10. Make sure there are no dead spots, tool marks, gaps or other areas where material can hang up in flow channels
11. Manifold thermocouple placement is critical, typically the thermocouple should be installed between centerline and first vertical flow channel or the hottest spot on the manifold
12. Manifold, assembled with spacers, center support pad and riser pads must be parallel within .0002 to properly fit in the manifold housing. For best results zero preload at room temperature is recommended

Designing and Machining Guidelines

THE HOT ONE® MANIFOLD SYSTEM DESIGNING AND MACHINING GUIDELINES FOR EXTERNALLY HEATED SYSTEMS

NOZZLE AND GATE SELECTION GUIDELINE

For selection of nozzle and gate diameter it is important to take into consideration the material's flow characteristics, shear rate of resin, molding conditions, fill time requirements, gate vestige, wall thickness and configuration of the part to be molded. Situations requiring high injection velocities must be considered when selecting small gate diameters. High injection rates may require larger gates due to shear heat build up (e.g. high weight or thin wall applications). See material manufacturer's literature for further information regarding material to be molded.

GATE-MATE™ 4 NOZZLE

Used where a small circular gate mark is permissible. Point Gate Tip controls plastics flow, provides uniform heat transfer and improves gate cosmetics.

MAXIMUM SHOT WEIGHT IN GRAMS		
ORIFICE SIZE DIA. / RESIN VISCOSITY	GATE-MATE 4	
	.060	.080
LOW VISCOSITY	170	225
MEDIUM VISCOSITY	90	125
HIGH VISCOSITY	60	95

SPRUE GATE NOZZLE

Used where a small sprue on the part or runner is not objectional. Its unrestricted channel is recommended for molding filled materials, or larger parts requiring maximum flow. Provides extra stock on front face for matching runner profiles and part contours.

MAXIMUM SHOT WEIGHT IN GRAMS						
ORIFICE SIZE DIA. / RESIN VISCOSITY	SERIES 250		SERIES 375		SERIES 625	
	.080	* .125	.125	* .187	.187	* .312
LOW VISCOSITY	500	625	1000	1250	1250	1900
MEDIUM VISCOSITY	375	475	750	1000	1000	1500
HIGH VISCOSITY	250	315	500	750	750	1000

***NOTE:** Standard tips of these diameters can be special ordered.

RING GATE NOZZLE

Used where a small circular gate mark is permissible. Tip controls plastics flow, provides uniform heat transfer and improves gate cosmetics.

MAXIMUM SHOT WEIGHT IN GRAMS						
ORIFICE SIZE DIA. / RESIN VISCOSITY	SERIES 250		SERIES 375		SERIES 625	
	.060	.080	.080	.100	.125	* .156
LOW VISCOSITY	150	200	250	310	600	800
MEDIUM VISCOSITY	100	150	150	200	400	550
HIGH VISCOSITY	50	100	100	150	300	400

***NOTE:** Standard tips of these diameters can be special ordered.

POINT GATE NOZZLE

Eliminates circular gate marks and provides optimum gate cosmetics.

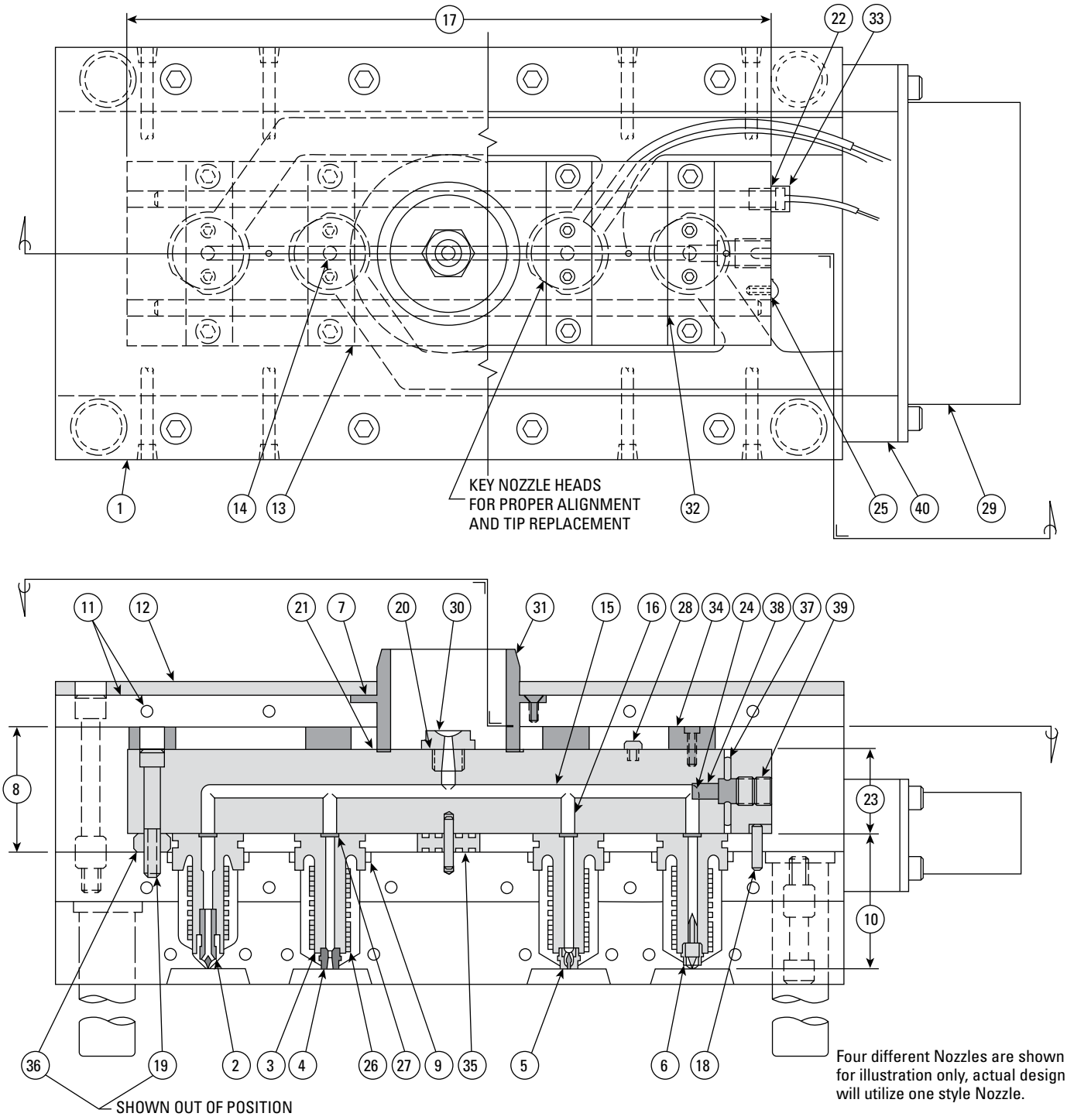
MAXIMUM SHOT WEIGHT IN GRAMS		
ORIFICE SIZE DIA. / RESIN VISCOSITY	SERIES 250	SERIES 375
	.060	.080
LOW VISCOSITY	150	250
MEDIUM VISCOSITY	100	150
HIGH VISCOSITY	50	100

DESIGNING AND MACHINING STEPS

(Numbers relate to details on next page)

1. MOLD LAYOUT
2. GATE-MATE 4™ NOZZLE
3. NOZZLE SUB-ASSEMBLIES
4. SPRUE GATE TIP
5. RING GATE TIP
6. POINT GATE TIP
7. LOCATING RING MACHINING IN MANIFOLD HOUSING
8. MANIFOLD HOUSING HEIGHT
9. NOZZLE MACHINING
10. NOZZLE LENGTH PLUS EXPANSION
11. MANIFOLD HOUSING REQUIREMENTS
12. INSULATOR SHEET REQUIREMENTS
13. MANIFOLD SIZE AND TYPE
14. NOZZLE LAYOUT
15. HORIZONTAL FLOW CHANNEL
16. VERTICAL FLOW CHANNEL
17. THERMAL EXPANSION OF MANIFOLD
18. DOWEL PIN FOR MANIFOLD ALIGNMENT
19. MANIFOLD HOLD DOWN CAP SCREW LOCATION
20. NOZZLE SEAT MACHINING
21. LOCATING RING MACHINING IN MANIFOLD
22. HEATER PULLER MACHINING
23. MANIFOLD HEIGHT
24. END PLUG, TAPERED DOWEL PIN AND SET SCREW MACHINING
25. HEATER STOP MACHINING
26. REPLACEMENT NOZZLE HEATERS
27. REPLACEMENT NOZZLE SEALS
28. MANIFOLD THERMOCOUPLES
29. TERMINAL MOUTING BOX
30. NOZZLE SEAT
31. LOCATING RING
32. MANIFOLD HEATER
33. HEATER PULLER
34. RISER PAD
35. CENTER SUPPORT PAD
36. SPACER RING
37. TAPERED DOWEL PIN
38. END PLUG
39. 2 END PLUG SET SCREWS PER END PLUG
40. TERMINAL MOUNTING BOX SPACER - MOLDMAKER TO SUIT

Designing and Machining Guidelines



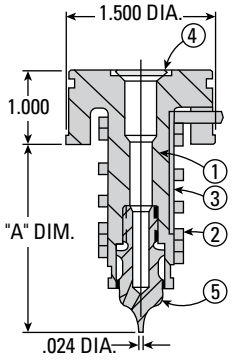
Four different Nozzles are shown for illustration only, actual design will utilize one style Nozzle.

The design guidelines in this document are based upon results obtained using D-M-E's production equipment and are provided as a design aid for use with D-M-E Hot Runner Systems. They are ONLY applicable to the current line of D-M-E components detailed in this document. Due to the wide variety of plastics materials and possible molding applications available, and since D-M-E has no control over the circumstances of any molding operation, D-M-E assumes no liability for any results obtained with this information.

D-M-E Hot Runner System Components are manufactured and sold under one or more of the following U.S. patents: 3,767,340; 3,010,155; 3,023,458; 3,231,938 AND 3,758,248; 4,787,836. FOREIGN PATENTS ISSUED AND PENDING.

Nozzle Assembly/Sub-Assembly Details

GATE-MATE™ 4 NOZZLE ASSEMBLY DETAIL #2



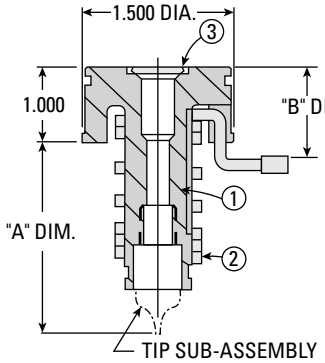
ASSEMBLY INCLUDE:

1-Nozzle Body, 1-sq. Coil Heater, 1-Thermocouple, 1-O-Ring and 1-Tip.

"A" DIM.	NOZZLE ASSEMBLY NUMBER	1	2	3	4	5
		NOZZLE BODY	SQ. COIL HEATER	T/C	O-RING	TIP
2.000	GMB0050	GMB0060	SCH0060	TCG0060	EHR7155	GMT-2*
2.500	GMB0051	GMB0061	SCH0061	TCG0061		
3.000	GMB0052	GMB0062	SCH0062	TCG0062		
3.500	GMB0053	GMB0063	SCH0063	TCG0063		
4.000	GMB0054	GMB0064	SCH0064	TCG0064		
5.000	GMB0055	GMB0065	SCH0065	TCG0065		
6.000	GMB0056	GMB0066	SCH0066	TCG0066		

*GMT-2 not recommended for abrasive materials. See the Gate-Mate Nozzles section for other component options.

GATE-MATE™ 4 NOZZLE SUB-ASSEMBLY WITH FRONT LOAD HEATER DETAIL #2



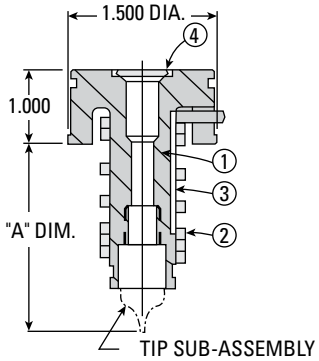
SEE THE GATE-MATE NOZZLES SECTION FOR OTHER COMPONENT OPTIONS.

SUB-ASSEMBLY INCLUDE:

1-Nozzle Body, 1-Front Load sq. Coil Heater with Thermocouple and 1-O-Ring.

"A" DIM.	"B" DIM.	NOZZLE SUB-ASSEMBLY NUMBER	1	2	3
			NOZZLE BODY	SQ. COIL HEATER	O-RING
2.000	1.250	GMB1050	GMB0060	SCH1060	EHR7155
2.500	1.250	GMB1051	GMB0061	SCH1061	
	1.750	GMB2051		SCH2061	
3.000	1.250	GMB1052	GMB0062	SCH1062	
	1.750	GMB2052		SCH2062	
3.500	1.250	GMB1053	GMB0063	SCH1063	
	1.750	GMB2053		SCH2063	
4.000	1.250	GMB1054	GMB0064	SCH1064	
	1.750	GMB2054		SCH2064	
5.000	1.250	GMB1055	GMB0065	SCH1065	
	1.750	GMB2055		SCH2065	
6.000	1.250	GMB1056	GMB0066	SCH1066	
	1.750	GMB2056		SCH2066	

GATE-MATE™ 4 NOZZLE SUB-ASSEMBLY DETAIL #2



SEE THE GATE-MATE NOZZLES SECTION FOR OTHER COMPONENT OPTIONS.

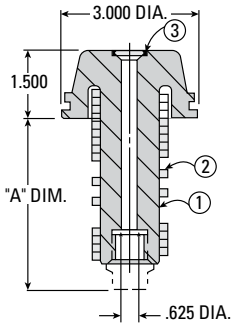
SUB-ASSEMBLY INCLUDE:

1-Nozzle Body, 1-sq. Coil Heater, 1-Thermocouple and 1-O-Ring.

"A" DIM.	NOZZLE SUB-ASSEMBLY NUMBER	1	2	3	4
		NOZZLE BODY	SQ. COIL HEATER	T/C	O-RING
2.000	GMB0150	GMB0060	SCH0060	TCG0060	EHR7155
2.500	GMB0151	GMB0061	SCH0061	TCG0061	
3.000	GMB0152	GMB0062	SCH0062	TCG0062	
3.500	GMB0153	GMB0063	SCH0063	TCG0063	
4.000	GMB0154	GMB0064	SCH0064	TCG0064	
5.000	GMB0155	GMB0065	SCH0065	TCG0065	
6.000	GMB0156	GMB0066	SCH0066	TCG0066	

625 SERIES NOZZLE SUB-ASSEMBLY DETAIL #3

(ADD .750 TO "A" DIM. FOR EXTENDED SPRUE GATE TIPS.)



SUB-ASSEMBLY INCLUDE:

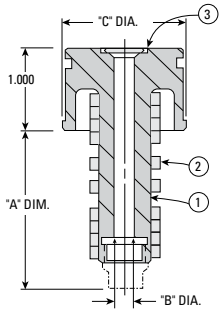
1-Nozzle Body, 1-sq. Coil Heater with Thermocouple and 1-O-Ring.

"A" DIM.	SUB-ASSEMBLY NUMBER	1	2	3
		NOZZLE BODY	SQ. COIL HEATER	O-RING
4.000	EHA0016	EHB0074	SCH0096	EHR7156
5.000	EHA0017	EHB0075	SCH0097	
6.000	EHA0018	EHB0076	SCH0098	
7.000	EHA0019	EHB0077	SCH0099	
8.000	EHA0020	EHB0078	SCH0100	
9.000	EHA0021	EHB0079	SCH0101	
10.000	EHA0022	EHB0080	SCH0102	

Nozzles and Gate Tip Detail

250 AND 375 SERIES NOZZLES DETAIL #3

(ADD .750 TO "A" DIM. FOR EXTENDED SPRUE GATE TIPS.)



	250 SERIES	375 SERIES
"B" DIA.	.250	.375
"C" DIA.	1.500	2.000

SUB-ASSEMBLY INCLUDES:

1-Nozzle Body, 1-sq. Coil Heater with Thermocouple and 1-O-Ring.

250 SERIES EXTERNALLY HEATED NOZZLES

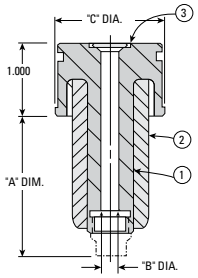
"A" DIM.	SUB-ASSEMBLY NUMBER	1 NOZZLE BODY	2 SQ. COIL HEATER	3 O-RING
2.000	EHA0001	CIB0059	SCH0081	EHR7154
2.500	EHA0002	CIB0060	SCH0082	
3.000	EHA0003	CIB0061	SCH0083	
3.500	EHA0004	CIB0062	SCH0084	
4.000	EHA0005	CIB0063	SCH0085	
5.000	EHA0006	CIB0064	SCH0086	
6.000	EHA0007	CIB0065	SCH0087	

375 SERIES EXTERNALLY HEATED NOZZLES

"A" DIM.	SUB-ASSEMBLY NUMBER	1 NOZZLE BODY	2 SQ. COIL HEATER	3 O-RING
2.000	EHA0008	CIB0066	SCH0088	EHR7155
2.500	EHA0009	CIB0067	SCH0089	
3.000	EHA0010	CIB0068	SCH0090	
3.500	EHA0011	CIB0069	SCH0091	
4.000	EHA0012	CIB0070	SCH0092	
5.000	EHA0013	CIB0071	SCH0093	
6.000	EHA0014	CIB0072	SCH0094	
7.000	EHA0015	CIB0073	SCH0095	

HIGH PERFORMANCE 250 AND 375 SERIES NOZZLES DETAIL #3

(ADD .750 TO "A" DIM. FOR EXTENDED SPRUE GATE TIPS.)



	250 SERIES	375 SERIES
"B" DIA.	.250	.375
"C" DIA.	1.500	2.000

SUB-ASSEMBLY INCLUDES:

1-Nozzle Body, 1-Cast-in Heater with Thermocouple and 1-O-Ring.

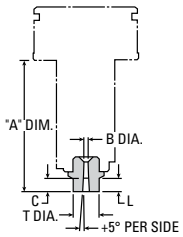
250 SERIES HIGH PERFORMANCE NOZZLES

"A" DIM.	SUB-ASSEMBLY NUMBER	1 NOZZLE BODY	2 CAST-IN HEATER	3 O-RING
2.000	CIA0001	CIB0059	CIH0081	EHR7154
2.500	CIA0002	CIB0060	CIH0082	
3.000	CIA0003	CIB0061	CIH0083	
3.500	CIA0004	CIB0062	CIH0084	
4.000	CIA0005	CIB0063	CIH0085	
5.000	CIA0006	CIB0064	CIH0086	
6.000	CIA0007	CIB0065	CIH0087	

375 SERIES HIGH PERFORMANCE NOZZLES

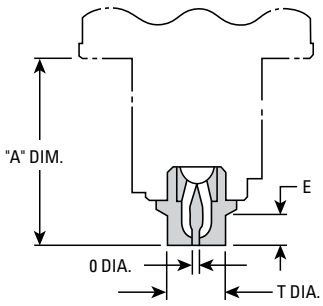
"A" DIM.	SUB-ASSEMBLY NUMBER	1 NOZZLE BODY	2 CAST-IN HEATER	3 O-RING
2.000	CIA0008	CIB0066	CIH0088	EHR7155
2.500	CIA0009	CIB0067	CIH0089	
3.000	CIA0010	CIB0068	CIH0090	
3.500	CIA0011	CIB0069	CIH0091	
4.000	CIA0012	CIB0070	CIH0092	
5.000	CIA0013	CIB0071	CIH0093	
6.000	CIA0014	CIB0072	CIH0094	
7.000	CIA0015	CIB0073	CIH0095	

SPRUE GATE TIP DETAIL #4



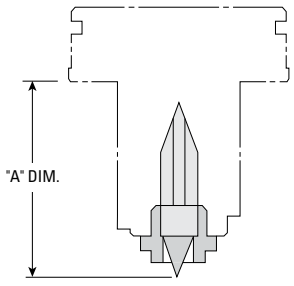
SERIES	GATE TIP	ITEM NO.	B DIA.	T DIA.	L DIM.	C DIM.
250	SPRUE	EHT0010	.080	.500	.250	.375
		EHT0011		.750		
		EHT0012		1.000	.100	
	EXTENDED SPRUE	EHT0013		.500	1.000	1.125
		EHT0014		.750		
		EHT0015		1.000	.850	
375	SPRUE	EHT0016	.125	.500	.250	.375
		EHT0017		.750		
		EHT0018		1.000		
	EXTENDED SPRUE	EHT0019		.500	1.000	1.125
		EHT0020		.750		
		EHT0021		1.000		
625	SPRUE	EHT0022	.187	1.000	.250	.500
	EXTENDED SPRUE	EHT0023			1.000	1.250

RING GATE TIP DETAIL #5



SERIES	ITEM NUMBER	T DIA.	O DIA.	E DIM.
250	EHT0001	.375	.060	.187
	EHT0002		.080	
	EHT0003	.500	.060	
	EHT0004		.080	
375	EHT0006	.500	.080	.230
	EHT0007		.100	
	EHT0008	.750	.080	
	EHT0009		.100	
	EHT0037	1.000	.080	
	EHT0038		.100	
625	EHT0040	1.000	.125	.250

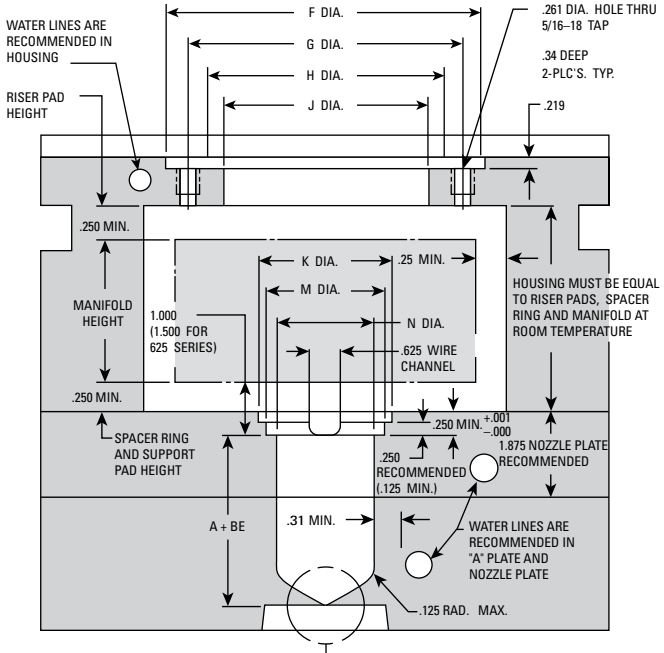
POINT GATE TIP DETAIL #6



SERIES	TYPE	ITEM NUMBER
250	STANDARD	EHT0005
		EHT1314
	WEAR RESISTANT	EHT1308
		EHT1313
375	STANDARD	EHT0039
		EHT1312
	WEAR RESISTANT	EHT1303
		EHT1309
625	STANDARD	EHT1306
		EHT1311
	WEAR RESISTANT	EHT1307
		EHT1310

Housing, Nozzle Plate and Gate Machining Dimensions Detail

MANIFOLD HOUSING, NOZZLE PLATE, "A" PLATE AND GATE MACHINING DIMENSIONS DETAIL #7 THRU #12



LOCATING RING

ITEM NUMBER	F DIA.	G DIA.	H DIA.	J DIA.
EHL0252	4.000	3.312	3.000	2.500
EHL0253	5.500	4.625	4.000	3.750
EHL0254	4.000	3.312	3.000	2.500
EHL0255	5.500	4.625	4.000	3.750

Manifold housing and insulator sheet are to be same width and length as mold base. Height of manifold housing to vary with stackup of manifold, riser pads and spacer rings.

NOZZLES

SERIES	K DIA.	+.001 –.000 M DIA.	N DIA. (MAX.) SQ. COIL OR CAST-IN	N DIA. (MIN.) SQ. COIL OR CAST-IN
GATE-MATE 4	1.56	1.501	1.250	1.125
250	1.56	1.501	1.250	1.187
375	2.06	2.001	1.625	1.437
625	3.06	3.001	2.125	1.875

The Cast-in heater is not available for the Gate-Mate 4 and 625 series nozzles. See the Gate-Mate Nozzles section for Gate-Mate 4 nozzles with front load heaters.

NOTE: The expansion factor must be taken into consideration prior to machining for, and installing nozzle. This expansion factor (BE) must then be added to the nominal "A" dimension.

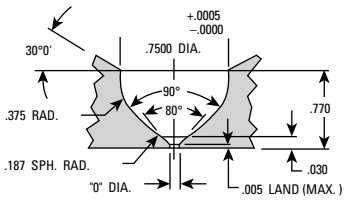
Formula for determining this expansion factor is as follows:

BE = "A" dimension x .0000063 x (nozzle setpoint temp –68°).

EXAMPLE: Given a 3 inch "A" dimension, with a Nozzle setpoint temp. of 500°.
BE = 3 x .0000063 x (500-68) = .008… thus A + BE = 3.008.

The above information is only given as an example. Variations may occur based on mold configurations and cooling factor. In some instances, it may be necessary to obtain an empirical factor.

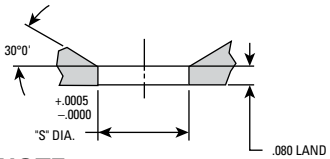
GATE-MATE 4 MACHINING DIMENSIONS



TIP STYLE	TIP ITEM NUMBER	"O" DIA.
STANDARD	GMT-2	.044 MIN.
WEAR RESISTANT	GMT0400	.055 MIN.
SUPER SHARP	GMT0301	.030 MIN.
SUPER SHARP WEAR RESISTANT	GMT0401	.055 MIN.
THRU HOLE	GMT0302*	.030 MIN.– .050 MAX.
THRU HOLE WEAR RESISTANT	GMT0402*	.055 MIN.
NO HOLE	GMT0303	.044 MIN.

Please note that the "O" diameter can be opened by the customer to suit the application. Also the land must be remachined to .055 max. after increasing the gate diameter.
*Contact D-M-E for details to modify thru hole tips for larger "O" diameters.

SPRUE AND RING GATE MACHINING DIMENSIONS

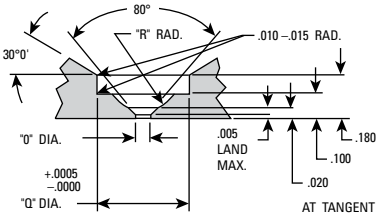


NOTE: Extended sprue length will add .750 to land.

SERIES	"T" DIA.	"S" DIA.
250 AND 375	*.375	*.3755
	.500	.5005
	.750	.7505
	1.000	1.0005
625	1.000	1.0005

*250 Ring gate only.

POINT GATE MACHINING DIMENSIONS



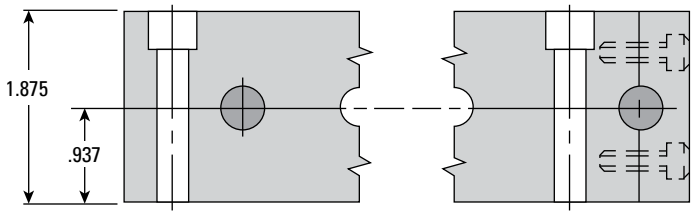
SERIES NOZZLE	"O" DIA. UNFILLED RESIN	"O" DIA. FILLED RESIN	"Q" DIA.	"R" DIA.
250	.028 MIN.	.060 MIN.	.3750	.125
375	.028 MIN.	.060 MIN.	.5000	.187

Please note that the "O" diameter, can be opened by the customer to suit the application. Also the land must be remachined to .005 max. after increasing the gate diameter. Contact D-M-E for 625 Series Point Gate machining dimensions.

Manifold Height Recommendations Detail

MANIFOLD HEIGHT RECOMMENDATIONS DETAIL #23

GATE-MATE 4, 250 SERIES AND 375 SERIES

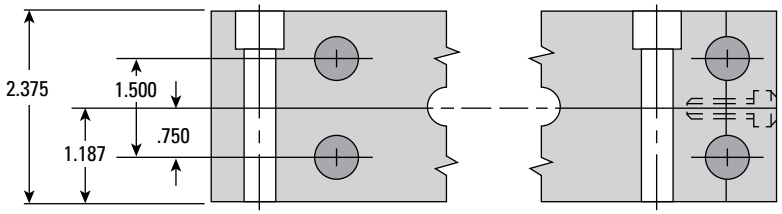


SOLID MANIFOLD WITH SINGLE LEVEL HEATER

MANIFOLD WITH HEATER RETAINER PLATES AND SINGLE LEVEL HEATER

GATE-MATE 4, 250 SERIES, 375 SERIES AND 625 SERIES

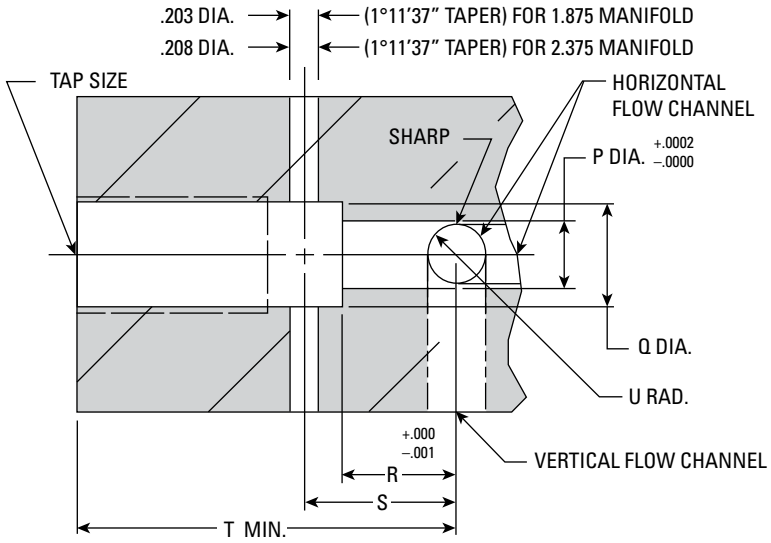
When more watt density is required



SOLID MANIFOLD WITH DUAL LEVEL HEATERS

MANIFOLD WITH HEATER RETAINER PLATES AND DUAL LEVEL HEATERS

END PLUG MACHINING DETAILS #24

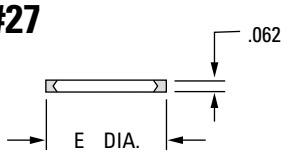


DIMENSION	GATE-MATE 4	250 SERIES	375 SERIES	625 SERIES
P DIA.	.5615	.4365	.5615	.6875
Q DIA.	.812	.687	.812	.922
R	.750	.750	.750	1.125
S	1.000	1.000	1.000	1.375
T	3.250	3.000	3.250	3.875
U RAD.	.250	.187	.250	.312
TAP SIZE	7/8-14 UNF-3B	3/4-16 UNF-3B	7/8-14 UNF-3B	1-12 UNF-3B
TAP DEPTH	1.875	1.625	1.875	2.125

Replacement Parts Detail

REPLACEMENT SEAL RING DETAIL #27

Used between manifold and nozzle to prevent leakage. New seal rings must be installed each time manifold is assembled.



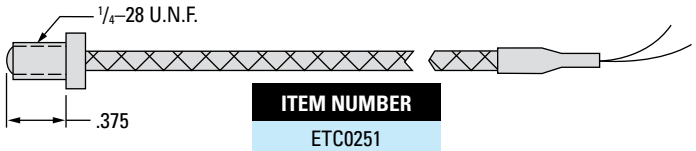
SERIES	ITEM NUMBER	E DIA.
GATE-MATE 4	EHR0155	.686
250	EHR0154	.561
375	EHR0155	.686
625	EHR0156	1.063

MANIFOLD THERMOCOUPLE DETAIL #28

TYPE "J", 36" LEADS

THREAD TYPE

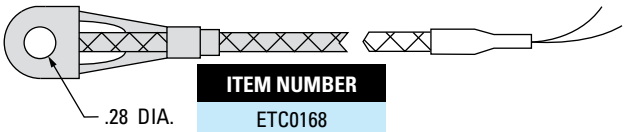
Installed between heat source and flow channel for precise control.



ITEM NUMBER
ETC0251

FLAT WASHER TYPE

Utilized in limited space applications.



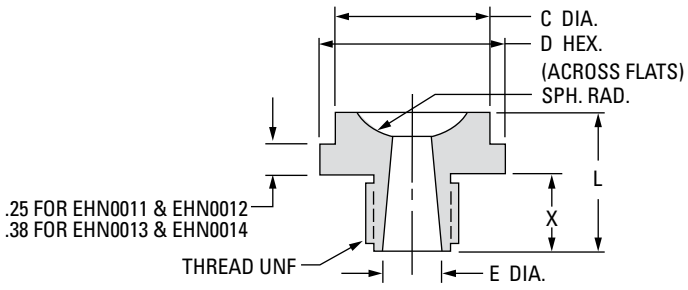
ITEM NUMBER
ETC0168

TERMINAL MOUNTING BOX DETAIL #29

For information on terminal mounting boxes, mold power and thermocouple connectors, see the D-M-E Control Systems Catalog.

NOZZLE SEAT DETAIL #30

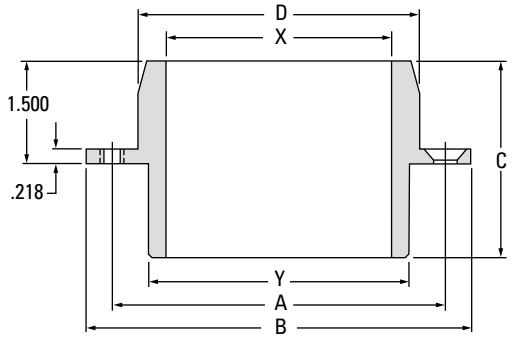
Replaceable interface between manifold and machine nozzle.



ITEM NUMBER	SPH. RAD.	X	L	C DIM.	D HEX.	E DIA.	THREAD
EHN0011	.500	.62	1.250	1.250	1.50	.363	¾–16
EHN0012	.750						
EHN0013	.500	.75	1.750	1.500	1.88	.457	1–12
EHN0014	.750						

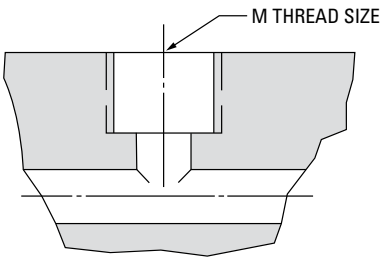
LOCATING RING DETAIL #31

INCLUDES (2) 5/16 – 18 × ½" LG. FLAT HEAD CAP SCREW



ITEM NUMBER	D DIA.	X DIA.	Y DIA.	A DIM.	B DIA.	C DIM.
EHL0252	2.990	2.000	2.500	3.312	3.990	2.875
EHL0253	3.990	3.250	3.750	4.625	5.495	2.875
EHL0254	2.990	2.000	2.500	3.312	3.990	4.500
EHL0255	3.990	3.250	3.750	4.625	5.495	4.500

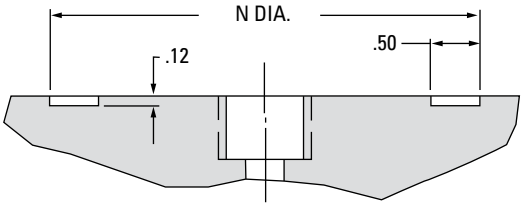
NOZZLE SEAT MACHINING DETAIL #20



ITEM NUMBER	M THREAD SIZE
EHN0011	.687 DIA. HOLE × .56 DEEP
EHN0012	¾–16 UNF TAP × .50 DEEP
EHN0013	.922 DIA. HOLE × .69 DEEP
EHN0014	1–12 UNF TAP × .62 DEEP

LOCATING RING MACHINING DETAIL #21

Relief in top of manifold for locating ring.



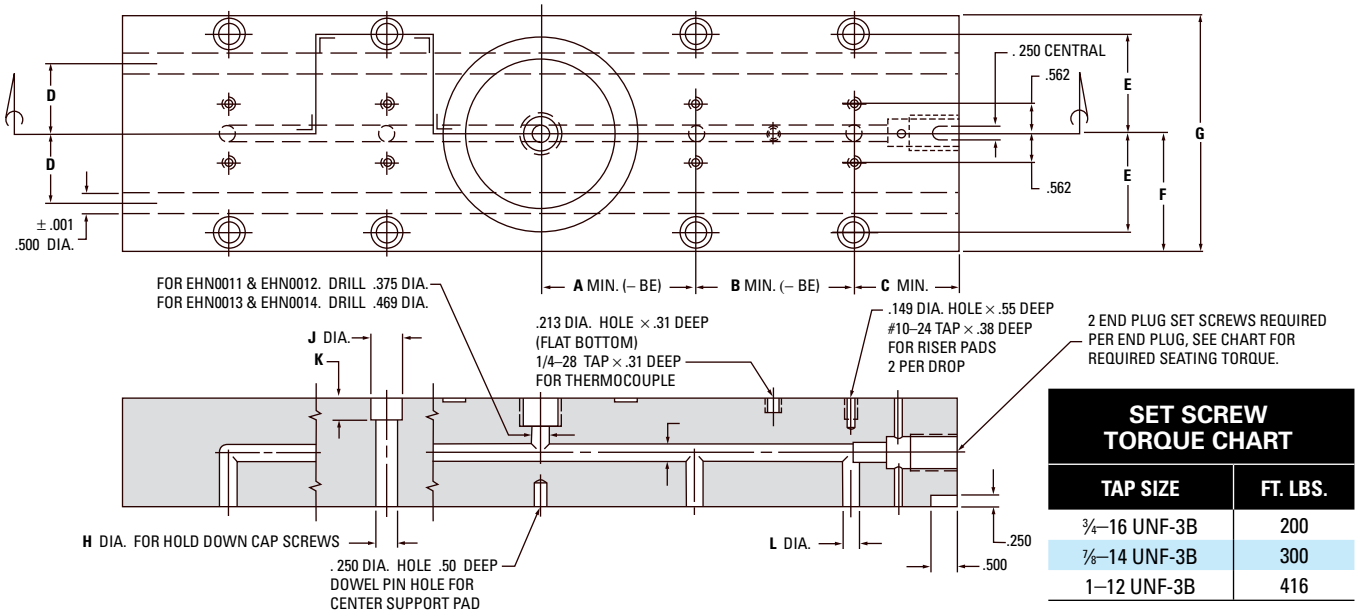
ITEM NUMBER	N DIA. +.005 –.000
EHL0252	2.505
EHL0253	3.755
EHL0254	2.505
EHL0255	3.755

Manifold Design and Machining Dimensions Details

MANIFOLD DESIGN AND MACHINING DIMENSIONS DETAILS #13 THRU #19

MATERIAL: D-M-E #3 STEEL

IN LINE PATTERN



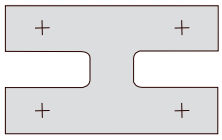
SET SCREW TORQUE CHART	
TAP SIZE	**FT. LBS.**
¾–16 UNF-3B	200
⅞–14 UNF-3B	300
1–12 UNF-3B	416

MANIFOLD CONFIGURATION IS DETERMINED BY PLACEMENT OF NOZZLES IN MOLD

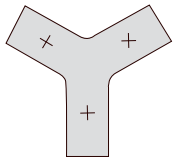
IN LINE PATTERN



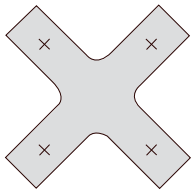
H PATTERN



Y PATTERN



X PATTERN



DIMENSIONS	GATE-MATE 4	250 SERIES	375 SERIES	625 SERIES
A*	2.000	2.000	2.250	2.750
B*	1.500	1.500	2.000	3.000
C	3.250	3.000	3.250	3.875
D	1.000	1.000	1.000	1.125
E	1.625	1.625	1.625	2.000
F	2.000	2.000	2.000	2.500
G	4.000	4.000	4.000	5.000
H DIA. **	.406	.406	.406	.531
J C'BORE	.594	.594	.594	.781
K	.380	.380	.380	.500
L DIA.	.500	.375	.500	.625

*Allowance must be made for the thermocouple placement between the nozzle seat and the first riser pad or between two riser pads.
**All hold down cap screws to be hardened and evenly torqued to 45–55 ft. lbs. Diameters shown are for .015 maximum expansion. For expansion greater than .15, modify to suit.

MANIFOLD WATT DENSITY	
APPROXIMATE MELT TEMPERATURE OF MATERIAL TO BE MOLDED	**WATT DENSITY PER CUBIC INCH OF MANIFOLD**
350° – 400° F	32
400° – 450° F	34
450° – 500° F	36
500° – 550° F	38
550° – 600° F	40
600° – 650° F	42
650° – 700° F	44
700° – 750° F	46

NOTE: The expansion factor must be taken into consideration prior to machining for, and installing manifold. This expansion factor (BE) must then be subtracted from the nominal "A" and "B" dimension, if "B" is required.

Formula for determining this expansion factor is as follows:
BE = "A" or "B" dimension × .0000063 × (manifold setpoint temp. – 68°F).

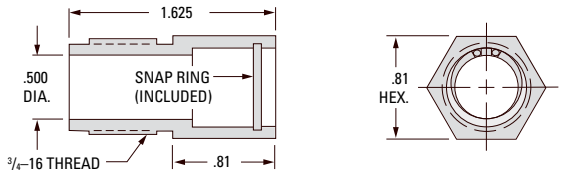
EXAMPLE: Given a 4 inch "A" dimension, with a manifold setpoint temp. of 500°F.
BE = [4 × .0000063 × (500–68)] = .011 thus A – BE = 3.989

The above information is only given as an example. Variations may occur based on mold configurations and cooling factor. In some instances, it may be necessary to obtain an empirical factor.

Parts Detail

HEATER PULLER DETAIL #33

Assists in the removal of shoulder style cartridge heater.



PULLER WITH RING

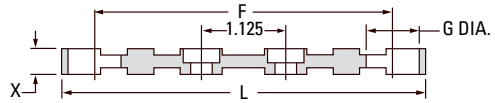
ITEM NUMBER
EHP0250

REPLACEMENT SNAP RING

ITEM NUMBER
EHP0001

RISER PAD DETAIL #34

Supports manifold opposite nozzles. Prevents heat loss and maintains spacing between manifold and clamping plate.

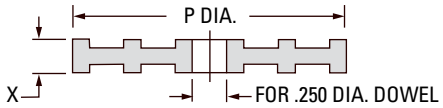


INCLUDES (2) #10–24 LOW HEAD CAP SCREWS

ITEM NUMBER	X DIM. +.010 ⊠.000	L DIM.	F DIM.	G DIA.	USED WITH
ERP0163	.250	4.000	3.250	.625	GATE–MATE 4, 250 SERIES AND 375 SERIES
ERP0167	.375				
ERP0164	.750				
ERP0165	.250	5.000	4.000	.781	625 SERIES
ERP0168	.375				
ERP0166	.750				

CENTER SUPPORT PAD DETAIL #35

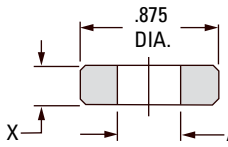
Aligns and supports manifold center while minimizing heat transfer from manifold.



ITEM NUMBER	X DIM. +.010 ⊠.000	P DIA.
ECB0161	.250	2.500
ECB0162	.750	2.500
ECB0163	.250	1.500
ECB0164	.750	1.500

SPACER RING DETAIL #36

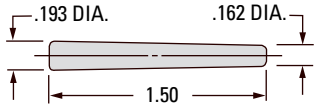
Maintains spacing between manifold and nozzle plate.



ITEM NUMBER	X DIM. +.010 ⊠.000	A DIA.	USED WITH
ESR0157	.250	.406	GATE–MATE 4, 250 SERIES AND 375 SERIES
ESR0158	.750		
ESR0159	.250	.531	625 SERIES
ESR0160	.750		

TAPERED DOWEL PIN DETAIL #37

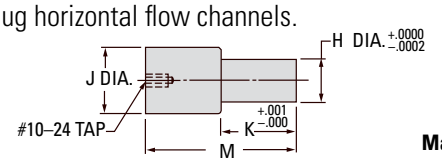
Aligns and prevents end plug from rotating.
Tapered dowel pin must conform to ANSI B18.8.2-1978 standard.



ITEM NUMBER
EDP0001

END PLUG DETAIL #38

Used to plug horizontal flow channels.

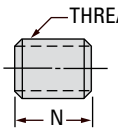


Material : P–20

SERIES	ITEM NUMBER	H DIA.	J DIA.	K DIM.	M DIM.
GATE–MATE 4	EEP0002	.5615	.800	.750	1.500
250	EEP0001	.4365	.675	.750	1.500
375	EEP0002	.5615	.800	.750	1.500
625	EEP0003	.6875	.894	1.125	1.875

END PLUG SET SCREW DETAIL #39

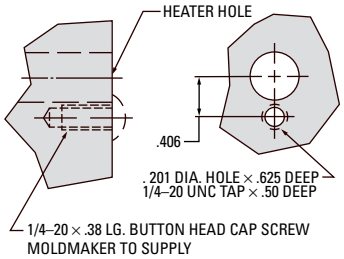
Used to secure end plug into manifold (2 required).
End plug set screw must conform to the following standards.
ANSI B1.1. ANSI B18.3 and ASTM F912.



SERIES	ITEM NUMBER	THREAD	N DIM.
GATE–MATE 4	SSS7878	7/8–14 UNF-3A	.875
250	SSS3434	3/4–16 UNF-3A	.750
375	SSS7878	7/8–14 UNF-3A	.875
625	SSS11	1–12 UNF-3A	1.000

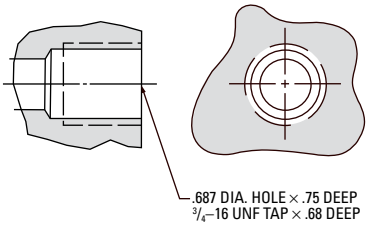
HEATER STOP MACHINING DETAIL #25

Used for ECH-Series cartridge heaters.



HEATER PULLER MACHINING DETAIL #22

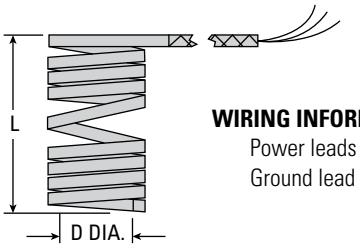
Used for CHS-Series cartridge heaters recommended for heaters installed in blind holes.



Replacement Square Coil Nozzle Heater Detail

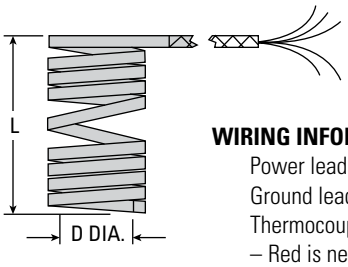
REPLACEMENT SQUARE COIL NOZZLE HEATER DETAIL #26

GATE-MATE 4™ NOZZLE HEATER
240 VAC, 36" LEADS



WIRING INFORMATION:
Power leads are black
Ground lead is green

250, 375 AND 625 NOZZLE HEATER
240 VAC, T/C TYPE "J", 36" LONG



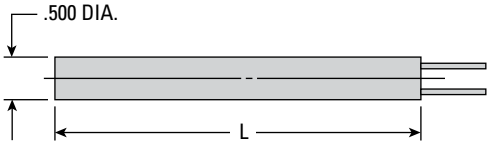
WIRING INFORMATION:
Power leads are black
Ground lead is green
Thermocouple leads are red and white
– Red is negative (–) and constantan (non-magnetic)
– White is positive (+) and iron (magnetic)

SERIES	ITEM NUMBER	D DIA. NOMINAL NOZZLE	L DIM.	WATTS	USED WITH NOZZLE SUB-ASSEMBLY
GATE-MATE 4	SCH0060	.750	1.437	250	GMB0050
					GMB0150
	SCH0061		1.937	300	GMB0051
					GMB0151
	SCH0062		2.437	350	GMB0052
					GMB0152
	SCH0063		2.937	400	GMB0053
					GMB0153
	SCH0064		3.437	425	GMB0054
					GMB0154
	SCH0065		4.437	500	GMB0055
					GMB0155
	SCH0066		5.437	500	GMB0056
					GMB0156
250	SCH0081	.625	2.000	300	EHA0001
	SCH0082		2.500	350	EHA0002
	SCH0083		3.000	400	EHA0003
	SCH0084		3.500	425	EHA0004
	SCH0085		4.000	500	EHA0005
	SCH0086		5.000	500	EHA0006
	SCH0087		6.000	550	EHA0007
375	SCH0088	.875	2.125	400	EHA0008
	SCH0089		2.625	450	EHA0009
	SCH0090		3.125	550	EHA0010
	SCH0091		3.625	700	EHA0011
	SCH0092		4.125	800	EHA0012
	SCH0093		5.125	900	EHA0013
	SCH0094		6.125	1000	EHA0014
	SCH0095		7.125	1100	EHA0015
625	SCH0096	1.500	4.000	1000	EHA0016
	SCH0097		5.000	1030	EHA0017
	SCH0098		6.000	1100	EHA0018
	SCH0099		7.000	1000	EHA0019
	SCH0100		8.000	1200	EHA0020
	SCH0101		9.000	1200	EHA0021
	SCH0102		10.000	1200	EHA0022

MANIFOLD HEATER DETAIL #32

240 VAC, 36" LEADS

CARTRIDGE HEATER



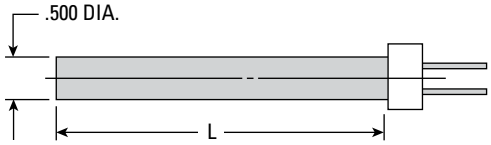
Used in through hole or retainer plate construction.

WIRING INFORMATION:
Power leads are multicolored

ITEM NUMBER	'L' LENGTH	WATTS
ECH0103	4.00	500
ECH0119	4.00	750
ECH0104	4.50	575
ECH0105	5.00	650
ECH0120	5.00	1000
ECH0106	5.50	725
ECH0107	6.00	800
ECH0121	6.00	1000
ECH0108	6.50	875
ECH0109	7.00	950
ECH0122	7.00	1000
ECH0110	7.50	1025
ECH0111	8.00	1100
ECH0123	8.00	1500

ITEM NUMBER	'L' LENGTH	WATTS
ECH0124	8.00	2000
ECH0112	8.50	1175
ECH0113	9.00	1200
ECH0114	10.00	1350
ECH0125	10.00	1500
ECH0126	11.00	1000
ECH0115	11.00	1500
ECH0128	12.00	1000
ECH0127	12.00	1500
ECH0116	12.00	1650
ECH0129	15.00	1500
ECH0117	15.00	2050
ECH0130	18.00	1700
ECH0118	18.00	2500

SHOULDER STYLE CARTRIDGE HEATER



These heaters are used in conjunction with heater pullers for ease of removal in blind or through hole installations.

ITEM NUMBER	'L' LENGTH	WATTS
CHS0119	4.00	500
CHS0120	4.50	575
CHS0121	5.00	650
CHS0122	5.50	725
CHS0123	6.00	800
CHS0124	6.50	875
CHS0125	7.00	950
CHS0126	7.50	1025
CHS0127	8.00	1100
CHS0128	8.50	1175
CHS0129	9.00	1200
CHS0130	10.00	1350
CHS0131	11.00	1500
CHS0132	12.00	1650
CHS0133	15.00	2050
CHS0134	18.00	2500

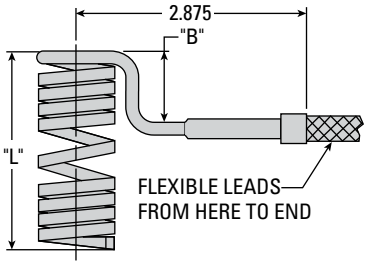
Gate-Mate™ 4 Options Detail

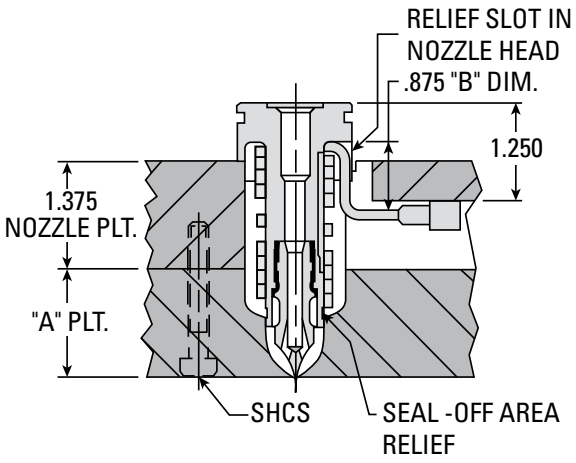
GATE-MATE™ 4 OPTIONS DETAIL #2

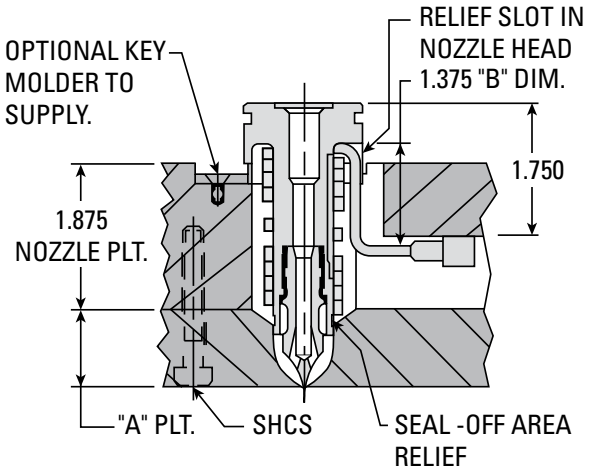
FRONT LOAD SQUARE COIL HEATER 240 VAC, T/C TYPE "J", 36" LONG

WIRING INFORMATION:

Power leads are black
Ground lead is green
Thermocouple leads are red and white
– Red is negative (–) and constantan (non-magnetic)
– White is positive (+) and iron (magnetic)







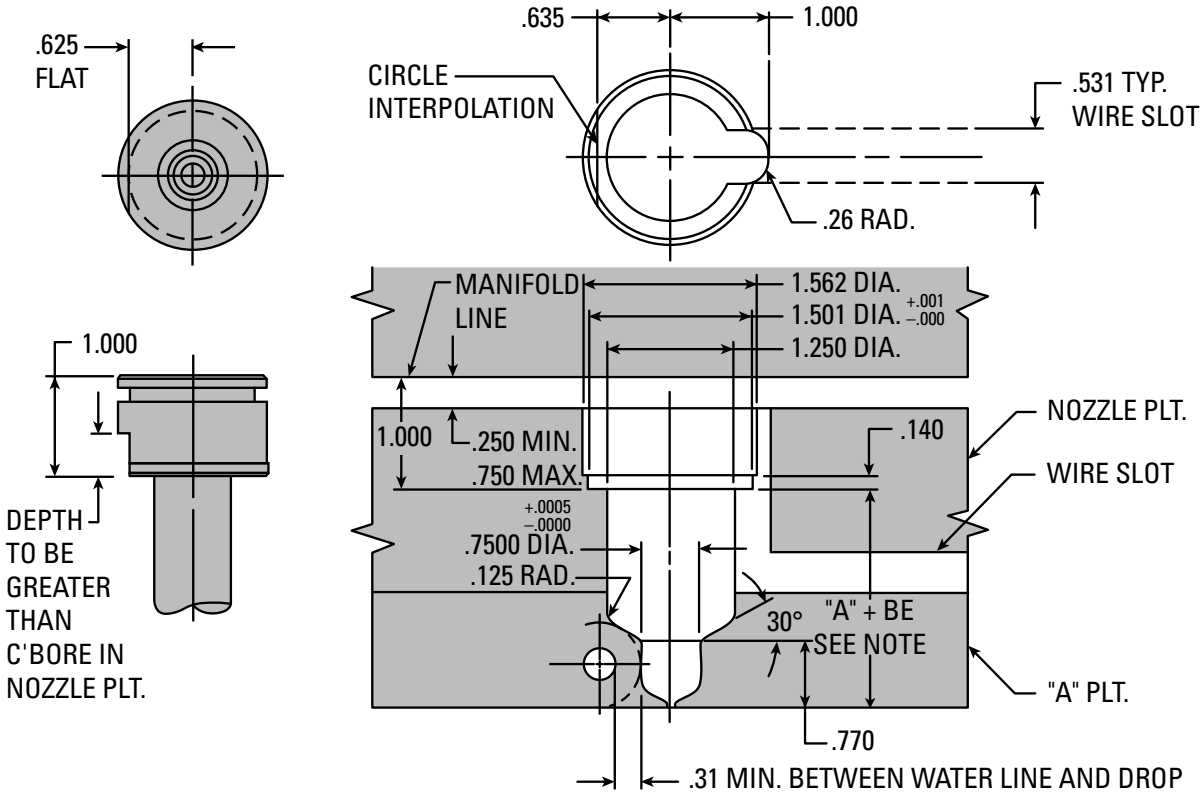
ITEM NUMBER	USED WITH NOZZLE SUB-ASSY.	'B' DIM.	'L' DIM.	WATTS
SCH1060	GMB1050	.875	1.594	250
SCH1061	GMB1051	.875	2.094	300
SCH2061	GMB2051	1.375		
SCH1062	GMB1052	.875	2.594	350
SCH2062	GMB2052	1.375		
SCH1063	GMB1053	.875	3.094	400
SCH2063	GMB2053	1.375		
SCH1064	GMB1054	.875	3.594	425
SCH2064	GMB2054	1.375		
SCH1065	GMB1055	.875	4.594	500
SCH2065	GMB2055	1.375		
SCH1066	GMB1056	.875	5.594	500
SCH2066	GMB2056	1.375		

NOTE: The expansion factor must be taken into consideration prior to machining for and installing nozzles. This factor (BE) must then be added to the nominal "A" dimension.
Formula for determining this expansion factor is as follows:
BE = "A" dimension x .00000633 x (nozzle setpoint temp –68°).

EXAMPLE: Given a 2.500 inch 'A' dimension with a Nozzle setpoint temp. of 500°.
BE = 2.500 × .00000633 × (500–68) = .0068… thus 'A' + BE will be 2.5068.

Please note that the above information is given as an example. Variations may occur based on mold configurations and cooling factor. In some instances, it may be necessary to obtain an empirical factor.

Gate-Mate™ 4 Options Detail

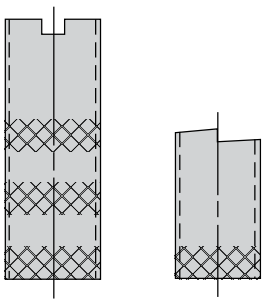


RECOMMENDATIONS AND GUIDELINES

1. Front Load Square Coil Heaters are designed to be used with Gate-Mate 4 Nozzles only
2. The nozzle head must be held in such a manner to keep it from rotating upon installation of the Front Load Square Coil Heater. This may be done by making a key for the head to match the flat on the nozzle's head or by circle interpolation
3. Nozzle plate must be designed so that the heads of the socket head cap screws are exposed when the mold is split on the parting line
4. After the nozzle has been located and positioned in the nozzle plate with manifold secured in place and 'A' plate removed, the heater can be installed on the nozzle body as follows:
   a. Place heater within Tube 'A' so that the bending exit lead lies within the slot of the tube
   b. Insert Tube 'B' with angle out within Tube 'A' so that the angle of the tube mates with the last coil of the heater
   c. Rotate Tube 'A' counterclockwise while at the same time rotating Tube 'B' clockwise. This action will spring open the coils enough to slide the heater onto the shaft of the nozzle body
   d. Slide the heater onto the nozzle body shaft aligning the heater exit lead within the relief slot in the nozzle's head
   e. Position heater so that the end of the last coil is above the relief of the seal-off area (see figure above)
5. Place wire straps over wire channel to secure heater and thermocouple wires before assembling 'A' plate to the nozzle plate

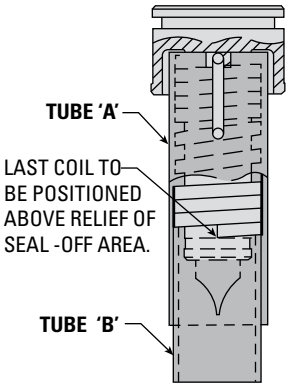
Coil Heater Wrench Detail | Gate Shell Insulator Detail | Gate-Mate Tips Detail

FRONT LOAD SQUARE COIL HEATER WRENCH DETAIL #2



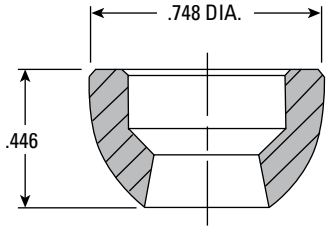
FRONT LOAD SQUARE COIL HEATER WRENCH ASSEMBLY	
ITEM NO.	WRE0007

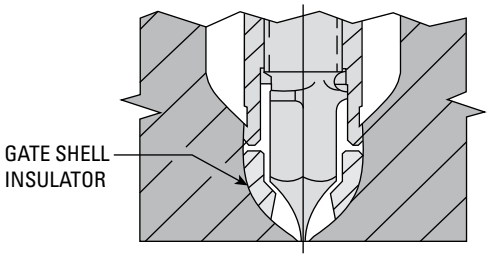
Front Load Square Coil Heater Wrench assembly must be ordered separately from heater.



GATE SHELL INSULATOR DETAIL #2

For use with Gate-Mate 4 Nozzles only

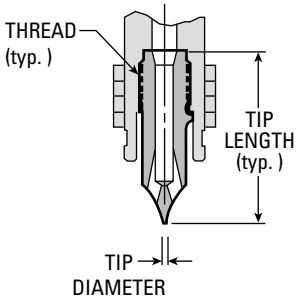




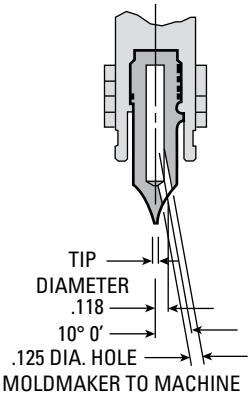
GATE SHELL INSULATOR	
ITEM NO.	GSI0001

GATE-MATE TIPS DETAIL #2

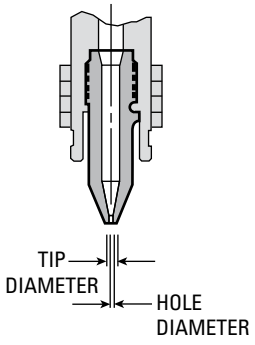
STANDARD WEAR RESISTANT SUPER SHARP



NO HOLE



THRU HOLE



TIP STYLE	ITEM NUMBER	"O" DIAMETER	TIP LENGTH	TIP DIAMETER	HOLE DIAMETER	THREAD	BODY STYLE
STANDARD	GMT-2	.044 MIN.	1.730	.024	N/A	1/2–20	MEDIUM GATE-MATE & GATE-MATE 4
WEAR RESISTANT	GMT0400	.055 MIN.					
SUPER SHARP	GMT0301	.030 MIN.		.010			
SUPER SHARP WEAR RESISTANT	GMT0401	.055 MIN.					
THRU HOLE	GMT0302*	.030 MIN. – .050 MAX.	1.690	.090	.050		
THRU HOLE WEAR RESISTANT	GMT0402*	.055 MIN.					
NO HOLE	GMT0303	.044 MIN.	1.730	.024	N/A		

Wear resistant tips are recommended for abrasive materials.
*Contact D-M-E for details to modify thru hole tips for larger "O" diameters.

U.S. 800-626-6653 ▪ Canada 800-387-6600 ▪ www.dme.net
ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

D-M-E Meteor™ Hot Runner Systems

CUSTOM-CONFIGURED,
ECONOMICAL SOLUTIONS
FOR QUICK DELIVERY

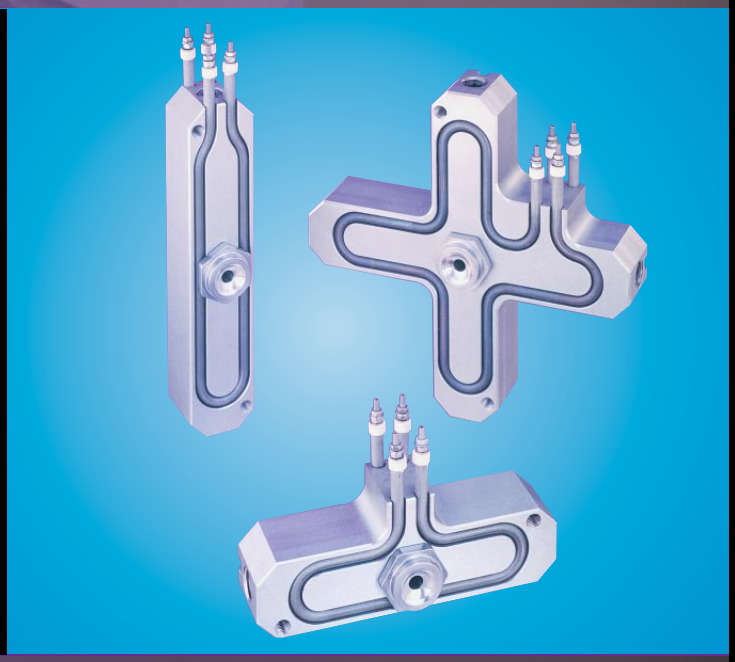


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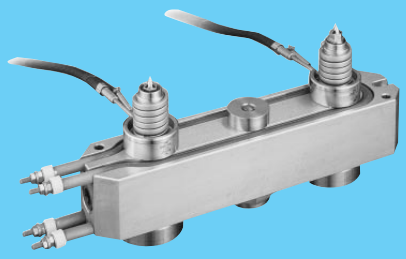
ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

More Solutions. More Choices. Always Quick Delivery.

Meteor™
Hot Runner Systems



Meteor 1 hot runner systems available for same-day shipment.



Meteor 2 manifold and components systems ship in one week or less.



Meteor 3 complete hot half assemblies ship in only three weeks. D-M-E mold base and temperature controller are optional.

The Meteor™ Manifold System provides a versatile yet economical solution for many hot runner mold designs. Two-drop (in-line) and four-drop (X-style) manifolds are available in sizes to suit a variety of applications. Pre-engineered with accurately machined flow channels, nozzle ports can be freely located anywhere within each manifold's flow channel limits. Stocked for quick delivery, Meteor manifolds are supplied with replaceable, press-fit tubular heaters. A full complement of ancillary components are also available to complete the system design and construction. Nozzle selection can be made from a broad array of D-M-E nozzles, including the 250 and 375 Series, the popular Mini Gate-Mate™ and the Gate-Mate 4™ Series.

Advantages

- Three levels of quick-delivery hot runner systems
- In-line and X-style manifolds for 2- and 4-drop applications
- Suitable for engineered and commodity resins
- Cost-effective
- Satisfaction 100% guaranteed

Choose the Meteor™ System that's right for you

D-M-E offers three quick-delivery hot runner systems with varying levels of customization – you pick the one that fits your needs.

Meteor 1

- Standard, off-the-shelf manifolds with machined horizontal flow channel
- Customer machines vertical flow channel locations and end plugs for maximum configuration flexibility
- Customer can easily order a Meteor 1 manifold kit and select nozzles, supports, nozzle seat, locating ring, thermocouples and other necessary items – for same-day shipment

Meteor 2

- Manifold and components system, integrated with a Meteor 1 manifold kit
- Customer specifies nozzles, supports, nozzle seat, locating ring, thermocouples, etc.
- D-M-E performs vertical flow channel and end plug machining
- Shipment in just one week (or less)

Meteor 3

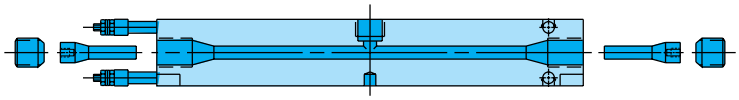
- Complete hot-half assembly, ready to bolt onto the mold
- Turnkey solution with optional D-M-E mold base and 5-zone or 8-zone temperature controller
- Hot half fully assembled, wired and tested
- Industry-leading three-week delivery time

More Solutions. More Choices. Always Quick Delivery.

The Meteor Package

Each Meteor manifold kit includes the following standard items:

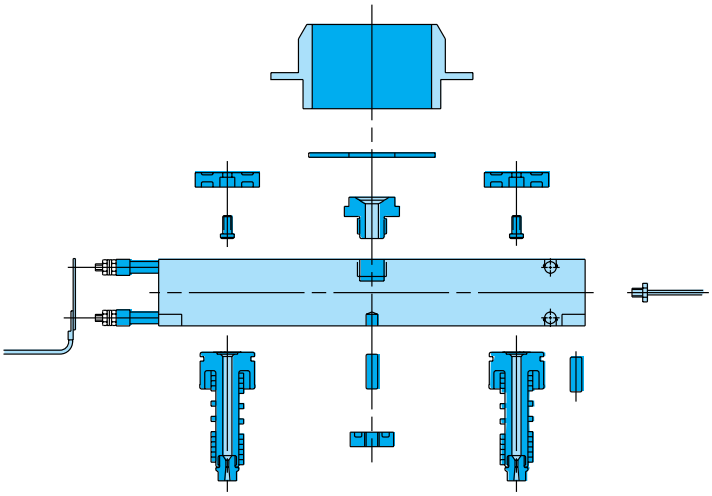
- Manifold with pre-machined horizontal flow channel
- Pre-installed, replaceable tubular heaters
- End plugs
- End plug set screws



Ancillary Components

A variety of ancillary components available include:

- Locating rings
- Drool rings
- Nozzle seats
- Riser pads and cap screws
- Center support pads and dowel pins
- Thermocouples



Nozzle Options

All nozzles have a selection of tip styles to suit material flow and gate cosmetic requirements.

METEOR SYSTEM	EHA AND CIA		MINI GATE-MATE	GATE-MATE 4 SERIES
	250 SERIES	375 SERIES		
METEOR 1	✓	✓	✓	✓
METEOR 2	✓	✓	✓	✓
METEOR 3	✓	✓	—	✓

Application Notes

- Mini Gate-Mate, Gate-Mate 4 and 250 Series nozzles to be used with manifold kits MEM0100K thru MEM0200K, MCM0100K thru MCM0200K and MXM0100K thru MXM0200K. Gate-Mate 4 and 375 Series nozzles to be used with all other manifold kits.
- All manifolds with suffix of 100K, 150K and 200K have a 9mm diameter flow channel; all other manifolds have a 12mm diameter flow channel.
- CIA High Performance nozzles are recommended for materials that process above 260°C/500°F.
- For filled or abrasive materials, wear-resistant tips are recommended.
- Meteor manifolds are not recommended for use with PVC material.

Contact D-M-E for assistance.

CUSTOMER DESIGN CRITERIA FORMS

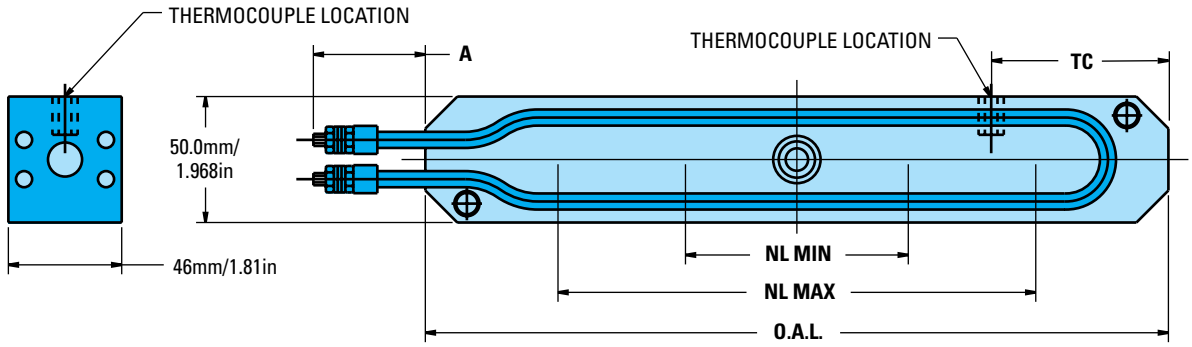
CDC

To provide your Meteor™ application specifications, visit www.dme.net/cdc

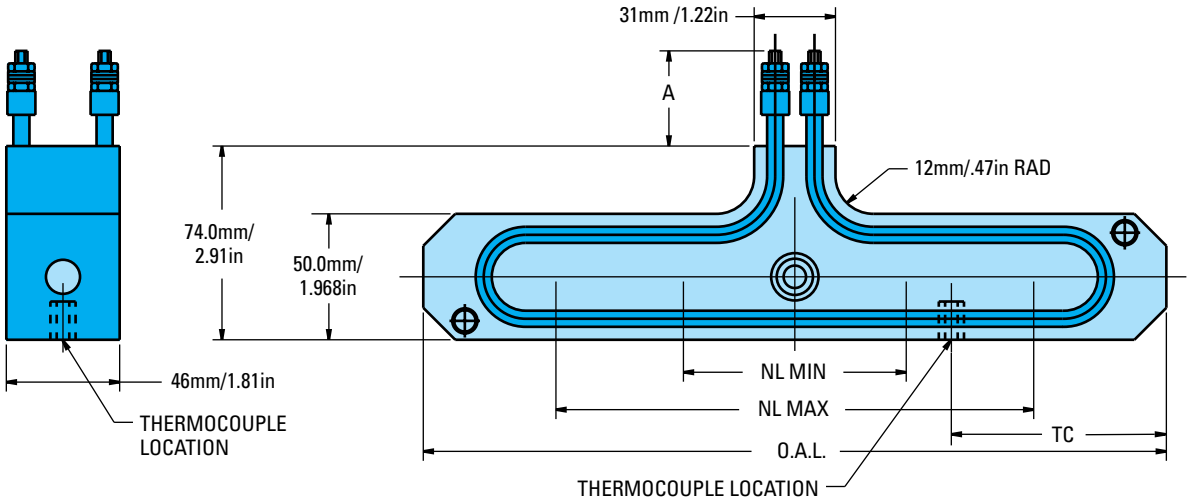
Meteor 1
In-Line and X-Style Manifolds

Meteor 1: Same-day shipment!

Meteor 1 In-Line End Exit



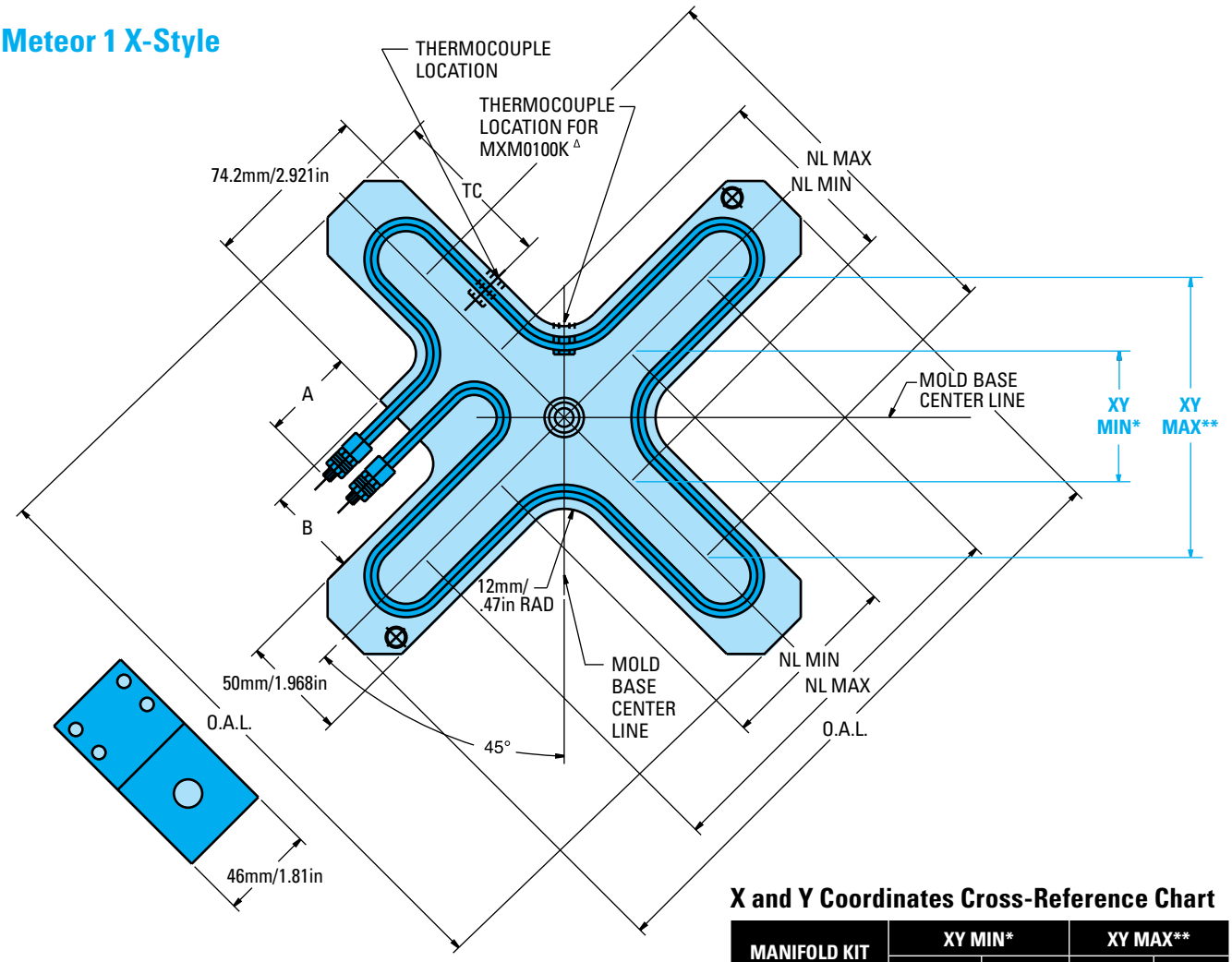
Meteor 1 In-Line Center Exit



MANIFOLD TYPE	MANIFOLD KIT ITEM NO.	NL MIN.		NL MAX.		O.A.L.		A		B		TC	
		MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH
IN-LINE END EXIT	MEM0100K	55	2.165	100	3.937	195	7.677	44.5	1.75	—	—	60	2.362
	MEM0150K	100	3.937	150	5.906	245	9.646	44.5	1.75	—	—		
	MEM0200K	150	5.906	200	7.874	295	11.614	44.5	1.75	—	—		
	MEM0300K	200	7.874	300	11.811	395	15.551	44.5	1.75	—	—	72.5	2.362
	MEM0400K	300	11.811	400	15.748	495	19.488	50.8	2.00	—	—		
	MEM0500K	400	15.748	500	19.685	595	23.425	50.8	2.00	—	—		
IN-LINE CENTER EXIT	MCM0100K	55	2.165	100	3.937	195	7.677	44.5	1.75	—	—	60	2.362
	MCM0150K	100	3.937	150	5.906	245	9.646	44.5	1.75	—	—		
	MCM0200K	150	5.906	200	7.874	295	11.614	44.5	1.75	—	—		
	MCM0300K	200	7.874	300	11.811	395	15.551	44.5	1.75	—	—	72.5	2.854
	MCM0400K	300	11.811	400	15.748	495	19.488	50.8	2.00	—	—		
	MCM0500K	400	15.748	500	19.685	595	23.425	50.8	2.00	—	—		
X-STYLE	MXM0100K	55	2.165	100	3.937	195	7.677	44.5	1.75	56.8	2.236	SEE X-STYLE[Δ]	
	MXM0150K	100	3.937	150	5.906	245	9.646	44.5	1.75	51.3	2.020	60	2.362
	MXM0200K	150	5.906	200	7.874	295	11.614	50.8	2.00	51.3	2.020		
	MXCM0300K	200	7.874	300	11.811	395	15.551	50.8	2.00	51.3	2.020	72.5	2.854

Meteor 1
In-Line and X-Style Manifolds

Meteor 1 X-Style



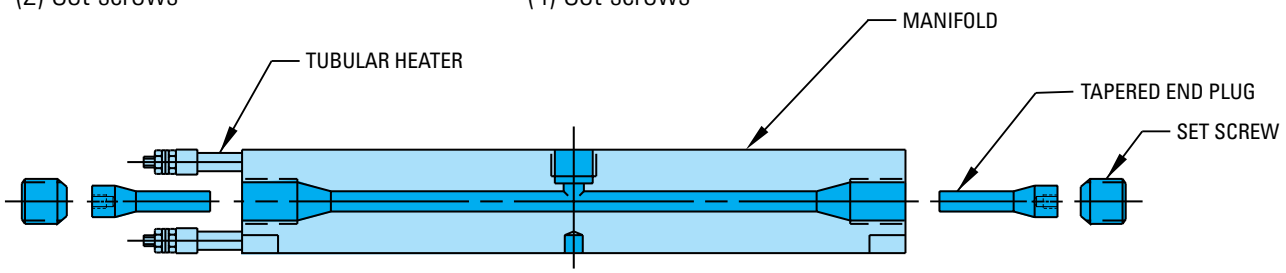
X and Y Coordinates Cross-Reference Chart

MANIFOLD KIT ITEM NO.	XY MIN*		XY MAX**	
	MM	INCH	MM	INCH
MXM0100K	38.90	1.531	70.71	2.783
MXM0150K	70.71	2.783	106.07	4.176
MXM0200K	106.07	4.176	141.42	5.568
MXM0300K	141.42	5.568	212.13	8.352

Meteor 1 Manifold Kit Includes:

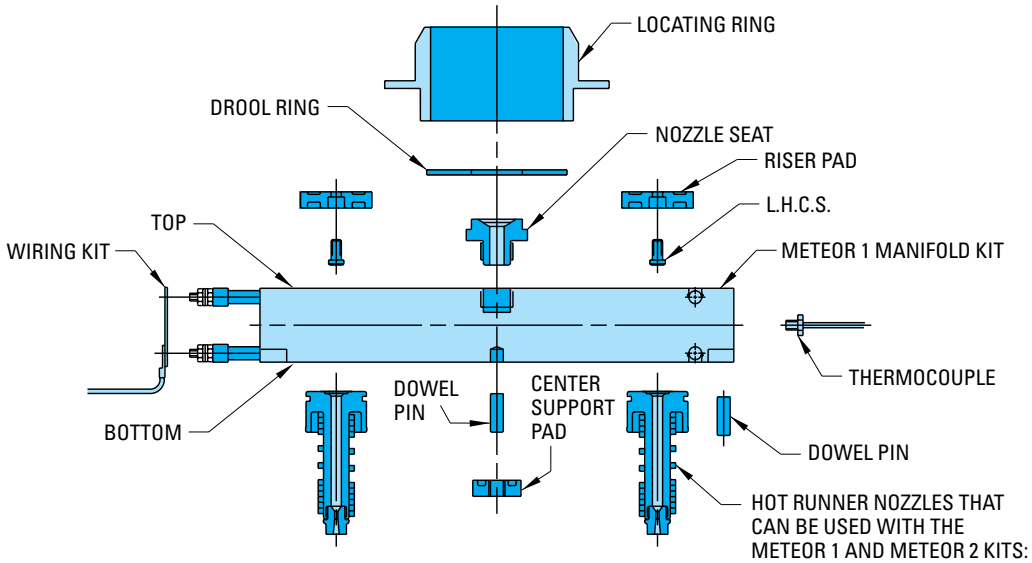
In-Line System:
- (1) Manifold (center or end heater exit)
- (2) Tubular heaters (installed)
- (2) Tapered end plugs
- (2) Set screws

X-Style System:
- (1) Manifold
- (2) Tubular heaters (installed)
- (4) Tapered end plugs
- (4) Set screws



Meteor 1 & 2
Ancillary Component Options

Meteor 2: One-week delivery!



MANIFOLD TYPE	METEOR 1 MANIFOLD KIT ITEM NO.	METEOR 2 MANIFOLD KIT PLUS ITEM NO.	DESIGN CRITERIA		
			NOZZLE OPTIONS	V VERTICAL FLOW CHANNEL DIA. MM	INCH
IN-LINE END EXIT	MEM0100K	MEM0100KP	250 SERIES EHA & CIA MINI GATE-MATE GATE-MATE 4 SERIES	9	.354
	MEM0150K	MEM0150KP			
	MEM0200K	MEM0200KP			
	MEM0300K	MEM0300KP	375 SERIES EHA & CIA GATE-MATE 4 SERIES	12	.472
	MEM0400K	MEM0400KP			
	MEM0500K	MEM0500KP			
IN-LINE CENTER EXIT	MCM0100K	MCM0100KP	250 SERIES EHA & CIA MINI GATE-MATE GATE-MATE 4 SERIES	9	.354
	MCM0150K	MCM0150KP			
	MCM0200K	MCM0200KP			
	MCM0300K	MCM0300KP	375 SERIES EHA & CIA GATE-MATE 4 SERIES	12	.472
	MCM0400K	MCM0400KP			
	MCM0500K	MCM0500KP			
X-STYLE	MXM0100K	MXM0100KP	250 SERIES EHA & CIA MINI GATE-MATE GATE-MATE 4 SERIES	9	.354
	MXM0150K	MXM0150KP			
	MXM0200K	MXM0200KP			
	MXM0300K	MXM0300KP	375 SERIES EHA & CIA GATE-MATE 4 SERIES	12	.472

Meteor 1 Manifold Kit includes manifold, tubular heaters installed, two end plugs, and two set screws. The customer machines the vertical flow channel locations and end plugs for maximum configuration flexibility.

Meteor 2 Manifold Kit Plus includes the machining of the vertical flow channels and the installation of the end plugs and set screws by D-M-E. The customer provides D-M-E with the gate locations on a Meteor 2 Criteria Form.

CUSTOMER DESIGN CRITERIA FORMS

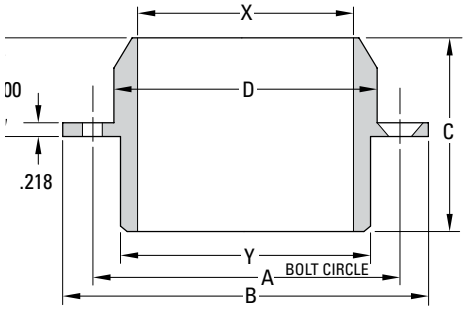
CDC

To provide your Meteor™ application specifications, visit www.dme.net/cdc

MANIFOLD TYPE	METEOR 1 MANIFOLD KIT ITEM NO.	METEOR 2 MANIFOLD KIT PLUS ITEM NO.	ANCILLARY COMPONENT OPTIONS								
			THERMO-COUPLE ITEM NO.	LOCATING RING ITEM NO.	DROOL RING ITEM NO.	NOZZLE SEAT ITEM NO.	RISER PADS ITEM NO.	CTR. SUPPORT PADS ITEM NO.	DOWEL PINS ITEM NO.	1/4-20 X .50 LG. L.H.C.S. ITEM NO.	WIRING KIT ITEM NO.
IN-LINE END EXIT	MEM0100K	MEM0100KP	ETC0252	EHL0253 EHL0255 (1 REQ'D.)	EHL1003	MNS0009	ERP1001 ERP1002 ERP1011 ERP1012 (2 OF SAME REQ'D.)	ECB0468 ECB0469 ECB0503 (1 REQ'D.)	DP820 DP828 DP832 (2 OF SAME REQ'D.)	1412LH (2 REQ'D.)	MWK1001
	MEM0150K	MEM0150KP									
	MEM0200K	MEM0200KP									
	MEM0300K	MEM0300KP									
	MEM0400K	MEM0400KP				MNS0012					
	MEM0500K	MEM0500KP	ETC0252 (2 REQ'D.)								MWK1002
IN-LINE CENTER EXIT	MCM0100K	MCM0100KP	ETC0252	EHL0253 EHL0255 (1 REQ'D.)	EHL1003	MNS0009	ERP1001 ERP1002 ERP1011 ERP1012 (2 OF SAME REQ'D.)	ECB0468 ECB0469 ECB0503 (1 REQ'D.)	DP820 DP828 DP832 (2 OF SAME REQ'D.)	1412LH (2 REQ'D.)	MWK1001
	MCM0150K	MCM0150KP									
	MCM0200K	MCM0200KP									
	MCM0300K	MCM0300KP									
	MCM0400K	MCM0400KP				MNS0012					
	MCM0500K	MCM0500KP	ETC0252 (2 REQ'D.)								MWK1002
X-STYLE	MXM0100K	MXM0100KP	ETC0252	EHL0253 EHL0255 (1 REQ'D.)	EHL1003	MNS0009	ERP1001 ERP1002 ERP1011 ERP1012 (4 OF SAME REQ'D.)	ECB0468 ECB0469 ECB0503 (1 REQ'D.)	DP820 DP828 DP832 (2 OF SAME REQ'D.)	1412LH (2 REQ'D.)	MWK1001
	MXM0150K	MXM0150KP									
	MXM0200K	MXM0200KP									
	MXM0300K	MXM0300KP	ETC0252 (2 REQ'D.)			MNS0012					MWK1002

Meteor 1 & 2
Ancillary Component Options

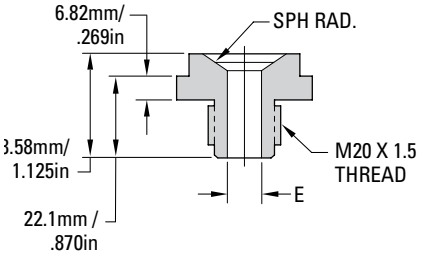
Locating Rings



ITEM NO.	Ø D	Ø X	Ø Y	A	Ø B	C
EHL0253	101 MM 3.990 IN	82.5 MM 3.250 IN	95 MM 3.750 IN	117 MM 4.625 IN	139.5 MM 5.495 IN	73 MM 2.875 IN
EHL0255	101 MM 3.990 IN	82.5 MM 3.250 IN	95 MM 3.750 IN	117 MM 4.625 IN	139.5 MM 5.495 IN	114 MM 24.500 IN

Includes (2) 1/2 inch long, 5/16 Flat Head Cap Screws.

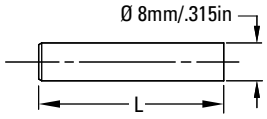
Machine Nozzle Seats



ITEM NO.	E FLOW CHANNEL MM	E FLOW CHANNEL IN	SPHERICAL RADIUS
MNS0009	9 MM	.354 IN	1/2 + 3/4 IN
MNS1009	9 MM	.354 IN	15.5 MM
MNS0012	12 MM	.472 IN	1/2 + 3/4 IN
MNS1012	12 MM	.472 IN	15.5 MM

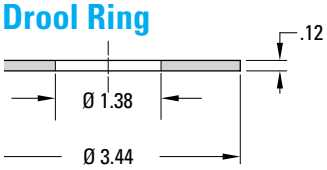
NOTE: Machine nozzle tip orifice to be matched properly with nozzle seat flow channel.

Dowel Pins



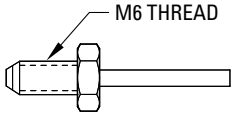
ITEM NO.	L MM	L IN
DP8-20	20	.787
DP8-28	28	1.102
DP8-32	32	1.260

Drool Ring



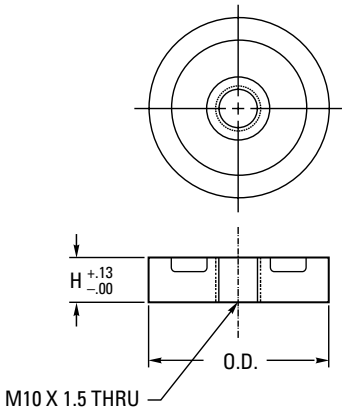
ITEM NO.
EHL1003

Manifold Thermocouple



ITEM NO.
ETC0252

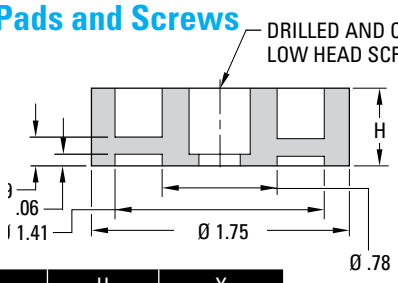
Center Support Pads



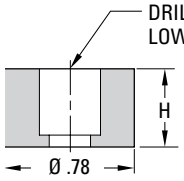
ITEM NO.	O.D. MM	O.D. IN	H MM	H IN
ECB0468	30	1.181	20	.787
ECB0469	30	1.181	10	.394
ECB0503	40	1.575	10	.394

NOTES:
1. The M10 X 1.5 tapped hole is used to screw the center support pad to a plate for machining the pad to the correct height.
2. An 8mm dia. dowel pin is required for assembly.

Riser Pads and Screws



ITEM NO.	H MM	H IN	X MM	X IN
ERP1001	12.7	.500	10	.405
ERP1002	19	.750	16.6	.655



ITEM NO.	H MM	H IN	X MM	X IN
ERP1011	12.7	.500	10	.405
ERP1012	19	.750	16.6	.655

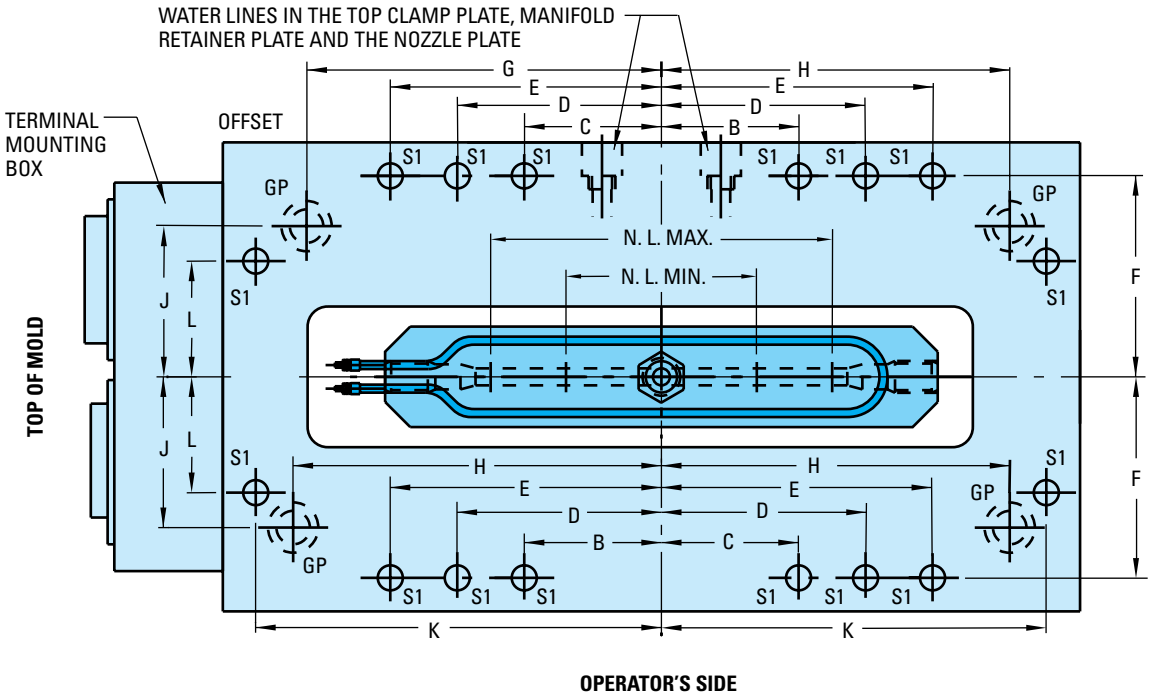
ITEM NO.
1412LH

1/4-20 x 1/2 lg. LOW HEAD CAP SCREW (L.H.C.S.)

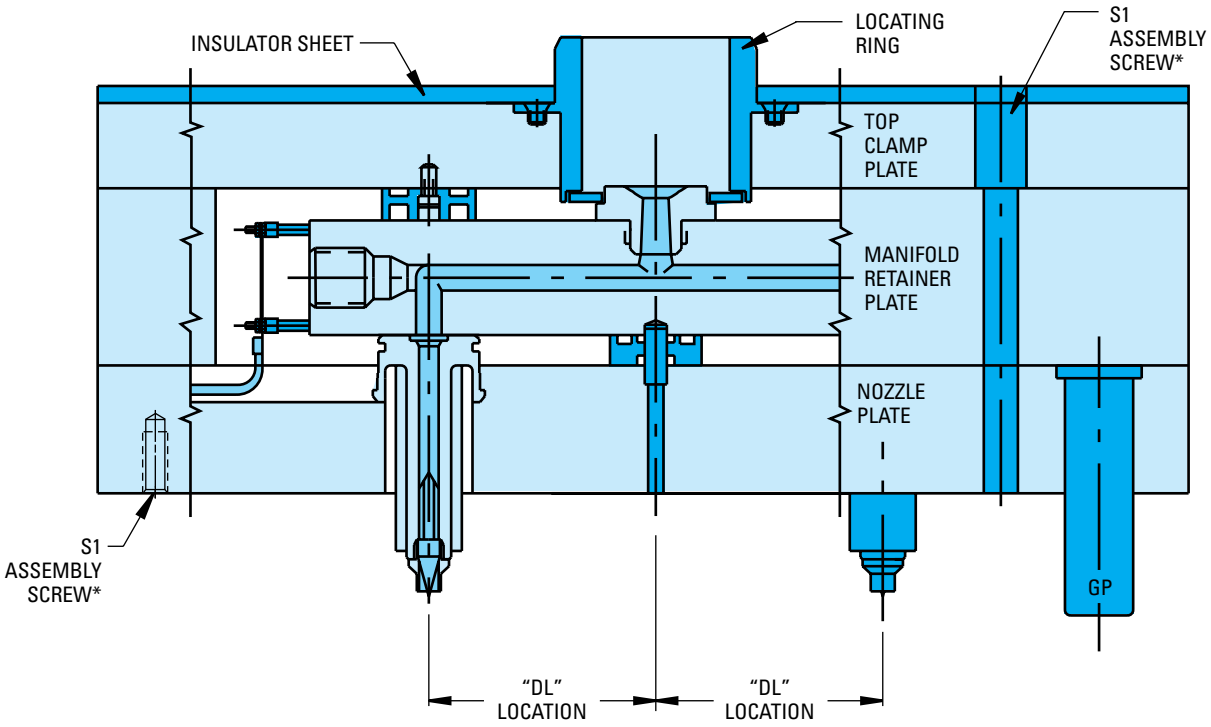
NOTE: For maximum support, use riser pads ERP1001 or ERP1002 whenever possible. Only use riser pads ERP1011 or ERP1012 when there are space constraints.

Meteor 3
In-Line End Exit

Meteor 3: Three-week delivery!



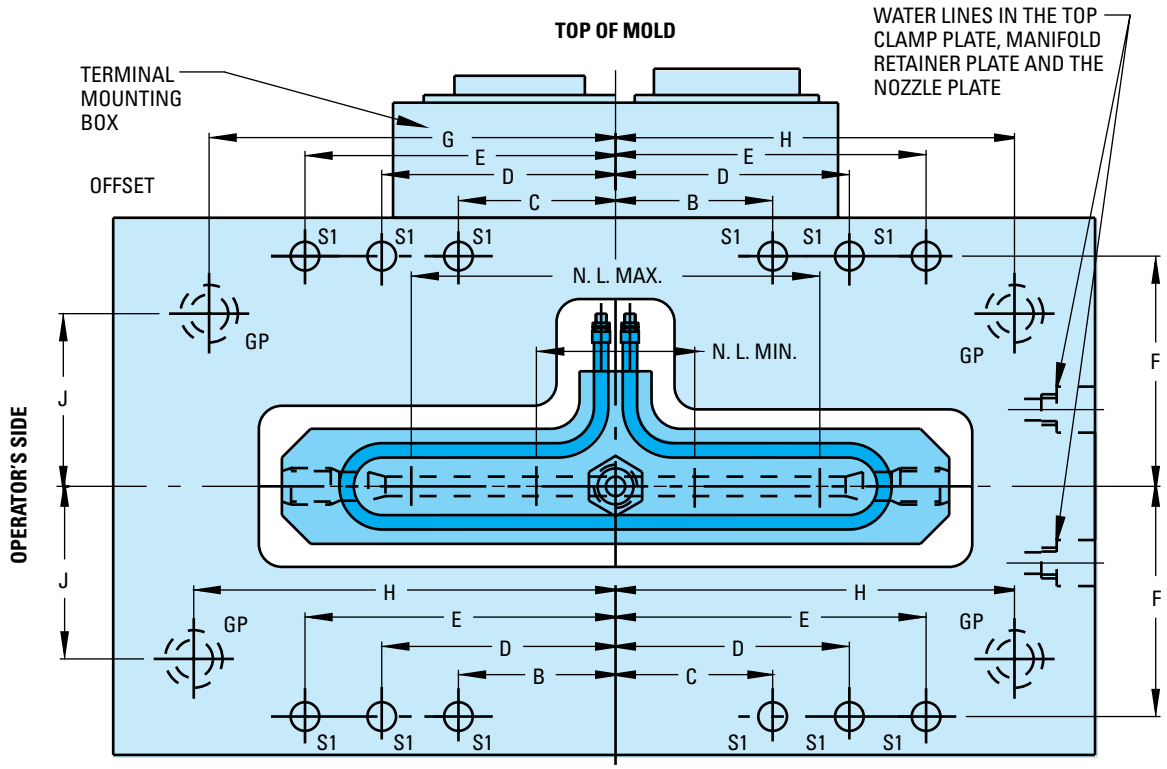
NOTE: The plan view is from mold locating ring/machine nozzle.



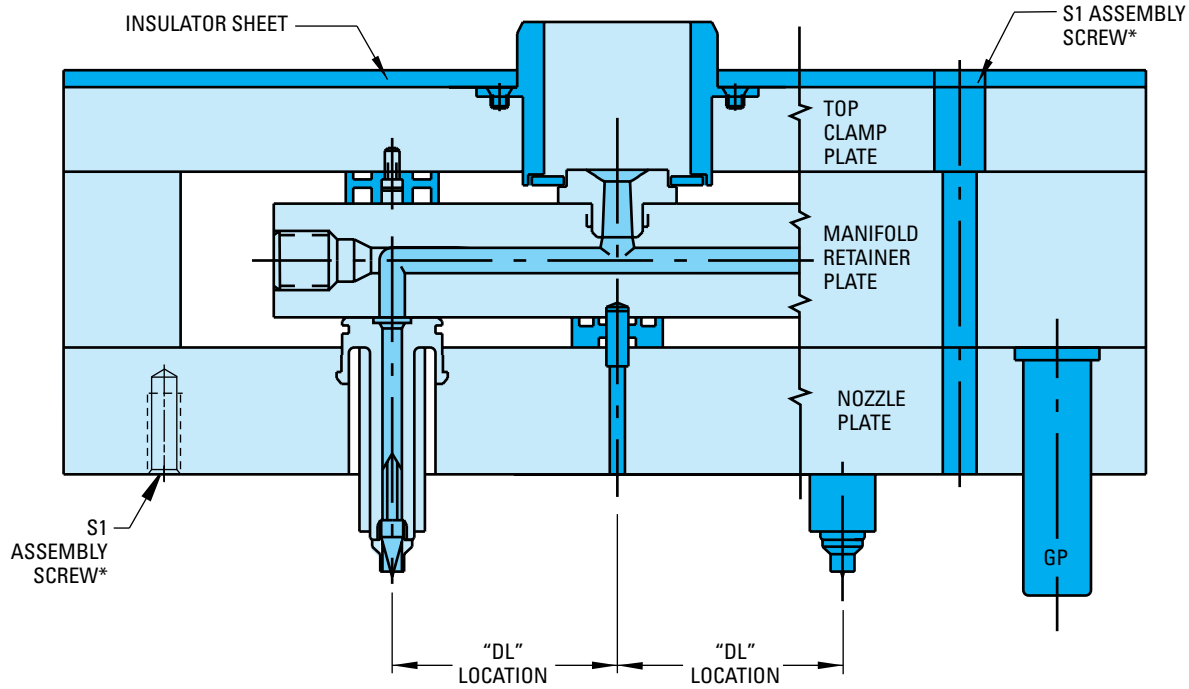
*S1 screws can be mounted either from the parting line or from the top clamp plate. Specify preference on criteria form when placing order.

Meteor 3
In-Line Center Exit

Meteor 3: Three-week delivery!



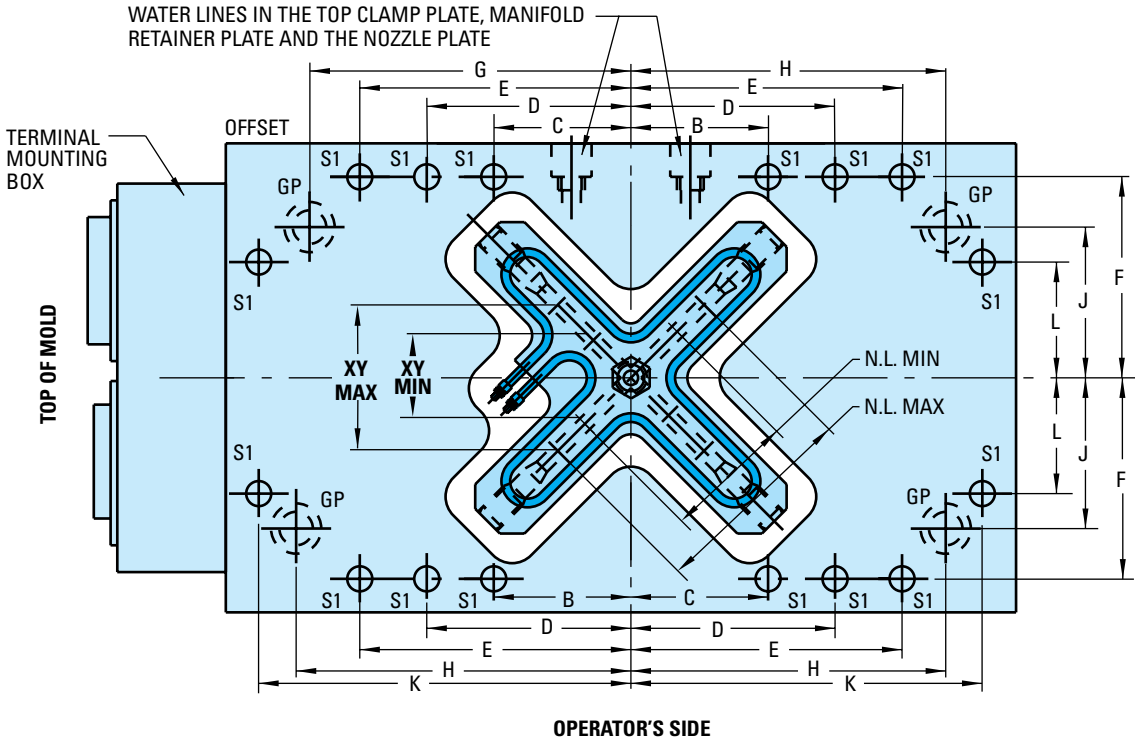
NOTE: The plan view is from mold locating ring/machine nozzle.



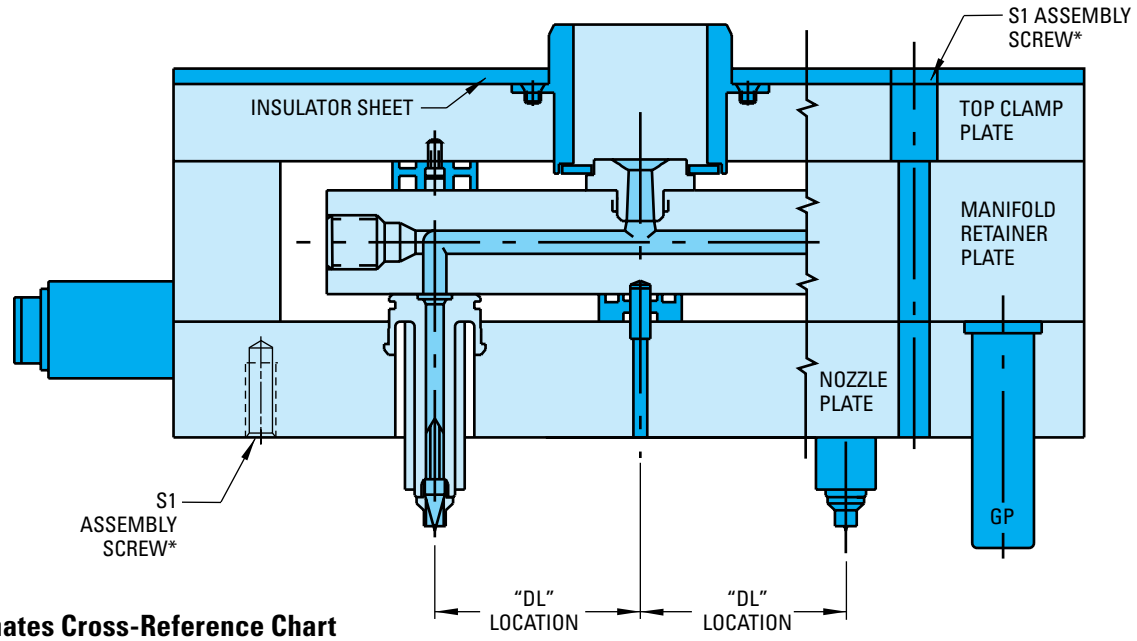
*S1 screws can be mounted either from the parting line or from the top clamp plate. Specify preference on criteria form when placing order.

Meteor 3 X-Style

Meteor 3: Three-week delivery!



NOTE: The plan view is from mold locating ring/machine nozzle.



X and Y Coordinates Cross-Reference Chart

MANIFOLD KIT ITEM NO.	XY MIN*		XY MAX**	
	MM	INCH	MM	INCH
MXM0100K	38.90	1.531	70.71	2.783
MXM0150K	70.71	2.783	106.07	4.176
MXM0200K	106.07	4.176	141.42	5.568
MXM0300K	141.42	5.568	212.13	8.352

NOTE: See In-Line and X-Style Manifolds for NL MIN and NL MAX.

*S1 screws can be mounted either from the parting line or from the top clamp plate. Specify preference on criteria form when placing order.

Meteor 3 Dimensional Information
In-Line End Exit and In-Line Center Exit

HOT HALF ASSEMBLY ITEM NUMBER		MOLD BASE SIZE	B	C	D	E	F	G	H	J	K	L
IN-LINE END EXIT	IN-LINE CENTER EXIT											
MEM0100KPH	MCM0100KPH	1215	—	1.000	—	5.375	4.969	5.4375	5.6250	3.8125	—	—
		1220	—	1.000	—	7.500	4.969	7.5625	7.7500	3.8125	—	—
		1315	—	1.000	—	5.375	5.719	5.4375	5.6250	4.5000	—	—
		1321	—	1.000	—	7.625	5.719	7.9375	8.1250	4.1875	—	—
		1620	—	1.000	—	7.125	6.969	7.5625	7.7500	5.0000	—	—
MEM0150KPH	MCM0150KPH	1220	—	1.000	—	7.500	4.969	7.5625	7.7500	3.8125	—	—
		1321	—	1.000	—	7.625	5.719	7.9375	8.1250	4.1875	—	—
		1620	—	1.000	—	7.125	6.969	7.5625	7.7500	5.0000	—	—
MEM0200KPH	MCM0200KPH	1321	—	1.000	—	7.6225	5.719	7.9375	8.1250	4.1875	—	—
		1524	3.625	3.625	—	8.625	6.469	8.4375	8.6250	5.0000	—	—
		1924	3.625	3.625	—	8.625	8.781	8.6875	8.8750	7.2500	—	—
MEM0300KPH	MCM0300KPH	1524	3.625	3.625	—	8.625	6.469	8.4375	8.6250	5.0000	—	—
		1924	3.625	3.625	—	8.625	8.781	8.6875	8.8750	7.2500	—	—
		1929	4.562	4.562	—	12.000	8.781	12.1875	12.3750	6.5000	—	—
MEM0400KPH	MCM0400KPH	1826	4.000	4.000	—	10.250	7.969	10.4375	10.6250	6.0000	—	—
		1929	4.562	4.562	—	12.000	8.781	12.1875	12.3750	6.5000	—	—
		2429	4.812	4.812	—	11.750	10.844	11.5625	11.7500	8.5000	13.750	6.750
MEM0500KPH	MCM0500KPH	2429	4.812	4.812	—	11.750	10.844	11.5625	11.7500	8.5000	13.750	6.750
		2435	3.875	3.875	9.625	14.750	10.844	14.6875	14.8750	8.5000	16.750	6.750

NOTE: "S1" screws for 24" wide mold bases are to be 5/8-11 S.H.C.S. All other mold bases require 1/2-13 S.H.C.S.

QDS Mold Bases Available for Meteor 3 – End Exit and Center Exit

HOT HALF ASSEMBLY (PREFIX)		SUITABLE D-M-E QDS MOLD BASES (SUFFIX)															
IN-LINE END EXIT	IN-LINE CENTER EXIT	1215	1220	1315	1321	1518	1524	1616	1620	1818	1820	1826	1924	1929	2424	2429	2435
MEM0100KPH	MCM0100KPH	✓	✓	✓	✓				✓								
MEM0150KPH	MCM0150KPH	N/A	✓	N/A	✓				✓								
MEM0200KPH	MCM0200KPH	N/A	N/A	N/A	✓	N/A	✓						✓				
MEM0300KPH	MCM0300KPH	N/A	N/A	N/A	N/A	N/A	✓						✓	✓			
MEM0400KPH	MCM0400KPH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	N/A	✓		✓	
MEM0500KPH	MCM0500KPH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	✓

NOTE: Program expansion ongoing. Contact D-M-E for delivery timeframes regarding availability of other mold base sizes.

Nozzle Options

D-M-E nozzles for use with Meteor 3 systems include:

- 250 Series EHA and CIA
- 375 Series EHA and CIA
- Gate-Mate 4 Series

All nozzles have a selection of tip styles to suit material flow and gate cosmetic requirements.

Meteor 3 Dimensional Information
X-Style

MANIFOLD KIT PLUS ITEM NUMBER	MOLD BASE SIZE	B	C	D	E	F	G	H	J	K	L
MEM0150KPH	1220	—	1.000	—	7.500	4.969	7.5625	7.7500	3.8125	—	—
	1321	—	1.000	—	7.625	5.719	7.9375	8.1250	4.1875	—	—
	1620	—	1.000	—	7.125	6.969	7.5625	7.7500	5.0000	—	—
MEM0200KPH	1321	—	1.000	—	7.6225	5.719	7.9375	8.1250	4.1875	—	—
	1524	3.625	3.625	—	8.625	6.469	8.4375	8.6250	5.0000	—	—
	1924	3.625	3.625	—	8.625	8.781	8.6875	8.8750	7.2500	—	—
MEM0300KPH	1524	3.625	3.625	—	8.625	6.469	8.4375	8.6250	5.0000	—	—
	1924	3.625	3.625	—	8.625	8.781	8.6875	8.8750	7.2500	—	—
	1929	4.562	4.562	—	12.000	8.781	12.1875	12.3750	6.5000	—	—
MEM0400KPH	1826	4.000	4.000	—	10.250	7.969	10.4375	10.6250	6.0000	—	—
	1929	4.562	4.562	—	12.000	8.781	12.1875	12.3750	6.5000	—	—
	2429	4.812	4.812	—	11.750	10.844	11.5625	11.7500	8.5000	13.750	6.750

NOTE: "S1" screws for 24" wide mold bases are to be 5/8-11 S.H.C.S. All other mold bases require 1/2-13 S.H.C.S.

QDS Mold Bases Available for Meteor 3 – X-Style

HOT HALF ASSEMBLY (PREFIX)	SUITABLE D-M-E QDS MOLD BASES (SUFFIX)											
X-STYLE	1518	1524	1616	1620	1818	1820	1826	1924	1929	2424	2429	2435
MEM0100KPH	✓	N/A	✓	✓								
MEM0150KPH	✓	N/A	✓	✓								
MEM0200KPH	N/A	N/A	N/A	N/A	✓	✓		✓				
MEM0300KPH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	✓	✓

NOTE: Program expansion ongoing. Contact D-M-E for delivery timeframes regarding availability of other mold base sizes.

Nozzle Options

D-M-E nozzles for use with Meteor 3 systems include:

- 250 Series EHA and CIA
- 375 Series EHA and CIA
- Gate-Mate 4 Series

All nozzles have a selection of tip styles to suit material flow and gate cosmetic requirements.

Meteor 3 Reference Information and Item Numbers

Minimum Mold Plate Sizes

MANIFOLD TYPE	MANIFOLD KIT ITEM NO.	MINIMUM WIDTH		MINIMUM LENGTH	
		MM	INCH	MM	INCH
IN-LINE END EXIT	MEM0100K	302	11 7/8	381	15
	MEM0150K	302	11 7/8	508	20
	MEM0200K	302	11 7/8	527	20 3/4
	MEM0300K	302	11 7/8	610	24
	MEM0400K	302	11 7/8	660	26
	MEM0500K	302	11 7/8	737	29
IN-LINE CENTER EXIT	MCM0100K	302	11 7/8	381	15
	MCM0150K	302	11 7/8	508	20
	MCM0200K	302	11 7/8	527	20 3/4
	MCM0300K	302	11 7/8	660	24
	MCM0400K	302	11 7/8	749	26
	MCM0500K	302	11 7/8	902	29
X-STYLE	MXM0100K	378	14 7/8	406	16
	MXM0150K	378	14 7/8	406	16
	MXM0200K	454	17 7/8	457	18
	MXM0300K	603	23 3/4	603	23 3/4

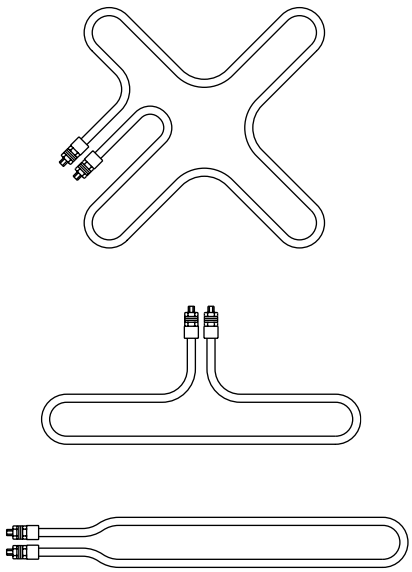
Meteor Wiring Information

MANIFOLD TYPE	MANIFOLD KIT ITEM NO.	D-M-E CONTROLLER	WIRING LOCATION FOR NOZZLES AND MANIFOLD					
			ZONE 1	ZONE 2	ZONE 3	ZONE 4	ZONE 5	ZONE 6
IN-LINE END EXIT	MEM0100K	5 ZONE	NOZ. 1	NOZ. 2	MAN.	—	—	—
	MEM0150K		NOZ. 1	NOZ. 2	MAN.	—	—	—
	MEM0200K		NOZ. 1	NOZ. 2	MAN.	—	—	—
	MEM0300K		NOZ. 1	NOZ. 2	MAN.	—	—	—
	MEM0400K		NOZ. 1	NOZ. 2	MAN.	—	—	—
	MEM0500K		NOZ. 1	NOZ. 2	MAN. TOP	MAN. BTM.	—	—
IN-LINE CENTER EXIT	MCM0100K	5 ZONE	NOZ. 1	NOZ. 2	MAN.	—	—	—
	MCM0150K		NOZ. 1	NOZ. 2	MAN.	—	—	—
	MCM0200K		NOZ. 1	NOZ. 2	MAN.	—	—	—
	MCM0300K		NOZ. 1	NOZ. 2	MAN.	—	—	—
	MCM0400K		NOZ. 1	NOZ. 2	MAN.	—	—	—
	MCM0500K		NOZ. 1	NOZ. 2	MAN. TOP	MAN. BTM.	—	—
X-STYLE	MXM0100K	5 ZONE	NOZ. 1	NOZ. 2	NOZ. 3	NOZ. 4	MAN.	—
	MXM0150K		NOZ. 1	NOZ. 2	NOZ. 3	NOZ. 4	MAN.	—
	MXM0200K	8 ZONE	NOZ. 1	NOZ. 2	NOZ. 3	NOZ. 4	MAN. TOP	MAN. BTM.
	MXM0300K		NOZ. 1	NOZ. 2	NOZ. 3	NOZ. 4	MAN. TOP	MAN BTM.

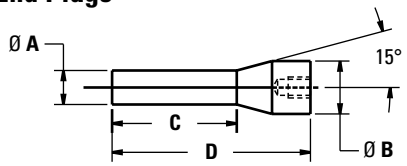
Meteor Spare Parts

MANIFOLD TYPE	MANIFOLD KIT ITEM NO.	TUBULAR HEATER		END PLUG ITEM NO.	SET SCREW ITEM NO.
		ITEM NO.	WATTAGE		
IN-LINE END EXIT	MEM0100K	MEH0100	600	MTP0009	MSS0001
	MEM0150K	MEH0150	750		
	MEM0200K	MEH0200	900		
	MEM0300K	MEH0300	1225	MTP0012	
	MEM0400K	MEH0400	1550		
	MEM0500K	MEH0500	1850		
IN-LINE CENTER EXIT	MCM0100K	MCH0100	600	MTP0009	MSS0001
	MCM0150K	MCH0150	750		
	MCM0200K	MCH0200	900		
	MCM0300K	MCH0300	1225	MTP0012	
	MCM0400K	MCH0400	1550		
	MCM0500K	MCH0500	1850		
X-STYLE	MXM0100K	MXH0100	575	MTP0009	MSS0001
	MXM0150K	MXH0150	1350		
	MXM0200K	MXH0200	1675		
	MXM0300K	MXH0300	2150	MTP0012	

Tubular Heaters



End Plugs



ITEM NO.	A		B		C		D	
	MM	INCH	MM	INCH	MM	INCH	MM	INCH
MTP0009	9	.354	14	.551	33	1.299	52.5	2.067
MTP0012	12	.472	16	.630	60	2.362	77.5	3.051

Set Screw



- Thread: M20 x 2.5
- Thickness: 20mm/.787in
- Hex Flat: 10mm/.394in

Meteor 3 Reference Information and Item Numbers

Meteor 3 Item Numbers

METEOR 3 TYPE	ITEM NUMBERS FOR HOT HALF ASSEMBLY	ITEM NUMBERS FOR HOT HALF ASSEMBLY AND MOLD BASE*	ITEM NUMBERS FOR HOT HALF ASSEMBLY, MOLD BASE AND TEMPERATURE CONTROLLER*
IN-LINE END EXIT	MEM0100KPH1215	MEM0100KPHM1215	MEM0100KPHM1215T
	MEM0100KPH1220	MEM0100KPHM1220	MEM0100KPHM1220T
	MEM0100KPH1315	MEM0100KPHM1315	MEM0100KPHM1315T
	MEM0100KPH1321	MEM0100KPHM1321	MEM0100KPHM1321T
	MEM0100KPH1620	MEM0100KPHM1620	MEM0100KPHM1620T
	MEM0150KPH1220	MEM0150KPHM1220	MEM0150KPHM1220T
	MEM0150KPH1321	MEM0150KPHM1321	MEM0150KPHM1321T
	MEM0150KPH1620	MEM0150KPHM1620	MEM0150KPHM1620T
	MEM0200KPH1321	MEM0200KPHM1321	MEM0200KPHM1321T
	MEM0200KPH1524	MEM0200KPHM1524	MEM0200KPHM1524T
	MEM0200KPH1924	MEM0200KPHM1924	MEM0200KPHM1924T
	MEM0300KPH1524	MEM0300KPHM1524	MEM0300KPHM1524T
	MEM0300KPH1924	MEM0300KPHM1924	MEM0300KPHM1924T
	MEM0300KPH1929	MEM0300KPHM1929	MEM0300KPHM1929T
	MEM0400KPH1826	MEM0400KPHM1826	MEM0400KPHM1826T
	MEM0400KPH1929	MEM0400KPHM1929	MEM0400KPHM1929T
	MEM0400KPH2429	MEM0400KPHM2429	MEM0400KPHM2429T
	MEM0500KPH2435	MEM0500KPHM2435	MEM0500KPHM2435T
IN-LINE CENTER EXIT	MCM0100KPH1215	MCM0100KPHM1215	MCM0100KPHM1215T
	MCM0100KPH1220	MCM0100KPHM1220	MCM0100KPHM1220T
	MCM0100KPH1315	MCM0100KPHM1315	MCM0100KPHM1315T
	MCM0100KPH1321	MCM0100KPHM1321	MCM0100KPHM1321T
	MCM0100KPH1620	MCM0100KPHM1620	MCM0100KPHM1620T
	MCM0150KPH1220	MCM0150KPHM1220	MCM0150KPHM1220T
	MCM0150KPH1321	MCM0150KPHM1321	MCM0150KPHM1321T
	MCM0150KPH1620	MCM0150KPHM1620	MCM0150KPHM1620T
	MCM0200KPH1321	MCM0200KPHM1321	MCM0200KPHM1321T
	MCM0200KPH1524	MCM0200KPHM1524	MCM0200KPHM1524T
	MCM0200KPH1924	MCM0200KPHM1924	MCM0200KPHM1924T
	MCM0300KPH1524	MCM0300KPHM1524	MCM0300KPHM1524T
	MCM0300KPH1924	MCM0300KPHM1924	MCM0300KPHM1924T
	MCM0300KPH1929	MCM0300KPHM1929	MCM0300KPHM1929T
	MCM0400KPH1826	MCM0400KPHM1826	MCM0400KPHM1826T
	MCM0400KPH1929	MCM0400KPHM1929	MCM0400KPHM1929T
	MCM0400KPH2429	MCM0400KPHM2429	MCM0400KPHM2429T
	MCM0500KPH2429	MCM0500KPHM2429	MCM0500KPHM2429T
	MCM0500KPH2435	MCM0500KPHM2435	MCM0500KPHM2435T
X-STYLE	MXM0100KPH1518	MXM0100KPHM1518	MXM0100KPHM1518T
	MXM0100KPH1616	MXM0100KPHM1616	MXM0100KPHM1616T
	MXM0100KPH1620	MXM0100KPHM1620	MXM0100KPHM1620T
	MXM0150KPH1518	MXM0150KPHM1518	MXM0150KPHM1518T
	MXM0150KPH1616	MXM0150KPHM1616	MXM0150KPHM1616T
	MXM0150KPH1620	MXM0150KPHM1620	MXM0150KPHM1620T
	MXM0200KPH1818	MXM0200KPHM1818	MXM0200KPHM1818T
	MXM0200KPH1820	MXM0200KPHM1820	MXM0200KPHM1820T
	MXM0200KPH1924	MXM0200KPHM1924	MXM0200KPHM1924T
	MXM0300KPH2424	MXM0300KPHM2424	MXM0300KPHM2424T
	MXM0300KPH2429	MXM0300KPHM2429	MXM0300KPHM2429T
	MXM0300KPH2435	MXM0300KPHM2435	MXM0300KPHM2435T

*Optional mold base and/or temperature controller are configured by customer.

D-M-E Internally Heated Hot Runner Systems

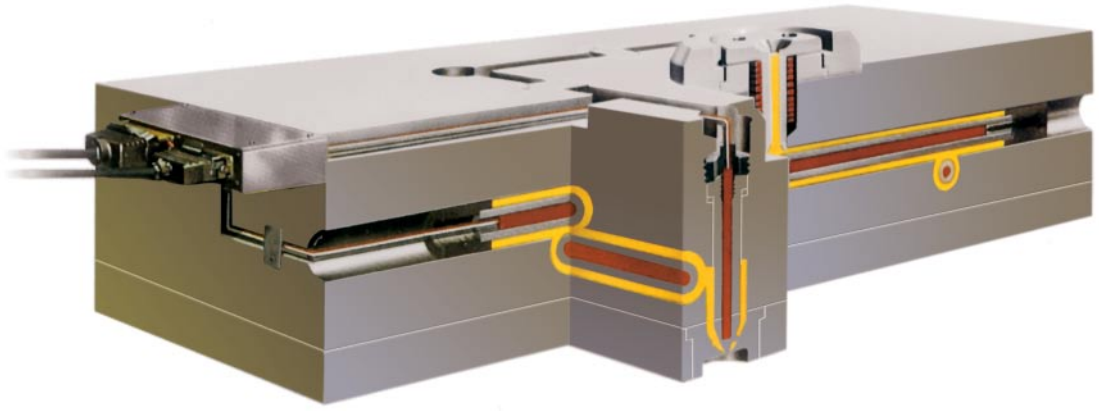
Standardized, pre-engineered components for hot runner molding



D-M-E
Every step of the way

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

The Cool One – Features and Benefits



Hot runner molds have been in use for decades. Today, energy costs and material availability have become greater processing considerations and new emphasis is being placed on reducing these costs. As a result, a hot runner molding system that can cut energy requirements, shorten cycles, save material and eliminate secondary operations, such as degating parts, spot facing and regrinding runners, is extremely well-suited for the industry.

What is The Cool One?

The Cool One is a group of standardized, pre-engineered components that can be incorporated into a hot runner mold to suit a specific application. The design of the Cool One places particular emphasis on temperature control throughout the system. Standard Cool One components fall into two categories: Distributor System and Probes.

Distributor System

Plastics are injected into the system through the D-M-E Heated Nozzle Locator. The system consists of bores, gun-drilled into the distributor block. A smaller diameter distributor tube is inserted in each bore and centered with end caps.

Material flowing in the bore, around the central tube, is kept molten by a thermocouple-cartridge heater in the tube. Heating the material "from the inside out" is highly efficient, since it allows heater loads to be considerably less than systems which heat from the outside in. In addition, the outer layer of the melt stream solidifies to form an insulating layer of plastics that further reduces energy requirements and permits mold surface temperatures to be maintained at 100° F. In many cases the flow design has a single primary distributor tube with intersecting probes to direct the flow of material to the gates. A primary and secondary distributor tube layout using a common "H" pattern is also a typical method of providing a balanced flow of material to probes intersecting the secondary tubes. (The cutaway view above is an example of the "H" pattern layout.) A wide variety of intersecting layouts are possible to carry molten material to virtually any number or pattern of cavities.

For even smaller molds, or increased cavitation in larger molds, D-M-E has standardized a group of Micro Cool One components applicable for solid block designs. In this design, smaller distributor tubes and cartridge heaters are used in conjunction with smaller "integral heater" gating probes. The Micro Cool One utilizes round distributor channels and a single level of distribution. System designs incorporate the Solid Block concept (as shown in the illustration above).

The Cool One – Features and Benefits

Probes

Molten material flows through the distributor system to intersect with the probes centered in the probe bores. The heated probes keep the material molten and flowing to the gates.

In general, the gate is the most critical point in any hot runner mold. A perfect temperature balance has to be maintained at the gate if the mold is to run effectively. The molder has to find the "compromise" temperature which will fill the cavity, provide good part quality, keep the plastics molten and still shut-off without drooling when the mold opens for part ejection. The gate size and cycle time are also major variables that have to be considered in achieving this proper balance.

With the D-M-E system, cartridge heaters in both the tubes and probes contain integral thermocouples. This allows the heaters to be closely monitored and continuously adjusted by closed-loop temperature controls.

D-M-E Auto-Fixed™ probes are offered in three styles – finless with integral heaters, and finned or finless with replaceable heaters. The "integral heater" probes are smaller in diameter than the others, making them ideal for smaller molds or closer cavity patterns. The finned style employs a precision-engineered tip configuration that automatically "fixes" the relationship between the probe tip and gate (i.e., centers the probe and limits tip protrusion into the gate). The finless style provides a wider selection of probe lengths (up to 10") for larger molds and deeper cavity configurations. An optional register ring is available for these probes to provide added stability at the probe tip if desired. Probes of different lengths can be used in the same mold to suit the gating requirements and contours of the molded part.

To save the moldmaker valuable machining time, standardized gate inserts are also available for all probes. Made from prehardened AISI S-7 steel, these inserts are pre-machined with the appropriate internal configurations for optimum probe performance.

Benefits

For The Processor

Some of the most readily apparent benefits of The Cool One are to the plastics processor. Basically, the system offers more quality parts while reducing labor and material costs.

As proven in actual production, this D-M-E Hot Runner System can:

- **Increase Production …** Faster startups, faster cycles and delay-free automatic operation
- **Conserve Energy …** "The Cool One" uses up to 75% less energy than conventional hot manifold systems and no regrind operations are necessary
- **Conserve Materials …** No sprues or runners and fewer rejects make 50%–80% material savings possible
- **Improve Part Quality …** Improved temperature control provides better gate cosmetics, more homogeneous melt
- **Increase Uptime …** Contamination can be cleared or cartridge heaters replaced quickly with the mold in the press

For The Designer

Standardized components have established themselves as the best, fastest and least expensive way to design tools. This is especially true with D-M-E pre-engineered hot runner molding components.

- **Maximum Design Flexibility …** Improved cosmetics offer wide choice of gate locations; Distributor System configurations are virtually unlimited
- **Production Proven …** Predictable performance based on decades of successful applications.

For The Moldmaker

- **Shorter Lead Times …** Pre-engineered components allow the moldmaker to go from part print to part approval (and final payment) sooner
- **Availability …** Components are available from stock for immediate delivery which means faster mold construction and more uptime

Components for Micro Cool One® Split Plate/Solid Block Designs

Components for Micro Cool One® Split Plate/Solid Block Designs

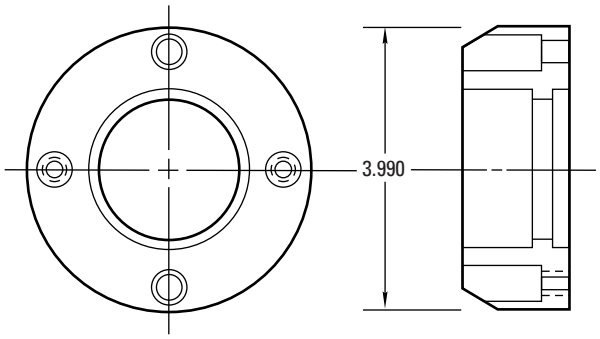


- Micro components for smaller molds or increased cavitation in larger molds
- Integral heaters in all probes improve heat transfer throughout system
- Applicable for split plate or solid block designs

Locating Ring (for Heated Nozzle Locator)

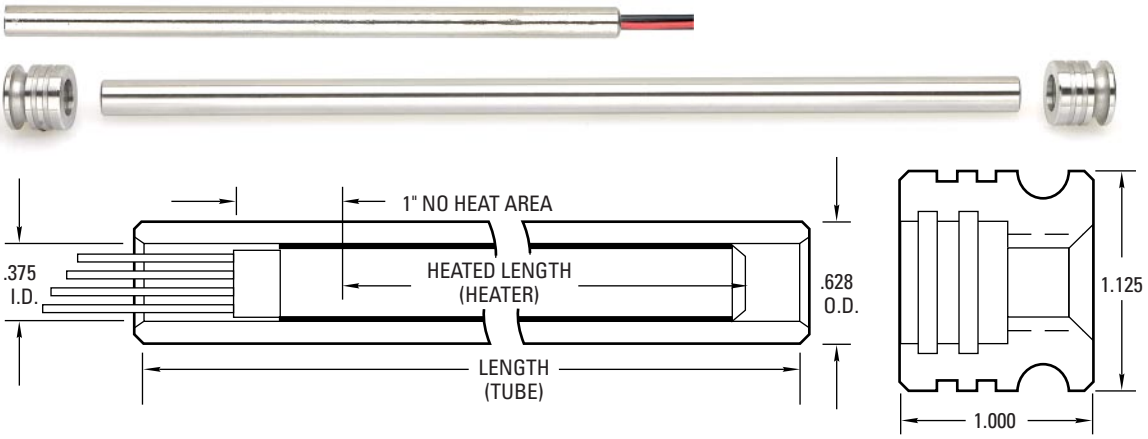
NOTE: In addition to use with Micro Cool One designs, this locating ring can be used with any Cool One system employing the heated nozzle locator in its design.

ITEM NUMBER
HNR0001



See the end of this section for component detail dimensions and design and machining guidelines.

Micro Cool One Distributor Tubes, End Caps, Distributor Tube Heaters



Thermocouple (T/C) Distributor Tube Heaters (240 VAC, T/C Type J, 34" Leads)

Distributed wattage heater design for more uniform temperature control. Sealed, flexible teflon covered leads to prevent lead damage and improve moisture resistance.

DIA (AMPS)*	ITEM NUMBER	OVERALL LENGTH	HEATED LENGTH	WATTS
.375 (10 AMP)	HCTC-03-4	5.000	4.000	320
	HCTC-03-45	5.500	4.500	340
	HCTC-03-5	6.000	5.000	400
	HCTC-03-55	6.500	5.500	430
	HCTC-03-6	7.000	6.000	450
	HCTC-03-65	7.500	6.500	470
	HCTC-03-7	8.000	7.000	480

DIA (AMPS)*	ITEM NUMBER	OVERALL LENGTH	HEATED LENGTH	WATTS
.375 (10 AMP)	HCTC-03-75	8.500	7.500	515
	HCTC-03-8	9.000	8.000	550
	HCTC-03-9	10.000	9.000	650
	HCTC-03 -10	11.000	10.000	710
	HCTC-03-11	12.000	11.000	720
	HCTC-03-12	13.000	12.000	760
	HCTC-03-13	14.000	13.000	810

*(AMPS) = Amperage requirement for temp. control module.

Distributor Tubes

MATERIAL: AISI 4140 STEEL
HARDNESS: 28-35 HRC

ITEM NUMBER	LENGTH
HT-05-03-12	11.82
HT-05-03-16	15.76

End Cap

MATERIAL: AISI 4140 STEEL

ITEM NUMBER
EC-11-05

Components for Micro Cool One®
Solid Block Designs

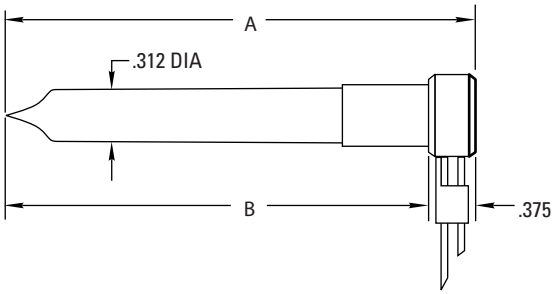
Auto-fixed® "Integral Heater" Micro Probes (240 VAC, T/C Type J, 48" Leads)

MATERIAL: AISI D-2 STEEL

HARDNESS: 50-55 HRC

ITEM NUMBER*	A	B	WATTS
AFIP3- 310-90	3.095	2.720	110
AFIP3-360-90	3.595	3.220	130
AFIP3-410-90	4.095	3.720	150
AFIP3-460-90	4.595	4.220	170





Replacement Thermocouple

ITEM NUMBER	LEAD LENGTH
TC-9900	48"

Register Ring

MATERIAL: AISI H-13 STEEL
HARDNESS: 48-52 HRC
I.D. = .313
O.D.= 1.000

ITEM NUMBER
AFRR-03N



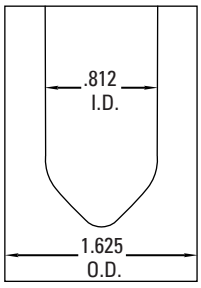
Gate Insert

MATERIAL: AISI S-7 STEEL (pre-hardened)

HARDNESS: 30-34 HRC

Hardness can be increased to a higher value by heat treatment if desired.

ITEM NUMBER
AFGI-03N





Adjustment Ring

(Packaged with all probes)

For simplified counterbore depth adjustment.

I.D. = .456 THICKNESS = .062

ITEM NUMBER*
RAF3-062

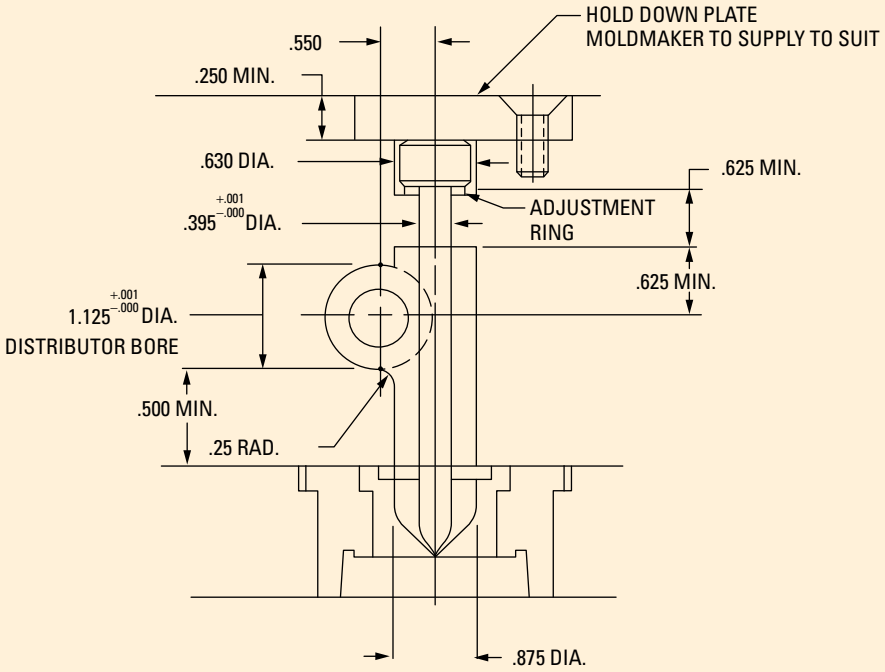
*Package of 10.

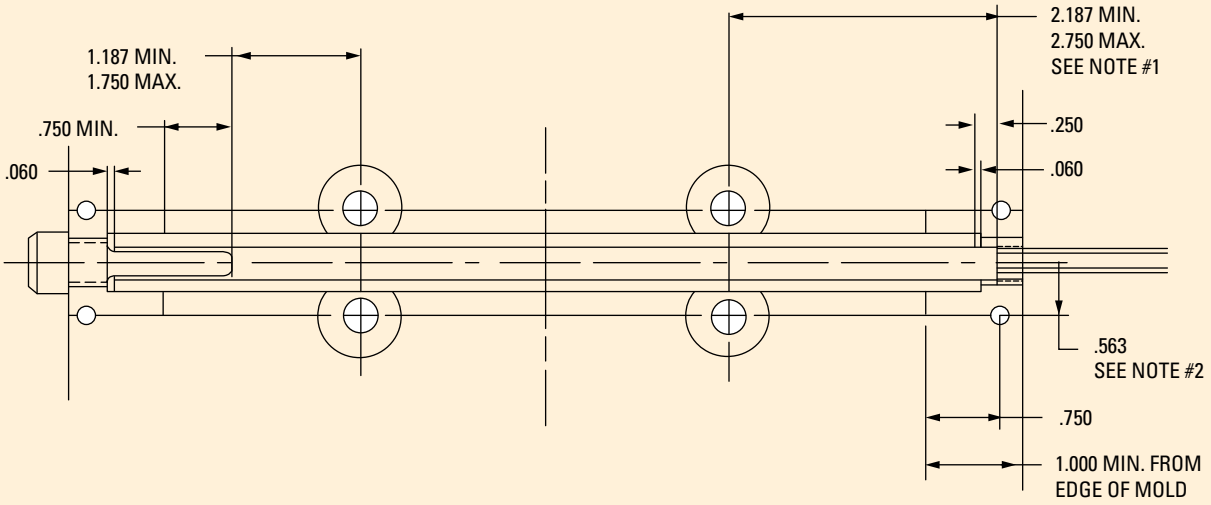


CUSTOMER DESIGN CRITERIA FORMS
CDC
To provide your Cool One® application specifications, visit www.dme.net/cdc

Probe Machining Dimensions for Micro Cool One

PROBE MACHINING DIMENSIONS – SOLID BLOCK DESIGN





NOTES:
1. Due to the longer no-heat section at the lead end, heater will not be centered in distributor tube.
2. The use of (2) .250 dia. dowel pins with .562 distance between dowel pin and end cap centerlines is recommended to secure end cap into mold.

MICRO COOL ONE® SOLID BLOCK DESIGNING AND MACHINING GUIDELINES

Machining for Heated Nozzle Locator and Locating Ring

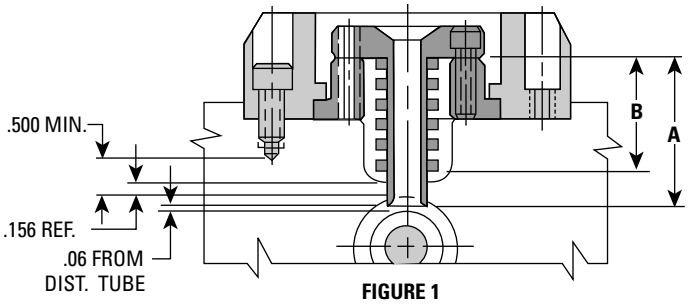
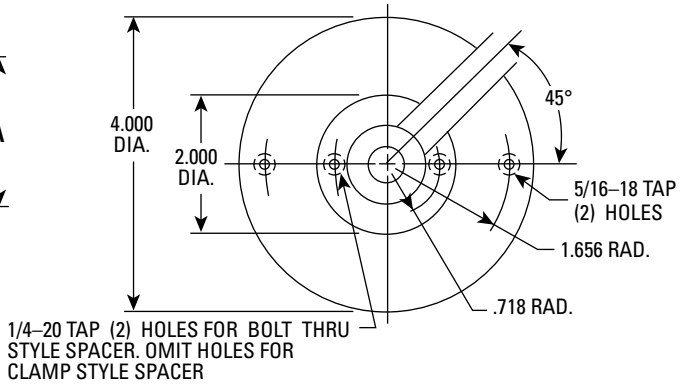


FIGURE 1



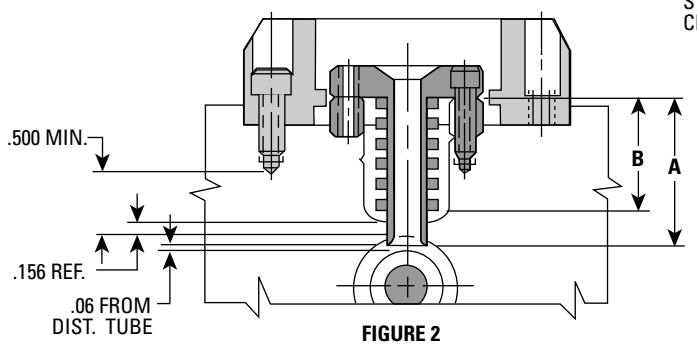


FIGURE 2

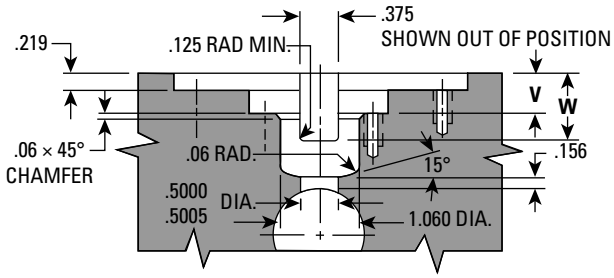


FIGURE 3

ALL APPLICATIONS

The locator's core tip should be positioned .06 from the top of the distributor tube, establishing the 'A' dimension. In most cases, the dimension from the bottom of the core head to the locating ring counterbore will equal the adjusted height of the spacer. (The 'B' dimension, for reference, is the heater length of 1.450 or 1.950, depending on core length being used.)

CLAMP STYLE SPACER APPLICATION (FIGURE 1)

In conjunction with a D-M-E HNR0001 locating ring, the flange on the spacer is utilized as a clamp style heater nozzle locator. The core is secured to the spacer with two 1/4–20 S.H.C.S.

BOLT THRU STYLE SPACER APPLICATION (FIGURE 2)

Another option is to remove the flange and adjust the spacer height to the desired dimension, then secure the heated nozzle locator through the spacer with two 1/4–20 S.H.C.S. into the mold plate. Use caution to insure that the tapped holes are .500 minimum from the distributor channel. Spacer thickness should never be less than .250. However, if a condition results where the spacer would be less than .250, counterbore a 2.000 diameter into the plate to a 'V' depth that will accept the .250 spacer. (See Figure 3)

ALL APPLICATIONS

In order to maintain plate strength, the depth of the lead wire channel, dimension 'W', must be no deeper than required to contain the heater leads. The distance from the bottom of the core head to the bottom of the leads is .800. Channel depth can be determined accordingly, based on the distance between the core head and the top of the mold.

The design guidelines in this document are based upon results obtained using D-M-E's production equipment and are provided as a design aid for use with D-M-E Hot Runner Systems. They are ONLY applicable to the current line of D-M-E components detailed in this document. Due to the wide variety of plastics materials and possible molding applications available, and since D-M-E has no control over the circumstances of any molding operation, D-M-E assumes no liability for any results obtained with this information.

D-M-E Hot Runner System Components are manufactured and sold under one or more of the following U.S. patents, 3,767,340; 3,010,155; 3,023,458; 3,231,938 AND 3,758,248. FOREIGN PATENTS ISSUED AND PENDING.

The Cool One – Heated Nozzle Locators, Assemblies and Replacement Parts

Heated Nozzle Locators

A requirement for D-M-E split-plate designs, and recommended for all D-M-E hot runner molds, the new heated nozzle locator improves both the performance and structural integrity of D-M-E hot runner systems. It provides uniform temperature control of resin from the machine nozzle to the distributor channel. The thermocouple equipped coil heater features a square (or flat) cross section to improve heat transfer to the core's .312 diameter feed channel. The heated nozzle locator provides quicker and easier system start-ups, minimizes pressure loss and eliminates cold slugs in the feed channel. Available in two lengths with choice of ½" or ¾" spherical radius, the assemblies can be installed using either a clamp style or bolt thru style method for added design and construction versatility. See design and machining guidelines at the end of this Internally Heated Hot Runner Systems section.


CORE


HEATER


SPACER

Heated Nozzle Locator Assemblies

HNL-462 and HNL-662 assemblies include:

- HNC-46 or HNC-66 core, respectively
- SSTC-62-90 heater
- HNS-67 spacer

R	ITEM NUMBER
½	HNL-462
	HNL-472
¾	HNL-662
	HNL-672

HNL-472 and HNL-672 assemblies include:

- HNC-47 or HNC-67 core, respectively
- SSTC-72-90 heater
- HNS-67 spacer

Heated Nozzle Locator Replacement Parts

Cores

R	ITEM NUMBER
½	HNC-46
	HNC-47
¾	HNC-66
	HNC-67

Thermocouple Heaters

(240 VAC, 250 WATTS T/C type J 36" leads)

ITEM NUMBER	USED WITH CORES
SSTC-62-90	HNC-46 & 66
SSTC-72-90	HNC-47 & 67

Spacer

ITEM NUMBER
HNS-67

Nozzle Locators (Replacement Only)

Heated Nozzle Locators (above) are recommended for all systems. Nozzle Locators NL-6702 and 6703 are available for replacement in previous systems.

ITEM NUMBER	R
NL-6702	½
NL-6703	¾



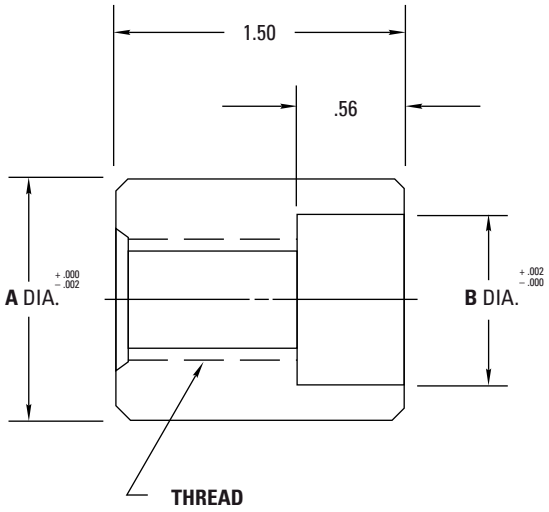
The Cool One – End Caps and Distributor Tubes

End Caps (for use with solid distributor block designs)

MATERIAL: AISI 4140 STEEL

End caps provide concentricity between distributor tube and distributor bore. Thread accommodates heater stop or lead wire protector (see design and machining guidelines at the end of this Internally Heated Hot Runner Systems section).





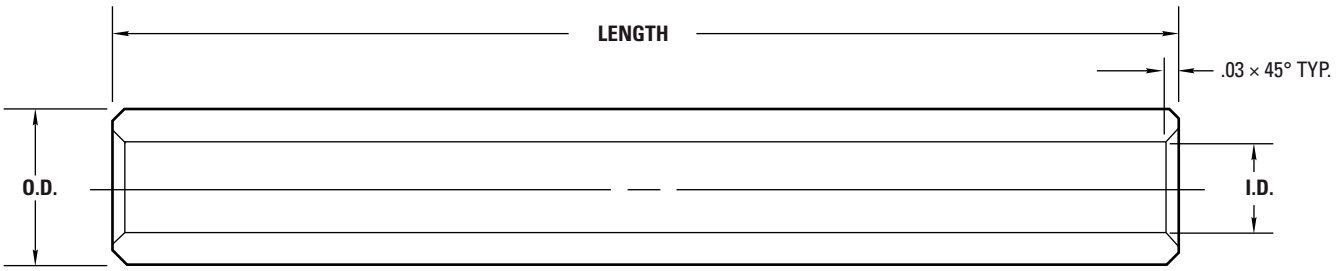
ITEM NUMBER	DIA. A	DIA. B	THREAD	USED WITH DIST. BORE/TUBE
EC-12-07	1.249	0.875	⅝"- 11	1.25 DIA./.87 O.D.
EC-20-15	1.999	1.625	¾"- 10	2.00 DIA./1.62 O.D.

END CAPS FOR SPLIT PLATE DESIGNS: Moldmaker to supply to suit. See design and machining guidelines at the end of this Internally Heated Hot Runner Systems section.

Distributor Tubes

MATERIAL: AISI P-20 STEEL
HARDNESS: 28-35 HRC





USED WITH 1.25 DIAMETER DISTRIBUTOR BORE/CHANNEL	
LENGTH	I.D. = .50 O.D. = .87
	ITEM NUMBER
6"	HT-07-04-6
10"	HT-07-04-10
16"	HT-07-04-16
20"	HT-07-04-20
24"	HT-07-04-24
29"	HT-07-04-29
34"	HT-07-04-34

USED WITH 2.00 DIAMETER DISTRIBUTOR BORE/CHANNEL	
LENGTH	I.D. = .62 O.D. = 1.62
	ITEM NUMBER
10"	HT-15-05-10
18"	HT-15-05-18
24"	HT-15-05-24
29"	HT-15-05-29
34"	HT-15-05-34
40"	HT-15-05-40
46"	HT-15-05-46

NOTES:

Stainless Steel Distributor Tubes available on special order for molding highly corrosive plastics materials.

See design and machining guidelines at the end of this Internally Heated Hot Runner Systems section.

The Cool One – Thermocouple Distributor Tube Heaters

Thermocouple (T/C) Distributor Tube Heaters

(240 VAC, T/C type J, 34" leads)



DIA. (AMPS)*	ITEM NUMBER	LENGTH	WATTS
.500 (10 AMP)	HCTC-04-4	4"	380
	HCTC-04-5	5"	500
	HCTC-04-6	6"	600
	HCTC-04-7	7"	700
	HCTC-04-8	8"	820
	HCTC-04-9	9"	920
	HCTC-04-10	10"	1030
	HCTC-04-11	11"	1140
	HCTC-04-12	12"	1250
	HCTC-04-13	13"	1350
	HCTC-04-14	14"	1460
	HCTC-04-15	15"	1570
	HCTC-04-16	16"	1680
	HCTC-04-17	17"	1780
	HCTC-04-18	18"	1900
	HCTC-04-19	19"	2010
	HCTC-04-20	20"	2110
	HCTC-04-21	21"	2220
	HCTC-04-22	22"	2330
	HCTC-04-23	23"	2400
	HCTC-04-24	24"	2400
	HCTC-04-25	25"	2400
	HCTC-04-26	26"	2400
	HCTC-04-27	27"	2400
	HCTC-04-28	28"	2400
	HCTC-04-29	29"	2400
	HCTC-04-30	30"	2400
.625 (10 AMP)	HCTC-05-5	5"	620
	HCTC-05-6	6"	750
	HCTC-05-7	7"	880
	HCTC-05-8	8"	1020
	HCTC-05-9	9"	1160
	HCTC-05-10	10"	1300

DIA. (AMPS)*	ITEM NUMBER	LENGTH	WATTS
.625 (10 AMP)	HCTC-05-11	11"	1430
	HCTC-05-12	12"	1570
	HCTC-05-13	13"	1700
	HCTC-05-14	14"	1840
	HCTC-05-15	15"	1980
	HCTC-05-16	16"	2110
	HCTC-05-17	17"	2250
	HCTC-05-18	18"	2390
.625 (15 AMP)	HCTC-05-19	19"	2520
	HCTC-05-20	20"	2660
	HCTC-05-21	21"	2800
	HCTC-05-22	22"	2930
	HCTC-05-23	23"	3070
	HCTC-05-24	24"	3200
	HCTC-05-25	25"	3340
	HCTC-05-26	26"	3480
.625 (30 AMP)	HCTC-05-27	27"	3620
	HCTC-05-28	28"	3750
	HCTC-05-29	29"	3900
	HCTC-05-30	30"	4020
	HCTC-05-31	31"	4160
	HCTC-05-32	32"	4300
	HCTC-05-33	33"	4430
	HCTC-05-34	34"	4570
	HCTC-05-35	35"	4710
	HCTC-05-36	36"	4840
	HCTC-05-37	37"	4980
	HCTC-05-38	38"	5120
	HCTC-05-39	39"	5250
	HCTC-05-40	40"	5390
	HCTC-05-41	41"	5520
	HCTC-05-42	42"	5520
	HCTC-05-43	43"	5520
	HCTC-05-44	44"	5520

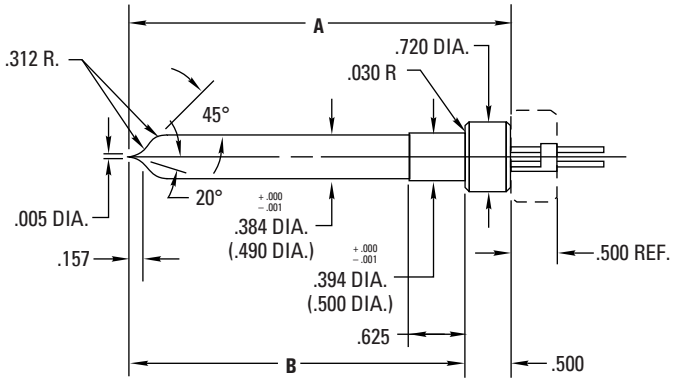
*(AMPS) Amperage requirement for temperature control module.

NOTE: Heaters should be at least 2" shorter than distributor tube length in mold design. See design and machining guidelines at the end of this Internally Heated Hot Runner Systems section.

The Cool One – Components

Auto-Fixed™ "Integral Heater" Probes (240 VAC, T/C Type J Grounded, 48" Leads)

MATERIAL: AISI D-2 STEEL **HARDNESS: 50-55 HRC**



Important: Dimensions shown in parentheses apply to larger probes AFIP5-372 thru 622 only. Tolerances shown also apply to dimensions in parentheses.

ITEM NUMBER**		AFIP4 SERIES PROBES .394 (10 mm) DIAMETER		
STRAIGHT EXIT LEADS	90° EXIT LEADS	A DIM.	B DIM.	WATTS
AFIP4-322	AFIP4-322-90	3.220	2.720	135
AFIP4-372	AFIP4-372-90	3.720	3.220	160
AFIP4-422	AFIP4-422-90	4.220	3.720	185
AFIP4-472	AFIP4-472-90	4.720	4.220	210

**Includes probe, integral heater, thermocouple, adjustment ring and hold down nut.

STRAIGHT



AVAILABLE WITH STRAIGHT OR 90° EXIT HEATER LEADS



See design and machining guidelines at the end of this Internally Heated Hot Runner Systems section.

These probes feature a swaged in heating element which is an integral part of the probe. A separate replaceable thermocouple is installed in each probe as supplied. The integral heater design provides highly efficient heat transfer, uniform heat distribution and is guaranteed for one year.

ITEM NUMBER**		AFIP5 SERIES PROBES .500 (12.9 mm) DIAMETER		
STRAIGHT EXIT LEADS	90° EXIT LEADS	A DIM.	B DIM.	WATTS
AFIP5-372	AFIP5-372-90	3.720	3.220	200
AFIP5-422	AFIP5-422-90	4.220	3.720	230
AFIP5-472	AFIP5-472-90	4.720	4.220	265
AFIP5-522	AFIP5-522-90	5.220	4.720	295
AFIP5-572	AFIP5-572-90	5.720	5.220	325
AFIP5-622	AFIP5-622-90	6.220	5.720	360

Replacement Thermocouples

(ALL PROBES)

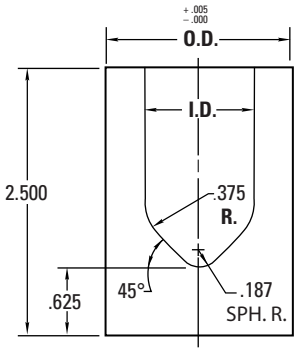
ITEM NUMBER	LEAD LENGTH
TC-9900	48"

Gate Inserts

MATERIAL: AISI S-7 STEEL (pre-hardened)

HARDNESS: 30-34 HRC

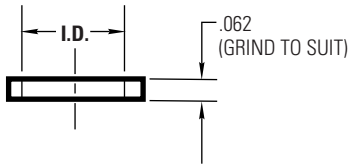
Hardness can be increased to a higher value by heat treatment, if desired.



ITEM NUMBER	O.D.	I.D.	USED WITH
AFGI-04N	1.625	.875	AFIP4 SERIES
AFGI-10N	1.750	1.000	AFIP5 SERIES

Adjustment Rings

(Packaged with all probes)



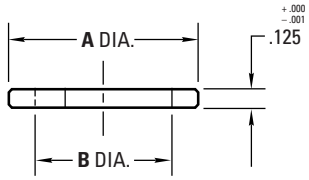
ITEM NUMBER†	I.D.	USED WITH
RAF4-062	.469	AFIP4 SERIES
RAF5-062	.565	AFIP5 SERIES

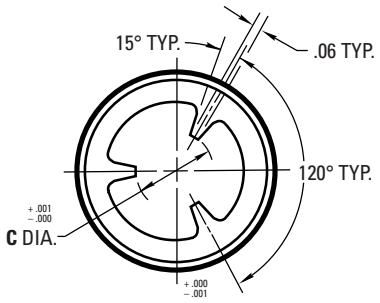
†Bag of 5 rings.

Register Rings

MATERIAL: AISI H-13 STEEL

HARDNESS: 48-52 HRC





ITEM NUMBER	A DIM.	B DIM.	C DIM.	USED WITH
AFRR-04N	1.062	.865	.387	AFIP4 SERIES
AFRR-05N	1.187	.937	.493	AFIP5 SERIES

Hold-Down Nut

(Packaged with all probes)

THICKNESS = .500
THREAD = 1"- 8
HEX FLAT = 9/16



ITEM NUMBER
AFN-100

Hold-Down Nut Wrench*

ITEM NUMBER
WR-916

*Required for straight exit leads only.

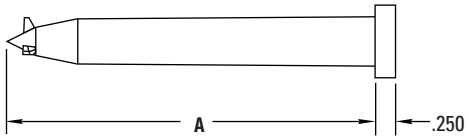
The Cool One – Probes and Probe Heaters

Auto-Fixed™ Probes (3" to 6" long)

MATERIAL: AISI D-2 STEEL
HARDNESS: 50-55 HRC

LENGTH A	ITEM NUMBER **
2.893	AFP-310
3.625	AFP-410
4.625	AFP-510
5.609	AFP-610

*Includes probe, stop sleeve and hold down nut only.





See design and machining guidelines at the end of this Internally Heated Hot Runner Systems section.

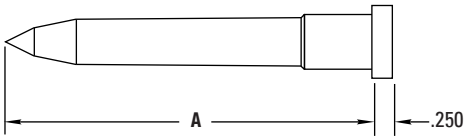
These finned style Auto-Fixed probes employ a precision engineered tip configuration that automatically "fixes" the relationship between probe tip and gate, centering the probe and limiting tip protrusion into the gate. Thermocouple heaters are guaranteed for one year as detailed under the heater chart below. Gate inserts (shown on page 119), pre-machined for use with these probes, can save valuable machining time and help assure optimum probe performance.

Auto-Fixed™ Finless Probes (3" to 6" long)

MATERIAL: AISI D-2 STEEL
HARDNESS: 50-55 HRC

LENGTH A	ITEM NUMBER **
2.893	AFPN-310
3.625	AFPN-410
4.625	AFPN-510
5.609	AFPN-610

*Includes probe, stop sleeve and hold down nut only.





See design and machining guidelines at the end of this Internally Heated Hot Runner Systems section.

These finless style Auto-Fixed probes are available in the same sizes as the finned probes above and also in lengths up to 10". An optional register ring is available to provide added stability at the probe tip if desired. As with the finned probes, thermocouple heaters are guaranteed for one year and pre-machined gate inserts are available.

NOTE: Due to minimum distance requirements specified, the AFPO-310 and AFPN-310 probes cannot be used in a Cool One system. They may, however, be used in an insulated runner system.

Thermocouple (T/C) Probe Heaters*

(.250 diameter, 240 VAC, T/C type J grounded, 34" leads)



ITEM NUMBER	FOR PROBE	WATTS	LENGTH
AFTC-213-2	AFP(N)-310	150	3.00
AFTC-214-2	AFP(N)-410	220	3.75
AFTC-215-2	AFP(N)-510	275	4.75
AFTC-216-2	AFP(N)-610	350	5.75

Non-Thermocouple Probe Heaters

(.250 diameter, 240 VAC, 34" leads)



ITEM NUMBER	FOR PROBE	WATTS	LENGTH
AFC-213-2	AFP(N)-310	150	3.00
AFC-214-2	AFP(N)-410	220	3.75
AFC-215-2	AFP(N)-510	275	4.75
AFC-216-2	AFP(N)-610	350	5.75

*Thermocouple (T/C) Probe Heaters are guaranteed for one year from date of shipment.

The Cool One – Accessories and Replacement Parts

Accessories/Replacement Parts for 3" to 6" Long Auto-fixed Probes

See design and machining guidelines at the end of this Internally Heated Hot Runner Systems section.

Hold-Down Nut

(Packaged with all probes)

Thickness = .50
Thread = 1"-8
Hex Flat = 9/16



ITEM NUMBER
AFN-100

Stop Sleeve

(Packaged with all probes)

Length = 1.375
Thread = 3/8"-24
Dia. = .375



ITEM NUMBER
AFSS-38

Register Ring

(For Finless Probes Only)

AISI H-13 STEEL
48-52 HRC
I.D. = .562
O.D. = 1.375



ITEM NUMBER
AFRR-10N

Gate Inserts

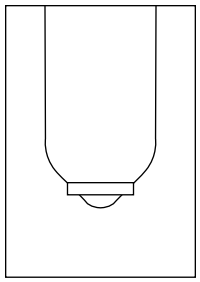
MATERIAL: AISI S-7 STEEL (pre-hardened)
HARDNESS: 30-34 HRC

Hardness can be increased to a higher value by heat treatment, if desired.

I.D. = 1.000 O.D. = 1.750 Height = 2.500

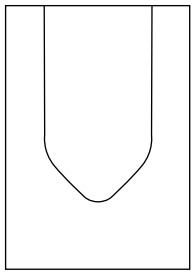


ITEM NUMBER	FOR PROBE
AFGI-10	AFP-310 thru 610
AFGI-10N	AFPN-310 thru 610



AFGI-10

Gate inserts are supplied premachined. See design and machining guidelines at the end of this Internally Heated Hot Runner Systems section.



AFGI-10N

Adjustment Rings

For simplified counterbore depth adjustment (No change from previous rings).

I.D. = .687 O.D. = .868



ITEM NUMBER*	THICKNESS
RAF-002	.002
RAF-003	.003
RAF-005	.005
RAF-007	.007
RAF-032	.032
RAF-062	.062
RAF-125	.125

*Package of 10.

Replacement Thermocouple (T/C) And Non T/C Heaters

FOR DISCONTINUED AUTO-FIXED PROBES AFP-300, 400, 500, 600
(.250 diameter, 240 VAC, T/C type J grounded, 36" leads)

While the original Auto-Fixed probes (AFP-300, 400, 500, 600) have been replaced with the AFP-310 thru 610 series, replacement heaters for these previous probes are still available as detailed here.

T/C HEATERS ITEM NUMBER	NON T/C HEATERS ITEM NUMBER	FOR PROBE	WATTS	LENGTH
AFTC-202-2	AFC-202-2	AFP-300	200	2"
AFTC-203-2	AFC-203-2	AFP-400	300	3"
AFTC-204-2	AFC-204-2	AFP-500	375	4"
AFTC-205-2	AFC-205-2	AFP-600	475	5"

The Cool One – Accessories and Replacement Parts

Auto-Fixed™ Finless Probes (7" to 10" long)

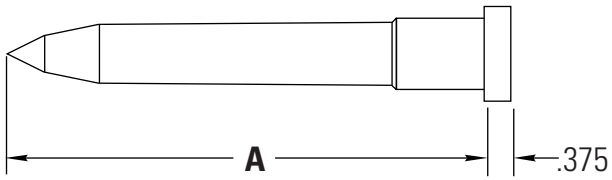
MATERIAL: AISI D-2 STEEL
HARDNESS: 50-55 HRC

These longer probes are ideal for larger molds or gating into deeper cavity configurations. The optional register ring shown below may be used to provide added stability at the probe tip if desired. Thermocouple heaters are guaranteed for one year as detailed under the heater chart below.



LENGTH A	ITEM NUMBER**
7.000	AFPN-720
8.000	AFPN-820
9.000	AFPN-920
10.000	AFPN-1020

**Includes probe, stop sleeve and hold down nut only.



Hold-Down Nut

(Packaged with all probes)

Thickness = .50
Thread = 1¼"-12
Hex Flat = 5/8



ITEM NUMBER
AFN-125

Stop Sleeve

(Packaged with all probes)

Length = 1.375
Thread = 1/2"-20
Dia. = .500



ITEM NUMBER
AFSS-12

Register Ring

AISI H-13 STEEL
48-52 HRC
I.D. = .693
O.D. = 1.500



ITEM NUMBER
AFRR-20N

Thermocouple (T/C) Probe Heaters†

(.375 diameter, 240 VAC, T/C type J grounded, 46" leads)



ITEM NUMBER	FOR PROBE	WATTS	LENGTH
AFTC-327-2	AFPN-720	645	7.15
AFTC-328-2	AFPN-820	760	8.15
AFTC-329-2	AFPN-920	870	9.15
AFTC-3210-2	AFPN-1020	980	10.15

†Thermocouple (T/C) Probe Heaters are guaranteed for one year from date of shipment.

Gate Insert

MATERIAL: AISI S-7 STEEL (pre-hardened)
HARDNESS: 30-34 HRC

Hardness can be increased to a higher value by heat treatment, if desired.

I.D. = 1.125 O.D. = 2000 Height = 2.500



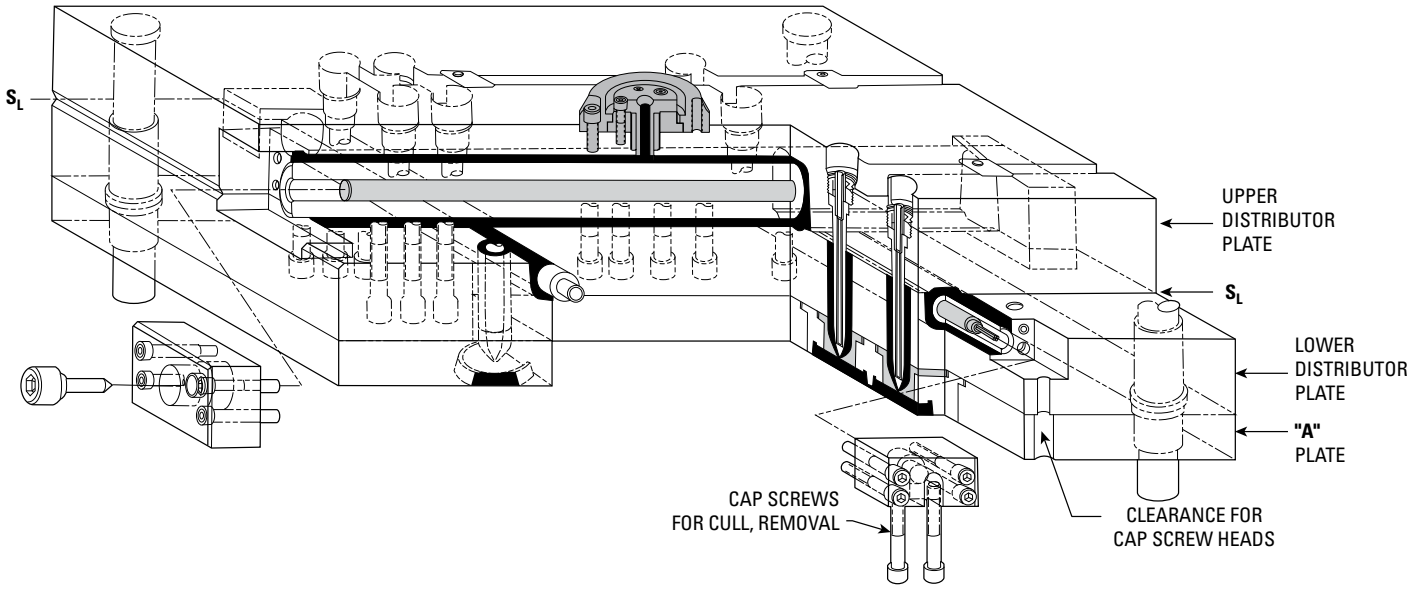
ITEM NUMBER
AFGI-20N

Adjustment Rings

Moldmaker to supply to suit (.990 O.D., .820 I.D.)

See design and machining guidelines at the end of this Internally Heated Hot Runner Systems section.

Split Plate Design



SPLIT PLATE CONCEPT

While D-M-E normally recommends the solid plate approach to hot runner molding, the split plate concept will appeal to the molder who frequently has to change colors or materials in a specific molding application. The split plate concept allows for the distributor plate to be separated and the "cull" (material surrounding the distributor tubes and probes) removed.

To facilitate removal of the cull from the mold while it is in the machine, it is necessary to provide the following: 1) bolt pattern that will allow for the removal of the "A" plate from the parting line when the mold is open; 2) leader pins and bushings that maintain plate alignment when carrying the "A" plate and the "lower" distributor plate to the movable side; 3) a bolt pattern that will allow unfastening of the distributor plates, behind the "A" plate, form the parting line opening; 4) the attachment of mold straps and a bolt arrangement that will enable the operator to move the mold plates in the proper sequences with normal molding machine manual controls; 5) a method of removing the cull from the channel, in most cases from the probe side.

One method of removing the cull from the probe side is to install cap screws into the end caps, as shown above.

Provide for a 1-inch deep counterbored clearance in the lower distributor plate for these cap screw heads. This clearance will create a delay and allow the material to separate from the probe drop area, subsequently pulling the cull from the probes.

Another method of cull removal would be to drill and tap thru holes in the end caps. After the distributor plates have been separated, install threaded shafts and tighten to apply pressure on the cull. If the cull resists removal due to shrinkage around the probes, it may be necessary to apply heat to the probes by reducing the control setpoint temperature and turning the probe heaters on.

If the mold is going to be benched for cull removal, the bolts securing the split plate may be installed from the back of the mold (see optional cap screw placement, Figure #3). The probes should be removed first, then the bolts securing the distributor plates and the bolts in the end caps. After the distributor plates are split, the cull may be removed by any of the following methods: 1) threaded holes in the end caps to allow for threaded shafts to be used as jack screws or 2) pry slots in the end caps to be able to remove with pry bars.

Split Plate Designs and Machining Guidelines – Trapezoids

Two Level Trapezoid

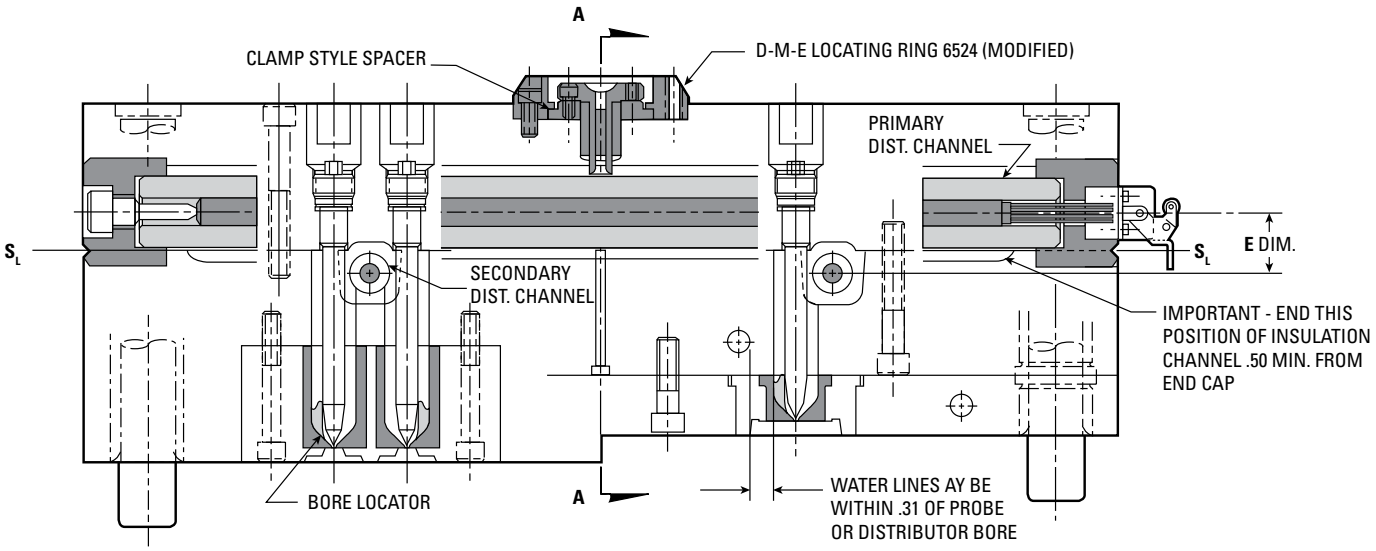


FIGURE 1

NOTE: The S_L symbol indicates the split line for split plate designs.

Single Level Trapezoid

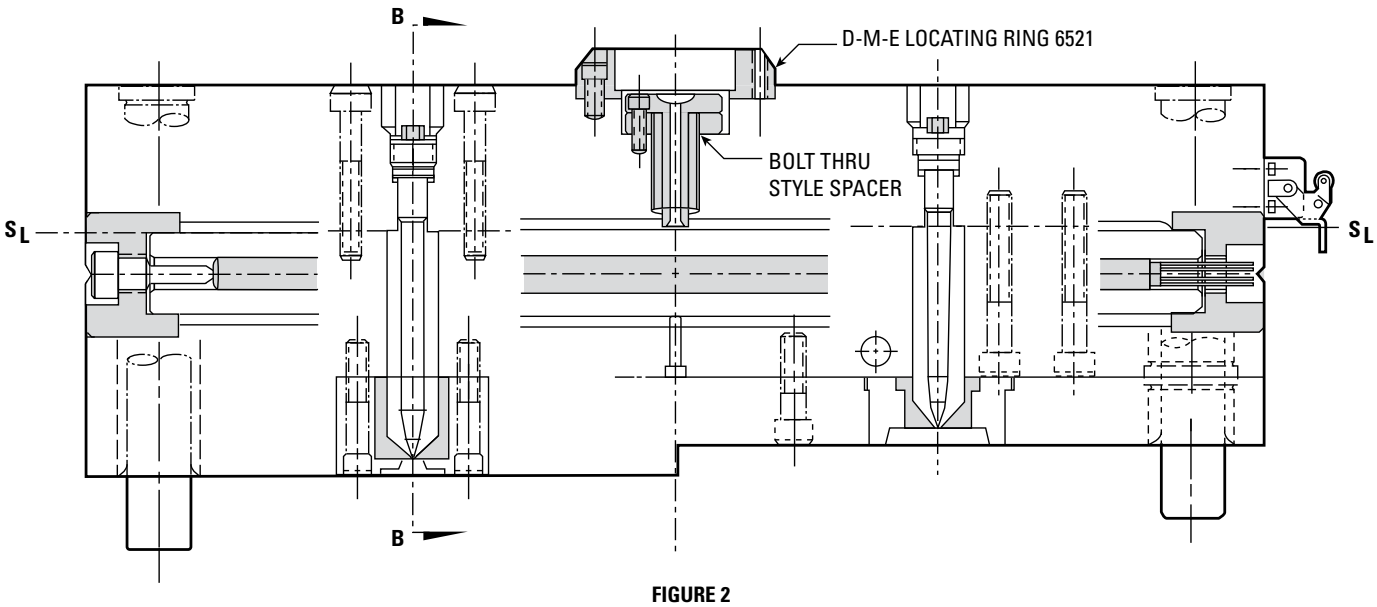


FIGURE 2

Dimensions and callouts on each side view (Figures 1, 2 and 3) can be applied to all three side views.

Split Plate Designs and Machining Guidelines
Single Level Round

Single Level Round

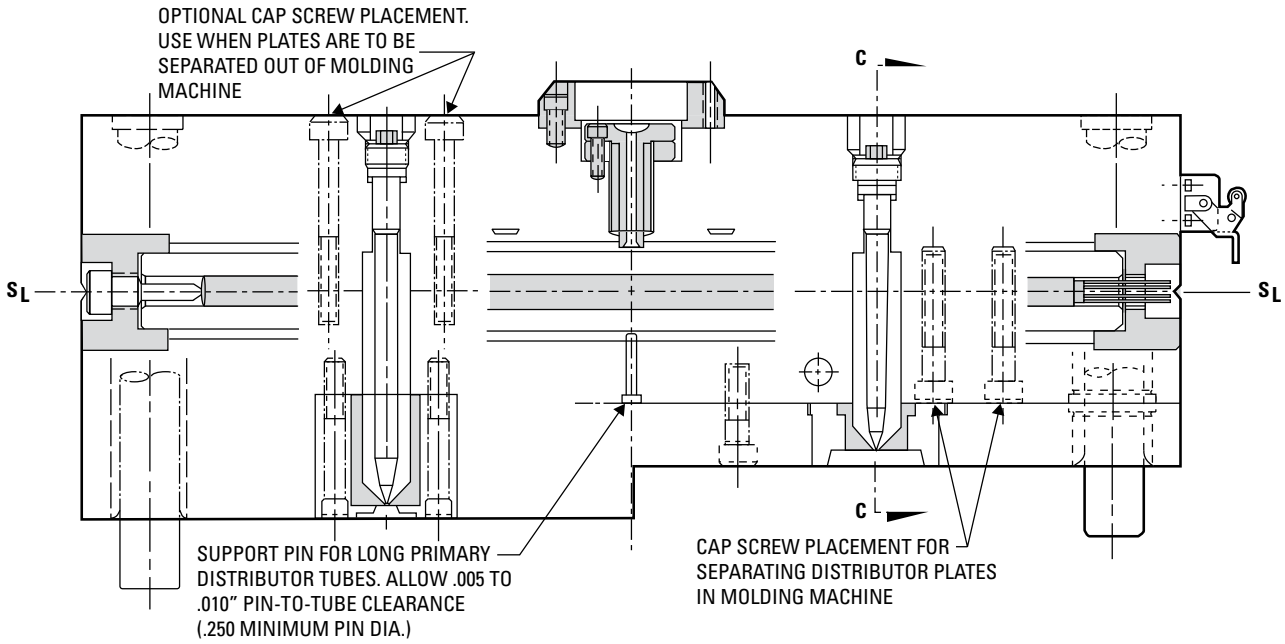
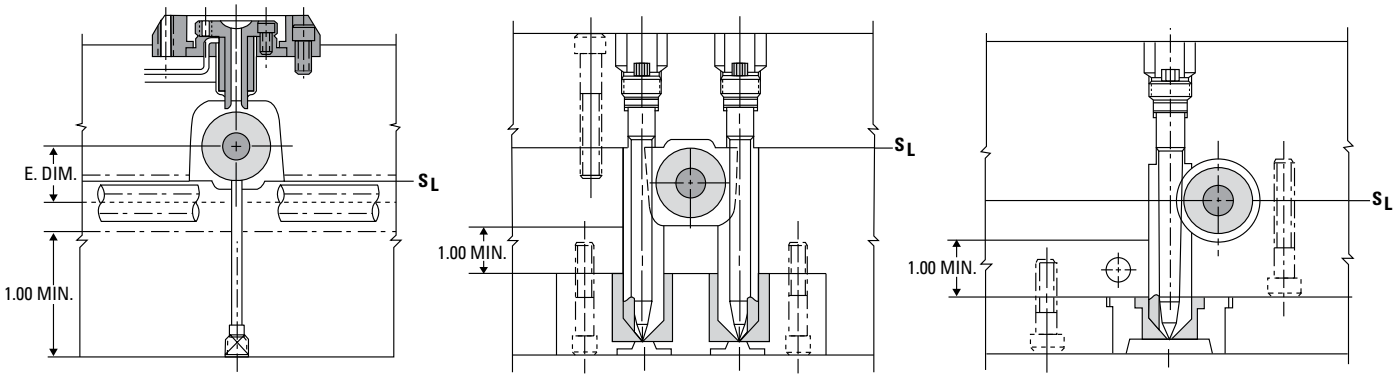


FIGURE 3

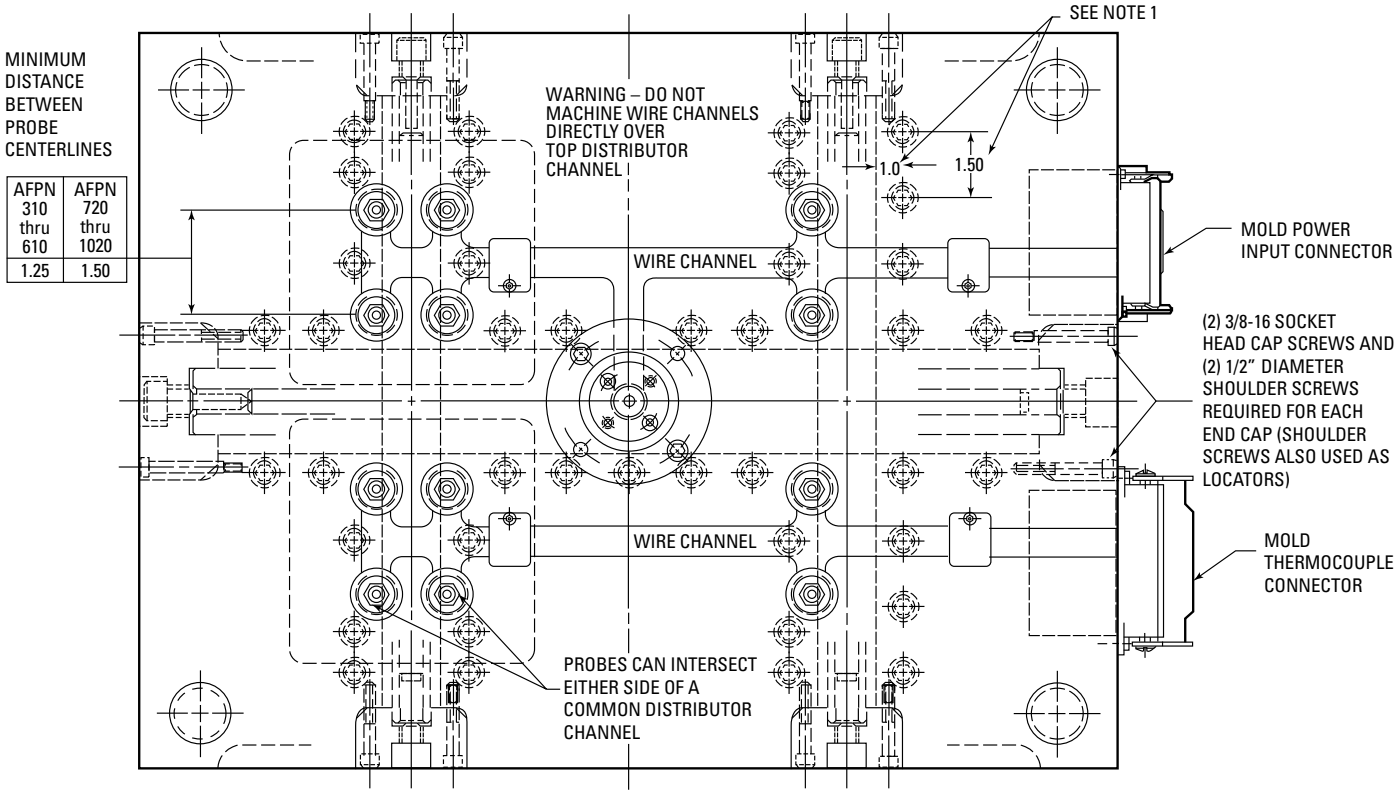
NOTE: The 2.00 dia. channel uses the 1.625 dia. distributor tube.
the 1.250 dia. channel uses the .875 dia. distributor tube.



SECTION A-A **SECTION B-B** **SECTION C-C**

Split Plate Design and Machining Guidelines

Top of Mold



INTERSECTIONS BETWEEN DISTRIBUTOR CHANNELS

PRIMARY DIST. CHANNEL	SECONDARY DIST. CHANNEL	E DIM. (± .020)
2.00	2.00	1.705
2.00	1.25	1.330
*1.25	1.25	.955

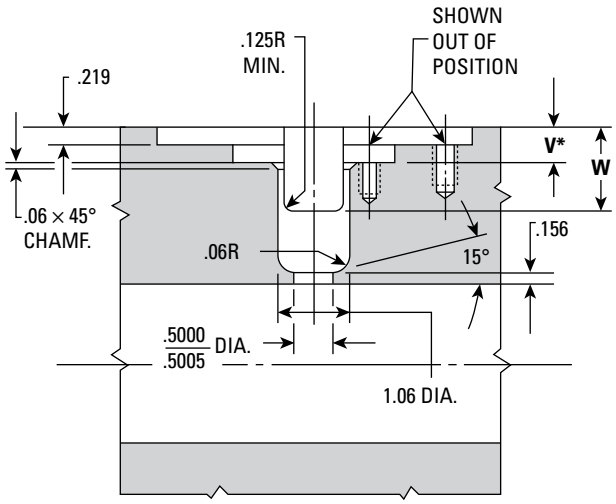
*The 2.00" distributor channel with 1.625 dia. tube is recommended.

NOTES:

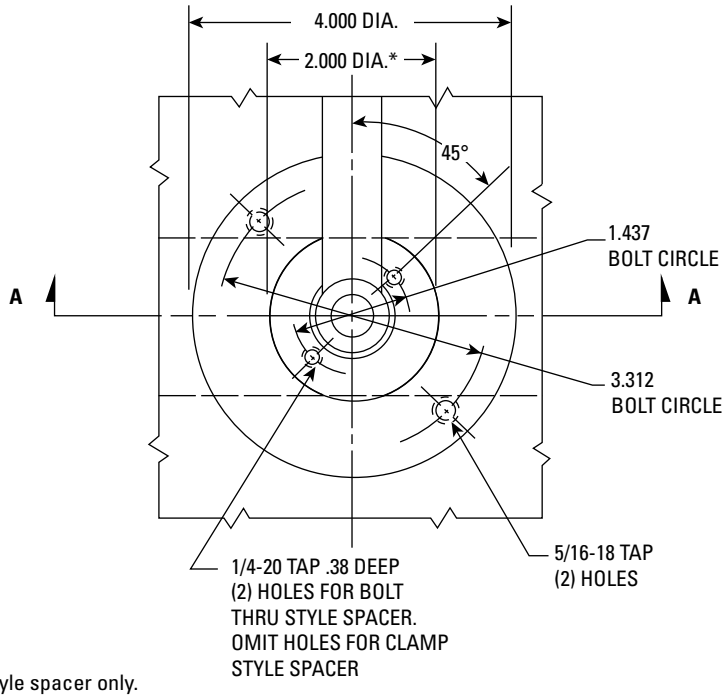
1. To secure distributor plates, the use of 1/2-13 hardened cap screws is recommended. Line both sides of the distributor channel on 1.5" centers, 1" from channel. Torque to manufacturer's recommendations (Approx. 110 foot pounds)
2. Moldmaker to supply guide pins and bushings, molds straps and appropriate holes to allow plates to be split and moved when removing the cull in the molding machine
3. When separating the distributor system, the cull will have the tendency to stay on the probe side. A method of extraction is suggested to facilitate removal

Machining for Heated Nozzle Locator, Locating Ring and Distributor Channel

Machining for Heated Nozzle Locator and D-M-E 6521 or 6524 (Modified) Locating Ring — Adjust Accordingly for Other Locating Rings

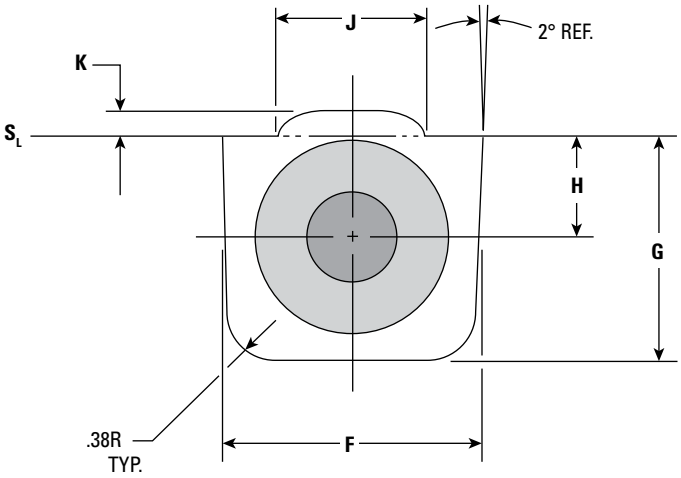


SECTION A-A
V&W = Depths determined by application.



***NOTE:** Counterbore depth (V) and diameter (2.000") apply to bolt thru style spacer only.

Machining for Trapezoidal Distributor Channel



DIM.	PRIMARY CHANNEL WITH 1.625 DIA. DIST. TUBE	SECONDARY CHANNEL WITH .875 DIA. DIST. TUBE
F	2.000	1.250
G	1.850	1.100
H	.850	.475
J	1.000	.750
K	.150	.150

NOTE: For Trapezoidal Designs, select from above to suit mold/part requirements. For single level round, use a 2" dia. bore with 1.625 O.D. distributor tube — or — 1.25 dia. bore with .875 O.D. distributor tube.

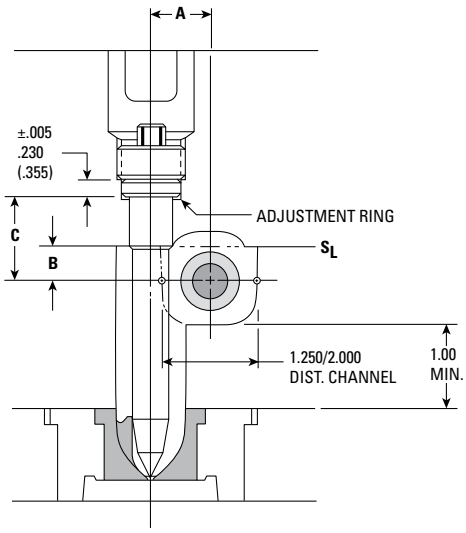
The design guidelines in this document serve as production-proven recommendations of the D-M-E Hot Runner System, and are ONLY applicable to the current line of D-M-E components. The guidelines and component details in this document supersede all previous documents. Due to the wide variety of plastics materials and possible molding applications available, no warranties are expressed or implied.

D-M-E Hot Runner System Components are manufactured and sold under one or more of the following U.S. patents: 3,767,340; 3,010,155; 3,023,458; 3,231,938 and 3,758,248. Foreign patents issued and pending.

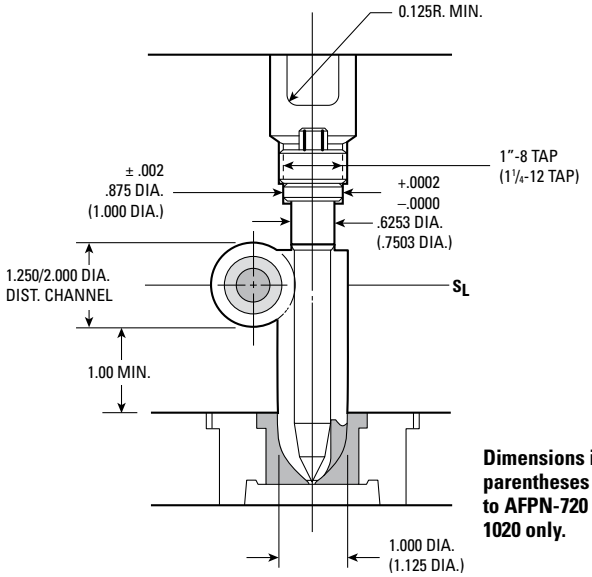
Dimensions for Probe Machining, Probe Set-up and Gate Machining

Probe Machining Dimensions

(NOTE: Dimensions shown are common to either round or trapezoid.)



NOTE: ONLY AFPN Series probes are recommended for the trapezoidal and round split plate concept.



Dimensions in parentheses apply to AFPN-720 thru 1020 only.

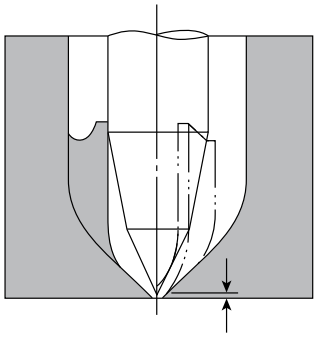
USED WITH .875 DIA. DISTRIBUTOR TUBE (1.25 CHANNEL)

PROBE ITEM NO.	A DIM. ± .020	B DIM. MIN.	C DIM. MIN.
AFPN-410	.796	.500	1.375
AFPN-510	.796	.500	1.375
AFPN-610	.796	.500	1.375
AFPN-720	.861	.750	2.250
AFPN-820	.861	.750	2.250
AFPN-920	.861	.750	2.250
AFPN-1020	.861	.750	2.250

USED WITH 1.625 DIA. DISTRIBUTOR TUBE (2.00 CHANNEL)

PROBE ITEM NO.	A DIM. ± .020	B DIM. MIN.	C DIM. MIN.
AFPN-410	1.171	.500	1.375
AFPN-510	1.171	.500	1.375
AFPN-610	1.171	.500	1.375
AFPN-720	1.236	.750	2.250
AFPN-820	1.236	.750	2.250
AFPN-920	1.236	.750	2.250
AFPN-1020	1.236	.750	2.250

Initial Probe Set-up Dimensions



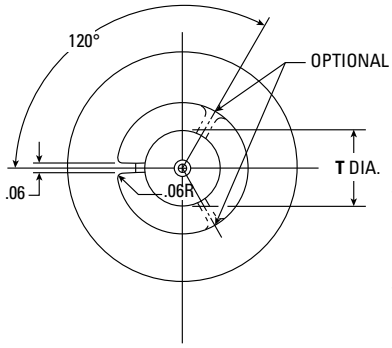
X DIMENSION
(PROBE TIP SETTING
AT ROOM TEMPERATURE)

NOTE: X Dimension is for initial probe set-up and may require further adjustment. Final position of probe tip will be determined by gate cosmetics and flow requirements.

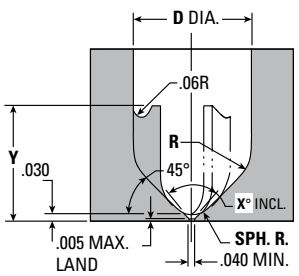
PROBE ITEM NO.	X DIM.
AFPN-410	.000-.004
AFPN-510	.000-.005
AFPN-610	.000-.006

PROBE ITEM NO.	X DIM.
AFPN-720	.000-.007
AFPN-820	.000-.008
AFPN-920	.000-.009
AFPN-1020	.000-.010

Gate Machining Dimensions



IMPORTANT: When using a single locator – the primary locator must be positioned directly opposite to the distributor tube feeding the drop.

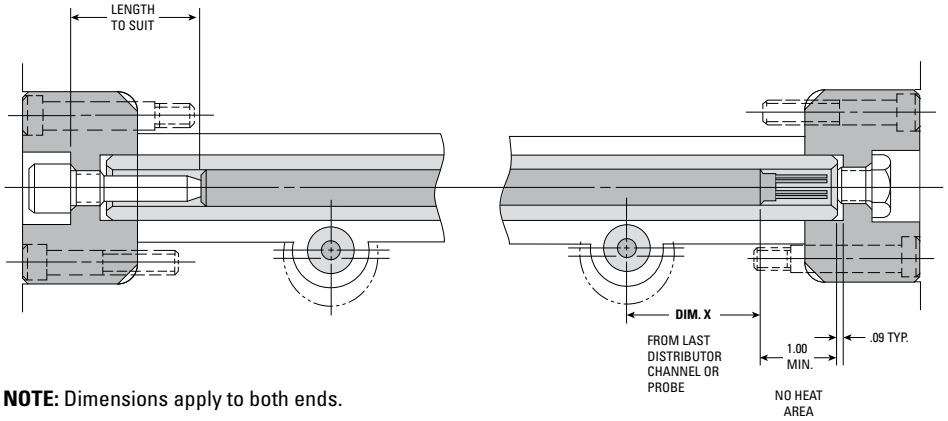


PROBE ITEM NO.	AFPN-410 THRU-610	AFPN-720 THRU-1020
D DIA.	1.000	1.125
T DIA.	.562	.693
Y DIM.	1.000	.850
SPH.R.	.187	.250
R	.375	.500

X° = 80° INCL. MIN.
90° INCL. MAX.

Split Plate Designs and Machining Guidelines

Recommended Relationship Between Thermocouple (T/C) Distributor Tube Heaters, Distributor Tubes and Intersecting Tubes or Probes

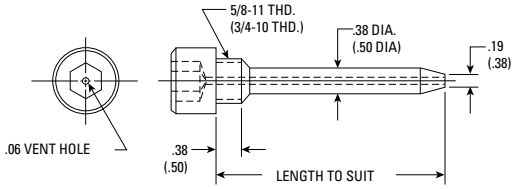


NOTE: Dimensions apply to both ends.

FOR PRIMARY CHANNEL WITH	DIM. X
1.625 DIST. TUBE	2.250 MIN.
.875 DIST. TUBE	1.750 MIN.

Heater Stop

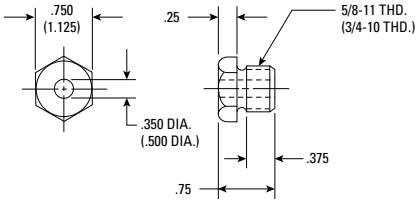
Moldmaker to supply to suit



(**NOTE:** Dimensions in parentheses apply to large distributor tube).

Heater Lead Wire Protector

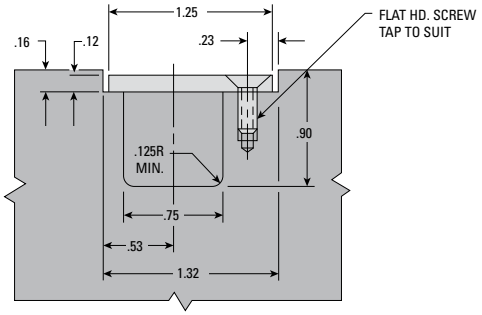
Moldmaker to supply to suit



(**NOTE:** Dimensions in parentheses apply to large distributor tube).

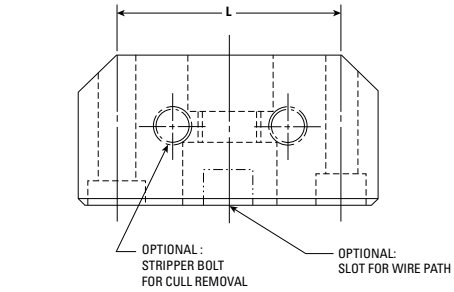
Recommended Wire Channels and Strap

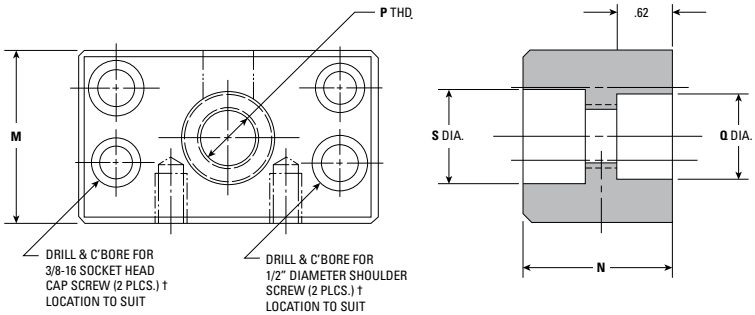
Break all sharp corners to prevent damage to heater lead wires. Moldmaker to supply to suit.



End Cap Dimensions

(Moldmaker to supply to suit)





DIM.	USED WITH .875 DIA. DIST. TUBE (1.25 CHANNEL)	USED WITH 1.625 DIA. DIST. TUBE (2.00 CHANNEL)
*L	2.125 MIN.	2.875 MIN.
*M	1.500 MIN.	2.500 MIN.
N	1.750 MIN.	1.875 MIN.
P	5/8-11	3/4-10
Q	$.875^{+.002}_{-.000}$	$1.625^{+.002}_{-.000}$
S	1.000	1.500

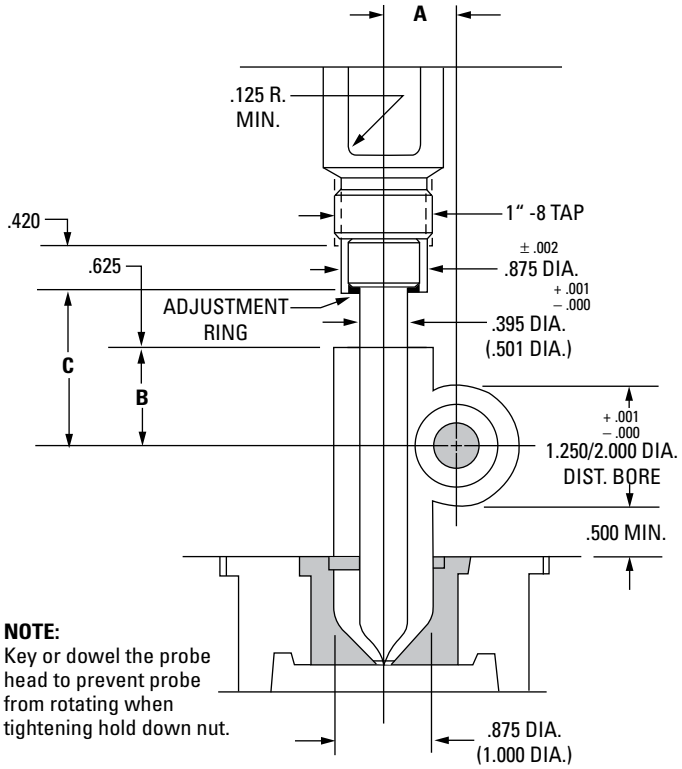
***L** & **M** dimensions must extend .250 past channel.

†**NOTE:** 5/16-18 S.H.C.S. & 3/8 dia. locational shoulder screws may be substituted on the 1.25 distributor channel.

D-M-E #3 STEEL IS RECOMMENDED FOR END CAPS.

Dimensions for Probe Machining and Set-up Solid Block and Split Plate Designs

Probe Machining Dimensions – Solid Block Design



NOTE:
Key or dowel the probe head to prevent probe from rotating when tightening hold down nut.

USED WITH .875 DIA. DISTRIBUTOR TUBE (1.25 DIST. BORE)

PROBE ITEM NUMBER	A DIM. + .000/–.020	B DIM. MIN.	C DIM. MIN.
AFIP4-372-(90)	.709	.788	1.413
AFIP4-422-(90)	.709	.788	1.413
AFIP4-472-(90)	.709	.788	1.413
AFIP5-372-(90)	.762	1.000	1.625
AFIP5-422-(90)	.762	1.000	1.625
AFIP5-472-(90)	.762	1.000	1.625
AFIP5-522-(90)	.762	1.000	1.625
AFIP5-572-(90)	.762	1.000	1.625
AFIP5-622-(90)	.762	1.000	1.625

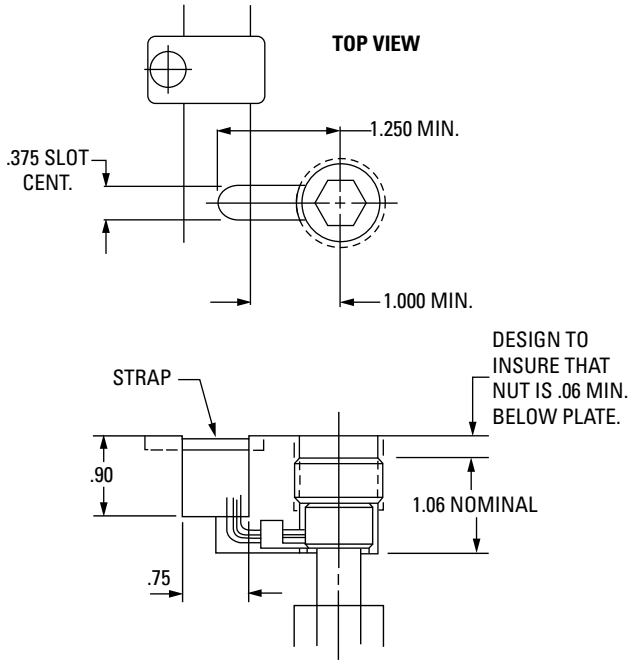
USED WITH 1.625 DIA. DISTRIBUTOR TUBE (2.00 DIST. BORE)

PROBE ITEM NUMBER	A DIM. + .000/–.020	B DIM. MIN.	C DIM. MIN.
AFIP5-372-(90)	1.137	1.000	1.625
AFIP5-422-(90)	1.137	1.000	1.625
AFIP5-472-(90)	1.137	1.000	1.625
AFIP5-522-(90)	1.137	1.000	1.625
AFIP5-572-(90)	1.137	1.000	1.625
AFIP5-622-(90)	1.137	1.000	1.625

IMPORTANT: Dimensions shown in parentheses apply to larger probes AFIP5-372 thru 5-622 only. Tolerances shown also apply to dimensions in parentheses.

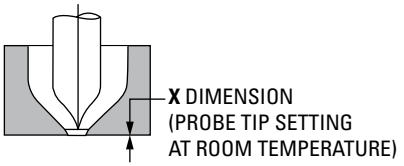
Recommended Wire Channels and Strap (Solid Block or Split Plate Design)

Break all sharp corners to prevent damage to heater lead wires



PARTIAL SIDE VIEW SHOWING INSTALLATION OF PROBE WITH 90° LEADS

Initial Probe Set-up Dimensions (Solid Block or Split Plate Design)



PROBE ITEM NUMBER	X DIM.
AFIP4-372-(90)	.000-.004
AFIP4-422-(90)	.000-.004
AFIP4-472-(90)	.000-.005
AFIP5-372-(90)	.000-.004
AFIP5-422-(90)	.000-.004

PROBE ITEM NUMBER	X DIM.
AFIP5-472-(90)	.000-.005
AFIP5-522-(90)	.000-.005
AFIP5-572-(90)	.000-.006
AFIP5-622-(90)	.000-.006

NOTE: X dimension is for initial probe set-up and may require further adjustment. Final position of probe tip will be determined by gate cosmetics and flow requirements.

Gate Machining Dimensions (Solid Block Design)

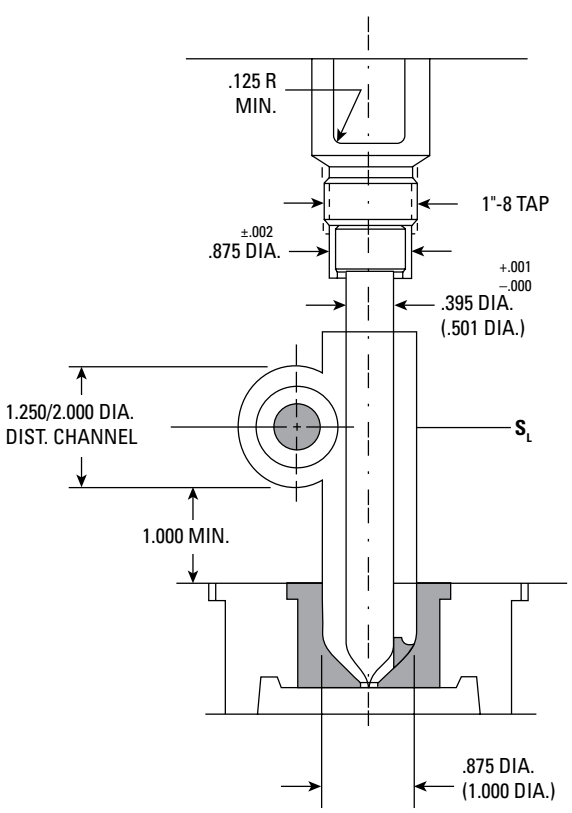
Refer to drawing on next page for Auto-Fixed Finless Probes and apply the following:

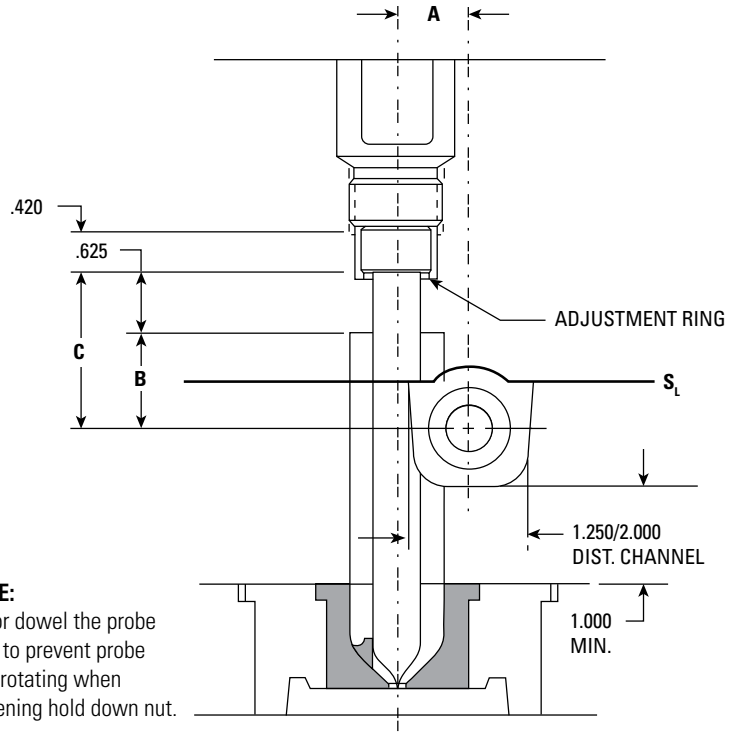
PROBE SERIES	D DIA.	SPH. R.	R
AFIP4	.875	.187	.38
AFIP5	1.000		

Probe Machining Dimensions – Split Plate Design

Probe Machining Dimensions – Split Plate Design

(See previous page for initial probe set-up dimensions and wire channels)





NOTE:
Key or dowel the probe head to prevent probe from rotating when tightening hold down nut.

USED WITH .875 DIA. DISTRIBUTOR TUBE (1.25 DIST. BORE)

PROBE ITEM NUMBER	A DIM. + .000/–.020	B DIM. MIN.	C DIM. MIN.
AFIP4-372-(90)	.709	.788	1.413
AFIP4-422-(90)	.709	.788	1.413
AFIP4-472-(90)	.709	.788	1.413
AFIP5-372-(90)	.762	1.000	1.625
AFIP5-422-(90)	.762	1.000	1.625
AFIP5-472-(90)	.762	1.000	1.625
AFIP5-522-(90)	.762	1.000	1.625
AFIP5-572-(90)	.762	1.000	1.625
AFIP5-622-(90)	.762	1.000	1.625

USED WITH 1.625 DIA. DISTRIBUTOR TUBE (2.00 DIST. BORE)

PROBE ITEM NUMBER	A DIM. + .000/–.020	B DIM. MIN.	C DIM. MIN.
AFIP5-372-(90)	1.137	1.000	1.625
AFIP5-422-(90)	1.137	1.000	1.625
AFIP5-472-(90)	1.137	1.000	1.625
AFIP5-522-(90)	1.137	1.000	1.625
AFIP5-572-(90)	1.137	1.000	1.625
AFIP5-622-(90)	1.137	1.000	1.625

IMPORTANT: Dimensions shown in parentheses apply to larger probes AFIP5-372 thru 5-622 only. Tolerances shown also apply to dimensions in parentheses.

NOTE: The symbol "S_L" is used to show the split line. Dimensions shown are common to either round or trapezoid applications.

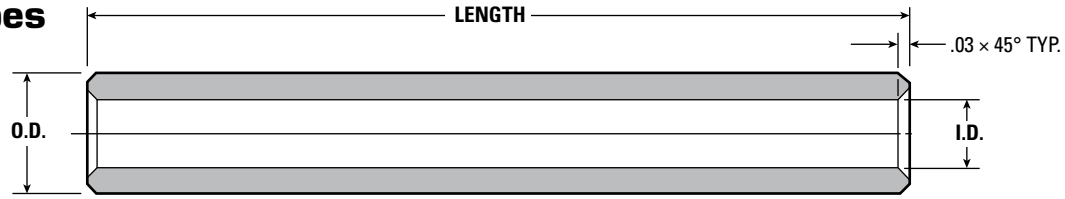
Gate Machining Dimensions (Split Plate Design)

PROBE SERIES	AFIP4	AFIP5
D DIA.	.875	1.000
T DIA.	.390	.496
Y DIM.	.480	.530
SPH.R.	.187	.187
R	.375	.375

Distributor Tubes and Heaters

Distributor Tubes

MATERIAL: AISI P-20 STEEL
HARDNESS: 28-35 HRC



USED WITH 1.250 DIST. BORE

ITEM NO.	O.D.	I.D.	LENGTH
HT-07-04-6	.875	.500	6″
HT-07-04-10			10″
HT-07-04-16			16″
HT-07-04-20			20″
HT-07-04-24			24″
HT-07-04-29			29″
HT-07-04-34			34″

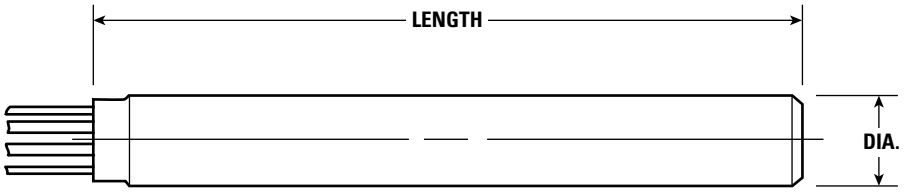
USED WITH 2.000 DIST. BORE

ITEM NO.	O.D.	I.D.	LENGTH
HT-15-05-10	1.625	.625	10″
HT-15-05-18			18″
HT-15-05-24			24″
HT-15-05-29			29″
HT-15-05-34			34″
HT-15-05-40			40″
HT-15-05-46			46″

Thermocouple (T/C) Distributor Tube Heaters

240 VAC, T/C type J grounded, 34″ leads

WIRING INFORMATION
Power leads — BLACK OR MULTI-COLORED
T/C leads — RED & WHITE
RED is negative (–)
WHITE is positive (+)



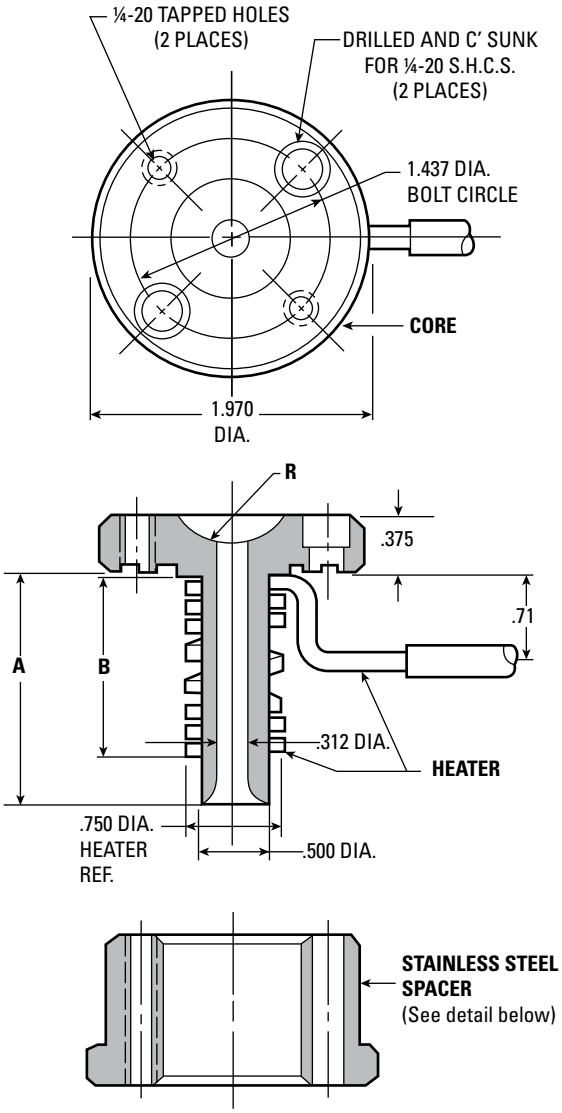
ITEM NO.	DIA.	LENGTH	WATTS	CONTROL
HCTC-04-4	.500	4″	380	15 AMP
HCTC-04-5		5″	500	
HCTC-04-6		6″	600	
HCTC-04-7		7″	700	
HCTC-04-8		8″	820	
HCTC-04-9		9″	920	
HCTC-04-10		10″	1030	
HCTC-04-11		11″	1140	
HCTC-04-12		12″	1250	
HCTC-04-13		13″	1350	
HCTC-04-14		14″	1460	
HCTC-04-15		15″	1570	
HCTC-04-16		16″	1680	
HCTC-04-17		17″	1780	
HCTC-04-18		18″	1900	
HCTC-04-19		19″	2010	
HCTC-04-20		20″	2110	
HCTC-04-21		21″	2220	
HCTC-04-22		22″	2330	
HCTC-04-23		23″	2400	
HCTC-04-24		24″	2400	
HCTC-04-25		25″	2400	
HCTC-04-26		26″	2400	
HCTC-04-27		27″	2400	
HCTC-04-28		28″	2400	
HCTC-04-29		29″	2400	
HCTC-04-30		30″	2400	

ITEM NO.	DIA.	LENGTH	WATTS	CONTROL
HCTC-05-5	.625	5″	620	15 AMP
HCTC-05-6		6″	750	
HCTC-05-7		7″	880	
HCTC-05-8		8″	1020	
HCTC-05-9		9″	1160	
HCTC-05-10		10″	1300	
HCTC-05-11		11″	1430	
HCTC-05-12		12″	1570	
HCTC-05-13		13″	1700	
HCTC-05-14		14″	1840	
HCTC-05-15		15″	1980	
HCTC-05-16		16″	2110	
HCTC-05-17		17″	2250	
HCTC-05-18		18″	2390	
HCTC-05-19		19″	2520	
HCTC-05-20		20″	2660	
HCTC-05-21		21″	2800	
HCTC-05-22		22″	2930	
HCTC-05-23		23″	3070	
HCTC-05-24		24″	3200	
HCTC-05-25		25″	3340	
HCTC-05-26		26″	3480	

ITEM NO.	DIA.	LENGTH	WATTS	CONTROL
HCTC-05-27	.625	27″	3620	30 AMP
HCTC-05-28		28″	3750	
HCTC-05-29		29″	3900	
HCTC-05-30		30″	4020	
HCTC-05-31		31″	4160	
HCTC-05-32		32″	4300	
HCTC-05-33		33″	4430	
HCTC-05-34		34″	4570	
HCTC-05-35		35″	4710	
HCTC-05-36		36″	4840	
HCTC-05-37		37″	4980	
HCTC-05-38		38″	5120	
HCTC-05-39		39″	5250	
HCTC-05-40		40″	5390	
HCTC-05-41		41″	5520	
HCTC-05-42		42″	5520	
HCTC-05-43		43″	5520	
HCTC-05-44		44″	5520	

Nozzle Locator Assemblies, Cores and Heaters

Heated Nozzle Locator Assemblies



ITEM NO.		A DIM.	B DIM.
R = ½	R = ¾		
HNL-462	HNL-662	1.809	1.450
HNL-472	HNL-672	2.309	1.950

HNL-462 and HNL-662 assemblies include:
- HNC-46 or HNC-66 core, respectively
- SSTC-62-90 heater
- HNS-67 spacer (stainless steel)

HNL-472 and HNL-672 assemblies include:
- HNC-47 or HNC-67 core, respectively
- SSTC-72-90 heater
- HNS-67 spacer (stainless steel)

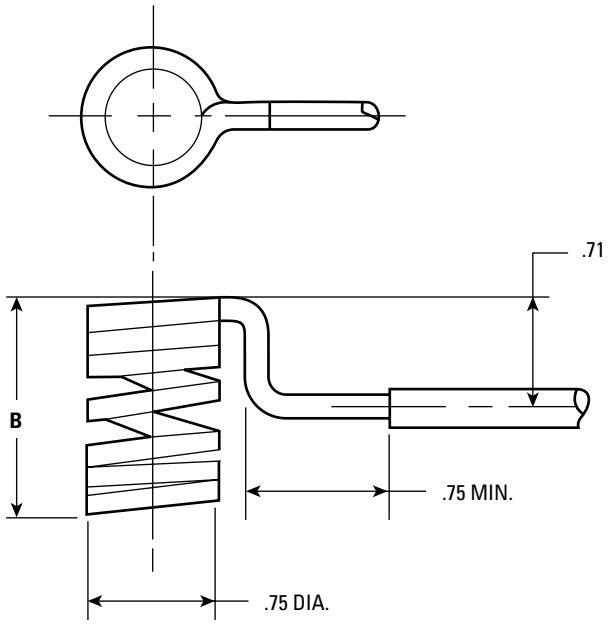
Replacement Nozzle Locator Cores

(See drawing at left for A Dim. reference and detail)

ITEM NUMBER		A DIM.
R = ½	R = ¾	
HNC-46	HNC-66	1.809
HNC-47	HNC-67	2.309

Replacement Thermocouple (T/C) Square Coil Nozzle Locator Heaters

(240 VAC, 250 Watts, T/C type J grounded, 34" leads)



ITEM NO.	B DIM.	USED WITH
SSTC-62-90	1.450	HNC-46 & HNC-66 Cores
SSTC-72-90	1.950	HNC-47 & HNC-67 Cores

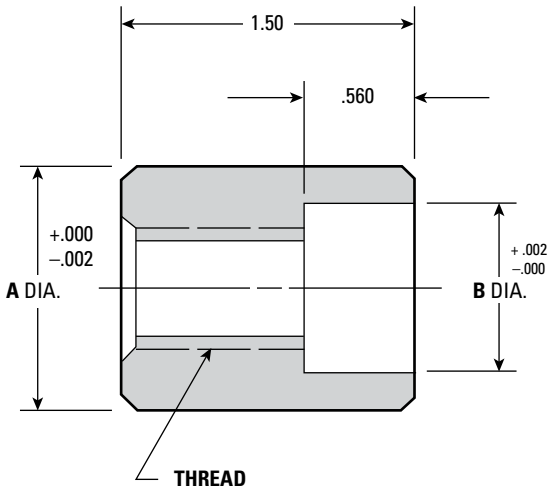
WIRING INFORMATION

Power leads — BLACK OR MULTI-COLORED
T/C leads — RED & WHITE
RED is negative (–)
WHITE is positive (+)

End Caps, Nozzle Locators and Spacer

End Caps

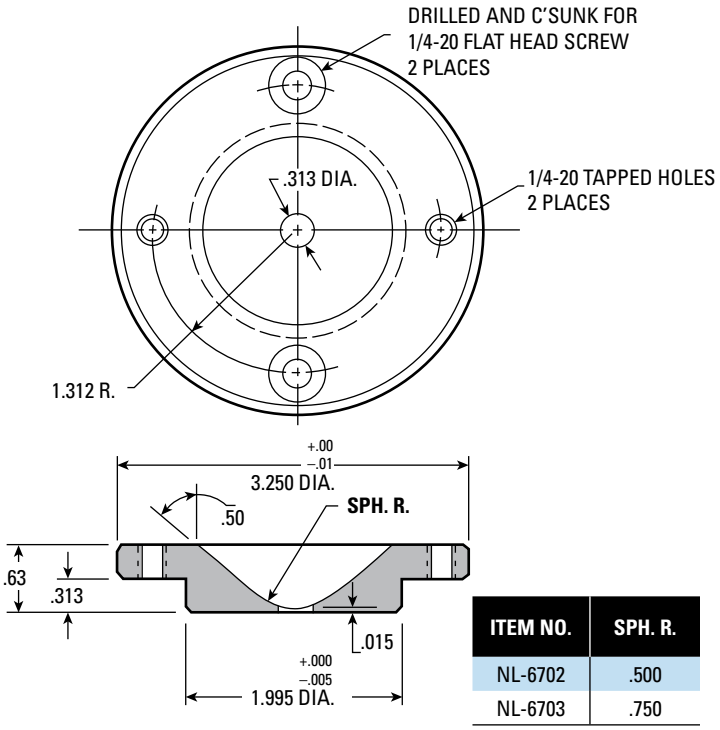
MATERIAL: AISI 4140 STEEL



ITEM NO.	A DIA.	B DIA.	THREAD	USED WITH
EC-12-07	1.249	.875	5/8"-11	1.250 DIST. BORE
EC-20-15	1.999	1.625	3/4"-10	2.000 DIST. BORE

Nozzle Locators (Optional)

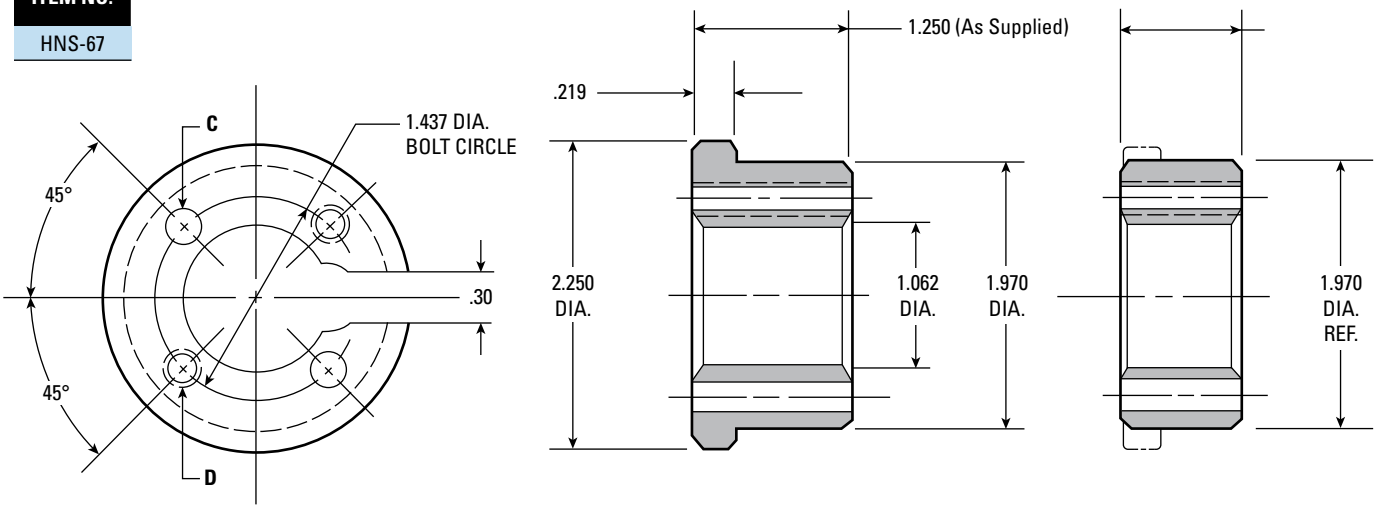
Heated Nozzle Locator is Recommended



ITEM NO.	SPH. R.
NL-6702	.500
NL-6703	.750

Replacement Nozzle Locator Spacer

ITEM NO.
HNS-67



C = .312 Dia. thru Hole (2 Places), Used with Bolt-Thru Style Application.
D = 1/4-20 Tapped Hole (2 Places), Used with Clamp Style Application.

NOTE: For bolt-thru style remove 2.250 dia. flange and adjust 1.250 height to suit application.

Probes and Gate Insert Applications

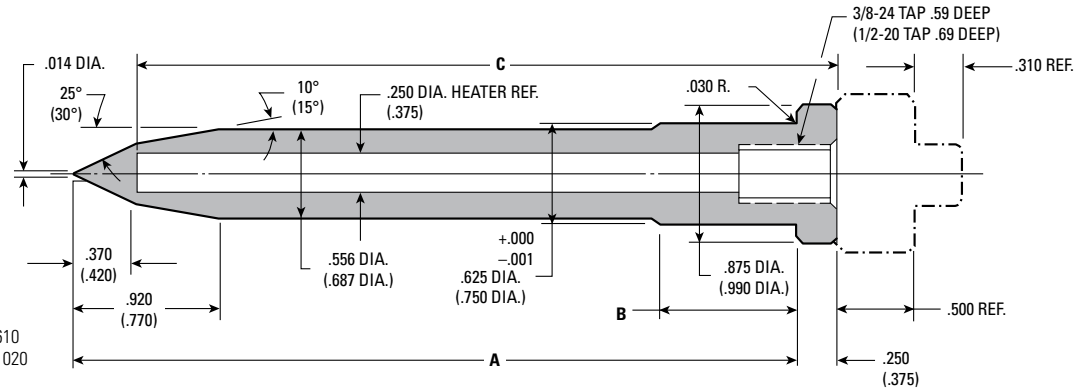
Auto-fixed® Finless Probe (Item Nos. AFPN-410, -510, and -610) (Item Nos. AFPN-720, -820, -920, and -1020)

MATERIAL: AISI D-2 STEEL
HARDNESS: 50-55 HRC

Important: Dimensions shown in parentheses apply to longer probes AFPN-720 thru 1020 only. Tolerances shown also apply to dimensions in parentheses.

Example:

+.000 −.001 ← FOR ALL PROBES
.625 DIA. ← FOR AFPN-410 THRU 610
(.750 DIA.) ← FOR AFPN-720 THRU 1020

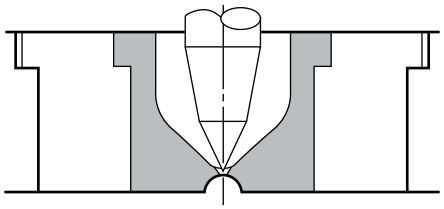


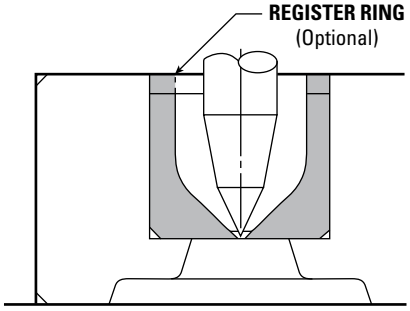
ITEM NO.	A DIM.	B DIM.	C DIM.	T/C HEATER NO.*
AFPN-410	3.625	.875	3.470	AFTC-214-2
AFPN-510	4.625	.875	4.470	AFTC-215-2
AFPN-610	5.609	.875	5.450	AFTC-216-2

*OMIT "T" From T/C Heater Number When Ordering Non-T/C Heaters.

ITEM NO.	A DIM.	B DIM.	C DIM.	T/C HEATER NO.
AFPN-720	7.000	1.500	6.925	AFTC-327-2
AFPN-820	8.000	1.500	7.925	AFTC-328-2
AFPN-920	9.000	1.500	8.925	AFTC-329-2
AFPN-1020	10.000	1.500	9.925	AFTC-3210-2

Gate Insert Applications

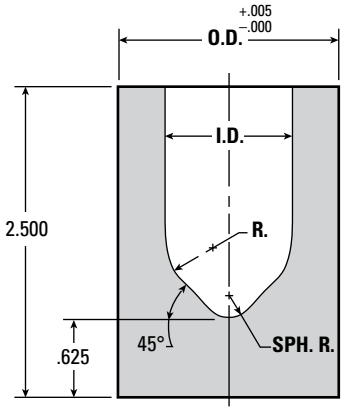




GATE INSERTS (For Finless Probes)

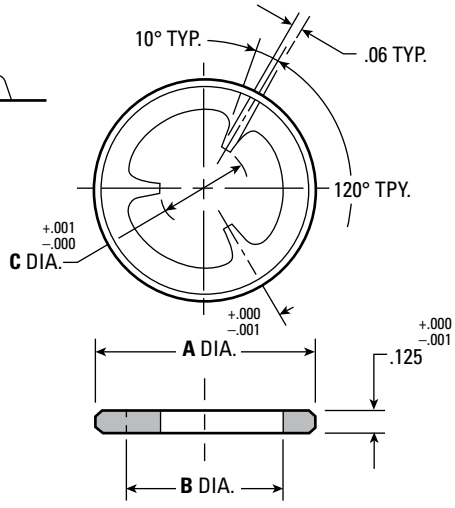
MATERIAL: AISI S-7 STEEL (pre-hardened)
HARDNESS: 30-34 HRC

Hardness can be increased to a higher value by heat treatment, if desired.



REGISTER RINGS

MATERIAL: AISI H-13 STEEL
HARDNESS: 48-52 HRC



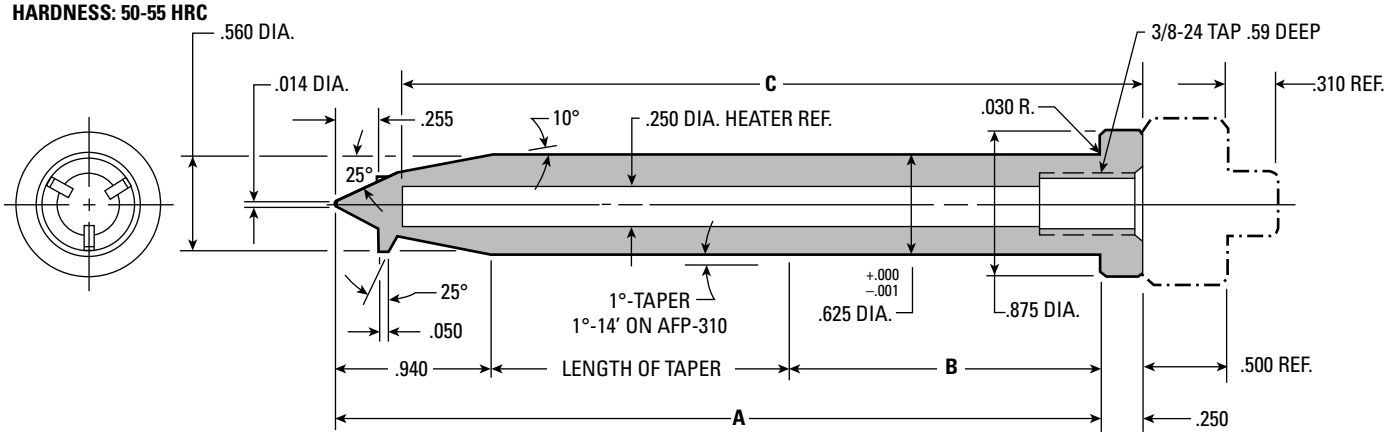
ITEM NO.	O.D.	I.D.	SPH. R.	R.	USED WITH
AFGI-10N	1.750	1.000	.187	.375	AFPN-410 THRU 610
AFGI-20N	2.000	1.125	.250	.500	AFPN-720 THRU 1020

ITEM NO.	A DIA.	B DIA.	C DIA.	USED WITH
AFRR-10N	1.375	1.000	.562	AFPN-410 THRU 610
AFRR-20N	1.500	1.125	.693	AFPN-720 THRU 1020

Probes and Gate Insert Applications

Auto-fixed® Probe (Item Nos. AFP-410, -510, and -610)

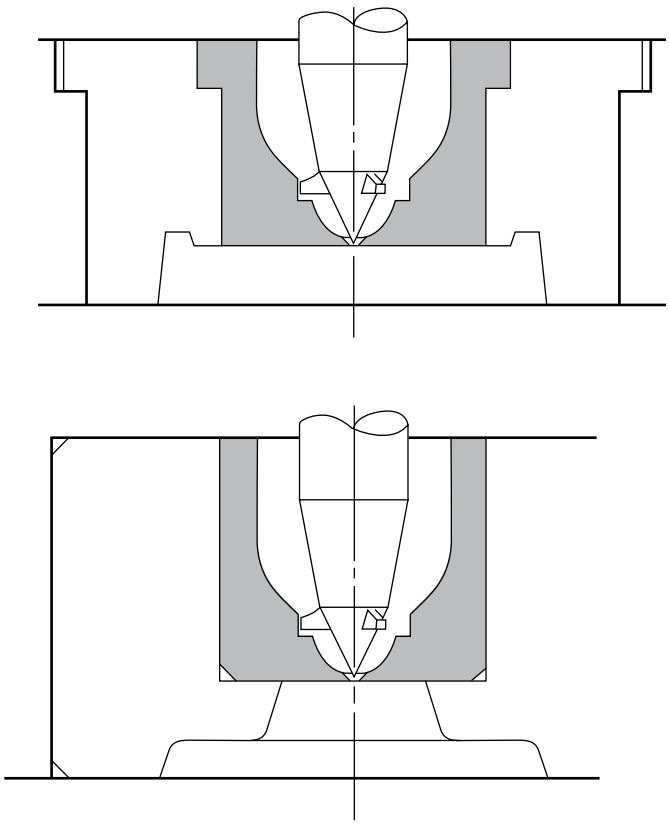
MATERIAL: AISI D-2 STEEL
HARDNESS: 50-55 HRC



ITEM NO.	A DIM.	B DIM.	C DIM.	T/C HEATER NO.*
AFP-410	3.625	.890	3.470	AFTC-214-2
AFP-510	4.625	1.890	4.470	AFTC-215-2
AFP-610	5.609	2.900	5.450	AFTC-216-2

*OMIT "T" From T/C Heater Number When Ordering Non-T/C Heaters.

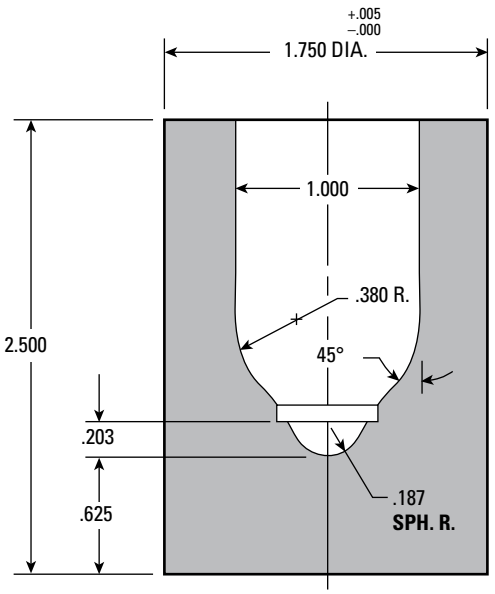
Gate Insert Applications



GATE INSERTS (ITEM NO. AFGI-10)

MATERIAL: AISI S-7 STEEL (pre-hardened)
HARDNESS: 30-34 HRC

Hardness can be increased to a higher value by heat treatment, if desired.

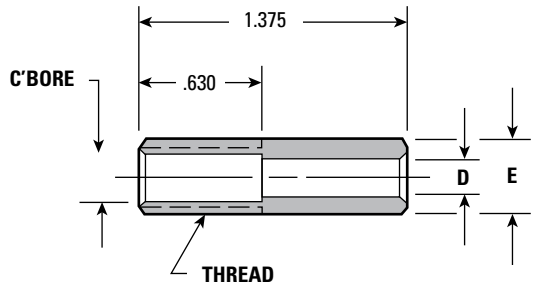


ITEM NO.	O.D.	USED WITH
AFGI-10	1.750	AFP-410 THRU 610

Probe Heaters and Components

Stop Sleeves

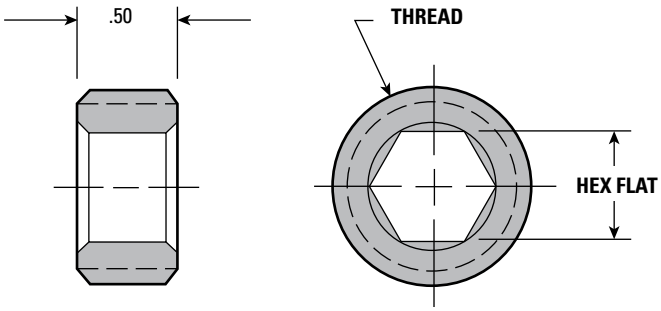
Packaged with all Probes



ITEM NO.	D	E	C'BORE	THREAD	USED WITH
AFSS-38	.187	.375	.265 DIA.	⅜"-24	AFP(N)-410 THRU 610
AFSS-12	.300	.500	.390 DIA.	½"-20	AFPN-720 THRU 1020

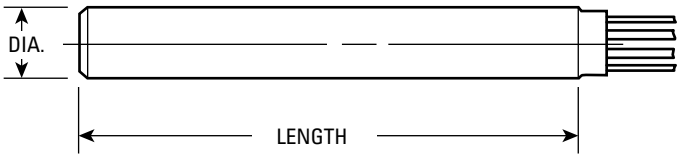
Hold-Down Nuts

Packaged with all Probes



ITEM NO.	THREAD	HEX FLAT	USED WITH
AFN-100	1"-8	9/16	AFP(N)-410 THRU 610
AFN-125	1¼-12	⅝	AFPN-720 THRU 1020

Thermocouple (T/C) Probe Heaters



WIRING INFORMATION

Power leads — BLACK OR MULTI-COLORED
T/C leads — RED & WHITE
RED is negative (–)
WHITE is positive (+)

.250 DIA.
(240 VAC, T/C type J grounded, 34" leads)

ITEM NUMBER*	FOR PROBE	WATTS	LENGTH
AFTC-214-2	AFP(N)-410	220	3.75
AFTC-215-2	AFP(N)-510	275	4.75
AFTC-216-2	AFP(N)-610	350	5.75

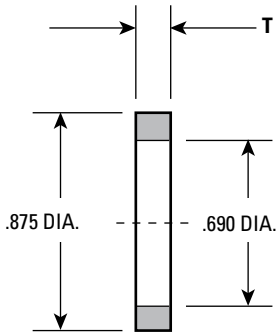
*OMIT "T" From T/C Heater Number When Ordering Non-T/C Heaters.

.375 DIA.
(240 VAC, T/C type J grounded, 48" leads)

ITEM NUMBER	FOR PROBE	WATTS	LENGTH
AFTC-327-2	AFPN-720	645	7.15
AFTC-328-2	AFPN-820	760	8.15
AFTC-329-2	AFPN-920	870	9.15
AFTC-3210-2	AFPN-1020	980	10.15

Adjustment Rings

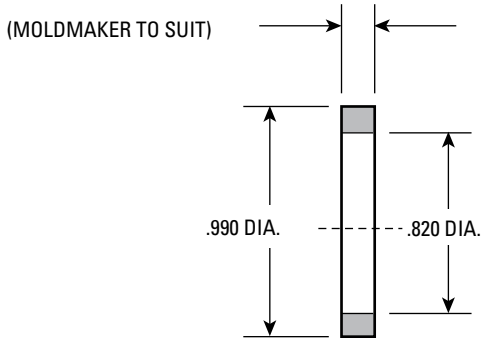
For AFP(N)-410 Thru 610



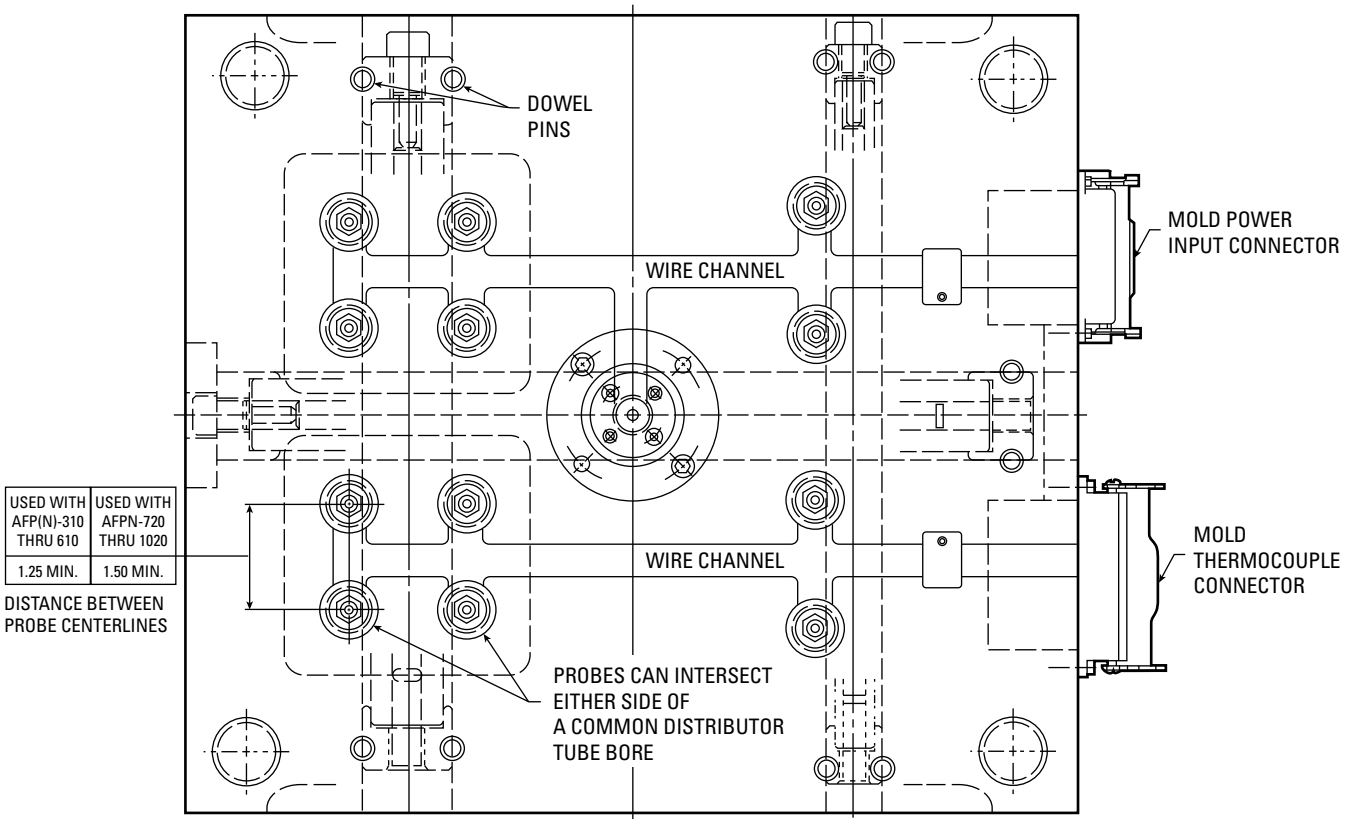
ITEM NUMBER	T DIM.
RAF-002	.002
RAF-003	.003
RAF-005	.005
RAF-007	.007
RAF-032	.032
RAF-062	.062
RAF-125	.125

For AFP(N)-720 Thru 1020

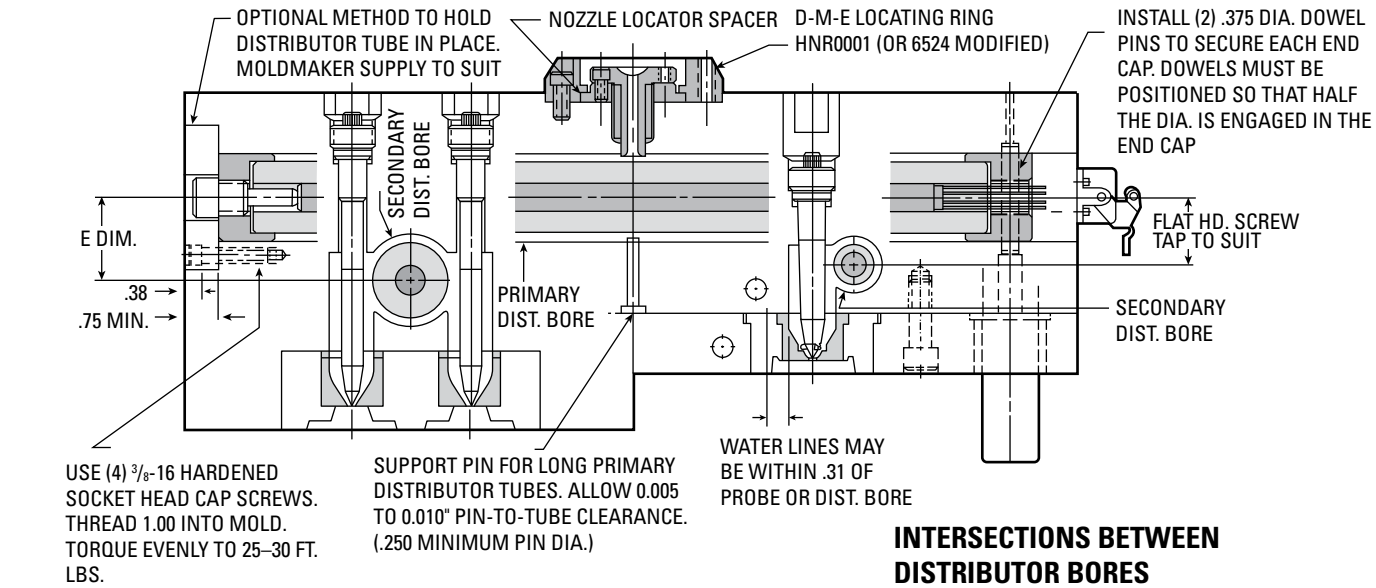
MOLDMAKER TO SUPPLY TO SUIT:



Solid Distributor Block Design and Machining Guidelines



TOP OF MOLD



NOTE: Finned and finless probes shown together for illustration purposes only.

D-M-E #3 STEEL IS RECOMMENDED FOR DISTRIBUTOR PLATES.

INTERSECTIONS BETWEEN DISTRIBUTOR BORES

PRIMARY DIST. BORE	SECONDARY DIST. BORE	E DIM. (± .020)
2.00	2.00	1.705
2.00	1.25	1.330
*1.25	1.25	.955

*The 2.00" distributor bore with 1.625 dia. tube is recommended.

Solid Distributor Block Design and Machining Guidelines

Heated Nozzle Locator

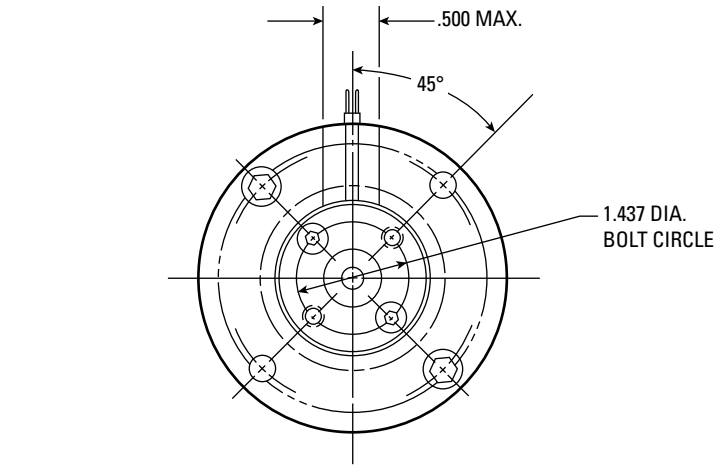


FIGURE 1

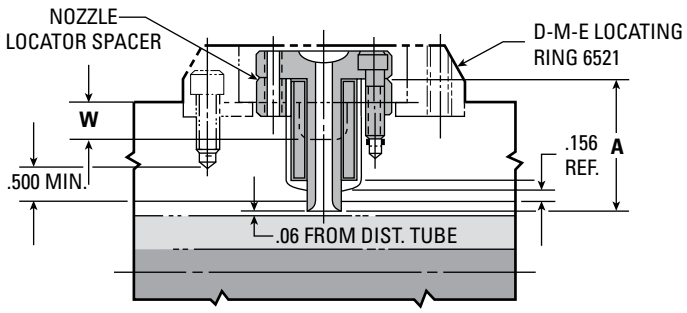


FIGURE 2

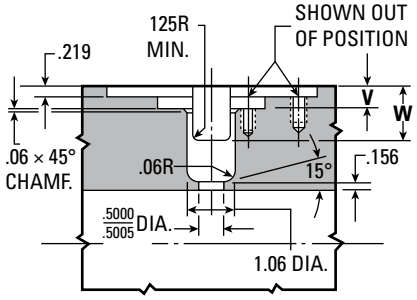


FIGURE 3

ALL APPLICATIONS

The locator's core tip should be positioned 0.060 from the top of the distributor tube, establishing the "**A**" dimension. In most cases, the dimension from the bottom of the core head to the locating ring counterbore will equal the adjusted height of the spacer. (The "**B**" dimension, for reference, is the heater length of 1.450 or 1.950, depending on core length being used.)

CLAMP STYLE SPACER APPLICATION (Figure 1)

The spacer is supplied with a flange and a 1.250 height. The flange may be used in conjunction with a D-M-E HNR0001 or modified 6524 locating ring to form a clamp-style spacer. To modify the locating ring, enlarge its 2.00 diameter counterbore to 2.281 (0.219 deep) and its 1.75 I.D. to 2.00. The core is secured to the spacer with two 1/4-20 S.H.C.S.

BOLT THRU STYLE SPACER APPLICATION (Figure 2)

Another option is to remove the flange and adjust the spacer height to the desired dimension, then secure the Heated Nozzle Locator through the spacer with two 1/4-20 S.H.C.S. into the mold plate. Use caution to insure that the tapped holes are 0.500 minimum from the distributor channel.

Spacer thickness should never be less than 0.250. However, if a condition results where the spacer would be less than 0.250, counterbore a 2.00 diameter into the plate to a "**V**" depth that will accept the 0.250 spacer **(see Figure 3)**.

ALL APPLICATIONS

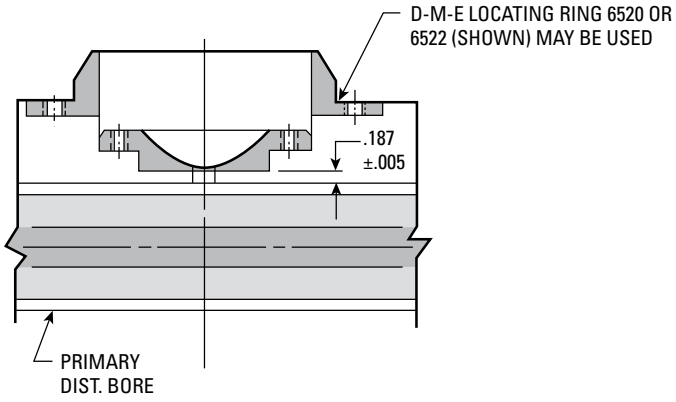
In order to maintain plate strength, the depth of the lead wire channel, dimension "**W**", must be no deeper than required to contain the heater leads. The distance from the bottom of the core head to the bottom of the heater leads is 0.800. Channel depth can be determined accordingly, based on the distance between the core head and the top of the mold.

If a condition occurs where the Heated Nozzle Locator would extend above the standard locating ring, a special locating ring with extended flange for protecting the Heated Nozzle Locator should be constructed.

Solid Distributor Block Design and Machining Guidelines

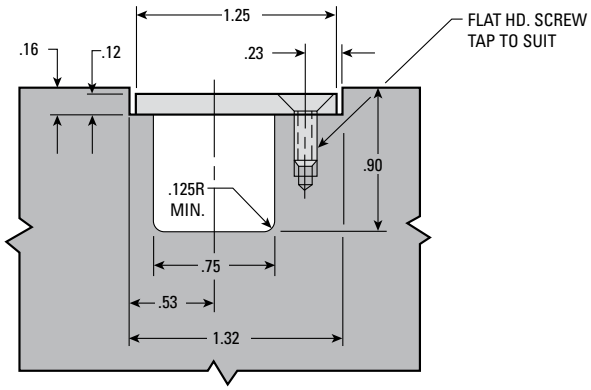
Nozzle Locator (Optional)

HEATED NOZZLE LOCATOR IS RECOMMENDED

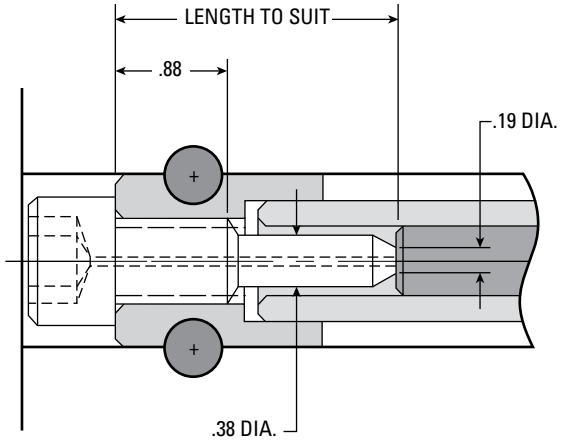


Recommended Wire Channels and Strap

Break all sharp corners to prevent damage to heater lead wires. Moldmaker to supply to suit.

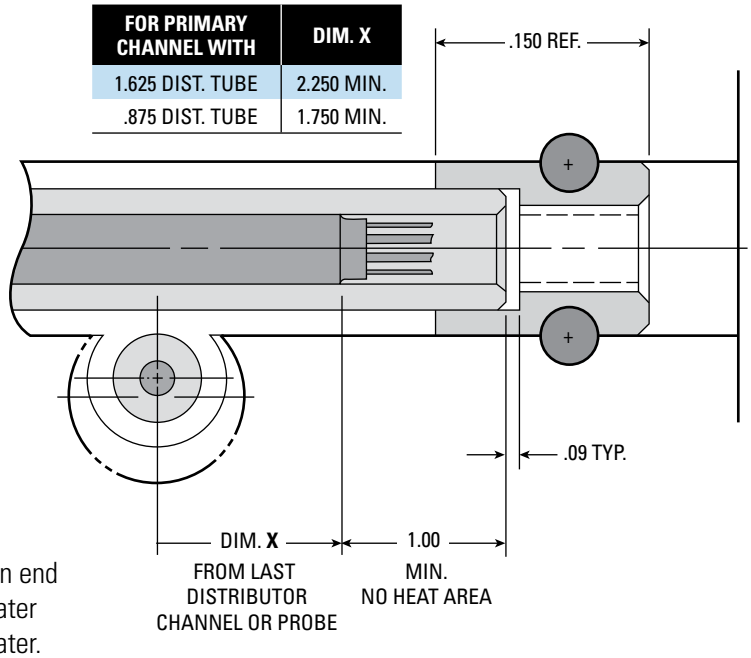


Recommended Relationship Between Thermocouple (T/C) Distributor Tube Heaters, Distributor Tubes and Intersecting Tubes or Probes



NOTE: Dimensions apply to both ends.

FOR PRIMARY CHANNEL WITH	DIM. X
1.625 DIST. TUBE	2.250 MIN.
.875 DIST. TUBE	1.750 MIN.



T/C DISTRIBUTOR TUBE HEATER STOP

A 5/8-11 or 3/4-10 socket head cap screw (thread based on end cap being used) is recommended to serve as a positive heater stop. One stop is required for each T/C distributor tube heater. Moldmaker supply to suit.

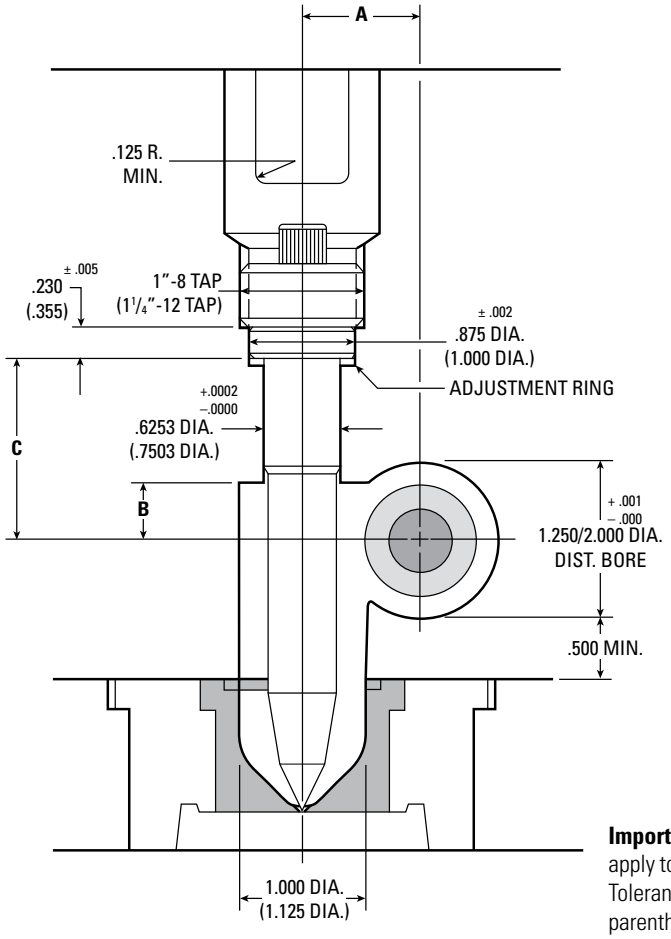
The design guidelines in this document serve as production-proven recommendations of the D-M-E Hot Runner System, and are ONLY applicable to the current line of D-M-E components. The guidelines and component details in this document supersede all previous documents. Due to the wide variety of plastics materials and possible molding applications available, no warranties are expressed or implied.

D-M-E Hot Runner System Components are manufactured and sold under one or more of the following U.S. patents: 3,767,340; 3,010,155; 3,023,458; 3,231,938 and 3,758,248. Foreign patents issued and pending.

Solid Distributor Block Machining Guidelines

Auto-Fixed® Finless Probes (AFPN-410 thru 610)

Probe Machining Dimensions



USED WITH .875 DIA. DISTRIBUTOR TUBE (1.25 DIST. BORE)

PROBE ITEM NO.	A DIM. ± .020	B DIM. MIN.	C DIM. MIN.
AFPN-410	.796	.500	1.375
AFPN-510	.796	.500	1.375
AFPN-610	.796	.500	1.375
AFPN-720	.861	.750	2.250
AFPN-820	.861	.750	2.250
AFPN-920	.861	.750	2.250
AFPN-1020	.861	.750	2.250

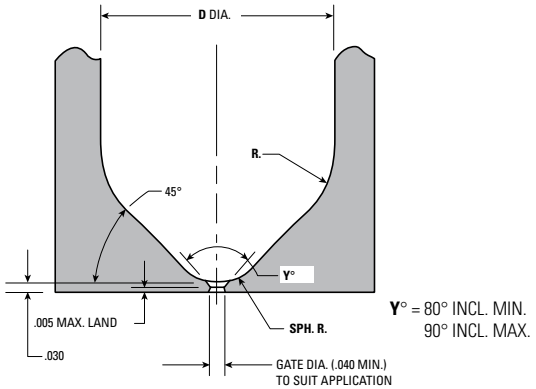
USED WITH 1.625 DIA. DISTRIBUTOR TUBE (2.00 DIST. BORE)

PROBE ITEM NO.	A DIM. ± .020	B DIM. MIN.	C DIM. MIN.
AFPN-410	1.171	.500	1.375
AFPN-510	1.171	.500	1.375
AFPN-610	1.171	.500	1.375
AFPN-720	1.236	.750	2.250
AFPN-820	1.236	.750	2.250
AFPN-920	1.236	.750	2.250
AFPN-1020	1.236	.750	2.250

Important: Dimensions shown in parentheses apply to longer probes AFPN-720 thru 1020 only. Tolerances shown also apply to dimensions in parentheses.

Example:
± 002 ← FOR ALL PROBES
.875 DIA. ← FOR AFPN-410 THRU 610
1.000 DIA. ← FOR AFPN-720 THRU 1020

Gate Machining Dimensions

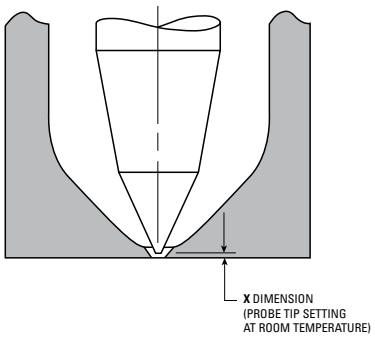


Y° = 80° INCL. MIN.
90° INCL. MAX.

PROBE ITEM NO.	D DIA.	SPH. R	R
AFPN-410 THRU-610	1.000	.187	.38
AFPN-720 THRU-1020	1.125	.250	.50

Initial Probe Set-up Dimensions

PROBE ITEM NO.	X DIM.
AFPN-410	.000-.004
AFPN-510	.000-.005
AFPN-610	.000-.006
AFPN-720	.000-.007
AFPN-820	.000-.008
AFPN-920	.000-.009
AFPN-1020	.000-.010



NOTE: X dimension is for initial probe set-up and may require further adjustment. Final position of probe tip will be determined by gate cosmetics and flow requirements.

Solid Distributor Block Machining Guidelines

Auto-Fixed® Probes (AFP-410 thru 610)

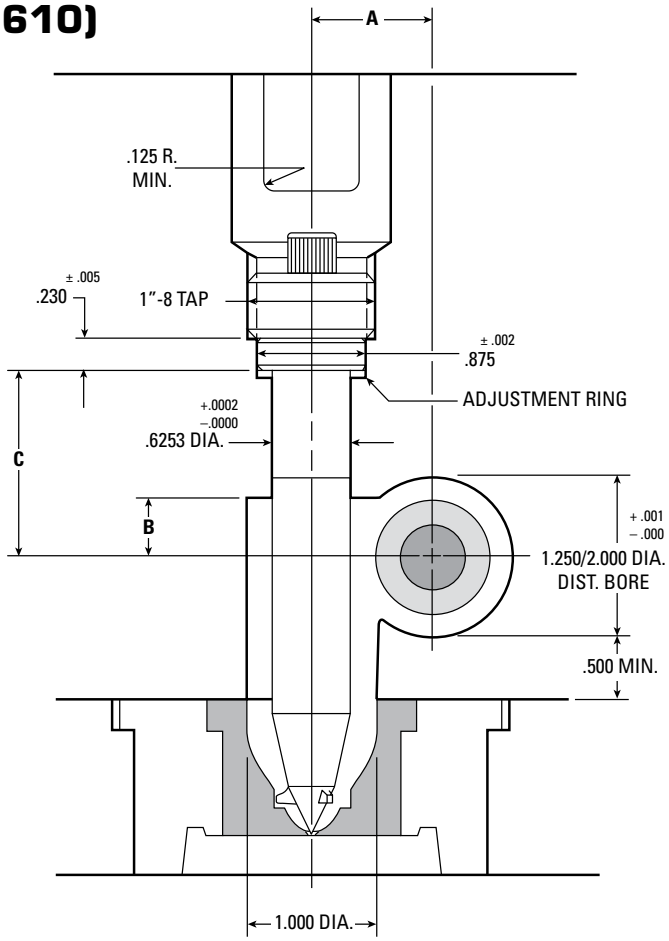
Probe Machining Dimensions

USED WITH .875 DIA. DISTRIBUTOR TUBE (1.25 DIST. BORE)

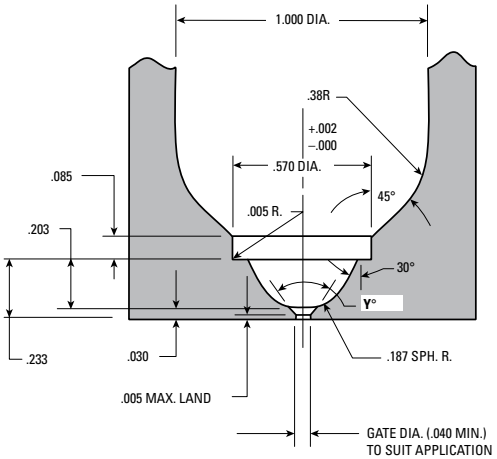
PROBE ITEM NO.	A DIM. ± .020	B DIM. MIN.	C DIM. MIN.
AFP-410	.830	.500	1.375
AFP-510	.830	.500	1.375
AFP-610	.830	.500	1.375

USED WITH 1.625 DIA. DISTRIBUTOR TUBE (2.00 DIST. BORE)

PROBE ITEM NO.	A DIM. ± .020	B DIM. MIN.	C DIM. MIN.
AFP-410	1.205	.500	1.375
AFP-510	1.205	.500	1.375
AFP-610	1.205	.500	1.375

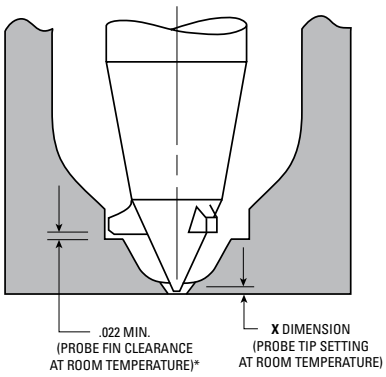


Gate Machining Dimensions



Y° = 80° INCL. MIN.
90° INCL. MAX.

Initial Probe Set-up Dimensions



PROBE ITEM NO.	X DIM.
AFP-410	.000-.004
AFP-510	.000-.005
AFP-610	.000-.006

*Some clearance must also be maintained at operating temperature (i.e. no metal to metal contact between fin and counterbore).

NOTE: X dimension is for initial probe set-up and may require further adjustment. Final position of probe tip will be determined by gate cosmetics and flow requirements.

U.S. 800-626-6653 ▪ Canada 800-387-6600 ▪ www.dme.net
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D-M-E Hot Sprue Bushings

Reliable direct part gating in single cavity molds



D-M-E
Every step of the way

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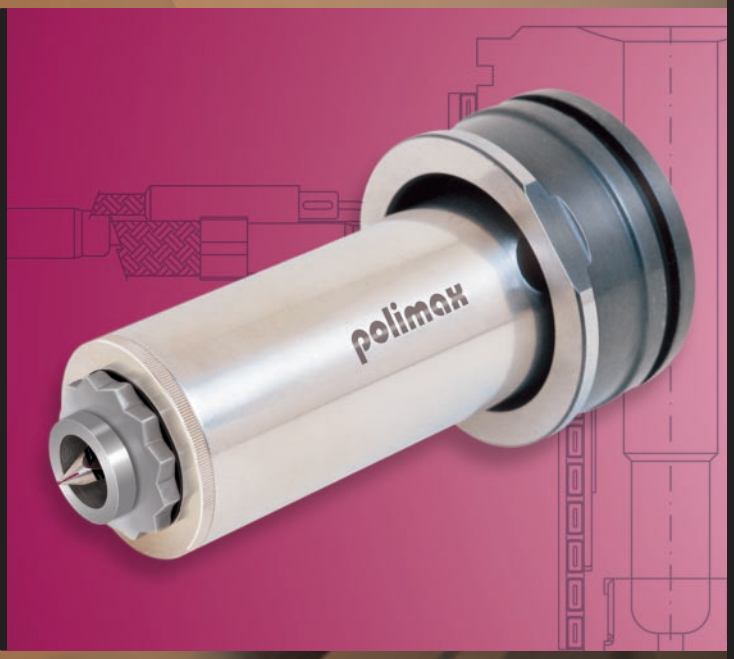
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Reduce cycle times and save material costs

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Go to www.dme.net/prices for the latest pricing guide.

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HIGH-PERFORMANCE CAPABILITY
WITH ENGINEERED AND
COMMODITY-GRADE RESINS



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Plastic Materials and Specifications

- Large number of bushing and tip combinations
- Two flow channel sizes
- Lengths up to 185mm
- High performance capability
- Standard & wear-resistant tips
- Precise thermal control

PLASTIC MATERIAL PROCESS CONDITIONS

MATERIAL	STANDARD RESIN SYMBOL	PROCESS TEMPERATURE		MOLD TEMPERATURE		HOT RUNNER TEMPERATURE		DENSITY MELTING		SOLID DENSITY	
		[°C]	[°F]	[°C]	[°F]	[°C]	[°F]	[g/cm³]	[lbs/Inch³]	[g/cm³]	[lbs/Inch³]
Styrene Butadiene	SB	210	410	70	158	230	446	0,93	0.0366	1,02	0.0369
Poliuretane	PUR	220	428	45	113	240	464	0,93	0.0366	1,11	0.0401
Poly (Vinil Chloride)	PVC/FLEX	175	347	35	95	200	392	1,02	0.0405	1,38	0.0499
Styrene/acrylonitrile	SAN	230	446	80	176	255	491	0,99	0.0358	1,08	0.0390
Polystyrene	PS	210	410	45	113	230	446	0,95	0.0343	1,05	0.0379
Polycarbonate	PC	300	572	80	176	330	626	1,08	0.0390	1,20	0.0434
Polyphenylene Oxide-Styrene	PPO	260	500	80	176	300	572	0,99	0.0358	1,13	0.0408
Polyethylene	PE	200	392	25	77	225	437	0,74	0.0267	0,96	0.0347
Polypropylene	PP	225	437	40	104	245	473	0,73	0.0264	0,91	0.0329
Polyether-etherketone	PEEK	330	626	165	329	370	698	1,13	0.0408	1,37	0.0495
Poly (phenylene sulfide)	PPS	300	572	110	230	330	626	1,53	0.0553	1,70	0.0614
Polyebutylene terephthalate	PBT	265	509	60	140	290	554	1,44	0.0520	1,57	0.0567
6 Polyamide	PA 6	220	428	90	194	250	482	0,98	0.0354	1,14	0.0412
66 Polyamide	PA 6.6	255	491	90	194	280	536	1,09	0.0394	1,26	0.0455
Thermal Plastic Elastomers	TPE	240	464	35	95	265	509	0,78	0.0282	0,90	0.0325
Poly (Oxymethylene) (Polyacetal)	POM	180	356	100	212	200	392	1,16	0.0419	1,42	0.0513
Poly (methyl methacrylate)	PMMA	235	455	70	158	250	482	1,09	0.0394	1,18	0.0426
Acrylonitrile Butadiene Styrene	ABS	225	437	70	158	250	482	0,95	0.0343	1,08	0.0390

PLASTIC MATERIAL FLOW RATES

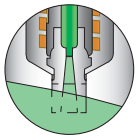
HIGH MFI	MEDIUM MFI		LOW MFI	
SB	ABS		PVC/FLEX	
PS	SAN	PA 6	PEI	PC
PE	PPO	PA 6.6	TPE	PBT
PP	PPS	POM	PEEK	PUR
	PET	PMMA		

NOTE: Temperature and density values shown above are general, and may not apply to your application. Please refer to proper processing data for the resin grade intended for your specific application. Failure to use temperature settings appropriate to the specific resin and resin grade intended for your application may result in poor part quality, or inability to produce acceptable molded parts.

Polimax is a registered trademark of polimold® INDUSTRIAL S.A.

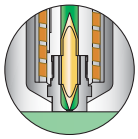
Bushing Selection

HOT SPRUE BUSHING TIP STYLE



SPRUE GATE TIP
STANDARD / EXTENDED

For use where gate vestige is allowed. Provides low resistance to flow with excellent flow rates. Extended style provides additional stock for machining profiles or part contours.



RING GATE TIP
STANDARD / EXTENDED

Ideal for low vestige commodity and engineering grade resin applications. The Ring Gate features a sealed tip for efficient shut-off at the part surface. Available with standard or wear resistant needles. Extended style provides additional stock for machining profiles or part contours.

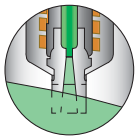
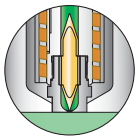
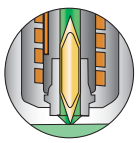


POINT GATE TIP

Suitable for high viscosity resins, engineering plastics and applications requiring optimum gate cosmetics with minimal gate vestige. Available with standard or wear resistant needles.

BUSHING TIP AND PLASTIC MATERIAL COMPATIBILITY

* HIGH PERFORMANCE SPRUE BUSHING RECOMMENDED FOR THIS RESIN.

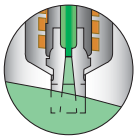
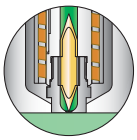
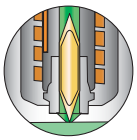
NOZZLE	THERMOPLASTIC RESIN TYPE																									
	AMORPHOUS								SEMI-CRYSTALINE																	
	SB	PUR *	PEI *	PVC/FLEX	SAN *	PS	PC *	PPO *	PE	PP	PEEK	PPS *	PET *	PBT *	PA *	TPE *	POM *	PMMA *	ABS	TPO *	ABS/PC *	PPE/PS *	PSU	LCP
 SPRUE GATE TIP STANDARD / EXTENDED	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
 RING GATE TIP STANDARD / EXTENDED	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
 POINT GATE TIP	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

● Green – Works well with this resin
● Yellow – Contact D-M-E Engineering for guidance
● Red – Not recommended

Maximum Flow Capacity Tables

MAXIMUM BUSHING FLOW CAPACITY

MAXIMUM LOAD WEIGHT IN GRAMS WITH MAXIMUM HOLE DIAMETERS

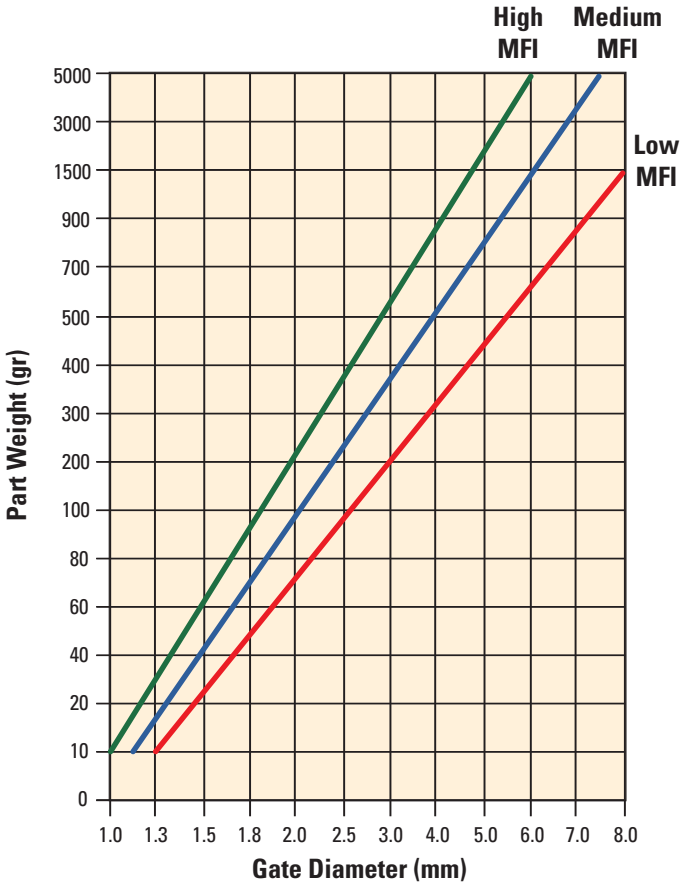
NOZZLE	200 SERIES	500 SERIES	FLUID (Melt Flow Index)
 SPRUE GATE TIP STANDARD / EXTENDED	800	1400	HIGH
	400	700	MEDIUM
	200	300	LOW
 RING GATE TIP STANDARD / EXTENDED	210	980	HIGH
	105	490	MEDIUM
	52	210	LOW
 POINT GATE TIP	210	980	HIGH
	105	490	MEDIUM
	52	210	LOW

DEFINITION OF MATERIAL INPUT

The optimal gate diameter will vary according to the resin Mold Flow Index and part weight.

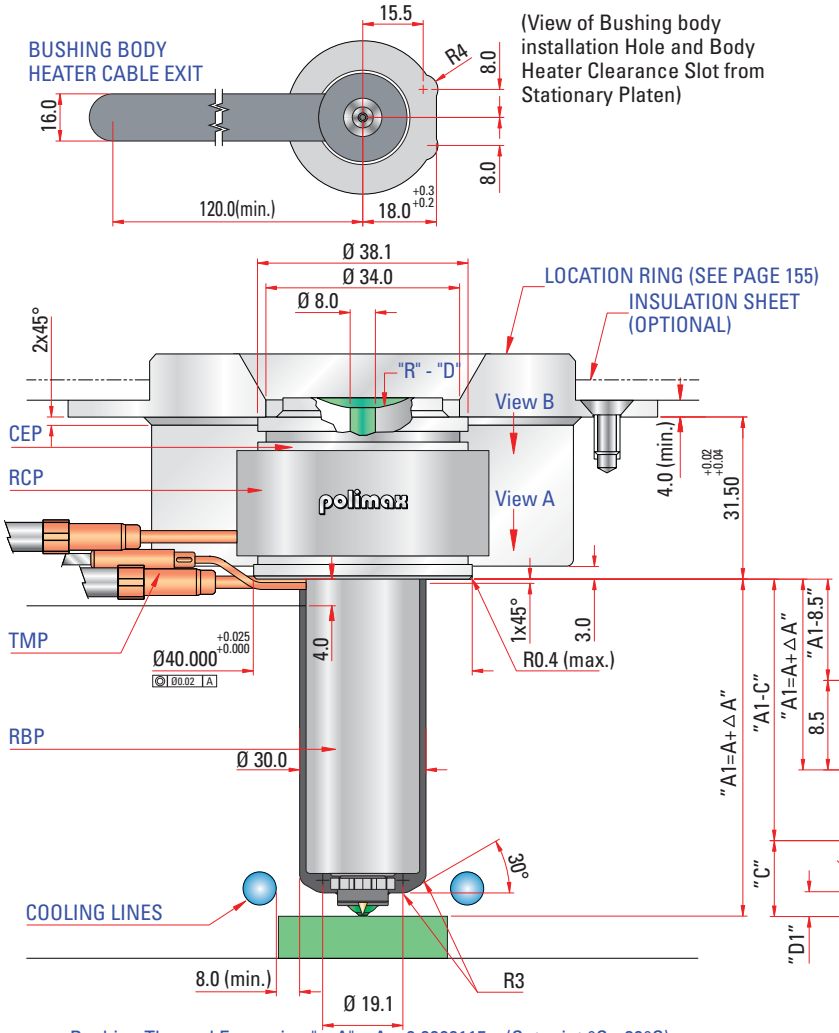
Please refer to the chart for guidelines. Other factors to consider when defining gate requirements for a D-M-E Polimax System are:

- Product geometry
- Polymer type
- Mold and injection machine conditions



Polimax High Performance Series 200

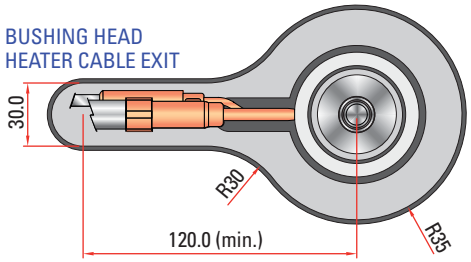
CAVITY BLOCK VIEW A



(View of Bushing body installation Hole and Body Heater Clearance Slot from Stationary Platen)

CAVITY BLOCK VIEW B

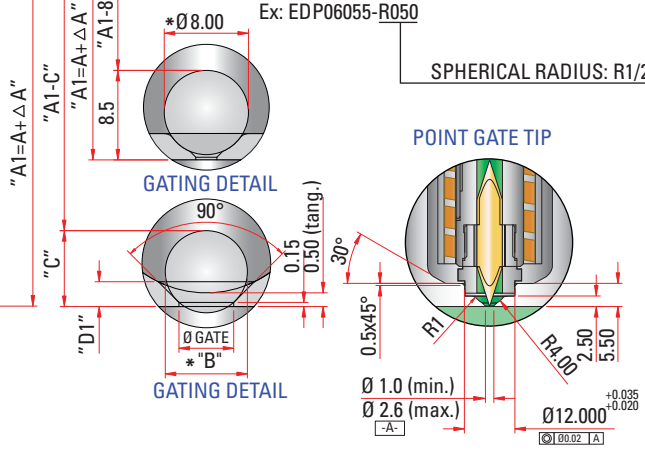
(View of Bushing body installation Hole and Head Heater Clearance Slot from Stationary Platen)



CODE FOR DETAIL	SPHERICAL "R"	CHAMFER "D"
...-R000	0	
...-R155	15.5	
...-R400	40.0	
...-R050	1/2"	
...-R075	3/4"	
...-D090		90° - incl.

Ex: EDP06055-R050

SPHERICAL RADIUS: R1/2"



Bushing Thermal Expansion "△A" = A x 0.0000115 x (Setpoint °C - 20°C)
or "△A" = A x 0.0000064 x (Setpoint °F - 68°F)

BUSHING AND COMPONENT SPECIFICATIONS

ASSEMBLY	DIMENSION "A"	ASSEMBLY COMPONENTS					
		BUSHING BODY	HEATER	WATTS	HEAD HEATER	WATTS	THERMOCOUPLE
EDP06055-R...	55.00	CEP06055-R...	RBP06053	460W	RCP38020	295W	TMP01080
EDP06067-R...	67.50	CEP06067-R...	RBP06065	460W			TMP01100
EDP06080-R...	80.00	CEP06080-R...	RBP06078	690W			TMP01120
EDP06092-R...	92.50	CEP06092-R...	RBP06092	690W			TMP01140
EDP06105-R...	105.00	CEP06105-R...	RBP06104	760W			TMP01160
EDP06130-R...	130.00	CEP06130-R...	RBP06129	850W			TMP01180
EDP06155-R...	155.00	CEP06155-R...	RBP06155	1100W			TMP01200

GATE DIAMETER	DIMENSION "B"	DIMENSION "C"	DIMENSION "D1"
Ø 1.0	Ø 2.00	2.06	0.62
Ø 1.2		1.96	0.66
Ø 1.4		1.86	0.70
Ø 1.6	Ø 3.00	2.97	0.75
Ø 1.8		2.87	0.82
Ø 2.0		2.77	0.91
Ø 2.2	Ø 4.00	3.88	1.02
Ø 2.4		3.78	1.18
Ø 2.6		3.68	1.54

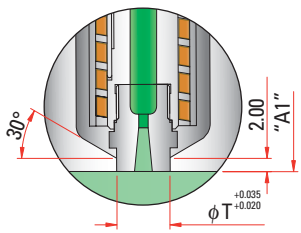
NOTE: Maximum Operating Pressure in Bushing 138 MPa (20,000 PSI).
NOTE: Maximum Operating Temperature of Bushing 343°C (650°F).

* The "B" and 8.00 Diameter Dimensions are correct Ball Gauges to be used for checking the "A1-C" and "A1-8.5" Dimensions.

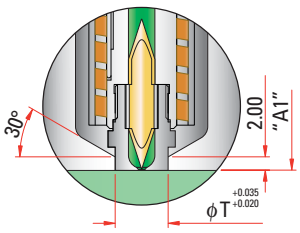
TIP OPTIONS

NOTE: For Extra Stock Tips, Customer Must Modify and Add Relief, Such that Average Land Contact is 2.00mm.

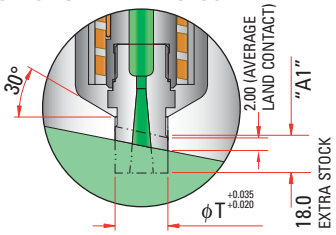
SPRUE GATE TIP



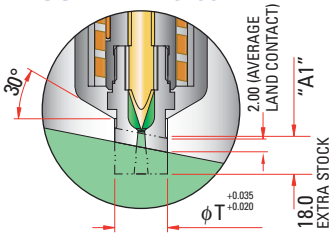
RING GATE TIP



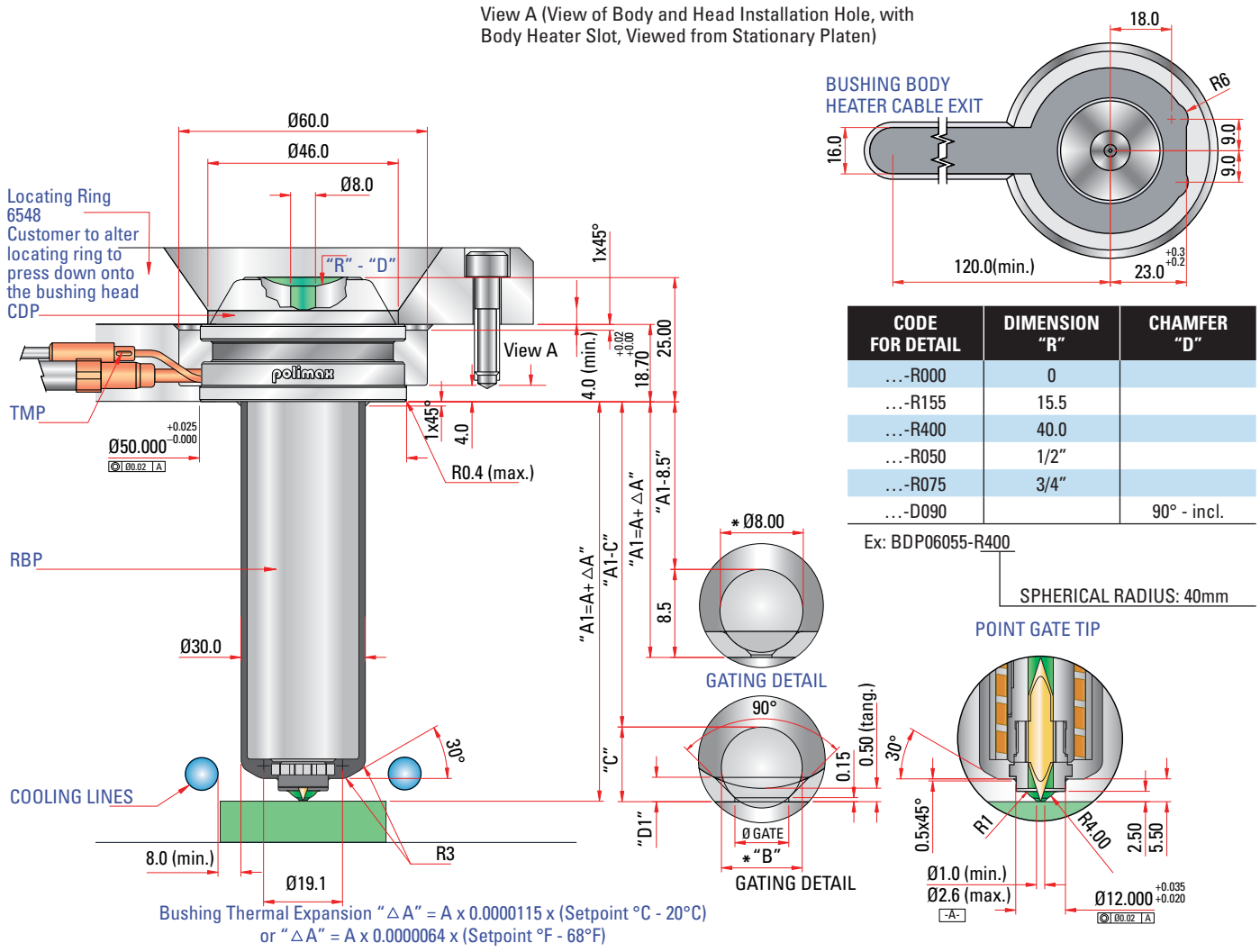
SPRUE GATE EXTRA STOCK TIP



RING GATE EXTRA STOCK TIP



Polimax Standard Series 200



CODE FOR DETAIL	DIMENSION "R"	CHAMFER "D"
...-R000	0	
...-R155	15.5	
...-R400	40.0	
...-R050	1/2"	
...-R075	3/4"	
...-D090		90° - incl.

Ex: BDP06055-R400

SPHERICAL RADIUS: 40mm

BUSHING AND COMPONENT SPECIFICATIONS					
ASSEMBLY	DIMENSION "A"	ASSEMBLY COMPONENTS			
		BUSHING BODY	HEATER	WATTS	THERMOCOUPLE
BDP06055-R...	55.00	CDP06055-R...	RBP06053	460W	TMP01080
BDP06067-R...	67.50	CDP06067-R...	RBP06065	460W	TMP01100
BDP06080-R...	80.00	CDP06080-R...	RBP06078	690W	TMP01120
BDP06092-R...	92.50	CDP06092-R...	RBP06092	690W	TMP01140
BDP06105-R...	105.00	CDP06105-R...	RBP06104	760W	TMP01160
BDP06130-R...	130.00	CDP06130-R...	RBP06129	850W	TMP01180
BDP06155-R...	155.00	CDP06155-R...	RBP06155	1100W	TMP01200

NOTE: Maximum Operating Pressure in Bushing 138 MPa (20,000 PSI).

NOTE: Maximum Operating Temperature of Bushing 288°C (550°F).

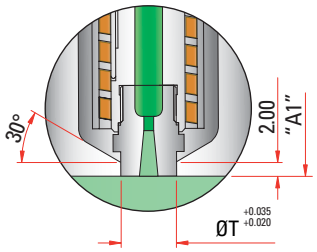
GATE DIAMETER	DIMENSION "B"	DIMENSION "C"	DIMENSION "D1"
Ø 1.0	Ø 2.00	2.06	0.62
Ø 1.2		1.96	0.66
Ø 1.4		1.86	0.70
Ø 1.6	Ø 3.00	2.97	0.75
Ø 1.8		2.87	0.82
Ø 2.0		2.77	0.91
Ø 2.2	Ø 4.00	3.88	1.02
Ø 2.4		3.78	1.18
Ø 2.6		3.68	1.54

* The "B" and 8.00 Diameter Dimensions are correct Ball Gauges to be used for checking the "A1-C" and "A1-8.5" Dimensions.

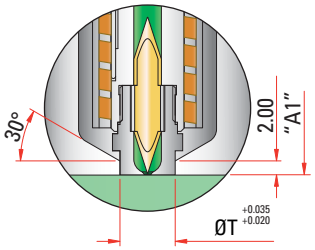
TIP OPTIONS

NOTE: For Extra Stock Tips, Customer Must Modify and Add Relief, Such that Average Land Contact is 2.00mm.

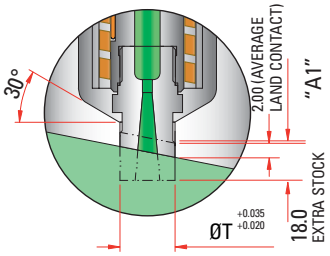
SPRUE GATE TIP



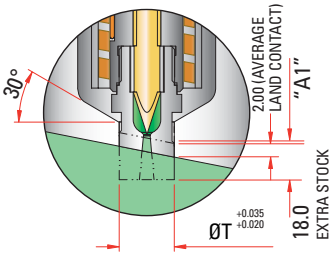
RING GATE TIP



SPRUE GATE EXTRA STOCK TIP

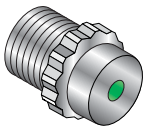


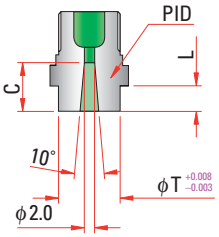
RING GATE EXTRA STOCK TIP



Polimax Series 200 Tips

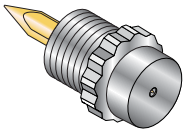
SPRUE GATE TIP

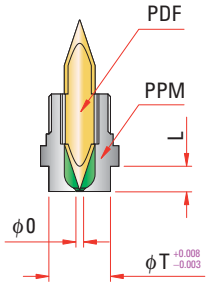




TIP DIMENSIONS			
TIPS	DIMENSION "T"	DIMENSION "L"	DIMENSION "C"
PID06001	12.00	5.50	9.00
PID06002	18.00	5.50	9.00
PID06003	12.00	23.50	27.00
PID06004	18.00	23.50	27.00

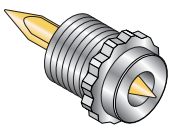
RING GATE TIP

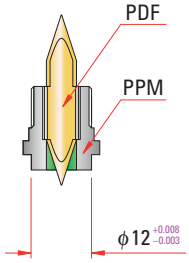




TIP DIMENSIONS						
ASSEMBLY	ASSEMBLY COMPONENTS		MATERIAL	DIMENSION "T"	DIMENSION "0"	DIMENSION "L"
	NEEDLE	RETAINER TIP				
PMA06009	PDF06502	PPM06601	WEAR RESISTANT	12.00	1.50	5.50
PMA06010		PPM06602		12.00	2.00	
PMA06011		PPM06603		18.00	1.50	
PMA06012		PPM06604		18.00	2.00	
PMA06013		PPM06605		12.00	1.50	23.50
PMA06014		PPM06606		12.00	2.00	
PMA06015		PPM06607		18.00	1.50	
PMA06016		PPM06608		18.00	2.00	
PMA06109	PDF06802	PPM06601	STANDARD D-M-E	12.00	1.50	5.50
PMA06110		PPM06602		12.00	2.00	
PMA06111		PPM06603		18.00	1.50	
PMA06112		PPM06604		18.00	2.00	
PMA06113		PPM06605		12.00	1.50	23.50
PMA06114		PPM06606		12.00	2.00	
PMA06115		PPM06607		18.00	1.50	
PMA06116		PPM06608		18.00	2.00	

POINT GATE TIP

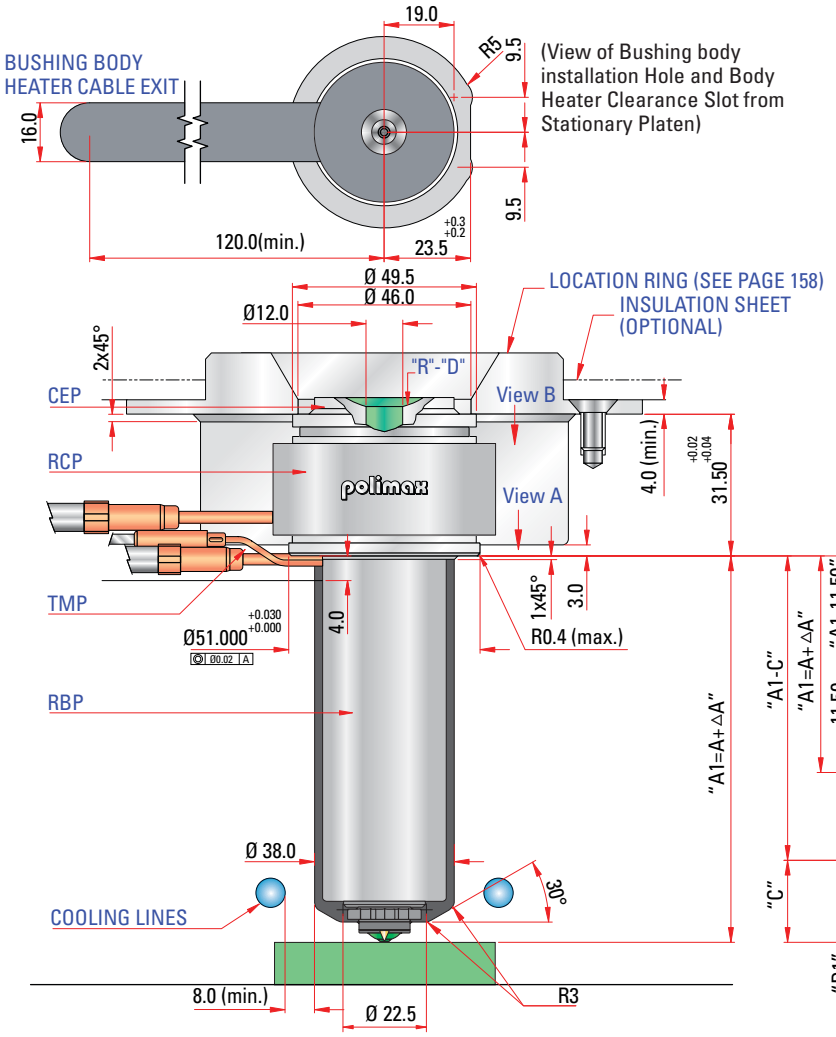




ASSEMBLY	POINT GATE COMPONENTS		
	NEEDLE	RETAINER TIP	MATERIAL
PVM06002	PDF06502	PPM06609	WEAR RESISTANT
PVM06009	PDF06802	PPM06609	STANDARD D-M-E

Polimax High Performance Series 500

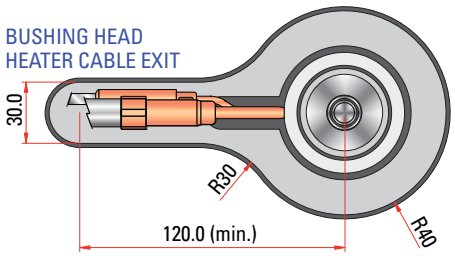
CAVITY BLOCK VIEW A



Bushing Thermal Expansion "ΔA" = A x 0.0000115 x (Setpoint °C - 20°C)
or "ΔA" = A x 0.0000064 x (Setpoint °F - 68°F)

CAVITY BLOCK VIEW B

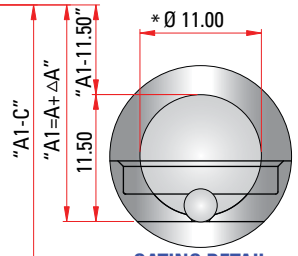
(View of Bushing Head Installation Hole and Head Heater Clearance Slot from Stationary Platen)



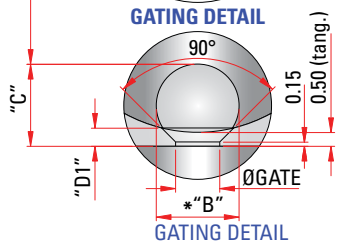
CODE FOR DETAIL	SPHERICAL "R"	CHAMFER "D"
...-R000	0	
...-R155	15.5	
...-R400	40.0	
...-R050	1/2"	
...-R075	3/4"	
...-D090		90° - incl.

Ex: EDP10060-R050

SPHERICAL RADIUS: R1/2"

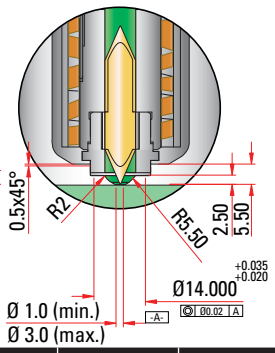


GATING DETAIL



GATING DETAIL

POINT GATE TIP



BUSHING AND COMPONENT SPECIFICATIONS

ASSEMBLY	DIMENSION "A"	ASSEMBLY COMPONENTS					
		BUSHING BODY	HEATER	WATTS	HEAD HEATER	WATTS	THERMOCOUPLE
EDP10060-R...	60.00	CEP10060-R...	RBP10056	500W	RCP50020	400W	TMP01080
EDP10072-R...	72.50	CEP10072-R...	RBP10069	690W			TMP01100
EDP10085-R...	85.00	CEP10085-R...	RBP10081	760W			TMP01120
EDP10097-R...	97.50	CEP10097-R...	RBP10094	760W			TMP01140
EDP10110-R...	110.00	CEP10110-R...	RBP10107	760W			TMP01160
EDP10135-R...	135.00	CEP10135-R...	RBP10131	850W			TMP01180
EDP10160-R...	160.00	CEP10160-R...	RBP10158	1100W			TMP01200
EDP10185-R...	185.00	CEP10185-R...	RBP10183	1300W			TMP01220

GATE DIAMETER	DIMENSION "B"	DIMENSION "C"	DIMENSION "D1"
Ø 1.0	Ø 2.00	2.06	0.58
Ø 1.2		1.96	0.60
Ø 1.4		1.86	0.63
Ø 1.6	Ø 3.00	2.97	0.66
Ø 1.8		2.87	0.69
Ø 2.0		2.77	0.73
Ø 2.2	Ø 4.00	3.88	0.78
Ø 2.4		3.78	0.83
Ø 2.6		3.68	0.89
Ø 2.8	Ø 5.00	4.78	0.96
Ø 3.0		4.68	1.05

NOTE: Maximum Operating Pressure in Bushing 138 MPa (20,000 PSI).

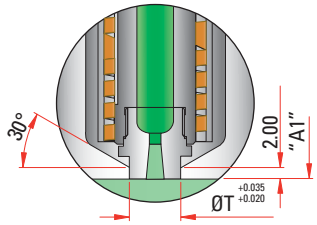
NOTE: Maximum Operating Temperature of Bushing 343°C (650°F).

* The "B" and 11.00 Diameter Dimensions are correct Ball Gauges to be used for checking the "A1-C" and the "A1-11.50" Dimensions.

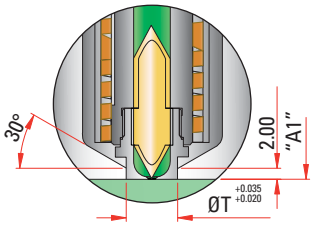
TIP OPTIONS

NOTE: For Extra Stock Tips, Customer Must Modify and Add Relief, Such that Average Land Contact is 2.00mm.

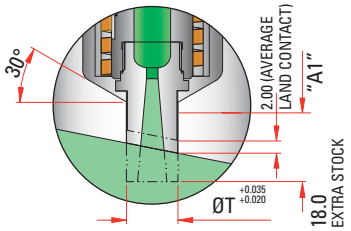
SPRUE GATE TIP



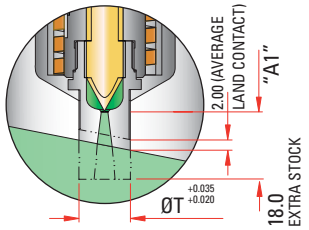
RING GATE TIP



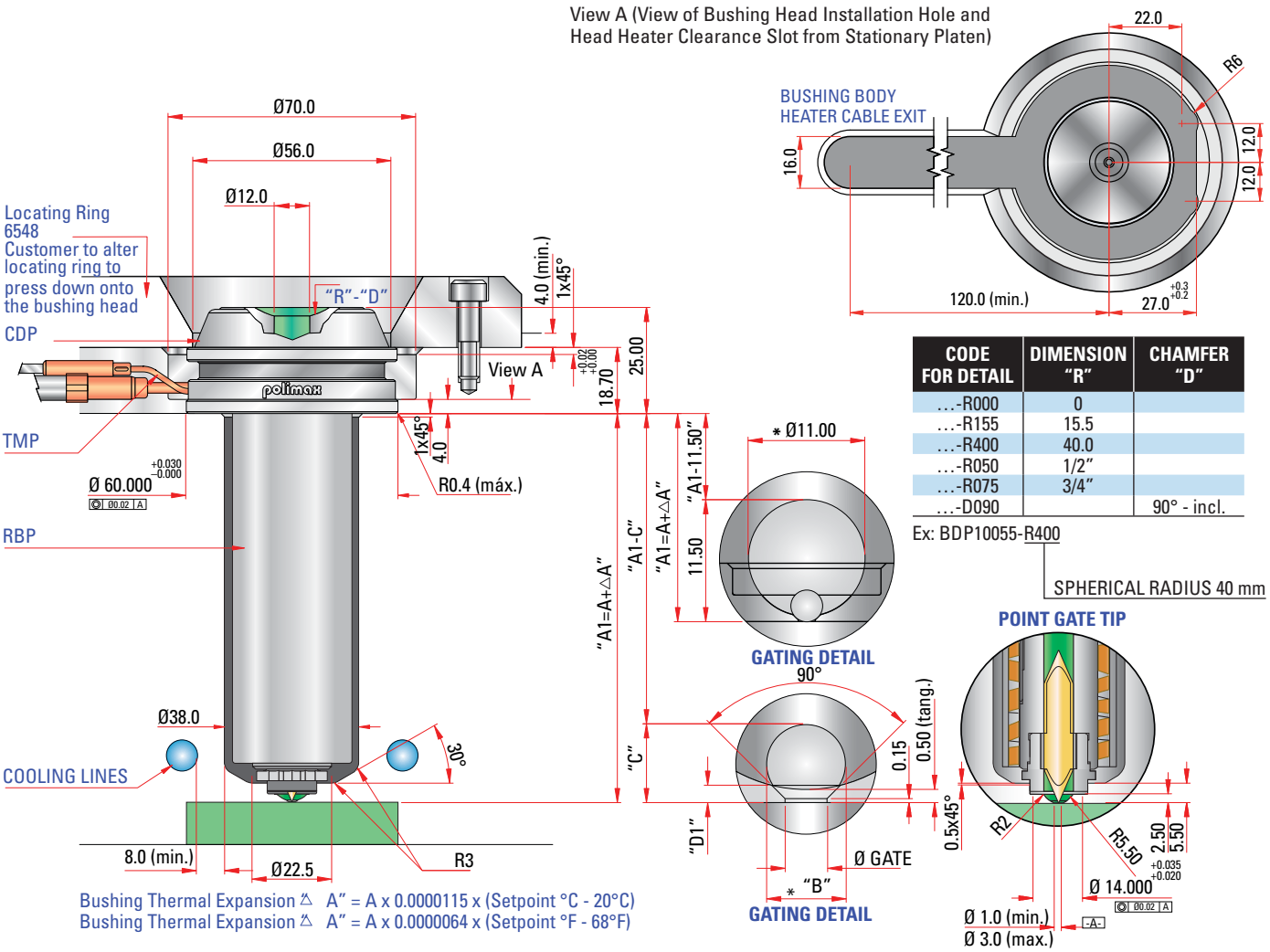
SPRUE GATE EXTRA STOCK TIP



RING GATE EXTRA STOCK TIP



Polimax Standard Series 500



CODE FOR DETAIL	DIMENSION "R"	CHAMFER "D"
...-R000	0	
...-R155	15.5	
...-R400	40.0	
...-R050	1/2"	
...-R075	3/4"	
...-D090		90° - incl.

Ex: BDP10055-R400

SPHERICAL RADIUS 40 mm

Bushing Thermal Expansion △ A" = A x 0.0000115 x (Setpoint °C - 20°C)
Bushing Thermal Expansion △ A" = A x 0.0000064 x (Setpoint °F - 68°F)

BUSHING AND COMPONENT SPECIFICATIONS

ASSEMBLY	DIMENSION "A"	ASSEMBLY COMPONENTS			
		BUSHING BODY	HEATER	WATTS	THERMOCOUPLE
BDP10055-R...	55.00	CDP10055-R...	RBP10056	500W	TMP01080
BDP10067-R...	67.50	CDP10067-R...	RBP10069	690W	TMP01100
BDP10080-R...	80.00	CDP10080-R...	RBP10081	760W	TMP01120
BDP10092-R...	92.50	CDP10092-R...	RBP10094	760W	TMP01140
BDP10105-R...	105.00	CDP10105-R...	RBP10107	760W	TMP01160
BDP10130-R...	130.00	CDP10130-R...	RBP10131	850W	TMP01180
BDP10155-R...	155.00	CDP10155-R...	RBP10158	1100W	TMP01200
BDP10180-R...	180.00	CDP10180-R...	RBP10183	1300W	TMP01220

NOTE: Maximum Operating Pressure in Bushing 138 MPa (20,000 PSI)

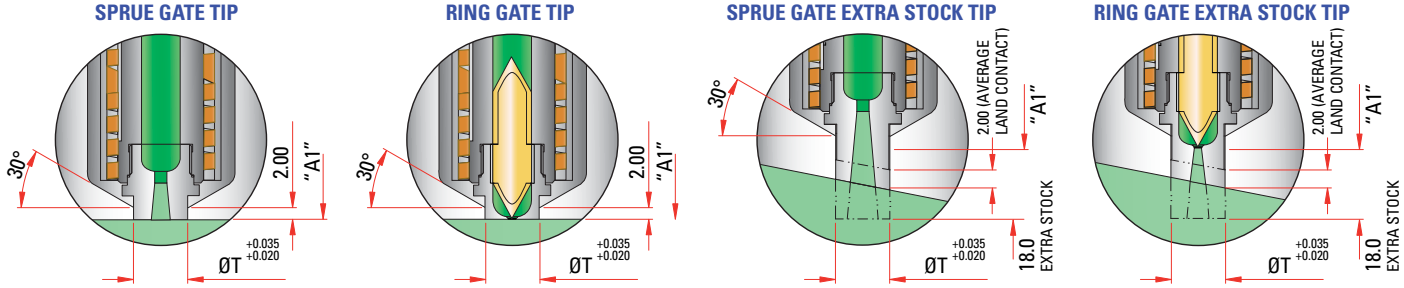
NOTE: Maximum Operating Temperature of Bushing 288°C (550°F)

GATE DIAMETER	DIMENSION "B"	DIMENSION "C"	DIMENSION "D1"
Ø 1.0	Ø 2.00	2.06	0.58
Ø 1.2		1.96	0.60
Ø 1.4		1.86	0.63
Ø 1.6	Ø 3.00	2.97	0.66
Ø 1.8		2.87	0.69
Ø 2.0		2.77	0.73
Ø 2.2	Ø 4.00	3.88	0.78
Ø 2.4		3.78	0.83
Ø 2.6		3.68	0.89
Ø 2.8	Ø 5.00	4.78	0.96
Ø 3.0		4.68	1.05

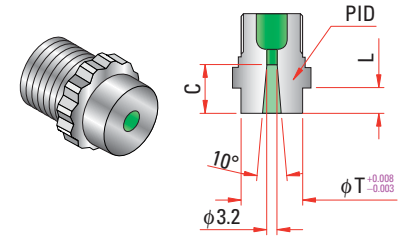
* The "B" and 11.00 Diameter Dimensions are correct Ball Gauges to be used for checking the "A1-C" and "A1-11.50" Dimensions.

TIP OPTIONS

NOTE: For Extra Stock Tips, Customer Must Modify and Add Relief, Such that Average Land Contact is 2.00 mm.

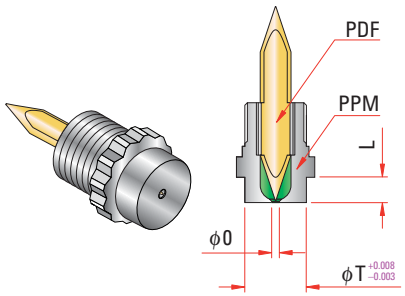


Polimax Series 500 Tips



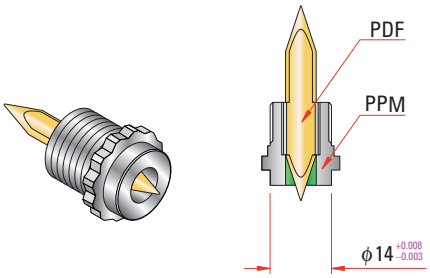
SPRUE GATE TIP

TIP DIMENSIONS			
TIPS	DIMENSION "T"	DIMENSION "L"	DIMENSION "C"
PID10001	14.00	6.00	9.50
PID10002	18.00	6.00	9.50
PID10003	14.00	24.00	27.50
PID10004	18.00	24.00	27.50



RING GATE TIP

TIP DIMENSIONS						
ASSEMBLY	ASSEMBLY COMPONENTS		MATERIAL	DIMENSION "T"	DIMENSION "O"	DIMENSION "L"
	NEEDLE	RETAINER TIP				
PMA10009	PDF10502	PPM10601	WEAR RESISTANT	14.00	2.00	6.00
PMA10010		PPM10602		14.00	2.50	
PMA10011		PPM10603		18.00	2.00	
PMA10012		PPM10604		18.00	2.50	
PMA10013		PPM10605		14.00	2.00	24.00
PMA10014		PPM10606		14.00	2.50	
PMA10015		PPM10607		18.00	2.00	
PMA10016		PPM10608		18.00	2.50	
PMA10109	PDF10802	PPM10601	STANDARD D-M-E	14.00	2.00	6.00
PMA10110		PPM10602		14.00	2.50	
PMA10111		PPM10603		18.00	2.00	
PMA10112		PPM10604		18.00	2.50	
PMA10113		PPM10605		14.00	2.00	24.00
PMA10114		PPM10606		14.00	2.50	
PMA10115		PPM10607		18.00	2.00	
PMA10116		PPM10608		18.00	2.50	

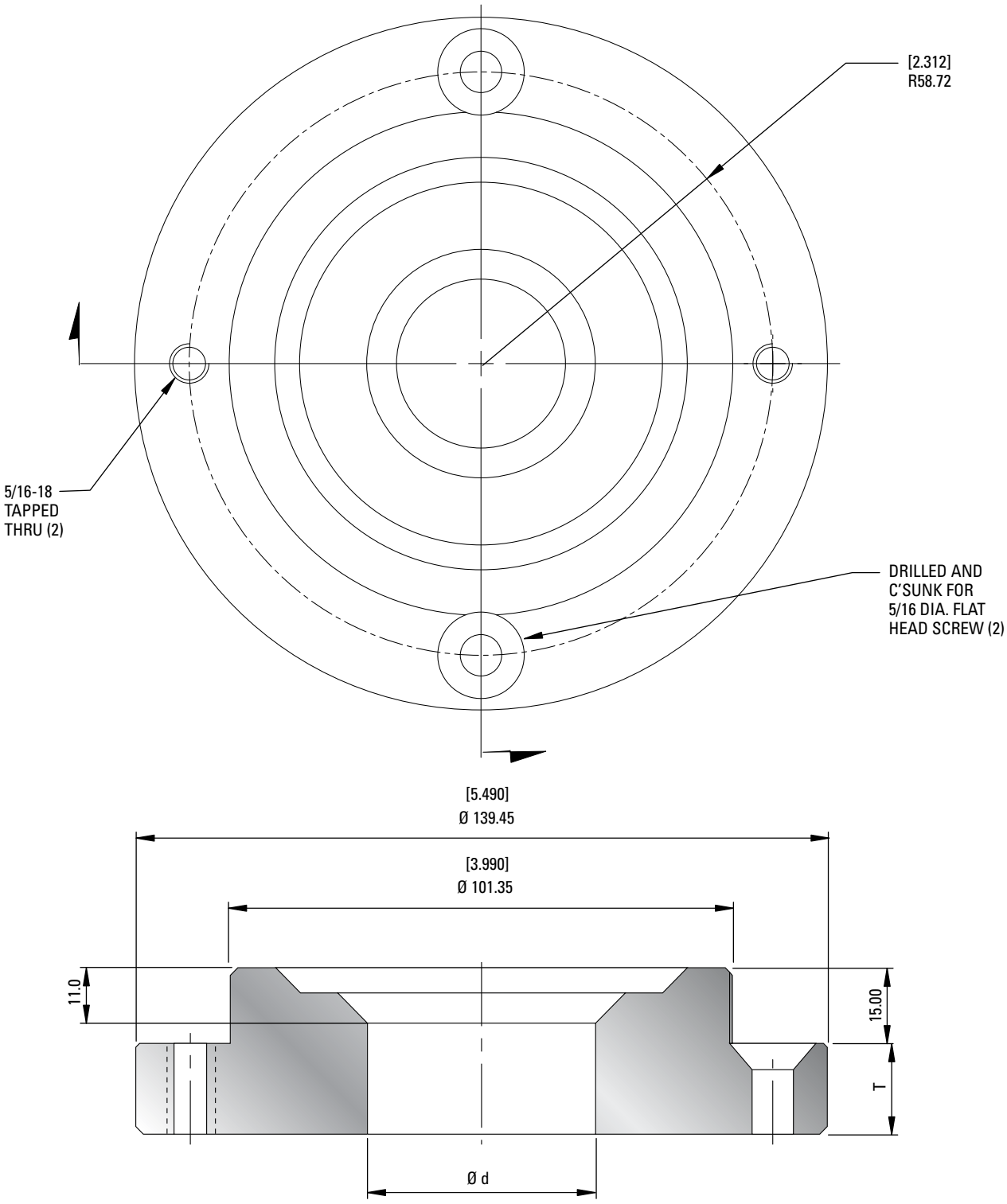


POINT GATE TIP

ASSEMBLY	POINT GATE COMPONENTS		
	NEEDLE	RETAINER TIP	MATERIAL
PVM10002	PDF10502	PPM10609	WEAR RESISTANT
PVM10009	PDF10802	PPM10609	STANDARD D-M-E

U.S. 800-626-6653 ▪ Canada 800-387-6600 ▪ www.dme.net
ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

200 & 500 High Performance Locating Rings



200 & 500 SERIES HIGH PERFORMANCE LOCATING RINGS

HOT SPRUE BUSHING	ITEM NUMBER	Ø d	T
200 Series	PML0251	34.0 (1.34")	18.00 (0.709")
200 Series	PML0253	34.0 (1.34")	5.54 (0.218")
500 Series	PML0551	46.0 (1.81")	18.00 (0.709")
500 Series	PML0553	46.0 (1.81")	5.54 (0.218")

Gate-Mate™ Applications and Benefits

D-M-E Gate-Mate™ Hot Sprue Bushings

The D-M-E Gate-Mate™ Hot Sprue Bushing is designed for direct part gating in single-cavity molds, eliminating the conventional cold sprue. The unique design of the bushing provides minimal gate vestige, without the objectionable witness lines so commonly found on direct gated parts.

The bushing transfers molten plastics from the machine nozzle to the mold cavity via a direct channel in the body. The plated copper alloy tip provides an improved temperature profile in the gate area.

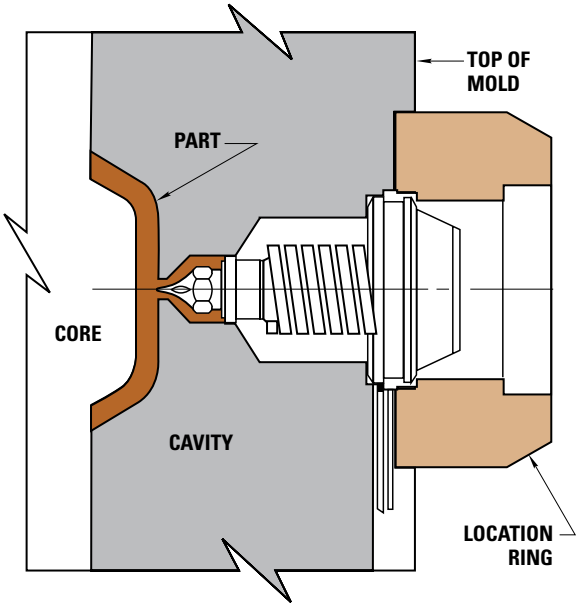
The D-M-E Gate-Mate™ Hot Sprue Bushing utilizes an advanced design square coil heater and independent thermocouple, strategically located for precise temperature control. The bushing is available in three sizes to suit a variety of applications.

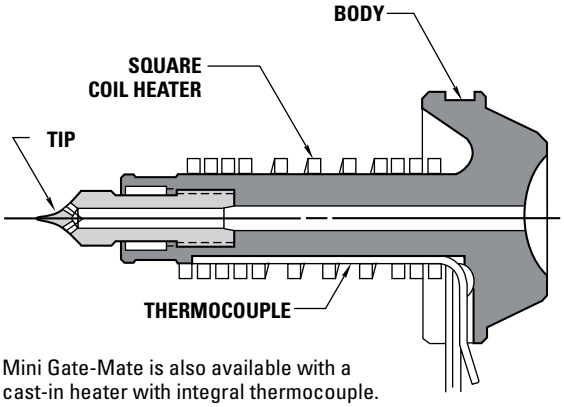
See the D-M-E Control Systems Catalog for Smart Series® Single Zone Temperature Controllers. (For Multi-Cavity, see D-M-E Gate-Mate Nozzles).



Mini and Jumbo Style Gate-Mate Bushings Shown

Typical Applications





NOTE: Mini Gate-Mate is also available with a cast-in heater with integral thermocouple.

Benefits

- Eliminates sprues, reduces cycle time, improves part quality, increases production
- Provides optimum gate cosmetics
- Plated copper alloy tip improves temperature profile in gate area
- Self insulating material layer surrounds tip for better tip control and part cooling
- Square coil heater and independent thermocouple provide precise temperature control
- Optional cast in heater available for Mini Gate-Mate bushing

Advantages

- Direct part gating eliminating a cold sprue to trim and no witness lines on the molded part
- Minimal gate vestige resulting in better part appearance
- Faster start-ups providing positive temperature control of gate area
- Reduced cycle times because the bushing allows cooling channels to be placed closer to the gate area
- Cooler cavities with no direct contact between bushing tip and cavity
- Improved part quality with a shorter injection path and elimination of sprue, meaning no regrind
- Increased production with faster cycles and no sprue trimming
- Easy installation and operation, and available in three standard sizes suitable for most applications
- Positive temperature control with J-Type thermocouple and D-M-E Smart-Series® (and G-Series) controllers

Mini Gate-Mate™



Radius Type

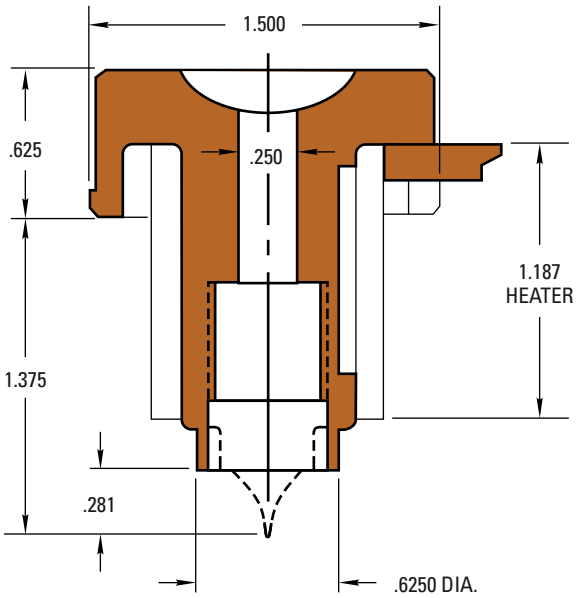


Flat Type

The Mini Gate-Mate Bushings are ideal for fast cycling single cavity molds. The compact design permits shorter overall stack-up of the "A" side mold plates. The Mini Gate-Mate Bushings are provided with either a square coil heater or a cast-in heater. Thermocouple placement provides better heater control, and the overall body design improves thermal insulation. Square coil heater, thermocouple and tip are all replaceable.

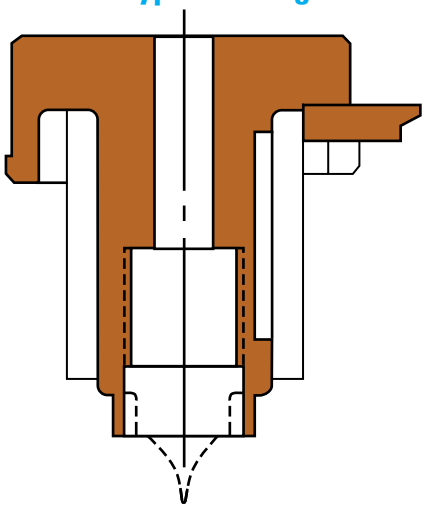
Sub-assemblies include square coil heater and thermocouple or cast-in heater with integral thermocouple. Tip to be ordered separately.

½" SPH. Radius Type Bushing



½ SPH. RADIUS BUSHING SUB-ASSEMBLY	
ITEM NUMBER	HEATER TYPE
GMB0116	SQUARE COIL
GMB0111	CAST-IN

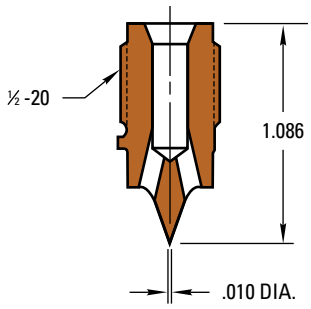
Flat Type Bushing



Dimensions same as radius type bushing

FLAT BUSHING SUB-ASSEMBLY	
ITEM NUMBER	HEATER TYPE
GMB0117	SQUARE COIL
GMB0112	CAST-IN

Mini Gate-Mate™ Tips



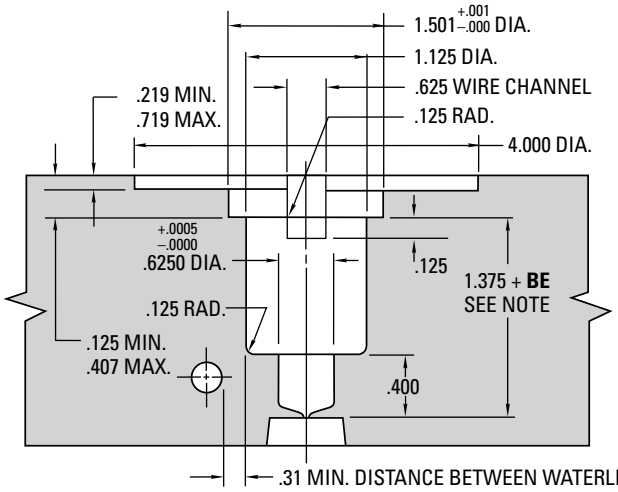


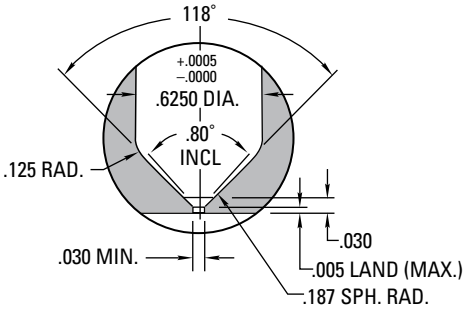
ITEM NUMBER	TIP STYLE
GMT0100	STANDARD
GMT4101	WEAR RESISTANT

Contact for D-M-E for tip recommendations and assistance with your application.

Mini Gate-Mate™ Machining Dimensions

Machining Dimensions for Bushings





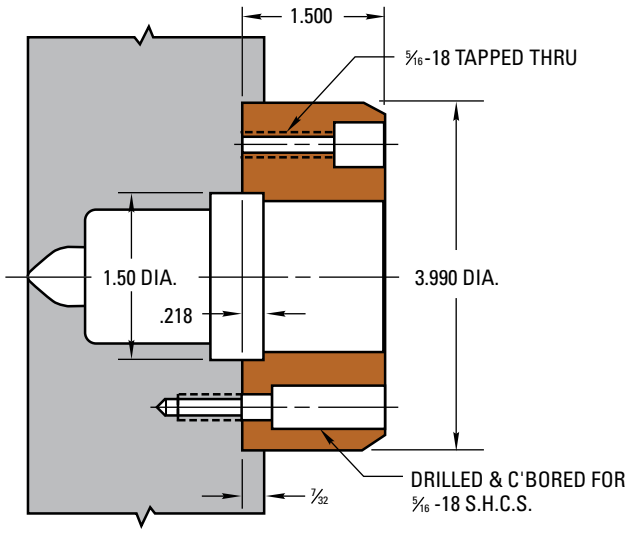
NOTE:
The expansion factor must be taken into consideration prior to machining for and installation of the bushing. This factor (BE) must then be added to the A dimension. The formula for determining this expansion factor is as follows:
BE = 1.375 × .0000063 × (nozzle setpoint – 68°F).

EXAMPLE:
Given a setpoint of 500°F. BE = 1.375 × .0000063 × (500 – 68) = .004 thus 1.375 + .004 = 1.379.
Please note that the above information is given as an example. Variations may occur based on mold configuration and cooling factor. In some instances, it may be necessary to obtain an empirical factor.

Replacement Parts

SUB-ASSEMBLY REFERENCE	BODY TYPE	HEATER TYPE (240 VAC, 250 WATT)	THERMOCOUPLE (36" LEADS)
GMB0111	½ RADIUS	(CAST IN) CIH0100	N/A (INTEGRAL TO HEATER)
GMB0112	FLAT		
GMB0116	½ RADIUS	(SQUARE COIL) SCH0004	TCG0100
GMB0117	FLAT		

Mini Gate-Mate Bushing Locating Ring



ITEM NUMBER
6548

NOTES:
1. Two (2) 5/16-18 S.H.C.S. are included with Locating Ring
2. Two (2) Drilled and C'bored holes for 5/16-18 S.H.C.S. are on a 1.656 circle radius in Locating Ring
3. C'bore depth in Top Clamp Plate and C'bore depth in Locating Ring can be altered to suit application

Medium Gate-Mate™

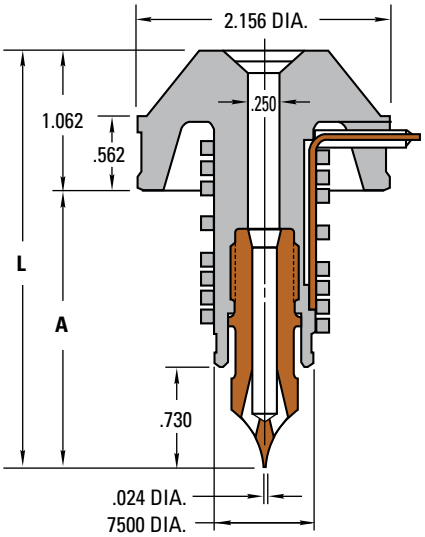
The Medium Gate-Mate Bushing is designed for direct part gating in single cavity molds, eliminating the conventional cold sprue. The unique design of the bushing provides minimal gate vestige, without the objectionable witness lines so commonly found on direct gated parts.



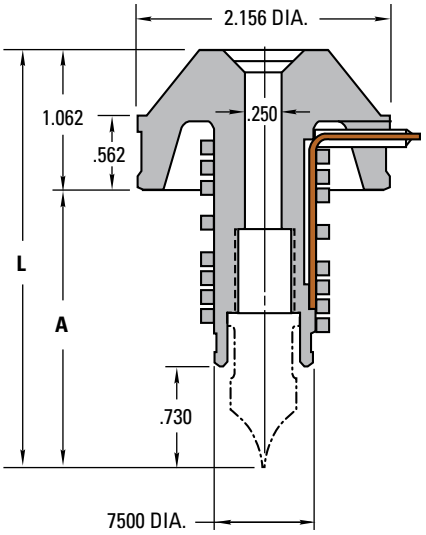
The bushing transfers molten plastics from the machine nozzle to the mold cavity via a direct channel in the body. The bushing, in conjunction with the recommended tip and gate configuration, controls gate vestige height.

The Medium Gate-Mate Bushing utilizes an advanced design square coil heater and an independent thermocouple, strategically located for precise temperature control.

Bushing Assembly



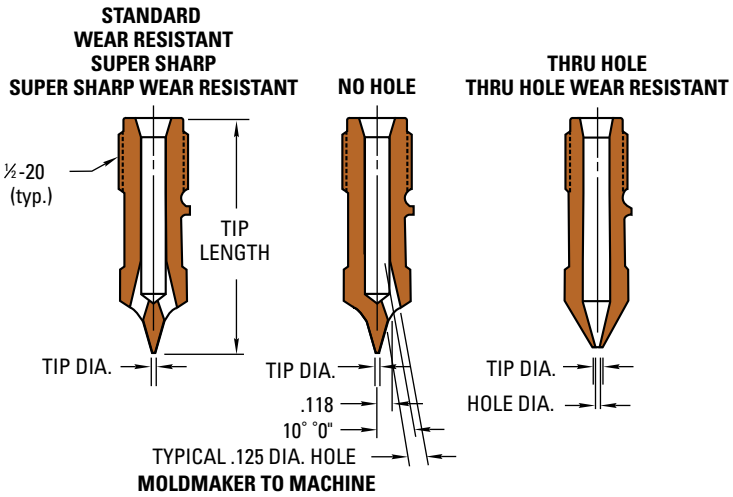
Bushing Sub-Assembly



BUSHING ASSEMBLY (INCLUDES GMT-2 TIP)			
ITEM NUMBER	A	L	DUAL SPH. RAD.
GMB-523-2	2.375	3.437	1/2 & 3/4
GMB-533-2	3.375	4.437	

BUSHING SUB-ASSEMBLY (ORDER TIP SEPARATELY)			
ITEM NUMBER	A	L	DUAL SPH. RAD.
GMB0020	2.375	3.437	½ & ¾
GMB0030	3.375	4.437	

Gate-Mate 4™ Tips



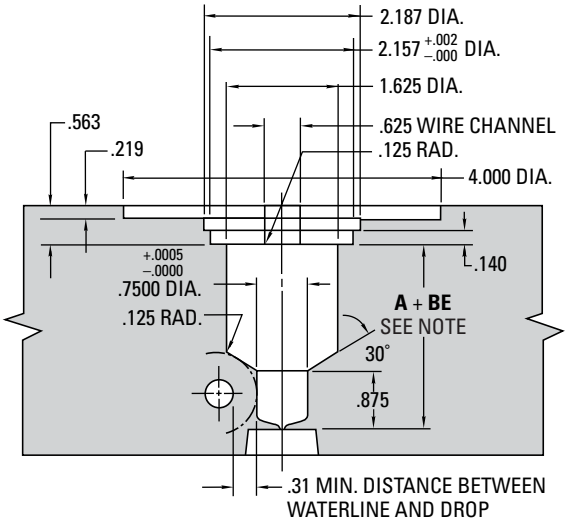
*Contact D-M-E for details to modify thru-hole tips for larger "O" diameters.

TIP STYLE	TIP ITEM NUMBER	O DIA.	TIP LENGTH	TIP DIA.	HOLE DIA.
STANDARD	GMT-2	.044 MIN.	1.730	.024	N/A
WEAR RESISTANT	GMT0400	.055 MIN.			
SUPER SHARP	GMT0301	.030 MIN.		.010	
SUPER SHARP WEAR RESISTANT	GMT0401	.055 MIN.			
THRU HOLE	GMT0302*	.030 MIN. .050 MAX	1.690	.090	.050
THRU HOLE WEAR RESISTANT	GMT0402*	.055 MIN.			
NO HOLE	GMT0303	.044 MIN.	1.730	.024	N/A

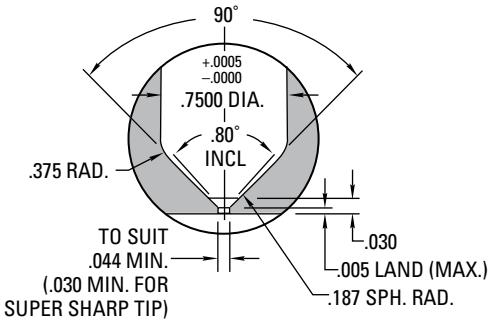
NOTES:
1. Thru-hole tip is designed .040 shorter in length to be a direct replacement for the standard tip; use a .030 to .060 diameter gate
2. A .030 minimum diameter gate is recommended when using the super sharp tip
3. Contact D-M-E for tip recommendations and assistance with your application

Medium Gate-Mate™ Machining Dimensions

Machining Dimensions for Bushings



Improved tip insulation, elimination of material degradation in threaded area of tip, and faster color changes can be achieved through use of a Gate Shell Insulator. See page 65 for details.



NOTE:
The expansion factor must be taken into consideration prior to machining for, and installing bushing. This factor (BE) must then be added to the nominal A dimension. Formula for determining this expansion is as follows: BE = A dimension × .0000063 × (bushing set point temp. – 68°).

EXAMPLE:
Given a 2.375 inch A dimension, with a Bushing Set Point temp. of 500°F.
BE = 2.375 × .0000063 × (500 – 68) = .006 thus A + BE will be 2.381.

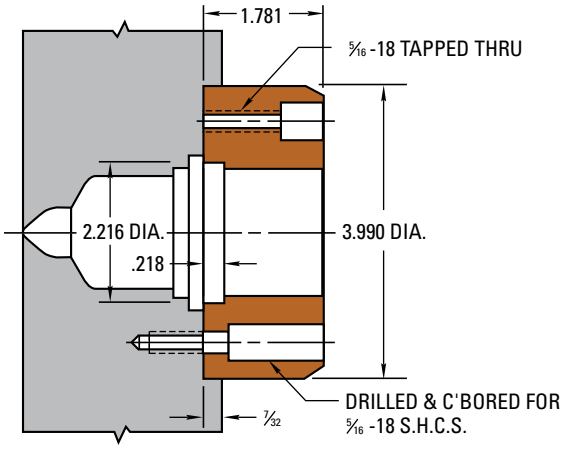
Please note that the above information is given as an example. Variations may occur based on mold configurations and cooling factor. In some instances, it may be necessary to obtain an empirical factor.

ITEM NUMBER REFERENCE		A
BUSHING ASSEMBLY	BUSHING SUB-ASSEMBLY	
GMB-523-2	GMB0020	2.375
GMB-533-2	GMB0030	3.375

Replacement Parts

ITEM NUMBER REFERENCE		SQUARE COIL HEATERS (240 VAC)			THERMOCOUPLE (TYPE J, 36" LEADS)	
BUSHING ASSEMBLY	BUSHING SUB-ASSEMBLY	ITEM NUMBER	WATTS	LENGTH	ITEM NUMBER	LENGTH
GMB-523-2	GMB0020	SCH3142	315	1.70	TC-9600	1.35
GMB-533-2	GMB0030	SCH3242	315	2.70	TC-9700	2.35

Medium Gate-Mate Locating Ring



ITEM NUMBER
6545

NOTES:
1. Two (2) 5/16 -18 S.H.C.S. are included with Locating Ring
2. Two (2) Drilled and C'bored holes for 5/16 -18 S.H.C.S. are on a 1.656 circle radius in Locating Ring
3. C'bore depth in Top Clamp Plate and C'bore depth in Locating Ring can be altered to suit application

Jumbo Gate-Mate™

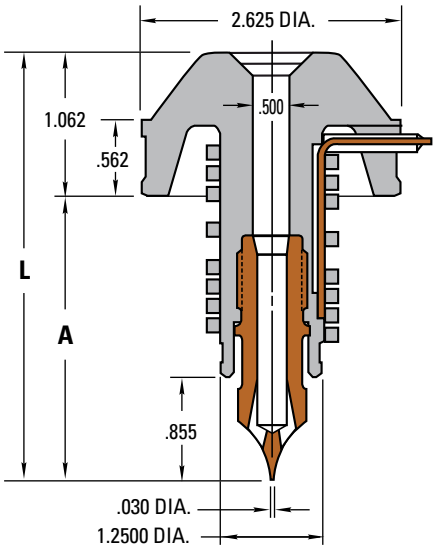


The Jumbo Gate-Mate Bushing is designed for direct part gating in single cavity molds, eliminating the conventional cold sprue. The unique design of the bushing provides minimal gate vestige, without the objectionable witness lines so commonly found on direct gated parts.

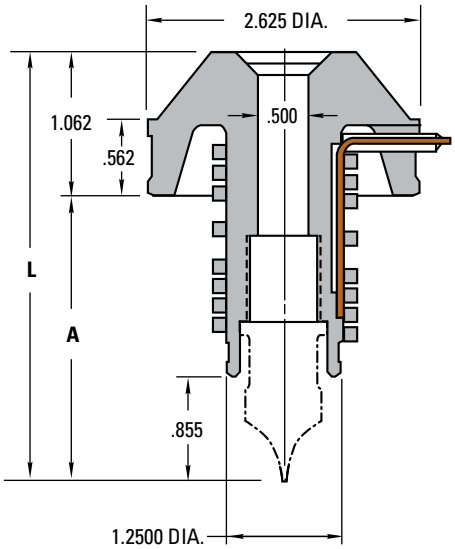
The bushing transfers molten plastics from the machine nozzle to the mold cavity via a direct channel in the body. The bushing, in conjunction with the recommended tip and gate configuration, controls gate vestige height.

The Jumbo Gate-Mate Bushing utilizes an advanced design square coil heater and an independent thermocouple, strategically located for precise temperature control.

Bushing Assembly



Bushing Sub-Assembly

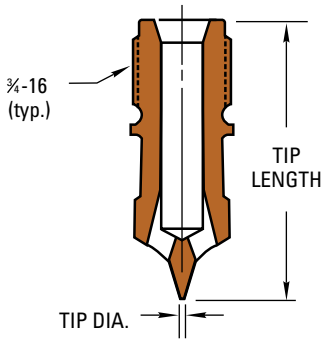


BUSHING ASSEMBLY (INCLUDES GMT0004 TIP)			
ITEM NUMBER	A	L	SPH. RAD.
GMB0008	2.500	3.562	1/2 & 3/4
GMB0009	3.500	4.562	

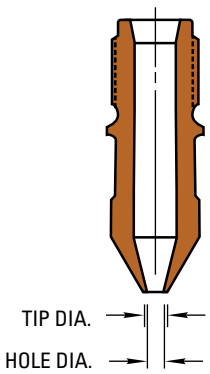
BUSHING SUB-ASSEMBLY (ORDER TIP SEPARATELY)			
ITEM NUMBER	A	L	SPH. RAD.
GMB0113	2.500	3.562	1/2 & 3/4
GMB0114	3.500	4.562	

Jumbo Gate-Mate™ Tips

STANDARD
WEAR RESISTANT



THRU HOLE
THRU HOLE WEAR RESISTANT



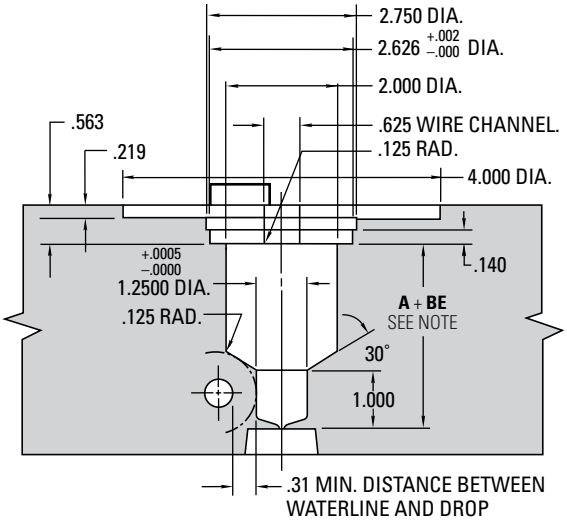
TIP STYLE	ITEM NUMBER	TIP LENGTH	TIP DIA.	HOLE DIA.
STANDARD	GMT0004	1.855	.030	N/A
WEAR RESISTANT	GMT0406			
THRU HOLE	GMT0007	1.815	.140	.100
THRU HOLE WEAR RESISTANT	GMT0407			

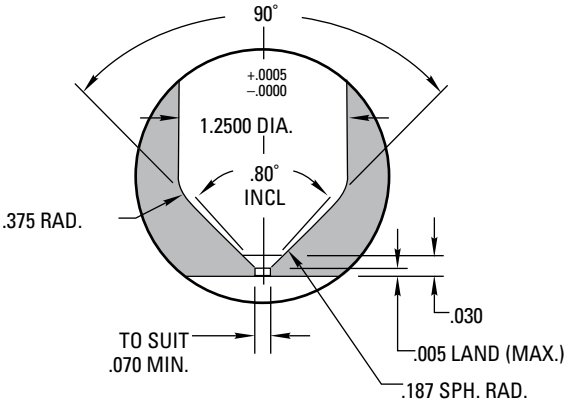
NOTES:

1. Thru-hole tip designed .040 shorter in length to be a direct replacement for the standard tip; use a .080 to .125 diameter gate
2. Contact D-M-E for tip recommendations and assistance with your application

Jumbo Gate-Mate™ Machining Dimensions

Machining Dimensions for Bushings





ITEM NUMBER REFERENCE		A
BUSHING ASSEMBLY	BUSHING SUB-ASSEMBLY	
GMB0008	GMB0113	2.500
GMB0009	GMB0114	3.500

NOTE:
The expansion factor must be taken into consideration prior to machining for, and installing bushing. This factor (BE) must then be added to the nominal A dimension. Formula for determining this expansion is as follows: BE = A dimension × .0000063 × (bushing set point temp. – 68°).

EXAMPLE:
Given a 2.500 inch A dimension, with a Bushing Set Point temp. of 500°F. BE = 2.500 × .0000063 × (500 – 68) = .007 thus A + BE will be 2.507.

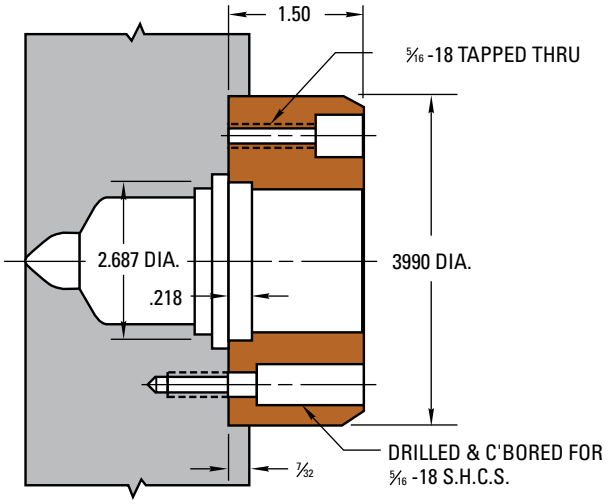
Please note that this information is given as an example. Variations may occur based on mold configurations and cooling factor. In some instances, it may be necessary to obtain an empirical factor.

Replacement Parts

Improved tip insulation, elimination of material degradation in threaded area of tip, and faster color changes can be achieved through use of a Gate Shell Insulator.

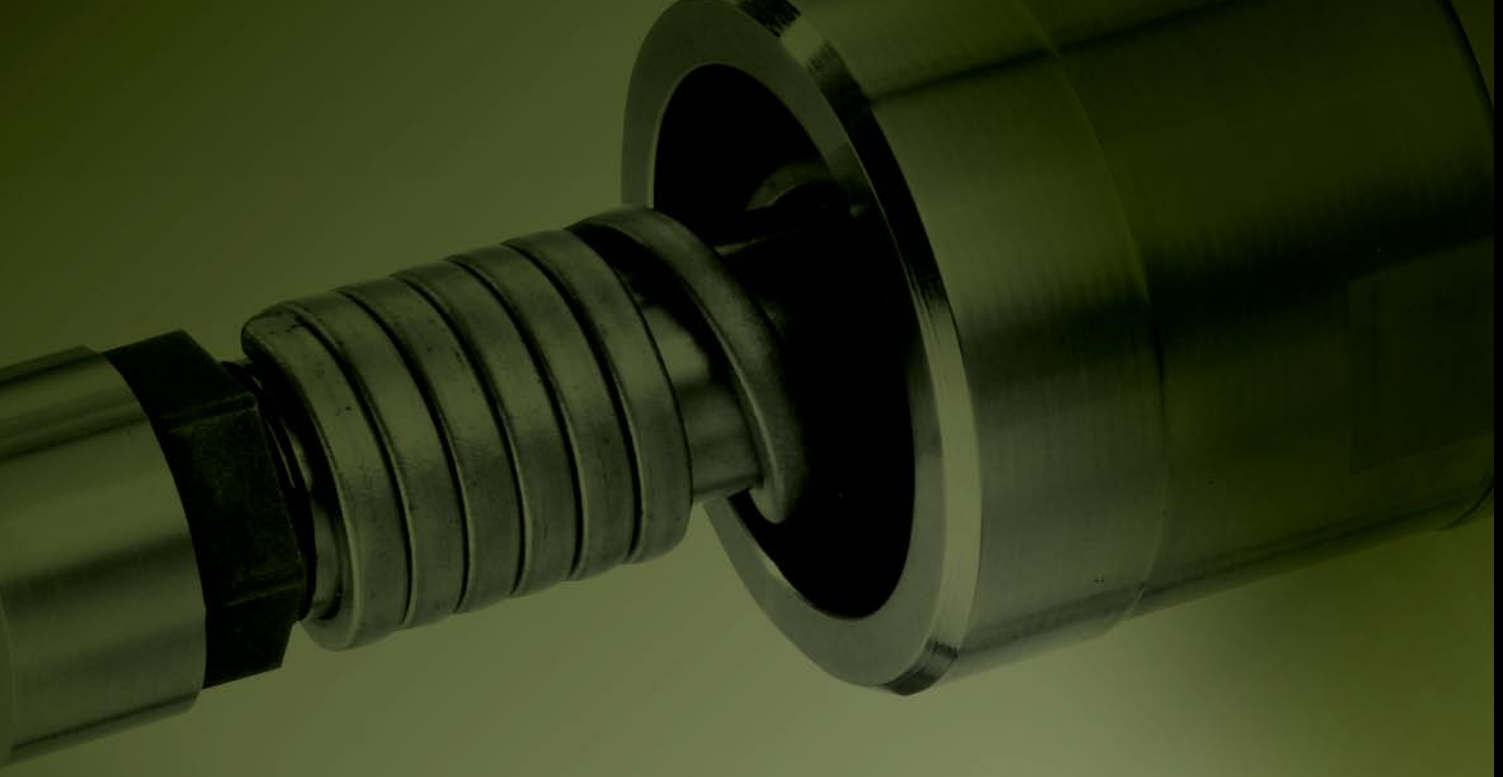
ITEM NUMBER REFERENCE		SQUARE COIL HEATERS (240 VAC)			THERMOCOUPLE (TYPE J, 36" LEADS)	
BUSHING ASSEMBLY	BUSHING SUB-ASSEMBLY	ITEM NUMBER	WATTS	LENGTH	ITEM NUMBER	LENGTH
GMB0008	GMB0113	SCH0002	600	1.70	TC-0002	1.18
GMB0009	GMB0114	SCH0001	800	2.70	TC-0001	2.18

Jumbo Gate-Mate Locating Ring



ITEM NUMBER
GMB0007

NOTES:
1. Two (2) 5/16 -18 S.H.C.S. are included with Locating Ring
2. Two (2) Drilled and C'bored holes for 5/16 -18 S.H.C.S. are on a 1.656 Circle radius in Locating Ring
3. C'bore depth in Top Clamp Plate and C'bore depth in locating ring can be altered to suit application

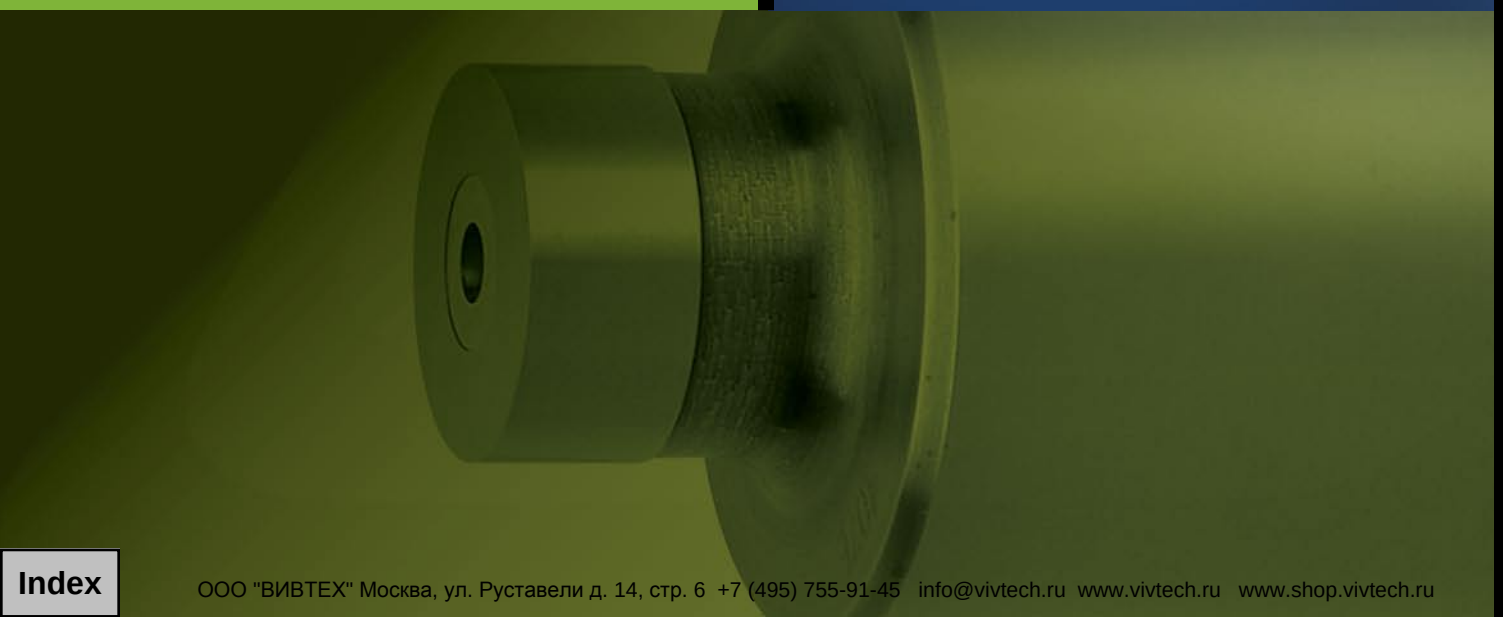


D-M-E Straight-Shot™ Hot Sprue Bushings

REDUCE CYCLE TIMES

AND SAVE MATERIAL COSTS





ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

High-Performance Series Straight-Shot™



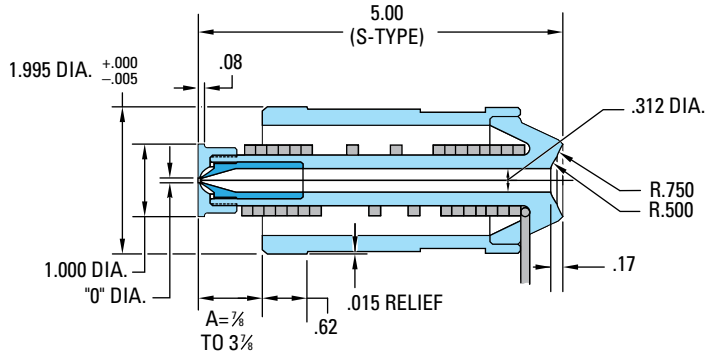
High-Performance Straight-Shot bushings are available as S-type

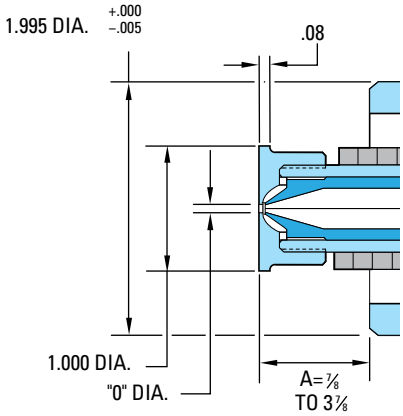
NOTE:
The expansion factor must be taken into consideration prior to machining for and installation of the bushing. This factor (BE) must then be added to the A dimension. The formula for determining this expansion factor is as follows:
BE = 1.375 × .0000063 × (nozzle setpoint – 68°F).

EXAMPLE:
Given a setpoint of 500°F.
BE = 1.375 × .0000063 × (500 – 68) = .004 thus 1.375 + .004 = 1.379.
Please note that the above information is given as an example. Variations may occur based on mold configuration and cooling factor. In some instances, it may be necessary to obtain an empirical factor.

"S" Type (Standard Tip Configuration)

- .062 or .125 DIA. Tips with .08 Land area
- Seven shoulder lengths from ⅞ to 3⅞
- .500 And .750 Spherical radius for machine nozzle
- Replaces conventional cold sprue bushings to reduce cycle time and save material costs
- Efficiently processes commodity or engineering grade resins
- Provides low vestige gate cosmetics (.062 or .125 Gate diameters available)
- High-watt density heater with distributed wattage to help prevent tip freeze-offs



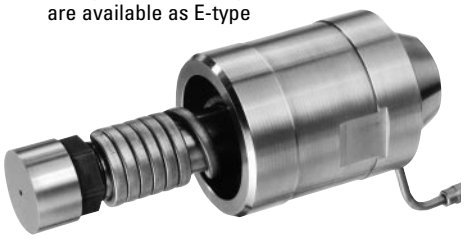


BUSHING ASSEMBLY			REPLACEMENT PARTS						
O DIA.	SHOULDER LENGTH A	BUSHING ASSEMBLY ITEM NUMBER	SHOULDER BUSHING ITEM NUMBER	TIP ITEM NUMBER	RETAINER ITEM NUMBER	BODY ITEM NUMBER	SPACER ITEM NUMBER	HEATER ITEM NUMBER	THERMOCOUPLE ITEM NUMBER
.062	⅞	HPS0607S2	HPS1007	HPT0001	HPT0601	HPS0001	HPT1001	HPS2001	HPS3001
	1⅜	HPS0613S2	HPS1013						
	1⅞	HPS0617S2	HPS1017						
	2⅜	HPS0623S2	HPS1023						
	2⅞	HPS0627S2	HPS1027						
	3⅜	HPS0633S2	HPS1033						
	3⅞	HPS0637S2	HPS1037						
.125	⅞	HPS1207S2	HPS1007	HPT0002	HPT1201	HPS0001	HPT1001	HPS2001	HPS3001
	1⅜	HPS1213S2	HPS1013						
	1⅞	HPS1217S2	HPS1017						
	2⅜	HPS1223S2	HPS1023						
	2⅞	HPS1227S2	HPS1027						
	3⅜	HPS1233S2	HPS1033						
	3⅞	HPS1237S2	HPS1037						

NOTE: High-Performance Series Straight-Shot Hot Sprue Bushings heater has voltage of 240 VAC, 700 watts. Thermocouple is "J" type.

High-Performance Series Straight-Shot™

High-Performance Straight-Shot Bushings are available as E-type



"E" Type (Extended Tip Configuration)

- Replaces conventional cold sprue bushings to reduce cycle time and save material costs
- Efficiently processes commodity or engineering grade resins
- High-watt density heater with distributed wattage to help prevent tip freeze-offs
- .062 or .125 DIA. Tips with .36 Land area for machining of molded part details
- Seven shoulder lengths from ⅞ to 3⅞
- .500 And .750 Spherical radius for machine nozzle

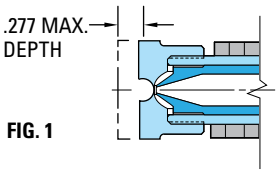


FIG. 1

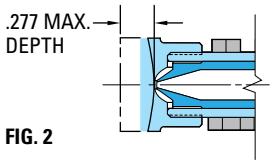


FIG. 2

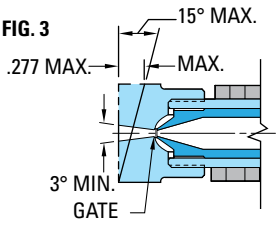


FIG. 3

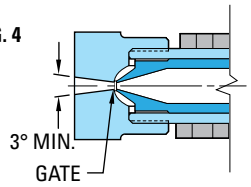
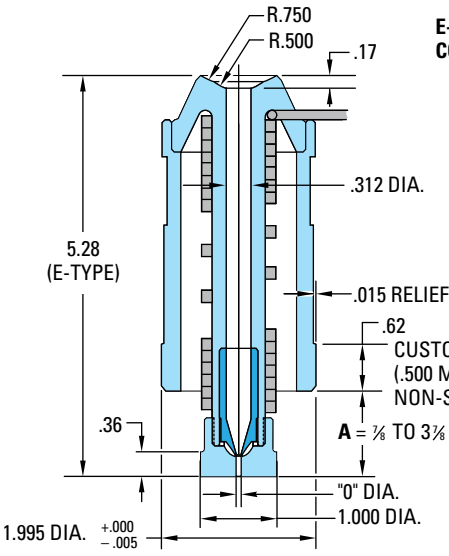


FIG. 4

Always machine runner or part contour to the .277 maximum depth at centerline of gate. However, do not weaken the bushing face by exceeding this maximum dimension (Figures 1 and 2). Always machine part contour to the .277 maximum depth at edge of retainer, with 15° maximum angle. Machine a 3° minimum taper to the gate diameter. This will result in a small sprue on the part being molded (Figure 3). Machine a 3° minimum taper to the gate for a reverse taper sprue on the part being molded (Figure 4). Retainer material is H-13 steel 46-52 HRC.



E-TYPE (EXTENDED TIP CONFIGURATION)

NOTE:
The expansion factor must be taken into consideration prior to machining for and installation of the bushing. This factor (BE) must then be added to the A dimension. The formula for determining this expansion factor is as follows: BE = 1.375 × .0000063 × (nozzle setpoint − 68°F).

EXAMPLE:
Given a setpoint of 500°F. BE = 1.375 × .0000063 × (500 − 68) = .004 thus 1.375 + .004 = 1.379.

Please note that the above information is given as an example. Variations may occur based on mold configuration and cooling factor. In some instances, it may be necessary to obtain an empirical factor.

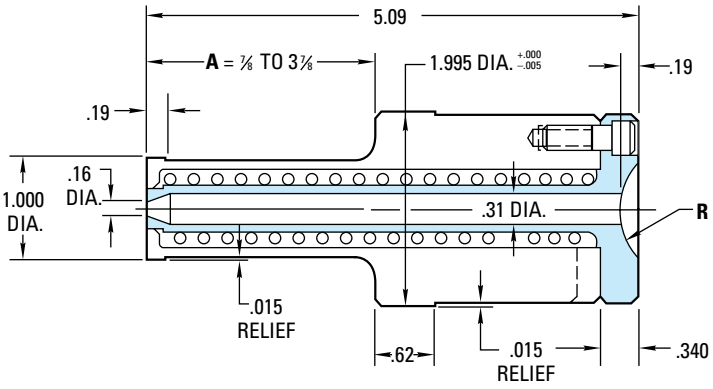
"0" DIA.	**SHOULDER LENGTH A**	**BUSHING ASSEMBLY ITEM NUMBER**	**SHOULDER BUSHING ITEM NUMBER**	**TIP ITEM NUMBER**	**RETAINER ITEM NUMBER**	**BODY ITEM NUMBER**	**SPACER ITEM NUMBER**	**HEATER ITEM NUMBER**	**THERMOCOUPLE ITEM NUMBER**
.062	⅞	HPS0607E2	HPS2007	HPT0001	HPT0602	HPS0001	HPT1001	HPS2001	HPS3001
	1⅜	HPS0613E2	HPS2013						
	1⅞	HPS0617E2	HPS2017						
	2⅜	HPS0623E2	HPS2023						
	2⅞	HPS0627E2	HPS2027						
	3⅜	HPS0633E2	HPS2033						
	3⅞	HPS0637E2	HPS2037						
.125	⅞	HPS1207E2	HPS2007	HPT0002	HPT1202	HPS0001	HPT1001	HPS2001	HPS3001
	1⅜	HPS1213E2	HPS2013						
	1⅞	HPS1217E2	HPS2017						
	2⅜	HPS1223E2	HPS2023						
	2⅞	HPS1227E2	HPS2027						
	3⅜	HPS1233E2	HPS2033						
	3⅞	HPS1237E2	HPS2037						

NOTE: High-Performance Series Straight-Shot Hot Sprue Bushings heater has voltage of 240 VAC, 700 watts. Thermocouple is "J" type.

S-Series Straight-Shot™



U.S. Patent No. 4,273,525



NOTE:
The expansion factor must be taken into consideration prior to machining for and installation of the bushing. This factor (BE) must then be added to the A dimension. The formula for determining this expansion factor is as follows: BE = 1.375 × .0000063 × (nozzle setpoint – 68°F).

EXAMPLE:
Given a setpoint of 500°F.
BE = 1.375 × .0000063 × (500 – 68) = .004 thus 1.375 + .004 = 1.379.
Please note that the above information is given as an example. Variations may occur based on mold configuration and cooling factor. In some instances, it may be necessary to obtain an empirical factor.

Larger Shots – Extended Heater Life

D-M-E developed Straight-Shot Hot Sprue Bushings to eliminate sprues, permit larger shots and faster fills, and greatly extend heater life.

The bushings feature an unrestricted "straight-shot" channel to feed the part or runner. Material in the channel is heated by a special helical tubular heater which surrounds the melt stream. This heater distributes heat uniformly throughout the bushing and is virtually impervious to moisture, gases and plastics contamination.

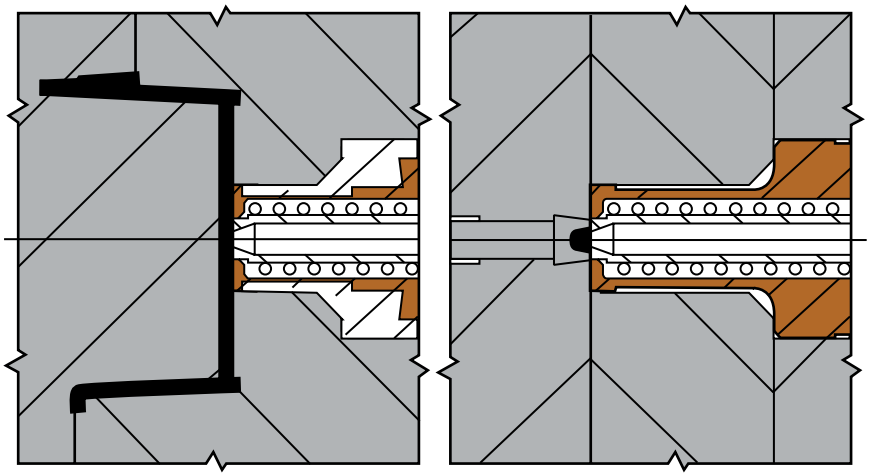
The helical tubular heater (120 or 240 volt) is thermocouple equipped so temperature can be closely controlled using a D-M-E single-zone Closed Loop Temperature Controller.

The Standard S-Series Straight-Shot is designed for direct part gating or for feeding half-round or trapezoidal runners. It is supplied with a .16 diameter gate and no gate land. Available in seven standard shoulder lengths with either a ½" or ¾" spherical radius and 120 or 240 volt heater. The S-Series Straight-Shot can be retrofitted to almost any mold that uses a conventional sprue bushing.

NOTE: 5° heater lead is standard. For 90° lead, add "90" to end of item number (e.g., SSBT-4507S-1-90).

R	WITH 120 VOLT HEATER ITEM NUMBER	SHOULDER LENGTH A	WITH 240 VOLT HEATER ITEM NUMBER
½	SSBT-4507S-1	⅞	SSBT-4507S-2
	SSBT-4513S-1	1⅜	SSBT-4513S-2
	SSBT-4517S-1	1⅞	SSBT-4517S-2
	SSBT-4523S-1	2⅜	SSBT-4523S-2
	SSBT-4527S-1	2⅞	SSBT-4527S-2
	SSBT-4533S-1	3⅜	SSBT-4533S-2
	SSBT-4537S-1	3⅞	SSBT-4537S-2
¾	SSBT-6507S-1	⅞	SSBT-6507S-2
	SSBT-6513S-1	1⅜	SSBT-6513S-2
	SSBT-6517S-1	1⅞	SSBT-6517S-2
	SSBT-6523S-1	2⅜	SSBT-6523S-2
	SSBT-6527S-1	2⅞	SSBT-6527S-2
	SSBT-6533S-1	3⅜	SSBT-6533S-2
	SSBT-6537S-1	3⅞	SSBT-6537S-2

Typical Applications



DIRECT PART GATING

FEEDING A TRAPEZOIDAL RUNNER

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E-Series Straight-Shot™

D-M-E Standard E-Series Straight-Shot Hot Sprue Bushings (Long and Short Styles) provide a .25 inch extra stock allowance on the front face to permit machining of runner profiles or part contours into that face. They are supplied with a .06 diameter gate and a .25 inch gate land. The gate diameter can be enlarged to suit the particular molding application.

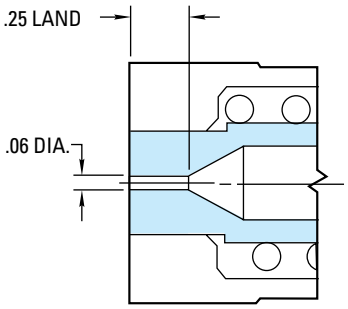


Long Style

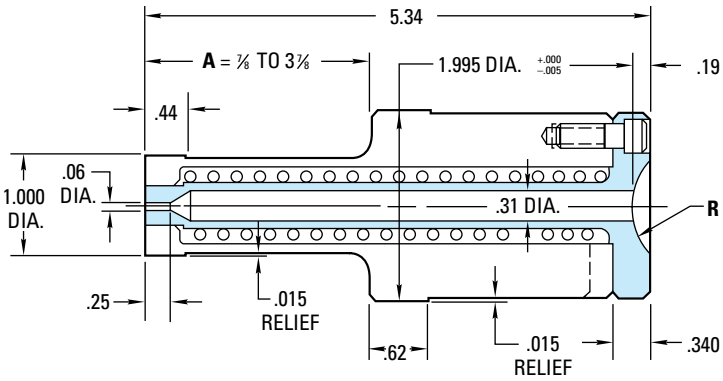
See D-M-E Control Systems Catalog for temperature controllers.

E-Series (Long Style)

NOTE:
Must always be altered as shown in Figures 1 thru 6 (see p. 166).



ENLARGED VIEW AS SUPPLIED



NOTE:
The expansion factor must be taken into consideration prior to machining for and installation of the bushing. This factor (BE) must then be added to the A dimension. The formula for determining this expansion factor is as follows: BE = 1.375 × .0000063 × (nozzle setpoint – 68°F).

EXAMPLE:
Given a setpoint of 500°F.
BE = 1.375 × .0000063 × (500 – 68) = .004 thus 1.375 + .004 = 1.379.
Please note that the above information is given as an example. Variations may occur based on mold configuration and cooling factor. In some instances, it may be necessary to obtain an empirical factor.

The D-M-E Standard E-Series Straight-Shot (Long Style) is available in seven standard shoulder lengths with either a ½" or ¾" spherical radius and 120 or 240 volt heater. The E-Series Straight-Shot (Long Style) can be retrofitted to suit the particular molding application.

NOTE: 5° heater lead is standard. For 90° lead, add "90" to end of item number (e.g., SSBT-4507E-1-90).

E-Series Straight-Shot (Long Style) Hot Sprue Bushings

R	WITH 120 VOLT HEATER ITEM NUMBER	SHOULDER LENGTH A	WITH 240 VOLT HEATER ITEM NUMBER
½	SSBT-4507E-1	⅞	SSBT-4507E-2
	SSBT-4513E-1	1⅜	SSBT-4513E-2
	SSBT-4517E-1	1⅞	SSBT-4517E-2
	SSBT-4523E-1	2⅜	SSBT-4523E-2
	SSBT-4527E-1	2⅞	SSBT-4527E-2
	SSBT-4533E-1	3⅜	SSBT-4533E-2
	SSBT-4537E-1	3⅞	SSBT-4537E-2
¾	SSBT-6507E-1	⅞	SSBT-6507E-2
	SSBT-6513E-1	1⅜	SSBT-6513E-2
	SSBT-6517E-1	1⅞	SSBT-6517E-2
	SSBT-6523E-1	2⅜	SSBT-6523E-2
	SSBT-6527E-1	2⅞	SSBT-6527E-2
	SSBT-6533E-1	3⅜	SSBT-6533E-2
	SSBT-6537E-1	3⅞	SSBT-6537E-2

E-Series Straight-Shot™

The D-M-E Standard E-Series Straight-Shot (Short Style) is intended to suit the requirements of smaller injection molding machines and is supplied with a 7/8" A dimension. The A dimension can be altered to suit the particular molding application.

NOTE: 5° heater lead is standard. For 90° lead, add "90" to end of item number (e.g., SSBT-4407E-2-90).



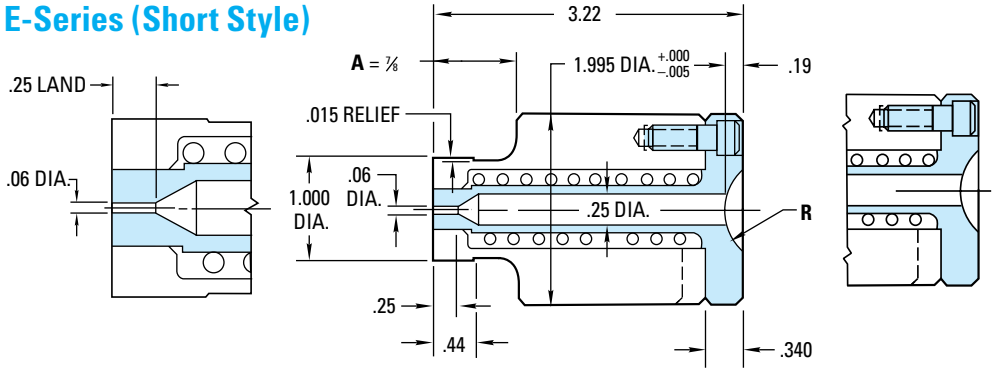
Short Style

See the D-M-E Control Systems Catalog for temperature controllers.

E-Series Straight-Shot Hot Sprue Bushings (Short Style)

WITH 240 VOLT HEATER ITEM NUMBER	R	A DIMENSION
SSBT-4407E-2	½	7/8
SSBT-0407E-2	NONE	

E-Series (Short Style)



ENLARGED VIEW AS SUPPLIED — SSBT-4407E-2 — SSBT-0407E-2

NOTE: Must always be altered as shown in Figures 1 thru 6.

NOTE:
The expansion factor must be taken into consideration prior to machining for and installation of the bushing. This factor (BE) must then be added to the A dimension. The formula for determining this expansion factor is as follows: BE = 1.375 × .0000063 × (nozzle setpoint – 68°F).

EXAMPLE:
Given a setpoint of 500°F.
BE = 1.375 × .0000063 × (500 – 68) = .004 thus 1.375 + .004 = 1.379.
Please note that the above information is given as an example. Variations may occur based on mold configuration and cooling factor. In some instances, it may be necessary to obtain an empirical factor.

Design Guidelines for Altering E-Series Straight-Shot Hot Sprue Bushings (Long and Short Styles)

Always remove the .25 extra stock allowance and alter the A dimension to suit whenever gating into a flat part surface. Minimum stock removal of .25 provides an approximate .06 gate diameter (Figure 1).

Maximum stock removal of .268 provides an approximate .08 gate diameter (Figure 2). Maximum stock removal of .268 is recommended for gate diameters larger than .08 (Figures 3 and 4).

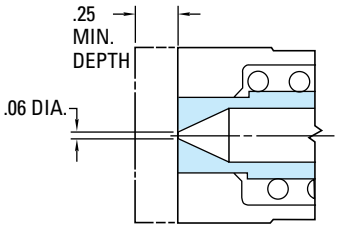


FIG. 1

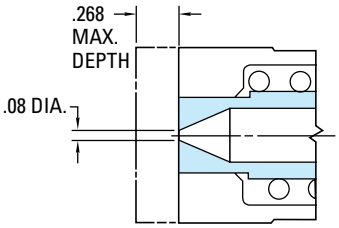


FIG. 2

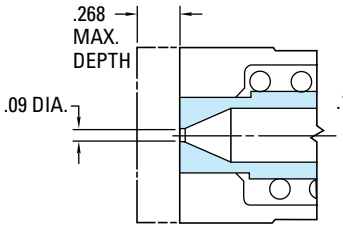


FIG. 3

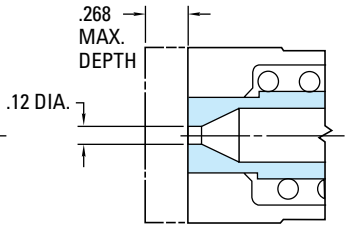


FIG. 4

Always machine runner profile or part contour to the .268 maximum depth at centerline of gate (Figures 5 and 6). However, do not weaken the bushing face by exceeding this maximum dimension.

* Resultant gate diameter may be enlarged to suit the particular molding application.

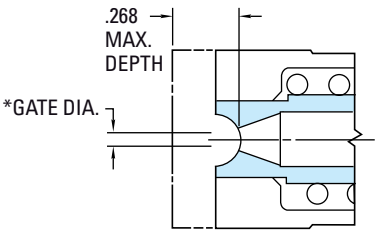


FIG. 5

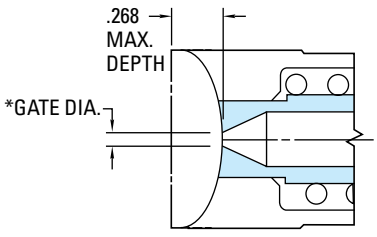


FIG. 6

ER-Series Straight-Shot™

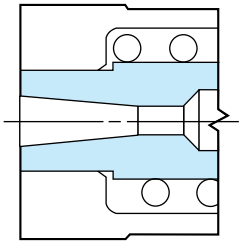
The D-M-E standard ER-Series Straight-Shot Hot Sprue Bushings (Long and Short Styles), like the standard E-Series, are supplied with a .25 inch extra stock allowance on the front face to permit machining of runner profiles or part contours into that face. These bushings feature a "reverse taper" design that originates from under the heat source, providing easier start-ups.

The ER-Series design can also be used when a reverse taper will benefit a particular application. These bushings are supplied with a .12 diameter orifice and a .50 long reverse taper. The orifice may be enlarged and the taper increased to suit.

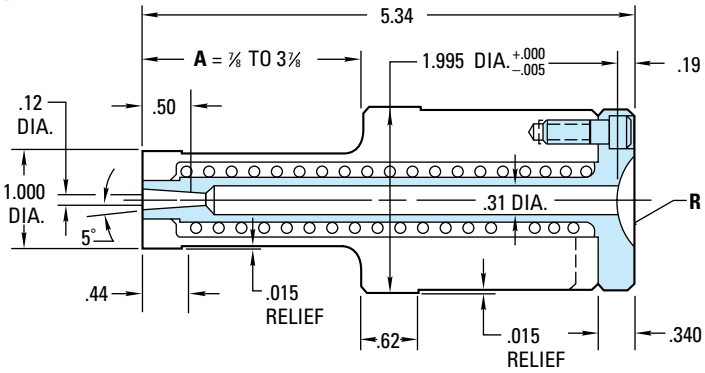


(Long Style)

ER-Series (Long Style)



ENLARGED VIEW AS SUPPLIED



NOTE: For minimum projection on runner/part, alter the bushing face (See figures 1 thru 3 on p. 168).

NOTE:
The expansion factor must be taken into consideration prior to machining for and installation of the bushing. This factor (BE) must then be added to the A dimension. The formula for determining this expansion factor is as follows: BE = 1.375 × .0000063 × (nozzle setpoint – 68°F).

EXAMPLE:
Given a setpoint of 500°F.
BE = 1.375 × .0000063 × (500 – 68) = .004 thus 1.375 + .004 = 1.379.
Please note that the above information is given as an example. Variations may occur based on mold configuration and cooling factor. In some instances, it may be necessary to obtain an empirical factor.

ER-Series Straight-Shot (Long Style) Hot Sprue Bushings

R	WITH 120 VOLT HEATER ITEM NUMBER	SHOULDER LENGTH A	WITH 240 VOLT HEATER ITEM NUMBER
½	SSBT-4507ER-1	⅞	SSBT-4507ER-2
	SSBT-4513ER-1	1⅜	SSBT-4513ER-2
	SSBT-4517ER-1	1⅞	SSBT-4517ER-2
	SSBT-4523ER-1	2⅜	SSBT-4523ER-2
	SSBT-4527ER-1	2⅞	SSBT-4527ER-2
	SSBT-4533ER-1	3⅜	SSBT-4533ER-2
	SSBT-4537ER-1	3⅞	SSBT-4537ER-2
¾	SSBT-6507ER-1	⅞	SSBT-6507ER-2
	SSBT-6513ER-1	1⅜	SSBT-6513ER-2
	SSBT-6517ER-1	1⅞	SSBT-6517ER-2
	SSBT-6523ER-1	2⅜	SSBT-6523ER-2
	SSBT-6527ER-1	2⅞	SSBT-6527ER-2
	SSBT-6533ER-1	3⅜	SSBT-6533ER-2
	SSBT-6537ER-1	3⅞	SSBT-6537ER-2

The D-M-E Standard ER-Series Straight-Shot (Long Style) is available in seven standard shoulder lengths with either a ½" or ¾" spherical radius and 120 or 240 volt heater. The ER-Series Straight-Shot (Long Style) can be retrofitted to suit the particular molding application.

NOTE: 5° heater lead is standard. For 90° lead, add "90" to end of item number (e.g., SSBT-4507ER-1-90).

ER-Series Straight-Shot™

The D-M-E Standard ER-Series Straight-Shot (Short Style) is intended to suit the requirements of smaller injection molding machines and is supplies with a ⅞" A dimension. The A dimension can be altered to suit the particular molding application.

NOTE: 5° heater lead is standard. For 90° lead, add "90" to end of item number (e.g., SSBT-4407ER-2-90).

NOTE:
The expansion factor must be taken into consideration prior to machining for and installation of the bushing. This factor (BE) must then be added to the A dimension. The formula for determining this expansion factor is, as follows: BE = 1.375 × .0000063 × (nozzle setpoint – 68°F).

EXAMPLE:
Given a setpoint of 500°F. BE = 1.375 × .0000063 × (500 – 68) = .004 thus 1.375 + .004 = 1.379. Please note that the above information is given as an example. Variations may occur based on mold configuration and cooling factor. In some instances, it may be necessary to obtain an empirical factor.

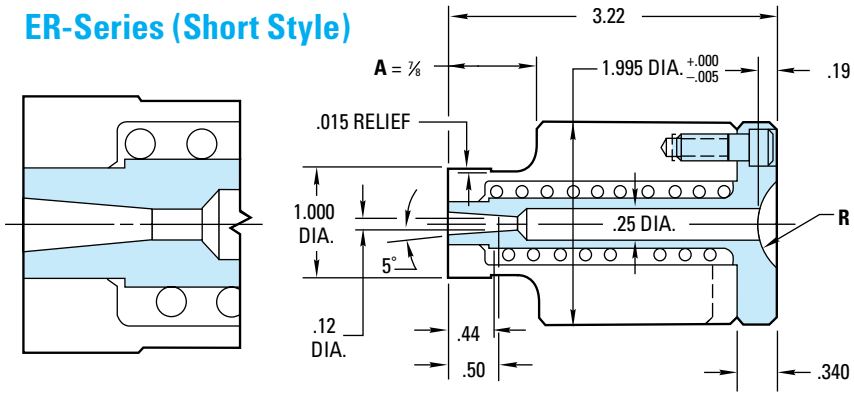
Short Style



ER-Series Straight-Shot Hot Sprue Bushings (Short Style)

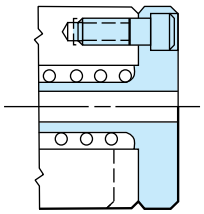
WITH 240 VOLT HEATER ITEM NUMBER	R	A DIMENSION
SSBT-4407ER-2	½	⅞
SSBT-0407ER-2	NONE	

ER-Series (Short Style)



ENLARGED VIEW AS SUPPLIED

SSBT-4407ER-2



SSBT-0407ER-2

NOTE:
For minimum projection on runner/part, alter the bushing face (See figures 1 through 3 below).

Design Guidelines for Altering ER-Series Straight-Shot Hot Sprue Bushings (Long and Short Styles)

FIG. 1

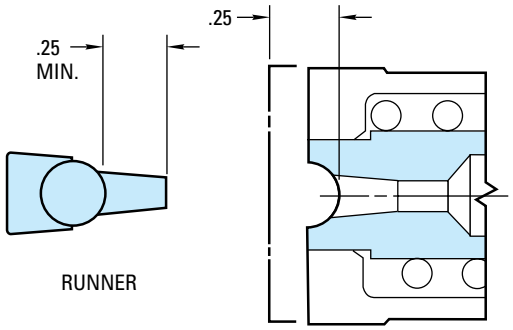


FIG. 2

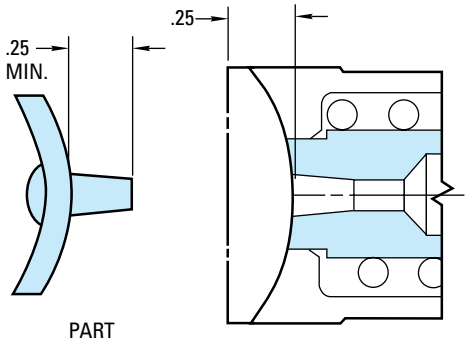
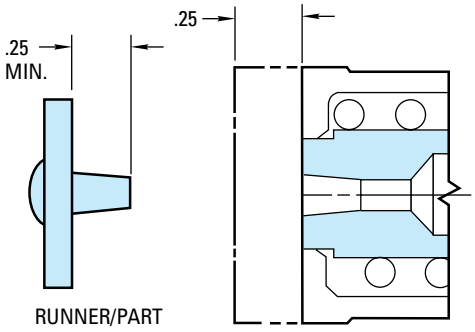


FIG. 3



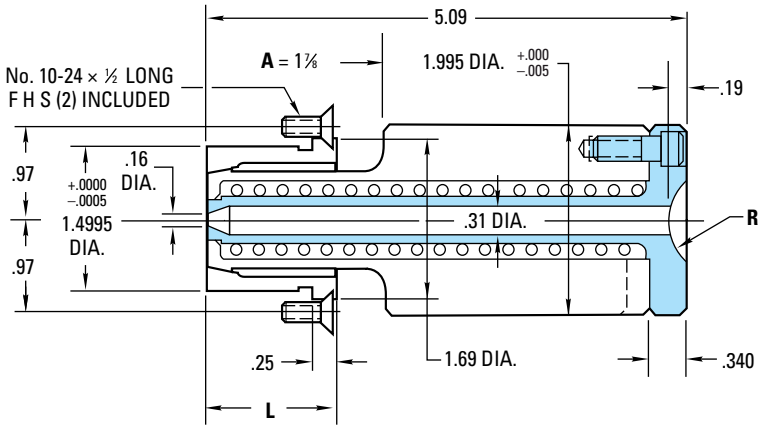
For minimum projection on runner/part, machine the runner profile or part contour .25 inch deep into the bushing face at the centerline of the orifice (See Figures 1 and 2). When gating into a flat surface, remove the .25 inch extra stock allowance on the bushing face (See Figure 3). However, do not weaken the bushing face by exceeding the .25 inch dimension. The A dimension can be altered by removing stock from the front face of the 2.00 diameter bushing shoulder.

T-Series Straight-Shot™

The D-M-E Standard "T" Series Straight-Shot improves the performance of three-plate molds by virtually eliminating the sprue from the runner system. It is available with either ½" or ¾" spherical radius, 120 or 240 volt heater and a ⅞" or 1⅜" long stripper plate bushing to suit the application.

NOTE: 5° heater lead is standard. For 90° lead, add "90" to end of item number (e.g., SSBT-4517T-1-07-90).



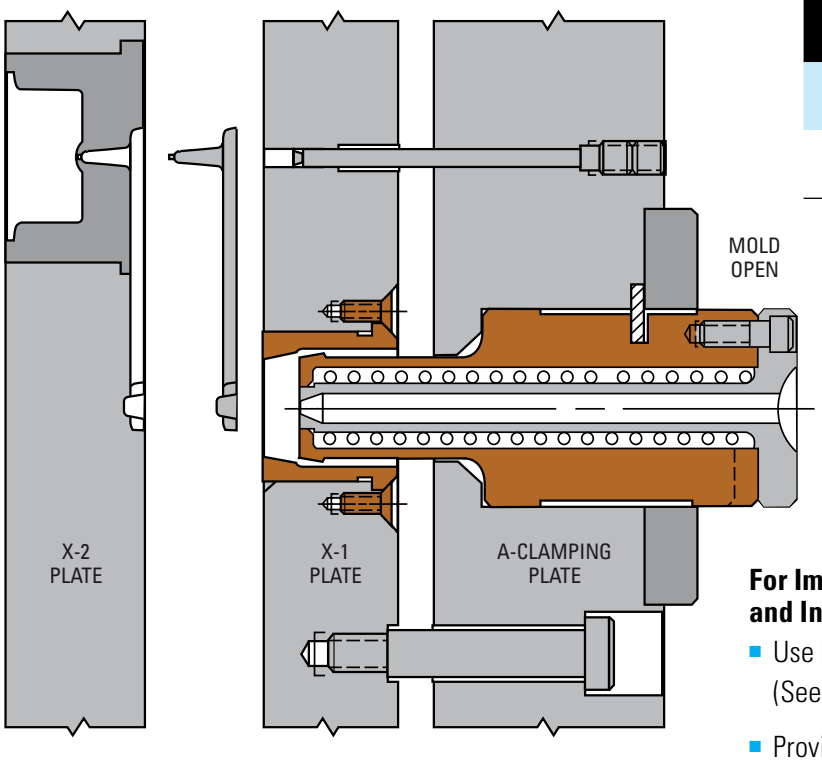


NOTE:
The expansion factor must be taken into consideration prior to machining for and installation of the bushing. This factor (BE) must then be added to the A dimension. The formula for determining this expansion factor is as follows: BE = 1.375 × .0000063 × (nozzle setpoint – 68°F).

EXAMPLE:
Given a setpoint of 500°F. BE = 1.375 × .0000063 × (500 – 68) = .004 thus 1.375 + .004 = 1.379.

Please note that the above information is given as an example. Variations may occur based on mold configuration and cooling factor. In some instances, it may be necessary to obtain an empirical factor.

Typical Application



T-Series Straight-Shot Hot Sprue Bushings

R	WITH 120 VOLT HEATER ITEM NUMBER	L	WITH 240 VOLT HEATER ITEM NUMBER
½	SSBT-4517T-1-07	⅞	SSBT-4517T-2-07
	SSBT-4517T-1-13	1⅜	SSBT-4517T-2-13
¾	SSBT-6517T-1-07	⅞	SSBT-6517T-2-07
	SSBT-6517T-1-13	1⅜	SSBT-6517T-2-13

Replacement Stripper Bushings

ITEM NUMBER*	L
SSSB-07	⅞
SSSB-13	1⅜

*Includes mounting screws.

For Improved Performance and Increased Productivity:

- Use D-M-E Standard T-Series (3-Plate) Mold Bases (See D-M-E Mold Bases and Plates Catalog)
- Provide Positive Runner Ejection with a D-M-E Jiffy-Jector (See D-M-E Mold Components Catalog)

TR-Series Straight-Shot™



NOTE:
The expansion factor must be taken into consideration prior to machining for and installation of the bushing. This factor (BE) must then be added to the A dimension. The formula for determining this expansion factor is as follows:
BE = 1.375 × .0000063 × (nozzle setpoint – 68°F).

EXAMPLE:
Given a setpoint of 500°F.
BE = 1.375 × .0000063 × (500 – 68) = .004 thus 1.375 + .004 = 1.379.
Please note that the above information is given as an example. Variations may occur based on mold configuration and cooling factor. In some instances, it may be necessary to obtain an empirical factor.

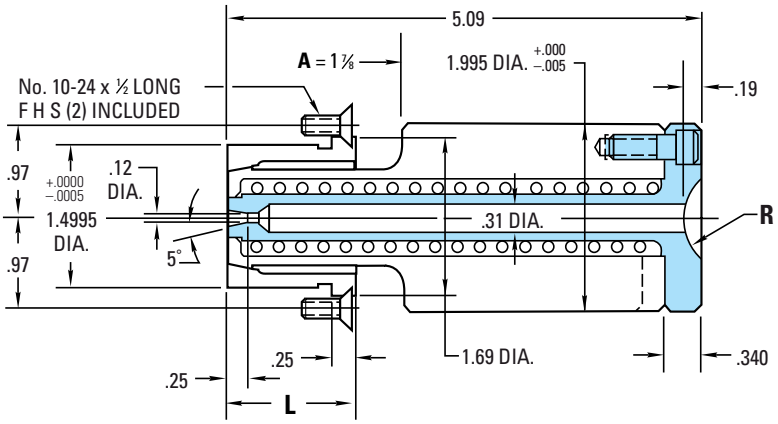
The D-M-E standard TR-Series Straight-Shot Hot Sprue Bushing, like the standard T-Series, improves the performance of three-plate runner molds by minimizing the length of protrusion on the runner system. This bushing features a "reverse taper" design that originates from under the heat source, providing easier start-ups.

The TR-Series design can also be used when a reverse taper will benefit a particular application. The bushing is supplied with a .12 diameter orifice and a .25 long reverse taper. The orifice may be enlarged and the taper increased to suit. The bushing is available with either ½" or ¾" spherical radius, 120 or 240 volt heater and a ⅞" or 1⅜" long stripper-plate bushing to suit the application.

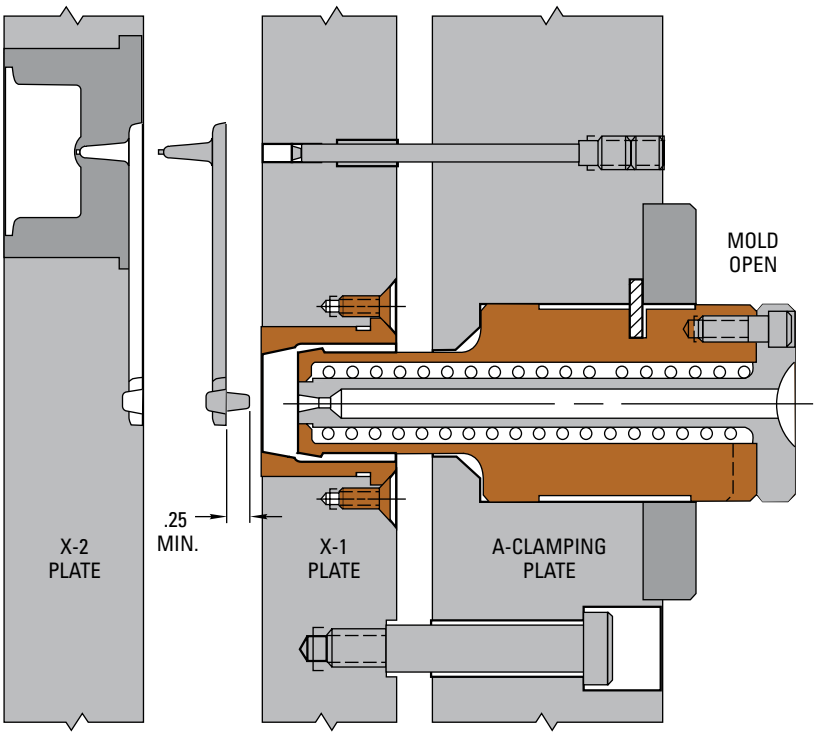
TR-Series Straight-Shot Hot Sprue Bushings

R	WITH 120 VOLT HEATER ITEM NUMBER	L	WITH 240 VOLT HEATER ITEM NUMBER
½	SSBT-4517TR-1-07	⅞	SSBT-4517TR-2-07
	SSBT-4517TR-1-13	1⅜	SSBT-4517TR-2-13
¾	SSBT-6517TR-1-07	⅞	SSBT-6517TR-2-07
	SSBT-6517TR-1-13	1⅜	SSBT-6517TR-2-13

NOTE:
5° heater lead is standard. For 90° lead, add "90" to end of item number (e.g., SSBT-4517TR-1-07-90).



Typical Application



Important:
To prevent "pushback" of the hot sprue bushing due to injection pressure – and assure a positive tapered seal with the stripper plate bushing – secure the hot sprue bushing to the A-Clamping Plate. A dowel or flat key installed under the locating ring (shown) or clamping-type locating ring may be used.

For Improved Performance and Increased Productivity:

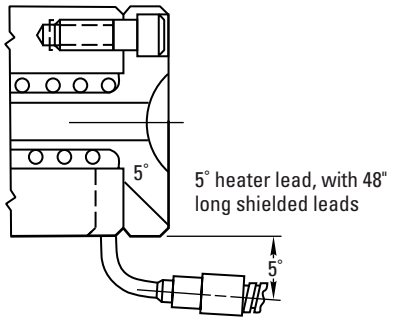
- Use D-M-E Standard T-Series (3-Plate) Mold Bases (see D-M-E Mold Bases and Plates Catalog)
- Provide Positive Runner Ejection with a D-M-E Jiffy-Jector (see D-M-E Mold Components Catalog)

Straight-Shot™ Bushings Replacement Parts

Replacement Heaters for Straight-Shot Hot Sprue Bushings Standard

ITEM NUMBER*	VOLTS	WATTS	L	BUSHING SERIES
SSTC-31	120	300	4⅝	S, E & ER (Long Style), T & TR
SSTC-32	240	300	4⅝	S, E & ER (Long Style), T & TR
SSTC-42	240	460	2½	E & ER (Short Style)

* Includes installation wrench.



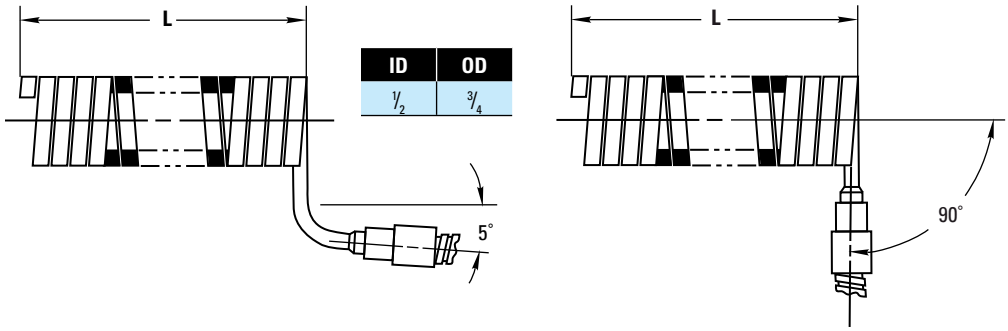
5° heater lead, with 48" long shielded leads

Straight-Shot Heater Installation and Removal Wrench

(Included with heaters above).

ITEM NUMBER	USED WITH
WR 087-5	SSTC-31 & 32 Series
WR 087-4	SSTC-42 Series

Available On Request:
Heaters with 90° exit leads. Add "90" to item number.
Example: SSTC-31-90



Replacement Parts for Discontinued Hot Sprue Bushings (HBT-6630 through 6636), Temperature Controllers (PFC-5) and Control Modules (FC-5)

Band Heaters

INSIDE DIA.	WIDTH	VOLTS	WATTS	ITEM NUMBER
2	2	240	350	HBN-2020-2†

Band heaters supplied with flexible leads and metal sheath 46" long.

†NOTE: Not recommended for processing engineering materials.

Cartridge Heaters

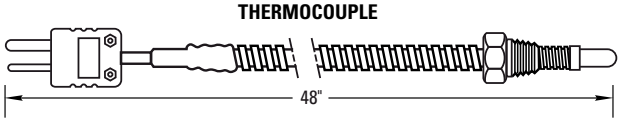
DIA.	LENGTH	WATTS	VOLTS	ITEM NUMBER
¼	2½	240	200	HBC-202-2*
¼	3¾	240	300	HBC-203-2@

* Used with Hot Sprue Bushings 5 3/16 long; heater supplied with leads 48" long.

@ Used with Hot Sprue Bushings 6 3/16 long; heater supplied with leads 46" long.

Thermocouple Cartridge Heaters

DIA.	LENGTH	VOLTS	WATTS	ITEM NUMBER
¼	2½	240	200	HBTC-202-2*
¼	3¾	240	300	HBTC-203-2@



Threaded type thermocouple is spring loaded and supplied with cable and mini plug.

ITEM NUMBER
TCT-4

ITEM NUMBER	AMPS
ABC-5	5
13X-5	5

Replacement Fuses for Temperature Control Modules (FC-5) and Temperature Controllers (PFC-5)

See the D-M-E Control Systems Catalog for new controllers.

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Modular Components Deliver High-Performance Solutions



Today's increasingly feature-packed plastic products benefit tremendously from the right hot runner solution. Increasing resin costs and the complexity of engineered materials only compound this challenge. From hot sprue bushings to turnkey hot halves, D-M-E offers a wide range of solutions to almost any molding application.

Get the modular advantage with D-M-E hot runner systems

D-M-E's newest family of hot runner systems are built on an architecture of modular components so we can quickly custom configure a system that is ideal for your application. With the tremendous time pressures on moldmakers today, our modular architecture enables industry-leading delivery times. This modular approach shortens delivery, improves cost-effectiveness and optimizes performance. D-M-E's Meteor and Stellar hot runner systems offer standardized products, custom-configured to each application in only a few days.

Our dedicated team of application engineers works to understand the critical variables of your molding equation.

Here are a few areas in which our global capabilities make hot runner solutions more efficient and more economical.

Micromolding solutions

As plastic parts get smaller and more complex, micromolding solutions become more challenging. D-M-E Stellar Hot Runner Systems were designed for the demands of very small part molding with engineered or commodity materials. The Stellar hot runner system is available for applications with center-to-center dimensions as close as 17mm.

Application engineered solutions

As an industry leader in hot runner systems, D-M-E is able to offer our customers a comprehensive resource for hot runner solutions. Our dedicated team of application engineers works to understand the critical variables of your molding equation and engineer a hot runner system solution that is optimal for your project.

Powerful custom manufacturing capabilities

For more complex, custom and even high cavitation applications, D-M-E offers extensive manufacturing capabilities enabling complete, custom solutions. For example, turnkey hot half systems — fully assembled, wired, and electrically tested — are ready to drop in with no machining and minimal installation demands.

Cartridge Heaters



D-M-E Standard Cartridge heaters employ a swaged construction using the finest resistance wire and insulation available for optimum heating performance, long life and maximum dependability. These heaters are furnished with 10" long flexible lead wires, ready for fast installation. Thermocouple cartridge heaters are also available.

NOTE: Lead wires can withstand temperatures up to 450°F. If temperatures will exceed this amount, leads must be insulated.

DIA.	LENGTH (INCHES)	VOLTS	WATTS	ITEM NUMBER
1/4	2	120	40	CU-202-1
	2	240	40	CU-202-2
	3	120	75	CU-203-1
	3	240	75	CU-203-2
	4	120	100	CU-204-1
	4	240	100	CU-204-2
	6	120	150	CU-206-1
	6	240	150	CU-206-2
3/8	2	120	75	CU-302-1
	2	240	75	CU-302-2
	3	120	100	CU-303-1
	3	240	100	CU-303-2
	4	120	150	CU-304-1
	4	240	150	CU-304-2
	5	120	185	CU-305-1
	5	240	185	CU-305-2
	6	120	225	CU-306-1
	6	240	225	CU-306-2
	8	120	300	CU-308-1
	8	240	300	CU-308-2
1/2	2	120	75	CU-402-1
	2	240	75	CU-402-2
	3	120	150	CU-403-1
	3	240	150	CU-403-2
	4	120	180	CU-404-1
	4	240	180	CU-404-2
	5	120	200	CU-405-1
	5	240	200	CU-405-2
	6	120	300	CU-406-1
	6	240	300	CU-406-2
	8	120	400	CU-408-1
	8	240	400	CU-408-2
	10	120	500	CU-410-1
	10	240	500	CU-410-2
	12	120	600	CU-412-1
	12	240	600	CU-412-2
	16	120	800	CU-416-1
	16	240	800	CU-416-2

DIA.	LENGTH (INCHES)	VOLTS	WATTS	ITEM NUMBER
5/8	2	120	100	CU-502-1
	2	240	100	CU-502-2
	3	240	200	CU-503-2
	4	240	250	CU-504-2
	5	120	300	CU-505-1
	5	240	300	CU-505-2
	6	120	375	CU-506-1
	6	240	375	CU-506-2
	8	120	500	CU-508-1
	8	240	500	CU-508-2
	10	120	650	CU-510-1
	10	240	650	CU-510-2
	12	120	775	CU-512-1
	12	240	775	CU-512-2
	14	240	900	CU-514-2
	16	240	1050	CU-516-2
3/4	3	240	225	CU-603-2
	4	120	300	CU-604-1
	4	240	300	CU-604-2
	5	120	375	CU-605-1
	5	240	375	CU-605-2
	6	120	450	CU-606-1
	6	240	450	CU-606-2
	8	120	600	CU-608-1
	8	240	600	CU-608-2
	10	120	800	CU-610-1
	10	240	800	CU-610-2
	12	120	950	CU-612-1
	12	240	950	CU-612-2
	14	240	1100	CU-614-2
	16	240	1250	CU-616-2

NOTE: Special heaters are available on special order.

High Watt Density Cartridge Heaters



Fit Tolerances

The cavity or hole, into which a cartridge heater is inserted, should be reamed* to the nominal diameter of the heater. D-M-E cartridge heater diameters are actually .002 to .007 undersize. High Watt Density Cartridge Heaters are .004 undersize, held to a tolerance of ±.002. This sizing is maintained for easy installation and for best heat transfer. However, if close hole tolerances are not maintained, operating life of the heater may be drastically reduced. Also make sure that the heated area of the cartridge does not extend beyond the hole.

Spacing of Heaters

As a general rule it is not recommended to space heaters in a mold, die or platen any closer to each other than the diameter of the heater.

Contamination

Contamination consists of any foreign matter such as plastics, oil, grease, dirt or water entering through the terminal end or the end opposite the terminal. Care must be taken to protect the heater or these contaminants will shorten the effective heater life.

Proper Care and Maintenance

1. Heaters should be stored in a dry area, especially during periods of excess humidity.
2. Protect leads from abuse, abrasion, fatigue, etc.
3. Maintain temperature controllers and accessories in good working condition to avoid an overheating condition.
4. Transferring heaters from one die or platen to another is not recommended.

D-M-E High Watt Density Cartridge Heaters employ swaged construction for maximum heat transfer and high watt density for more demanding applications. Recommended for use when high temperatures are required (up to 1500°F) or where heaters will be subjected to vibration. Furnished with 10" long flexible lead wires. Special heaters are available on special order. Thermocouple cartridge heaters are also available.

DIA.	LENGTH (INCHES)	VOLTS	WATTS	ITEM NUMBER
1/4	1	120	100	CM-100-1
	1	240	100	CM-100-2
	1 1/2	120	150	CM-112-1
	1 1/2	240	150	CM-112-2
	2	120	200	CM-202-1
	2	240	200	CM-202-2
	3	120	300	CM-203-1
	3	240	300	CM-203-2
	4	240	375	CM-204-2
	5	240	450	CM-205-2
3/8	2	240	250	CM-302-2
	3	240	350	CM-303-2
	4	240	500	CM-304-2
	5	240	550	CM-305-2
	6	240	600	CM-306-2
1/2	2	240	250	CM-402-2
	3	240	300	CM-403-2
	4	240	400	CM-404-2
	5	240	800	CM-405-2
	6	240	1000	CM-406-2
	8	240	1200	CM-408-2
	10	240	1500	CM-410-2
	12	240	2000	CM-412-2
5/8	2	240	300	CM-502-2
	4	240	700	CM-504-2
	6	240	1000	CM-506-2
	8	240	1200	CM-508-2
	9	240	1400	CM-509-2
	10	240	1500	CM-510-2
	14	240	2000	CM-514-2
3/4	2	240	300	CM-602-2
	4	240	750	CM-604-2
	6	240	1200	CM-606-2
	10	240	1600	CM-610-2
	14	240	2200	CM-614-2

*See D-M-E Equipment and Supplies Catalog for D-M-E machine reamers and D-M-E straight shank long drills.

NOTE: Lead wires can withstand temperatures up to 450°F. If temperatures will exceed this amount, leads must be insulated.

Nozzle Heaters for Injection Molds



Features

- Square coil design for improved heat transfer
- High watt density on nozzle … up to 106 watts/in^2
- Heat is conducted from entire heater circumference…360° heat
- Unheated tail section reduces temperature at adapter
- Moisture-resistant seal
- Low profile
- 1200°F maximum operating temperature
- Available from stock

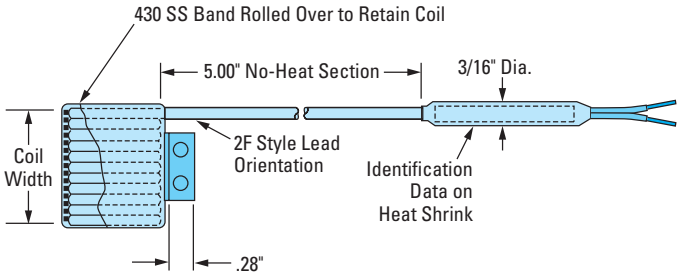
This nozzle heater features a five-inch long unheated tail section, and the adapter is provided with a moisture-resistant seal. These two design advantages practically eliminate failures in the adapter area due to overheating and moisture contamination.

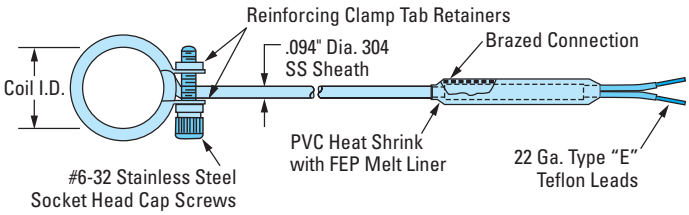
As with all D-M-E heaters, these new nozzle heaters are designed to give long life even when operated at 1200°F. These are very low profile heaters to facilitate easy installation in the tight environment of multiple gate molds.

All units have a resistance tolerance of ±5% to provide consistent operation and reduced adjustment time when it is necessary to replace a heater or bushing.

A stainless steel clamping band is installed on all units.

All units are stock coiled per the dimensions listed below. All units have Teflon covered power leads and fiberglass thermocouple leads as indicated.

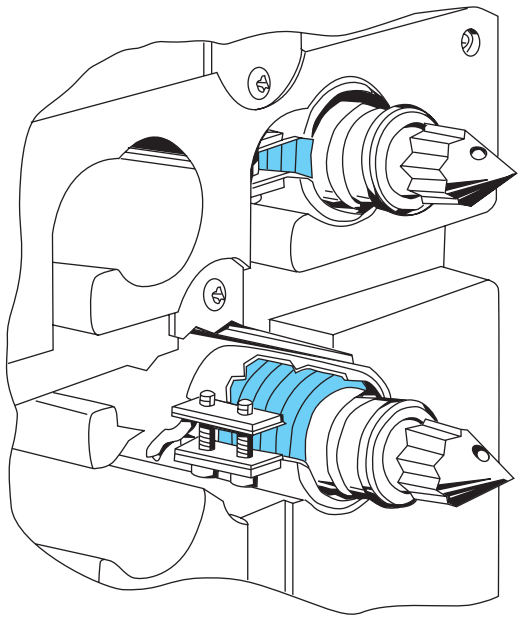




Nozzle Heaters (240 VAC)

WATTS	COIL I.D.	COIL O.D.	COIL WIDTH	LEAD LENGTH	THERMO-COUPLE	ITEM NUMBER
125	.750	.980	1.0"	36"	NO	SCH0103
125	.750	.980	1.0"	72"	NO	SCH0104
250	.750	.980	1.0"	36"	NO	SCH0105
250	.750	.980	1.0"	72"	NO	SCH0106
125	.750	.980	1.0"	36"	YES*	SCH0107
250	.750	.980	1.0"	36"	YES*	SCH0108
125	.875	1.10	1.0"	36"	NO	SCH0109
250	.875	1.10	1.0"	36"	NO	SCH0110

*A thermocouple is externally spotwelded to the sheath.



This installation illustrates D-M-E's square coil design fit over a nozzle. This heater was designed to fit any industry nozzle as a replacement for runnerless molding.

High Watt Density Thermocouple Cartridge Heaters



D-M-E High Watt Density Thermocouple Cartridge Heaters employ swaged construction for maximum heat transfer and high watt density for more demanding applications. Recommended for use when high temperatures are required (up to 1500°F) or where heaters will be subjected to vibration.

Fit Tolerances

The cavity or hole into which a cartridge heater is inserted should be reamed* to the nominal diameter of the heater. D-M-E cartridge heater diameters are actually .002 to .007 undersize. High Watt Density Cartridge Heaters are .003 undersize, held to a tolerance of ±.002. This sizing is maintained for easy installation and for best heat transfer. However, if close hole tolerances are not maintained, operating life of the heater may be drastically reduced. Also make sure that the heated area of the cartridge does not extend beyond the hole.

Contamination

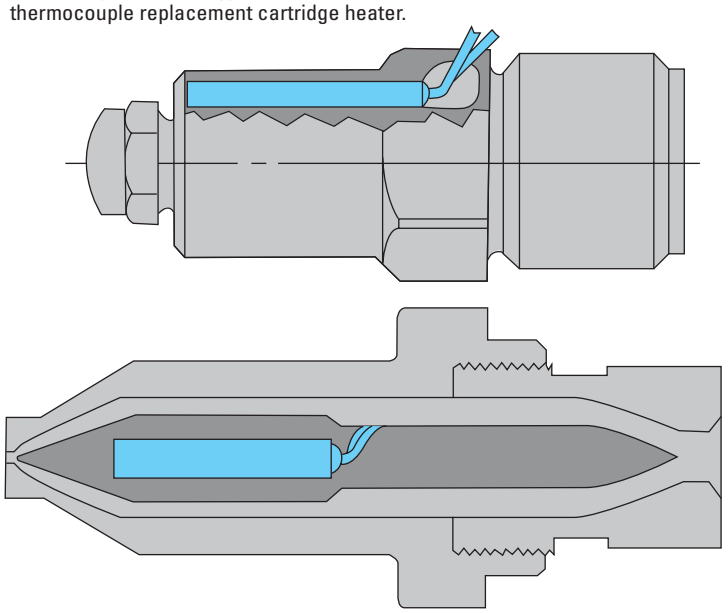
Contamination consists of any foreign matter such as plastics, oil, grease, dirt or water entering through the terminal end or the end opposite the terminal. Care must be taken to protect the heater or these contaminants will shorten the effective heater life.

Proper Care and Maintenance

1. Heaters should be stored in a dry area, especially during periods of excess humidity.
2. Protect leads from abuse, abrasion, fatigue, etc.
3. Maintain temperature controllers and accessories in good working condition to avoid an overheating condition.
4. Transferring heaters from one die or platen to another is not recommended.

*See D-M-E Equipment and Supplies Catalog for D-M-E machine reamers and D-M-E straight shank long drills.

These diagrams show typical installations of a thermocouple replacement cartridge heater.



High Watt Density Thermocouple Cartridge Heaters
(240 VAC, Type J Thermocouple, 36" Long Leads)

DIAMETER	LENGTHS IN	LENGTHS cm	VOLTS	WATTS	ITEM NUMBER
3/8" (9.42mm)	1 3/4	4.445	240	200	TCH0001
	2	5.08	240	250	TCH0002
	2 1/2	6.35	240	250	TCH0003
	3	7.52	240	250	TCH0004
	3 1/2	8.39	240	320	TCH0005
	4	10.15	240	370	TCH0006
	4 1/2	11.43	240	420	TCH0007
	5	12.70	240	470	TCH0008
	5 1/2	13.97	240	525	TCH0009
	6	15.24	240	575	TCH0010
	6 1/2	16.51	240	625	TCH0011
	7	17.78	240	675	TCH0012
	7 1/2	19.05	240	725	TCH0013
	8	20.32	240	775	TCH0014
1/2" (12.50mm)	3 1/2	8.89	240	420	TCH0015
	4	10.16	240	480	TCH0016
	4 1/2	11.43	240	550	TCH0017
	5	12.70	240	625	TCH0018
	5 1/2	13.97	240	700	TCH0019
	6	15.24	240	775	TCH0020
	6 1/2	16.51	240	850	TCH0021
	7 1/2	19.05	240	975	TCH0022

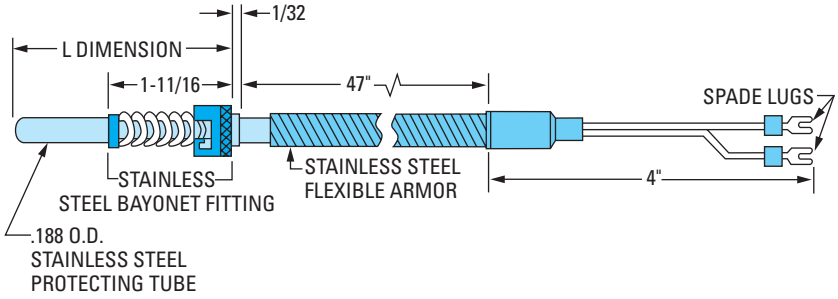
Thermocouples



D-M-E Bayonet Thermocouples are made of 20 gauge stranded glass-insulated wires. The grounded hot junction is in the end of a .188 O.D. stainless steel protecting tube for fast response and long life. Tube features a round tip and is fitted with a stainless steel spring loaded bayonet fitting. Lead wires are protected by rugged .188 I.D. flexible armor (lead wire calibration is ANSI Type J Iron/Constantan). Armor cable is 47" long; spade lugs are attached at the end of the lead wires for easy connection to terminal strip or plug.

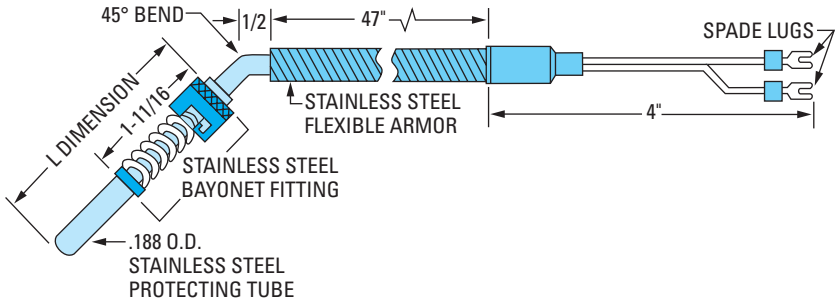
D-M-E Adjustable bayonet Type Thermocouples fit hole depths up to $10^1/_2$" and will conform to any angle.

D-M-E Spade Type Thermocouples are used between band heaters and machine nozzles in applications where space will not permit bayonet type thermocouples. The stainless steel spade is only .025 thick and can be easily contoured to fit various diameters.



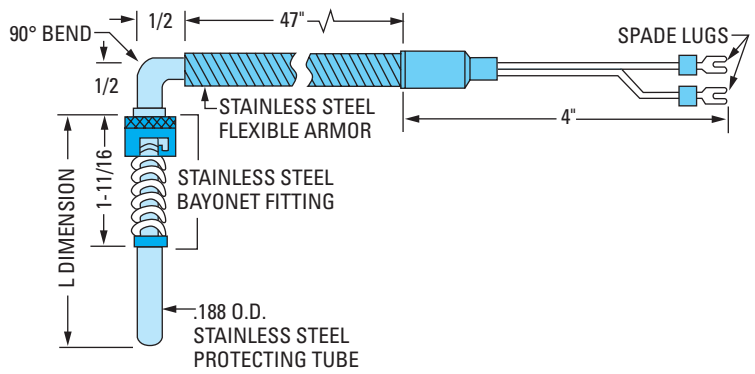
Straight Type

ITEM NUMBER	L
TC-2500	$2^1/_2$
TC-3500	$3^1/_2$
TC-6000	6"



45° Angle Type

ITEM NUMBER	L
TC-2545	$2^1/_2$
TC-3545	$3^1/_2$



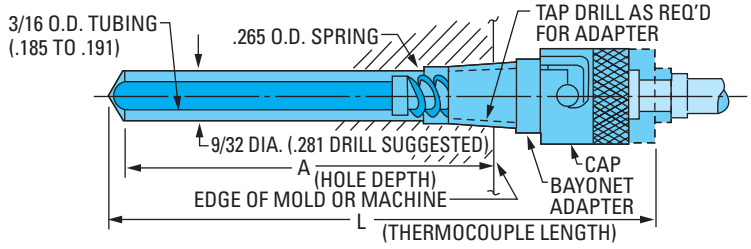
90° Angle Type

ITEM NUMBER	L
TC-2590	$2^1/_2$
TC-3590	$3^1/_2$
TC-6090	6"

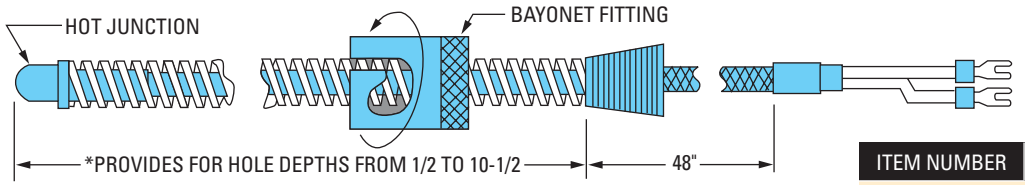
Thermocouples and Accessories

Hole Depth Chart

L THERMOCOUPLE LENGTH	A HOLE DEPTH FOR ADAPTER LENGTH	
	7/8	1 3/8
2 1/2	1" TO 1 3/8	1/2 TO 7/8
3 1/2	2" TO 2 3/8	1 1/2 TO 1 7/8
6"	4 1/2 TO 4 7/8	4" TO 4 3/8
10 1/2 ADJ.	1/2 TO 10 1/2	1/2 TO 10"



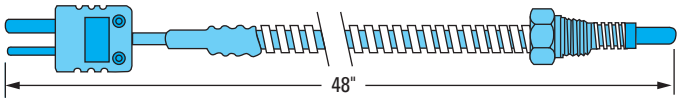
Adjustable Thermocouple



ITEM NUMBER
TC-8000

By turning the adjustable bayonet fitting along the spring, the D-M-E Adjustable Thermocouple can be set for the desired immersion length, from 1/2" to 10 1/2". Spring will conform to any angle. Hot junction of ANSI Type J I/C calibrated leads is inside round tip. Flexible metal braid is 48" long with 2 1/2" of lead wires at the end and spade lugs for ease of connection.

Threaded Type Thermocouple

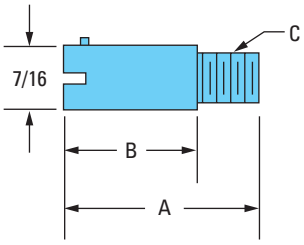


ITEM NUMBER
TCT-4

Threaded type thermocouple is spring loaded and supplied with cable and mini plug.

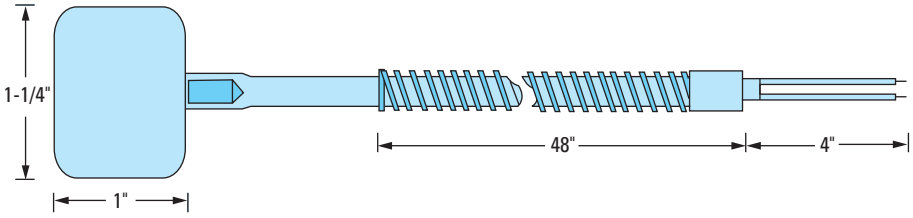
Bayonet Adapters

The stainless steel bayonet adapters accommodate the spring loaded bayonet fitting on the thermocouple, to bottom the hot junction where temperature sensing is desired. Adapter requires tapped hole for mounting.



ITEM NUMBER	A	B	C
BA1007	7/8	.465	1/8-27 NPT
BA1013	1 3/8	.934	1/8-27 NPT
BA4007	7/8	.465	3/8-24 NF
BA4013	1 3/8	.934	3/8-24 NF

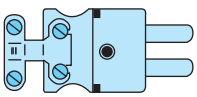
Spade Type Thermocouple



Used between band heaters and machine nozzles in applications where space will not permit bayonet type thermocouples. Stainless steel spade measures 1" x 1 1/4 x .025 thick and can be easily contoured to fit various diameters. Thermocouple is Type J I/C. Flexible stainless steel armor cable is 48" long with 4" of lead wires at the end.

ITEM NUMBER
TC-9000

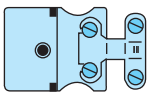
Plug (with Cable Clamp)



ROUND PINS AND SOCKETS (3/16 & 1/8)

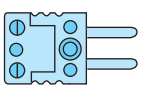
ITEM NUMBER
PL-10

Jack (with Cable Clamp)



ITEM NUMBER
PL-20

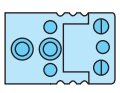
Mini Plug



FLAT PINS AND SOCKETS

ITEM NUMBER
M2MJ

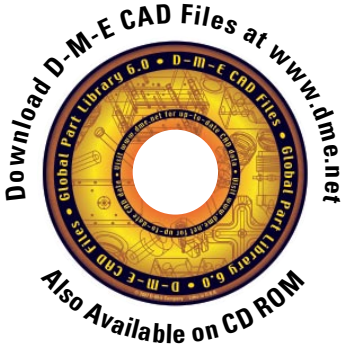
Mini Jack



ITEM NUMBER
M2F-J

D-M-E, an essential resource to the customers it serves worldwide, offers the industry's broadest range of market-leading products, unsurpassed knowledge and expertise, a global logistics infrastructure that ensures speed and accuracy, and a support organization unrivaled for its ability to assist customers when and where they need it. A complete line of hot runner systems, control systems, mold bases, MUD quick-change mold systems, mold components, moldmaking and molding equipment supplies, and technical services helps customers compete every step of the way.





D-M-E
Every step of the way

World Headquarters
D-M-E Company
29111 Stephenson Highway
Madison Heights, MI 48071
800-626-6653 *toll-free tel*
248-398-6000 *tel*
888-808-4363 *toll-free fax*
www.dme.net *web*
info@dme.net *e-mail*

D-M-E of Canada, Ltd.
6210 Northwest Drive
Mississauga, Ontario
Canada L4V 1J6
800-387-6600 *toll-free tel*
905-677-6370 *tel*
800-461-9965 *toll-free fax*
dme_canada@dme.net *e-mail*

D-M-E Europe C.V.B.A.
Industriepark Noord
B-2800 Mechelen Belgium
32-15-215011 *tel*
32-15-218235 *fax*
sales@dmeeu.com *e-mail*

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ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

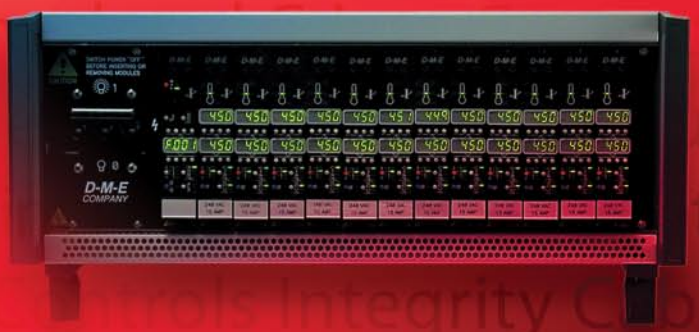
D-M-E Control Systems





CONTROL SYSTEMS





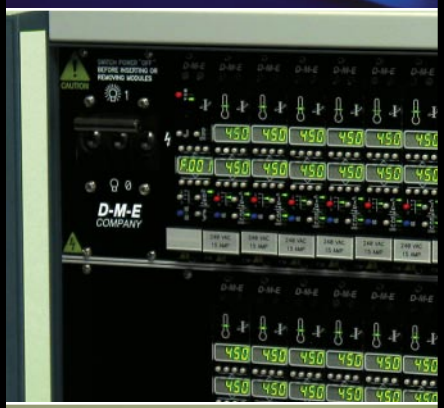
D-M-E
Every step of the way

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RoHS/WEEE-compliant temperature controls for hot runner systems



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Compact design, advanced functionality



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Achieving optimal molding results with injection process controllers, button sensors and slide sensors



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Energy efficient, reliable and compact hydraulic and pneumatic controls

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D-M-E has supported moldmakers, processors and designers around the globe since it innovated the standard mold base in 1942. Today, we offer the industry's broadest range of market-leading products.

BTEX" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtec

Terms and Conditions of Sale

1. **FOB POINT / PRICES:** Products are sold F.O.B. point of origin. Any taxes are in addition to the prices and may be invoiced later.
2. **SHIPPING SCHEDULE:** The shipping schedule is our current estimate of delivery dates and we agree to use reasonable efforts to comply with the schedule.
3. **WARRANTY:**
   (a) Any D-M-E trademarked or tradenamed product or part thereof manufactured by or for us which, under normal operating conditions in the plant of the Buyer thereof, proves defective in material or workmanship, as determined by our inspection, within 12 months from the date of shipment will be replaced or repaired free of charge to Buyer.

   This warranty is contingent upon the following conditions: *that we promptly receive notice of the defect; that Buyer establish that the product has been properly installed, maintained, and operated within the limits of related and normal usage as specified by us; and that, upon our request, Buyer will return to us at our expense the defective product or part thereof.*

   (b) The terms of this warranty do not in any way extend to any product or part thereof which have a life, under normal usage, inherently shorter than 12 months.
   (c) The conditions of actual production in each end user's plant vary considerably. Therefore, descriptions of the production or performance capabilities of any product or software materials are estimates only and are not warranted.
4. **EXCLUSIONS OF WARRANTIES:** THE WARRANTIES TO REPAIR OR REPLACE DEFECTIVE PRODUCTS OR PARTS AS SET FORTH IN PARAGRAPH 3, AND ANY ADDITIONAL WARRANTY EXPRESSLY STATED TO BE A WARRANTY AND SET FORTH IN WRITING AS PART OF THESE TERMS HEREIN ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
5. **LIMITATION OF REMEDIES AND LIABILITIES:**
   UNDER NO CIRCUMSTANCES SHALL WE OR ANY AFFILIATE OF OURS HAVE ANY LIABILITY WHATSOEVER FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES HOWSOEVER CAUSED OR ARISING (INCLUDING CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE), such as, but not limited to, loss of profit or revenue; loss of use of the product, part thereof; cost of capital; cost of replacement equipment; or claims resulting from contracts between Buyer, its customers and/or suppliers. Unless expressly provided for herein, in no event shall we or any affiliate of ours assume responsibility or liability for (a) penalties, penalty clauses or liquidated damages clauses of any description, (b) certifications or (c) indemnification of Buyer or others for costs, damages or expenses arising out of or related to the product or part thereof.
6. **CANCELLATION:** Unless otherwise agreed, Buyer may cancel all or any part of the order by written notice received by us before our completion of the order or applicable portion of the order. On receipt of such notice, all work on the order or part thereof canceled will be stopped as promptly as is reasonably possible. Buyer will then be invoiced for and will pay to us a cancellation charge. For completed items, the charge will be equal to their established prices. For items not completed, the charge will be equal to our full cost plus a premium in addition to a charge for any packing and storage and less a credit for the balance of the material as scrap.
7. **PAYMENT TERMS:** Payment is due in accordance with any applicable progress, advance or other agreed upon payment schedule, or, if no such schedule has been agreed to, upon Acceptance as specified in Paragraph 8, but in no event later than 30 days from the date of invoice. No cash discount is provided. If, in our judgment, Buyer's financial condition changes, we may stop work until financial arrangements satisfactory to us are made.
8. **ACCEPTANCE OF PRODUCT:** Each such product shall be deemed to be accepted within seven days after delivery of the product to the Buyer, unless we receive written notification of rejection for cause from Buyer within the seven day period.

   "Returned Goods": No goods are returnable without prior approval, prepaid transportation and an issued RMA number. All items are subject to our inspection before credit will be allowed. Special mold bases or steel, items involving custom work, or items not shown in our catalog are considered non-returnable. A minimum service charge of 10% will be made on all returned goods.
   NO GOODS ARE RETURNABLE LATER THAN THIRTY DAYS AFTER RECEIPT OF MERCHANDISE.
9. **PATENT INDEMNITY:** We shall defend any suit or proceeding brought against Buyer and pay all costs and damages awarded against Buyer provided that:
   (a) The suit or proceeding is based upon a claim that the product or part thereof is an infringement of any claim of a presently existing U.S. patent;
   (b) The claim of infringement is not based, directly or indirectly, upon (i) the manufacture, use, or sale of any product furnished by us which has been modified without our consent; or, (ii) the manufacture, use, or sale of any combination of a product furnished by us with products not furnished by us; or (iii) performance of a patented process using a product furnished by us or production thereby of a patented product; and,
   (c) We are notified promptly and given information and assistance (at our expense) and the authority to defend the suit or proceeding. We shall not be responsible hereunder for any settlement made without our written consent nor shall we be responsible for costs or expenses incurred without our written consent. If our product is adjudicated to be an infringement and its use in the U.S. by Buyer is enjoined, we shall, at our own expense, either:
   (i) procure for Buyer the right to continue using our product;
   (ii) replace it with a noninfringing product;
   (iii) modify it so it becomes noninfringing;
   (iv) remove the product or part thereof and refund Buyer's net book value and transportation costs attributable to it.
   The foregoing states our entire liability with respect to any patent infringement by our products or any parts thereof. To the extent that our product or any part thereof is supplied according to specifications and designs furnished by Buyer, Buyer agrees to indemnify us in the manner and to the extent set forth above insofar as the terms thereof are appropriate.
10. **FORCE MAJEURE:** We shall not be liable for any delay in performance or nonperformance which is due to war, fire, flood, acts of God, acts of third parties, acts of governmental authority or any agency or commission thereof, accident, breakdown of equipment, differences with employees or similar or dissimilar causes beyond our reasonable control, including but not limited to, those interfering with production, supply or transportation of products, raw materials or components or our ability to obtain, on terms we deem reasonable, material, labor, equipment or transportation.
11. **ACCEPTANCE OF ORDERS:** Buyer agrees that all orders, including any arising from our Proposal, shall include these terms and conditions only, notwithstanding any different or additional terms that may be embodied in Buyer's order. All orders are subject to our acceptance and we reserve the right to reject orders as, in our sole judgement, mandated by business conditions. We reserve the right to not proceed with any order until all necessary information is received from Buyer.
12. **MERGER CLAUSE:** This Agreement entirely supersedes any prior oral representations, correspondence, proposal, quotation, or agreement. This writing constitutes the final and total expression of such agreement between the parties, and it is a complete and exclusive statement of the terms of that agreement.
13. **ASSIGNMENT:** Neither party may assign this Agreement without the written consent of the other party, except that we may assign this Agreement to a third party that acquires substantially all of our assets or we may assign the flow of funds arising out of this Agreement.
14. **GOVERNING LAW:** This Agreement shall be governed by and construed in accordance with the laws of the State of Michigan.

Sales and Ordering Information

U.S.A.

TERMS AND CONDITIONS OF SALE: See previous page.

PHONE ORDERS – TOLL FREE: 800-626-6653. D-M-E's Customer Service Dept. operates Monday through Friday from 8 a.m. to 8 p.m. E.S.T. Calls can be made from anywhere in the continental U.S. and Puerto Rico (Puerto Rico: use "137" prefix instead of "1"). Our Customer Service Representatives will be happy to answer your questions on D-M-E products or services, provide on-the-spot feedback on product availability and shipping details, or take any messages you wish relayed to your local D-M-E sales, manufacturing or technical service representatives.

MAIL ORDERS: If you prefer to order by mail, please address your order to:

- D-M-E Company, 29111 Stephenson Highway, Madison Heights, Michigan 48071-2330
  ATTN: Customer Service Dept.

FAX: You may fax your order to:

- D-M-E Customer Service
  248-398-6174 • 888-808-4363

CHECKS OR MONEY ORDERS: When paying invoices by check or money order, please make payable to *D-M-E Company.* Include remittance copy of invoice and mail to:

- D-M-E Company, Department Lock Box 78242, P.O. Box 78000, Detroit, Michigan 48278-0242

WALK-IN ORDERS, PICK-UPS AND RETURNS: If desired, ordered products in stock at your nearest D-M-E Service Center can be picked up rather than shipped. Walk-in orders at Service Center locations can also be processed while you wait. Products being returned for repair or exchange should be processed through Customer Service prior to being returned.

SPECIAL MACHINING SERVICES: Prints for quotation on special machining work can be sent by EDI to dme_cad@dme.net or mailed to the Estimating Department of the D-M-E manufacturing location nearest you. Call our toll-free number if desired to clarify location which serves your area.

Estimating locations are:

- 70 East Hillis Street, Youngwood, Pa 15697, FAX: 724-925-2424
- 1117 Fairplains Street, Greenville, MI 48338, Tel. 616-754-4601, FAX: 616-225-3924
- 3275 Deziel Drive, Windsor, Ont N8W 5A5, Tel. 519-948-5001, FAX: 519-948-4652
- 464-466 Windy Point Drive, Glendale Heights, IL 60139, Tel. 630-469-4280, FAX: 630-469-4740 (estimating only)

Please add "D-M-E Company" and "Attn: Estimating Dept." to above addresses when mailing prints. To obtain prices and delivery on special mold base orders or to check status of special work in progress please contact Customer Service.

CANADA

TERMS AND CONDITIONS OF SALE: See previous page.

PHONE ORDERS: Contact our Mississauga, Ontario office at 800-387-6600, FAX: 800-461-9965.

MAIL ORDERS: Send to: D-M-E of Canada, Ltd., 6210 Northwest Drive, Mississauga, Ontario L4V 1J6.

CHECK OR MONEY ORDERS: Make payable to *D-M-E of Canada, Ltd.* Include remittance copy of invoice and mail to Mississauga address above.

WALK-IN ORDERS, PICK-UPS, RETURNS, AND SPECIAL MACHINING: Contact our Mississauga office.

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Hot Runner Warranty

D-M-E
Every step of the way

D-M-E Company
29111 Stephenson Highway, Madison Heights, MI 48071
Tel. 248/398-6000 ▪ FAX 248/398-6174

D-M-E Hot Runner Systems and Temperature Controllers are warranted pursuant to D-M-E Company's standard terms and conditions (see page 4) for the time periods set forth below. The warranty (i) *covers items sold and shipped [supplied in accordance with orders placed by the customer with D-M-E on or after JULY 1, 2003,* (ii) *applies only to the original D-M-E customer and,* (iii) *is not transferable to subsequent owners of the product except as specifically set forth herein (see Transferability below for conditions).*

WARRANTY PERIODS APPLICABLE TO SPECIFIED D-M-E PRODUCTS; COVERAGE STARTS UPON DATE OF SHIPMENT:

Item	Coverage
D-M-E Hot Runner Package Systems (plates designed, machined & assembled by D-M-E, **excluding Electrical Parts**)	Three (3) years
Galaxy & Stellar Hot Runner Package Systems Only (plates designed, machined & assembled by D-M-E, **excluding Electrical Parts**)	Plastic leakage within hot runner plates covered for Three (3) years; **excluding Gate Detail. (Galaxy & Stellar Hot Runner Package Systems Only)**
D-M-E Hot Runner Systems supplied as Manifold and Components Only (neither plates nor assembly supplied by D-M-E, **excluding Electrical Parts**)	One (1) year
D-M-E Electrical Parts (all heaters and thermocouples)	One (1) year
D-M-E Mold Controls (Temperature, Valve Gate & Cavity Pressure Controls, **excluding Fuses & Triacs**)	Three (3) years

Replacement or repair will be made at the election of D-M-E; implemented at a D-M-E facility and/or by shipment of replacement parts to the customer for installation and/or return of defective parts to D-M-E for repair.

Transferability:

This warranty may be transferred by the original D-M-E Customer to a subsequent owner of the product *if all of the following conditions exist:* (i) the original D-M-E Customer purchased the product for purposes of re-sale or other immediate transfer and D-M-E was made aware of these purposes at the time of purchase in writing, (ii) within thirty (30) days from the date of invoice, D-M-E is notified in writing of the transfer and provided with the name of the new owner (hereafter "Transferee"), the contact person of the Transferee and the Transferee's address.

Exclusions:

- Normal wear of the system and components including, but not limited to: Nozzle Tips, Gate Shell Insulators, Nozzle Seal Rings, O-rings, Piston Seals, Valve Stems and Electrical connectors
- Damage to the critical seal-off areas on the manifold, nozzle bodies, or in the mating cavities or cavity inserts caused by improper assembly, operation, disassembly and maintenance
- Wear or damage resulting from corrosion or processing of abrasive/aggressive resins
- Damage due to failure to follow recommended operation and maintenance procedures specified in the D-M-E Hot Runner Manual, Hot Runner Nameplate, Service Bulletins, User Manuals or failure to follow standard industry operation and maintenance procedure
- Damage caused by abuse, neglect, and failure to adhere to D-M-E instructions and operational recommendations
- Damage caused by improper installation, operation and maintenance
- Damage resulting from modifications to the product or component parts, abuse or neglect
- Failure caused by modifications made to the product without the prior written approval of D-M-E
- Damage resulting from operation of products at injection pressures greater than 20,000 psi (1360 bar) on 250, 375, and 625 Series, Gate-Mate 4, Valve Gate, Galaxy and Stellar Systems; unless specifically designed and manufactured for higher pressure applications in agreement with manufacturer
- Damage or failure caused by the product's inability to perform as a component of a system design not supplied by D-M-E
- Operator absence or operator error
- Operator maintenance and training capability
- Electrical interruptions
- Events beyond the control of D-M-E
- Errors or actions by a third party
- Non-compliance with local laws, codes, ordinances or regulations codes or bylaws unless D-M-E is informed of them by our customer at the time of order placement

Smart Series®

ROHS/WEEE-COMPLIANT

TEMPERATURE CONTROLS

FOR HOT RUNNER SYSTEMS



ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

RoHS/WEEE Compliant
Advanced Temperature Control for Hot Runner Systems



Capability/RoHS and WEEE Compliant

D-M-E offers 2-, 5-, 8-, and 12-zone standard mainframes for 15A operation and 1-, 2-, 3-, and 5-zone standard mainframes for 30A operation. Components listed in this catalog satisfy all international compliances. This includes RoHS (Restriction of Hazardous Substances) that prohibits or restricts the use of six potentially harmful materials in electronic equipment, and WEEE (Waste Electrical and Electronic Equipment) that requires equipment made after August 2005 to be taken back and recycled by the manufacturer, rather than just "thrown away."

Three-Year Warranty

All D-M-E temperature controllers are now covered by a three-year warranty, excluding fuses and triacs.

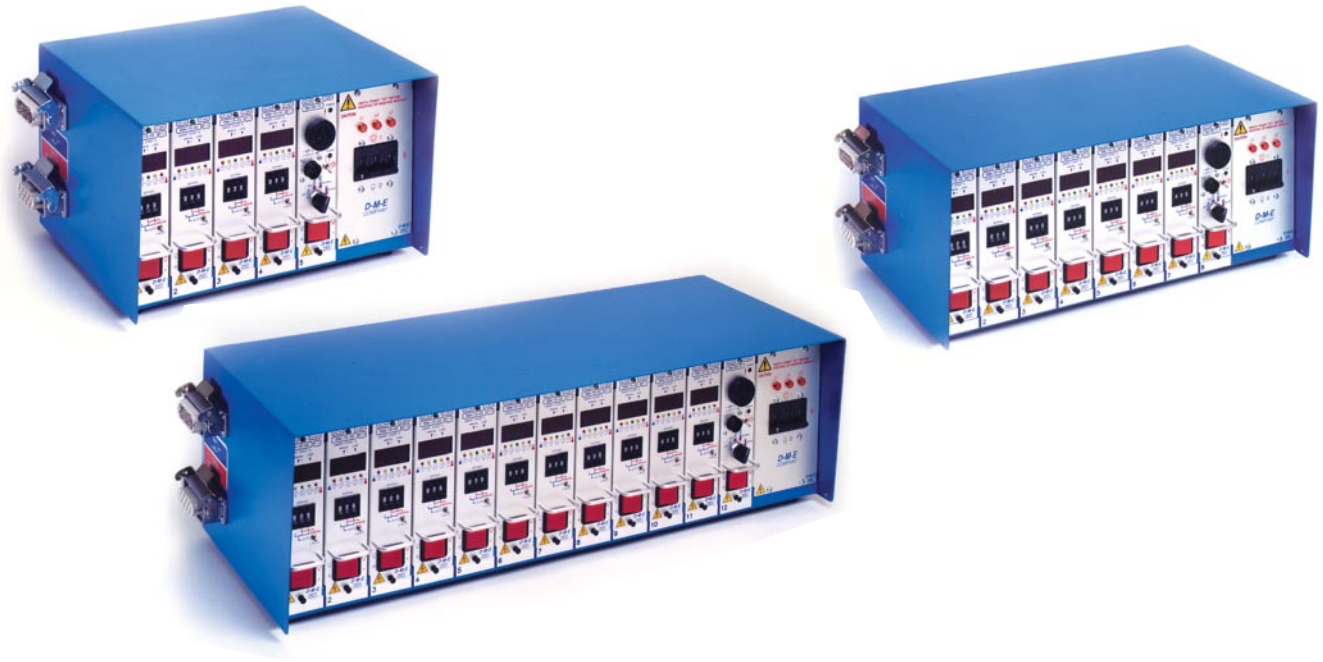
Electrical Noise Immunity

To enhance immunity from electrical noise, power and thermocouple wire are harnessed in separate wire ways within the body of the frame. Additional noise immunity is provided through the use of shielded thermocouple wires.

The D-M-E Smart Series® is the result of intensive and dedicated research with a goal of designing today's most versatile and reliable line of temperature controllers. D-M-E achieved this goal by not only incorporating the latest technology, but by also making certain that each controller is easy to install and above all…easy to operate.

Heavy Duty Welded Construction

With years of experience behind its design, the Smart Series line is built to last under the most rigorous conditions. The mainframe's welded 16 gauge steel construction ensures long life and peak performance. Cooling fans in the frame are strategically located to increase air ventilation, maintain cooler running conditions, and promote control module reliability.



CE COMPLIANT! D-M-E Mainframes and Modules comply with Electromagnetic compatibility and low voltage directives



SSM-15-12

Control Modules

SSM (15 and 30 AMP): The SSM module provides accurate temperature control, including Smart Start® heater dry out circuitry, thermocouple fault displays and auto/manual modes of operation. The SSM features automatic or manual bumpless transfer which, in the event of a thermocouple fault, provides switch over to manual mode at the proper power setting to continue molding until the fault can be corrected. This module can also trigger remote standby heat (idle), boost, off, and alarm functions when used with the TAS module.

DSS (15 and 30 AMP): For those who require independent dual displays for process and setpoint temperatures, the DSS is the ideal choice. The DSS module also features automatic or manual bumpless transfer. This module is also fully compatible with the TAS module for standby heat and alarm functions.

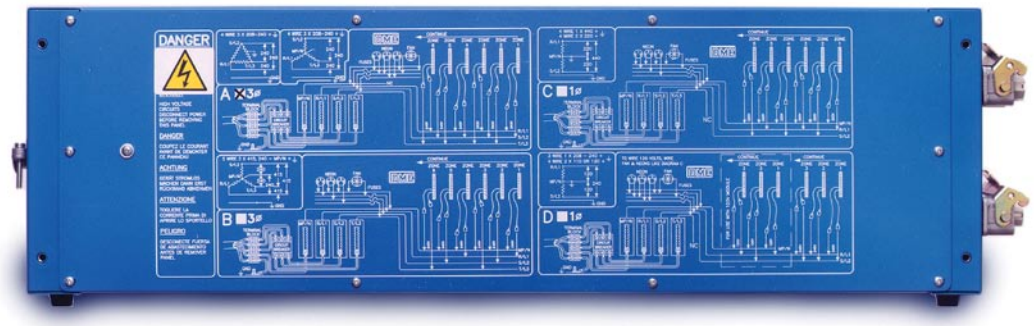
Accessory Modules

TAS: The TAS module provides over/under visual and audible alarms, boost, and standby heat control with control modules as stated above. The TAS module can accommodate up to 63 zones of control. Alarm is activated at ± 30° F. See pages 37-38 for details.

NOTE: The TAS accessory module requires the use of "MFC" style communications mainframes. Non-communications frames may be upgraded on-site with installable kits.



DSS-15-12



Simplified Power Hook-Up

Concern for user convenience didn't stop with improved operation features. D-M-E went one step beyond to ensure that the power hook-up procedure goes smoothly as well. For this reason, detailed schematics for various hook-ups are provided directly on all mainframe back panels. If it is ever necessary to change the configuration, these diagrams will help ensure safe and proper connections. All wiring diagrams can be referenced at the end of this brochure.

SSH Controller (10 AMP)



SSH-10-22

The SSH is a stand-alone single zone controller ideal for use with hot sprue bushings or machine nozzles.

Smart Series® Temperature Control Systems

1. Mainframe
2. Circuit Breaker/Disconnect
3. Mold Power Cable
4. Thermocouple Cable
5. Mold Power Input Connector
6. Insulated Crimp Connector
7. Thermocouple Connector
8. Terminal Mounting Boxes
9. Mainframe Blank Panels
10. Module Replacement Fuses
11. Control Modules

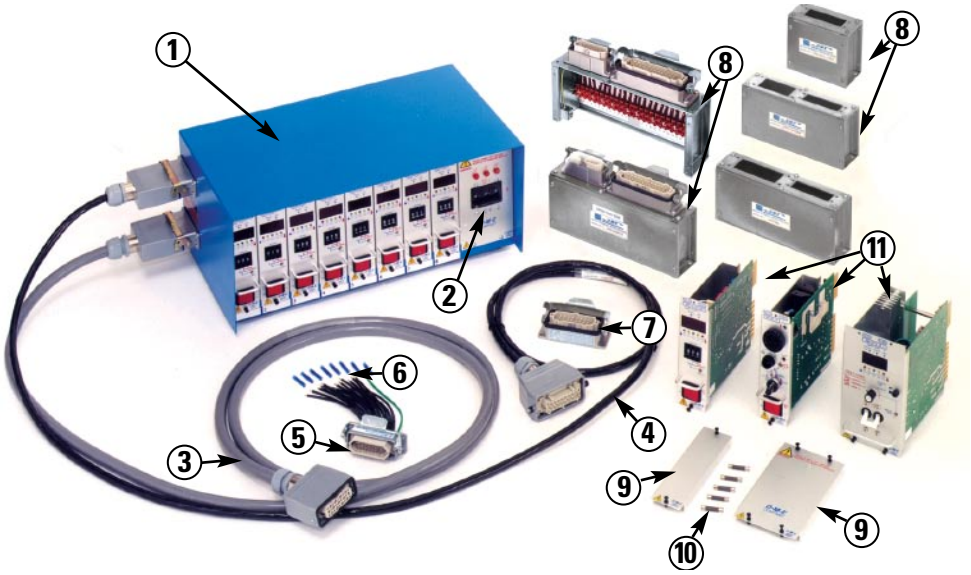


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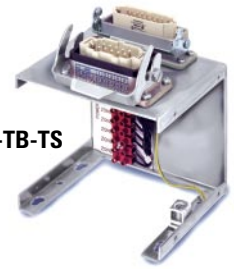
Typical System Configurations

SSM-15-12
DSS-15-12

5 Zones of Control (15 AMP)



MFP-5-G

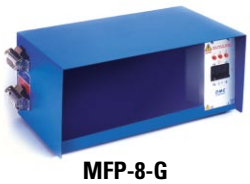
MPC-5-C10-G
TC-5-C10-G

PTC-5-TB-TS

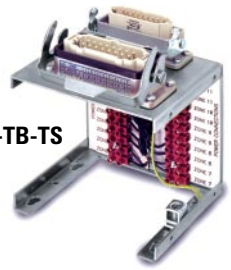
MFS-512-G

X5

SSM-15-12
DSS-15-12

8 Zones of Control (15 AMP)



MFP-8-G

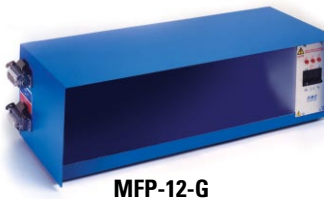
MPC-8-C10-G
TC-8-C10-G

PTC-8-TB-TS

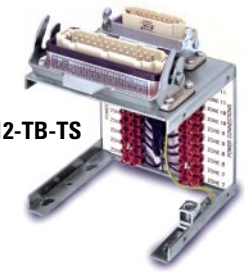
MFS-512-G

X8

SSM-15-12
DSS-15-12

12 Zones of Control (15 AMP)



MFP-12-G

MPC-12-C10-G
TC-12-C10-G

PTC-12-TB-TS

MFS-512-G

X12

SSM-30-12
DSS-30-12

2 or 3 Zones of High Power Control (30 AMP)



MFHP-2-G
MFHP-3-G

MPCH-23-C10-G
TC-5-C10-G

MTC-5-G
PICH-23-G

PTCH-23-TB-G

MFS-512-G

X2 or 3X

SSM-30-12
DSS-30-12

5 Zones of High Power Control (30 AMP)



MFHP-5-G

MPCH-5-C10-G
TC-5-C10-G

MTC-5-G
PICH-5-G

PTCH-5-TB-G

MFS-512-G

X5

RoHS/WEEE Compliant
Smart Series® Single Zone Temperature Controller

- **Compact**
- **Easy-to-use**
- **Includes new, improved and unique features**
- **Provides microprocessor-based PID control**
- **More accurate than analog or variac controllers**
- **Built-in thermocouple diagnostics**
- **Ideal for use with a hot sprue bushing or a machine nozzle**

SSH-10-22/21 (10 AMP)



Key Features

- **Large Digital Display**
  - For easier readability of temperature, % power and faults
- **Setpoint Pushwheel**
  - For setting desired setpoint temperature
  - Allows adjustment of setpoint before turning power on
- **AUTO % Power Display**
  - Shows % power output while in AUTO mode
  - Indicates average % power requirement on thermocouple failure
  - A diagnostic tool for solving problems

Switchable Options

- **Shorted Thermocouple Sensitivity Adjustment**
  - Operation can be tailored to fast or slow reaction times
  - Sensitivity can be adjusted with internal switches
  - Very useful for zones with long startup times
- **Switchable °C/°F Operation**
  - Scale indicated at startup
- **K Type Thermocouple Support**
- **Cut Feature**
  - Gain cut feature for small nozzles and heaters with ungrounded internal thermocouples

Operational Refinements

- **Improved SmartStart®**
  - A more gradual temperature rise leads to a more effective heater dry out period, thereby extending heater life
  - SmartStart® now available as an option in manual mode
- **SelectiveCycle®**
  - A very high speed power output approach
  - Enables accurate temperature control and longer heater life
- **Bumpless Transfer**
  - When a thermocouple failure occurs, operation is automatically continued with a learned % power
  - Unique software accurately assigns percent power setting
- **Third Fuse**
  - Allows for display of low temperature alarm when the load fuses are blown

Front Panel Digital LED Indicators

bAC	SHO	OPE	bPL	Loc	°F	°C	550	40	Err
BACKWARD THERMOCOUPLE	SHORTED THERMOCOUPLE	OPEN THERMOCOUPLE	BUMPLESS TRANSFER	FRONT PANEL LOCKOUT	TEMP MODE FAHRENHEIT	TEMP MODE CENTIGRADE	PROCESS TEMP	MANUAL % POWER	LOCKOUT ERROR

RoHS/WEEE Compliant
Smart Series® Single Zone Temperature Controller

SSH-10-22/21 (10 AMP)

Controller includes 19-foot power cord, mating mold power and thermocouple connector (CKPTM-1) and two spare fuses (ABC-10). Additional cables and/or connectors must be ordered separately. See Page 15 for detailed information on cables and connectors. Warranty: Three year (excluding triac and fuses).

CONTROLLER ITEM NUMBER	VOLTS (VAC)
SSH-10-22	240
SSH-10-21	120

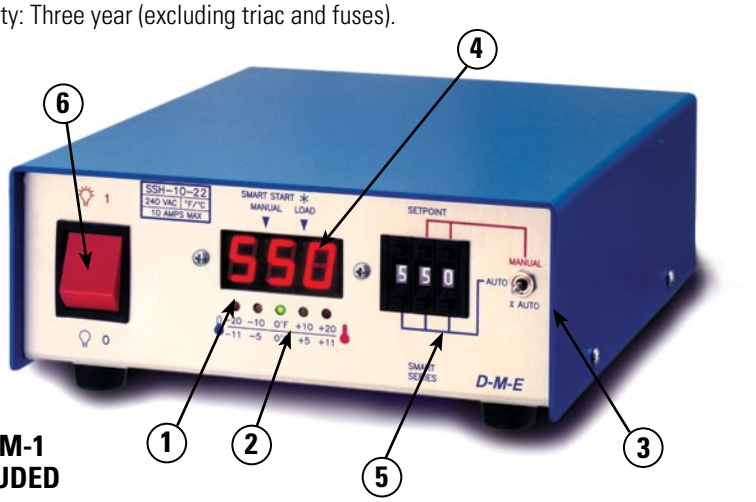
CABLE* ITEM NUMBER	LENGTH (FEET)
MPTC-10	10
MPTC-20	20

See page 15





CKPTM-1 INCLUDED



MOLD POWER AND THERMOCOUPLE CONNECTOR* ITEM NUMBER
CKPTIC-1

See page 15



*** ITEMS ORDERED SEPARATELY**

Front Panel Controls and Indicators

1. **Process Temperature Display:**
   Shows process temperature, thermocouple faults and other operational modes. Displays % power when switch (3) is pressed down.

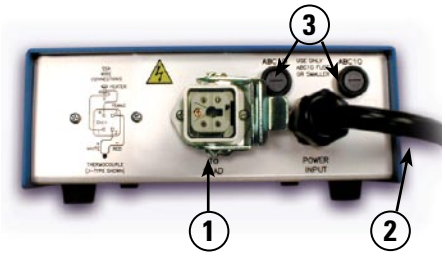
2. **Temperature Deviation Lights:**
   Indicates deviation from setpoint. Outer lights blink at more than ±40°F (22°C) from setpoint.

3. **Auto / Manual / % Auto Power Switch:**
   Selects AUTO or MANUAL control mode. Shows % power when pressed into "% AUTO" position.

4. **LED Mode Indicators:**
   Left LED illuminates during manual mode. Right LED illuminates when power is supplied to heater. Right LED blinks during SmartStart®.

5. **Setpoint Pushwheel:**
   Three digit switch programs setpoint in AUTO mode. Right two digits program % power in MANUAL mode.

6. **Power On/Off Switch:**
   Controls AC power to module.



Rear Panel

1. **Mold Power and Thermocouple Output Connector:**
   CKPTIC-1 connects to the heater and thermocouple. Mating connector CKPTM-1 is supplied with controller.

2. **Power Input Cord:**
   Nineteen foot cord supplies power to controller. Plug supplied with SSH-10-21 (120 VAC) units. No plug supplied with SSH-10-22.

3. **Load Fuse Receptacles:**
   Provides safe and easy replacement of load fuses.

RoHS/WEEE Compliant
Smart Series® Single and 2-Zone Mainframes (10 AMP max.)



MFP-1G
MFP-1G-1

A: AC2024F (Power to Mainframe); AC1512F supplied with MFP-1G-1

B: CKPTM-1 (Connector to heater)

This single-zone controller is ideal for use with Straight-Shot and Gate-Mate hot sprue bushings.



MFPR-2G

A: AC2024F (Power to Mainframe)

B: CKPTM-1 (Connector to heater)

Single zone, horizontal 10 amp controllers (SSH-10-22/21) also available. See page 12.

DIMENSIONS
(all frames)
7"W x 9"H x 10"D
(9"H dimension does not include connectors or handle)

Single and Two-Zone 10 AMP Mainframes

The D-M-E Portable 10 AMP Mainframes are designed for use with 10 or 15 AMP* Smart Series or G-Series Temperature Control Modules. Mainframe is supplied with power input and power-thermocouple output connectors. Circuit breaker provides safety for operation. Control modules and cables are to be ordered separately.

NOTE: Maximum safe operating amperage is 10 AMPS per zone when using 15 AMP modules. If application will draw more than 10 AMPS per zone, use 15 AMP Mainframe (MFFPR-2G).

*User must install ABC10 (10 AMP) fuses in the 15 AMP control modules to protect the mainframe.

Single and Two-Zone 10 AMP Mainframes (50-60 Hz, single phase)

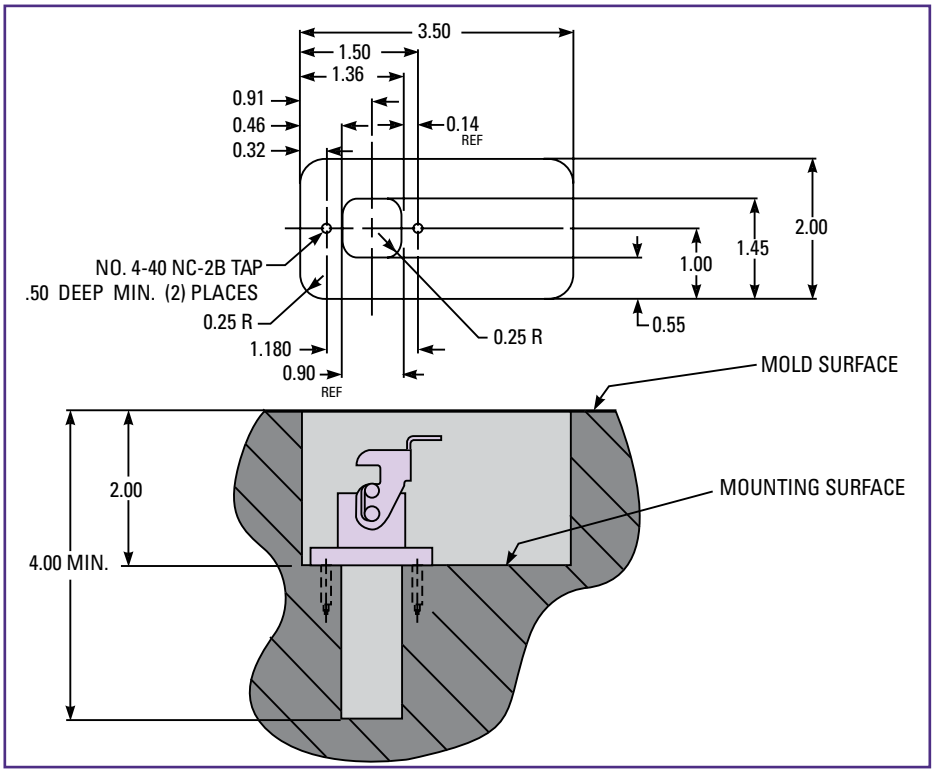
ZONES	ITEM NUMBERS**	VOLTS	WATTS PER ZONE	CONNECTORS SUPPLIED
1	MFP-1G-1	120	1200	(1) AC1512F (POWER IN) (1) CKPTM-1 (POWER-T/C OUT)
1	MFP-1G	240	2400	(1) AC2024F (POWER IN) (1) CKPTM-1 (POWER-T/C OUT)
2	MFPR-2G	240	2400	(1) AC2024F (POWER IN) (2) CKPTM-1 (POWER-T/C OUT)

**Includes frame and connectors listed. Modules and cables ordered separately.

NOTE: Replacement power connectors in frame are also available on special order.

Recommended Mold Pocket Layout

(For Mold Power-Thermocouple Input Connector CKPTIC-1)



RoHS/WEEE Compliant: Smart Series® Single and 2-Zone Mainframe Accessories (10 AMP)

For Use With MFP-1G, MFP-1G-1, MFPR-2-G, SSH-10-22 and SSH-10-21

Mold Power-Thermocouple Input Connector

ITEM NUMBER
CKPTIC-1



A Single-Zone Power-Thermocouple Input Connector is available for mounting in or on the mold to accept the power-thermocouple cable from the mainframe. Water resistant, the connector has an integral retaining latch for a secure cable connection and numbered screw-type terminals for power and thermocouple lead wires.
*Can be mounted on top of mold for use with D-M-E Straight Shot hot sprue bushings.

Armored Mold Power-Thermocouple Cables

ITEM NUMBER
MPTC-10
MPTC-20



Single-Zone Mold Power-Thermocouple Cables are constructed of special lead wire for use in high temperature environments, and are available to connect the mainframe to the connector on the mold. Available in lengths of 10 or 20 feet. Integral retaining latches on the mainframe and mold connections provide secure cable connections. Connector configurations ensure proper insertion of cable.

Replacement Connector Kits (for Controller & Cables)

Power Input Connectors For Mainframe



AC1512F



AC2024F

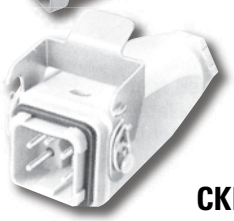
ITEM NUMBER	VOLTS
AC1512F	120
AC2024F	240

MALE POWER-T/C CONNECTORS;

- CKPTM-1 is on MPTC-10/20 Cables; Mates with Frame or CKPTF-1L Only
- CKPTM-1L Mates With CKPTF-1 Only



CKPTM-1



CKPTM-1L

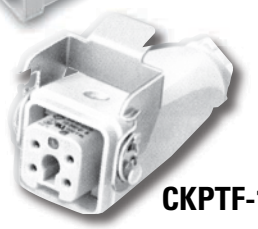
ITEM NUMBER
CKPTM-1
CKPTM-1L

FEMALE POWER – T/C CONNECTORS;

- CKPTF-1 is on MPTC-10/20 Cables; Mates with Mold or CKPTM-1L Only
- CKPTF-1L Mates with CKPTM-1 Only

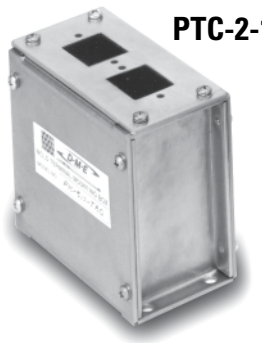


CKPTF-1



CKPTF-1L

ITEM NUMBER
CKPTF-1
CKPTF-1L



PTC-2-10

ITEM NUMBER
PTC-2-10

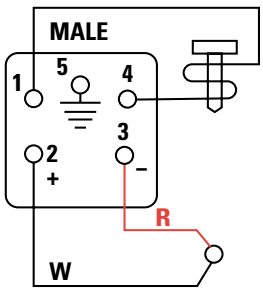
Power-Thermocouple Output Connector (for Mainframe Bulkhead)

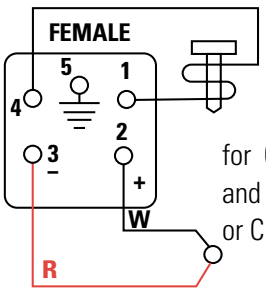


ITEM NUMBER
CKPTOC-1

Wiring Diagrams

for CKPTIC-1 and CKPTM-1 or CKPTM-1L





for CKPTOC-1 and CKPTF-1 or CKPTF-1L

Smart Series® 2-Zone Mainframes (15 AMP) and Accessories

MFFPR-2G



Two-Zone 15 AMP Mainframes

Provides 15 AMP (3600 watts) per zone. For use with Smart Series or G-Series modules. Supplied with built-in cooling fan, power input, power output and thermocouple input connectors. Control modules and cables are ordered separately.

TWO-ZONE 15 AMP MAINFRAME (240 VAC, 50-60 Hz, SINGLE PHASE)

ITEM NUMBER	WATTS PER ZONE	CONNECTORS SUPPLIED
MFFPR-2G	3600	(1) AC1240F (POWER IN) (2) AC1524M (POWER OUT) (2) M2MJ (T / C IN)

Includes frame and connectors listed. Modules and cables ordered separately.

NOTE: Replacement parts in frame are also available by special order. See pages 39 and 40

ITEM NUMBER	DESCRIPTION
AC1240F*	Female 240 VAC twist-lock power input connector (mates with male frame power input)
AC1524M*	Male 240 VAC power output connector (mates with female frame power outputs)
M2MJ*	Thermocouple mini-plug mates with frame as jack strip connector
PTC-2-TBG-TS	2 zone, pre-wired terminal mounting box with terminal strip (mounts to mold; mates with PTC-0110 or PTC-0120 cables)

* Included with MFFPR-2G

FRAME DIMENSIONS:
7"W x 9"H x 10"D
(9"H dimension does not include connectors or handle)



ITEM NUMBER
PTC0110
PTC0120

For use with MFFPR-2G only

Armored Mold Power-Thermocouple Cables (15 AMP)

Single-Zone Mold Power-Thermocouple Cable is constructed of special lead wire for use in high temperature environments. This cable connects the mainframe to the connector on the mold. Available in lengths of 10 or 20 feet. Retaining latches on the mold connector provide secure cable connections.



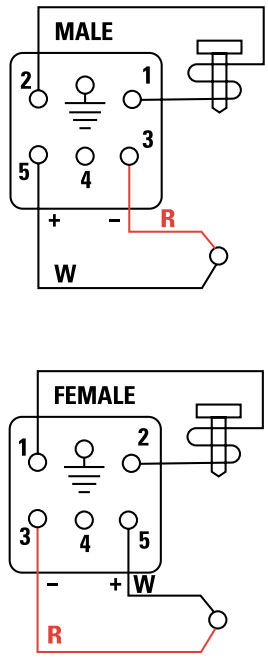
ITEM NUMBER
PTC-2-TBG-TS

For use with MFFPR-2G only

Terminal Mounting Boxes - Prewired (15 AMP)

Terminal Mounting Boxes provide the easiest and most economical method of mounting power and thermocouple connectors on the mold. Constructed of plated heavy gauge steel, each box is precut and drilled for quick mounting of the box to the mold (2-zone, prewired terminal mounting box with terminal strip shown with cover plate removed).

WIRING DIAGRAMS



NOTE: 6-pin connectors and pins are available as a special order only. These are crimp contacts. (See pages 31-32 for mounting dimensions.)

Smart Series® Single Zone High Power Mainframes (30 AMP Max.)

MFHP-1G



FRAME DIMENSIONS:
7"W x 9"H x 10"D
(9"H dimension does not include connectors or handle)

The D-M-E Portable Single-Zone High Power Mainframe is designed for use with 30 AMP Smart Series or G-Series temperature control modules. Mainframe is supplied with built-in cooling fan, power input, power output, and thermocouple input connectors. Circuit breaker provides safety for the operator. Control modules and cable are ordered separately.

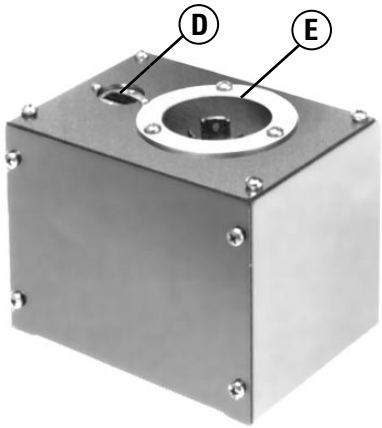
Single Zone 30 AMP Mainframes (240 VAC, 50-60 Hz, Single Phase)

ITEM NUMBER	WATTS (OUTPUT)	CONNECTORS SUPPLIED
MFHP-1G	7200	(1) AC1240F (POWER IN) (1) AC1240M (POWER OUT) (1) M2MJ (T / C IN)

Replacement Connectors and Accessories

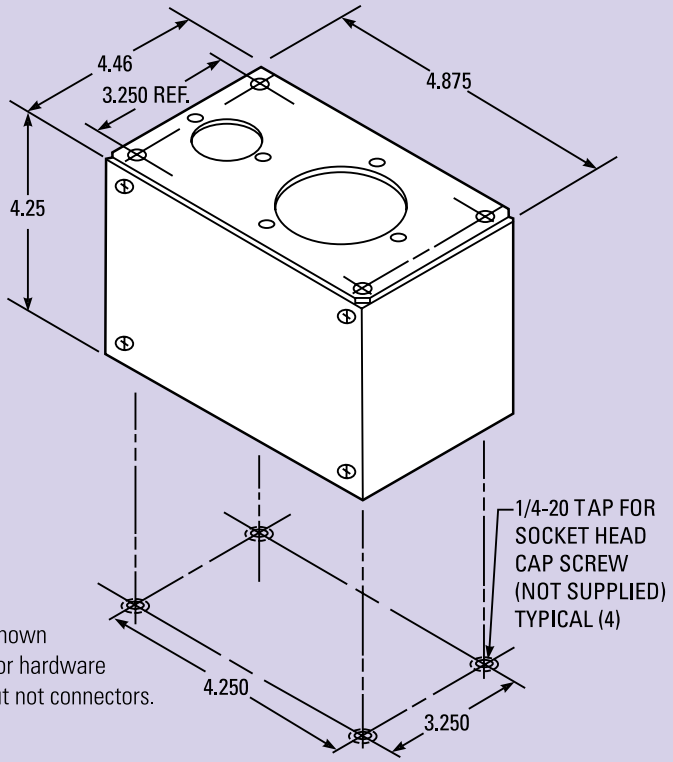
ITEM NUMBER	DESCRIPTION
MPCH1-10	10 ft. mold power cable (240 VAC) (1 AC1240F twist-lock connector on mold end; 1 AC1240M twist-lock connector on frame end)
MPCH1-20	20 ft. mold power cable (240 VAC) (same connectors as MPCH1-10)
AC1240MI	1-Zone twist-lock mold power input connector (mounts in mold or terminal mounting box; accepts AC1240F twist-lock connector on MPCH1-10 or MPCH1-20 cable)
TC1-10	10 ft. thermocouple cable (1 M2MJ mini-plug each end)
TC1-20	20 ft. thermocouple cable (1 M2MJ mini-plug each end)
AC1240F*	240 VAC twist-lock power input connector (mates with frame power input)
AC1240M*	240 VAC twist-lock power output connector (mates with frame power output)
M2MJ*	thermocouple mini-plug (mates with frame or jack strip connector)
PTCH1-TBG	terminal mounting box (mounts to mold; accepts 1 AC1240MI and 1 TCS-1)
TCS-1	jack strip connector

*Included with MFHP-1G mainframe



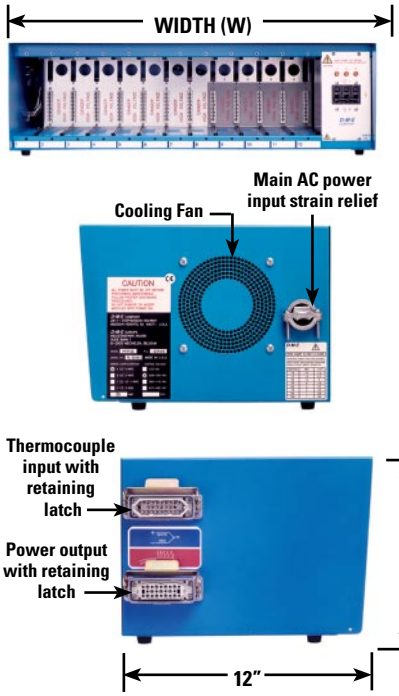
TERMINAL MOUNTING BOX PTCH1-TBG
(Connectors shown are ordered separately)
D: TCS-1
E: AC1240MI

TERMINAL MOUNTING BOX PTCH1-TBG



NOTE: Overall dimensions shown include allowances for hardware (assembly screws) but not connectors.

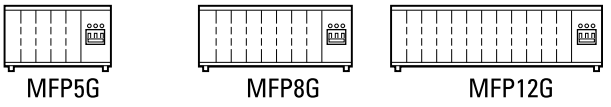
Smart Series® Mainframes (15 AMP)



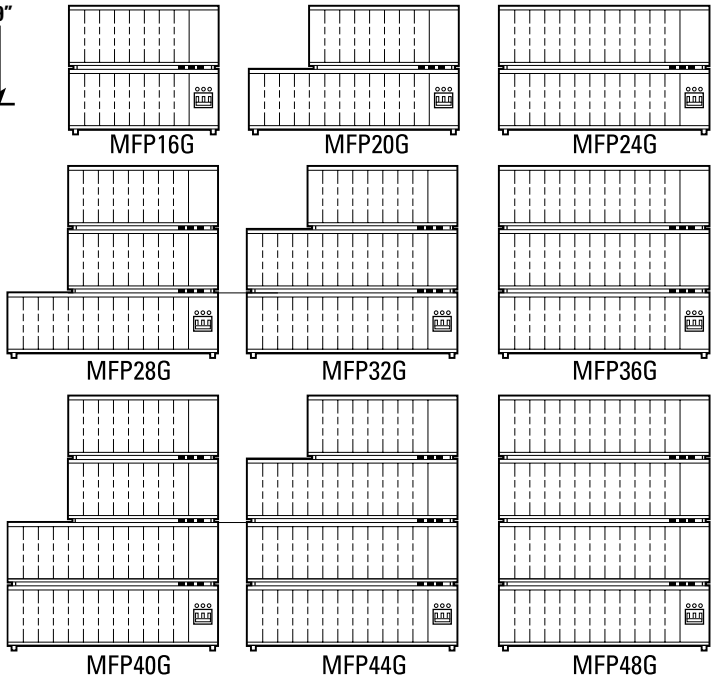
Smart Series® Mainframe (15 AMP Max.) Configurations

The 12 configurations illustrated below provide a wide selection of zone capacities to suit most control applications. The 5-, 8- and 12-zone frames (MFP5, 8, and 12 G) use individual frame sections. The 16 thru 48 zone frames use 2, 3, or 4 frame sections rigidly fastened together into one prewired integral unit which requires only one main AC power input connection. The Current Voltage monitor option will be factory installed when ordered at same time as Mainframe. Control modules, cables, mold connectors and other accessories are ordered separately (see table on p.19).

MAINFRAMES (Supplied with 50 AMP, 3-phase circuit breaker)



STACK FRAMES (Supplied with 70 AMP, 3-phase circuit breaker)



- Each frame section (MFP5G, MFP8G, and MFP12G) has its own cooling fan.
- Multi-section frame heights are multiples of 9" height shown (e.g. MFP32G is 27" high).
- Main AC input shown will always be in bottom frame section. For higher power requirements, individual power inputs and circuit breakers can be factory installed in each section of a stack frame on a special order basis.

WORLDWIDE WIRING CAPABILITIES

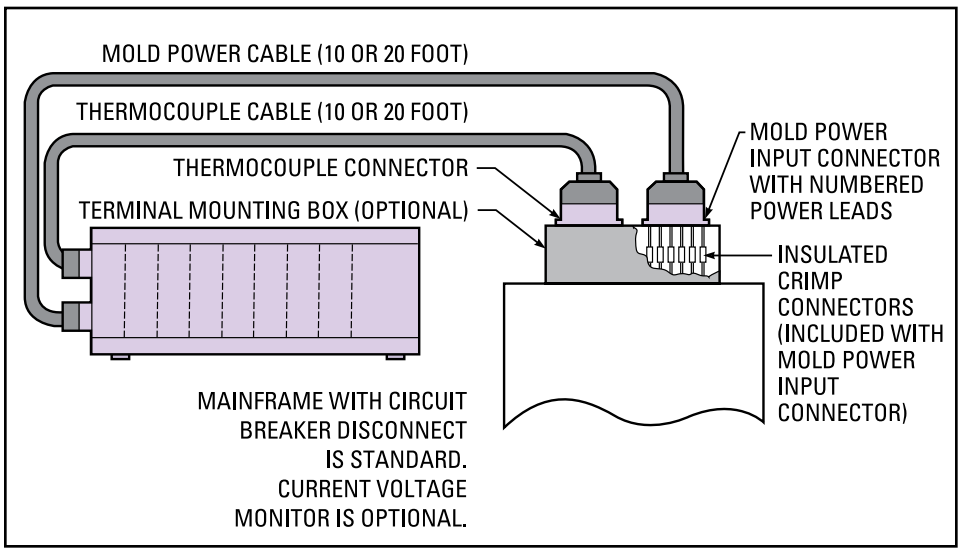
Unless otherwise specified, all Smart Series Mainframes will be supplied to accept 240 VAC, 3 phase, 4-wire, 50-60 Hz input power. Wiring diagram (included on the access cover) illustrates the variety of other voltage, phase and load balancing arrangements possible, such as: (380-415V, 3 phase, 5-wire, 50-60 Hz), (208-240V, single phase, 3-wire, 50-60 Hz) and (110-120V, single phase, 3-wire, 50-60 Hz).

These wiring adjustments can be performed in the field to suit the requirements of the application. If specified at the time of original order, D-M-E will supply the Mainframe required.

ITEM NUMBERS	W*
MFP5G	14 3/16
MFP8G	20 3/16
MFP12G	28 3/16

*Dimension does not include connectors

NOTE: Combination frames to accommodate both 15 and 30 AMP modules (with or without communications) are available by special order.



Smart Series® Mainframes (15 AMP)

SMART SERIES MAINFRAMES Optional Current Voltage Monitor is Factory Installed in CV-Style Frames					CABLES AND MOLD CONNECTORS REQUIRED (Not Included with Mainframes and Must Be Ordered Separately)							
ZONES	"MFP" TYPE FOR TEMPERATURE AND POWER CONTROL	"MFP" TYPE WITH CURRENT VOLTAGE MONITOR	"MFCP" TYPE FOR TEMP. CONTROL AND COMMUNICATIONS	"MFCP" TYPE WITH CURRENT VOLTAGE MONITOR	MOLD POWER CABLES C10 = 10 FT. C20 = 20 FT. (SELECT LENGTH DESIRED)		THERMOCOUPLE CABLES C10 = 10 FT. C20 = 20 FT. (SELECT LENGTH DESIRED)		MOLD POWER INPUT CONNECTORS (INCL. CRIMP CONNECTORS)		THERMOCOUPLE CONNECTORS	
	ITEM NUMBER	ITEM NUMBER (CV-STYLE)	ITEM NUMBER	ITEM NUMBER (CV-STYLE)	QTY.	ITEM NUMBER	QTY.	ITEM NUMBER	QTY.	ITEM NUMBER	QTY.	ITEM NUMBER
5	MFP5G	MFP5G-CV	MFCP5G	MFCP5G-CV	1	MPC5-C10 or C20-G	1	TC5-C10 or C20-G	1	PIC5G	1	MTC5G
8	MFP8G	MFP8G-CV	MFCP8G	MFCP8G-CV	1	MPC8-C10 or C20-G	1	TC8-C10 or C20-G	1	PIC8G	1	MTC8G
12	MFP12G	MFP12G-CV	MFCP12G	MFCP12G-CV	1	MPC12-C10 or C20-G	1	TC12-C10 or C20-G	1	PIC12G	1	MTC12G
16	MFP16G	MFP16G-CV	MFCP16G	MFCP16G-CV	2	MPC8-C10 or C20-G	2	TC8-C10 or C20-G	2	PIC8G	2	MTC8G
20	MFP20G	MFP20G-CV	MFCP20G	MFCP20G-CV	1 and 1	MPC8-C10 or C20-G and MPC12-C10 or C20-G	1 and 1	TC8-C10 or C20-G and TC12-C10 or C20-G	1 and 1	PIC8G and PIC12G	1 and 1	MTC8G and MTC12G
24	MFP24G	MFP24G-CV	MFCP24G	MFCP24G-CV	2	MPC12-C10 or C20-G	2	TC12-C10 or C20-G	2	PIC12G	2	MTC12G
28	MFP28G	MFP28G-CV	MFCP28G	MFCP28G-CV	2 and 1	MPC8-C10 or C20-G and MPC12-C10 or C20-G	2 and 1	TC8-C10 or C20-G and TC12-C10 or C20-G	2 and 1	PIC8G and PIC12G	2 and 1	MTC8G and MTC12G
32	MFP32G	MFP32G-CV	MFCP32G	MFCP32G-CV	1 and 2	MPC8-C10 or C20-G and MPC12-C10 or C20-G	1 and 2	TC8-C10 or C20-G and TC12-C10 or C20-G	1 and 2	PIC8G and PIC12G	1 and 2	MTC8G and MTC12G
36	MFP36G	MFP36G-CV	MFCP36G	MFCP36G-CV	3	MPC12-C10 or C20-G	3	TC12-C10 or C20-G	3	PIC12G	3	MTC12G
40	MFP40G	MFP40G-CV	MFCP40G	MFCP40G-CV	2 and 2	MPC8-C10 or C20-G and MPC12-C10 or C20-G	2 and 2	TC8-C10 or C20-G and TC12-C10 or C20-G	2 and 2	PIC8G and PIC12G	2 and 2	MTC8G and MTC12G
44	MFP44G	MFP44G-CV	MFCP44G	MFCP44G-CV	1 and 3	MPC8-C10 or C20-G and MPC12-C10 or C20-G	1 and 3	TC8-C10 or C20-G and TC12-C10 or C20-G	1 and 3	PIC8G and PIC12G	1 and 3	MTC8G and MTC12G
48	MFP48G	MFP48G-CV	MFCP48G	MFCP48G-CV	4	MPC12-C10 or C20-G	4	TC12-C10 or C20-G	4	PIC12G	4	MTC12G

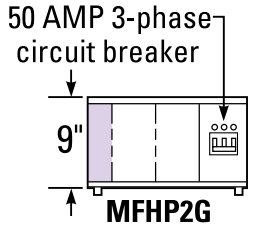
NOTE: For details on cables and connectors, see pages 26-28.

TERMINAL MOUNTING BOXES

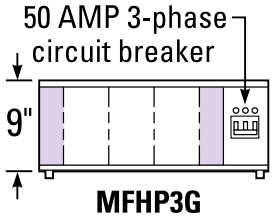
ZONES	ORDER ITEMS A and B or C					
	(A) FOR POWER INPUT CONNECTORS		(B) FOR THERMOCOUPLE CONNECTORS		(C) COMBINATION POWER & TC	
	QTY.	ITEM NUMBER	QTY.	ITEM NUMBER	QTY.	ITEM NUMBER
5	1	PIC512-TBG	1	MTC5-TBG	1	PTC5-TBG
8	1	PIC512-TBG	1	MTC8-TBG	1	PTC8-TBG
12	1	PIC512-TBG	1	MTC12-TBG	1	PTC12-TBG
16	2	PIC512-TBG	2	MTC8-TBG	2	PTC8-TBG
20	2	PIC512-TBG	1 and 1	MTC8-TBG and MTC12-TBG	1 and 1	PTC8-TBG and PTC12-TBG
24	2	PIC512-TBG	2	MTC12-TBG	2	PTC12-TBG
28	3	PIC512-TBG	2 and 1	MTC8-TBG and MTC12-TBG	2 and 1	PTC8-TBG and PTC12-TBG
32	3	PIC512-TBG	1 and 2	MTC8-TBG and MTC12-TBG	1 and 2	PTC8-TBG and PTC12-TBG
36	3	PIC512-TBG	3	MTC12-TBG	3	PTC12-TBG
40	4	PIC512-TBG	2 and 2	MTC8-TBG and MTC12-TBG	2 and 2	PTC8-TBG and PTC12-TBG
44	4	PIC512-TBG	1 and 3	MTC8-TBG and MTC12-TBG	1 and 3	PTC8-TBG and PTC12-TBG
48	4	PIC512-TBG	4	MTC12-TBG	4	PTC12-TBG

NOTES: Combination terminal mounting boxes are available with connectors prewired to terminal strips. See page 31 for details. See page 32 for dimensional details. For below flush mounting of connectors, see mold pocket layouts on pages 29-30. See page 21 for current voltage monitor.

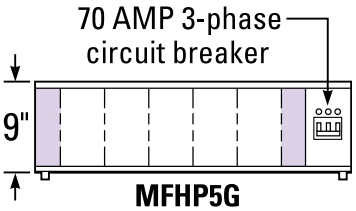
Smart Series® High Power Mainframes (30 AMP)



MFHP2G
(14 3/16" wide)



MFHP3G
(20 3/16" wide)



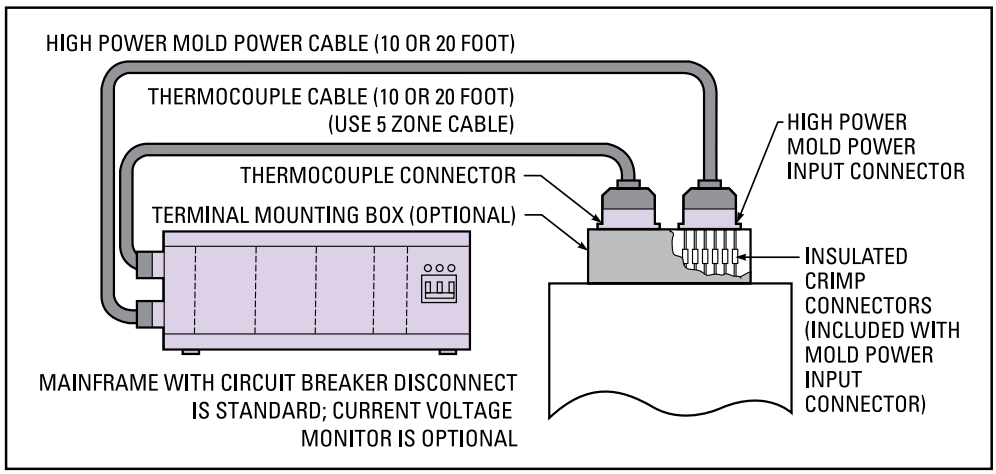
MFHP5G
(28 3/16" wide)

DIMENSIONS ABOVE DO NOT INCLUDE CONNECTORS
all frames are 12" deep

NOTE: Blank panels cover unused zones in frames (shaded panels above). For communications (MFCHP) type frames, these zones may be used for communications modules.



NOTE: Combination frames to accommodate both 15 and 30 AMP modules (with or without communications) are available by special order.



The 3 configurations illustrated at left provide 2, 3 or 5-zones of 30 AMP control for higher wattage heater applications. The Current Voltage monitor option will be factory installed when ordered at the same time as Mainframe. Control modules, cables, mold connectors and other accessories are ordered separately.

ZONES	SMART SERIES HIGH POWER MAINFRAMES OPTIONAL CURRENT VOLTAGE MONITOR IS FACTORY INSTALLED IN CV-STYLE FRAMES			
	"MFHP" TYPE FOR TEMPERATURE CONTROL	"MFHP" TYPE WITH CURRENT VOLTAGE MONITOR	"MFCHP" TYPE FOR TEMP. CONTROL AND COMMUNICATIONS	"MFCHP" TYPE WITH CURRENT VOLTAGE MONITOR
	ITEM NUMBER	ITEM NUMBER (CV-STYLE)	ITEM NUMBER	ITEM NUMBER (CV-STYLE)
2	MFHP2G	MFHP2G-CV	MFCHP2G	MFCHP2G-CV
3	MFHP3G	MFHP3G-CV	MFCHP3G	MFCHP3G-CV
5	MFHP5G	MFHP5G-CV	MFCHP5G	MFCHP5G-CV

ZONES	CABLES AND MOLD CONNECTORS REQUIRED (NOT INCLUDED WITH MAINFRAMES)							
	MOLD POWER CABLES C10 = 10 FT. C20 = 20 FT. (SELECT LENGTH DESIRED)		THERMOCOUPLE CABLES C10 = 10 FT. C20 = 20 FT. (SELECT LENGTH DESIRED)		MOLD POWER INPUT CONNECTORS (INCL. CRIMP CONNECTORS)		THERMOCOUPLE CONNECTORS	
	QTY.	ITEM NUMBER	QTY.	ITEM NUMBER	QTY.	ITEM NUMBER	QTY.	ITEM NUMBER
2	1	MPCH23-C10 or C20-G	1	TC5-C10 or C20-G	1	PICH23G	1	MTC5G
3	1	MPCH23-C10 or C20-G	1	TC5-C10 or C20-G	1	PICH23G	1	MTC5G
5	1	MPCH5-C10 or C20-G	1	TC5-C10 or C20-G	1	PICH5G	1	MTC5G

NOTE: For details on cables and connectors, see pages 26-28.

TERMINAL MOUNTING BOXES

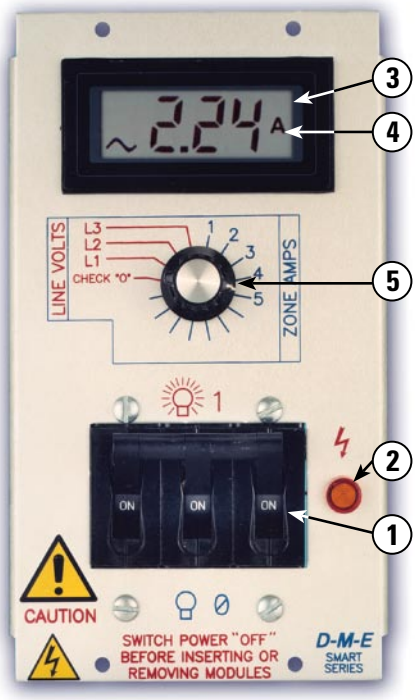
ZONES	ORDER ITEMS A and B or C					
	(A) FOR POWER INPUT CONNECTORS		(B) FOR THERMOCOUPLE CONNECTORS		(C) COMBINATION POWER & TC	
	QTY.	ITEM NUMBER	QTY.	ITEM NUMBER	QTY.	ITEM NUMBER
2	1	PICH23-TBG	1	MTC5-TBG	1	PTCH23-TBG
3	1	PICH23-TBG	1	MTC5-TBG	1	PTCH23-TBG
5	1	PICH5-TBG	1	MTC5-TBG	1	PTCH5-TBG

NOTE: See page 31-32 for dimensional details. For below-flush mounting of connectors, see mold pocket layouts on pages 29-30.

Smart Series® Digital Current/Voltage Monitor

Streamlined Design For Improved Performance

The new Current/Voltage Monitor is simple to operate and features a large easy-to-read digital display. Ease of operation has been enhanced by streamlining the unit and eliminating unnecessary switches and controls. When setting the selector switch to the desired zone number, the 'AMPS' function is selected. The meter will then display the amount of current being delivered by the selected module. Input voltage to the system can be measured by rotating the selector switch to one of the three 'line voltage' positions. This will set the meter in the 'voltage' function and display the voltage of the selected phase.



Current Supply To Each Zone

To monitor the current supply to each zone, simply set the rotary selector switch to the desired module zone number. The "AMPS" function is then automatically selected and is indicated by the letter 'A' just to the right of the numbers in the display window. The meter displays the current being delivered to the heater load in amperes.

Input Voltage From Each Phase

Set the rotary selector to the desired phase voltage position. This automatically selects the 'volts' function which is indicated when the letter 'V' appears to the right of the numbers in the display window. The meter will display the line voltage of the selected phase.

1. **CIRCUIT BREAKER/DISCONNECT** – Applies or removes power to all modules in the frame.
2. **POWER ON LIGHT (amber)** – Illuminates when CIRCUIT BREAKER is in the ON position.
3. **AMPS/VOLTS METER** – Digital multi-scale meter provides accurate readings of zone current (AMPS) or input voltage (VOLTS).
4. **AMPS/VOLTS INDICATOR** – Appears automatically when either AMPS or VOLTS is selected.
5. **SELECTOR SWITCH** – Multi-position switch automatically selects zone current or phase line voltage to be monitored. For systems with more than 12-zones, additional meter and selector switch panels are supplied.

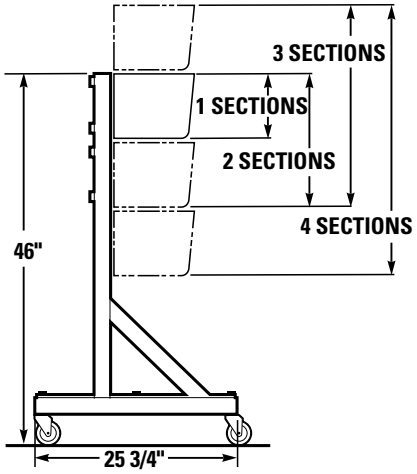
Specifications

Voltmeter Range	190 to 290 VAC (for 240 volt systems) 90 to 145 VAC (for 120 volt systems)
Voltmeter Accuracy	± 3% of reading, 50 to 60 Hz
Maximum Voltmeter Input	400 VAC
Input Voltage	240/120 VAC, 50 to 60 Hz
Ammeter Range	0 to 2; 0 to 30; 0 to 40 Amperes
Ammeter Accuracy	± 2% @ 0 to 100% Duty Cycle, 50-60 Hz
Maximum Ammeter Input	30 Amperes

NOTE: The Digital Current/Voltage Monitor is a factory installed option which replaces the standard circuit breaker/disconnect, and is supplied when "CV-style" mainframes are ordered.

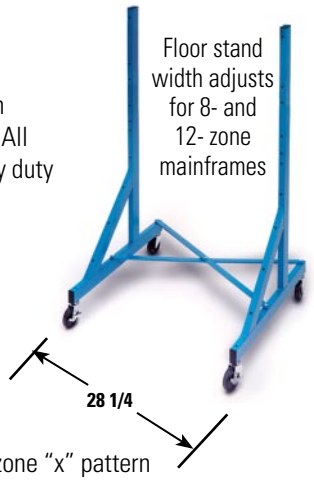
See pages 19 and 20 for appropriate mainframe item numbers.

Smart Series® Accessories



Universal Floor Stand

The Universal Floor Stand will accommodate all 15 or 30 amp Mainframes from one to four sections high. Stand is made from heavy gauge steel and includes locking casters (400 lb. rating). All assembly and Mainframe mounting hardware is included. Heavy duty floor stand available for larger systems (1000 lb. rating).



ITEM NUMBER	RATING
MFS-512-G	400 LBS
MFS-512-G-HD*	1000 LBS

*HD stand not shown.
Floor stand comes with plates for 5-zone frame mounting on 8-zone "x" pattern



Step-Down Transformer Kits (from 480 VAC to 240 VAC)

Transformer Kits are pre-wired and include enclosed transformer (480 VAC input, 240 VAC output) with adjustable transformer voltage taps, one 10-foot cable for AC power-in (no connector), one 6-foot cable for mainframe (AC input), one safety switch, two extra fuses, floor stand (MFS-512-G) and all mounting brackets and hardware required. Shipped with instructions for easy assembly.

Single section frames mount to front or rear of stand.

ITEM NUMBER	POWER CAPACITY
TK6-1A-G	6 KVA
TK9-1A-G*	9 KVA
TK15-1A-G*	15 KVA
TK30-1A-G**	30 KVA

Mainframe not included.
Adapter plates for narrower frames available by special order.
* Comes with plates for mounting 8-zone on 12-zone "x" pattern
** Supplied with MFS-512-G-HD for this transformer size or large and transformers mounted flat.

Also Available:

1. Transformer only
2. Transformer and cables only
3. Transformers with other voltage or current capacities
4. Isolation Transformers

Contact D-M-E for details and prices.

NOTE: Power capacity needed depends on total load of system (i.e. number of zones and heater load per zone).



Mainframe Blank Panels

Used. to cover unused zones in mainframes. Push-pull fasteners included in panel. **MFBP10G** covers one 15 AMP zone; **MFBP30G** covers one 30 AMP zone (or two 15 AMP zones).

ITEM NUMBER
MFBP10G
MFBP30G

Module Replacement Fuses

(sold in packages of 5)



ITEM NUMBER	AMPS
ABC-1	1
ABC-15	15
ABC-10	10
13X-10	10
13X-15	15

Insulated Crimp Connectors

For connection of mold power input connector leads to heater leads. (195°F / 90°C maximum temperature)

ITEM NUMBER	AMPS	WIRE GAUGE
HWCC-1 (Bag of 30)	10-15	16-22 RED
HWCC-3 (Bag of 30)	10-15	14-16 BLUE
HWCC-2 (Bag of 20)	15-30	10-12 YELLOW

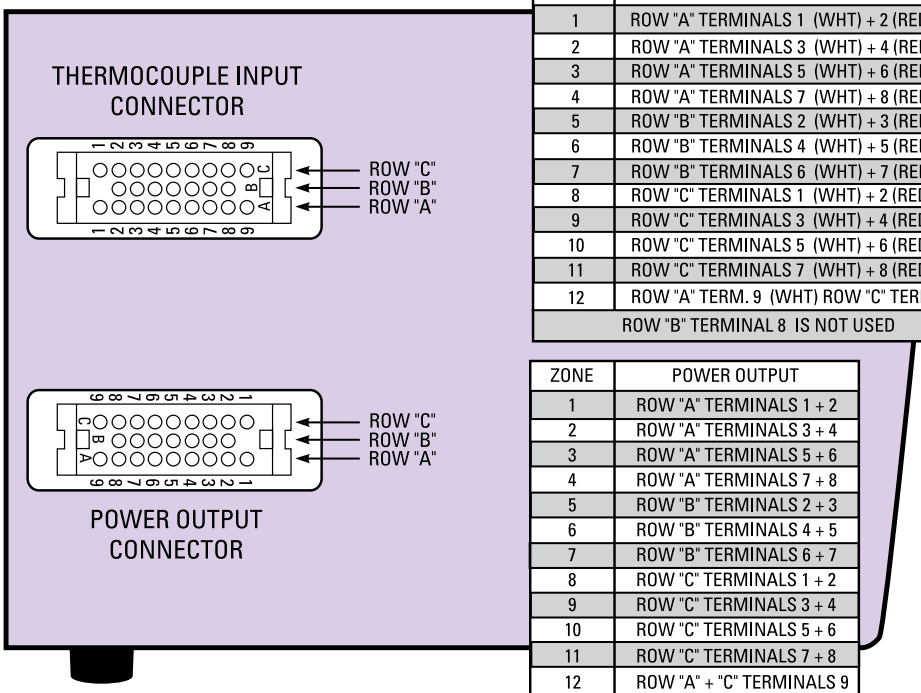
NOTE: Initial supply is provided with mold power input connectors.



Smart Series® Mainframe Connector Wiring

STANDARD MAINFRAME CONNECTOR WIRING

Side of Mainframe



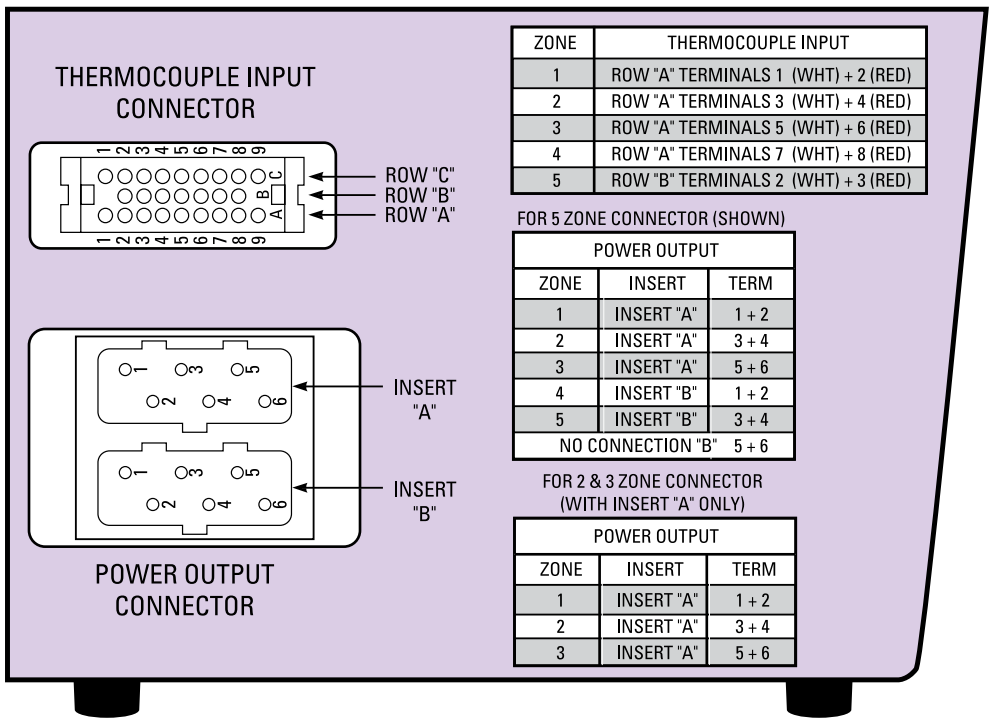
ZONE	THERMOCOUPLE INPUT
1	ROW "A" TERMINALS 1 (WHT) + 2 (RED)
2	ROW "A" TERMINALS 3 (WHT) + 4 (RED)
3	ROW "A" TERMINALS 5 (WHT) + 6 (RED)
4	ROW "A" TERMINALS 7 (WHT) + 8 (RED)
5	ROW "B" TERMINALS 2 (WHT) + 3 (RED)
6	ROW "B" TERMINALS 4 (WHT) + 5 (RED)
7	ROW "B" TERMINALS 6 (WHT) + 7 (RED)
8	ROW "C" TERMINALS 1 (WHT) + 2 (RED)
9	ROW "C" TERMINALS 3 (WHT) + 4 (RED)
10	ROW "C" TERMINALS 5 (WHT) + 6 (RED)
11	ROW "C" TERMINALS 7 (WHT) + 8 (RED)
12	ROW "A" TERM. 9 (WHT) ROW "C" TERM. 9 (RED)
ROW "B" TERMINAL 8 IS NOT USED	

ZONE	POWER OUTPUT
1	ROW "A" TERMINALS 1 + 2
2	ROW "A" TERMINALS 3 + 4
3	ROW "A" TERMINALS 5 + 6
4	ROW "A" TERMINALS 7 + 8
5	ROW "B" TERMINALS 2 + 3
6	ROW "B" TERMINALS 4 + 5
7	ROW "B" TERMINALS 6 + 7
8	ROW "C" TERMINALS 1 + 2
9	ROW "C" TERMINALS 3 + 4
10	ROW "C" TERMINALS 5 + 6
11	ROW "C" TERMINALS 7 + 8
12	ROW "A" + "C" TERMINALS 9
ROW "B" TERMINAL 8 IS NOT USED	

NOTE:
1. Mating cable connectors are wired the same as frame connectors shown.
2. Wires in frames are color coded for reference when rewiring of frame connectors is necessary (see owner's manual).
3. All grounds must be connected to ensure operator safety.

HIGH POWER MAINFRAME CONNECTOR WIRING

Side of Mainframe



ZONE	THERMOCOUPLE INPUT
1	ROW "A" TERMINALS 1 (WHT) + 2 (RED)
2	ROW "A" TERMINALS 3 (WHT) + 4 (RED)
3	ROW "A" TERMINALS 5 (WHT) + 6 (RED)
4	ROW "A" TERMINALS 7 (WHT) + 8 (RED)
5	ROW "B" TERMINALS 2 (WHT) + 3 (RED)

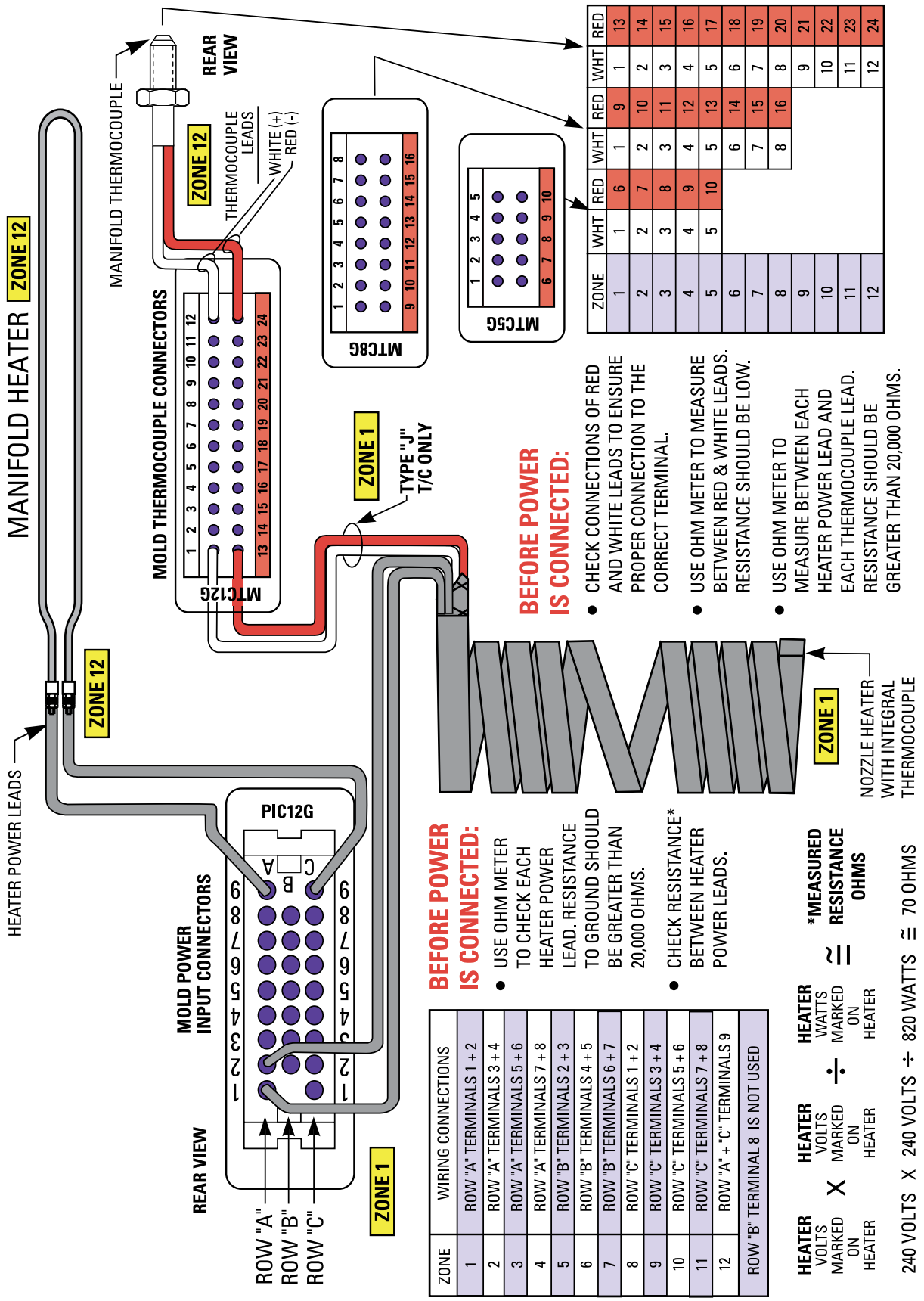
FOR 5 ZONE CONNECTOR (SHOWN)

POWER OUTPUT		
ZONE	INSERT	TERM
1	INSERT "A"	1 + 2
2	INSERT "A"	3 + 4
3	INSERT "A"	5 + 6
4	INSERT "B"	1 + 2
5	INSERT "B"	3 + 4
NO CONNECTION "B"		5 + 6

FOR 2 & 3 ZONE CONNECTOR (WITH INSERT "A" ONLY)

POWER OUTPUT		
ZONE	INSERT	TERM
1	INSERT "A"	1 + 2
2	INSERT "A"	3 + 4
3	INSERT "A"	5 + 6

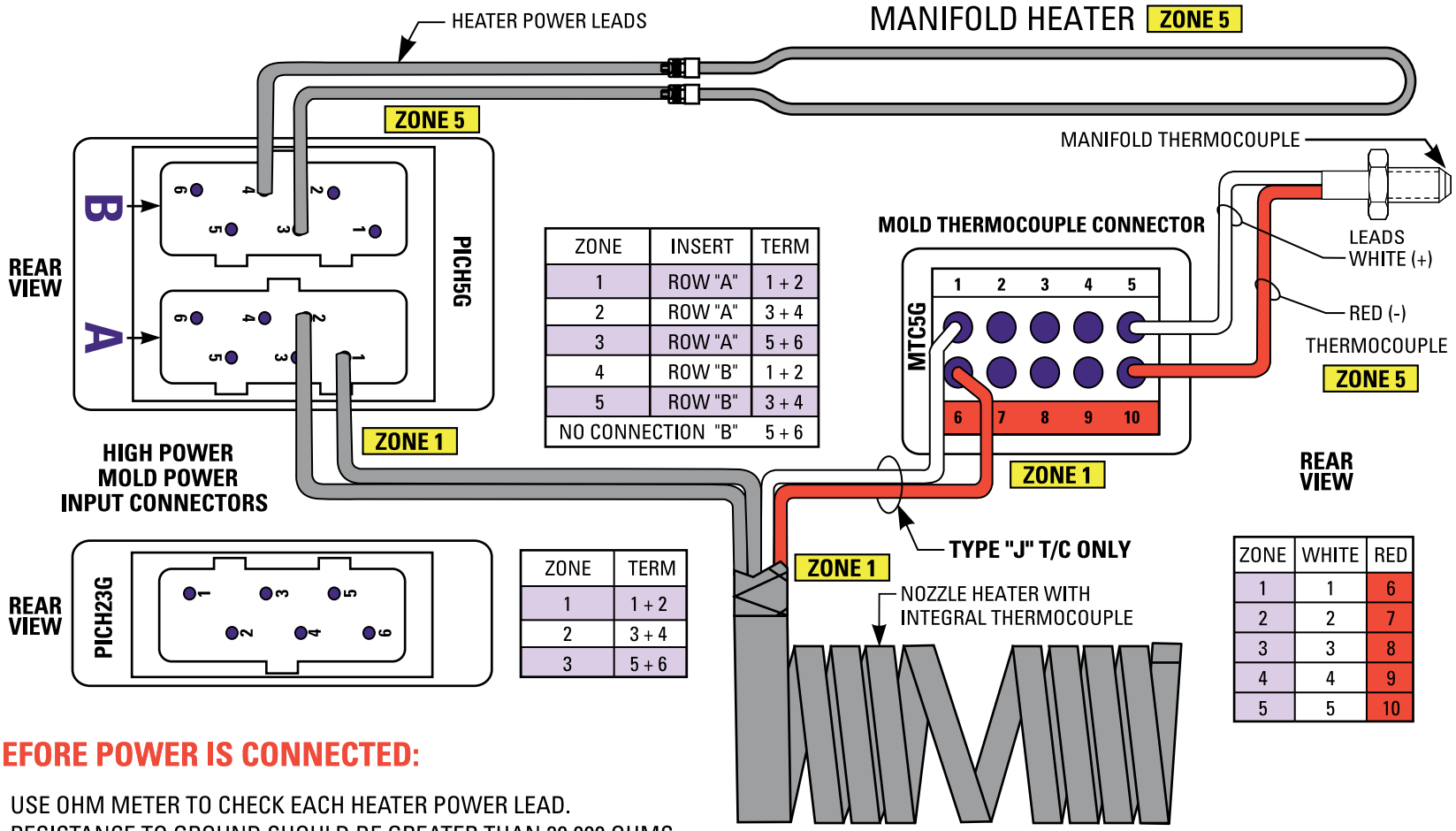
Wiring Diagram for D-M-E Hot Runner Molding System with Smart Series® Mold Connectors



ZONE	WIRING CONNECTIONS
1	ROW "A" TERMINALS 1 + 2
2	ROW "A" TERMINALS 3 + 4
3	ROW "A" TERMINALS 5 + 6
4	ROW "A" TERMINALS 7 + 8
5	ROW "B" TERMINALS 2 + 3
6	ROW "B" TERMINALS 4 + 5
7	ROW "B" TERMINALS 6 + 7
8	ROW "C" TERMINALS 1 + 2
9	ROW "C" TERMINALS 3 + 4
10	ROW "C" TERMINALS 5 + 6
11	ROW "C" TERMINALS 7 + 8
12	ROW "A" + "C" TERMINALS 9
	ROW "B" TERMINAL 8 IS NOT USED

ZONE	WHT	RED	WHT	RED	WHT	RED
1	1	6	1	9	1	13
2	2	7	2	10	2	14
3	3	8	3	11	3	15
4	4	9	4	12	4	16
5	5	10	5	13	5	17
6			6	14	6	18
7			7	15	7	19
8			8	16	8	20
9					9	21
10					10	22
11					11	23
12					12	24

NOTES: All grounds must be connected to mold to ensure operator safety.
All crimp connections can be eliminated by using terminal mounting box with terminal strip. See page 31.



ZONE	INSERT	TERM
1	ROW "A"	1 + 2
2	ROW "A"	3 + 4
3	ROW "A"	5 + 6
4	ROW "B"	1 + 2
5	ROW "B"	3 + 4
NO CONNECTION "B"		5 + 6

ZONE	TERM
1	1 + 2
2	3 + 4
3	5 + 6

ZONE	WHITE	RED
1	1	6
2	2	7
3	3	8
4	4	9
5	5	10

BEFORE POWER IS CONNECTED:

- USE OHM METER TO CHECK EACH HEATER POWER LEAD. RESISTANCE TO GROUND SHOULD BE GREATER THAN 20,000 OHMS.
- CHECK RESISTANCE* BETWEEN HEATER POWER LEADS.

HEATER VOLTS MARKED ON HEATER X **HEATER** VOLTS MARKED ON HEATER ÷ **HEATER** WATTS MARKED ON HEATER ≅ ***MEASURED RESISTANCE OHMS**

240 VOLTS X 240 VOLTS ÷ 820 WATTS ≅ 70 OHMS

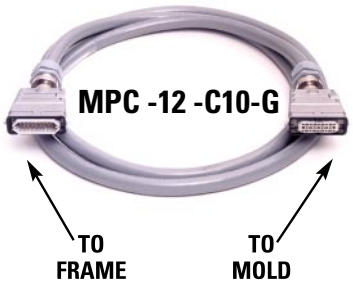
BEFORE POWER IS CONNECTED:

- CHECK CONNECTIONS OF RED AND WHITE LEADS TO ENSURE PROPER CONNECTION TO THE CORRECT TERMINAL.
- USE OHM METER TO MEASURE BETWEEN RED & WHITE LEADS. RESISTANCE SHOULD BE LOW.
- USE OHM METER TO MEASURE BETWEEN EACH HEATER POWER LEAD AND EACH THERMOCOUPLE LEAD. RESISTANCE SHOULD BE GREATER THAN 20,000 OHMS.

NOTES: All grounds must be connected to mold to ensure operator safety.
All crimp connections may be eliminated. Simply remove 6" leads form PIC connectors and wire directly.

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ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Mold Power and Thermocouple Cables



Mold Power Cables are used to connect the Mainframe to the Power Input Connector on the mold. Available in lengths of 10 or 20 feet. Integral retaining latches on both the frame and mold connectors provide secure cable connections. Connector configurations ensure proper insertion of cable. Cables are wired for 5, 8 or 12 zones (15 AMP) and 3 or 5 zones (30 AMP) for use with the appropriate Smart Series Mainframes and Mold Power Input Connectors.

Universal Mold Power Cable (15 AMP)

The MPC-12-C10 or 20-G Mold Power Cable also serves as a universal cable for connecting any 15 AMP Smart Series Mainframe to any 15 AMP Mold Power Input Connector. The maximum number of zones will be determined by the connector in the mold.

Mold Power Cables (15 AMP Max)

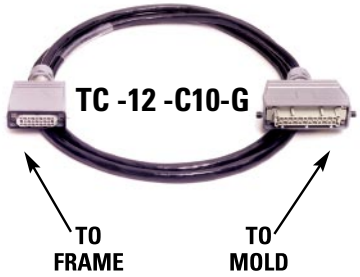
10 FOOT LONG	20 FOOT LONG	NUMBER OF ZONES (MAX.)	FOR CONNECTIONS	
ITEM NUMBER	ITEM NUMBER		FROM 15 AMP FRAME (S)	TO POWER INPUT CONNECTOR
MPC-5-C10-G	MPC-5-C20-G	5	5, 8, 12 ZONE	PIC-5-G
MPC-8-C10-G	MPC-8-C20-G	8	8, 12 ZONE	PIC-8-G
MPC-12-C10-G	MPC-12-C20-G	12	12 ZONE	PIC-12-G

Mold High Power Cables (30 AMP Max)

10 FOOT LONG	20 FOOT LONG	NUMBER OF ZONES (MAX.)	FOR CONNECTIONS	
ITEM NUMBER	ITEM NUMBER		FROM 30 AMP FRAME (S)	TO POWER INPUT CONNECTOR
MPCH-23-C10-G	MPCH-23-C20-G	3	2-3 ZONE	PICH-23-G
MPCH-5-C10-G	MPCH-5-C20-G	5	5 ZONE	PICH-5-G

SPECIAL CABLES

Virtually any type of Conversion or Special Cable configuration can be provided by special order.



Thermocouple Cables are used to connect the Mainframe to the Thermocouple Connector on the mold, and are available in lengths of 10 or 20 feet. Integral retaining latches on both the frame and mold connectors provide secure cable connections. Connector configurations ensure proper insertion of cable. Cables available are wired for 5, 8 or 12 zones for use with the appropriate Smart Series Mainframes and Thermocouple Connectors.

Thermocouple Cables (for use with 15 or 30 AMP Mainframes)

These Thermocouple Cables serve as cables for connecting dissimilar Mainframes and Thermocouple Connectors. For example, the TC-8-C10-G could be used to connect a 12-zone frame to an 8-zone MTC-8-G connector. The maximum number of zones will be determined by the connector in the mold.

Thermocouple Cables

10 FOOT LONG	20 FOOT LONG	NUMBER OF ZONES (MAX.)	FOR CONNECTIONS	
ITEM NUMBER	ITEM NUMBER		FROM 15 AMP FRAME (S)	TO THERMOCOUPLE CONNECTOR
TC-5-C10-G*	TC-5-C20-G*	5	5, 8, 12 ZONE	MTC-5-G
TC-8-C10-G	TC-8-C20-G	8	8, 12 ZONE	MTC-8-G
TC-12-C10-G	TC-12-C20-G	12	12 ZONE	MTC-12-G

* Used with all 30 AMP Mainframes.

Mold Power Input Connectors

For 15 AMP Applications



PIC-5-G



PIC-8-G



PIC-12-G

For 30 AMP Applications



PICH-23-G

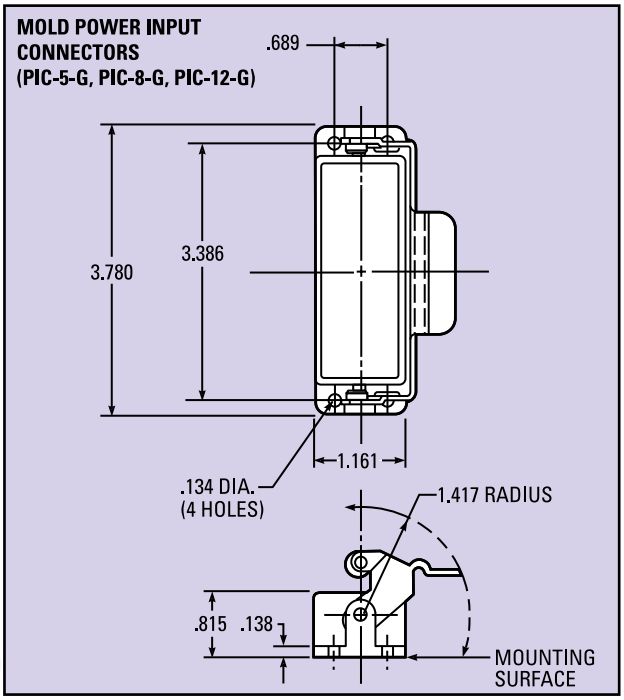


PICH-5-G

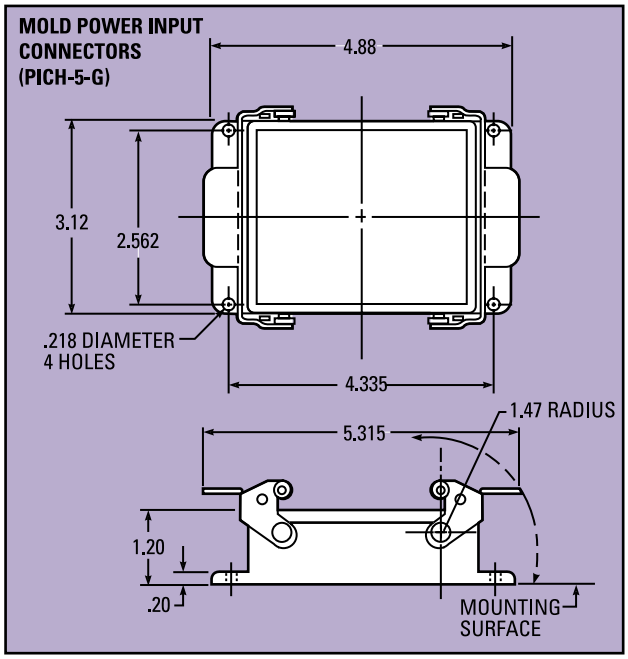
NOTES:
Connector PICH-23-G is dimensionally identical to thermocouple connector MTC-8-G. See page 28.

For PICH-23-G and PICH-5-G, direct wiring without crimp connectors is possible by removing 6" leads.

Mold Power Input Connectors are mounted on the mold to accept power cable(s) from the Mainframe. They are supplied with six inches of numbered leads and a ground wire. All three 15 AMP connectors are the same physical size and use 14-gauge wire. Only the number of active pins change. The 30 AMP connectors are supplied with 10-gauge leads and are attached to screw terminals. Each is equipped with an integral retaining latch to provide a secure cable connection. Connector configuration ensures proper insertion of cable. Splicing of 6" leads to heater power leads is easily accomplished with the Insulated Crimp Connectors supplied.



NOTE: Dimensions shown may vary slightly.



NOTE: Ground wire must be connected to mold to ensure operator safety.

Mold Power Input Connectors

ITEM NUMBER	NUMBER OF ZONES (MAX.)	AMPS (MAX.) PER ZONE
PIC-5-G	5	15
PIC-8-G	8	15
PIC-12-G	12	15
PICH-23-G	3	30
PICH-5-G	5	30

NOTE: Replacement parts and extraction tools can be found on page 40.

Insulated Crimp Connectors

ITEM NUMBER	AMPS	FOR WIRE GAUGE
HWCC-1 30 PCS.	10-15	16-22
HWCC-3 30 PCS.	15	14-16
HWCC-2 20 PCS.	30	10-12

NOTE: Initial supply is provided with mold power input connectors. Also, see page 22.



Mold Thermocouple Connectors



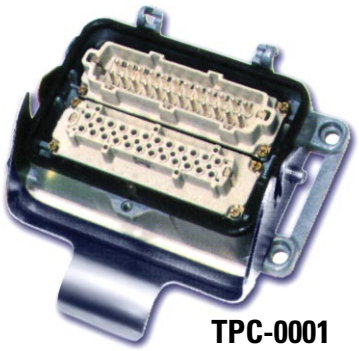
MTC-5-G



MTC-8-G



MTC-12-G



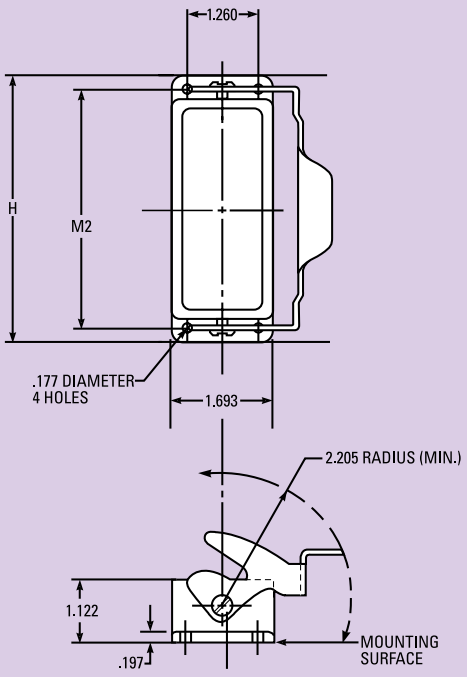
TPC-0001

Thermocouple Connectors are mounted on the mold to use with thermocouple cable(s) from the Mainframe. Screw type terminals for use with iron(+) and constantan(-) thermocouple leads are numbered and coded on the side and bottom of each connector. All three connectors are equipped with integral retaining latches to provide a secure cable connection. Connector configuration ensures proper insertion of cable. Pins are made of copper alloy and are silver plated. Experience has proven that iron and constantan are not required.

ITEM NUMBER	NUMBER OF PINS	DIMENSION	
		M2	H
MTC-5-G	10	3.268	3.662
MTC-8-G	16	4.055	4.449
MTC-12-G	24	5.118	5.512
TPC-0001	48	5.827	6.496

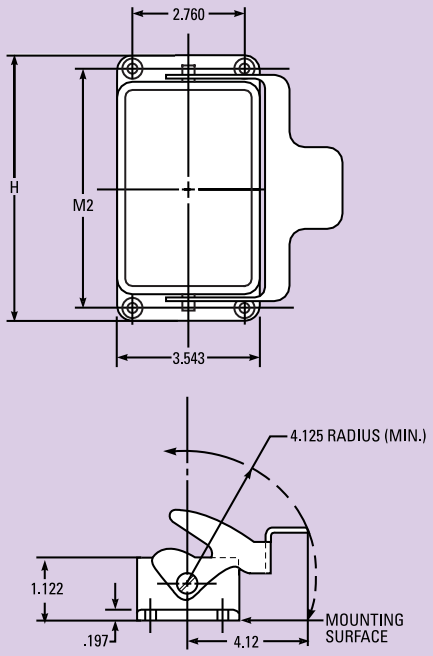
NOTE: MOLD POWER INPUT CONNECTOR PICH-23-G IS DIMENSIONALLY IDENTICAL TO MTC-8-G

MOLD THERMOCOUPLE CONNECTOR
MTC-5-G MTC-5-G-IDC
MTC-8-G MTC-8-G-IDC
MTC-12-G MTC-12-G-IDC



NOTE: DIMENSIONS SHOWN ARE FOR THE MTC5-G, MTC8-G AND MTC12-G CONNECTORS

MOLD POWER AND THERMOCOUPLE CONNECTOR TPC-0001



Thermocouple / Mold Power Connectors

ITEM NUMBER	NUMBER OF ZONES (MAX.)
MTC-5-G*	5
MTC-8-G	8
MTC-12-G	12
TPC-0001	12

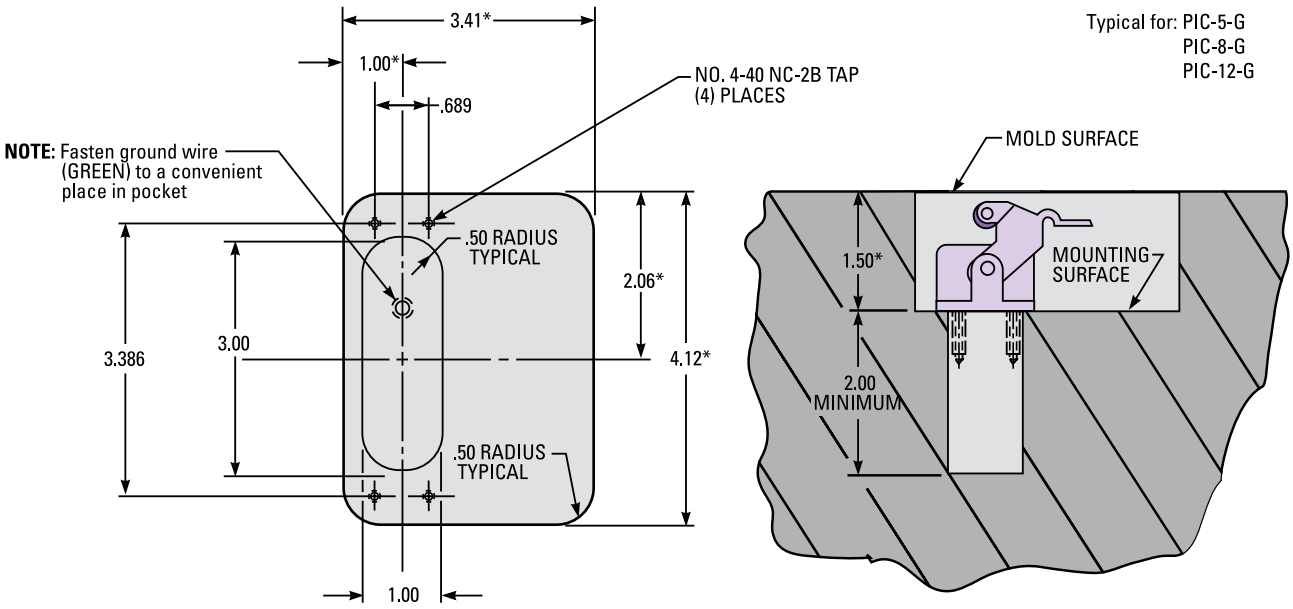
* Use with 2, 3 and 5-zone, 30 AMP mainframes

Mold Connector Pocket Layouts

NOTE: Drawing depicts below-flush mounting. Disregard dimensions marked with * for surface mounting.

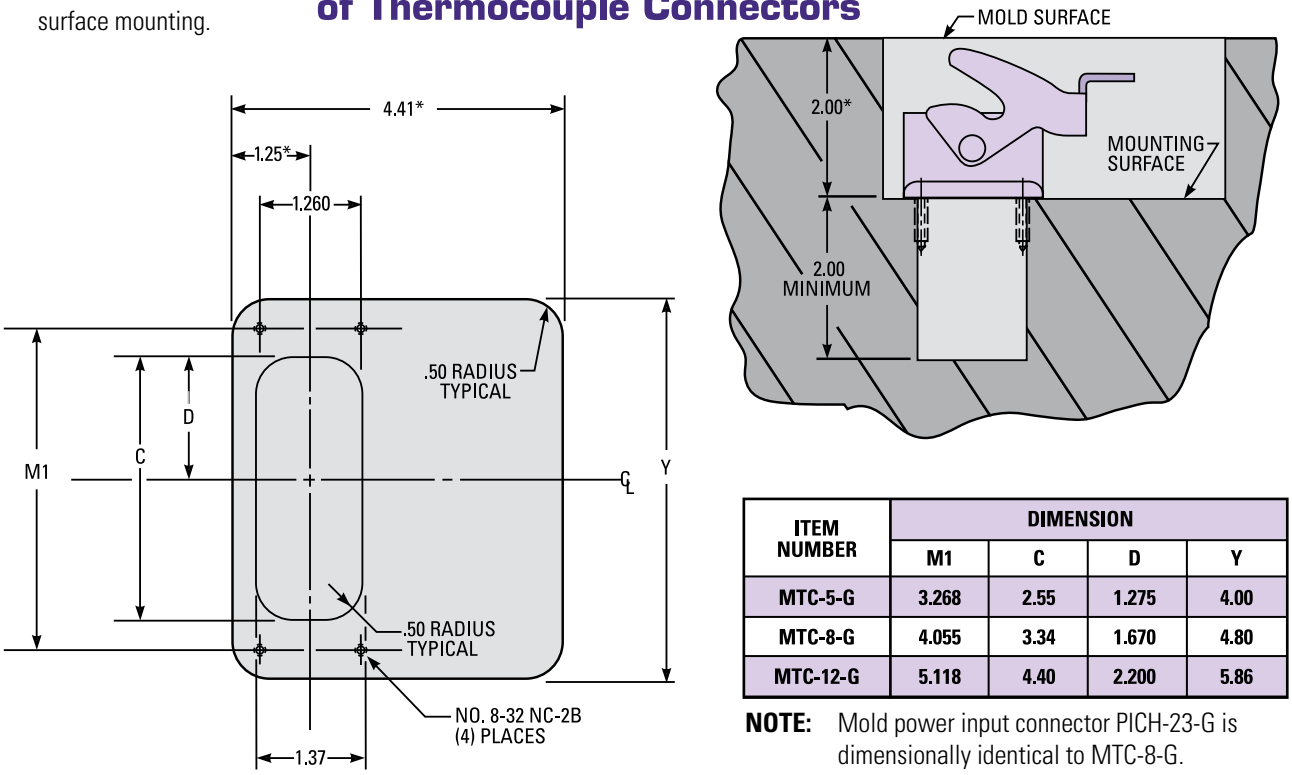
Where space or mold handling and storage requirements do not permit the use of Terminal Mounting Boxes, the connectors can be below-flush or surface mounted. See drawings below and page 30 for dimensions.

Below-Flush and Surface Mounting of Mold Power Input Connectors (15 AMP)



NOTE: Disregard dimensions marked with * for surface mounting.

Below-Flush and Surface Mounting of Thermocouple Connectors

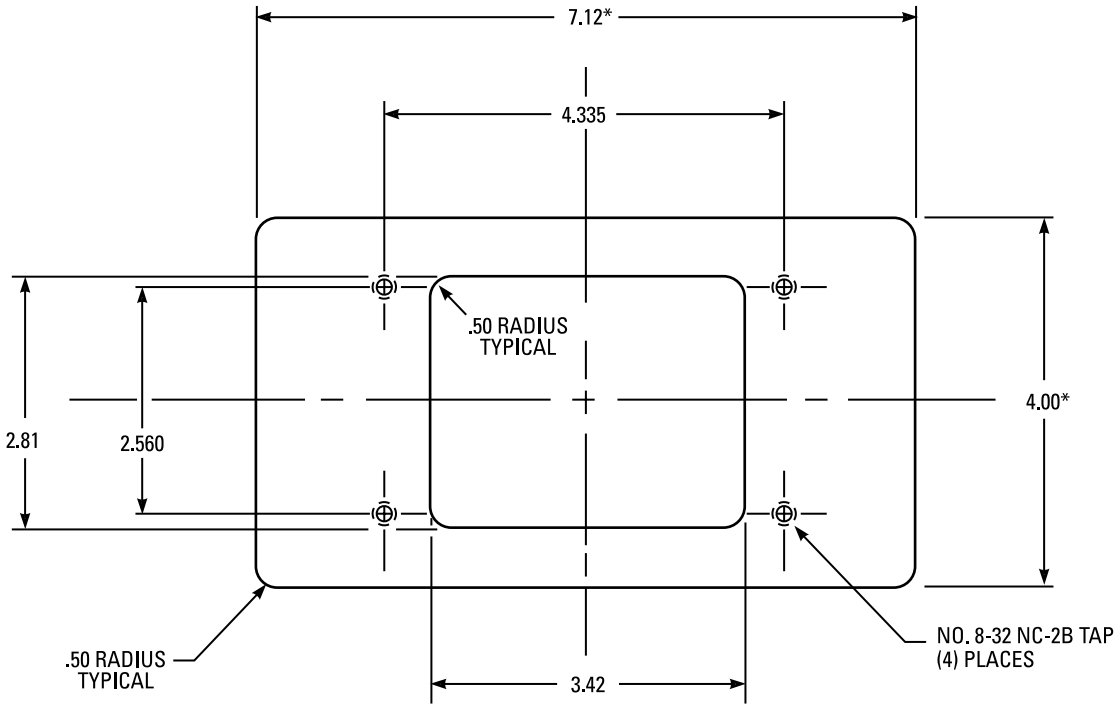


ITEM NUMBER	DIMENSION			
	M1	C	D	Y
MTC-5-G	3.268	2.55	1.275	4.00
MTC-8-G	4.055	3.34	1.670	4.80
MTC-12-G	5.118	4.40	2.200	5.86

NOTE: Mold power input connector PICH-23-G is dimensionally identical to MTC-8-G.

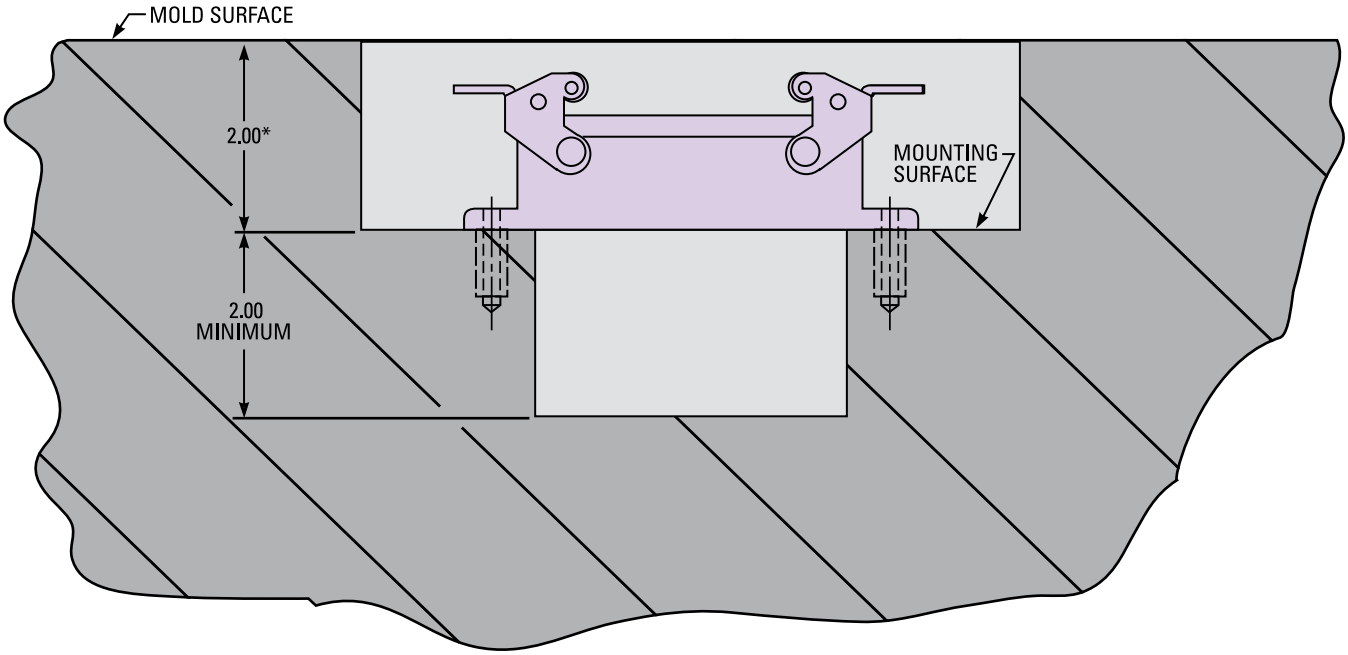
Mold Connector Pocket Layouts

Below-Flush and Surface Mounting of Mold Power Input Connectors (30 AMP)



For PICH-5-G

NOTE: Drawing depicts below-surface mounting. Disregard dimensions marked with * for surface mounting.

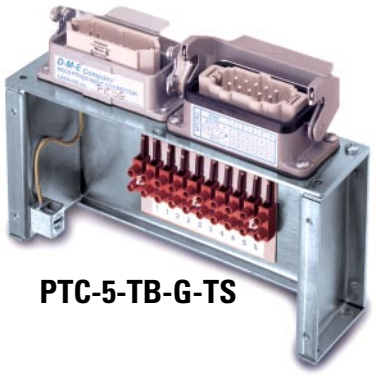


For PICH-23-G

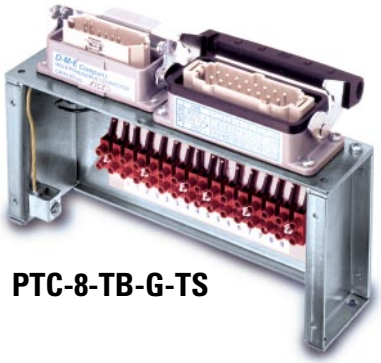
(Use pocket dimensions shown on pages 28-29 as detailed for thermocouple connector MTC-8-G.)

Pre-wired Combination Terminal Mounting Boxes

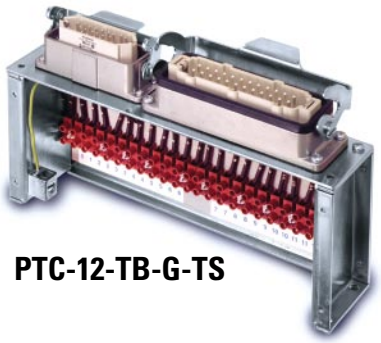
Includes terminal strip for ease of wiring, all necessary connectors installed, and power connector pre-wired to a terminal strip. All units shown without covers.



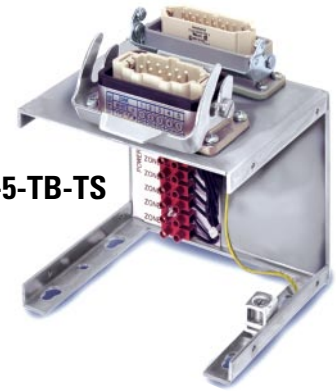
PTC-5-TB-G-TS



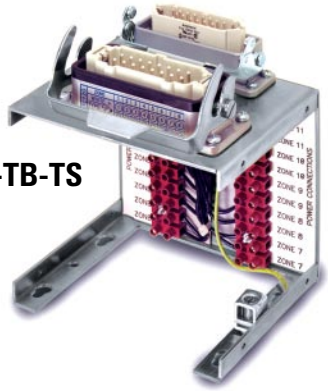
PTC-8-TB-G-TS



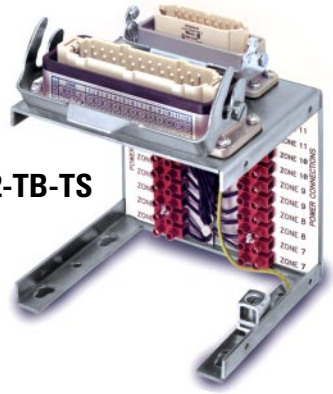
PTC-12-TB-G-TS



PTC-5-TB-TS



PTC-8-TB-TS



PTC-12-TB-TS



PTC-2-TB-G-TS

PTC-2-TB-GTS is not to be used with SSH-10-22, SSH-10-21, MFP-1-G, MFP-1-G-1, MFP-2-G, MFPR-2-G controls & mainframes

For use with PTC-0110 or PTC-0120 Cables only. See page 11.

Combination Terminal Mounting Boxes - with Terminal Strip

ITEM NUMBER	X	Y	H	M1	M2	ACCEPTS
PTC-2-TB-G-TS*	2.75	4.88	4.25	1.500	4.250	See page 16
PTC-5-TB-G-TS**	2.75	8.66	4.25	1.500	8.031	PIC-5-G, MTC-5-G**
PTC-8-TB-G-TS**	2.75	9.47	4.25	1.500	8.843	PIC-8-G, MTC-8-G**
PTC-12-TB-G-TS**	2.75	10.53	4.25	1.500	9.906	PIC-12-G, MTC-12-G**
PTC-5-TB-TS**	5.00	6.13	5.12	2.625	5.000	PIC-5-G, MTC-5-G**
PTC-8-TB-TS**	5.00	6.13	5.12	2.625	5.000	PIC-8-G, MTC-8-G**
PTC-12-TB-TS**	5.00	6.13	5.12	2.625	5.000	PIC-12-G, MTC-12-G**

**Comes with all necessary connectors installed and power connector pre-wired to a terminal strip.
*Power & thermocouple connectors are pre-wired.

Terminal Mounting Boxes



PTC-8-TB-G
(Connectors ordered separately)



PTC-5-TB-G



PTC-0012



PIC-512-TB-G



PTC-2-10

Terminal Mounting Boxes provide the easiest and most economical method of mounting power and thermocouple connectors on the mold. Constructed of plated heavy gauge steel, each box is precut and drilled for quick mounting of the connector to the box, and box to the mold. Connector mounting hardware is supplied. Connectors are ordered separately.

Terminal Mounting Boxes for Mold Power Input Connectors

ITEM NUMBER	X	Y	H	M1	M2	ACCEPTS
PIC-512-TB-G	2.75	4.875	4.25	1.500	4.250	PIC-5, 8 or 12-G
PICH-23-TB-G	2.75	5.614	4.25	1.500	4.990	PICH-23-G
PICH-5-TB-G	4.46	6.676	4.25	3.250	6.052	PICH-5-G

Terminal Mounting Boxes for Thermocouple Connectors

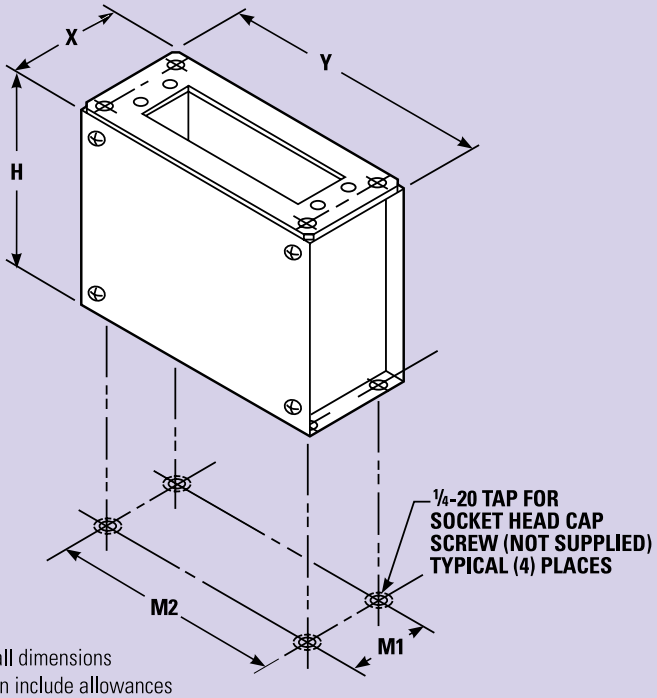
ITEM NUMBER	X	Y	H	M1	M2	ACCEPTS
MTC-5-TB-G	2.75	4.875	4.25	1.500	4.250	MTC-5-G
MTC-8-TB-G	2.75	5.614	4.25	1.500	4.990	MTC-8-G
MTC-12-TB-G	2.75	6.676	4.25	1.500	6.052	MTC-12-G

Combination Terminal Mounting Boxes

ITEM NUMBER	X	Y	H	M1	M2	ACCEPTS
PTC-2-10	2.75	4.88	4.25	1.500	4.250	(2) CKPTIC-1
PTC-5-TB-G	2.75	8.66	4.25	1.500	8.031	PIC-5-G, MTC-5-G
PTC-8-TB-G	2.75	9.47	4.25	1.500	8.843	PIC-8-G, MTC-8-G
PTC-12-TB-G	2.75	10.53	4.25	1.500	9.906	PIC-12-G,MTC-12-G
PTCH-1-TB-G**	4.46	4.88	4.25	3.250	4.250	AC1240MI, TCS-1
PTCH-23-TB-G	2.75	10.53	4.25	1.500	9.906	PICH-23-G, MTC-5-G
PTCH-5-TB-G	4.46	11.06	4.25	3.250	10.431	PICH-5-G, MTC-5-G
PTC-0012	4.46	7.66	4.25	3.250	7.160	TPC-0001

* Used with 2-zone, 15 AMP mainframe MFFPR-2G ** Used with 1-zone, 30 AMP mainframe MFHP-1G

Terminal Mounting Boxes



NOTE: Overall dimensions shown include allowances for hardware (assembly screws) but not connectors.

Microprocessor-Based Temperature Control Modules with Digital Display and Setpoint Pushwheel

COMPATIBLE WITH TAS-05-12 ALARM AND SYSTEM CONTROL FUNCTIONS. SEE PAGES 37-38.



SSM-15-12/11 (15 AMP) & SSM-30-12 (30 AMP)

The SSM-15-12 is the second generation of the popular SSM-15G. This version maintains simplicity of operation with simultaneous display of setpoint and temperature. Other new, improved, and unique features include:

Key Features

- **Large Digital Display**
  - For easier readability of temperature, % power and faults
- **Setpoint Pushwheel**
  - For setting desired setpoint temperature
  - Allows adjustment of setpoint before turning power on
- **Auto % Power Display**
  - Shows % power output while in AUTO mode
  - Indicates average % power requirement on thermocouple failure
  - Serves as a diagnostic tool for solving hot runner system problems

Operational Refinements

- **Improved SmartStart®**
  - A more gradual temperature rise leads to a more effective heater dry-out period, thereby extending heater life
  - SmartStart® now available in MANUAL mode (optional)
- **SelectiveCycle®**
  - A very high speed power output approach
  - Enables accurate temperature control and longer heater life
- **Bumpless Transfer**
  - When a thermocouple failure occurs, operation is automatically continued with a learned % power
  - Unique software accurately assigns percent power setting
- **Third Fuse**
  - Allows for alarm output when the load fuses are blown
  - Protects module from application of excessive voltage
- **Anti-Arcing Feature**
  - Protects circuit board from damage when module is either inserted or removed under power

Switchable Options

- **Boost, Idle and Power Off Features**
  - Provides system-wide adjustment of temperatures
  - Enables alarm audio/visual output and remote alarms
  - Requires TAS-05-12 module and communications mainframe (See pages 37-38 for more information on these capabilities)
- **Unique AutoBoost Option**
  - Instantaneously opens frozen gates on startup
  - TAS module or mainframe communications are not required
- **Lights Out Feature**
  - After stabilizing at setpoint, display turns off; when a fault occurs, display is turned on and flashes
  - For easier detection of faults
- **Shorted Thermocouple Sensitivity Adjustment**
  - Operation can be tailored to fast or slow reaction times
  - Sensitivity can be adjusted with internal switches
  - Very useful for manifold zones with long startup times
- **Switchable °C/°F Operation**
  - Scale indicated at startup
- **K Type Thermocouple Support**
- **Cut Feature**
  - Gain cut feature for small nozzles and heaters with ungrounded internal thermocouples

NOTE: SSM-30-12 is twice as wide as above and has circuit breaker instead of power on/off switch.

Microprocessor-Based Temperature Control Modules with Digital Display and Setpoint Pushwheel

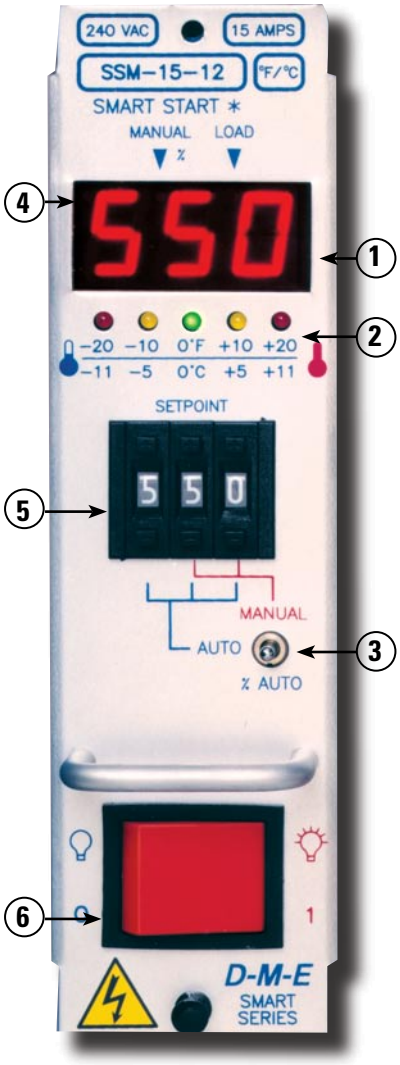
SSM-15-12/11 (15 AMP) & SSM-30-12 (30 AMP)

Warranty:
Three years
(excluding triac and fuses)

Fuse Requirements
(15 AMP only)
(2) ABC-15 fuses (Bussman only)
(2) spare fuses included
with module

MODULE ITEM NUMBER	VOLTAGE (VAC)	AMPS	WATTS
SSM-15-12	240	15	3600
SSM-15-11	120	15	1800
SSM-30-12	240	30	7200

NOTE: Standard (240 VAC) modules are compatible with mainframes wired for either 240 VAC three phase (standard) or 240 VAC single phase.



Front Panel Controls and Indicators

1. Process Temperature Display
Indicates process temperature, thermocouple faults and other operational modes. Displays % power when switch **(3)** is in "% Auto" position.

2. Temperature Deviation Lights
Indicates deviation from setpoint. Outer lights blink when temperature is more than ±40°F (22°C) from setpoint.

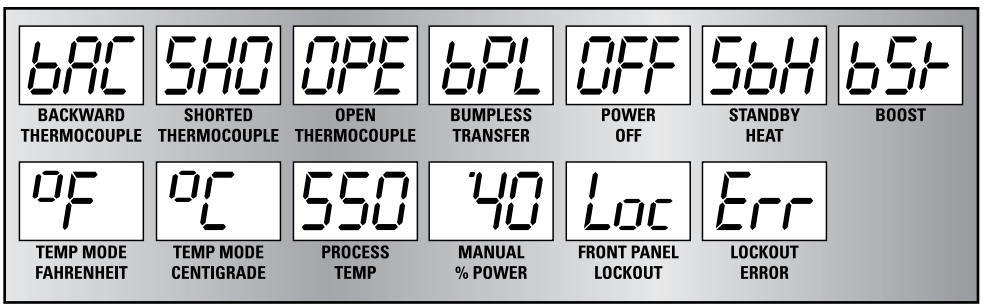
3. Auto/Manual/Auto % Power Switch
Selects AUTO or MANUAL control mode. Shows % power when pressed into "% AUTO" position.

4. LED Mode Indicators
Left LED illuminates during MANUAL mode.
Right LED illuminates when power is supplied to heater.
Right LED blinks on and off during SmartStart®.

5. Setpoint Pushwheel
Three-digit switch programs setpoint in AUTO mode. Right two digits program % power in MANUAL mode.

6. Power On/Off Switch
Controls AC power to module.

Front Panel Digital LED Indicators



Microprocessor-Based Temperature Control Modules with Dual Digital Display

COMPATIBLE WITH TAS MODULE ALARM AND STANDBY HEAT FUNCTIONS. SEE PAGES 37-38.

DSS-15-12/11 (15 AMP) & DSS-30-12 (30 AMP)

The DSS-15 Smart Series Module has dual digital displays providing readouts of both process and setpoint temperatures at a glance. Closed-loop, fuzzy logic PID control, and auto-tuning of PID parameters provide precise control even under the most adverse processing conditions.

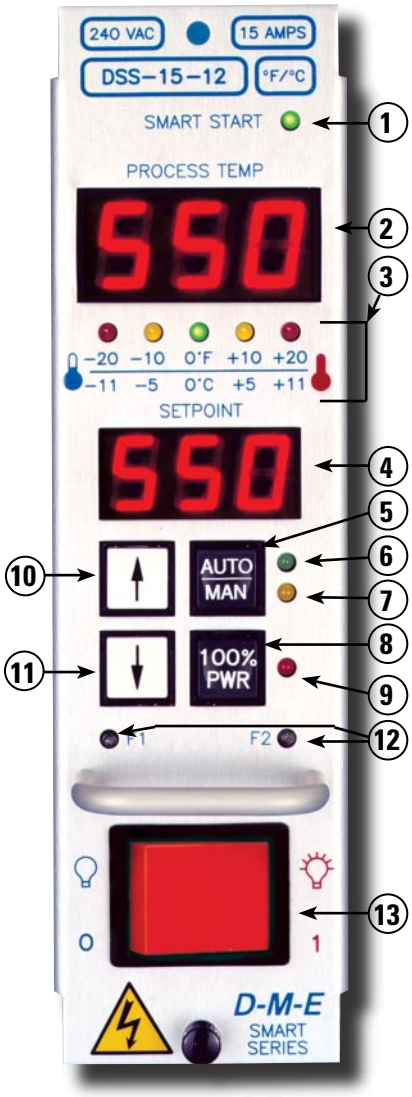
In the event of a thermocouple failure, the DSS can automatically invoke bumpless transfer to a percent power mode based on the last valid percentage learned before the thermocouple failure. If desired, manual bumpless transfer may be selected, in which case a thermocouple fault will turn off power to the heater until the manual percent power mode is activated by the operator.

A unique feature of the DSS is a 100% power option. For a switch-selectable, interval of 15 or 30 seconds, full power can be immediately delivered to the heater to rapidly break through frozen gates to achieve quicker start-ups. The 100% power mode can be disengaged at any time by simply pressing any front panel button.

Indicator lights provide quick reference for module control modes, temperature deviation and blown fuses. The process temperature display also provides quick diagnostics of thermocouple faults, using the following abbreviated codes:

Shi = Shorted Thermocouple
oPi = Open Thermocouple
bci = Reversed Thermocouple

The DSS module also includes a Smart Start® mode to safely bake out damaging internal heater moisture at system start-up and to prolong heater life. Fast or slow load modes may also be selected to protect smaller heaters or compensate for "slow" loads such as externally heated manifolds. An accurate, durable and full-featured module, the DSS is fully compatible with all Smart Series or G-Series® 15 AMP mainframes.

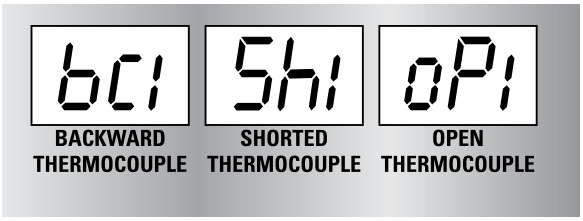


NOTE: DSS-30-12 is twice as wide as above; has circuit breaker instead of F1/F2 lights and power on/off switch.

Front Panel Controls and Indicators

1. **Smart Start Light**
   Indicates Smart Start is on.
2. **Process Temperature Display**
   Indicates process temperature and thermocouple faults as described above.
3. **Temperature Deviation Lights**
   Indicates deviation from setpoint. Outer lights blink at more than ±30°F from setpoint.
4. **Setpoint Display**
   Indicates setpoint temperature or percent power, depending on controller mode.
5. **Auto/Manual Switch**
   Selects auto or manual control mode.
6. **Auto Light**
   Indicates auto mode.
7. **Manual Light**
   Indicates manual mode.
8. **100% Power Switch**
   Indicates 100% power output for selectable interval of 15 or 30 seconds.
9. **100% Power Light**
   Indicates 100% power mode.
10. **Up Arrow**
    Increases desired setpoint value.
11. **Down Arrow**
    Decreases desired setpoint value.
12. **F1/F2 Lights**
    Illuminate when fuse is blown.
13. **Power On/Off Switch**

Front Panel Digital LED Indicators



Microprocessor-Based Temperature Control Modules with Dual Digital Display

DSS-15-12/11 (15 AMP) & DSS-30-12 (30 AMP)

Performance Specifications

Auto and Manual Control Modes:	Time proportioning/Selective Cycle®
Temperature Range:	Ambient to 999°F (537°C)
Control Accuracy:	±1°F (0.5°C) dependent on the total thermal system
Temperature Stability:	± 0.5% of full scale over the ambient range of 32 to 120°F (0 to 50°C)
Calibration Accuracy:	Better than 0.2% of full scale
Power Response Time:	0.538 seconds.
Manual Control:	Adjustable from 0-100%, maintains output power to within 1% of set point.
Smart Start®:	Linear voltage ramping.
Maximum Smart Start Duration:	5 minutes
Smart Start Override Temperature:	256°F (124°C)
100% Power:	Applies 100% power to the output. Software selectable inhibit or S = 15, L = 30 seconds.
Operational Mode Priority:	• Smart Start® precedes auto mode. • Thermocouple (T/C) break, reversed or shortened T/C overrides Smart Start and auto modes. • Manual control overrides auto mode, T/C breaks, reversed or shortened thermocouples. • Output is inhibited during all fault conditions

Input Specifications

Thermocouple Sensor:	Type J, grounded or ungrounded.
External T/C Residence:	Less than 0.1°F/Ω.
T/C Isolation:	Isolated by control circuit power supply
Cold Junction Compensation:	Automatic, better than 0.03°F/F (0.015°C/°C).
T/C Break, Reversed & Shorted Protection:	Automatically inhibits power to heater unless bumpless transfer is invoked.
Input Impedance:	5.6 Megohms
Input Amplifier Stability:	Greater than 0.02°F/°F (0.01°C/°C).
Common Mode Rejection Ratio:	Greater than 120dB.
Power Supply Rejection:	Greater than 110dB.

Output Specifications

Voltage Power Capability:	15 AMP: 240 nominal, single phase, 120 VAC available, 15 amperes, 3600 watts @ 240 VAC (1800 watts @ 120 VAC). 30 AMP: 30 amperes, 7200 watts @ 240 VAC
Output Drive:	Internal solid state triac, triggered by zero AC crossing pulses.
Overload Protection:	15 AMP: Fuses are provided on both sides of AC line. 30 AMP: Fast acting circuit breaker.
Transient Protection:	dv/dt and transient pulse suppression included.
Power Line Isolation:	Optically and transformer isolated from AC lines. Isolation voltage is greater than 2500 volts.

Controls and Indicators

Auto/Manual Selection:	Push-button switch with LED indicators adjacent to switch.
Setpoint Adjustment:	Push-button up & down arrow keys.
100% Power Selection:	Push-button switch with LED indicator adjacent.
Power On/Off:	16 AMP rocker switch (15 AMP) or 30 AMP circuit breaker (30 amp). Both are UL, CSA, VDE approved.
Setpoint Display:	Three 0.4", seven segment digit display.
Process Display:	Three 0.56", seven segment digit display. Also displays alarm codes and flashing "100" for 100° power operation.
100% Power Indication:	Red LED adjacent to 100% power key flashes. Process display flashes "100."
Auto Indication:	Illuminates green LED adjacent to Auto/Man key.
Manual Indication:	Illuminates yellow LED adjacent to Auto/Man key.
Smart Start Indication:	Illuminates green LED above the process display.
Shorted T/C Indication:	Flashes "Shi" in process display.
Opened T/C Indication:	Flashes "oPi" in process display.
Reversed T/C Indication:	Flashes "bci" in process display.
Temperature Deviation Indicators:	Five separate LEDs: ±20°F/11°C = Red ±10°F/5°C = Yellow 0° = Green.
Blown Fuse Indicators:	2 neon indicators (15 AMP only)

Electrical Power Specifications

Input Voltage:	240/120 VAC + 10% -15%
Frequency:	50/60 Hz
DC Power Supplies:	Internally generated, regulated and compensated
Module Power Usage:	Less than 6 watts, excluding load.
Dimensions:	15 AMP: 2"W x 7"H x 7 1/2 "D (5.08 x 17.78 x 19.05 cm) 30 AMP: 4"W x 7"H x 7 1/2 "D (10.06 x 17.78 x 19.05 cm)

NOTE: Standard (240 VAC) modules are compatible with mainframes wired for either 240 VAC three phase (standard) or 240 VAC single phase.

FOR °C OPERATION: Switch to °C on front panel.

FUSE REQUIREMENTS (15 AMP ONLY): (2) ABC-15 Fuses (Bussman only)

NOTE: (2) spare fuses included with module.

WARRANTY: Three years (excluding triac and fuses)

Smart Series Microprocessor-Based Temperature Control Modules

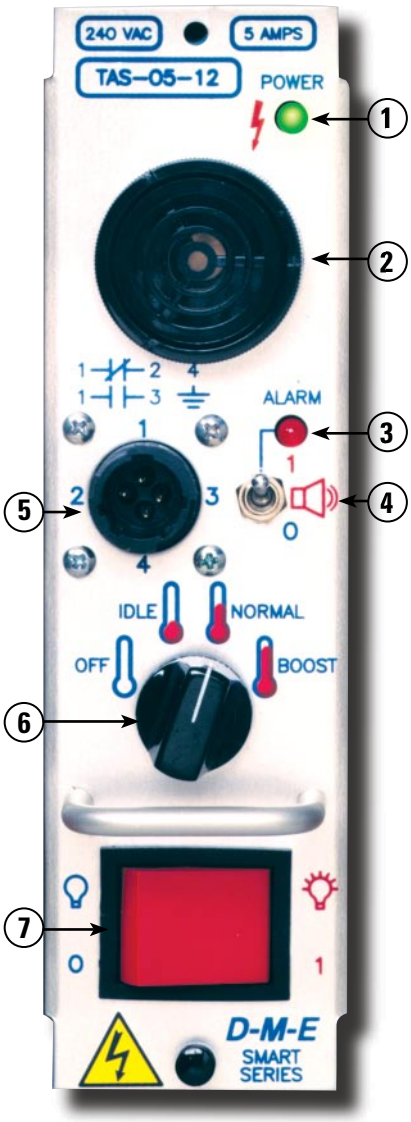
(240 VAC, standard)

ITEM NUMBER	AMPS	WATTS
DSS-15-12	15	3600
DSS-30-12	30	7200

(120 VAC, optional)

ITEM NUMBER	AMPS	WATTS
DSS-15-11	15	1800

Temperature Alarm/System Control Modules



TAS-05-12/11 Temperature Alarm Function

- Provides alarm for over or under temperature, or diagnostic error
- Provides visual and audible indications of an alarm
- The audible alarm **(2)** can be turned on or off with switch **(4)**
- Relay contacts **(5)** are provided to allow hook-up of remote equipment such as a light, a conveyor or a machine function
- Relay contacts are unaffected by the position switch **(4)**
- An infinite number of zones of control can be monitored as long as they are contained within the same communications-style mainframe as the TAS module

System Control Functions

Up to 63 zones can be controlled remotely at one time. These zones must be contained within the same communications-style mainframe as the TAS module.

NORMAL / IDLE

- Rotary switch **(6)** provides remote control of DSS-15-02/01, DSS-15-12/11, CSS-15-02/01, SSM-15-02/01, and SSM-15-12/11
- Control modules can all be commanded to respond from NORMAL to IDLE (Standby Heat)
- In IDLE, the modules will adjust to a setting of 93°C (200°F)
  Exceptions: SSM-15-02/01 and SSM-15-12/11 adjust to a setting of 100°C (212°F)
- Moving the rotary switch back to NORMAL restores all modules to their established setpoints
- The user can select IDLE for temporary lowering of all zones to prevent material degradation
- This feature can be used to keep heaters warm enough to prevent absorption of moisture

BOOST / OFF

- The SSM-15-02/01 and SSM-15-12/11 can be placed into BOOST and OFF
- BOOST will raise the setpoint of the module by 10, 20, or 30%
- OFF shuts off power to the heater but allows the user to monitor cool down of the hot runner system
- Each SSM-15-02/01 and SSM-15-12/11 can be individually programmed to respond to OFF, IDLE and BOOST commands
- The user can quickly drive all nozzle zones into BOOST to open frozen gates

Front Panel Controls and Indicators

1. **Power On Indicator:** LED illuminates when power is applied to the module.
2. **Audible Alarm:** Emits a loud audible alarm when the alarm switch (**4**) is placed in the "1" position (ON) and an alarm condition is sent by a compatible control module.
3. **Alarm Indicator:** LED illuminates when an alarm condition is sent by a compatible module.
4. **Audio Alarm On/Off Switch:** Turns the audio alarm **(2)** on or off.
5. **Alarm Relay Connector** Provides relay contacts for use with remote equipment. Mating connector is supplied.
6. **System Control Switch:** Activates the OFF, IDLE and BOOST mode in all compatible modules.
7. **Power On/Off Switch:** Controls AC power to the module.

Temperature Alarm/System Control Modules

ITEM NUMBER	VOLTS
TAS-05-12	240 VAC
TAS-05-11	120 VAC

NOTE: Standard (240 VAC) modules are compatible with mainframes wired for either 240 VAC three-phase (standard) or 240 VAC single-phase. Use TAS-05-11 for 120 VAC operation.

FUSE REQUIREMENTS: (2) ABC-1 fuses. NOTE: (2) spare fuses included with module.

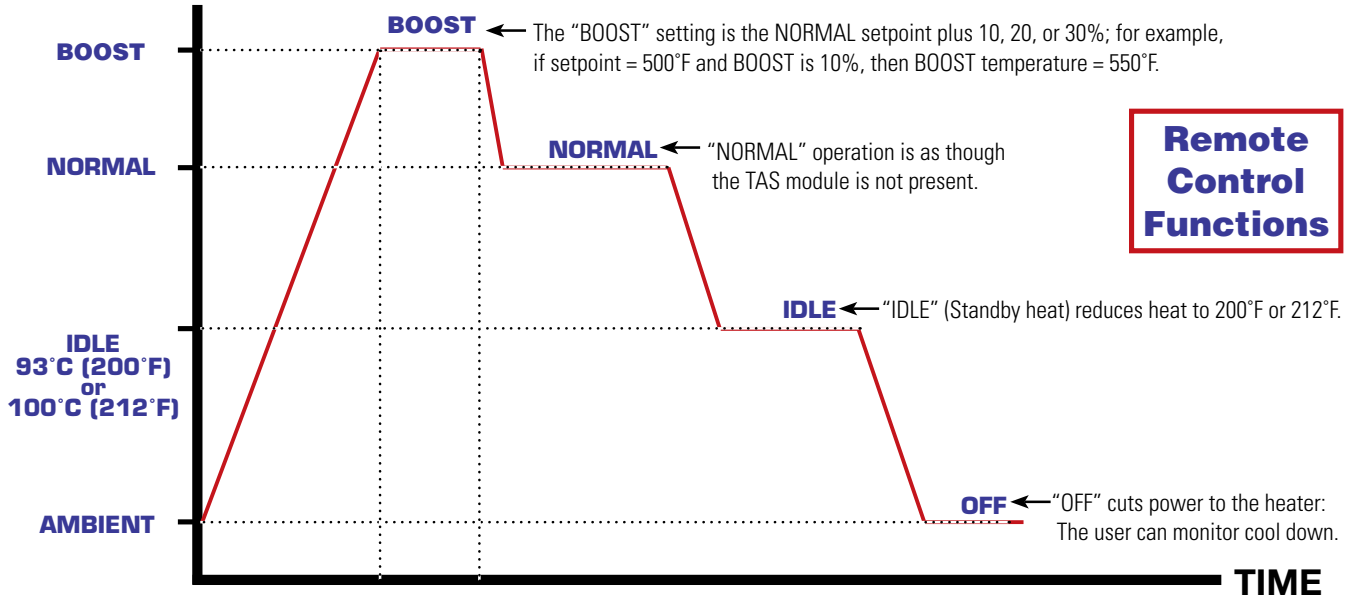
WARRANTY: Three years (excluding fuses).

TAS Module Compatibility

MODULE	FUNCTIONS			
	ALARM	IDLE	BOOST	OFF
SSM-1502/01/12/11	✓	✓	✓	✓
SSM-3002/12	✓	✓	✓	✓
DSS-1502/01/12/11	✓	✓		
DSS-3002/12	✓	✓		

Note: TAS module is not compatible with older CSS-15G/30G or DSS-15G/30G modules

MODULE	FUNCTIONS			
	ALARM	IDLE	BOOST	OFF
CSS-1502/01	✓	✓		
CSS-3002	✓	✓		
SSM-15G	✓			
SSM-15G1	✓			
SSM-30G	✓			



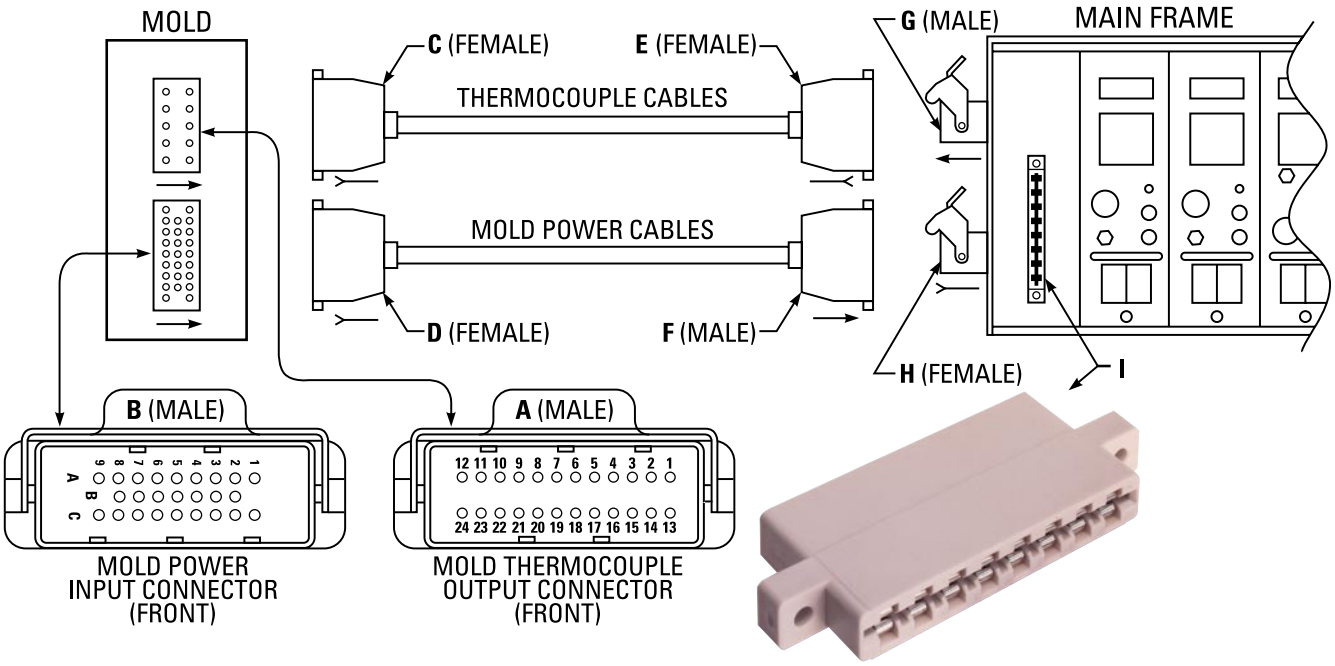
Remote Control Functions

Upgrade Kits For Converting to Communications Mainframes

ITEM NUMBER	MAIN FRAME
CIK-4	4-ZONE
CIK-5	5-ZONE
CIK-7	7-ZONE
CIK-8	8-ZONE
CIK-11	11-ZONE
CIK-12	12-ZONE
CIK-16	16-ZONE
CIK-20	20-ZONE
CIK-24	24-ZONE

ITEM NUMBER	MAIN FRAME
CIK-28	28-ZONE
CIK-32	32-ZONE
CIK-36	36-ZONE
CIK-40	40-ZONE
CIK-44	44-ZONE
CIK-48	48-ZONE
CIK-2HP	2-ZONE HIGH POWER
CIK-3HP	3-ZONE HIGH POWER
CIK-5HP	5-ZONE HIGH POWER

Replacement Parts and Service Items for D-M-E Smart Series® Temperature Control Systems



NOTE: For upper inside communications connectors, see page 38.

Connectors / Connector Kits (5 - 48 Zone, 15 Amp; 2 - 5 Zone, 30 Amp)

REFERENCE LETTER	DESCRIPTION	ITEM NUMBER
A	Mold Thermocouple Output Connectors	See pg. 28
B	Mold Power Input Connectors	See pg. 27
C	Mold End Kit for 5-Zone Thermocouple Cable (10, 15 or 30 AMP)	CKTF-15-G
	Mold End Kit for 8-Zone Thermocouple Cable (10 or 15 AMP)	CKTF-18-G
	Mold End Kit for 12-Zone Thermocouple Cable (10 or 15 AMP)	CKTF-112-G
D	Mold End Kit for all 10 or 15 AMP Power Cables	CKPF-112-BG
	Mold End Kit for 2 or 3-Zone 30 AMP Power Cables	CKPF-13-CG
	Mold End Kit for 5 Zone 30 AMP Power Cables	CKPF-15-CG
E	Frame End Kit for all Thermocouple Cables (10, 15 or 30 AMP)	CKTF-112-AG
F	Frame End Kit for all 10 or 15 AMP Power Cables	CKPM-112-BG
	Frame End Kit for 2 or 3-Zone, 30 AMP Power Cables	CKPM-13-CG
	Frame End Kit for 5-Zone, 30 AMP Power Cables	CKPM-15-CG
G	Thermocouple Input Kit for all Mainframes (10, 15 or 30 AMP)	CKTM-212-AG
H	Power Output Kit for all 10 or 15 AMP Mainframes	CKPF-212-BG
	Power Output Kit for 2-, or 3-Zone, 30 AMP Mainframes	CKPF-23-CG
	Power Output Kit for 5-Zone, 30 AMP Mainframes	CKPF-25-CG
I	Edge Card Connector Kit for all Mainframe PC Boards (10, 15 or 30 AMP)	CKF-312-G

Replacement Parts and Service Items for D-M-E Smart Series® Temperature Control Systems

Mainframe, Cable Components, and Service Tools*

CBD10M	10 AMP 2 POLE, CIRCUIT BREAKER USED IN MFP1G AND MFP1G1	
CBD20M	20 AMP 2 POLE, CIRCUIT BREAKER USED IN MFR2G	
CBD30M	30 AMP 2 POLE, CIRCUIT BREAKER USED IN MFFPR2G AND MFHP1G	
CBD50	50 AMP 3 POLE, CIRCUIT BREAKER USED IN 5 THROUGH 12 ZONE MAINFRAMES	
CBD70	70 AMP 3 POLE, CIRCUIT BREAKER USED IN 16 THROUGH 48 ZONE & HIGH POWER MAINFRAMES	
PIN-0114	14 GAUGE MALE PIN FOR "B"& "F" POWER CONNECTORS (PACKAGE OF 30)	SEE PAGE 39
PIN-0214	14 GAUGE FEMALE SOCKET FOR "D"& "H" POWER CONNECTORS (PACKAGE OF 30)	SEE PAGE 39
PIN-0120	20 GAUGE MALE PIN FOR "G" THERMOCOUPLE CONNECTOR (PACKAGE OF 30)	SEE PAGE 39
PIN-0220	20 GAUGE FEMALE PIN FOR "E" THERMOCOUPLE CONNECTOR (PACKAGE OF 30)	SEE PAGE 39
WHT-1919	CRIMP TOOL FOR ALL PIN-XXXX LISTED ABOVE	
RPM-0048	EXTRACTION TOOL FOR ALL PIN-TYPE CONNECTOR PINS	
RPM-0038	NEON INDICATORS USED ON 240 VAC MAINFRAME CIRCUIT BREAKER PANELS	
RPM-0044	CARD GUIDES FOR ALL MAINFRAMES	
RPM-0046	PINS FOR WHITE EDGE CARD CONNECTORS "I" (PACKAGE OF 20)	
RPM-0059	PANEL MOUNT BASE & LATCH FOR 5 ZONE THERMOCOUPLE MOLD CONNECTION "A"	SEE PAGE 39
RPM-0060	PANEL MOUNT BASE & LATCH FOR 8 ZONE THERMOCOUPLE MOLD CONNECTION "A"	SEE PAGE 39
RPM-0061	PANEL MOUNT BASE & LATCH FOR 12 ZONE THERMOCOUPLE MOLD CONNECTION "A"	SEE PAGE 39
RPM-0062	MALE INSERT FOR 5 ZONE THERMOCOUPLE MOLD CONNECTION "A"	SEE PAGE 39
RPM-0063	MALE INSERT FOR 8 ZONE THERMOCOUPLE MOLD CONNECTION "A"	SEE PAGE 39
RPM-0064	MALE INSERT FOR 12 ZONE THERMOCOUPLE MOLD CONNECTION "A"	SEE PAGE 39
RPM-0065	FEMALE INSERT FOR 5 ZONE THERMOCOUPLE CABLE CONNECTOR "C"	SEE PAGE 39
RPM-0066	FEMALE INSERT FOR 8 ZONE THERMOCOUPLE CABLE CONNECTOR "C"	SEE PAGE 39
RPM-0067	FEMALE INSERT FOR 12 ZONE THERMOCOUPLE CABLE CONNECTOR "C"	SEE PAGE 39
RPM-0068	HOOD FOR 5 ZONE THERMOCOUPLE CABLE CONNECTOR "C"	SEE PAGE 39
RPM-0069	HOOD FOR 8 ZONE THERMOCOUPLE CABLE CONNECTOR "C"	SEE PAGE 39
RPM-0070	HOOD FOR 12 ZONE THERMOCOUPLE CABLE CONNECTOR "C"	SEE PAGE 39
RPM-0071	HOOD FOR 5, 8 & 12 POWER & THERMOCOUPLE CABLE CONNECTIONS "D","E" & "F"	SEE PAGE 39
RPM-0072	MALE INSERT FOR "B", "F" & "G" (15 AMP CONNECTOR RATING IS EXCLUSIVE TO D-M-E)	SEE PAGE 39
RPM-0073	FEMALE INSERT FOR "D", "E" & "H" (15 AMP CONNECTOR RATING IS EXCLUSIVE TO D-M-E)	SEE PAGE 39

***(Reference page 28-39 for Letter Designations)**

All Smart Series Modules

ABC-1	1 AMP 250 VAC FUSE
ABC-3	3 AMP 250 VAC FUSE - NOTE: THESE LOWER POWER FUSES ARE RECOMMENDED FOR NOZZLES
ABC-5	5 AMP 250 VAC FUSE - NOTE: THESE LOWER POWER FUSES ARE RECOMMENDED FOR NOZZLES
ABC-10	10 AMP 250 VAC FUSE - NOTE: REQUIRED FOR 15 AMP MODULES USED IN 10 AMP FRAMES
ABC-15	15 AMP 250 VAC FUSE
NYL-0001	"NYLATCH" MODULE RETENTION PLUNGER AND GROMMET (10/PKG) - NOTE: AT THE BOTTOM OF EACH MODULE
RPM-0008	POWER ROCKER SWITCH FOR ALL MODULES EXCEPT DSS AND CSS-1524
RPM-0009	TRANSFORMER TYPE DST-4-16 FOR ALL MODULES EXCEPT DSS & TAS
RPM-0027	ALUMINUM HANDLE FOR 15 AMP MODULES
RPM-0039	30 AMP 2 POLE, CIRCUIT BREAKER FOR MODULES
RPM-0023	TRIAC - TYPE Q6040P 40 AMP 600 VOLT FOR USE ON ALL MODULES
RPM-0054	TRIAC - TYPE BTA40-800B 40 AMP 800 VOLT FOR USE ON ALL MODULES EXCEPT CSS
RPM-0050	2200 OHM FLAME PROOF FUSIBLE LINK RESISTOR USED IN THERMOCOUPLE CIRCUIT (10/PKG) USED ON ALL MODULES
RPM-0088	A/D CONVERTER FOR SSM-15G, SSM15G1, SSM-30G, SSH-1001, SSH-1002 AND ALL CSS MODULES

Replacement Parts and Service Items for D-M-E Smart Series® Temperature Control Systems

CSS-15G, CSS-30G, CSS-1502, CSS-3002

CSS-0001	MICROPROCESSOR FOR CSS-15G
CSS-0002	MICROPROCESSOR FOR CSS-1502
RPM-0011	TRIAC DRIVER U14
RPM-0012	OPTOCOUPLER U9 & U11
RPM-0013	OPERATIONAL AMPLIFIER U8 & U13
RPM-0014	OPERATIONAL AMPLIFIER U3

DSS-15G, DSS-30G, DSS-1502, DSS-3002

DSS-0001	MICROPROCESSOR FOR DSS-15G, DSS-15G1 & DSS-30G
DSS-0002	MICROPROCESSOR FOR DSS-1501, DSS-1502 & DSS-3002
RPM-0020	TRANSFORMER
RPM-0022	TRIAC DRIVER Q1
RPM-0024	POWER ROCKER SWITCH
RPM-0086	315 MA TIME LAG FUSE F3 (USED IN DSS-1501, 1502, & 3002 MODULES ONLY); CHECK YOUR MODULE!
RPM-0089	200 MA TIME LAG FUSE F3 (USED IN DSS-1501, 1502, & 3002 MODULES ONLY); CHECK YOUR MODULE!

SSM-15G, SSM-30G, SSH-1002, ESH-1012

RPM-0010	TRIAC DRIVER U5
RPM-0012	OPTOCOUPLER U6 & U7
RPM-0013	OPERATIONAL AMPLIFIER U2
RPM-0014	OPERATIONAL AMPLIFIER U8
RPM-0015	SETPOINT POTENTIOMETER (FRONT PANEL)

SSM-1501, SSM-1502, SSM-3002, SSH-1011, SSH-1012, ESH-1012

SSM-0002	MICROPROCESSOR
RPM-0010	TRIAC DRIVER U5
RPM-0014	OPERATIONAL AMPLIFIER U3 & U8
RPM-0053	PUSHWHEEL ASSEMBLY, WITH CABLE
RPM-0055	AUTO/MANUAL/AUTO% SWITCH FOR FRONT PANEL (SSM ONLY) (FRONT PANEL)
RPM-0056	AUTO/MANUAL/AUTO% SWITCH FOR FRONT PANEL (SSH & ESH) (FRONT PANEL)
RPM-0087	250 MA TIME LAG FUSE F3; CHECK YOUR MODULE!
RPM-0090	160 MA TIME LAG FUSE F3; CHECK YOUR MODULE!

TAS-0501, TAS-0502, TAS-0511, TAS-0512

RPM-0025	BEEPER
RPM-0026	TRANSFORMER
RPM-0028	SWITCH STANDBY HEAT (TAS-0501, TAS-0502, ONLY) & ALARM (ALL UNITS) (FRONT PANEL)
RPM-0057	ROTARY SWITCH FOR OFF, STANDBY HEAT, NORMAL, BOOST (TAS-0511, TAS-0512, ONLY)
RPM-0058	KNOB FOR RPM-0057
RPM-0029	RECEPTACLE CONNECTOR FOR FRONT PANEL
RPM-0030	MATING CONNECTOR (PLUG) FOR RPM-0029
RPM-0031	PINS FOR RPM-0030
RPM-0032	SOCKETS FOR RPM-0029
RPM-0033	RELAY #1 - ALARM OUTPUT CONNECTOR
RPM-0034	RELAY #2 - BEEPER CONTACTS

Input Power Wiring Diagrams (Option A)

The diagrams on pages 42 through 45 are printed on the back panels of the mainframes. For your convenience, they are depicted here along with additional information.

For information on input wiring for 30 AMP mainframes, contact D-M-E.

Standard input wiring for mainframes, unless specified otherwise at time of order, is 240 VAC, three- phase, 4-wire, 50/60 Hz. (OPTION A). If it becomes necessary to change to another configuration, refer to the appropriate diagram and information on the following pages:

Page 42: **(OPTION A)** 208-240 VAC, 3-phase, 4-wire

Page 43: **(OPTION B)** 380-415 VAC, 3-phase, 5-wire

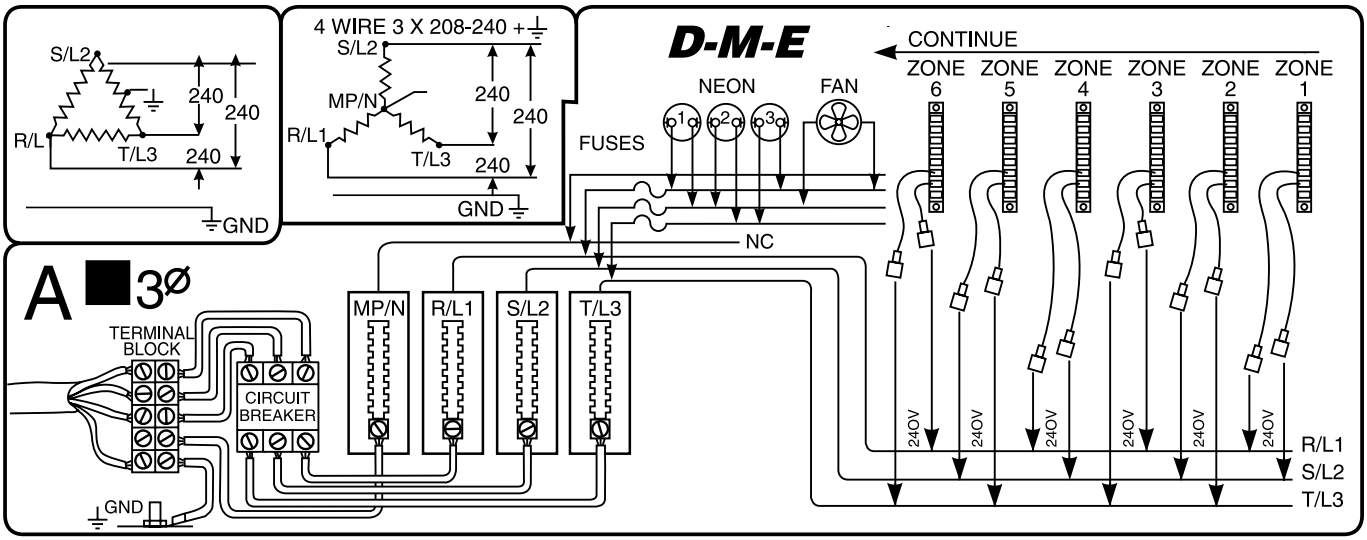
Page 44: **(OPTION C)** 240 VAC, 2-phase, 4-wire

Page 45: **(OPTION D)** 208-240 VAC, single phase, 3-wire
120 VAC, 2-phase, 4-wire

NOTE: For mold power and thermocouple connector wiring information, see pages 23-25.

OPTION A (Standard)

208 - 240 VAC, Three-Phase, 4-Wire Delta or "Y" Power Distribution System

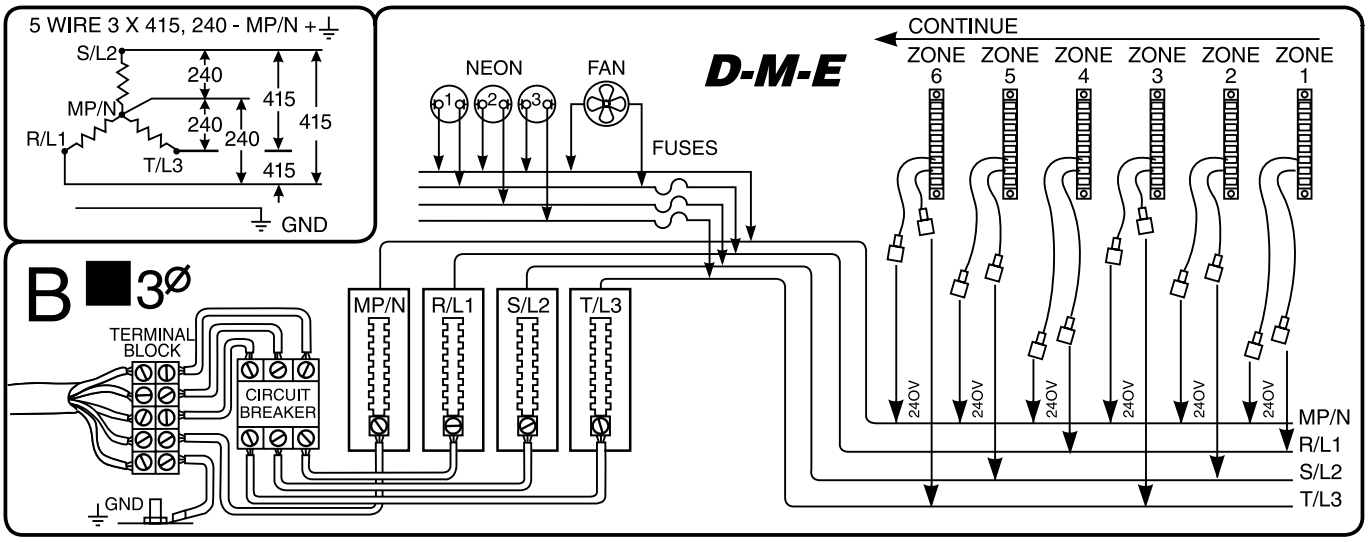


As shown above, each module is powered from one of the three phases. Zone (1), for example, is powered from Phase 1, which is supplied by R/L1 and S/L2. Zone (2) is powered by Phase 2, which is supplied by S/L2 and T/L3. Zone (3) is powered by Phase 3, which is supplied by R/L1 and T/L3.

NOTE: At this point, the sequence repeats itself. For example, Zone (4) is connected the same as Zone (1) to R/L1 and S/L2 and Zone (5) is connected the same as Zone (2) to S/L2 and T/L3 and Zone (6) is connected the same as Zone (3) to R/L1 and T/L3. Zone (7) is then connected to the same phase as Zone (1) and (4), etc. This method of connection assures the greatest likelihood of line balance.

Input Power Wiring Diagrams (Option B)

380 - 415 VAC, Three-Phase, 5-Wire "Y" Power Distribution System



CAUTION NOTE: The voltages from line-to-line in this system are 380 to 415 volts. Severe damage to module and mainframe could result if this type of AC input system is connected to a mainframe wired as OPTION A. This type of power distribution is not found or is very uncommon in the United States but is the most common system found in many other countries worldwide.

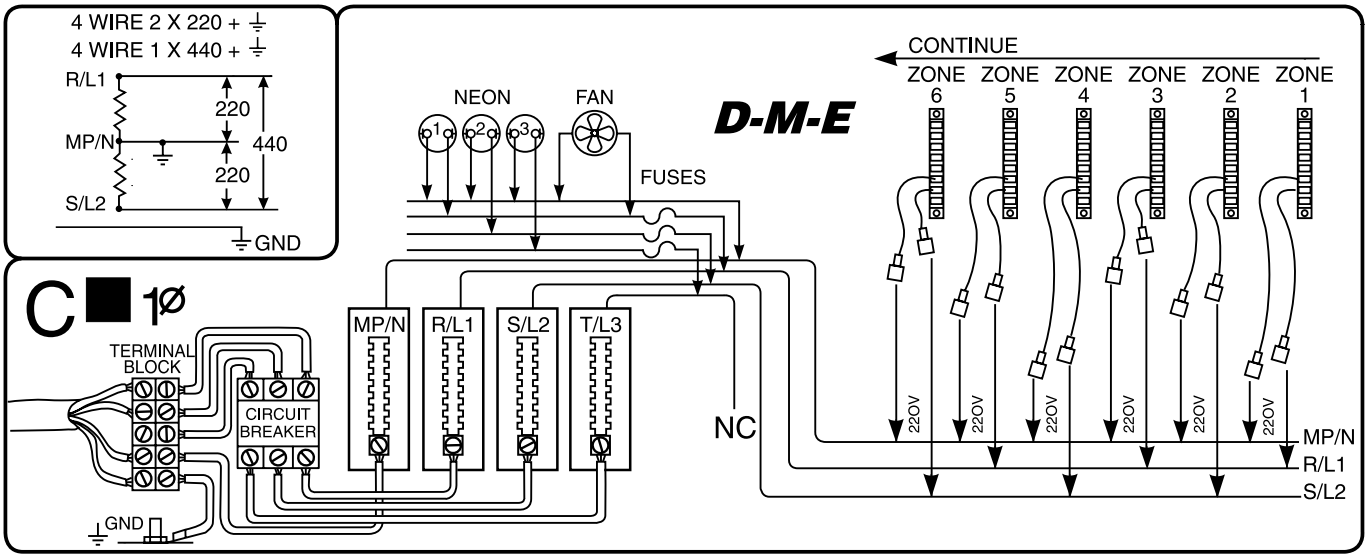
WARNING: If export of this system is intended, make sure that wiring is reconfigured for the country where it is to be used.

Please note that the 380-415 Volt Power Distribution System is the same as the "Y" connection shown in OPTION A except for the voltage levels and the use of the MP/N to develop the 240 volt from the 380-415 volt system. Notice that all modules have one line connected to MP/N and the other side connected to one of the three phase lines.

Example: Zone (1) is connected to Phase 1, which is supplied by R/L1 and MP/N.
Zone (2) is connected to Phase 2, which is supplied by S/L2 and MP/N.
Zone (3) is connected to Phase 3, which is supplied by T/L3 and MP/N.
Zone (4) starts the sequence over again. It is connected to Phase 1 R/L1 and MP/N, etc.

Input Power Wiring Diagrams (Option C)

240 VAC, "Two-Phase", 4-Wire



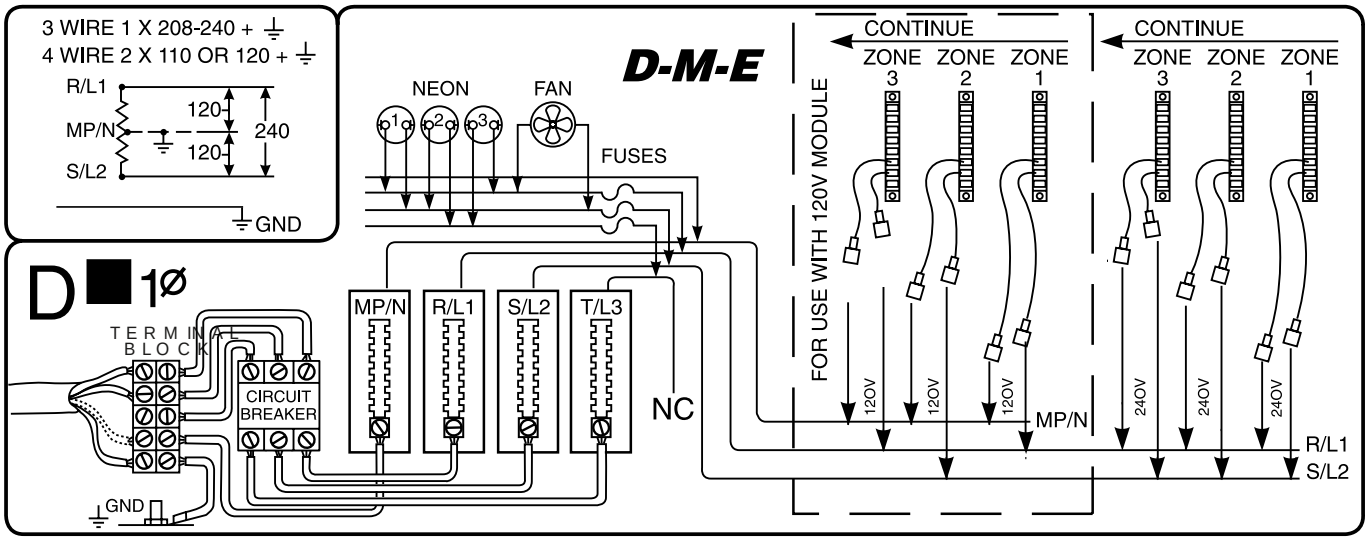
The 240 volt single-phase connection only uses two power lines plus ground.

CAUTION: Only power conductors should be connected through the circuit breaker. Never make ground connections through a circuit breaker. Notice that the output of the circuit breaker is connected to terminal strips R/L1 and S/L2. Also notice that ground is common with MP/N in this system. All zones in this system have to be connected to MP/N and either R/L1 or S/L2. Line balance is achieved by alternating between R/L1 and S/L2.

Example: Zone (1) is connected to MP/N and R/L1.
Zone (2) is connected to MP/N and S/L2, etc.
Zone (3) starts the sequence over again. It is connected to MP/N and R L2, same as zone (1).

Input Power Wiring Diagrams (Option D)

208 - 240 VAC, Single-Phase, 3-Wire or 120 VAC, Two-Phase, 4-Wire



Above diagram depicts two different wiring configurations. One is 208-240 volt, singlephase, 3-wire. Note that lines R/L1 and S/L2 are connected through the circuit breaker to the appropriate terminal strips. All zones will be connected between R/L1 and S/L2. MP/N is common with ground and is not connected through the circuit breaker.

In the 120 volt connection (zone connections shown within the dashed-line area), the 120 volts is developed between R/L1 and MP/N and S/L2 and MP/N. Again, ground and MP/N are not connected through the circuit breaker. Each zone in this system will be connected to MP/N and either R/L1 or S/L2. Line balance is achieved by alternating between R/L1 and S/L2.

Example: Zone (1) is connected to MP/N and R/L1.
Zone (2) is connected to MP/N and S/L2, etc.
Zone (3) starts the sequence over again. It is connected to MP/N and R/L2, same as zone (1).

D-M-E Mainframe Stand Accessory — Cable Storage Basket

FSCB-0001 CABLE BASKET

(Includes (1) 14"- and (4) 6"- long zip ties)



- Compatible with D-M-E Smart Series or Integrity Floor Stands
- Durable molded plastic construction
- Keep all your cables and connectors safely off the floor



Integrity 12/24 zone stand



Smart Series 8 zone



Smart Series 12-zone stand width



Integrity 48-zone stand

INSTALLATION GUIDE

Note: Product color may differ from what is shown.

Step 1

Position Basket on bottom of the D-M-E Mainframe Floor Stand.
Decide if you will attach the basket to the right or left Mainframe Upright Post.

Step 2

Secure Basket to Mainframe Floor Stand with Supplied Cable Ties.



Attach Longer Cable Tie to Side Post



Attach Shorter Cable Ties to Corners



Integrity™ Hot Runner Controls

COMPACT DESIGN,

ADVANCED FUNCTIONALITY



ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Features and Benefits





ADVANCED FUNCTIONALITY:

- Group or individual setpoints
- Zone slaving
- Input and output diagnostics
- Stand-by Heat, Boost, and Auto Boost
- Programmable setpoint and alarm limits
- Remote control of setpoints via contact closure
- Blown fuse indicator
- Digital calibration
- Industry-standard 15 AMP ratings

INTEGRITY™ — HOT RUNNER CONTROLS RETHOUGHT

D-M-E, a long-time leader in hot runner controls, has totally rethought all aspects of the controller to create the new Integrity temperature control family. New modules. New mainframe. New cabling. New communications. All to make a more compact, more powerful, more flexible control solution that makes your molding operation more productive. And the Integrity product line comes with a three-year warranty.

INNOVATIVE CONTROL

Our objectives for the Integrity Hot Runner Control module were simple — make it powerful, small and affordable. An innovative, patented idea is our zone slaving feature that allows the user to slave one zone to another with a power offset. This enables minor power output adjustments to compensate for master zone variations and solve part-quality problems.



RoHS AND WEEE COMPLIANT

Integrity Hot Runner Controls are acceptable for use worldwide. D-M-E ensures that these products are free of the following substances: Lead, Mercury, Hexavalant Chromium, Cadmium, PBB (Polybrominated Biphenyls, and PBDE (Polybrominated Diphenyl Ethers). At the end of life, customers are asked to return these products to D-M-E for disposal.

Features and Benefits

Powerful. Flexible. Affordable. That's what molders want from today's generation of hot runner controls. With the introduction of our new Integrity™ series of hot runner control solutions, D-M-E delivers the latest in technology.

12-Zone System



COMPACT

The Integrity™ control module is less than half the size of our popular Smart Series® modules, thereby conserving floor space.



MODULAR

Integrity systems feature an integrated, modular construction that enables convenient swapping of control modules.

24-Zone System



EXPANDABLE

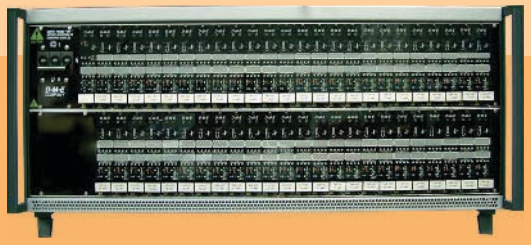
The system can easily grow to meet changing process needs; reconfiguration is quick and easy in 12-zone increments.



EASY-TO-USE

The module front panels are very simple for operators to learn and use.

48-Zone System



STANDARD FEATURES

- Both load line relays allow termination of power during a fault
- Monitoring of load current, ground fault current, and line voltage
- K-type thermocouple support

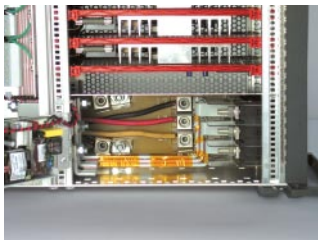
Modular, Expandable Hot Runner Control Solutions

MODULAR, EXPANDABLE HOT RUNNER CONTROL SOLUTIONS

We Thought Outside the Box to Build a Better Box

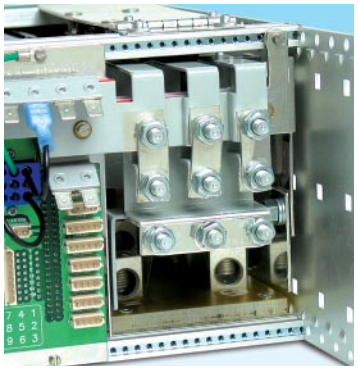
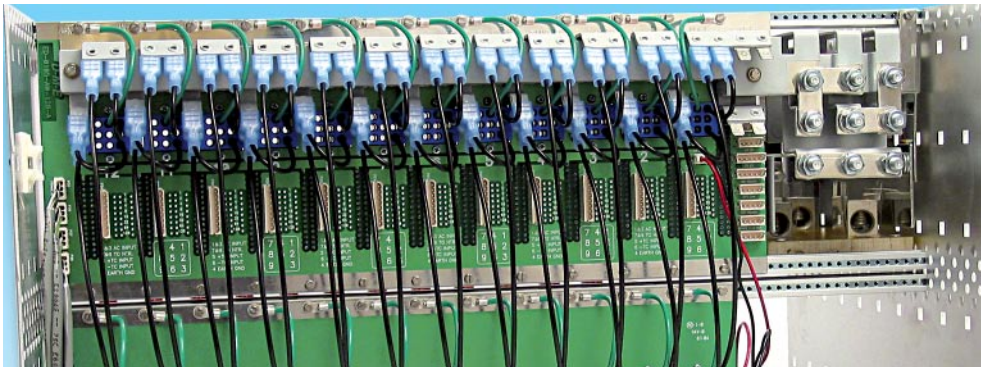
Integrity mainframes are offered in 12-zone increments to match your processing needs. Most systems feature a standard 100 Amp breaker for increased heater wattage capability. And every slot is rated at 15 Amps to enable zone configuration flexibility and interchangeability. The D-M-E patented bus bar design (patent #6674006) enables easy wiring reconfiguration with a simple jumper-based system for more rapid power input adjustments. Fuses are mounted for easy access and replacement. Stacked mainframes have separate power inputs but inter-connect with a single cable to allow inter-module communications across mainframes. Each Control Module is completely galvanically isolated from the others so grounded or ungrounded T/C's can be used.






Connecting the Input Power has never been easier. With Power disconnected, snap off and remove side covers, remove the top and swing the Power Supply out of the way. Have your Electrician feed the proper local electric code wires, which connect to the 100 Amp 240 VAC Breaker in the Mainframe via the power lugs. The lugs accept #2/0 to #14 wires, straight in from the rear into these terminal lugs. Tighten down with a 3/16 Hex Wrench. Swing the power supply back down, snap the Top cover and then the side covers on. The System is ready to connect to your plant power if it matches the Power Options for the Mainframe.

Power Options: The default "Option A" wiring can be changed if necessary by just reconfiguring the 5 Input Power Configuration Straps shown below at left. All the zones shown below at right are then automatically balanced on the New Power Option Selected. Rewiring of all the individual zones is no longer required. (See next page for more details on Power Hookup Options)

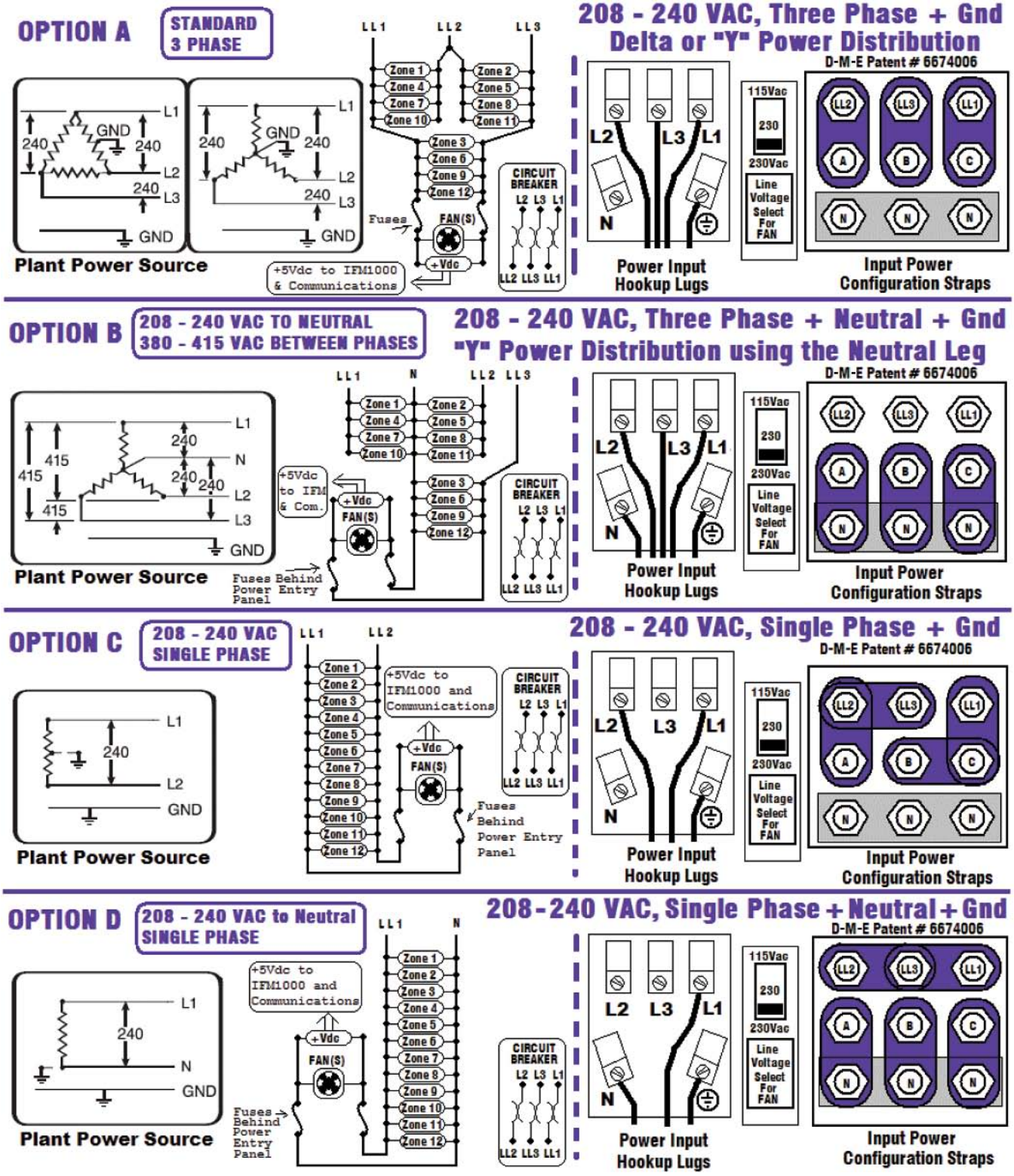
Even a Smarter Cable and Connector

Integrity's innovative design requires only a single connection for 12 heater power and thermocouple zones. The power to the cables is cut for additional safety and is incorporated with the Cable Connected Signal (with systems using the IFM1000 Modules) described in another New D-M-E Patented Technology (# 6,813,537).




Power Hookup Options

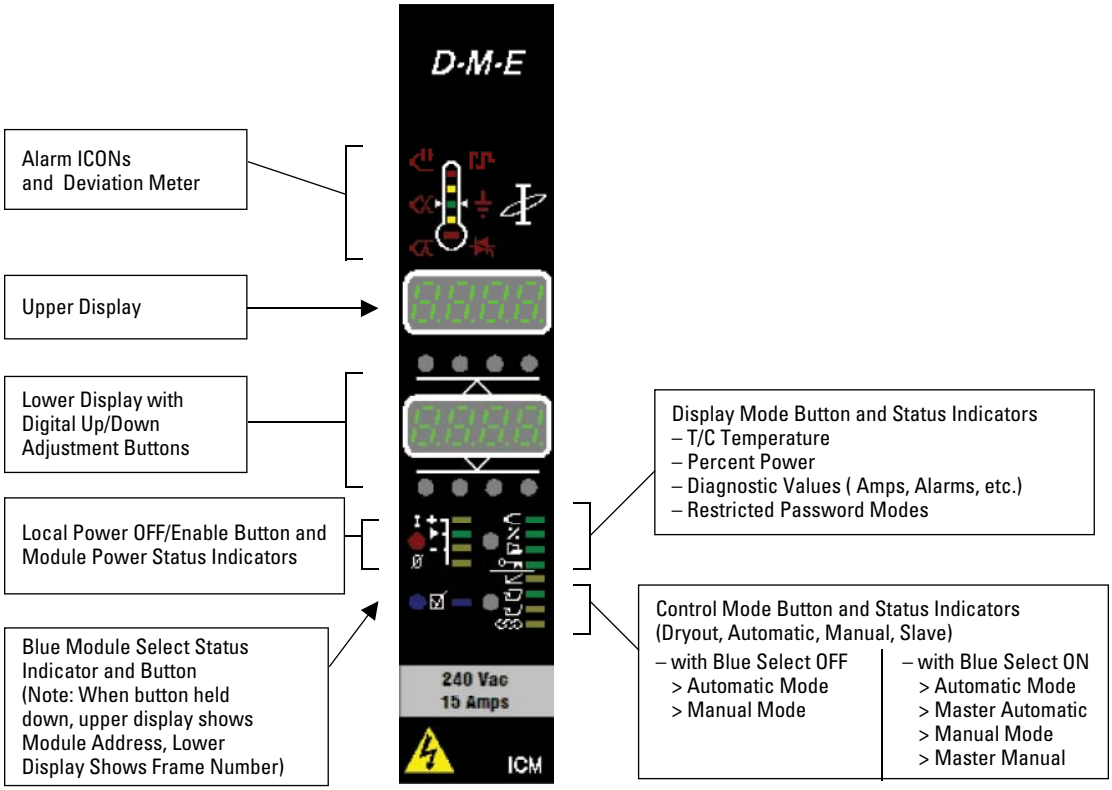
Customer Power Hookup Options for Plant Power Requirements – See Integrity Users Manual for full details. Your electrician simply changes the "Input Power Configuration Straps" and the entire 12-, 24- or 48-zone frame is re-wired! Factory Default is Option A.



ICM1502 Integrity Module Overview

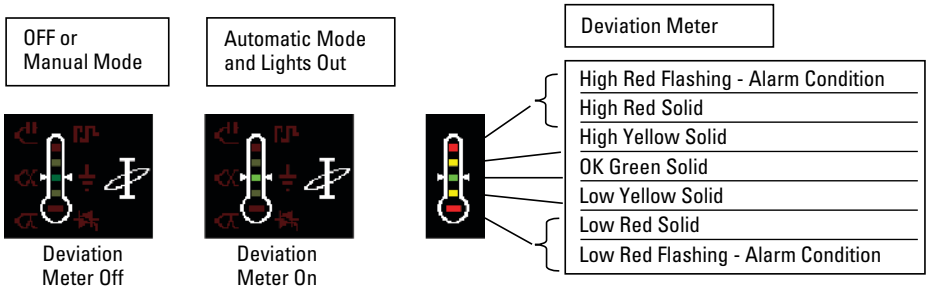
ICM1502 INTEGRITY™ CONTROL MODULE HIGHLIGHTS
(See Integrity Users Manual for Full Details)

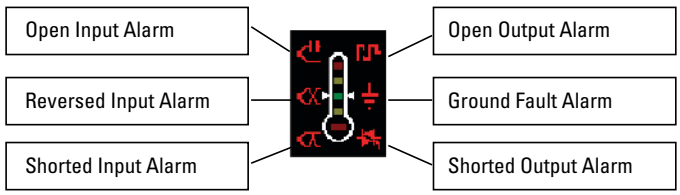
ICM1502 Integrity™ Control Module - Quick Overview



Alarm ICONS

4.2. ICM - Alarm Icons (also see - *Display Mode - Diagnostic Menu Display Items - Alarm Values in d.A.xx*)

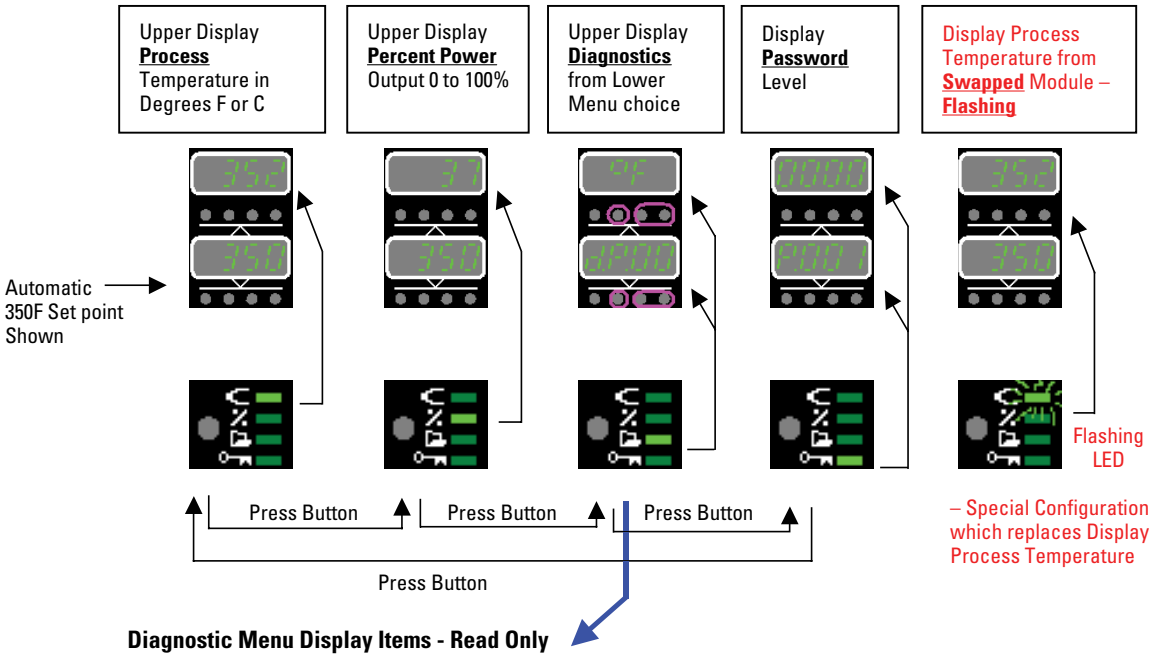




ICM1502 Integrity Module Overview

ICM1502 INTEGRITY™ CONTROL MODULE HIGHLIGHTS - CONTINUED

NEW Advanced Diagnostic and Detailed Alarm Status Features (See Integrity Users Manual for Full Details)



Diagnostic Menu Display Items - Read Only

Process Values in d.P.xx

Lower Display	***Upper Display***	***Description***
d.P.00	°F	Engineering Units (Degrees F or Degrees C)
d.P.01	1. 51 **	Load Current in Amps (0.00 to 15.00) "Peak RMS Amps"
d.P.02	237 **	Line Voltage (95 to 265 Vac)
d.P.03	60	Hertz Detection (50 or 60)
d.P.04	.01	GFI Ground Fault Amps
d.P.05	355	Wattage of Heater Maximum Available (P=VxI)
d.P.06	158	Resistance of Heater in Ohms (R=V/I)
d.P.07	1	Mold Terminal Box Number if connected
d.P.08	5	Zone in Mold Terminal Box if connected

** **NOTE:** Values will Flash in Phase Angle Firing Mode when not Accurate.

Alarm Values in d.A.xx (also see - ***ICM - Alarm Icon's***)

Lower Display	***Upper Display***	***Description***
d.A.00	nOnE	Alarm Horn ("nOnE" or LA Latched Alarm or A Alarm)
d.A.01	OFF	Shorted Output Alarm (On or OFF)
d.A.02	OFF	Open Output Alarm (On or OFF)
d.A.03	OFF	Ground Fault Alarm (On or OFF)
d.A.04	OFF	Shorted Input Alarm (On or OFF)
d.A.05	OFF	Reversed Input Alarm (On or OFF)
d.A.06	OFF	Open Input Alarm (On or OFF)
d.A.07	OFF	Heat Sink Alarm (On or OFF)
d.A.08	OFF	Load Fuse Failure Alarm (On or OFF)
d.A.09	OFF	Deviation Horn Alarm (Process Deviation Band- On or OFF)
d.A.10	OFF	Over Current (Amps) Detection (On or OFF)
d.A.11	OFF	Dryout Alarm - Dryout Lock Mode Only (On or Off)

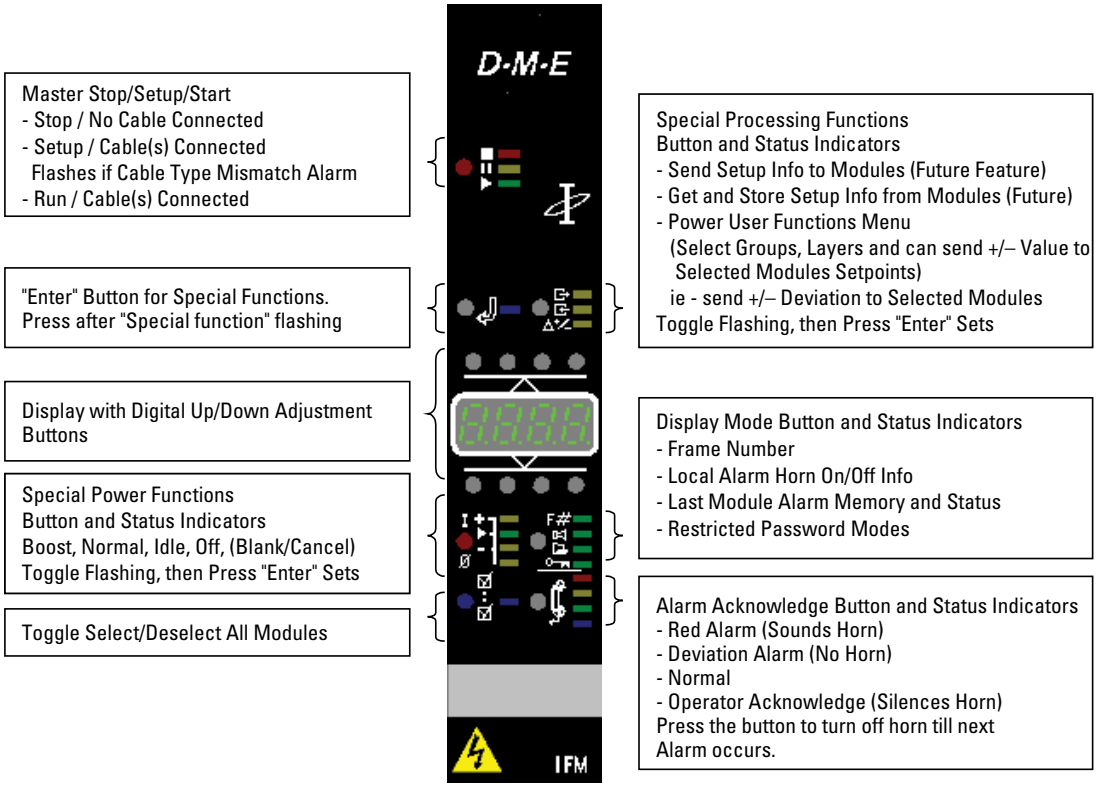
NOTE: The process values in d.P.01, d.P.02 and d.P.04 are very useful diagnostic values but are not meant to replace an Industrial Quality DVM Meter, even when calibrated properly. Typical accuracies are +/-5% F.S.

Values in d.P.05 and d.P.06 are calculated from d.P.01 and d.P.02.

IFM1000 Integrity Module Overview

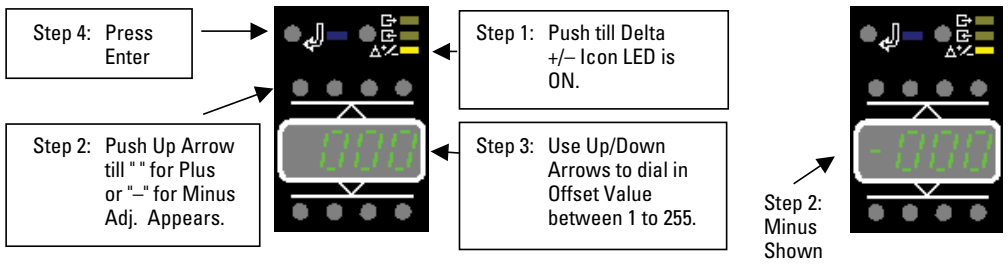
IFM1000 INTEGRITY™ FRAME MODULE HIGHLIGHTS
(See Integrity Users Manual for Full Details)

IFM1000 Integrity™ Frame Module - Quick Overview



Change All "BLUE LIGHT" Selected Modules Set Point by a +/– Deviation Value.

Send Delta +/– Value to All BLUE ON Selected Modules

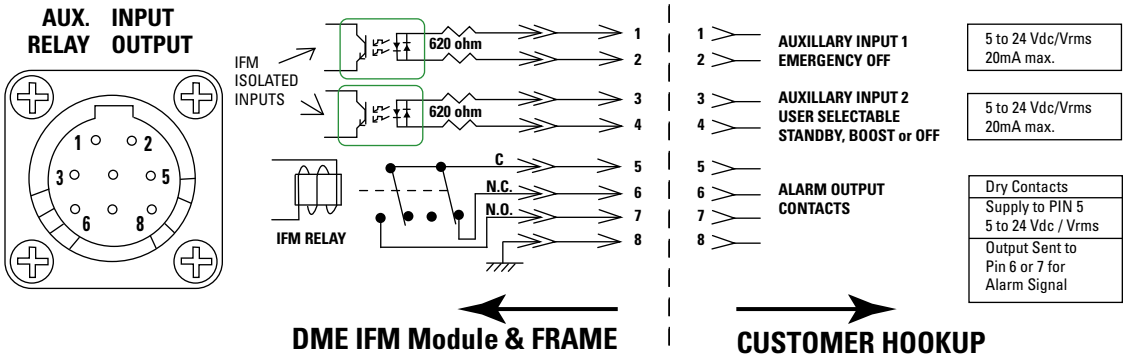


ICM modules with BLUE LEDs ON will add or subtract the Offset value from its current Auto Set-point.

IFM1000 INTEGRITY™ FRAME MODULE HIGHLIGHTS - CONTINUED

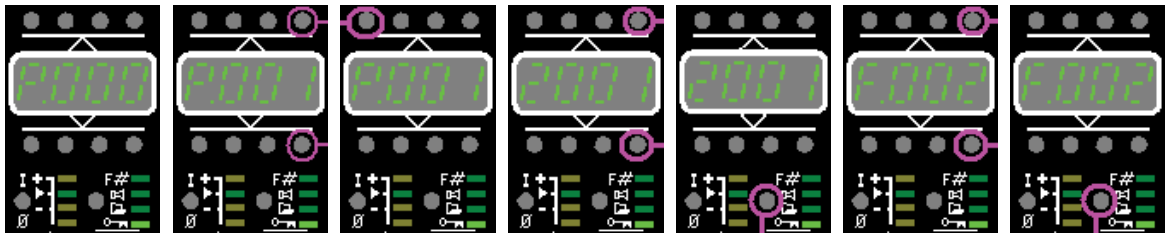
Machine Interface I/O

5.6. IFM - Alarm Output Connector - Located on Fan Panel on Rear of Mainframe.



Changing Frame Number When Linking Multiple Integrity Frames Together

Following procedure shows how to change Frame Module Frame Number to F.002.



Password Menu | Select Level Use Up/Down Above ".001" | Swap/Select Level - Press Above "P" | Enter Password for Level | Press Enter | Adjust Frame # | Press Enter

Follow Procedure for Entering Password Levels Below.

5.8.1. Password Level 1 - Frame Number Valid 1–223, default 1.
➢ Each Integrity Frame Module must be unique. This procedure allows the operator to change the Frame Number.
5.8.1.1. Enter Password Level P.001
5.8.1.2. Enter Password for this Level = 2001
5.8.1.3. Adjust Frame Number F.xxx to desired value. Ie F.002. Note: all units reboot.
5.8.1.4. Press Enter. Back to P.001.

Cable Wiring Information

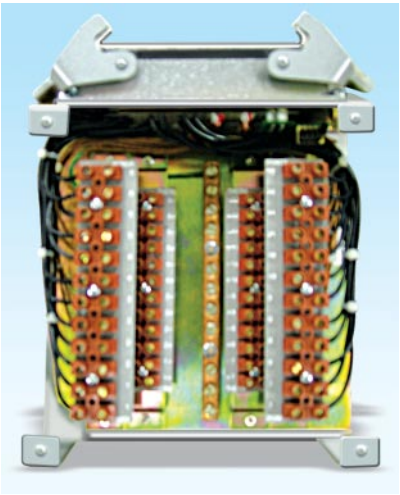
INTEGRITY™ CABLE WIRING INFORMATION

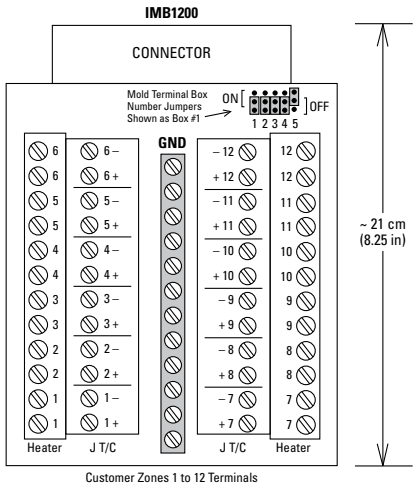


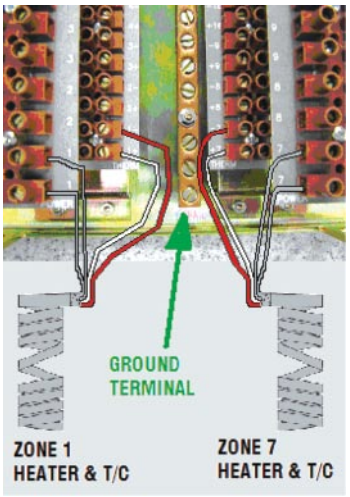
Heater Power Pins	Control zone Heater
A–1	1
A–2	2
A–3	3
A–4	4
A–5	1
A–6	2
A–7	3
A–8	4
B–1	5
B–2	6
B–3	7
B–4	8
B–5	5
B–6	6
B–7	7
B–8	8
C–1	9
C–2	10
C–3	11
C–4	12
C–5	9
C–6	10
C–7	11
C–8	12

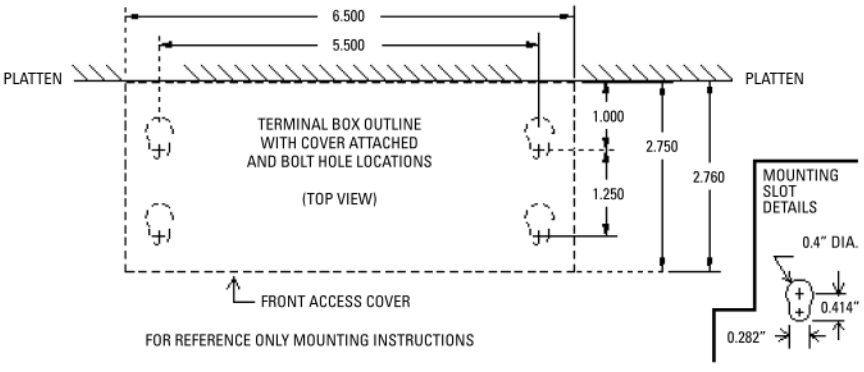
T/C Pins	Control zone J T/C
D–1	*+1 t/c*
D–2	*+2 t/c*
D–3	*+3 t/c*
D–4	*+4 t/c*
D–5	*+5 t/c*
D–6	*+6 t/c*
D–7	*–1 t/c*
D–8	*–2 t/c*
D–9	*–3 t/c*
D–10	*–4 t/c*
D–11	*–5 t/c*
D–12	*–6 t/c*
E–1	*+7 t/c*
E–2	*+8 t/c*
E–3	*+9 t/c*
E–4	*+10 t/c*
E–5	*+11 t/c*
E–6	*+12 t/c*
E–7	*–7 t/c*
E–8	*–8 t/c*
E–9	*–9 t/c*
E–10	*–10 t/c*
E–11	*–11 t/c*
E–12	*–12 t/c*

Cable Connect Pins
F–1
F–2
F–3
F–4
F–5
F–6
F–7
F–8
F–9
F–10
F–11
F–12

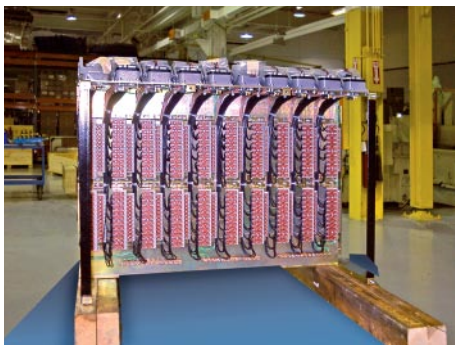








IMB1200 Mounting Box Dimensions – Leave Room for Cover Removal and Access.

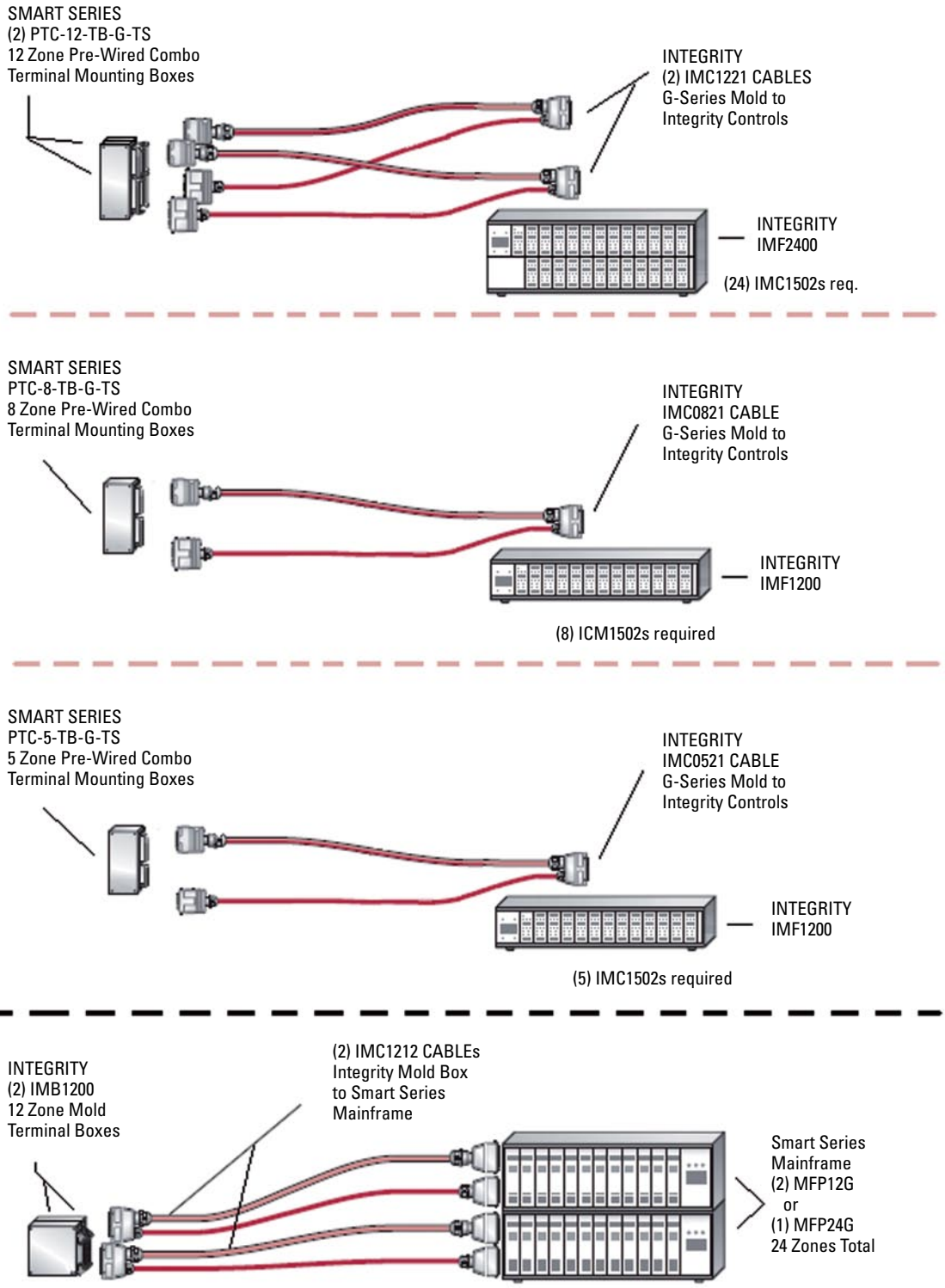


D-M-E Custom 120 zone (shown) and 72 zone Integrity™ Mold Power Boxes Available – Special Order

SMART SERIES AND INTEGRITY CONVERSION PRODUCTS

Not Recommended for New Designs

Cable Connect Safety Features Not Supported Using These Cables



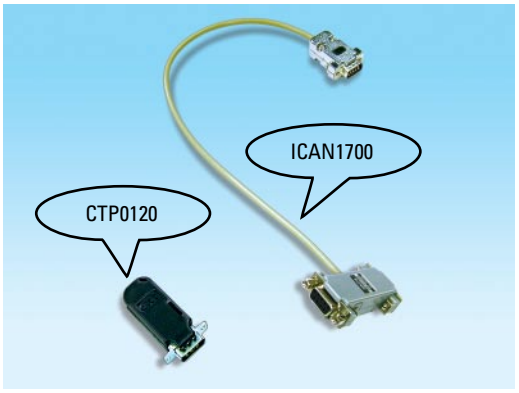
Integrity Configuration Accessories

STACKING INTEGRITY™ MAINFRAMES

A 36-Zone System with an IMF1200 placed on top of an IMF2400 with interconnecting cables to allow communications.
Shown using one ICAN1700 DMECAN Daisy Chain Cable and one CTP0120 DMECAN Termination Plug.
Each extra mainframe that is stacked requires another ICAN1700 DMECAN Daisy Chain Cable and Plant Power Hookup.







NOTE: Each Daisy Chained Frame ID in the IFM1000 must be set to a unique ID. Ex. F.001, F.002, F.003, etc. See user manual for more information relating to setting the FRAME ID on the IFM1000 module.

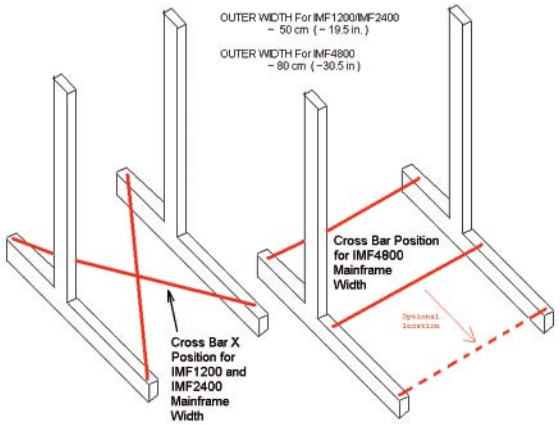
INTEGRITY™ MAINFRAME STANDS



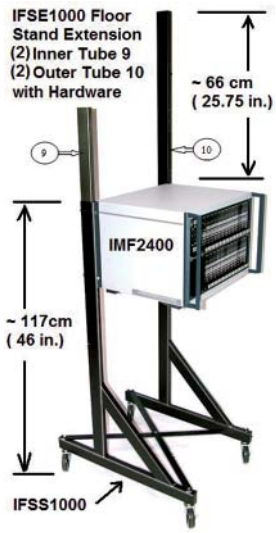
IFSS1000 Straight Floor Stand
(Shown with IMF4800)



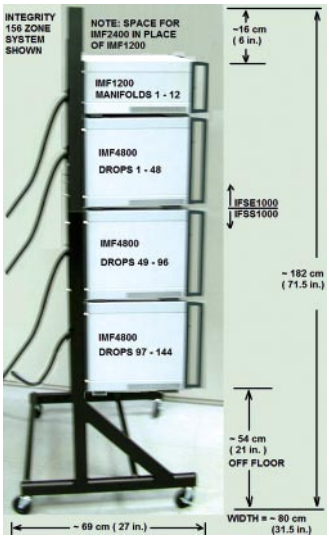
IFSA1000 Angled Floor Stand
(Shown with IMF2400)



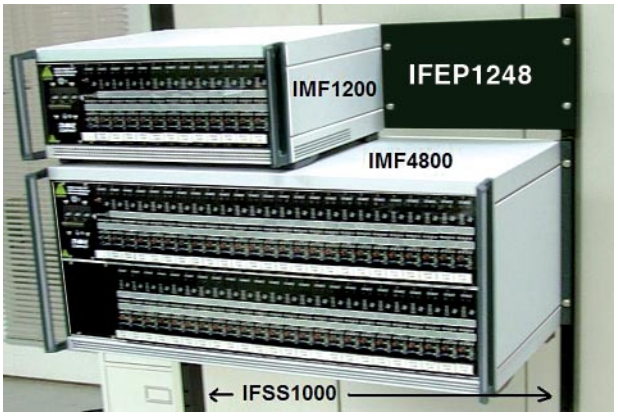
Adjust Floor Stand: X cross bars for IMF1200 & IMF2400;
straight for IMF4800



IFSE1000 Floor Stand Extension



Side View Mounting/Stacking Order

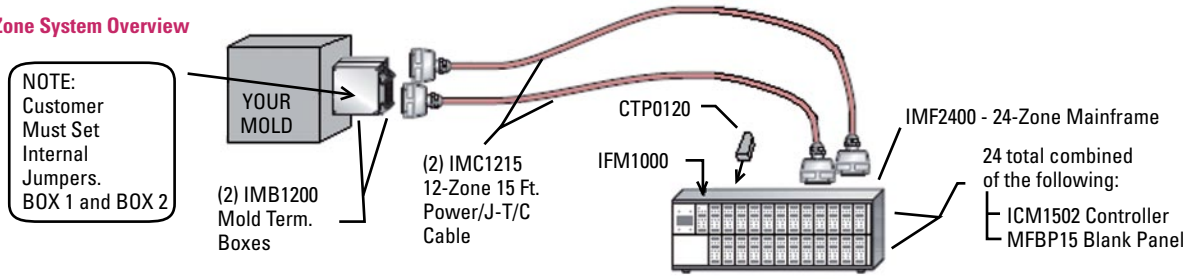


12-Zone Extension Plate Shown (24-Zone Ext. Plate Not Shown)

Integrity™ Component Ordering Information

INTEGRITY™ ITEM NUMBERS

Integrity™ 24-Zone System Overview



24-Zone Integrity™ System Shown

Qty.	Item #	Description
1	IMF2400	24-Zone Mainframe
1	IFM1000	Frame Module
2	IMC1215	12-Zone 15 Ft. Cable
2	IMB1200	Mold Terminal Box
1	CTP0120	Termination Plug

24 Total - ICM1502 and/or MFBP15

12-Zone Integrity™ System

Qty.	Item #	Description
1	IMF1200	12-Zone Mainframe
1	IFM1000	Frame Module
1	IMC1215	12-Zone 15 Ft. Cable
1	IMB1200	Mold Terminal Box
1	CTP0120	Termination Plug

12 Total - ICM1502 and/or MFBP15

48-Zone Integrity™ System

Qty.	Item #	Description
1	IMF4800	48-Zone Mainframe
1	IFM1000	Frame Module
4	IMC1215	12-Zone 15 Ft. Cable
4	IMB1200	Mold Terminal Box
1	CTP0120	Termination Plug

48 Total - ICM1502 and/or MFBP15

D-M-E ITEM #	INTEGRITY BASE PRODUCTS DESCRIPTION
ICM1502	15 Amp 240 VAC 3,600 Watt Temperature Control Module – (1 for each control zone required)
IFM1000	Frame Module (1 used per Mainframe – uses special non-controller reserved slot)
IMF1200	12-Zone Mainframe (Option A Standard – 100 Amp breaker, average full 3,600 Watts per zone balanced)
IMF2400	24-Zone Mainframe (Option A Standard – 100 Amp breaker, average 1,875 Watts per zone balanced)
IMF4800	48-Zone Mainframe (Option A Standard – 100 Amp breaker, average 937 Watts per zone balanced)
IMB1200	12-Zone Mold Terminal Mounting Box with J type T/C (1 for each 12 zones of control required.)
IMC1215	12-Zone 15-Foot Cable (Power and J Type T/C in one cable – 1 for each 12 zones of control required)
CTP0120	DMECAN termination plug (1 for each standalone or daisy-chained stacked mainframe system)
MFBP15	Blank Panel

D-M-E ITEM #	INTEGRITY ACCESSORY PRODUCTS DESCRIPTION
IFSS1000	Integrity Floor Stand Straight
IFSA1000	Integrity Floor Stand Angled
IFSE1000	Integrity Floor Stand Extension
IFEP1248	Extension Plates for IMF1200 to Mount with IMF4800 width Mainframe on common Floor Stand
IFEP2448	Extension Plates for IMF2400 to Mount with IMF4800 width Mainframe on common Floor Stand
ICAN1700	DMECAN Daisy-Chain Communications Cable (1 used with each stacked mainframe after first Frame)
IFMCCONN	IFM – Alarm Output connector for Machine Interface I/O (1 used on rear of each Mainframe)

D-M-E ITEM #	SMART SERIES® and INTEGRITY™ Conversion Products
IMC1212	12-Zone, 15-Foot Conversion Cable from IMB1200 Integrity Mold Box to Smart Series® Mainframe
IMC1221	15-Ft Conversion Cable, 12-Zone Smart Series® Mold Connectors to Integrity™ Mainframe (zones 1–12)
IMC0821	15-Ft Conversion Cable, 8-Zone Smart Series® Mold Connectors to Integrity™ Mainframe (zones 1–8)
IMC0521	15-Ft Conversion Cable, 5-Zone Smart Series® Mold Connectors to Integrity™ Mainframe (zones 1–5)

D-M-E ITEM #	INTEGRITY REPLACEMENT PARTS
IMC5012	12-Zone Integrity Mold Connector with 12 in. power & J type T/C wires attached & Cable Select Board
ABC15	F1 & F2, IMC1502 Main Load Fuses 15 AMP 250 VAC FUSE (2 required per module)
RPM0102	F3, IMC1502 Transformer Fuse, 100mA time delay 250 VAC TR5 Style Fuse – 1 per module
RPM0103	2 Integrity Mainframe Fan & Aux Power Fuses, 400mA time delay 250 VAC 5 x 20 mm style fuse
RPM0104	100 AMP 3 Phase 415 VAC rated breaker
RPM0105	Mainframe 5 Vdc 20 Watt Switching Power Supply
RPM0106	240VAC/120VAC Mainframe Fan

Advantages of the Integrity™ Control System

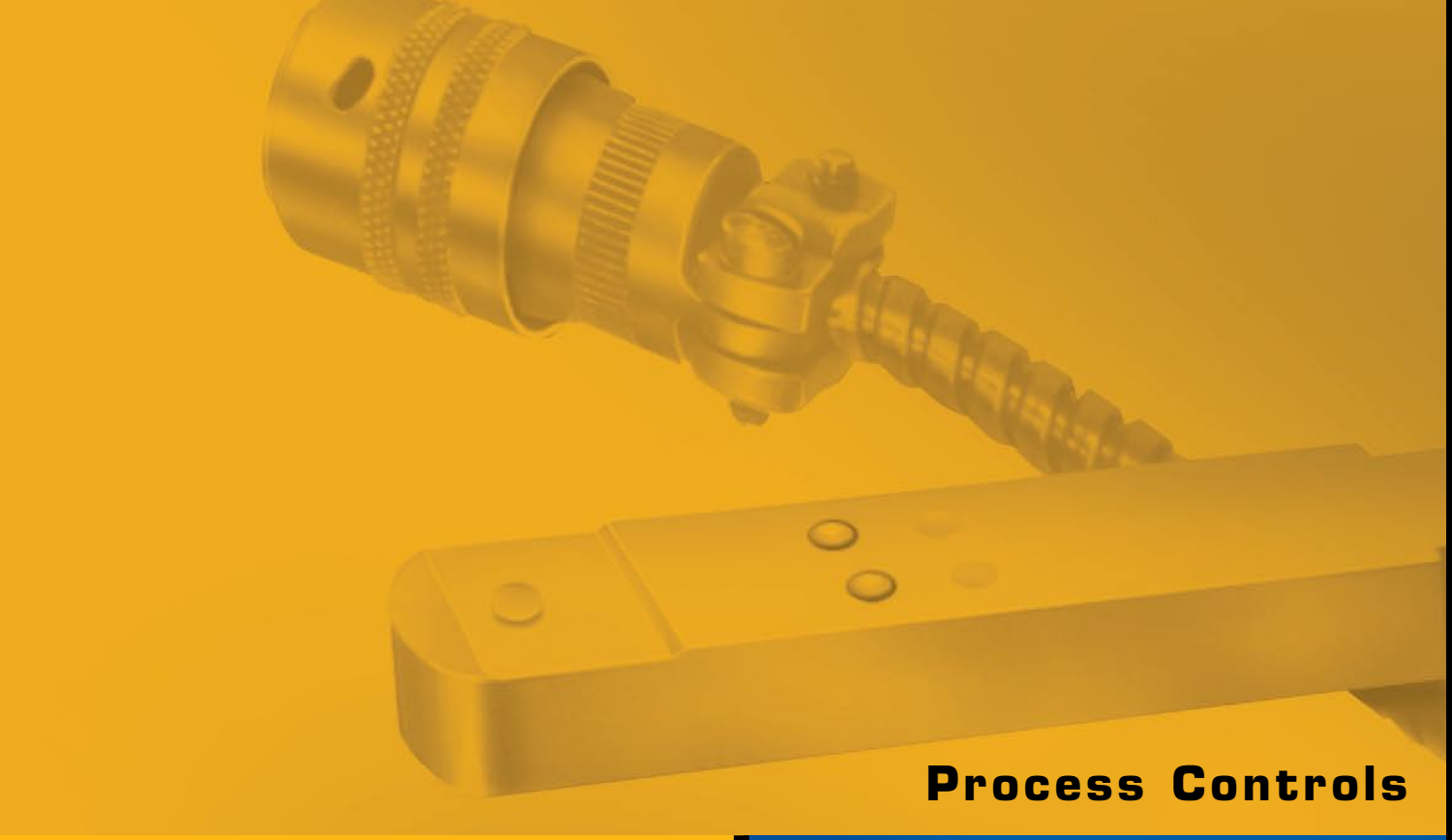






1. Fully isolated thermocouple input means highly accurate temperature readings and prevents heater current from penetrating the controls.
2. A pair of relays in each controller prevents a shorted triac from damaging a heater. If a runaway heat situation is detected, the relays open to prevent the heater from being damaged.
3. Each Integrity controller monitors line voltage, current drawn by the heater, damp heater leakage.
4. Since each controller monitors line voltage and current, Integrity controllers can calculate and display the power (watts) being delivered to the heater, and calculate the resistance of the heater. This provides the capability for users to detect hot runner system problems.
5. Each controller monitors its heat sink temperature. This allows the controller to determine if the control system has a defective fan or an air flow blockage.
6. Integrity controllers are switchable between phase angle fire and zero cross fire.
7. The controllers can be switched between J- and K-type thermocouples without the need for recalibration. (Mainframes should be wired for K type, however).
8. Despite being a modular system, Integrity modules can be slaved. A D-M-E patented feature lets users set a power offset between the master and the slave so small power adjustments can be made.
9. Set points can be input before turning power on to the heaters.
10. The system has a built-in alarm output and offers relay contacts for triggering external alarms or shutting down the injection process.
11. Auxiliary inputs are available for remote control of the system (ex. idle heat)

    Hot runner systems can use the classic D-M-E Smart Series connection system or the new combined power and thermocouple connections that save space on top of the mold. Custom cables are always available from D-M-E.



Process Controls

ACHIEVING OPTIMAL MOLDING RESULTS WITH INJECTION PROCESS CONTROLLERS, BUTTON SENSORS AND SLIDE SENSORS





ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Portable Cavity and Hydraulic Pressure Monitor and Controller



- COMPACT AND SELF CONTAINED
- PROVIDES DIGITAL DISPLAY READOUT OF HYDRAULIC AND CAVITY PRESSURES
- PROVIDES AMPLIFIED OUTPUT OF PRESSURE SIGNAL
- 1 AMP RELAY OUTPUT FOR CONTROL OF BOOSTER PUMP CUTOUT
- PROVIDES EASY CALIBRATION OF D-M-E CONSTANT CALIBRATION SENSORS

The IPC-01-01 Injection Process Controller is a portable device that provides an inexpensive means of controlling peak plastics pressure in the mold. Peak pressure control is accomplished using a mold pressure sensor and a single setpoint to control filling and packing of the mold. By closely monitoring and controlling cavity pressure the user will reduce cycle time, reject rates and plastics usage. The controller operates the booster pump for the absolute minimum time required to fill and pack the cavities, significantly reducing electrical power consumption.

The IPC-01-01 controller uses a technique known as Dynamic Pressure Control (DPC). DPC maintains a more constant peak cavity pressure than machine timers and limit switches, regardless of plastic viscosity changes. This is accomplished by switching from High Volume (Fill) to Low Volume (Hold) injection at a predetermined cavity pressure.

Because of a direct correlation between peak cavity pressure and part weight (and therefore part size), accurate control of peak cavity pressure means more consistent part production.

Because part weight range can be reduced by using DPC, the average part weight can be reduced without occurrences of short shots. This translates into potential reduction in material usage. Increased repeatability in part weight also means less scrap as a result of short shots, over packed and flashed parts. Reducing these occurrences can also reduce associated wear and damage to tooling.

The IPC offers the three most requested features in a pressure monitor/controller:

1. Display of the pressure reading, including the peak pressure that occurred.
2. Amplification of the pressure signal for use by other equipment.
3. A relay contact set for direct control of the molding machine's booster pump cutoff function.

The IPC uses an injection signal or other switch closure to arm the holding of the peek pressure that occurred during the shot. The peak pressure reading is held until the end of the injection sequence.

A connector on the rear of the IPC provides the amplified pressure signal. A zero to 1, 2, 5, or 10 VDC (or 4 to 20 mA DC) signal directly corresponds to a zero to 20.000 PSI pressure. This signal can be routed to strip chart recorders, plant wide monitors or other equipment. The signal can also be input into molding machines offering closed loop pressure control but that lack the necessary amplifiers for the sensing equipment.

The IPC offers a one amp, form C (normally open, normally closed) relay contact set for direct control of the machine's booster cutout function. The relay contacts are also gold plated for switching of low level signals such as the potentiometers used to set the machine's injection velocity. Many control relays are not capable of switching such sensitive signals. The relay contacts carry a voltage rating of up to 120 VAC.

The IPC is designed for use with D-M-E's Constant Calibration sensors but can be used with other manufacturers strain gage based sensors as well.

FRONT PANEL CONTROLS AND INDICATORS

The IPC offers quick easy calibration of pressure sensors via front panel adjustments. Calibration is quickly performed by pressing a push button and then adjusting the calibration setting.

A rotary switch allows for rapid selection of the pressure sensor and ejector pin size. A second rotary switch allows for selecting what is displayed: The pressure signal with peak hold, the pressure signal without peak hold or the DPC pressure setpoint.

A DPC light illuminates when the mold (or hydraulic) pressure reaches setpoint. This is an indication that the IPC's control relay has activated.

A toggle switch allows the user to override the control function while allowing for continued monitoring of pressures. A high accuracy ten-turn potentiometer allows for input of the pressure setpoint for booster cutout.

A three and one-half digit display allows for direct readout of pressures up to 19,990 PSI. This is displayed as pressure (times 10) for mold pressure.

A UL, CSA, VDE approved power switch allows the user to turn the IPC on and off from the front panel. Internal fuses (not shown) protect the unit from both sides of the AC line voltage. While the standard unit (IPC-01-01) is constructed for 120 VAC use, an optional IPC-01-02 is available. The unit is easily converted between 120 and 240 VAC operation. The 120 VAC unit comes with a standard wall outlet plug.

Portable Cavity and Hydraulic Pressure Monitor and Controller

OPERATION

The user plugs the IPC into a standard wall outlet. If machine control or automatic hold of the peak pressure signal is desired, a normally open relay contact is attached via the rear panel connector. If control of the machine is desired, the IPC's control relay is wired back to the machine via the same connector. A D-M-E pressure sensor is then attached via the rear panel and the unit is set to the appropriate pin size calibration. The pressure offset value is adjusted to zero with the front panel ZERO adjustment. The CAL push-button is pressed in and the CAL adjustment is then set for 8900 PSI. The user then sets IPC to the actual pin size being used and the IPC is ready to run. With the IPC set to MONITOR, the user notes and records the peak pressure obtained during acceptable part production. The SETPOINT is adjusted to 50 to 80% of the recorded peak. The user then places the IPC into the CONTROL mode and adjusts the SETPOINT until the desired peak pressure is achieved. It will be necessary to add time or distance to the machine's booster setting for the IPC to take control. The amplified signal output can be connected to process recording equipment or a molding machine's pressure signal input.

REAR PANEL (LEFT TO RIGHT)

Analog Output: is a standard 1/4 inch stereo headphone jack that outputs an amplified pressure signal of zero to 1, 2, 5 or 10 VDC (or 4 to 20 mA DC) corresponding to zero to 20,000 PSI.

D-M-E Sensor: accepts a D-M-E slide, or button sensor or related extension cable. Also accepts other sensors via a conversion cable.

Machine Interface: provides the injection forward and booster cutout wiring connections to the molding machine.

Power Input: provides 120 VAC (standard) or 240 VAC (optional) power for operation.



IPC-01-01 SPECIFICATIONS:

Accuracy:	Analog output and digital display: +/–1% full scale Setpoint: 0.8% of full scale
Repeatability:	Analog output and digital display: +/–0.5% full scale Setpoint: 0-25% of full scale
Recorder Output:	Proportional to cavity pressure. Zero to 1, 2, 5 or 10 VDC (or 4 to 20 mA DC) corresponds to zero to 20,000 PSI
Control Span Range:	Zero to 20,000 PSI
Temperature Range:	50° to 130°F
Power Required:	115 VAC (105-125), 50-60Hz
Zero Drift, Analog Out:	Long Term: 0.1%/month, with temperature 0.1%/°F
Control Relay:	1 amp, form C, 0-120 VAC, VDC
Injection Forward In:	normally open contact closure, less than 10 milliamps
Dimensions:	7.2" wide, 2.7" high, 8.6" deep

ORDERING INFORMATION

CONTROLLER

Includes 19 foot integral power cable, mating control and analog output connectors and two spare fuses. Pressure sensors and extension cables must be ordered separately.

Catalog Numbers:	**IPC-01-01**	(120 VAC standard)
	IPC-01-02	(240 VAC optional)
Fuse Requirement:	**(2) ABC-1**	**fuses**

SLIDE MOLD PRESSURE SENSORS

Catalog Numbers:	**SS-405C**	(500 pound)*
	SS-406C	(2000 pound)*

BUTTON MOLD PRESSURE SENSORS

Catalog Numbers:	**BS-411C**	(125 pound)
	BS-412C	(500 pound)*
	BS-413C	(2000 pound)*
Requires Extension:	**BSC-10**	(10 foot cable)

EXTENSION CABLES

Catalog Numbers:	**SSC-10**	works with all sensors, 10'
	BSC-10	one req'd for button sensor
	SI-900	JIG box with 15' cable, works with all sensors.

***NOTE:** 500 pound sensors are recommended for use with ejector pins from 1/16 to 3/16 inch diameters. 2000 pound sensors are recommended for use with ejector pins from 3/16 to 1/2 inch diameters. The 125 pound Sensor is recommended for 1/16 inch or less diameter pins.

DESIGNED, MANUFACTURED AND TESTED IN THE U.S.A.

Button Mold Pressure Sensors

Both Models Available in 12, 24 and 36 inch lengths



D-M-E Button Mold Pressure Sensors are used for measuring pressures in conjunction with auxiliary recording and control equipment in injection, die cast and transfer molds. They provide a full-scale output of 2 millivolts per volt of excitation.

Three Models
Available in 125, 500 and 2000 pounds force.

Hermetically Sealed
Allows sensor to be used where moisture is present.

NIST TRACEABLE
SUPPLIED WITH CERTIFICATE OF CALIBRATION

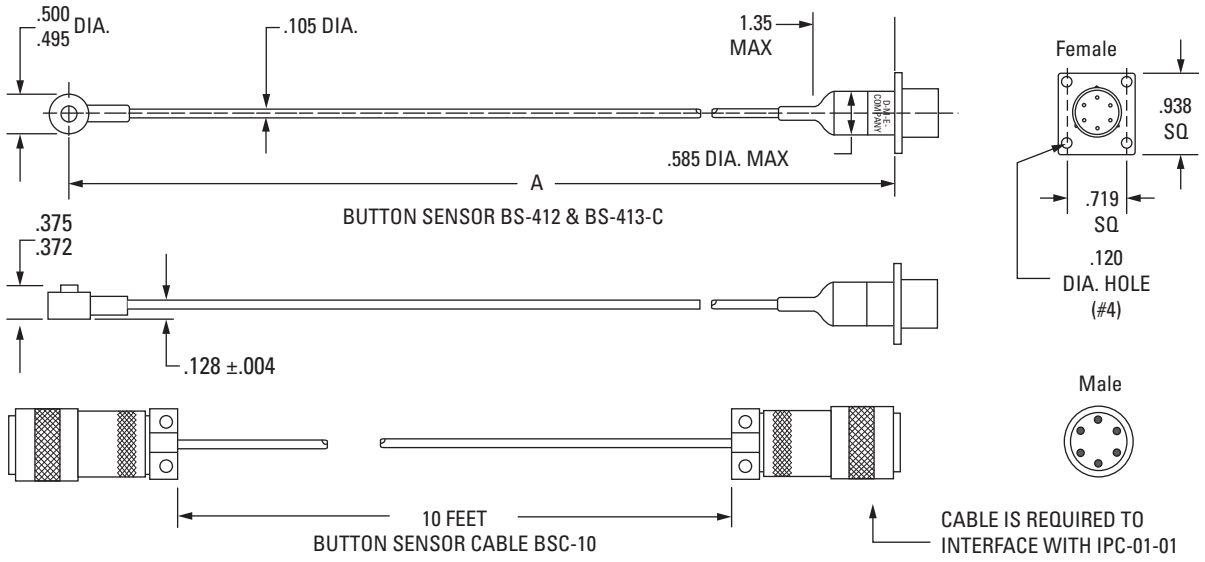
Permanently Installed
Minimizes damage due to mishandling of sensors.

Temperature Compensated
Special amplifiers that compensate for temperature changes are avoided.

Constant Output
Because each sensor is electrically identical, each sensor has the same output. This similarity practically eliminates the need to recalibrate the readout system when sensors are exchanged. Only a slight readjustment of the zero setting of the readout system may be required when exchanging sensors. Therefore errors in calibration are non-existent and operators will spend less time setting up control systems and recorders.

Small Size
Suitable for small molds or molds where water lines, support pillars, etc., inhibit the use of slide sensors.

Installation
The Button Sensor is usually installed under an ejector pin and the shielded lead wire is run to the outside of the mold for mounting. To accommodate the button sensor, a slot and counterbored hole is machined into the ejector plate. See installation information for details.



BUTTON MOLD PRESSURE SENSORS

Supplied with soldered on flush mount connector Amphenol PT02A10-6S (Mating connector Amphenol PT06A10-6P(SR) not supplied).

FORCE POUNDS	MEASURES PRESSURE ON PINS FROM:	A LENGTH				
		6" LEADS	12" LEADS	18" LEADS	24" LEADS	36" LEADS
125	1/32 Thru 3/32 (1 Thru 3mm) dia.	BS411C6	BS411C12	BS411C18	BS411C24	–
500	1/16 Thru 3/16 (2 Thru 6mm) dia.	–	BS412C12	–	BS412C24	BS412C36
2000	3/16 Thru 1/2 (6 Thru 16mm) dia.	–	BS413C12	–	BS413C24	BS413C36

BUTTON SENSOR EXTENSION CABLE*

ITEM NUMBER	LENGTH
BSC-10	10 FEET

*Mates with connector on button sensors above. Amphenol PT06A10-6P(SR) on each end. Use where required for monitoring and control equipment

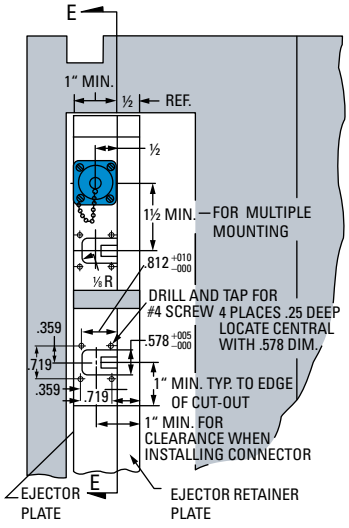
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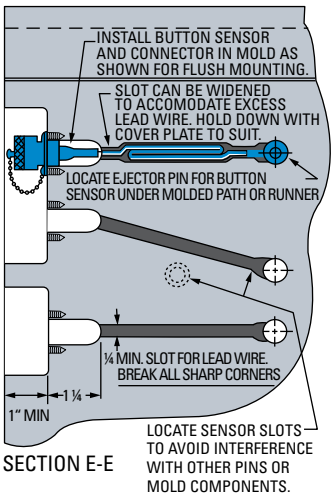
Button Mold Pressure Sensors

INSTALLATION INFORMATION

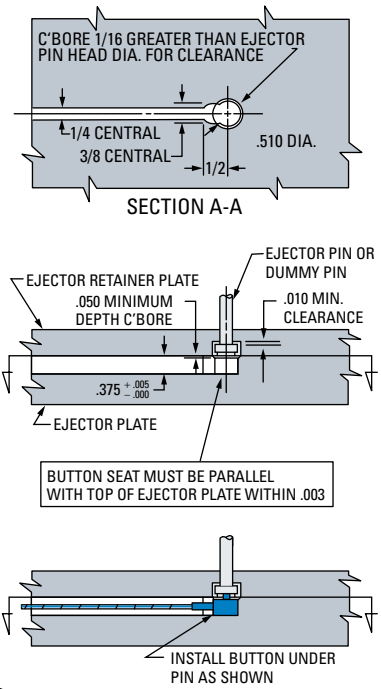
FLUSH MOUNTED CONNECTOR



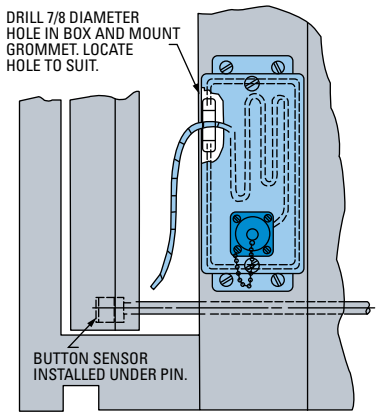
NOTE: When ejector plate is thicker than 1" connector may be centered on plate thickness. Altering mounting dimensions as required slot for lead wire should be depended as it approaches connector end as required.



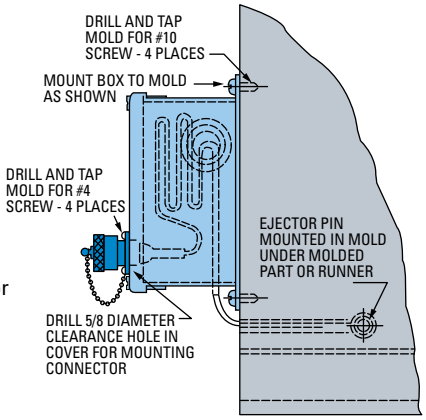
NOTE: When dummy pin installation is made. Altering mounting dimensions and location as required



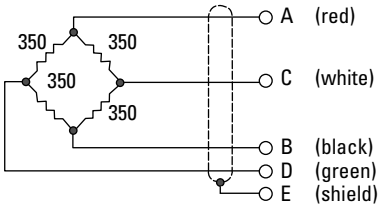
OUTSIDE BOX MOUNTED



NOTE: When installing button sensor in mold pass button through hole in cover and Hole in box before incorporating into mold under pin excess wire may be left in box.



WIRING INFORMATION



+ POWER	A	(red)
– POWER	B	(black)
+ SIGNAL	C	(white)
– SIGNAL	D	(green)
GROUND	E	(shield)

WARNING:
DO NOT REMOVE CONNECTOR FROM SENSOR CABLE. CALIBRATION WILL BE ALTERED.

NOTE: MATING CONNECTOR IS AMPHENOL PT06A10-6P(SR).

SPECIFICATIONS

PRESSURE MEASUREMENT RANGE (FOR RECOMMENDED PIN DIAMETERS) ..... 0 to 20,000 psi

FORCE RANGE	lb.	kg.
ITEM NO. BS-411C	125	60
ITEM NO. BS-412C	500	225
ITEM NO. BS-413C	2000	900

MAXIMUM LOAD ..... 150% FULL SCALE
TEMPERATURE RANGE ..... 0°F TO 450°F
TEMPERATURE COMPENSATION ..... 2% FULL SCALE
INPUT ..... 12V MAX.
OUTPUT ..... 2.0 mV/V FULL SCALE
ACCURACY ..... ¾% FULL SCALE
REPEATABILITY ..... 0.1% FULL RANGE OUTPUT
FULL RANGE DEFLECTION ..... LESS THAN .0008"
CIRCUIT ..... 4-ARM 350 OHM BRIDGE
CONNECTOR ..... AMPHENOL PT02A10-6S
MATES WITH AMPHENOL PT06A10-6P (SR)

Slide Mold Pressure Sensors

D-M-E Slide Mold Pressure Sensors are used for measuring pressures in conjunction with auxiliary recording and control equipment in injection and transfer molds. They provide a constant, full-scale output of 2 millivolts per volt. Because each sensor is electrically identical, the need for recalibration of control systems or recorders when a sensor is replaced is virtually eliminated. This means that errors in calibration are non-existent and operating personnel will now have an easier time setting up and operating control systems and recorders.

Constant Output

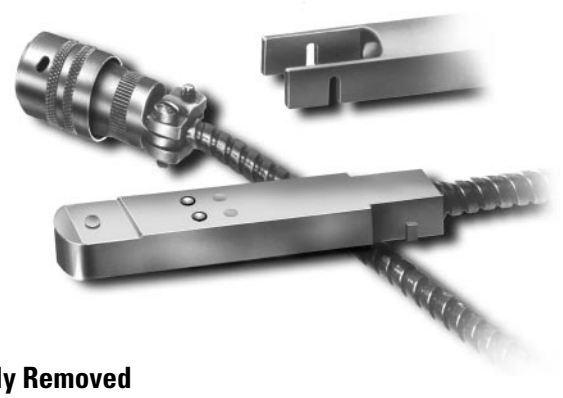
All sensors have the same output. This eliminates the need to recalibrate the readout system when sensors are exchanged.

Hermetically Sealed

Allows the sensor to be used at low temperatures where moisture is a problem.

Temperature Compensated

Special amplifiers are eliminated to compensate for temperature changes.



Easily Removed

Allows user to take sensor from one mold and place in another.

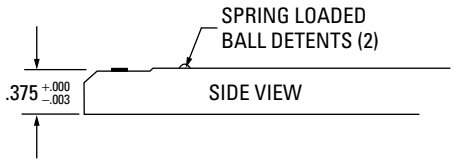
Two Models

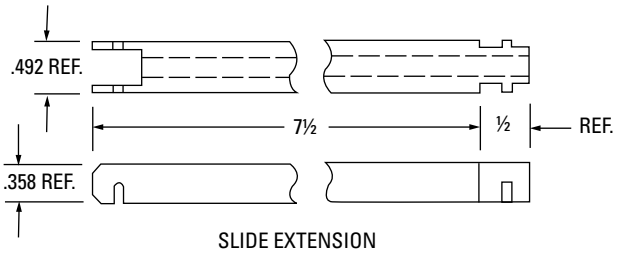
Covers ejector pin sizes from 1/16" to 1/2" diameter, eliminating the need for stocking several different load ranges.

Installation

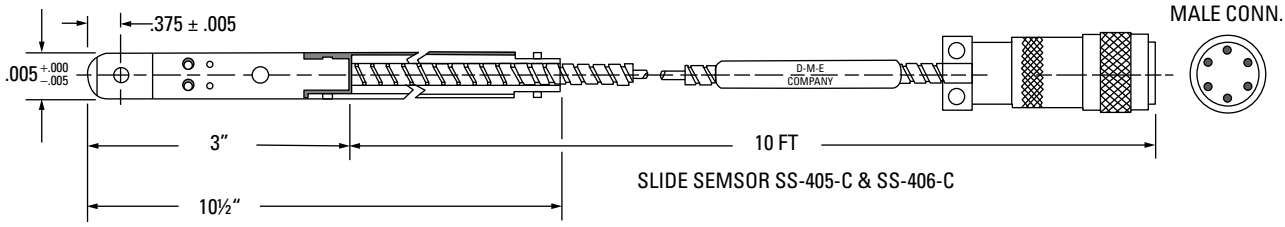
The sensing element is housed in a rectangular slide that plugs into a 3/8" deep by 1/2" wide slot, machined from the edge of the ejector plate to an ejector pin (slot machined in support plate when using a dummy pin). When fully inserted, the sensing element of the slide is under the head of the pin. See installation information for details.

NIST TRACEABLE
SUPPLIED WITH CERTIFICATE OF CALIBRATION

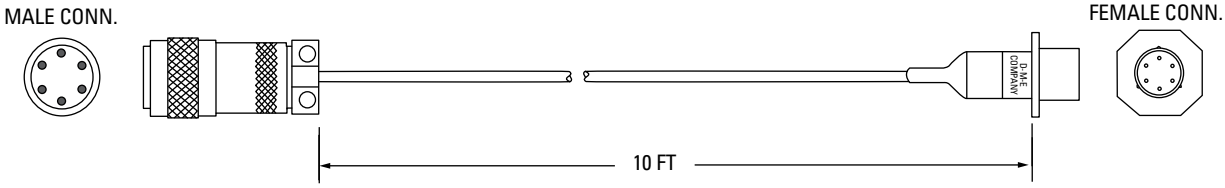




SLIDE EXTENSION



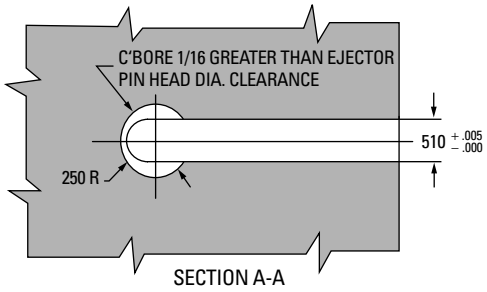
SLIDE SEMSOR SS-405-C & SS-406-C

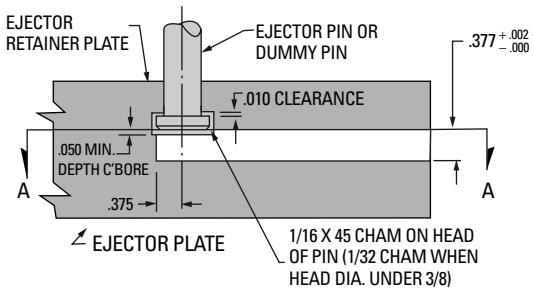


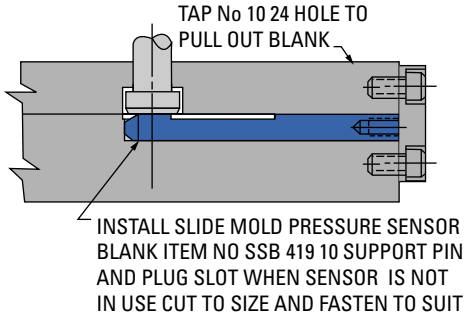
SLIDE SENSOR CABLE SSC-10

Slide Mold Pressure Sensors

INSTALLATION INFORMATION







SLIDE MOLD PRESSURE SENSORS

ITEM NUMBER	MEASURES PRESSURES ON PINS FROM:
SS-405C	1/16 THRU 3/16 (2 THRU 6mm) Dia.
SS-406C	3/16 THRU 1/2 (6 THRU 16mm) Dia.

SIDE EXTENSION

ITEM NUMBER	LENGTH
SSE-418	7½"

SENSOR BLANK

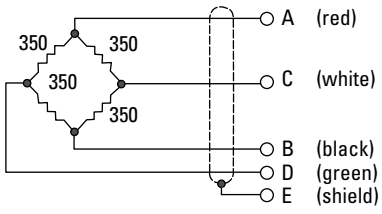
ITEM NUMBER	LENGTH
SSB-419	12"

SLIDE SENSOR EXTENSION CABLE**

ITEM NUMBER	LENGTH
SSC-10	10 ft.

**Mates with connector on slide sensors above. Has Amphenol connector No. PT01A10-6S(SR) on one end and Amphenol connector No. PT06A10-6P(SR) on the other end. Use where required for monitoring and control equipment.

WIRING INFORMATION



+ POWER	A	(red)
– POWER	B	(black)
+ SIGNAL	C	(white)
– SIGNAL	D	(green)
GROUND	E	(shield)

WARNING:
DO NOT REMOVE CONNECTOR FROM SENSOR CABLE. CALIBRATION WILL BE ALTERED.

SPECIFICATIONS

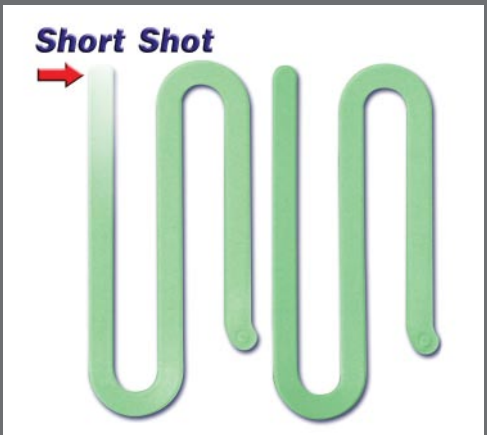
PRESSURE MEASUREMENT RANGE ..... 0 to 20,000 psi
(FOR RECOMMENDED PIN DIAMETERS)

FORCE RANGE	lb.	kg.
ITEM NO. SS-405C	500	225
ITEM NO. SS-406C	2000	900

MAXIMUM LOAD ..... 150% FULL SCALE
TEMPERATURE RANGE ..... 0°F TO 450°F
TEMPERATURE COMPENSATION ..... 2% FULL SCALE/100°F
INPUT ..... 12V MAX.
OUTPUT ..... 2.0 mV/V FULL SCALE
ACCURACY ..... ¾% FULL SCALE
REPEATABILITY ..... 0.1% FULL RANGE OUTPUT
FULL RANGE DEFLECTION ..... LESS THAN .0008"
CIRCUIT ..... 4-ARM 350 OHM BRIDGE
CABLE LENGTH ..... 10 FEET
CONNECTOR ..... AMPHENOL PT06A10-6P(SR)
MATES WITH AMPHENOL PT01A10-6S(SR)

Using Process Controls and Monitoring to Achieve Optimal Molding Results

Ensuring part quality — everytime.







D-M-E button sensors, slide sensors and injection process controllers can be used for a number of applications. Assuming one is using newer injection molding machine technology with 3-stage control, managing the peak cavity pressure during pack (2nd stage) will guarantee consistent part quality. Peak cavity pressure determines how much plastic is injected into the part. Having consistent peak pressure during injection, shot after shot, guarantees that all parts in production are of the same size. This is referred to as process control.

Another application is that of process monitoring. By placing an ejector pin and a sensor at the last location in the part to fill, the sensor can be used to determine whether a short shot occurred. By determining the minimum pressure that defines a filled part, monitoring the process can determine whether a short shot has occurred. Many molders have used this method to scrap a suspected bad part because they would rather risk scrapping a good part than supplying a defective part to their customer. This is a fairly common practice for molders supplying certain industries, including automotive.

Many customers use D-M-E sensors in conjunction with plant-wide monitoring systems to automatically control conveyors. If a specific range of cavity pressure is not realized during ejection, the part is automatically scrapped. Again, this practice of scrapping a potentially good part rather than supplying a bad part to a customer ensures that part quality remains consistently good.

The D-M-E Injection Process Controller (IPC) can operate in a couple different ways. It can act as an amplifier to supply zero to one, zero to five, or zero to 10 volts DC. It can also output a four to 20 milliamp signal. If the molding machine has cavity pressure control but no strain gauge amplifier, the IPC can be used to fill the void. The IPC can also accept a relay contact closure indicating that injection forward is occurring. It can then use a pressure setpoint to trigger a relay contact to inform the molding machine that a specific cavity pressure has occurred. This action instructs the molding machine to go into a hold (3rd stage) state. Since there is a slight delay in triggering the machine, a slightly lower setpoint is used than the peak pressure.

The injection signal into the IPC also triggers a peak hold circuit so that peak cavity pressure is maintained on the display of the IPC until the end of injection.

For more information about setting up process control and monitoring applications, visit www.dme.net.

Valve Gate Controls

ENERGY EFFICIENT, RELIABLE
AND COMPACT HYDRAULIC
AND PNEUMATIC CONTROLS



4-Zone and 8-Zone Timer-Based Sequencers

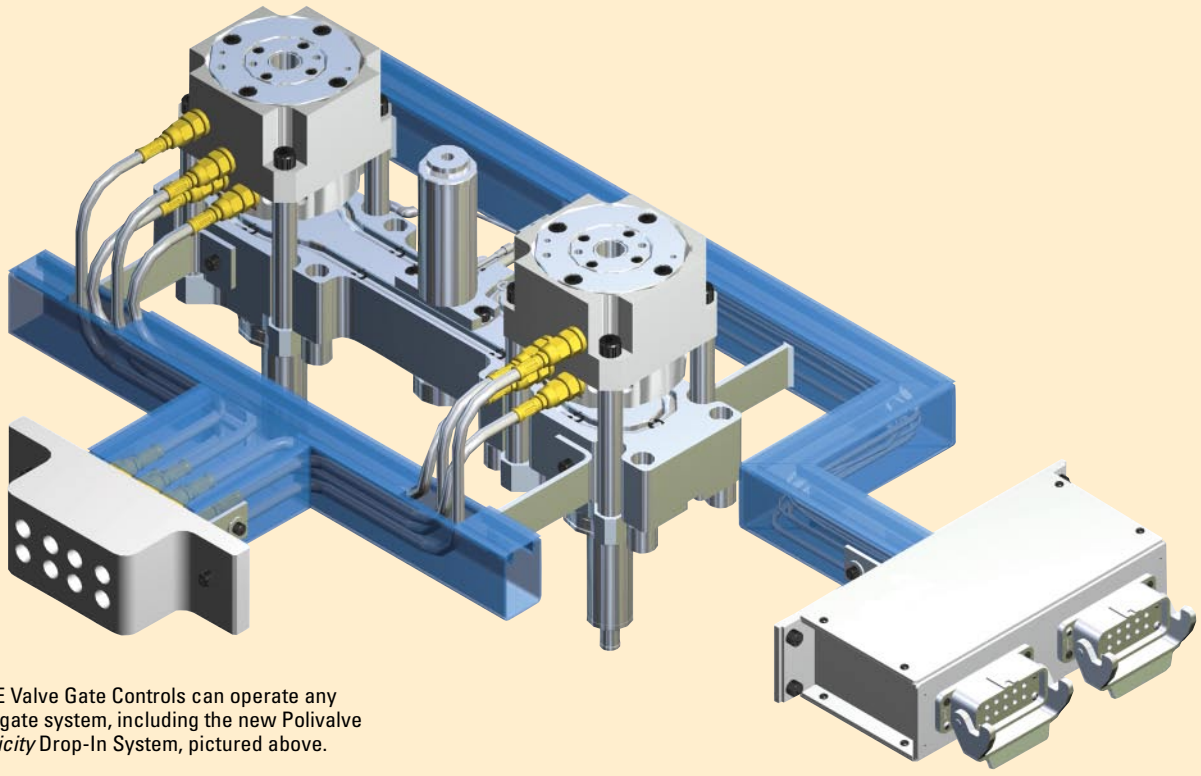
- Solid-state timers and relays have a life rating of 10 million cycles
- Robust power supply
- User-friendly auto-reset function
- Individual test buttons for each zone provide precise time control to .01 second
- Compact design takes up minimal space
- Air-powered operation runs on 120 VAC and an air line
- Accumulator stores precharged oil, allowing for instantaneous operation

Hydraulic and pneumatic valve gate controls provide reliable, accurate and efficient control

Valve gate sequencers from D-M-E are available in pneumatic or hydraulic control for timer-based actuation of up to eight valve gates. Offering faster response than typical valve gate controllers and greatly reduced electrical use over the life of the unit, D-M-E Valve Gate Controls provide reliable, accurate, highly efficient time control for years of use.

Controllers feature highly accurate (resolution to 1/100 of a second) DIN-style solid state timers, individually fused against faults, to provide long life and high reliability. Each timer is capable of dual time functions, allowing each zone to be programmed with a delay-time and an on-time. Test functions for each zone assist in determining the correct hookup of each valve.

The controllers operate from a wide supply of operating voltages (88 to 264 volts AC), making them easy to relocate between different plants or even different countries. The standard product is offered with a 125 volt AC plug (North American Standard). This plug can be removed and replaced with any number of 240 VAC plugs.



D-M-E Valve Gate Controls can operate any valve gate system, including the new Polivalve *Simplicity* Drop-In System, pictured above.

4-Zone and 8-Zone Timer-Based Sequencers

VCTH4000 and VCTH8000: 4-zone and 8-zone hydraulic control

The VCTH4000 provides four zones of hydraulic actuation and the VCTH8000 provides eight zones of actuation.

Hydraulic connections on the back of each controller allow for quick connect and disconnect of the hydraulic lines from the controller. This air-powered unit runs on 88 to 264 volts with a single air line. Because the VCTH pumps only when pressure build-up is required, operation is energy efficient, providing a low-cost energy solution. This style of pump also prevents degradation of hydraulic oil.

A hydraulic accumulator stores precharged oil, which provides on-demand flow for fast actuation of hydraulic cylinders. This powerful hydraulic system can provide up to 10 times the incoming air pressure.

ITEM NUMBER	DESCRIPTION
VCTH4000	4-ZONE HYDRAULIC CONTROLLER
VCTH8000	8-ZONE HYDRAULIC CONTROLLER
VCAH1500	15-FT. LONG HYDRAULIC HOSE ASSEMBLY

Note: Hydraulic hose assemblies and trigger signal cable included with each controller.



D-M-E Valve Gate controllers provide an extended life cycle, energy savings and more accurate time settings.

Compact 4-zone pneumatic or hydraulic control unit

The VCTB4000 Valve Gate Controller is designed to provide timer-based control of up to four 24 volt DC valves used to actuate pneumatic valve gate cylinders as well as some hydraulic valves, and features a user-friendly auto-reset feature. Its compact size makes it extremely portable and requires minimal space. A single DB-025 cable connects the controller to up to four remotely located valves, minimizing wiring and air connections.

ITEM NUMBER	DESCRIPTION
VCTB4000	4-ZONE PNEUMATIC HYDRAULIC CONTROLLER
VCPT0100	100-FT. LENGTH OF PNEUMATIC TUBING

Note: Trigger signal cable included with controller.



Highly accurate D-M-E solid state timers feature resolution to 1/100 of a second, far exceeding the industry standard of 1/10 of a second.

VCAP Air Valve Assemblies

VCAP multi-station air valve assemblies

The VCAP series offers 4-station (0400), 6-station (0600), 8-station (0800), 10-station (1000), and 12-station (1200) valve assemblies. The single-solenoid valves are spring returned and designed to run from 24 VDC +/- 10%. The air supply (maximum rated pressure 145 PSI) can be lubricated or non-lubricated — dry air is preferred but the valve is designed to tolerate some moisture.

Quick connects are provided on all air outputs to accept standard 1/4" tubing. The de-energized outputs, used for closing valve gates, feature check valves to ensure that unused valves do not leak air.

ITEM NUMBER	DESCRIPTION
VCAP0400	4-STATION AIR VALVE ASSEMBLY
VCAP0600	6-STATION AIR VALVE ASSEMBLY
VCAP0800	8-STATION AIR VALVE ASSEMBLY
VCAP1000	10-STATION AIR VALVE ASSEMBLY
VCAP1200	12-STATION AIR VALVE ASSEMBLY

Note: Each valve assembly includes a valve cable.



Technical Support

TECHNICAL SUPPORT: CURRENT LISTING OF ONLINE DOCUMENTS

Visit www.dme.net under D-M-E Americas "North America". Select "Download Documents" – Product Application Guides, Frequently Asked Questions, etc. for the most current listings.

Valve Gate Control Related

Valve Gate Controller User Manual

- VCTH-4000, 8000 Four-Zone and Eight-Zone Timer Based Hydraulic Valve Gate Controller User Manual
- Valve Gate Controller User Manual

Air Valve Assemblies User Manual

- Air Valve Assemblies User Manual

Pressure Control Related

- IPC-01-01 Pressure Control Unit User's Manual (625KB)
- Sensor Cables (54KB)
- Technical Literature for D-M-E Pressure Transducers - Revision 1.1 (16KB)
- A Short Tutorial on Cavity Pressure Transducers Usage 06-22-93 (25KB)

SMART SERIES® Temperature Control Related

Temperature Control Guides Replacement Parts

- Temperature Control Replacement Parts List (ED-0095-PL-001-H) (112KB)

Mainframes

- MFP1G, MFP1G1, MFPR2G, MFFPR2G & MFHP1G Mainframe User's Manual (427KB)
- MFP5G, MFP8G, & MFP12G Mainframe User's Manual (660KB)
- MFP5G, MFP8G, & MFP12G Mainframe User's Manual (Chinese Version) (3.15MB)
- MFHP2G, MFHP3G, & MFHP5G High Power Mainframe User's Manual (742KB)
- How to Calculate the Required KVA Size Needed for a D-M-E Single Phase Power Transformer (4KB)
- How to Calculate the Required KVA Size Needed for a D-M-E Three Phase Power Transformer (6KB)
- "G" Series Mainframe Replacement Parts
- Power and Thermocouple Cables

Temperature Controls

- SSM-15-11, SSM-15-12 & SSM-30-12 Temperature Control Module User's Manual (690KB)
- SSM-15-01, SSM-15-02 & SSM-30-02 Temperature Control Module User's Manual (447KB)
- SSM-15-01, SSM-15-02 & SSM-30-02 Temperature Control Module User's Manual (Chinese Version) (1.73MB)
- SSM-15-G & SSM-30-G SSMX-15-G & SSMX-30-G Temperature Control Module User's Manual (141KB)
- DSS-15-11, DSS-15-12 & DSS-30-12 Temperature Control Module User's Manual
- Old DSS-15-01, DSS-15-02 & DSS-30-02 Temperature Control Module User's Manual (222KB)
- DSS15G Temperature Control Module User's Manual (681KB)
- CSS-15-02 & CSS-30-02 Temperature Control Module User's Manual (242KB)
- CSS-15 & CSS-30 Temperature Control Module User's Manual (750KB)
- CIM-01-01 & CIM-01-02 Computer Interface Module User's Manual (114KB)
- CIM-10-G & CIM-10-GS Computer Interface Module User's Manual (743KB)
- SSH-10-01 & SSH-10-02 Temperature Control Unit User's Manual (522KB)
- SSH-10-21, SSH-10-22 & ESH-10-22 Temperature Control Unit User's Manual (427KB)
- SSH-10-11, SSH-10-12 & ESH-10-12 Temperature Control Unit User's Manual (427KB)
- TAS-05-02 Temperature Alarm & Stand-by Heat Module User's Manual (310KB)
- TAS-05-11, TAS-05-12 Temperature Alarm & System Control Module User's Manual (284KB)
- SMP/CMP Microprocessor Temperature Control Modules Technical Manual (obsolete product) (1.24MB)
- SMP/CMP Calibration Procedure
- Series 965 - 1/16 DIN Microprocessor-Based Auto-tuning Control User Manual (1.97MB)

Frequently Asked Questions - Temperature Controls

- Temperature Control Guides - Frequently asked questions
- Temperature Controls - Not Heating Up/SHI/Anti-Arc Clips Problems
- Selecting Connectors for a 2-Zone MFPR2G
- Selecting Connectors for a SSH Hookup Diagram

Technical Support

TECHNICAL SUPPORT: CURRENT LISTING OF ONLINE DOCUMENTS

Integrity™ Temperature Control Related

- INTEGRITY™ Control System User's Guide

TECHNICAL SUPPORT: MISCELLANEOUS

General Transformer Rules of Thumb (Typical 3 Phase, 3 Wire Delta Type Power Connection)

- Heavy Duty Main Frame Stands required with Transformer Kits above 15 KVA.
  (1 KVA transformer rating = 1000 Watts of Resistance Heater Loads)
- Typical Modules Requirements
  - 15 amp 240 VAC modules rated at 3600 Watts Maximum
  - 10 amp 240 VAC modules rated at 2400 Watts Maximum
  - 5 amp 240 VAC modules rated at 1200 Watts Maximum
- Effects of Line Voltage Supply
  - If resistive heater is rated 1,000 Watts at 240 Vac, its Effective Wattage will be:
    - 750 Watts at 208 VAC drawing 3.6 amps
    - 840 Watts at 220 VAC drawing 3.82 amps
    - 1,000 Watts at 240 VAC drawing 4.17 amps
    - 1,210 Watts at 264 VAC drawing 4.58 amps
- each 100 amp breaker uses 45 KVA minimum for full available power to frame
  (can supply 15 KVA or 15,000 Watts per phase, zones balanced on the 3 phases.)
  - 45 KVA / 12 zones = 3,750 Watts available per zone
  - 45 KVA / 24 zones = 1,875 Watts Average available per zone
  - 45 KVA / 48 zones = 937.5 Watts Average available per zone
- each 70 amp 3 phase breaker uses 30 KVA minimum for full available power to frame
  (can supply 10 KVA or 10,000 Watts per phase, zones balanced on the 3 phases.)
  - 30 KVA /12 zones = 2,500 Watts Average available per zone
  - 30 KVA /24 zones = 1,250 Watts Average available per zone
  - 30 KVA/48 zones = 625 Watts Average available per zone
- each 50 amp 3 phase breaker uses 22.5 KVA min. for full available power to frame
  (can supply 7.5 KVA or 7,500 Watts per phase, zones balanced on the 3 phases.)
  - 22.5 KVA /12 zones = 1875 Watts Average available per zone
  - 22.5 KVA /24 zones = 916 Watts Average available per zone
  - 22.5 KVA/48 zones = 468 Watts Average available per zone

Returning Items to D-M-E U.S. for

- Repairs

  You can send temperature control repairs and modules needing calibration to:

  D-M-E Repairs
  1419 State Route 45 South
  Austinburg, Ohio 44010

  Please enclose contact information and a description of what problems you have been experiencing with the product. Module repairs are a fixed price. Cable and main frame repairs depend on what needs to be serviced. Warranty service is also covered via this method, however, module fuses and triacs are not covered.

- Return for Credit

  Call D-M-E USA at 1-800-626-6653 or D-M-E Canada at 1-800-387-6600 toll free

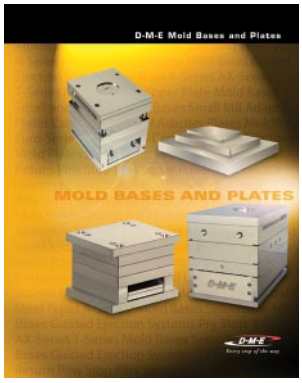
D-M-E U.S. Custom Quote Procedures

- Cables
- Special Mainframe Requirements
- Contact Thom Linehan at 248-544-5027 or email at thom_linehan@dme.net

D-M-E: Your Complete Mold Technologies Provider

Every step of the way

Check Out All of the D-M-E Mold Technology Catalogs And You'll See Why We're an Essential Resource to Thousands of Customers Worldwide!



CATALOG: 308 PAGES

D-M-E Mold Bases & Plates

Choose from the world's widest selection of mold bases from uniquely featured, off-the-shelf solutions to full-featured, custom-configured offerings. An array of standard and specially machined mold plate sizes gives you unlimited options.



CATALOG: 156 PAGES

MUD Quick-Change Systems From D-M-E

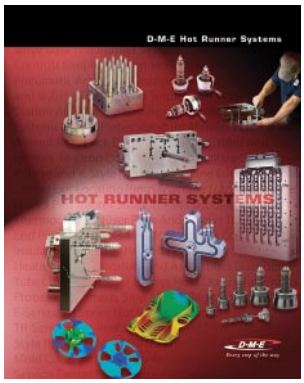
Reduce downtime by as much as 75 percent with an innovative approach to fast production changeovers. Master Unit Die is the leader in quick-change systems and the MUD Catalog offers many systems that will maximize your production volume.



CATALOG: 316 PAGES

D-M-E Mold Components

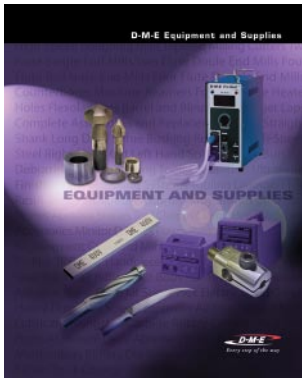
With the largest selection of mold components available around the globe, the D-M-E Mold Components Catalog has the products that will help you meet the unprecedented demands you face for speed, cost reduction and performance.



CATALOG: 174 PAGES

D-M-E Hot Runner Systems

Moldmakers, molders and mold designers worldwide look to the D-M-E Hot Runner Systems Catalog for essential hot runner solutions. From best-in-class components to complete, fully-functioning hot half systems, D-M-E has the broadest range of hot runner products and services.



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D-M-E Equipment and Supplies

From high-speed cutting tools and finishing and polishing systems to a vast array of maintenance, repair and operation-related products, the D-M-E Equipment and Supplies Catalog is an invaluable resource for mold technology professionals.



CATALOG: 68 PAGES

D-M-E Technical Services

From powerful, online resources available 24/7, to our team of trained, experienced experts committed to helping customers achieve maximum productivity, reliable operation, and better performance, D-M-E's goal is simple: to be an essential resource for your molding challenges every step of the way.

D-M-E, an essential resource to the customers it serves worldwide, offers the industry's broadest range of market-leading products, unsurpassed knowledge and expertise, a global logistics infrastructure that ensures speed and accuracy, and a support organization unrivaled for its ability to assist customers when and where they need it. A complete line of hot runner systems, control systems, mold bases, MUD quick-change mold systems, mold components, moldmaking and molding equipment supplies, and technical services helps customers compete every step of the way.



D-M-E
Every step of the way

World Headquarters
D-M-E Company
29111 Stephenson Highway
Madison Heights, MI 48071
800-626-6653 *toll-free tel*
248-398-6000 *tel*
888-808-4363 *toll-free fax*
www.dme.net *web*
info@dme.net *e-mail*

D-M-E of Canada, Ltd.
6210 Northwest Drive
Mississauga, Ontario
Canada L4V 1J6
800-387-6600 *toll-free tel*
905-677-6370 *tel*
800-461-9965 *toll-free fax*
dme_canada@dme.net *e-mail*

D-M-E Europe C.V.B.A.
Industriepark Noord
B-2800 Mechelen Belgium
32-15-215011 *tel*
32-15-218235 *fax*
sales@dmeeu.com *e-mail*

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ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

D-M-E Equipment and Supplies



D-M-E
Every step of the way

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Clean and protect your molds

Online Price Guide

Go to www.dme.net/prices for the latest pricing guide.

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Terms and Conditions of Sale

1. **FOB POINT / PRICES:** Products are sold F.O.B. point of origin. Any taxes are in addition to the prices and may be invoiced later.
2. **SHIPPING SCHEDULE:** The shipping schedule is our current estimate of delivery dates and we agree to use reasonable efforts to comply with the schedule.
3. **WARRANTY:**
   (a) Any D-M-E trademarked or tradenamed product or part thereof manufactured by or for us which, under normal operating conditions in the plant of the Buyer thereof, proves defective in material or workmanship, as determined by our inspection, within 12 months from the date of shipment will be replaced or repaired free of charge to Buyer.

   This warranty is contingent upon the following conditions: *that we promptly receive notice of the defect; that Buyer establish that the product has been properly installed, maintained, and operated within the limits of related and normal usage as specified by us; and that, upon our request, Buyer will return to us at our expense the defective product or part thereof.*

   (b) The terms of this warranty do not in any way extend to any product or part thereof which have a life, under normal usage, inherently shorter than 12 months.
   (c) The conditions of actual production in each end user's plant vary considerably. Therefore, descriptions of the production or performance capabilities of any product or software materials are estimates only and are not warranted.
4. **EXCLUSIONS OF WARRANTIES:** THE WARRANTIES TO REPAIR OR REPLACE DEFECTIVE PRODUCTS OR PARTS AS SET FORTH IN PARAGRAPH 3, AND ANY ADDITIONAL WARRANTY EXPRESSLY STATED TO BE A WARRANTY AND SET FORTH IN WRITING AS PART OF THESE TERMS HEREIN ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
5. **LIMITATION OF REMEDIES AND LIABILITIES:**
   UNDER NO CIRCUMSTANCES SHALL WE OR ANY AFFILIATE OF OURS HAVE ANY LIABILITY WHATSOEVER FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES HOWSOEVER CAUSED OR ARISING (INCLUDING CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE), such as, but not limited to, loss of profit or revenue; loss of use of the product, part thereof; cost of capital; cost of replacement equipment; or claims resulting from contracts between Buyer, its customers and/or suppliers. Unless expressly provided for herein, in no event shall we or any affiliate of ours assume responsibility or liability for (a) penalties, penalty clauses or liquidated damages clauses of any description, (b) certifications or (c) indemnification of Buyer or others for costs, damages or expenses arising out of or related to the product or part thereof.
6. **CANCELLATION:** Unless otherwise agreed, Buyer may cancel all or any part of the order by written notice received by us before our completion of the order or applicable portion of the order. On receipt of such notice, all work on the order or part thereof canceled will be stopped as promptly as is reasonably possible. Buyer will then be invoiced for and will pay to us a cancellation charge. For completed items, the charge will be equal to their established prices. For items not completed, the charge will be equal to our full cost plus a premium in addition to a charge for any packing and storage and less a credit for the balance of the material as scrap.
7. **PAYMENT TERMS:** Payment is due in accordance with any applicable progress, advance or other agreed upon payment schedule, or, if no such schedule has been agreed to, upon Acceptance as specified in Paragraph 8, but in no event later than 30 days from the date of invoice. No cash discount is provided. If, in our judgment, Buyer's financial condition changes, we may stop work until financial arrangements satisfactory to us are made.
8. **ACCEPTANCE OF PRODUCT:** Each such product shall be deemed to be accepted within seven days after delivery of the product to the Buyer, unless we receive written notification of rejection for cause from Buyer within the seven day period.

   "Returned Goods": No goods are returnable without prior approval, prepaid transportation and an issued RMA number. All items are subject to our inspection before credit will be allowed. Special mold bases or steel, items involving custom work, or items not shown in our catalog are considered non-returnable. A minimum service charge of 10% will be made on all returned goods.
   NO GOODS ARE RETURNABLE LATER THAN THIRTY DAYS AFTER RECEIPT OF MERCHANDISE.
9. **PATENT INDEMNITY:** We shall defend any suit or proceeding brought against Buyer and pay all costs and damages awarded against Buyer provided that:
   (a) The suit or proceeding is based upon a claim that the product or part thereof is an infringement of any claim of a presently existing U.S. patent;
   (b) The claim of infringement is not based, directly or indirectly, upon (i) the manufacture, use, or sale of any product furnished by us which has been modified without our consent; or, (ii) the manufacture, use, or sale of any combination of a product furnished by us with products not furnished by us; or (iii) performance of a patented process using a product furnished by us or production thereby of a patented product; and,
   (c) We are notified promptly and given information and assistance (at our expense) and the authority to defend the suit or proceeding. We shall not be responsible hereunder for any settlement made without our written consent nor shall we be responsible for costs or expenses incurred without our written consent. If our product is adjudicated to be an infringement and its use in the U.S. by Buyer is enjoined, we shall, at our own expense, either:
      (i) procure for Buyer the right to continue using our product;
      (ii) replace it with a noninfringing product;
      (iii) modify it so it becomes noninfringing;
      (iv) remove the product or part thereof and refund Buyer's net book value and transportation costs attributable to it.

   The foregoing states our entire liability with respect to any patent infringement by our products or any parts thereof. To the extent that our product or any part thereof is supplied according to specifications and designs furnished by Buyer, Buyer agrees to indemnify us in the manner and to the extent set forth above insofar as the terms thereof are appropriate.
10. **FORCE MAJEURE:** We shall not be liable for any delay in performance or nonperformance which is due to war, fire, flood, acts of God, acts of third parties, acts of governmental authority or any agency or commission thereof, accident, breakdown of equipment, differences with employees or similar or dissimilar causes beyond our reasonable control, including but not limited to, those interfering with production, supply or transportation of products, raw materials or components or our ability to obtain, on terms we deem reasonable, material, labor, equipment or transportation.
11. **ACCEPTANCE OF ORDERS:** Buyer agrees that all orders, including any arising from our Proposal, shall include these terms and conditions only, notwithstanding any different or additional terms that may be embodied in Buyer's order. All orders are subject to our acceptance and we reserve the right to reject orders as, in our sole judgement, mandated by business conditions. We reserve the right to not proceed with any order until all necessary information is received from Buyer.
12. **MERGER CLAUSE:** This Agreement entirely supersedes any prior oral representations, correspondence, proposal, quotation, or agreement. This writing constitutes the final and total expression of such agreement between the parties, and it is a complete and exclusive statement of the terms of that agreement.
13. **ASSIGNMENT:** Neither party may assign this Agreement without the written consent of the other party, except that we may assign this Agreement to a third party that acquires substantially all of our assets or we may assign the flow of funds arising out of this Agreement.
14. **GOVERNING LAW:** This Agreement shall be governed by and construed in accordance with the laws of the State of Michigan.

Sales and Ordering Information

U.S.A.

TERMS AND CONDITIONS OF SALE: See previous page.

PHONE ORDERS – TOLL FREE: 800-626-6653. D-M-E's Customer Service Dept. operates Monday through Friday from 8 a.m. to 8 p.m. E.S.T. Calls can be made from anywhere in the continental U.S. and Puerto Rico (Puerto Rico: use "137" prefix instead of "1"). Our Customer Service Representatives will be happy to answer your questions on D-M-E products or services, provide on-the-spot feedback on product availability and shipping details, or take any messages you wish relayed to your local D-M-E sales, manufacturing or technical service representatives.

MAIL ORDERS: If you prefer to order by mail, please address your order to:

- D-M-E Company, 29111 Stephenson Highway, Madison Heights, Michigan 48071-2330
  ATTN: Customer Service Dept.

FAX: You may fax your order to:

- D-M-E Customer Service
  248-398-6174 • 888-808-4363

CHECKS OR MONEY ORDERS: When paying invoices by check or money order, please make payable to *D-M-E Company.* Include remittance copy of invoice and mail to:

- D-M-E Company, Department Lock Box 78242, P.O. Box 78000, Detroit, Michigan 48278-0242

WALK-IN ORDERS, PICK-UPS AND RETURNS: If desired, ordered products in stock at your nearest D-M-E Service Center can be picked up rather than shipped. Walk-in orders at Service Center locations can also be processed while you wait. Products being returned for repair or exchange should be processed through Customer Service prior to being returned.

SPECIAL MACHINING SERVICES: Prints for quotation on special machining work can be sent by EDI to dme_cad@dme.net or mailed to the Estimating Department of the D-M-E manufacturing location nearest you. Call our toll-free number if desired to clarify location which serves your area.

Estimating locations are:

- 70 East Hillis Street, Youngwood, Pa 15697, FAX: 724-925-2424
- 1117 Fairplains Street, Greenville, MI 48338, Tel. 616-754-4601, FAX: 616-225-3924
- 3275 Deziel Drive, Windsor, Ont N8W 5A5, Tel. 519-948-5001, FAX: 519-948-4652
- 464-466 Windy Point Drive, Glendale Heights, IL 60139, Tel. 630-469-4280, FAX: 630-469-4740 (estimating only)

Please add "D-M-E Company" and "Attn: Estimating Dept." to above addresses when mailing prints. To obtain prices and delivery on special mold base orders or to check status of special work in progress please contact Customer Service.

CANADA

TERMS AND CONDITIONS OF SALE: See previous page.

PHONE ORDERS: Contact our Mississauga, Ontario office at 800-387-6600, FAX: 800-461-9965.

MAIL ORDERS: Send to: D-M-E of Canada, Ltd., 6210 Northwest Drive, Mississauga, Ontario L4V 1J6.

CHECK OR MONEY ORDERS: Make payable to *D-M-E of Canada, Ltd.* Include remittance copy of invoice and mail to Mississauga address above.

WALK-IN ORDERS, PICK-UPS, RETURNS, AND SPECIAL MACHINING: Contact our Mississauga office.

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Introduction

D-M-E Company offers a wide range of equipment and supplies for moldmakers and molders. From high-speed cutting tools and a wide variety of finishing and polishing systems to a vast array of maintenance, repair and operation-related products, D-M-E has the products you need to compete every step of the way.

Our line of cutting tools designed for moldmakers ranges from high-speed roughing mills and tapered milling cutters to counterbores, sprue bushing reamers, and dozens of lapping tools.

D-M-E has been an essential finishing and polishing resource to its customers for decades with the Ultraform System that effectively replaces expensive and time-intensive hand-finishing operations. Two models of the ultrasonic device are designed to handle virtually any finishing need. An extensive assortment of tools and accessories come with each unit, and additional tooling is also available.

The Minitor D Series is a popular line of hand pieces that offers the latest in polishing technology while still providing tremendous flexibility and accuracy. The Minitor D series hand pieces are available in several models and with accessory heads to ensure that your finishing and polishing jobs get done to perfection.

An extensive line of files, rifflers, stones, stone holders and many other accessories provide the perfect resource necessary to achieve any finish. And, the D-M-E Mold Finish Comparison Kit – featuring 12 samples finished to SPI standards – provides a visual and numerical standard for both the selection of finishes required and a comparison to work in progress.

For high-quality mold repairs, the D-M-E ProWeld Micro-Welding System provides precision results that increase mold life after every repair. The system is safe and easy to operate, and reduces repair costs by up to 85% with special metal alloys developed for all conventional types of steel.

Your molds will always be ready to perform with D-M-E mold sprays. Available in 10-ounce aerosol cans or in one-gallon non-aerosol containers, D-M-E Mold Cleaner, D-M-E Mold Saver and D-M-E Mold Release use the finest ingredients to complete the jobs for which they are intended.

For all of your processing needs, D-M-E Molding Supplies offers thousands of economical, high-quality products from auxiliary equipment such as drying hoppers and storage bins to machine parts like screw tips and machine mounts. All of your plumbing, heating and other processing-related needs are better achieved with the high-quality, low-cost offerings from D-M-E Molding Supplies.



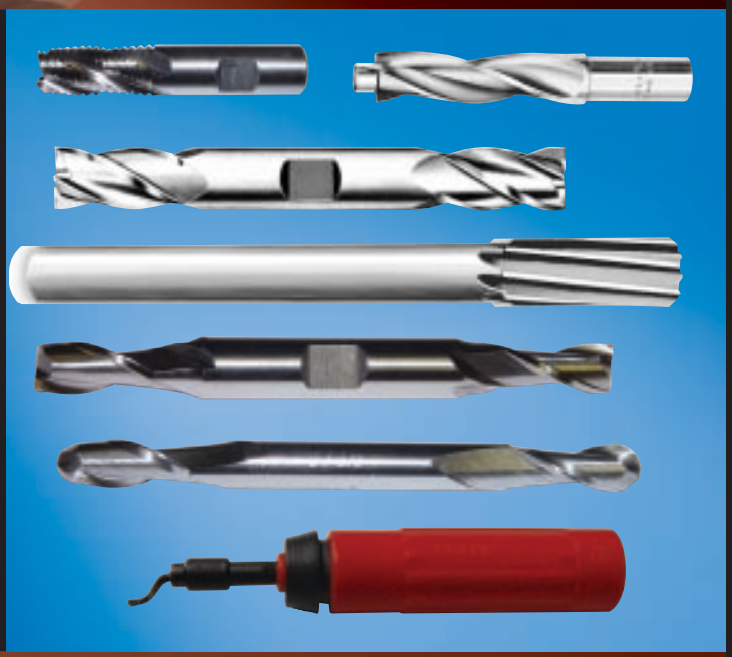


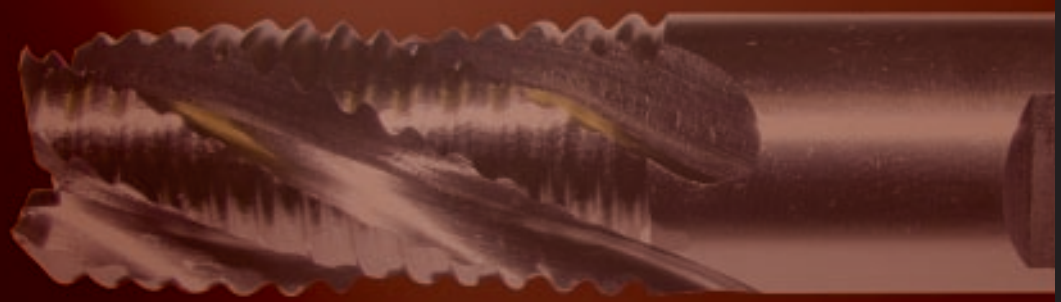




D-M-E Cutting Tools

HIGH-SPEED CUTTING TOOLS
ENGINEERED FOR CONSISTENT
ACCURACY, FASTER PRODUCTION
AND GREATER ECONOMY





High-Speed Roughing Mills

- Rounded cutting teeth produce smaller chips to permit feed rates and stock removal up to four times faster than conventional end mills
- Manufactured to close tolerances so they can be used for NC milling



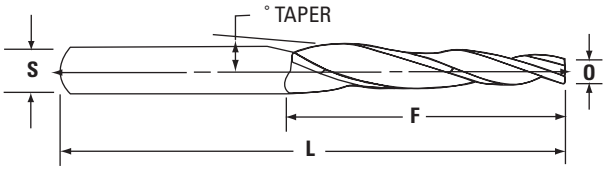
(ITEM NO. RM-34-158)

ITEM NUMBER	MILL DIAMETER	FLUTE LENGTH	SHANK DIAMETER	OVERALL LENGTH	NUMBER OF FLUTES
RM-12-114	½	1¼	½	3¼	4
RM-12-200	½	2	½	4	4
RM-58-158	⅝	1⅝	⅝	3¾	4
RM-58-212	⅝	2½	⅝	4⅝	4
RM-34-158	¾	1⅝	¾	3⅞	4
RM-34-300	¾	3	¾	5¼	4
RM-78-178	⅞	1⅞	¾	4⅛	4
RM-78-312	⅞	3½	⅞	5¾	4
RM-100-200	1	2	1	4½	6
RM-100-300	1	3	1	5½	6
RM-100-400	1	4	1	6½	6
RM-114-200	1¼	2	1¼	4½	6

D-M-E High-Speed Roughing Mills are efficient all-purpose cutting tools. Economically priced, these workhorse products are ideal for mold shops that machine different steel types. Stocked in a variety of mill diameters, D-M-E High-Speed Roughing Mills are available in lengths ranging from 3-1/4 to 6-1/2 inches.

Tapered Milling Cutters





½° TAPER PER SIDE

ITEM NUMBER	O SMALL DIA.	F FLUTE LENGTH	S SHANK DIA.	L OVERALL LENGTH
AX-203	1/8	3/4	3/8	2 1/2
AX-305	3/16	1 1/4	3/8	3 1/8
AX-805	1/2	1 1/4	1/2	3 1/8
AX-609	3/8	2 1/4	1/2	4 1/4
AX-813	1/2	3 1/4	1/2	5 1/2

1° TAPER PER SIDE

ITEM NUMBER	O SMALL DIA.	F FLUTE LENGTH	S SHANK DIA.	L OVERALL LENGTH
A-201	1/8	3/8	3/8	2 1/2
A-203	1/8	3/4	3/8	2 1/2
A-403	1/4	3/4	3/8	2 1/2
A-305	3/16	1 1/4	3/8	3 1/8
A-405	1/4	1 1/4	3/8	3 1/8
A-805	1/2	1 1/4	1/2	3 1/8
A-409	1/4	2 1/4	1/2	4 1/4
A-609	3/8	2 1/4	1/2	4 1/4
A-809	1/2	2 1/4	1/2	4 1/4
A-413	1/4	3 1/4	1/2	5 1/2
A-813	1/2	3 1/4	1/2	5 1/2

2° TAPER PER SIDE

ITEM NUMBER	O SMALL DIA.	F FLUTE LENGTH	S SHANK DIA.	L OVERALL LENGTH
B-203	1/8	3/4	3/8	2 1/2
B-403	1/4	3/4	3/8	2 1/2
B-305	3/16	1 1/4	3/8	3 1/8
B-405	1/4	1 1/4	3/8	3 1/8
B-805	1/2	1 1/4	1/2	3 1/8
B-409	1/4	2 1/4	1/2	4 1/4
B-609	3/8	2 1/4	1/2	4 1/4
B-809	1/2	2 1/4	1/2	4 1/4
B-413	1/4	3 1/4	1/2	5 1/2
B-813	1/2	3 1/4	5/8	5 1/2

OTHER SIZES AND TAPERS AVAILABLE. CONTACT D-M-E.

3° TAPER PER SIDE

ITEM NUMBER	O SMALL DIA.	F FLUTE LENGTH	S SHANK DIA.	L OVERALL LENGTH
C-106	3/32	1 1/2	3/8	3 1/4
C-203	1/8	3/4	3/8	2 1/2
C-305	3/16	1 1/4	3/8	3 1/8
C-409	1/4	2 1/4	1/2	4 1/4
C-809	1/2	2 1/4	5/8	4 1/4
C-613	3/8	3 1/4	3/4	5 1/2

5° TAPER PER SIDE

ITEM NUMBER	O SMALL DIA.	F FLUTE LENGTH	S SHANK DIA.	L OVERALL LENGTH
E-106	3/32	1 1/2	3/8	3 1/4
E-203	1/8	3/4	3/8	2 1/2
E-305	3/16	1 1/4	1/2	3 1/8
E-409	1/4	2 1/4	5/8	4 1/4
E-609	3/8	2 1/4	3/4	4 1/4
E-613	3/8	3 1/4	3/4	5 1/2

7° TAPER PER SIDE

ITEM NUMBER	O SMALL DIA.	F FLUTE LENGTH	S SHANK DIA.	L OVERALL LENGTH
G-106	3/32	1 1/2	1/2	3 1/4
G-203	1/8	3/4	3/8	2 1/2
G-206	1/8	1 1/2	1/2	3 1/4
G-305	3/16	1 1/4	1/2	3 1/8
G-409	1/4	2 1/4	3/4	4 1/4
G-609	3/8	2 1/4	3/4	4 1/4

10° TAPER PER SIDE

ITEM NUMBER	O SMALL DIA.	F FLUTE LENGTH	S SHANK DIA.	L OVERALL LENGTH
J-203	1/8	3/4	3/8	2 1/2
J-405	1/4	1 1/4	1/2	3 1/8
J-805	1/2	1 1/4	3/4	3 3/8

15° TAPER PER SIDE

ITEM NUMBER	O SMALL DIA.	F FLUTE LENGTH	S SHANK DIA.	L OVERALL LENGTH
P-202	1/8	1/2	3/8	2 1/2
P-304	3/16	1	1/2	3
P-406	1/4	1 1/2	3/4	3 5/8
P-805	1/2	1 1/4	3/4	3 1/2

Two Flute End Mills



- New flute shape allows increased feed and FASTER CUTS
- Polished flutes CLEAR CHIPS BETTER
- New flute shape reduces wear and PROLONGS LIFE
- Redesigned clearance gives GREATER ACCURACY

D-M-E End Mills are carefully designed and engineered to give you more cuts per grind, consistent accuracy, faster production and greater economy.

They are stronger because all sharp corners and points where localized stresses might occur have been eliminated. They clear chips better because the redesigned flutes have no "pockets" and allow the chips freedom of movement. New types of clearance and accurate machining of flutes result in closer size control and prevents "flaking" or "chipping out" of cutting edges.



TWO FLUTE SINGLE END MILLS

ITEM NUMBER	MILL DIAMETER	SHANK DIAMETER	FLUTE LENGTH	OVERALL LENGTH
EM685-18	1/8	3/8	3/8	2 5/16
EM685-14	1/4	3/8	1/2	2 5/16
EM685-516	5/16	3/8	9/16	2 5/16
EM685-38	3/8	3/8	9/16	2 5/16
EM685-716	7/16	3/8	1 3/16	2 1/2
EM685-12A	1/2A	3/8	1 3/16	2 1/2
EM685-12B	1/2B	1/2	1	3
EM685-34A	3/4A	1/2	1 5/16	3 5/16
EM685-34B	3/4B	5/8	1 5/16	3 7/16
EM685-1	1	5/8	1 1/2	3 5/8



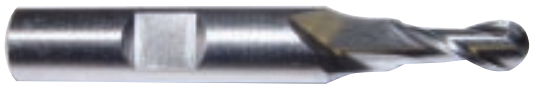
TWO FLUTE DOUBLE END MILLS

ITEM NUMBER	MILL DIAMETER	SHANK DIAMETER	FLUTE LENGTH	OVERALL LENGTH
EM684-18	1/8	3/8	3/8	3 1/16
EM684-316	3/16	3/8	7/16	3 1/8
EM684-14	1/4	3/8	1/2	3 1/8
EM684-516	5/16	3/8	9/16	3 1/8
EM684-38	3/8	3/8	9/16	3 1/8
EM684-12	1/2	1/2	13/16	3 3/4
EM684-58	5/8	5/8	1 1/8	4 1/2



TWO FLUTE DOUBLE END MILLS (Extra Small)

ITEM NUMBER	MILL DIAMETER	SHANK DIAMETER	FLUTE LENGTH	OVERALL LENGTH
EM350-132	1/32	3/16	3/32	2
EM350-116	1/16	3/16	1/8	2



TWO FLUTE BALL NOSE END MILLS (Single End)

ITEM NUMBER	MILL DIAMETER	SHANK DIAMETER	FLUTE LENGTH	OVERALL LENGTH
EM690-14	1/4	3/8	5/8	2 7/16
EM690-516	5/16	3/8	3/4	2 1/2



TWO FLUTE BALL NOSE END MILLS (Double End)

ITEM NUMBER	MILL DIAMETER	SHANK DIAMETER	FLUTE LENGTH	OVERALL LENGTH
EM356-132	1/32	3/16	3/32	2 1/4
EM356-116	1/16	3/16	3/16	2 1/4
EM356-332	3/32	3/16	5/16	2 1/4
EM356-18	1/8	3/16	3/8	2 1/4
EM356-532	5/32	3/16	7/16	2 1/4
EM356-316	3/16	3/16	1/2	2 1/4

Four Flute End Mills



D-M-E Standard Four Flute End Mills provide the plunge cutting ability of a two or three flute end mill plus the finer finishes possible with a four flute end mill. They're effective with a range of materials, including steel, iron and brass.



FOUR FLUTE – DOUBLE END MILLS (Center Cutting)

ITEM NUMBER	MILL DIAMETER	SHANK DIAMETER	FLUTE LENGTH	OVERALL LENGTH
EM582-18	1/8	3/8	3/8	2 1/16
EM582-316	3/16	3/8	1/2	3 1/4
EM582-14	1/4	3/8	5/8	3 3/8
EM582-516	5/16	3/8	3/4	3 1/2
EM582-38	3/8	3/8	3/4	3 1/2
EM582-12	1/2	1/2	1	4 1/8
EM582-58	5/8	5/8	1 3/8	5
EM582-34	3/4	3/4	1 5/8	5 5/8
EM582-1	1	1	1 7/8	6 3/8



FOUR FLUTE – SINGLE END MILLS (Center Cutting)

ITEM NUMBER	MILL DIAMETER	SHANK DIAMETER	FLUTE LENGTH	OVERALL LENGTH
EM588-14	1/4	3/8	1 1/4	3 1/16
EM588-516	5/16	3/8	1 3/8	3 1/8
EM588-38	3/8	3/8	1 1/2	3 1/4
EM588-12	1/2	1/2	2	4
EM588-58	5/8	5/8	2 1/2	4 5/8
EM588-34	3/4	3/4	3	5 1/4
EM588-1	1	1	4	6 1/2



FOUR FLUTE – BALL NOSE END MILLS (Single End – Center Cutting)

ITEM NUMBER	MILL DIAMETER	SHANK DIAMETER	FLUTE LENGTH	OVERALL LENGTH
EM584-38	3/8	3/8	3/4	2 1/2
EM584-12	1/2	1/2	1 1/4	3 1/4



FOUR FLUTE – DOUBLE END MILLS (Small Diameters)

ITEM NUMBER	MILL DIAMETER	SHANK DIAMETER	FLUTE LENGTH	OVERALL LENGTH
EM354-332	3/32	3/16	5/16	2 1/4
EM354-18	1/8	3/16	3/8	2 1/4
EM354-532	5/32	3/16	7/16	2 1/4
EM354-316	3/16	3/16	1/2	2 1/4

Counterbores



- Built-in chamfering operation
- Stub length for rigidity
- Three flute spiral design
- High speed steel

Here is a special purpose tool that not only performs its job well, but gives you added tooling performance besides. The built-in chamfer design automatically allows clearance for the radius under the Ejector Pin Head and insures proper seating of the pin.

D-M-E Counterbores are hardened and precision ground from top quality high speed steel to give you cleaner cutting and longer life. The three-flute spiral design has been engineered to reduce tool wear and give faster cutting action through rapid chip clearance.

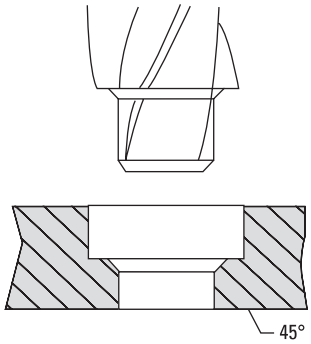
D-M-E Counterbores can help make counterboring easier and reduce your tooling costs… and here's how:

1. Drill the retainer plate to suit your D-M-E Ejector Pin diameter
2. Select the D-M-E Counterbore with the same Item Number as the D-M-E Ejector Pin to be used (*) and counterbore to the proper depth… *And that's it!*

(*) Example: For an EX-17 Ejector Pin or C-17 Core Pin, use a CB-17 Counterbore.

COUNTERBORES FOR EJECTOR PINS

ITEM NUMBER	EJ. PIN SIZE "G"	C-BORE BODY DIA.	PILOT LENGTH*	SHANK DIAMETER	OVERALL LENGTH
CB-9	1/8(†)	17/64	3/16	1/4	2 5/8
CB-10	9/64	17/64	3/16	1/4	2 5/8
CB-11	5/32	19/64	3/16	1/4	2 3/4
CB-12	11/64	23/64	3/16	1/4	3 1/16
CB-13	3/16	25/64	3/16	3/8	3 1/4
CB-14	13/64	25/64	3/16	3/8	3 1/4
CB-15	7/32	27/64	1/4	3/8	3 3/8
CB-16	15/64	27/64	1/4	3/8	3 3/8
CB-17	1/4	29/64	1/4	7/16	3 9/16
CB-18	17/64	29/64	1/4	7/16	3 9/16
CB-19	9/32	29/64	1/4	7/16	3 9/16
CB-20	19/64	33/64	5/16	1/2	3 7/8
CB-21	5/16	33/64	5/16	1/2	3 7/8
CB-22	21/64	37/64	5/16	1/2	4 1/8
CB-23	11/32	37/64	5/16	1/2	4 1/8
CB-24	23/64	41/64	5/16	5/8	4 1/2
CB-25	3/8	41/64	5/16	5/8	4 1/2
CB-27	13/32	45/64	5/16	5/8	4 3/4
CB-29	7/16	49/64	5/16	5/8	4 3/4
CB-31	15/32	49/64	5/16	5/8	5 1/8
CB-33	1/2	49/64	5/16	5/8	5 1/8
CB-35	9/16	53/64	5/16	5/8	5 3/8
CB-37	5/8	57/64	5/16	5/8	5 5/8
CB-39	11/16	61/64	5/16	5/8	5 7/8
CB-41	3/4	1 1/64	5/16	5/8	6 1/4
CB-45	7/8	1 3/64	5/16	3/4	6 1/4
CB-47	1"	1 17/64	5/16	3/4	6 1/4



COUNTERBORES FOR JIFFY-TITE CONNECTORS

ITEM NUMBER	FOR USE WITH	C-BORE BODY DIA.	PILOT DIA.	SHANK DIA.	OVERALL LENGTH
CB-80	JP-251	11/16	.337	1/2	4 1/8
CB-81	JP-252(SV)	27/32	.435	5/8	4 3/4
CB-82	JP-253(SV) JP-353(SV)	1.000	.575	5/8	5 5/8
CB-83	JP-354(SV)	1 3/16	.715	3/4	6 1/4

(†) For EX-3 through EX-9 Ejector Pins, use Counterbore CB-9.
*Pilot diameters are approximately .001 to .004 under EJ. Pin Size "G" diameter shown.

Machine Reamers



- Right Hand Spiral
- Right Hand Cut
- High Speed Steel
- Straight Shank

D-M-E Machine Reamers are made of top quality High Speed Steel and are especially effective for use in materials which are ordinarily difficult to ream. The right-hand spiral and right-hand cut design gives them a free cutting action resulting in smooth, accurate holes.

MACHINE REAMERS FOR EJECTOR PIN HOLES

ITEM NUMBER*	NOMINAL DIAMETER	DIAMETER Decimal Size	SHANK DIAMETER	FLUTE LENGTH	OVERALL LENGTH
R-5	1/16	.0625	.0585	1/2	2 1/2
R-6	5/64	.078125	.0720	3/4	3
R-7	3/32	.09375	.0880	3/4	3
R-8	7/64	.109375	.1030	7/8	3 1/2
R-9	1/8	.125	.1190	7/8	3 1/2
R-9 OS	1/8	.130	.1190	7/8	3 1/2
R-10	9/64	.140625	.1350	1	4
R-11	5/32	.15625	.1510	1	4
R-11 OS	5/32	.16125	.1510	1	4
R-12	11/64	.171875	.1645	1 1/8	4 1/2
R-13	3/16	.1875	.1805	1 1/8	4 1/2
R-13 OS	3/16	.1925	.1805	1 1/8	4 1/2
R-14	13/64	.203125	.1945	1 1/4	5
R-15	7/32	.21875	.2075	1 1/4	5
R-15 OS	7/32	.22375	.2075	1 1/4	5
R-16	15/64	.234375	.2265	1 1/2	6
R-17	1/4	.250	.2465	1 1/2	6
R-17 OS	1/4	.255	.2465	1 1/2	6
R-18	17/64	.265625	.2485	1 1/2	6
R-19	9/32	.28125	.2485	1 1/2	6
R-19 OS	9/32	.28625	.2485	1 1/2	6
R-20	19/64	.296875	.2792	1 1/2	6
R-21	5/16	.3125	.2792	1 1/2	6
R-21 OS	5/16	.3175	.2792	1 1/2	6
R-22	21/64	.328125	.2792	1 1/2	6
R-23	11/32	.34375	.2792	1 1/2	6
R-23 OS	11/32	.34875	.2792	1 1/2	6
R-24	23/64	.359375	.3105	1 3/4	7
R-25	3/8	.375	.3105	1 3/4	7
R-25 OS	3/8	.380	.3105	1 3/4	7
R-27	13/32	.40625	.3105	1 3/4	7
R-27 OS	13/32	.41125	.3105	1 3/4	7
R-29	7/16	.4375	.3730	1 3/4	7
R-29 OS	7/16	.4425	.3730	1 3/4	7
R-31	15/32	.46875	.3730	1 3/4	7
R-31 OS	15/32	.47375	.3730	1 3/4	7
R-33	1/2	.500	.4355	2	8
R-33 OS	1/2	.505	.4355	2	8
R-35	9/16	.5625	.4355	2	8
R-37	5/8	.625	.5620	2 1/4	9
R-39	11/16	.6875	.5620	2 1/4	9
R-41	3/4	.750	.6245	2 1/2	9 1/2
R-45	7/8	.875	.7495	2 5/8	10
R-47	1"	1.000	.8745	2 3/4	10 1/2

Machine Reamer Item Number corresponds to Ejector Pin Item Number.

For example: For an EX-17 Ejector Pin, order an R-17 Machine Reamer.

(*) "OS" in the Item Number indicates the reamer is .005" oversize nearest fractional diameter.

The "OS" reamers are also available in carbide. See price list.

MACHINE REAMERS FOR CARTRIDGE HEATER HOLES

ITEM NUMBER	NOMINAL DIAMETER	DIAMETER Decimal Size	SHANK DIAMETER	FLUTE LENGTH	OVERALL LENGTH
LRS-4	3/8	.375	.3105	1 3/4	20
LRS-7	1/2	.500	.4355	2	20
LRS-15	5/8	.625	.5620	2 1/4	24
LRS-25	3/4	.750	.6245	2 1/2	24

Flexolap® Sets

BARREL AND BLIND HOLE



Flexolap Set BL-6, or BH-6

DESCRIPTION	ITEM NUMBER
Barrel Lap Set	BL-6
Blind Hole Lap Set	BH-6

Includes six complete laps, one of each size 3⁄16, 1⁄4, 5⁄16, 3⁄8, 7⁄16, 1⁄2 and one additional Brass Lapping Cylinder of each size.

Flexolap Set BL-11, or BH-11

DESCRIPTION	ITEM NUMBER
Barrel Lap Set	BL-11
Blind Hole Lap Set	BH-11

Includes 11 laps, one of each size 3⁄16, 7⁄32, 1⁄4, 9⁄32, 5⁄16, 11⁄32, 3⁄8, 13⁄32, 7⁄16, 15⁄32, 1⁄2.



Flexolap Set BL-13, or BH-13

DESCRIPTION	ITEM NUMBER
Barrel Lap Set	BL-13
Blind Hole Lap Set	BH-13

Includes 13 laps, one of each size 3⁄16, 1⁄4, 5⁄16, 3⁄8, 7⁄16, 1⁄2, 9⁄16, 5⁄8, 11⁄16, 3⁄4, 7⁄8, 15⁄16, 1".

Flexolap Set BL-18, or BH-18

DESCRIPTION	ITEM NUMBER
Barrel Lap Set	BL-18
Blind Hole Lap Set	BH-18

Includes 18 laps, one of each size 3⁄16, 7⁄32, 1⁄4, 9⁄32, 5⁄16, 11⁄32, 3⁄8, 13⁄32, 7⁄16, 15⁄32, 1⁄2, 9⁄16, 5⁄8, 11⁄16, 3⁄4, 7⁄8, 15⁄16, 1".

Midget Laps

FOR ACCURATELY LAPPING SMALL HOLES

D-M-E Midget Laps are ideal for accuracy in lapping small holes from .032" to approximately .250". This complete range is covered by seventeen different sizes and each lap expands to the next larger size. The Midget Lap has an elongated slit like the eye of a needle. With the Lap Expander any desired degree of expansion is quickly and easily obtained. This enables you to have complete flexibility without the danger of seizing.

NOTE: Lap Expander is included with all packages and sets.



DIA.	ITEM NUMBER
.032	L-0
.036	L-1
.040	L-2
.046	L-3
.054	L-4
.062	L-5
.070	L-6
.079	L-6A
.090	L-7

DIA.	ITEM NUMBER
.104	L-8
.120	L-9
.135	L-10
.155	L-11
.170	L-12
.187	ML-13
.218	ML-15
.250	ML-17

L-0 thru ML-17 sold in packages of 10 only.

17 Piece Set (.032-.250)	MLS-1

QUANTITY DISCOUNTS:
Discounts apply to current Net Prices. Discount applies to quantities of same size Midget Lap.

10 packs or more ..... Less 20%

Flexolaps®



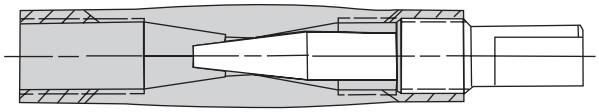
BARREL LAP



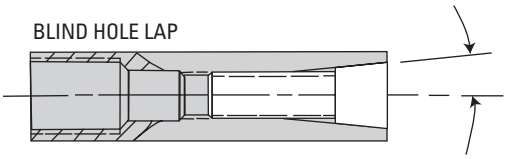
BLIND HOLE LAP

D-M-E Flexolaps are instantly and accurately adjustable for fast cutting and polishing. D-M-E branches carry all the sizes listed below in stock for immediate delivery in either the barrel or blind-hole style. The longer cylindrical lapping surface and easy adjustment insure greater precision and longer life. The Flexolap brass cylinder, in either the barrel or blind-hole type, is made with a series of longitudinal slots milled "off-center" to permit sensitive expansion up to 15% by simply turning the adjusting screw. This construction will enable you to lap rounder, straighter holes plus save valuable time.

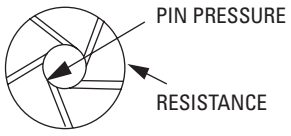
BARREL LAP



BLIND HOLE LAP



BACK TAPER TO INSURE DIAMETRAL CONTACT AT FRONT END OF LAP



Flexolap's patented design provides off-center pressure with the slight "give" that eliminates galling and seizing under even the fastest cutting action.

COMPLETE ASSEMBLIES

BARREL LAPS	
DIA.	ITEM NUMBER
3/16	L-13
7/32	L-15
1/4	L-17
9/32	L-19
5/16	L-21
11/32	L-23
3/8	L-25
13/32	L-27
7/16	L-29
15/32	L-31
1/2	L-33
9/16	L-35
5/8	L-37
11/16	L-39
3/4	L-41
7/8	L-45
15/16	L-46
1	L-47
1 1/8	L-49
1 1/4	L-51
1 1/2	L-55

BLIND HOLE LAPS	
DIA.	ITEM NUMBER
3/16	L-13-BH
7/32	L-15-BH
1/4	L-17-BH
9/32	L-19-BH
5/16	L-21-BH
11/32	L-23-BH
3/8	L-25-BH
13/32	L-27-BH
7/16	L-29-BH
15/32	L-31-BH
1/2	L-33-BH
9/16	L-35-BH
5/8	L-37-BH
11/16	L-39-BH
3/4	L-41-BH
7/8	L-45-BH
15/16	L-46-BH
1	L-47-BH
1 1/8	L-49-BH
1 1/4	L-51-BH

LAPPING CYLINDERS*



BARREL



BLIND HOLE

*Package Quantities
LB-13 to 37 (BH) = 10
LB-39 to 47 (BH) = 5
LB-49 to 55 (BH) = 3

NOTE: Lapping Cylinders sold only in package quantities listed.

REPLACEMENT PARTS

SIZE (DIA.)	FOR USE WITH LAP	LAPPING CYLINDERS		ADJUSTING SCREWS		SHANKS
		BARREL	BLIND HOLE	BARREL	BLIND HOLE	
	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER
3/16	L-13 (BH)	LB-13	LB-13-BH	LAS316B	LAS316BH	2027E
7/32	L-15 (BH)	LB-15	LB-15-BH	LAS732B	LAS732BH	2028E
1/4	L-17 (BH)	LB-17	LB-17-BH	LAS14B	LAS14BH	2029E
9/32	L-19 (BH)	LB-19	LB-19-BH	LAS932B	LAS932BH	2030E
5/16	L-21 (BH)	LB-21	LB-21-BH	LAS516B	LAS516BH	2031E
11/32	L-23 (BH)	LB-23	LB-23-BH	LAS1132B	LAS1132BH	2032E
3/8	L-25 (BH)	LB-25	LB-25-BH	LAS38B	LAS38BH	2033E
13/32	L-27 (BH)	LB-27	LB-27-BH	LAS1332B	LAS1332BH	2034E
7/16	L-29 (BH)	LB-29	LB-29-BH	LAS1532B	LAS716BH	2035E
15/32	L-31 (BH)	LB-31	LB-31-BH	LAS1532B	LAS1532BH	2036E
1/2	L-33 (BH)	LB-33	LB-33-BH	LAS12B	LAS12BH	2037E
9/16	L-35 (BH)	LB-35	LB-35-BH	LAS916B	LAS916BH	
5/8	L-37 (BH)	LB-37	LB-37-BH	LAS58B	LAS58BH	2039E
11/16	L-39 (BH)	LB-39	LB-39-BH		LAS1116BH	
3/4	L-41 (BH)	LB-41	LB-41-BH		LAS34BH	
7/8	L-45 (BH)	LB-45	LB-45-BH		LAS78BH	
15/16	L-46 (BH)	LB-46	LB-46-BH		LAS1516BH	
1	L-47 (BH)	LB-47	LB-47-BH		LAS1BH	
1 1/8	L-49 (BH)	LB-49	LB-49-BH	LAS118B	LAS3118BH	
1 1/4	L-51 (BH)	LB-51	LB-51-BH			2045E
1 1/2	L-55	LB-55	—	LAS112B	—	2047E

Straight Shank Long Drills

FOR STEAM LINES, WATER LINES, BRASS PLUG BAFFLE AND CARTRIDGE HEATER HOLES.

Now with parabolic flute geometry for improved performance!!



ITEM NUMBER	DIAMETER	FLUTE LENGTH	LENGTH OVERALL
LDS-2	5/16	16″	20″
LDS-4	23/64	16″	20″
LDS-5	7/16	16″	20″
LDS-7	31/64	16″	20″
LDS-10	9/16	20″	24″
LDS-15	39/64	20″	24″
LDS-20	11/16	20″	24″
LDS-25	47/64	20″	24″
LDS-30	15/16	20″	24″

For those molds that require deeper holes for hot runner and mold components, D-M-E Straight Shank Long Drills are available in overall lengths of 20 and 24 inches, with respective flute lengths of 16 and 24 inches. The product's parabolic flute geometry produces lower chip-evacuation forces than standard flute geometry and a 30 percent increase in depth.

Sprue Bushing Reamers

HIGH SPEED STEEL, RIGHT HAND CUT, LEFT HAND SPIRAL



MACHINE REAMER FOR ROUGHING



HAND REAMER FOR FINISHING

MACHINE REAMERS		TAPER PER FT.*	DIA. SMALL END	DIA. LARGE END	SHANK DIA.	FLUTE LENGTH	HAND REAMERS	
ITEM NUMBER	NO. FLUTES						ITEM NUMBER	NO. FLUTES
SR-50-125	3	1/2	7/64	3/8	5/16	6″	SR-50-125-H	4
SR-50	3	1/2	13/64	5/8	1/2	10 1/2	SR-50-H	6
SR-75-125	3	3/4	7/64	31/64	3/8	6″	SR-75-125-H	4
SR-75	3	3/4	13/64	7/8	5/8	10 3/4	SR-75-H	6

*1/2 TAPER PER FOOT = 2°23′13″ included angle.
3/4 TAPER PER FOOT = 3°34′47″ included angle.

For optimum results, first step drill hole slightly under reamer size. Then use machine reamer followed by hand reamer.

Rout-A-Burr



"No shop should be without these sturdy, time saving hand tools!"

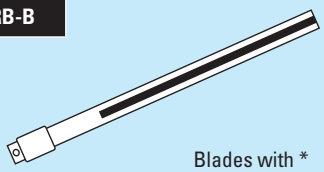
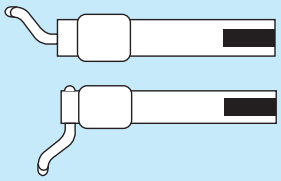
D-M-E Rout-A Burrs are versatile deburring and deflashing tools for mold and die makers, machinists, sheet metal workers, plastics molders and die casters. The sturdy acetal handle with interchangeable blade holders and blades can be used to break sharp edges, deburr, deflash, scrape and scribe. "Telescoping" action allows the blade holder to extend 1½ to 5" from the handle and be securely locked at various lengths by a ball and ring detent.

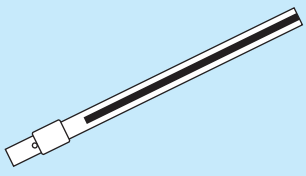
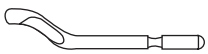
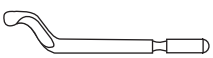
A selection of high speed steel (HSS) and carbide blades are available for use on metals and plastics…edges, internal and external holes.

ROUT-A-BURR ASSEMBLY	
ITEM NUMBER	
RBHA-3	Includes handle with removable end cap, blade holder (RB-B) and three blades (one each of RB-B10, B-20 and B-30)

QUANTITY DISCOUNTS:
Discounts apply to current Net Prices.
Rout-A-Burr Assemblies only.

3 or more ..... Less 10%

BLADE HOLDER		BLADES		ITEM NUMBER BOX OF 10
ITEM NO.		DESCRIPTION		
RB-B	 Blades with * may be installed two ways as shown below. 	 *	HSS basic blade for steel and aluminum. Ideal for straight edges or holes.	RB-B10
		 *	HSS for cast iron and brass. Rotates clockwise and counterclockwise.	RB-B20
		 *	HSS for sheet metal and tubing. Deburrs inside and outside simultaneously.	RB-B30
			Carbide tipped scriber. Can be resharpened many times.	RB-B50
		 *	HSS for reaching thru a hole to deburr the opposite side. Can reach 1" deep.	RB-B60
			Carbide tipped "V" blade for sheet metal up to ⅛" thick. Also ideal for breaking sharp edges after milling or grinding operations.	RB-B70

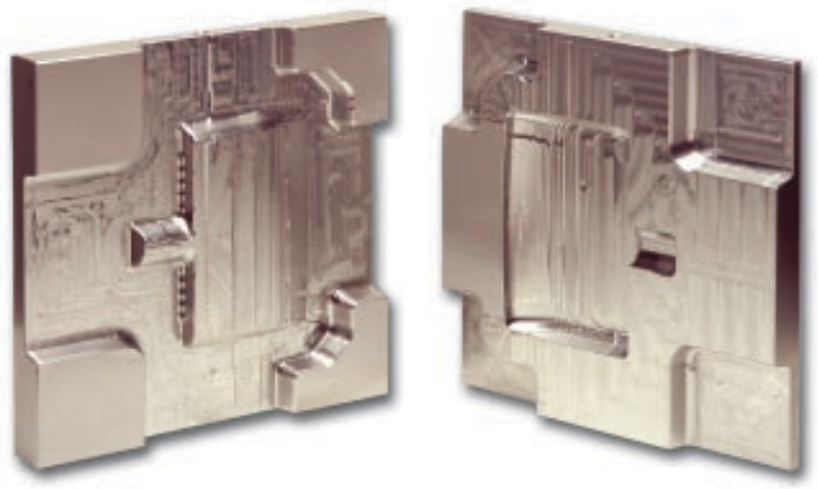
HEAVY DUTY BLADE HOLDER		HEAVY DUTY BLADES		ITEM NUMBER BOX OF 10
ITEM NO.		DESCRIPTION		
RB-E			HSS heavy-duty; longer version of RB-B10.	RB-E100
			HSS heavy-duty; longer version of RB-B20.	RB-E200
			HSS heavy-duty; longer version of RB-B30.	RB-E300
			HSS heavy-duty for straight edges, keyways, etc.	RB-E350
			HSS heavy-duty; longer version of RB-B60.	RB-E600

Contour Roughing Services

Key Advantages of Contour Roughing

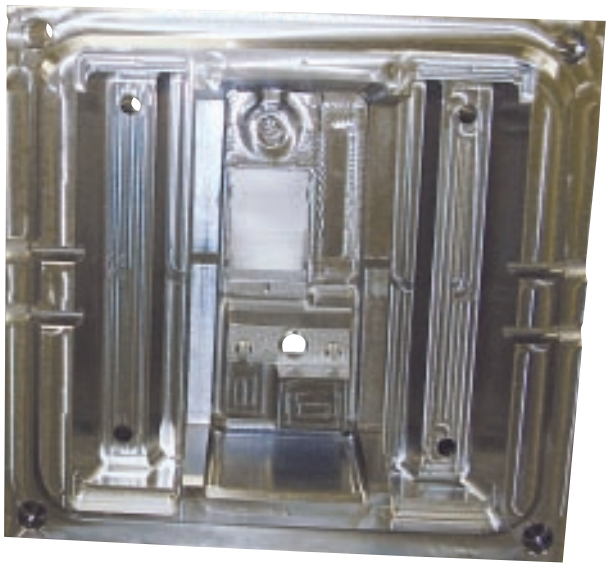
- Moldmakers can use this service to extend their in-house capacity, reduce lead time and focus on other high-value machining
- Consistent machining allowance throughout the surface of the cavity block provides even finishing without areas of heavy stock
- D-M-E can provide customers with the CAM program to continue the work where D-M-E left off, saving time and programming expense
- Contour roughing can be bundled with the option to stress-relieve cavity blocks and a custom mold base

At the request of moldmakers, D-M-E has begun to offer contour roughing services. D-M-E can rough mill complex part shapes into mold plates, even for milling that requires large and deep cavities.



- The Contour Roughing Service begins with complex core and cavity CAD files from customers
- D-M-E programs 3D cavity roughing tool paths that generate a rough milled surface, allowing machining stock for finishing by the customer
- D-M-E uses industry-leading CAM software for programming contour roughing tool paths leaving consistent machining allowance throughout the surface of the cavity block

For more details on the Contour Roughing Service, contact your D-M-E representative today.



ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru



D-M-E Finishing/Polishing Equipment

HUNDREDS OF EXACTING FINISHING AND POLISHING INSTRUMENTS AND SUPPLIES TO ACHIEVE FLAWLESS FINISHES





Ultraform®

The D-M-E Ultraform® Ultrasonic Finishing and Polishing Systems are designed to replace costly, time-consuming hand finishing operations. They excel at rapid deburring, filing, stoning, polishing and lapping on a variety of surfaces, including EDM, tungsten carbide, mold steels and more.

Using a continuously variable stroke of 4 to 40 microns (.00016 to .0016 inches) and ultrasonic vibrations of 20,000 cycles per second, these systems provide the ideal combination of pin-point control and heavy duty power. There is no need to adjust or "tune-in" the ultrasonic frequency for various replaceable tools. The Ultraform units automatically adjust the proper frequency for all size tools, including diamond files up to 6 inches long.

Two types of ultrasonic modules are available to fit your specific finishing needs. Select the UF-2600, a single function ultrasonic polisher, or the UF-5600, a dual system offering both Ultrasonic and Minitor functions which must be used independently.



Both the UF-2600 and UF-5600 systems include a universal hand piece that can be used with both large and small tooling. Each system is supplied with a variety of tools and all of the necessary accessories to handle your most intricate polishing jobs with ease.

IMPROVED FEATURES

D-M-E's Ultraform models UF-2600 and UF-5600 offer the following improvements over previous systems:

- Added power increases tool cutting strength by 50%
- Improved circuitry provides constant power, regardless of the amount of pressure applied to the handpiece
- New transformer improves reliability
- Cool, vibration-free handpiece can be used with small and large tooling
- Clamp tool mode reduces power by 50%, preventing broken stones and burnt wood laps
- Power packs feature new updated cabinet styling and control panel layout
- UF-5600 model has 30% more torque when using rotary handpieces
- Universal handpiece is included with each system

HANDPIECE UF-9700

Universal handpiece can be used with either system for large and small tooling. The UF-9700 has a tool holder thread of 6mm, rather than the 8mm thread offered on previous handpieces. The handpiece and a 6-to-4mm adapter are included with both systems. All 8mm tooling will be replaced with 6mm to accommodate the new handpiece.



ULTRAFORM UF-5600

Dual Operating Capabilities – Ultrasonic and Minitor functions.

Automatic Frequency Shift – Accommodates a broad range of tool sizes.

Tool Condition – The UF-5600 calculates resonant frequencies and enables the operator to make customized tools. Reset switch activates if tool is too long or short.

Reversing Switch – Reverses rotation of handpiece for exact polishing of edges, corners, radii, etc.

State-of-the-art Circuitry – Improves torque at any RPM setting.

LED-Indicator Lights – Monitor power conditions and indicate operational modes.

User-Friendly Key Pad – Puts all functions within easy reach of operator.

ULTRAFORM UF-2600

Single Function Ultrasonic Polisher – Permits rapid deburring, filing, stoning, polishing and lapping with minimal operator effort.

Self-tuning Frequency Adjustment – Simplifies operation.

LED-Indicator Lights – Monitor power conditions and indicate operational modes.

User-Friendly Key Pad – Puts all functions within easy reach of operator.

Portable – Lightweight case with built-in carrying handle makes the unit easy to carry.

Ultraform®



STANDARD TOOLS AND ACCESSORIES INCLUDED WITH UF-2600 AND UF-5600:

- 4 diamond files
- 2 resin bonded diamond stones
- 6 ceramic stones
- 2 wooden laps
- 3 diamond stones
- 5 clamp horns
- 1 adapter-6mm to 4mm thread
- 1 ultrasonic handpiece
- 3 wrenches: 8, 10 and 13mm
- 1 allen key
- 1 replacement fuse
- 1 power cord
- 1 handpiece wrench
- 1 set of protective ear plugs
- 1 toolbox
- 2 protective sleeves for the handpiece
- 1 wooden case for the handpiece
- 1 power cord

ITEM NUMBER	DESCRIPTION
UF-2600	Power Module UF-2600 and all standard tools and accessories
UF-5600	Power Module UF-5600 and all standard tools and accessories
UF-9700	Handpiece for UF-2600 and UF-5600 (included)
UF-7503	Memory Foot Switch (optional)

NOTE: If ordering other than standard 120 voltage, please specify.

Ultrasonic Handpiece UF-9700 is included with UF-2600 and UF-5600 Ultraform Systems.

POWER MODULE SPECIFICATIONS		
Model	**UF-2600 and UF-5600**	
Frequency of vibration	20.0 – 30.0 KHz	
Amplitude (stroke)	4 to 40 microns (.00016 to .0016")	
Frequency adjustment	Automatic feedback system	
Power output ultrasonic	45 watts max.	
Minitor power output (UF-5600 only)	DC 0 – 30 volts	
Output adjustment (power and stroke)	Continuously variable	
Power requirement	Single phase 100 to 250 v 50/60 Hz	
	UF-2600	**UF-5600**
Power consumption	100 VA	200 VA
Fuse	1.5 amperes 115 v 1 amperes 220 v	2 amperes 115 v 1.5 amperes 220 v
Outside dimension	7.1 × 8.4 × 6.2 inches	6.5 × 11.2 × 8.4 in.
Net weight	5.3 lbs.	8.2 lbs.

HANDPIECE UF-9700 SPECIFICATIONS	
Transducer	B.L.T. electrostrictive
Cable length	2 feet (coiled)
Screw thread	6 and 4mm with adapter
Dimensions	Small dia. 0.6" Large dia. 1.12" Length 5.12"
Weight	4.55 ounces

MEMORY FOOT SWITCH UF-7503

With the Memory Foot Switch power can be increased, decreased or memorized with a simple touch of the foot. Foot control can be used with either system and is compatible with both Ultrasonic and Minitor functions. By ordering a second foot switch, you can provide hands-free stroke/power adjustment for two operators.

ADDITIONAL TOOLING:

Additional tooling for the Ultraform Ultrasonic Finishing and Polishing System is available.

Refer to D-M-E's ULTRAFORM ULTRASONIC TOOLING ITEM for details.



Ultraform Tooling

Tooling Accessories in this item are for use with Ultraform Models UF-2600, and UF-5600.

Usage of Tools

– All Ultraform tools are made to match the resonant frequency of Argofile UL-501B and Ultraform models 2100/3000/5000/2600/5600.

The manufacturer does not accept any liability for other manufacturers' tools.

– For maximum power, ensure all tools are securely fastened to the ultrasonic handpiece. Any noise coming from the joint between the tool and handpiece indicates an insecure fitting and/or bent tools, which result in reduced cutting power.

– Abrasive Stones/Ceramic Stones –

Ultraform models 2100/3000/5000: When using SX, LX champ horns ensure power output does not exceed 3 on power indicator scale. Above this power level excessive heat will cause the bonding of the abrasive stone to break down.

Ultraform models 2600/5600: Operate only with clamp horn mode switch.

– Wooden Laps –

Ultraform models 2100/3000/5000: When using wooden laps with SX, LX clamp horns ensure power output does not exceed 3 on power indicator scale. Above this power level excessive heat build-up will cause the wood to burn.

To obtain maximum driving power, retighten cap-screw on clamp horn during use.

Ultraform models 2600/5600: Operate only with clamp horn mode switch.

Color Coding

– All Ultraform diamond tools are color coded to identify the mesh/grit/micron (/UM) according to the chart below.

Color	MESH/GRIT	MICRON/UM
RED	200	68
BLACK	320	40
BLUE	500	35
WHITE	600	28
GREEN	1000	15

QUANTITY DISCOUNTS:
Discounts apply to current Net Prices. Applies to tooling on pages 23 thru 28 only. Tools of different styles and sizes may be combined on one order for quantity discounts.

1 to 5 ..... Less 10%
6 or more ..... Less 15%

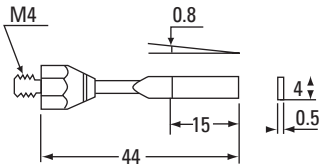
Ultraform Diamond Files

- Diamond particles are electro-deposited on steel shank
- Used for intermediate finishing
- Fast cutting

Precision graded particle size (68-28 micron). Excellent for finishing slot sidewalls and flat or curved surfaces.

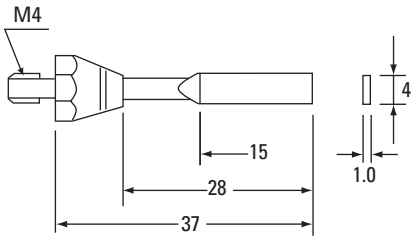
NOTE: All measurements in millimeters (mm).





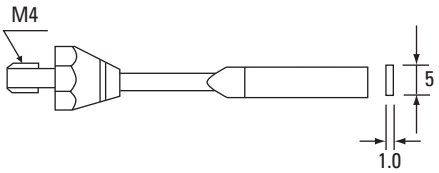
ITEM NUMBER	MESH/GRIT
USE-5845	200
USE-5745	320
USE-5545	600





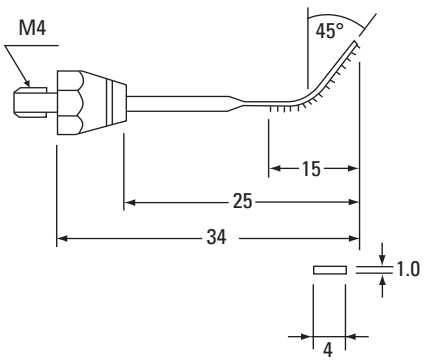
ITEM NUMBER	MESH/GRIT
SE-4841	200
SE-4741	320
SE-4541	600





ITEM NUMBER	MESH/GRIT
SE-8851U	200
SE-8751U	320
SE-8551U	600



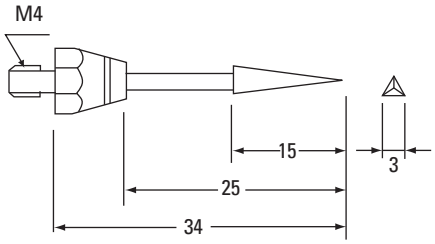


ITEM NUMBER	MESH/GRIT
SE-7841	200
SE-7741	320
SE-7541	600

Ultraform Diamond Files

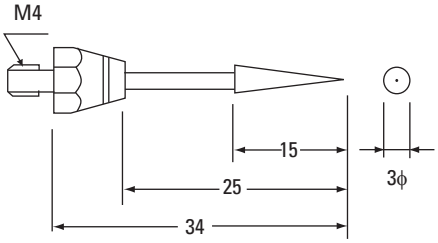
NOTE: All measurements in millimeters (mm).





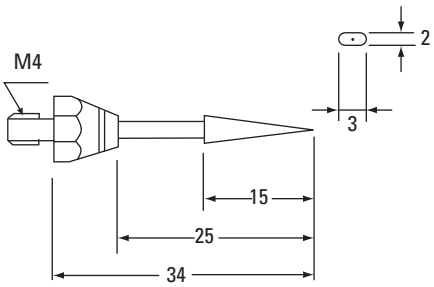
ITEM NUMBER	MESH/GRIT
SE-3803	200
SE-3703	320
SE-3503	600





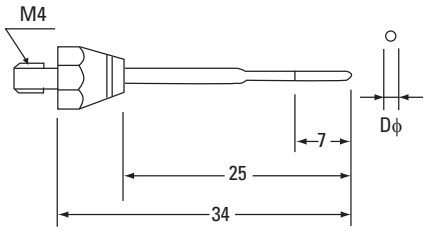
ITEM NUMBER	MESH/GRIT
SE-6803	200
SE-6703	320
SE-6503	600





ITEM NUMBER	MESH/GRIT
SE-5832	200
SE-5732	320
SE-5532	600



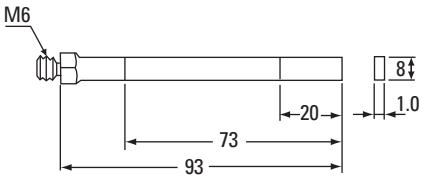


ITEM NUMBER	MESH/GRIT	D Ø
SE-9801	200	1mm
SE-9701	320	1mm
SE-9501	600	1mm
SE-9802	200	2mm
SE-9702	320	2mm
SE-9502	600	2mm

Ultraform Diamond Files | Resin Bonded Diamond Stones

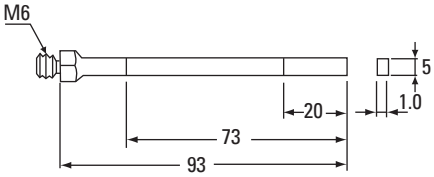
NOTE: All measurements in millimeters (mm).





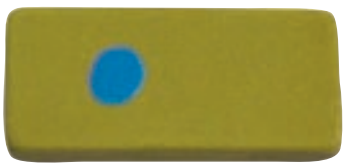
ITEM NUMBER	MESH/GRIT
UME-9881	200
UME-9781	320
UME-9581	600

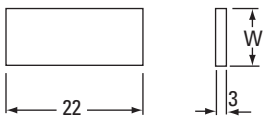




ITEM NUMBER	MESH/GRIT
UME-9851	200
UME-9751	320
UME-9551	600

Resin Bonded Diamond Stones





- Can be used on the ED surface
- 6W stones with tool clamp UMX-4030
- 10 stones with tool clamp UMX-4130

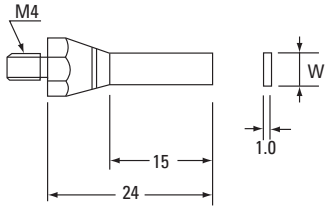
ITEM NUMBER	MESH/GRIT
UMD-4872	200
UMD-4772	320
UMD-4672	500
UMD-4372	1000
UMD-4812	200
UMD-4712	320
UMD-4612	500
UMD-4312	1000

Ultraform Diamond Stones

- Solid stone of diamond particles in a metal bond
- Used for intermediate and fine finishing
- Precision graded particle size (68 ~ 15 micron)
- Can be shaped with a diamond file to finish intricate surfaces

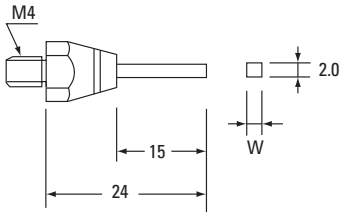
NOTE: All measurements in millimeters (mm).
COLOR CODING: Red... #200, Black...#320, Blue...#500, Green...#1000





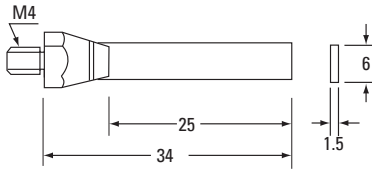
ITEM NUMBER	MESH/GRIT	W
SD-4831	200	3.0
SD-4731	320	3.0
SD-4631	500	3.0
SD-4331	1000	3.0
SD-4851	200	5.0
SD-4751	320	5.0
SD-4651	500	5.0
SD-4351	1000	5.0





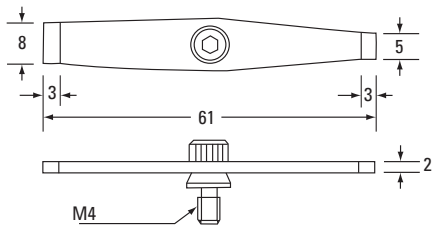
ITEM NUMBER	MESH/GRIT	W
SD-2802	200	2.0
SD-2702	320	2.0
SD-2602	500	2.0
SD-2302	1000	2.0
SD-4832	200	3.0
SD-4732	320	3.0
SD-4632	500	3.0
SD-4332	1000	3.0





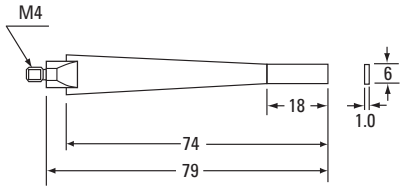
ITEM NUMBER	MESH/GRIT
SD-4862	200
SD-4762	320
SD-4662	500
SD-4362	1000





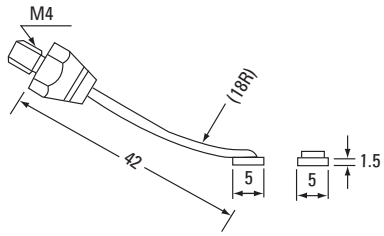
ITEM NUMBER	MESH/GRIT
USD-7885	200
USD-7785	320
USD-7685	500
USD-7385	1000





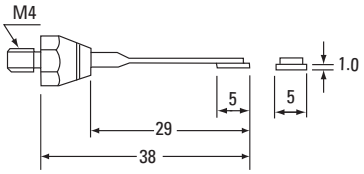
ITEM NUMBER	MESH/GRIT
USD-5861	200
USD-5761	320
USD-5661	500
USD-5361	1000





ITEM NUMBER	MESH/GRIT
SD-7855	200
SD-7755	320
SD-7655	500
SD-7355	1000





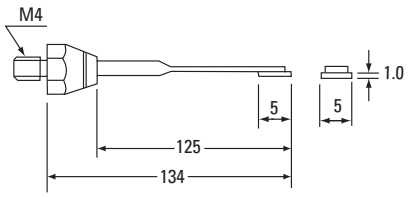
ITEM NUMBER	MESH/GRIT
SD-4861	200
SD-4761	320
SD-4661	500
SD-4361	1000

Ultraform Diamond Stones

NOTE: All measurements in millimeters (mm).

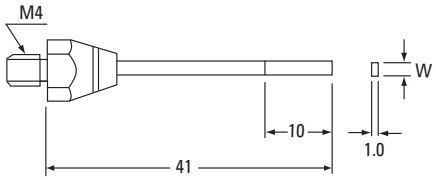
COLOR CODING: Red... #200, Black...#320, Blue...#500, Green...#1000





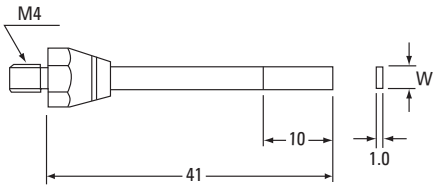
ITEM NUMBER	MESH/GRIT
SD-8851	200
SD-8751	320
SD-8651	500
SD-8351	1000





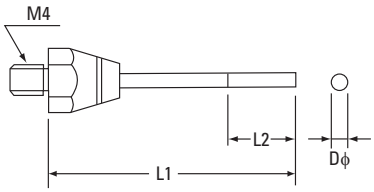
ITEM NUMBER	MESH/GRIT	W
SD-5821	200	2.0
SD-5721	320	2.0
SD-5621	500	2.0
SD-5321	1000	2.0
SD-5831	200	3.0
SD-5731	320	3.0
SD-5631	500	3.0
SD-5331	1000	3.0





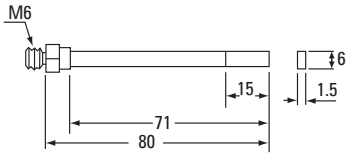
ITEM NUMBER	MESH/GRIT	W
SD-5841	200	4.0
SD-5741	320	4.0
SD-5641	500	4.0
SD-5341	1000	4.0
SD-5851	200	5.0
SD-5751	320	5.0
SD-5651	500	5.0
SD-5351	1000	5.0





ITEM NUMBER	MESH /GRIT	L1	L2	D
SD-1802	200	37	7.0	2.0
SD-1702	320	37	7.0	2.0
SD-1602	500	37	7.0	2.0
SD-1302	1000	37	7.0	2.0
SD-1803	200	39	10	3.0
SD-1703	320	39	10	3.0
SD-1603	500	39	10	3.0
SD-1303	1000	39	10	3.0

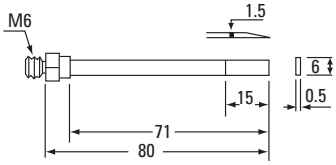




ITEM NUMBER	MESH/GRIT
UMD-8862	200
UMD-8762	320
UMD-8662	500
UMD-8362	1000

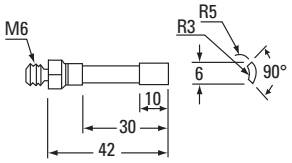


TAPER = 1.5 → 0.5t



ITEM NUMBER	MESH/GRIT
UMD-9865	200
UMD-9765	320
UMD-9665	500
UMD-9365	1000





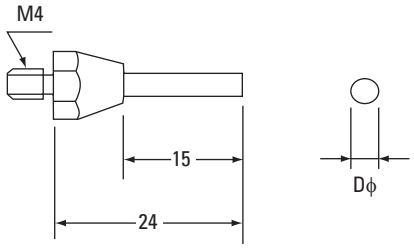
ITEM NUMBER	MESH/GRIT
UMD-1825	200
UMD-1725	320
UMD-1625	500
UMD-1325	1000

Ultraform Ruby Stones

- Precision graded particle size (17 micron)
- Can be shaped with a diamond file or stone to finish intricate surfaces
- Designed for fine finishing
- Fast cutting on soft surfaces
- Ideal for fine detail work and squaring off rounded corners

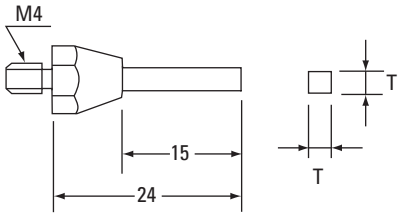
NOTE: All measurements in millimeters (mm).





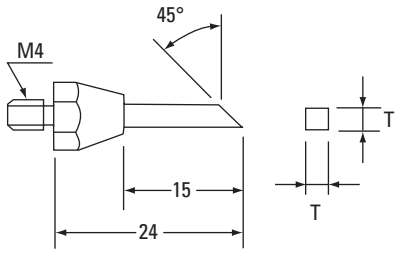
ITEM NUMBER	D
SR-1402	2.0
SR-1403	3.0





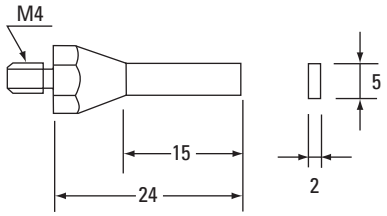
ITEM NUMBER	D
SR-2402	2.0
SR-2403	3.0





ITEM NUMBER	T
SR-7402	2.0
SR-7403	3.0





ITEM NUMBER	T
SR-4451	1.0
SR-4452	2.0

Ultraform Ceramic Stones

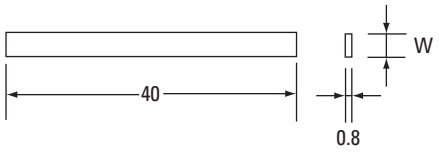
- Completely new line of abrasive stones made from a plastic matrix reinforced with high performance cutting ceramic fibers
- When used with ultrasonic vibration (ULTRAFORM) an exceptional polishing/cutting action is obtained
- Non-brittle stone ideal for polishing aluminum, stainless steel and tool steel
- Very durable with a long life and, when shaped, hold their profile without having to be reshaped

*Color Code/Mesh

COLOR	MESH/GRIT
BROWN	600
BLUE	800
WHITE	1000
RED	1200

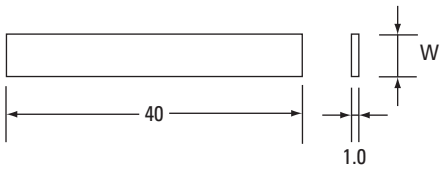
NOTE: All measurements in millimeters (mm).





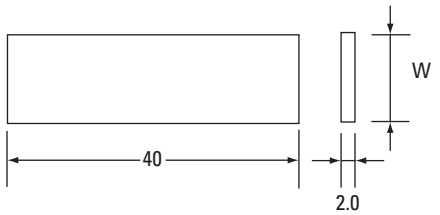
ITEM NUMBER	COLOR* CODE	W
USC-4548	BROWN	4
USC-4448	BLUE	4
USC-4348	WHITE	4
USC-4248	RED	4
USC-4568	BROWN	6
USC-4468	BLUE	6
USC-4368	WHITE	6
USC-4268	RED	6





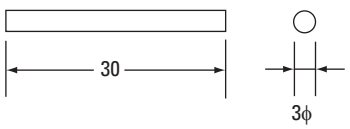
ITEM NUMBER	COLOR* CODE	W
USC-4541	BROWN	4
USC-4441	BLUE	4
USC-4341	WHITE	4
USC-4241	RED	4
USC-4561	BROWN	6
USC-4461	BLUE	6
USC-4361	WHITE	6
USC-4261	RED	6





ITEM NUMBER	COLOR* CODE	W
ULC-4562	BROWN	6
ULC-4462	BLUE	6
ULC-4362	WHITE	6
ULC-4262	RED	6
ULC-4512	BROWN	12
ULC-4412	BLUE	12
ULC-4312	WHITE	12
ULC-4212	RED	12





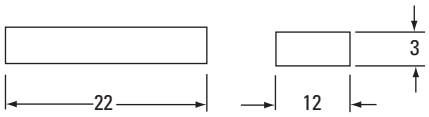
ITEM NUMBER	COLOR* CODE
USC-1530	BROWN
USC-1430	BLUE
USC-1330	WHITE
USC-1230	RED

Ultraform Abrasive Stones | Lapping Tools

- Non-loading, resin bonded
- Precision graded particle size (150-600 grit)
- Fast cutting
- For rough and intermediate finishing
- Can be shaped with diamond file to suit surface contours

NOTE: All measurements in millimeters (mm).





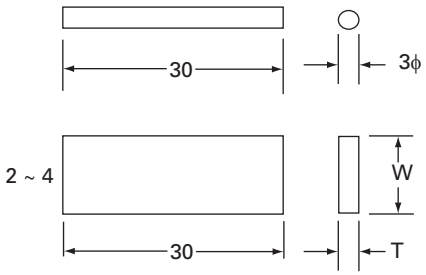
ITEM NUMBER	MESH/GRIT
LG-4813	150
LG-4713	220
LG-4613	280
LG-4513	320
LG-4413	400
LG-4313	600

Lapping Tools

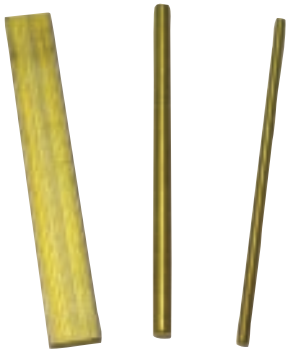
- For fine and ultra-fine polishing with diamond paste
- Can be shaped with a diamond file or stone to polish intricate surfaces

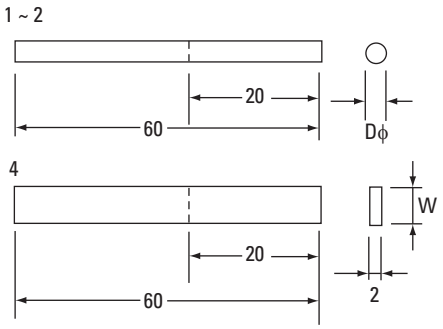
NOTE: All measurements in millimeters (mm).





	ITEM NUMBER	W	T
1	SO-1103	—	—
2	SO-4163	6	3.2
3	LO-4013	15	3.2
4	LO-2005	5	5
5	LO-4015	15	5





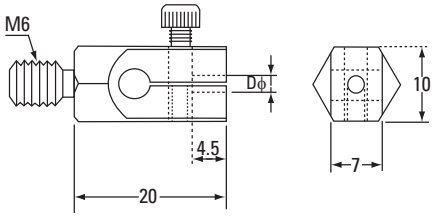
	ITEM NUMBER	D	W
1	SS-1102	2	—
2	SS-1103	3	—
4	LS-4082	—	8

Can be cut and shortened at / marked.

Ultraform Tool Clamps (Clamp Horns)

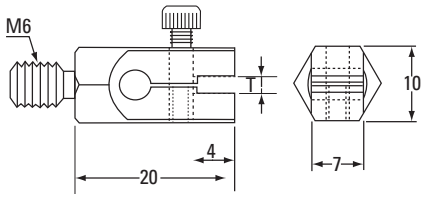
NOTE: All measurements in millimeters (mm).





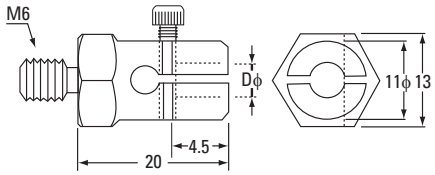
ITEM NUMBER	D
UMX-1020	2.0
UMX-1030	3.0
UMX-1033	3.3





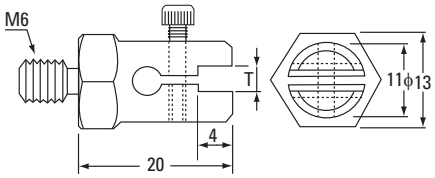
ITEM NUMBER	T
UMX-4008	0.8
UMX-4010	1.0
UMX-4020	2.0
UMX-4030	3.0
UMX-4033	3.3





ITEM NUMBER	D
UMX-1140	4.0
UMX-1150	5.0
UMX-1160	6.0



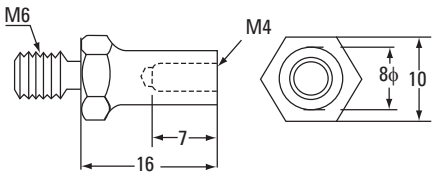


ITEM NUMBER	T
UMX-4110	1.0
UMX-4120	2.0
UMX-4130	3.0
UMX-4133	3.3
UMX-4140	4.0
UMX-4150	5.0

Ultraform Adapters

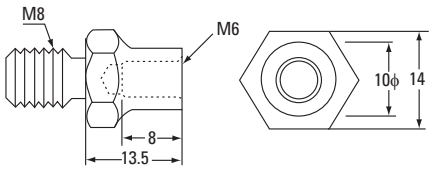
NOTE: All measurements in millimeters (mm).





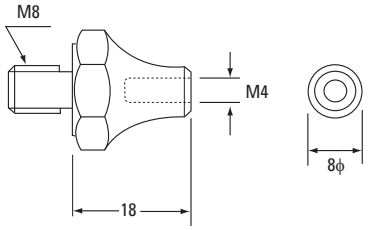
ITEM NUMBER
UMS-0064



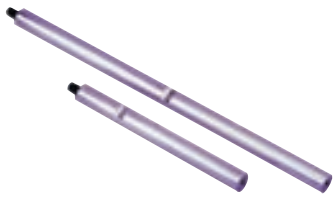


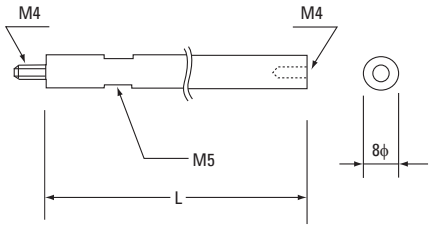
ITEM NUMBER
UMS-0086





ITEM NUMBER
SL-1000





ITEM NUMBER	L
SL-1080	80
SL-1160	160

Ultraform Accessories

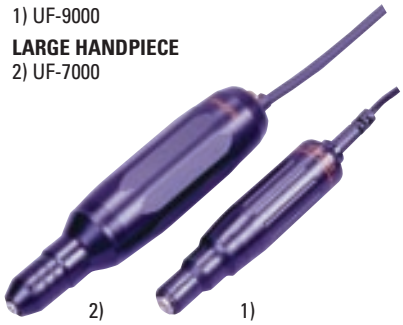
ULTRAFORM ACCESSORIES

HANDPIECE
UF-9700

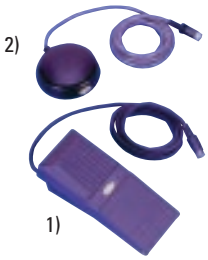


SMALL HANDPIECE
1) UF-9000

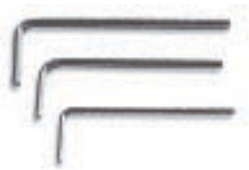
LARGE HANDPIECE
2) UF-7000



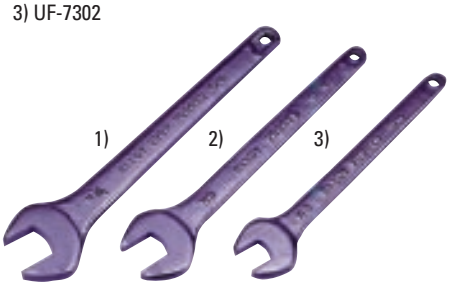
FOOT SWITCH
1) UF-7504 (ON/OFF)
2) UF-7503 (VARIABLE CONTROL)



CLAMP HORN KEY
UF-7005 M4
UF-7003 M3
UF-7006 M2.5



WRENCH
1) UF-7307
2) UF-7305
3) UF-7302



PROTECTION SLEEVE
1) UF-7024
2) UF-7026
3) UF-7025



WOODEN CASE FOR HANDPIECE
UF-7016 for UF-7000
UF-7017 for UF-9000, UF-9700



PLASTIC TOOL BOX
UF-7022



POWER CORD
UF-7100 100V Korea
UF-7101 115V U.S.A.
UF-7102 220V Europe
UF-7103 240V U.K.



Minitor D Series
Power Pack | Accessories

Power Pack

- Dual Operating Capabilities – Two operators can use all functions simultaneously
- High Torque at low rpm
- Reversing Switch prevents rollover on edges by reversing tool rotation

The Minitor "D" Series variable speed Power Pack NMS 0001 powers all D-M-E Minitor Handpieces. The power pack offers dual controls for use by two operators at one time. The power unit may be controlled by hand or by variable foot controls. This "D" Series System offers the latest in polishing technology for the ultimate in flexibility and accuracy.



SPECIFICATIONS

NMS-0001

Rated Voltage..... 117VAC ± 10%
Frequency..... 50/60 Hz
Output Voltage..... DC-30V (Continuous)
Output Amperage..... 0.3 A (Variable)
Output Socket.....2 (Dual Control)

ITEM NUMBER
NMS-0001

NOTE: "D" Series Power Pack will accept previous Minitor Handpieces; Previous Power Pack will accept "D" Series Handpieces.

Accessories

MINITOR EXTENSION CORD (not shown) Flexible 6-foot coiled cord connects between any Minitor handpiece and Power Pack or Ultraform UF3000/5000I. ITEM NUMBER: UFPPEC-30



HANDPIECE CRADLE MODEL UFRM-01

This molded rubber stand provides a handy non-slip place to "park" any Minitor handpiece when not in use. The functional stand is an ideal way to keep your bench top neat, and your handpieces accessible.

ITEM NUMBER
UFRM-01



REPLACEMENT CURL CORD MODEL NMS-0015

This flexible coiled cord is designed to connect between any "D" Series Minitor handpiece and Power Pack or Ultraform Model UF5000.

ITEM NUMBER
NMS-0015



MINITOR FOOT CONTROL MODEL NMS-0020

The Minitor Foot Control provides solid-state, infinitely variable speed control for all Minitor handpieces. It is supplied with a 5-foot cord. For use with new "D" Series Power Pack only.

ITEM NUMBER
NMS-0020

Minitor D Series
Belt Sander | Profiler R

Belt Sander

MODEL UFH-BS33

- Direct Motor Drive provides maximum power
- Spring Loaded Tensioning Device on belt arm enables quick change of sanding belts
- Lubrication not required



ABRASIVE BELTS

WIDTH	GRIT	ITEM NUMBER*
¼ (6mm)	80	ABB-08080
	120	ABB-08120
	180	ABB-08180
	240	ABB-08240
5/16 (8mm)	80	ABB-10080
	120	ABB-10120
	180	ABB-10180
	240	ABB-10240

*Pack of 10

ITEM NUMBER
UFH-BS33

SPECIFICATIONS

UFH-BS33

Input Voltage ..... 0-30 D.C.V.
Rated Amperage ..... 0.3 D.C.A.
Belt Speed ..... 3 to 12 m/sec.
Weight 450g

Profiler "R"

MODELS NMS-0005 AND NMS-0006

- Pistol Grip provides comfort and easy handling
- Curl Cord enables freedom of movement for greater accuracy
- Variable speed control and stroke adjustment provides maximum flexibility
- Accepts tool shanks up to 3/16" max



SPECIFICATIONS

NMS-0005

Rated Input Voltage ..... 0-30 D.C.V.
Reciprocating Stroke 0-6mm
Frequency ..... 0-4,200 strokes/min
Rotation Speed ..... 15,000 rpm
Pulley Reduction Rate 1:3.4
Size ..... 145 mm (L) × 40mm(W) × 130mm(H)
Weight 675g

ITEM NUMBER
NMS-0005

NMS-0006

Rated Input Voltage ..... 0-30 D.C.V.
Reciprocating Stroke 0-2mm
Frequency ..... 0-7,000 strokes/min
Rotation Speed ..... 15,000 rpm
Pulley Reduction Rate 1:2
Size ..... 145mm(L) × 40mm(W) × 130mm(H)
Weight 675g

ITEM NUMBER
NMS-0006

Rotary Handpieces

MODELS NMS-0002, NMS-0003, and NMS-0004

The new slim line rotary handpieces are perfectly balanced for ease of handling in even the most difficult jobs. The NMS-0002 provides high torque for heavy duty applications, while the NMS-0004 with its speed of 55,000 RPM is ideal for carbide burrs, CBN and diamond tools.

- Quick release 1/8" and 3/32" collets for rapid tool changing
- Curl cord plug-in for quick replacement (No screws or soldering required)
- Range of 15,000 to 55,000 rpm

SPECIFICATIONS

NMS-0002	
Rated Input Voltage	0-30 D.C.V.
Rotation Speed	0-15,000 rpm
Max Shaft Output	60 W
Max Shaft Torque	0.076 N.m.
Size	32 × 170 mm
Overall Weight	270g
Motor Weight	170g

NMS-0003	
Rated Input Voltage	0-30 D.C.V.
Rotation Speed	0-30,000 rpm
Max Shaft Output	70 W
Max Shaft Torque	0.059 N.m.
Size	32 × 170 mm
Overall Weight	270g
Motor Weight	170g

NMS-0004	
Rated Input Voltage	0-30 D.C.V.
Rotation Speed	0-55,000 rpm
Max Shaft Output	40 W
Max Shaft Torque	0.027 N.m.
Size	27 × 150 mm
Overall Weight	190g
Motor Weight	90g

Note: Due to improved design, "D" Series Motors and Heads are not interchangeable with previous models.

ITEM NUMBER
NMS-0002
NMS-0003
NMS-0004

*Standard Head NMS-0009 comes with all handpieces.



NMS-0004
(Uses NMS-0014 Motor)



NMS-0003
(Uses NMS-0013 Motor)



NMS-0002
(Uses NMS-0012 Motor)

Profiler "S"

MODEL NMS-0007



- Compact and lightweight for precise operation
- Reduced vibration for greater accuracy
- Variable stroke and speed control

ITEM NUMBER
NMS-0007

(Users NMS-0016 Motor)

SPECIFICATIONS

NMS-0007	
Rated Input Voltage	0-30 D.C.V.
Rotation Speed	0-8,000 rpm
Chuck Capacity	0.60-.156 (1.5 mm-4 mm)
Swing Stroke	0-.062 (0-1.6 mm)
Stroke Frequency	0-8,000 stroke/min
Size	32 × 190
Weight	290g
Motor Torque	0.073 N.m.

Minitor D Series
Motors | Accessory Heads

ITEM NUMBER	RPM
NMS-0012	15,000
NMS-0013	30,000
NMS-0016	8,000



NOTE: Due to improved design, "D" series motors and heads are not interchangeable with previous models.

Accessory Heads

STANDARD HEAD
MODEL NMS-0009

- ⅛" Std. Collet
- 3⁄32" and 3mm optional



This all-purpose rotary head is the same one supplied with handpiece Models NMS-0002, 0003 and 0004. It features a quick-release collet mechanism for rapid tool changes and is supplied with a ⅛" collet.

ITEM NUMBER
NMS-0009

120° HEAD
MODEL NMS-0011

- ⅛" Std. Collet
- 3⁄32" and 3mm optional



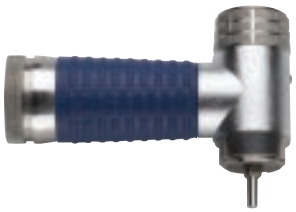
NOTE: For use with NMS 0012 motor only

This very useful head easily reaches those smaller and deeper areas that are unreachable with other types of heads. A quick-release collet is featured and a ⅛" collet is supplied with the head.

ITEM NUMBER
NMS-0011

90° HEAD
MODEL NMS-0010

- ⅛" Std. Collet
- 3⁄32" and 3mm optional



NOTE: For use with NMS 0012 motor only.

This useful head provides access for many finishing and polishing jobs. The right angle configuration is ideal for use with abrasive and polishing disks, felt bobs and more. This versatile head features a quick-release collet mechanism for rapid tool changes, and is supplied with a ⅛" collet.

ITEM NUMBER
NMS-0010

HEAVY-DUTY HEAD
MODEL NMS-0017



NOTE: Not for use with NMS-0014 motor.

This rotary head accepts larger ¼" shank tools for increased stock removal. It features a quick-release collet mechanism for rapid tool changes, and is supplied with a ¼" collet.

ITEM NUMBER
NMS-0017

SLENDER HEAD
MODEL NMS-0018



This pencil-like rotary head is ideal for working deep cavities and restricted areas. The profile provides an extra 40mm reach over the standard rotary head. It features a quick-release collet mechanism for rapid tool change. Supplied with a ⅛" collet.

ITEM NUMBER
NMS-0018

STEEL FILES

SWISS PATTERN

Precision-cut and made of high-quality steel. All are available in either "00" or "01" cut and have ⅛ shanks.

ITEM NUMBER	CUT
STL-00-SET	00
STL-01-SET	01

QUANTITY DISCOUNTS:
Discounts apply to current Net Prices. Shapes and cuts may be mixed.
5 or more ..... Less 10%

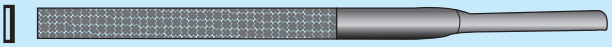
STEEL FILES (STL-101 – 4" LONG, ALL OTHERS 3½" LONG)	SHAPE	DESCRIPTION	ITEM NUMBER
	Flat	.400 wide × .110 thick	STL-101-*
	Flat	.200 wide × .060 thick	STL-1-*
	Round	.045 to .125 dia.	STL-2-*
	Half Round	.125 to .180 wide .045 to .100 thick	STL-3-*
	Crossing	.100 to .180 wide .045 to .075 thick	STL-4-*
	Triangular	.070 to .125 per side	STL-5-*
	Square	.045 to .100 per side	STL-6-*

*When ordering files above, add "00" or "01" to end of item number to indicate cut desired (e.g. STL-1-00).

DIAMOND FILES

D-M-E diamond files are particularly adapted for cavity finishing. Diamond particles are accurately graded and then metal bonded with points exposed. All D-M-E diamond files are supplied with ⅛ shanks. Heavy black lines on end cross sections indicate cutting edges.

QUANTITY DISCOUNTS:
Discounts apply to current Net Prices. Shapes and cuts may be mixed.
5 or more ..... Less 10%

STANDARD DIAMOND FILES (2" LONG)	SHAPE	DESCRIPTION**	ITEM NUMBER
	Flat	.0787 wide × .046 thick	DLA 2 × 1
		.1181 wide × .046 thick	DLA 3 × 1
		.1575 wide × .046 thick	DLA 4 × 1
		.1575 wide × .0787 thick	DLA 4 × 2
		.1969 wide × .0787 thick	DLA 5 × 2
	Round	.046 diameter	DLA 1
		.0787 diameter	DLA 2
		.1181 diameter	DLA 3
	Triangular	.0787 × .0787 × .0787	DLA T2
		.1181 × .1181 × .1181	DLA T3
	Crossing	.1610 wide × .0722 thick	DLA R2.5 × R5
LONG DIAMOND FILE (3¼" LONG)	**100 MICRONS		
	Flat	.1969 wide × .0600 thick	DLE 1

Half Rifflers

FOR USE WITH MINITOR PROFILER 'R'

The half rifflers illustrated below are precision-cut swiss pattern riffle files made of high-quality steel. D-M-E half rifflers are available in a variety of shapes. All are available in either "0" or "2" cut, have ⅛ shanks and are 3½ long.

QUANTITY DISCOUNTS:
Discounts apply to current Net Prices.
Half rifflers shapes and cuts may be mixed.
5 or more ..... Less 10%

	ITEM NUMBER PREFIX*
	HR 556
	HR 557
	HR 558
	HR 559
	HR 560
	HR 561

	ITEM NUMBER PREFIX*
	HR 562
	HR 563
	HR 564
	HR 565
	HR 566
	HR 567

*When ordering half rifflers above, add "0" or "2" to end of item number to indicate cut desired (e.g. HR-556-0).

Felt Bobs

FOR USE WITH MINITOR PROFILER 'R'

- 45° angle end cut
- ⅛" diameter x 1 ¼" long shanks

SIZE	MEDIUM	HARD	ROCK HARD
	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER
¼ × ¼ × 1½	LSB-1-M	LSB-1-H	LSB-1-DH
⅜ × ⅜ × 1¼	LSB-2-M	LSB-2-H	LSB-2-DH
½ × ½ × 1¾	LSB-3-M	LSB-3-H	LSB-3-DH



Abrasive Stone Holders

- Handheld and shank-mounted styles
- Provide excellent control and quick stone changes

The new line of abrasive stone holders provides the metal finisher with excellent control and convenience. They are precision molded of shock absorbing, impact resistant nylon 6-6, and feature a removable collar that locks the stones in place and permits quick stone changes. Shank mounted style is designed for use with the Minitor *Profiler 'R' as well as other reciprocating profilers.

Handheld style offers double end capacity.

* (⅛ shanks only)



HSH-400



SH-210



SH-220



SH-310



SH-320

ABRASIVE STONE HOLDERS

ITEM NUMBER	SHANK DIAMETER	ACCOMMODATE STONE SIZE
SH-210	(⅛) .125	⅛ × ¼
SH-220	(⅛) .125	⅛ × ½ ¼ × ¼
SH-310	(3⁄16) .185	⅛ × ¼
SH-320	(3⁄16) .185	⅛ × ½ ¼ × ¼
HSH-400 (Handheld Stone Holder)	None	1⁄16 × ½ ⅛ × ½ ¼ × ¼ ⅛ × ¼

QUANTITY DISCOUNTS:
Discounts apply to current Net Prices.
Stone holder styles may be mixed.

3 or more ..... Less 10%

Abrasive Stones | Abrasive Stone Shoe Kit

The stones are sized for use with D-M-E Stone Holders. They are available in three types of stones: VITRIFIED for general purpose finishing, RESIN for finishing EDM surfaces and ALUMINUM OXIDE for polishing. D-M-E abrasive stones can be used on pre-hardened, hardened and soft mold and die steels.



LENGTH (ALL STONES = 4")		GENERAL PURPOSE				EDM			FINE FINISH	
		SILICON-CARBIDE VITRIFIED BONDED TYPE V				SILICON-CARBIDE RESIN BONDED TYPE R			ALUMINUM OXIDE TYPE X	
THICKNESS	WIDTH	GRIT				GRIT			GRIT	
		150	240	400	600	120	220	320	600	900
1/8	3/8	•	•	•	•	•	•	•	•	•
3/16	3/8	•	•	•	•	•	•	•	–	–
1/4	3/8	•	•	•	•	•	•	•	–	–
1/8	1/2	•	•	•	•	•	•	•	–	–
3/16	1/2	•	•	•	•	•	•	•	–	–
1/4	1/2	•	•	•	•	•	•	•	•	•
3/8	1/2	•	•	•	•	•	•	•	•	•

QUANTITY DISCOUNTS:
Discounts apply to current Net Prices.
Types, sizes and grits may be mixed.
10 or more ..... Less 15%

WHEN ORDERING, PLEASE SPECIFY:
1. **Quantity**
2. **Thickness, width, length, grit and type**
   Example: (16) 3/16 x 1/2 x 4", 220R

For other shapes and sizes of abrasive stones, see page 50.

ABRASIVE STONE SHOE KIT

- Floating Stone Shoe design allows stones to be used at any angle
- Provides the metal finisher with optimum control and flexibility

These new Abrasive Stone Shoes and Stone Flats represent a new standard in metal finishing. Their unique "floating" design permits stoning of flat surfaces, sidewalls, ribs, various contours, etc., with speed and precision. The Stone Shoes are molded of shock absorbing, impact resistant nylon 6-6, and designed to accommodate square or triangular Abrasive Stone Flats. The 1/8" diameter hex drive stems are designed for use with the Minitor Profiler 'R', as well as other reciprocating profilers. Complete kit is supplied with 240 grit, type M oil filled stones.



Abrasive Stone Shoes: (clockwise from right) 1" Square, 1" Triangular, 3/4" Triangular and 3/4"/1" Triangular Upright.

ABRASIVE STONE SHOE KIT

ITEM NUMBER	DESCRIPTION
SSK-240M	Kit includes: 3/4" Triangular Stone Shoe; 1" Triangular Stone Shoe; 1" Square Stone Shoe; 3/4"/1" Stone Shoe; 4 Hex Drive Stems; 10 Abrasive Stone Flats in 240 grit; Type M (Medium oil filled); Sturdy Plastic Case.

QUANTITY DISCOUNTS:
Discounts apply to current Net Prices.
Pack sizes, types and grits may be mixed.
3 or more packs ..... Less 10%

REPLACEMENT ABRASIVE STONE FLATS*

SIZE AND SHAPE	GRIT PACKAGE OF TEN					STONE TYPE
	150	240	320	400	600	
3/4" TRI	•	•	•	•	•	Choice of Type E (EDM stone) or Type M (medium oil filled)
1" TRI	•	•	•	•	•	
1" SQ.	•	•	•	•	•	

Super-Flex Electric Hand Grinder | Heavy-Duty Foot Speed Controller

Super-Flex Electric Hand Grinder

The Super-Flex gives you a full ¼ hp 22,000 rpm hand-grinding tool for continuous, full-shift duty. With the Super-Flex you put the power in your hand and the power plant on the bench. Ideal for use with carbide cutters and mounted points. It has a cool-running aluminum handpiece with grease-sealed bearings. It weighs only 14 ounces but can accommodate ¼ and ⅛ shank diameters. Lock pin and wrenches allow quick tool change.

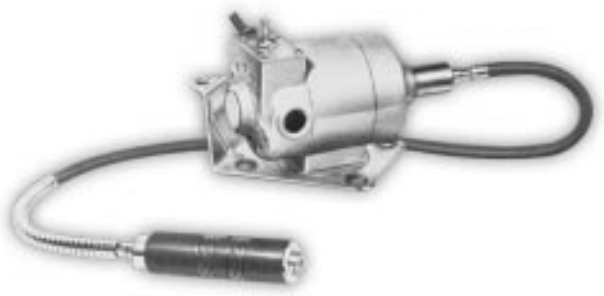
The 36" flexible shaft is moisture-, oil- and grease-resistant made of heavy-duty spun wire with bronze liner. Motor has swivel plate for bench or wall mounting. Item No. 2-248 Foot Speed Controller is available for variable speed control (see below).

ITEM NO. 6-411 – Super-Flex Hand Grinder consists of 115V, AC or DC motor with base, flexible shaft, handpiece, 2 collets (⅛ and ¼) and 2 wrenches.

ITEM NUMBER
6-411

SPECIFICATIONS

Type Motor ..... Universal
Rated hp ..... ¼
No-Load Speed..... .22,000 rpm
Type Bearings..... Ball



RECOMMENDED FOR HEAVY-DUTY CAVITY WORK AND PRODUCTION BENCH WORK WHERE FINGERTIP CONTROL IS A MUST.

NOTE: Electric Hand Grinders 10-311 & 10-321 available by special order. Please call Customer Service for price and availability.

Heavy-Duty Foot Speed Controller

Heavy duty, solid state, infinitely variable speed control, with a low profile housing to protect against accidental actuation. Motor speed is increased as pedal is depressed, stops when petal is released.

Supplied with a 6-foot No. 18/3 cord. Unit operates on 125 VAC, 6 amps, 60 Hertz.

Can be used with Super-Flex Hand Grinder (above).

ITEM NUMBER
2-248



Air Grinder and Filter Lubricator

The compact D-M-E Air Grinder has a rated capacity of ¼" diameter mounted points with its ⅛" collet. An easily operated speed adjusting throttle in the handpiece precisely controls the ball bearing motor to provide spindle speeds up to 60,000 rpm. The overhose exhaust, an integral part of the air supply line, muffles excessive noise and redirects the exhaust air away from the operator and work area. For added operator comfort, the metal handpiece is insulated by a plastic sleeve.

The D-M-E Air Grinder Kit, packaged in a sturdy tool box, includes handpiece with ⅛" collet and nose guard, 5-foot air supply line with 2-foot overhose exhaust, and two wrenches. A metric version of the D-M-E Air Grinder Kit is also available with a 3mm collet.

The recommended filter lubricator for air filtration and automatic lubrication is available separately.

AIR GRINDER KITS
(Motor = 0.1 hp)

ITEM NUMBER
AGK-61
AGK-61M*

Air Consumption = 0.7 cfm
*has 3mm collet

FILTER LUBRICATOR
IN/OUT PORTS ARE ¼ N.P.T.

ITEM NUMBER
FL-60





Tungsten Carbide Rotary Cutters

⅛, ¼ AND ⅜ DIAMETERS



CYL CON OVL INC BAL CBE TRS POV 60C 90C



ROTARY CUTTERS ALSO AVAILABLE IN 10-PIECE SETS (ONE OF EACH SHAPE IN HANDY CONTAINER AS SHOWN)

DESCRIPTION	⅛ SOLID CARBIDE	¼ CARBIDE HEADS ON ⅛ STEEL SHANKS	⅜ CARBIDE HEADS ON ¼ STEEL SHANKS
	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER
CYLINDRICAL	CYL-1	CYL-2	CYL-3
CONE	CON-1	CON-2	CON-3
OVAL	OVL-1	OVL-2	OVL-3
INVERTED CONE	INC-1	INC-2	INC-3
BALL	BAL-1	BAL-2	BAL-3
CYL. BALL END	CBE-1	CBE-2	CBE-3
TREE SHAPE	TRS-1	TRS-2	TRS-3
POINTED OVAL	POV-1	POV-2	POV-3
60° CENTER	60C-1	60C-2	60C-3
90° CENTER	90C-1	90C-2	90C-3

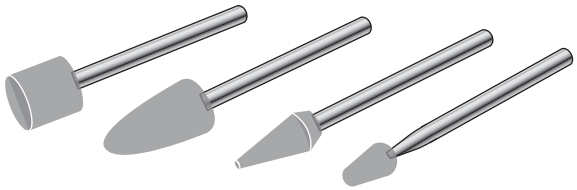
CARBIDE CUTTER SETS (10 Cutters)

ITEM NUMBER	CUTTER HEAD DIA.
18-CARBIDE SET	⅛
14-CARBIDE SET	¼
38-CARBIDE SET	⅜

QUANTITY DISCOUNTS:
Discounts apply to current Net Prices. Discounts apply only to quantities of the same item number.

3 to 9 carbide cutters..... Less 15%
10 or more ..... Less 25%

Mounted Points



ALUMINUM OXIDE ABRASIVE VITRIFIED BOND

D-M-E Mounted Points are carefully molded from the finest Aluminum Oxide Abrasive and with the exact amounts of Vitrified Bond to give the optimum holding qualities for the size of the point. They are precision formed to size and shape AFTER mounting to ensure concentricity between the point and the shank. This eliminates the vibration that causes excessive wear and damage to both the tools and the work surface. This also reduces the danger of shattering points. Five mounted points of same shape conveniently pre-packaged. See below for quantity discounts.

GROUP "B" SHAPES (⅛ SHANK)

ITEM NUMBER (PACK OF 5)	SIZE			ITEM NUMBER (PACK OF 5)	SIZE			ITEM NUMBER (PACK OF 5)	SIZE		
	DIA.	THICKNESS	GRIT		DIA.	THICKNESS	GRIT		DIA.	THICKNESS	GRIT
B-41	5/8	5/8	60	B-72	1/2	1/8	120	B-105	1/4	1/4	90
B-44	7/32	3/8	90	B-73	1/2	1/8	120	B-121	1/2	1/2	60
B-45	3/16	5/16	90	B-74	7/32	3/32	60	B-122	3/8	3/8	60
B-46	1/8	5/16	90	B-81	3/4	3/16	90	B-123	3/16	3/16	90
B-47	1/8	5/32	60	B-82	1/2	1/4	90	B-124	1/8	1/8	90
B-51	7/16	3/4	60	B-91	1/2	5/8	90	B-131	1/2	1/2	60
B-52	3/8	3/4	60	B-95	1/8	3/16	90	B-132	3/8	1/2	60
B-53	1/4	5/8	90	B-96	1/8	1/4	90	B-133	3/8	3/8	60
B-55	1/8	1/4	90	B-97	1/8	3/8	90	B-134	5/16	3/8	60
B-61	3/4	5/16	60	B-98	3/32	1/4	90	B-135	1/4	1/2	60
B-64	1/4	1/16	60	B-101	5/8	11/16	60	B-136	1/4	5/16	90
B-65	1/8	1/8	60	B-103	5/8	3/16	90	–	–	–	–
B-71	5/8	1/8	90	B-104	5/16	3/8	90	–	–	–	–

GROUP "W" SHAPES (⅛ SHANK)

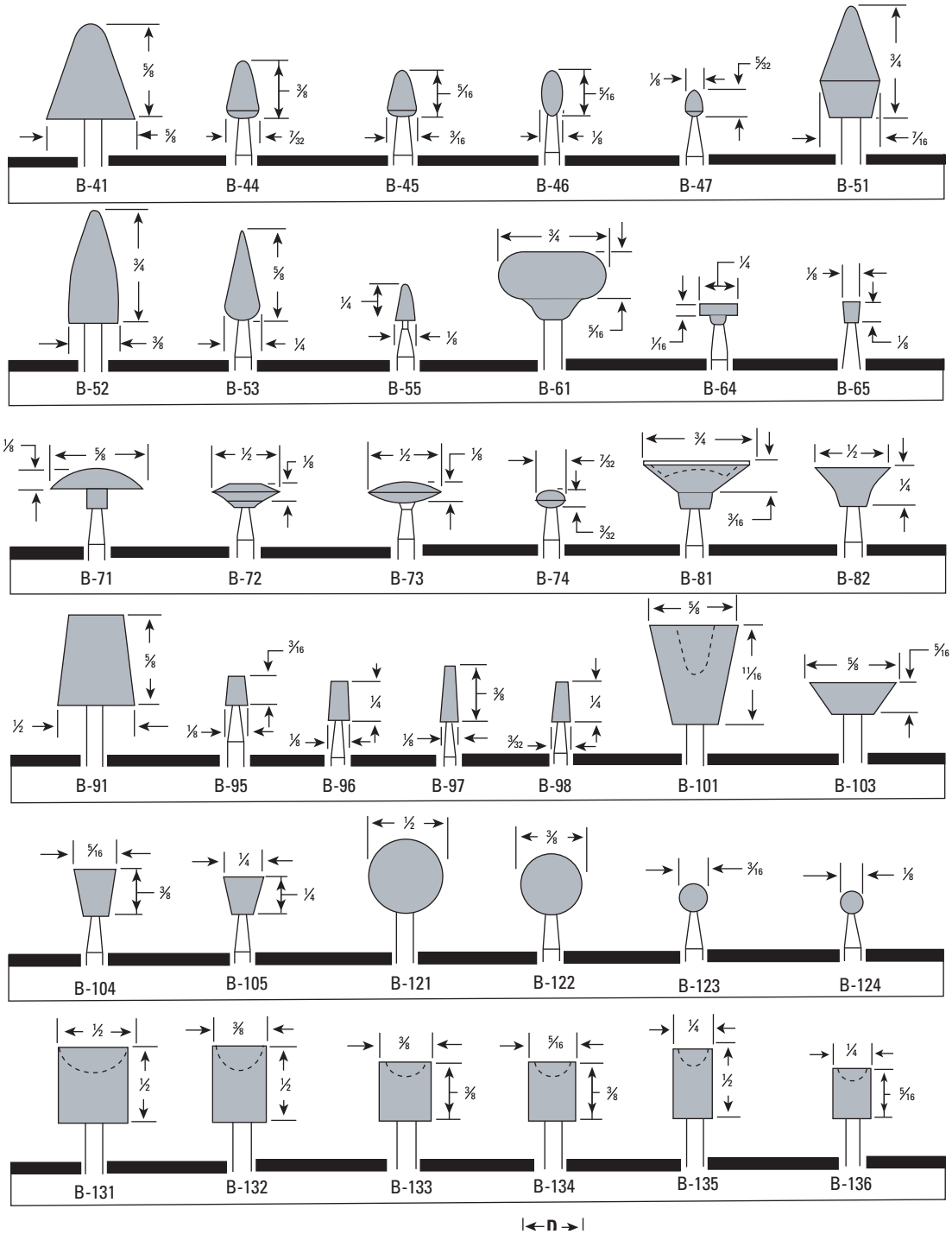
ITEM NUMBER (PACK OF 5)	SIZE			ITEM NUMBER (PACK OF 5)	SIZE			ITEM NUMBER (PACK OF 5)	SIZE		
	D DIA.	T THICKNESS	GRIT		D DIA.	T THICKNESS	GRIT		D DIA.	T THICKNESS	GRIT
W-142	3/32	1/4	90	W-160	1/4	1/4	60	W-176	3/8	1/2	60
W-143	1/8	1/8	90	W-161	1/4	5/16	60	W-182	1/2	1/8	90
W-144	1/8	1/4	90	W-162	1/4	3/8	60	W-185	1/2	1/2	60
W-145	1/8	3/8	90	W-163	1/4	1/2	60	W-200	3/4	1/8	60
W-146	1/8	1/2	90	W-170	5/16	1/2	60	W-215	1"	1/8	60
W-152	3/16	1/4	90	W-173	3/8	1/8	60	W-216	1"	1/4	60
W-153	3/16	3/8	90	W-175	3/8	3/8	60	–	–	–	–

QUANTITY DISCOUNTS:
Discounts apply to current Net Prices.
Shapes and sizes may be mixed.

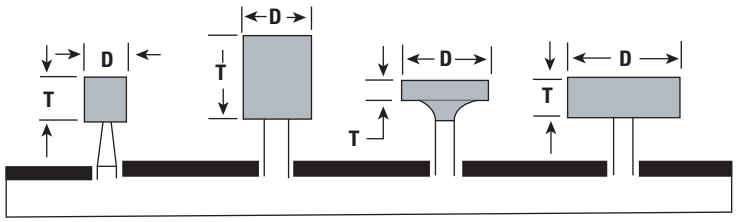
5 to 9 packs ..... Less 10%
10 to 25 packs .....Less 20%
26 or more packs ..... Less 30%

Mounted Points

GROUP "B" SHAPES



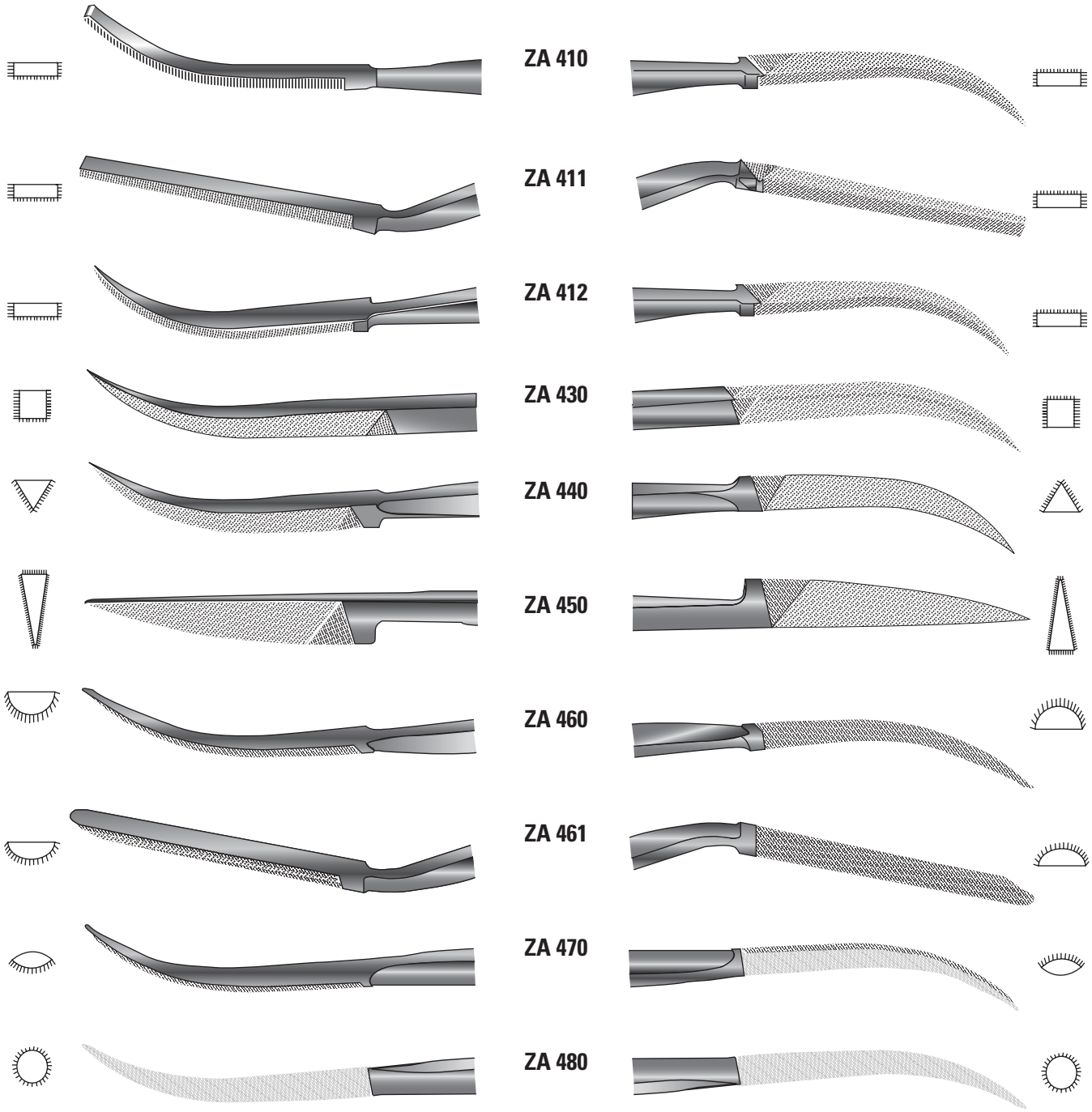
GROUP "W" SHAPES



Heavy-Duty Moldmakers' Rifflers

These Swiss Quality Heavy-Duty Moldmakers' Rifflers are made of chrome alloy steel for longer cutting life. They are ideal for "roughing-out" cavities in molds or die cast dies. Because of their length (12 inches), they provide ample surface to grasp and "bear-down" on the work.

ITEM NUMBER PREFIX*



AVAILABLE IN "0" AND "2" CUT ALL RIFFLERS ARE 7" LONG
"0" cut – 64 teeth/inch
"2" cut – 97 teeth/inch

*When ordering, add "0" or "2" to end of item number to indicate cut desired (e.g. ZA-711-0)

WHEN ORDERING, PLEASE SPECIFY:
1. Item Number
2. Quantity
3. Method of shipment

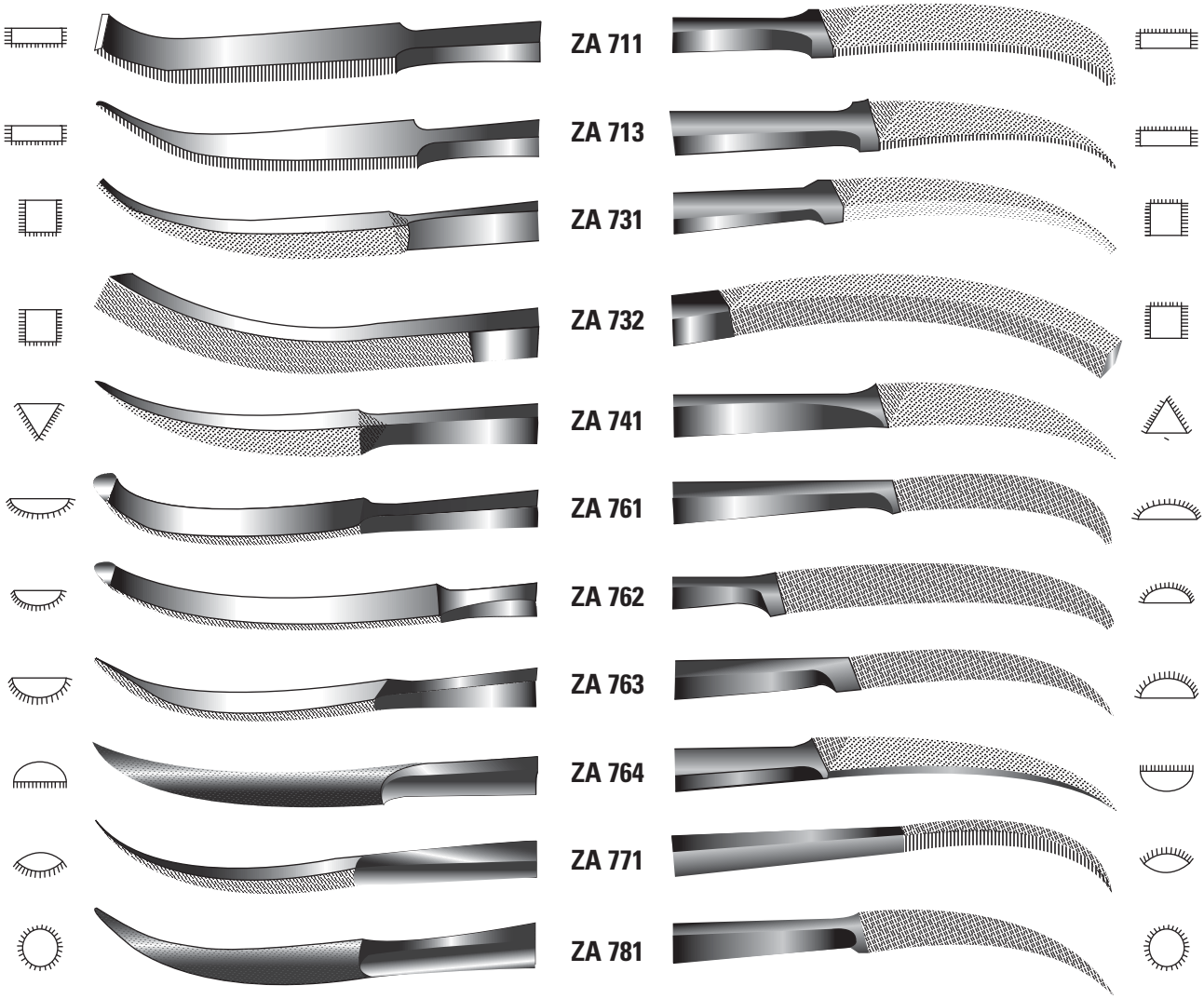
QUANTITY DISCOUNTS:
Heavy-Duty Rifflers. Discounts apply to current Net Prices. Shapes may be mixed.

5 or more ..... Less 10%

Silversmiths' Rifflers

These Swiss Quality Precision Silversmiths' Rifflers are made of chrome alloy steel for longer cutting life. They are unsurpassed as to precision of shape, accuracy of size, hardness and durability.

ITEM NUMBER PREFIX*



AVAILABLE IN "0" AND "2" CUT ALL RIFFLERS ARE 7" LONG
"0" cut – 64 teeth/inch
"2" cut – 97 teeth/inch

WHEN ORDERING, PLEASE SPECIFY:
1. Item Number
2. Quantity
3. Method of shipment

*When ordering, add "0" or "2" to end of item number to indicate cut desired (e.g. ZA-711-0)

QUANTITY DISCOUNTS:
Silversmiths' Rifflers. Discounts apply to current Net Prices. Shapes may be mixed.

5 or more ..... Less 10%

Quick-Change Riffler Handles

These sturdy, plastic-molded HANDLES for Die Sinkers' Rifflers prevent injury to the mold finisher's hand and protect the unused end of the file. They fit snugly into the palm of the hand and provide fingertip control of the riffler.

The unique design permits quick insertion and removal of the riffler without damage to tip.

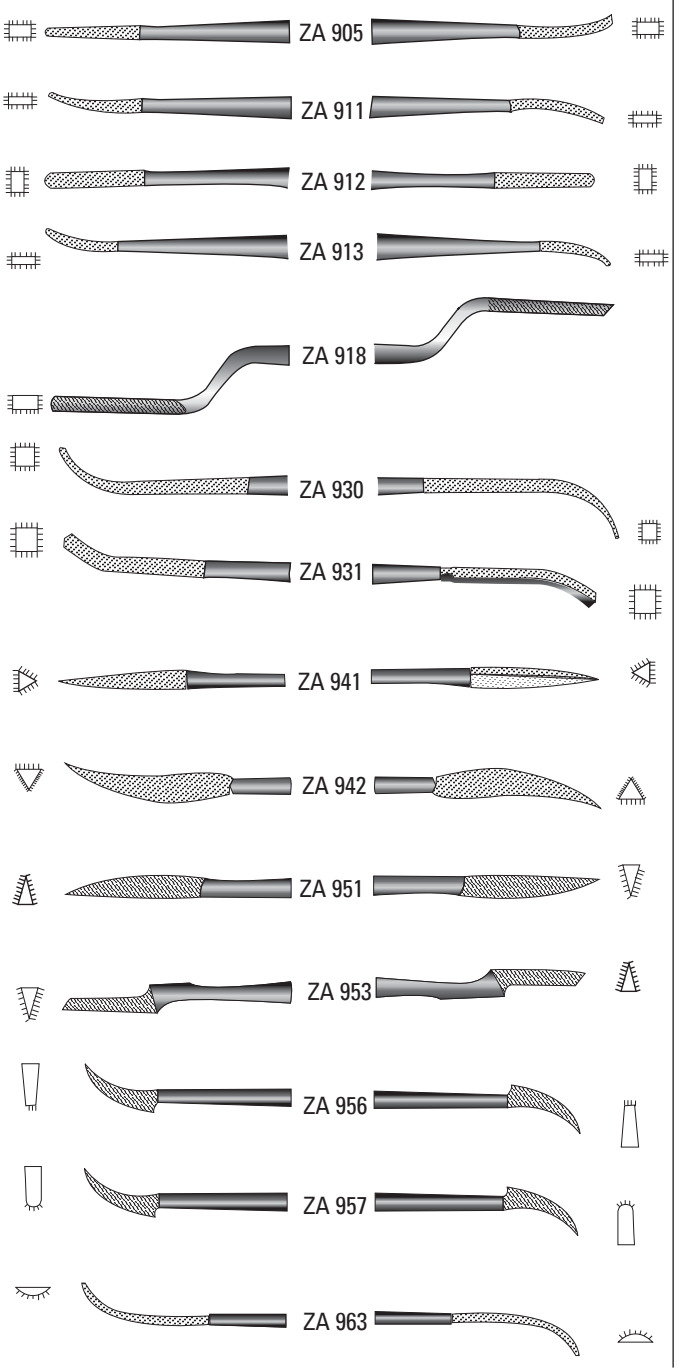
ITEM NUMBER	Complete Set of 4 Handles Includes:
DSR HANDLE SET	1 – Large — 3¾ Long 2 – Medium — 3⅜ Long 1 – Small — 3" Long



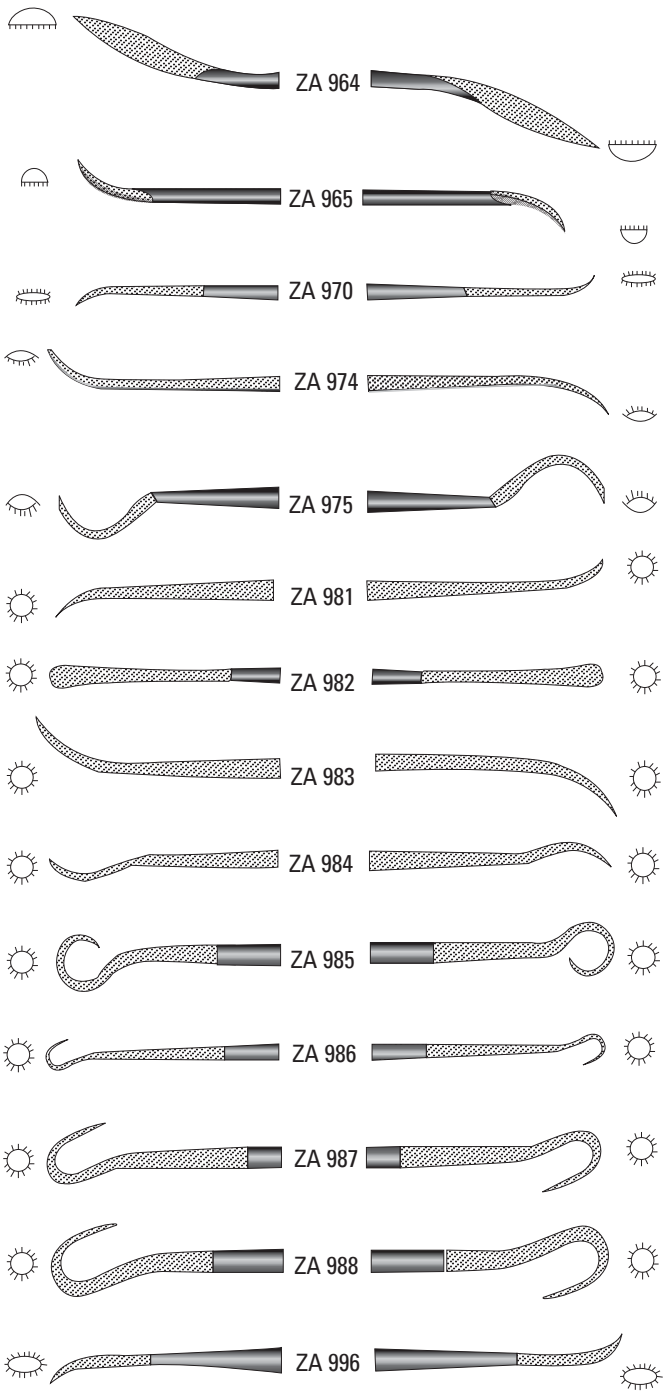
Die Sinkers' Rifflers

Exceptional Quality Swiss Die Sinkers' Rifflers are made of chrome alloy steel in the tradition of superior craftsmanship for longer cutting life. They are unsurpassed as to precision of shape, accuracy of size, hardness and durability.

ITEM NUMBER PREFIX*



ITEM NUMBER PREFIX*



AVAILABLE IN "0" AND "2" CUT ALL RIFFLERS ARE 6" LONG
"0" cut – 64 teeth/inch
"2" cut – 97 teeth/inch

WHEN ORDERING, PLEASE SPECIFY:
1. Item Number
2. Quantity
3. Method of shipment

*When ordering, add "0" or "2" to end of item number prefix to indicate cut desired (e.g. ZA-905-0)

QUANTITY DISCOUNTS:
Die Sinkers' Rifflers. Discounts apply to current Net Prices. Shapes may be mixed.

5 to 20 . . . . . Less 10%
21 or more . . . . . Less 15%

Habilis Files | Diamond Needle Files

Habilis Files

• CHROME ALLOY STEEL • INTEGRAL HANDLE

D-M-E Habilis Files are made from chrome alloy steel. They are just right for those in-between jobs when a full-size file is too large. The file and integral handle are balanced to give the mold or die maker full control for efficient cutting.

A complete set, stored in a sturdy vinyl pouch, includes one each of these five popular file shapes: rectangular, half-round, triangular, square and round. These handy Habilis Files are available in coarse (00) and medium (1) cut. Files of the same shape and same cut may be purchased in boxes of ten.

Set of 5 Files	
CUT	ITEM NUMBER
00	HFS-00
1	HFS-1

FILE SHAPE	00 CUT	1 CUT	FILE CONTOUR DIMENSIONS	CUT LENGTH
	ITEM NUMBER	ITEM NUMBER		
Rectangular	HFP-00	HFP-1	3/8 × 1/8	4"
Half-Round	HFF-00	HFF-1	15/32 × 9/64	4"
Triangular	HFT-00	HFT-1	3/8	4"
Square	HFL-00	HFL-1	1/4	4"
Round	HFR-00	HFR-1	1/4	4"



Set of five files in a vinyl pouch.
Overall length of files is 8½".

QUANTITY DISCOUNTS:
Habilis files. Discounts apply to current Net Prices. Shapes and cuts may be mixed.

5 or more ..... Less 10%

Diamond Needle Files

FOR FILING HARDENED STEELS, CARBIDES AND CERAMICS

D-M-E Diamond Needle Files are specially made for moldmakers. They feature efficient cutting action with only the slightest pressure and provide long tool life. The Diamond Needle Files are 5½" long with approximately 2¾" diamond surface. The round shanks are knurled to prevent slippage.

A complete set, stored in a sturdy vinyl pouch, includes one each of these five popular file shapes: rectangular, half-round, triangular, square and round. Diamond Needle Files may also be purchased individually.

FILE SHAPE	ITEM NUMBER
Rectangular	DNF-P
Half-Round	DNF-F
Triangular	DNF-T
Square	DNF-L
Round	DNF-R

Set of 5 Files
ITEM NUMBER
DNF-S5



GRIT = 75 microns
(180 MESH)

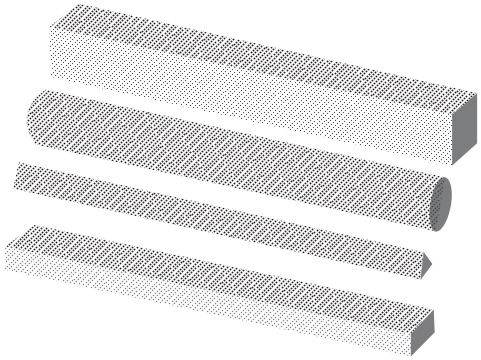
Set of five files in a vinyl pouch.
Overall length of files is 5½".

QUANTITY DISCOUNTS:
Diamond needle files. Discounts apply to current Net Prices. Shapes may be mixed.

5 or more ..... Less 10%

Abrasive Stones

FOR GENERAL AND SPECIAL PURPOSE STONING, FINISHING AND POLISHING OF MOLDS AND DIES



GENERAL PURPOSE STONES

These silicon carbide, vitrified bond stones are available in two types:

TYPE A: For use on steel prior to heat treating or for steel hardness lower than 40 HRC.

TYPE B: For steel hardness higher than 40 HRC. Ideal for restoring finish after heat treating.

SPECIAL PURPOSE STONES

Available in three types:

TYPE E (EDM STONES): Aluminum oxide crystals in a medium hard vitrified bond, with a special resin treatment to improve cutting action on hard surface crusts, such as those produced by EDM.

TYPE M (MEDIUM OIL FILLED): Aluminum oxide crystals in a hard vitrified bond, with a special oil fill which eliminates the soaking often recommended for abrasive stones. The oil fill provides additional lubrication to prevent loading and assure optimum stock removal. Ideal for heat treated tool steels.

TYPE F (D-M-E FLEX): Aluminum oxide crystals in a hard resin bond provide some flexibility to reduce breakage. Ideal for polishing deep ribs and fine details.

GENERAL PURPOSE (TYPE A OR B)

RECTANGULAR			GRIT		
THK.	WIDTH	LGTH.	150 & 240	400	600
1/16	1/2	4"	•	•	•
1/8	1/2	4"	•	•	•
3/16	1/2	4"	•	•	•
1/4	3/4	4"	•	•	•
1/2	3/4	4"	•	•	•
1/2	1"	4"	•	•	•

GENERAL PURPOSE (TYPE A OR B)

SQUARE		GRIT		
SIZE & SHAPE	LGTH.	150 & 240	400	600
1/4 SQ	4"	•	•	•
3/8 SQ	4"	•	•	•
1/2 SQ	6"	•	•	•
3/4 SQ	6"	•	•	•

GENERAL PURPOSE (TYPE A OR B)

TRIANGULAR		GRIT		
SIZE & SHAPE	LGTH.	150 & 240	400	600
1/4 TRI	4"	•	•	•
1/2 TRI	4"	•	•	•

GENERAL PURPOSE (TYPE A OR B)

ROUND		GRIT		
SIZE & SHAPE	LGTH.	150 & 240	400	600
1/4 RD	4"	•	•	•
3/8 RD	4"	•	•	•
1/2 RD	4"	•	•	•

WHEN ORDERING, PLEASE SPECIFY:
1. **Quantity**
2. **Size, Shape, Grit and Type**
   Example: (12) – 1/4 SQ x 4" – 400 GRIT-Type A

QUANTITY DISCOUNTS:
Discounts apply to current Net Prices. Types, sizes and grits may be mixed.

10 or more ..... Less 15%

SPECIAL PURPOSE (TYPES E, M OR F)

For other stones (sized for use with profilers), see Page 41.

SHAPE AND SIZE			TYPE E (EDM STONES) GRIT					TYPE M (MEDIUM OIL FILLED) GRIT					TYPE F (D-M-E FLEX) GRIT				
RECTANGULAR																	
THICK.	WIDTH	LENGTH	150	240	320	400	600	150	240	320	400	600	150	240	320	400	600
1/16	1/4	4"	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
1/8	1/4	4"	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
1/8	1/2	4"	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
1/4	1/2	4"	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SQUARE			GRIT					GRIT					GRIT				
SIZE AND SHAPE	LENGTH		150	240	320	400	600	150	240	320	400	600	150	240	320	400	600
1/8 SQ	4"		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
1/4 SQ	4"		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Abrasive Stone Kit

Abrasive Stone Kit

This useful kit designed for the professional metal finisher contains a complete selection of 45 aluminum oxide special-purpose stones, plus one handheld stone holder. The special-purpose stones consist of:

- "Type E" (resin treated) for work on hard surface crusts such as EDM
- "Type M" (oil filled) for stoning heat-treated tool steels
- "Type F" (resin bonded) for added flexibility and break resistance when stoning deep ribs and fine details



ABRASIVE STONE KIT ITEM NUMBER: ASK-450

ABRASIVE STONE KIT INCLUDES

SHAPE AND SIZE			TYPE E [EDM STONES)	TYPE M (MEDIUM OIL FILLED)	TYPE F (D-M-E FLEX)
RECTANGULAR			1 EACH OF GRIT	1 EACH OF GRIT	1 EACH OF GRIT
THICK	WIDTH	LENGTH			
⅛″	¼″	4″	150, 240, 320, 400, 600	150, 240, 320, 400, 600	150, 240, 320, 400, 600
⅛″	½″	4″	150, 240, 320 400, 600	150, 240, 320, 400, 600	150, 240, 320, 400, 600
SQUARE			1 EACH OF GRIT	1 EACH OF GRIT	1 EACH OF GRIT
¼″ x ¼″		4″	150, 240, 320, 400, 600	150, 240, 320, 400, 600	150, 240, 320, 400, 600

Abrasive Sheets

ALUMINUM OXIDE CLOTH AND SILICON CARBIDE WATERPROOF PAPER

- 9" × 11" Sheets
- 50 Sheets per Carton



ALUMINUM OXIDE ABRASIVE CLOTH SHEETS

ITEM NUMBER (CARTON OF 50 SHEETS)	GRIT
ABC-80	80
ABC-100	100
ABC-120	120
ABC-180	180
ABC-240	240
ABC-320	320
ABC-400	400
ABC-500	500

SILICON CARBIDE WATERPROOF PAPER

ITEM NUMBER (CARTON OF 50 SHEETS)	GRIT
ABW-220	220
ABW-280	280
ABW-320	320
ABW-400	400
ABW-500	500
ABW-600	600



Abrasive Cloth Bench Rolls

ALUMINUM OXIDE



50 YARD ROLLS			
1" WIDE		2" WIDE	
ITEM NUMBER	GRIT	ITEM NUMBER	GRIT
ABR60-1	60	ABR60-2	60
ABR80-1	80	ABR80-2	80
ABR100-1	100	ABR100-2	100
ABR120-1	120	ABR120-2	120
ABR180-1	180	ABR180-2	180
ABR240-1	240	ABR240-2	240
ABR320-1	320	ABR320-2	320
ABR400-1	400	ABR400-2	400

Abrasive Discs and Holders

ABRASIVE DISCS (SELF ADHESIVE)

DIA.	GRIT	ITEM NUMBER (PACK OF 50)
½	60	EPD-260
	80	EPD-280
	120	EPD-2120
	240	EPD-2240
	320	EPD-2320
¾	60	EPD-360
	80	EPD-380
	120	EPD-3120
	240	EPD-3240
	320	EPD-3320
1	60	EPD-460
	80	EPD-480
	120	EPD-4120
	240	EPD-4240
	320	EPD-4320

ABRASIVE DISC HOLDERS (⅛" SHANKS)

DIA.	ITEM NUMBER (PACK OF 5)
½	EPD-H2
¾	EPD-H3
1	EPD-H4

DISC HOLDER SET

ONE EACH OF EPD-H2, H3, H4
ITEM NUMBER
EPD-H234



Felt Polishing Kit | Polishing Brushes | Mold Polishing and Lapping Compound

Felt Polishing Kit

NYLON HOLDERS AND FELT WHEELS

POLISHING KIT CONTENTS:
(1) Storage Box shown at right
(12) ¼ Felt Wheels
(8) ½ Felt Wheels
(6) ¾ Felt Wheels
(1 ea) ¼, ½, ¾ Holder

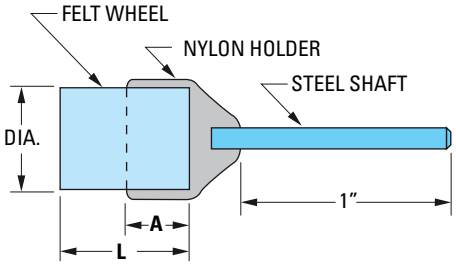


NO CENTER SCREW TO MAR THE WORK FINISH.
Nylon Holders have side and bottom grips to prevent slipping.

NYLON HOLDERS*				FELT WHEELS**		
ITEM NUMBER	NOM. DIA.	SHAFT DIA.	A	ITEM NUMBER	NOM. DIA.	L
14NH	¼	⅛	¼	14FW	¼	½
12NH	½	⅛	5⁄16	12FW	½	⅝
34NH	¾	⅛	5⁄16	34FW	¾	⅝
1NH18	1	⅛	5⁄16	1FW	1	11⁄16
1NH14	1	¼	5⁄16	1FW	1	11⁄16
112NH	1½	¼	5⁄16	112FW	1½	11⁄16

*Sold in packs of 5 only **Sold in packs of 10 only

POLISHING KIT
ITEM NUMBER
FPK-326



Polishing Brushes

AVAILABLE IN BRISTLE OR BRASS

ALL BRUSHES HAVE ⅛ DIAMETER SHANKS			
BRISTLE	BRUSH DIAMETER	STYLE	BRASS
ITEM NUMBER*			ITEM NUMBER*
PB-7	3⁄16	END BRUSH	PBR-7
PB-12	½	SMALL CUP	—
PB-11	⅝	LARGE CUP	PBR-11
PB-1	¾	WHEEL	PBR-1

*PACK OF 10



QUANTITY DISCOUNTS:
Discounts apply to current Net Prices.
Pack types and styles may be mixed.
5 packs or more ..... Less 10%

Mold Polishing and Lapping Compound

FLASH POINT = 335°F
FLAMMABLE LIMIT = 345°F

D-M-E Mold Polishing and Lapping Compound is made of an aluminum oxide abrasive powder mixed with a mineral-based carrier agent. It is an inexpensive and effective compound for polishing with brushes and brass or wood laps. Ideal for mold polishing, it can also be used for such applications as lapping bushing I.D.'s or enlarging undersized ejector pin bores.

ITEM NUMBER*	GRIT
PLC-220	220
PLC-280	280
PLC-400	400
PLC-600	600

*16 oz. can



Diamond Compound

FOR HIGH-QUALITY MOLD AND DIE POLISHING

Quality of mold or die finish is frequently an important factor in how a mold or die operates. D-M-E Diamond Compound is proven to produce the finest quality finish with considerable savings in time and labor.

D-M-E Diamond Compound contains no adulterants, nor non-graded, non-working diamond "fines". The precision-graded diamond particles are uniformly and permanently dispersed and blended in a high-quality, universally soluble, synthetic vehicle; giving the best composition possible. It will not "cake" or dry out and is completely stable at temperatures from –50°F to +150° F, permitting high-speed mechanical polishing operations.

Available in 2½ gram, 5 gram, and 18 gram sizes.

Since D-M-E Diamond Compound is not water soluble, the use of water as a thinning agent is not recommended. For best results, use D-M-E THINNER LUBRICATOR to reduce the compound to its most efficient working consistency.



18 Gram



5 Gram



2½ Gram

FINISH	ITEM NUMBER	LABEL COLOR GUIDE	NAT'L BUR. STD. GRADE	MICRON SIZE. RANGE†	COMPOUND NUMBER AND DIAMOND CONTENT	APPROX. MESH EQUIVALENT
Final ultra-mirror polishing of plastics mold cavities.	DC-OOH	Pink	¼	0-½	½-Heavy	100,000
	DC-OH	Silver	½	0-1	1-Heavy	60,000
Final high-mirror polishing of selected work such as optical quality plastics mold cavities.	DC-1M	Ivory	1	0-2	1-Medium	15,000
	DC-1H	Ivory	1	0-2	1-Heavy	15,000
Final mirror-polishing of high-quality plastics mold cavities, especially those producing clear plastic parts.	DC-3M	Yellow	3	1-5	3-Medium	9,000 to 7,000
	DC-3H	Yellow	3	1-5	3-Heavy	9,000 to 7,000
Final polishing of most plastics mold cavities.	DC-6U	Orange	6	4-8	6-Universal	5,000 to 2,500
	DC-6M	Orange	6	4-8	6-Medium	5,000 to 2,500
Intermediate polishing of plastics mold cavities and final polishing of die cast die cavities.	DC-9U	Green	9	6-12	9-Universal	1,300
	DC-9M	Green	9	6-12	9-Medium	1,300
	DC-15U	Blue	15	8-22	15-Universal	1,300 to 900
	DC-15M	Blue	15	8-22	15-Medium	1,300 to 900
Preliminary polishing of all plastics mold and die cast die cavities.	DC-30U	Red	30	20-40	30-Universal	800 to 550
	DC-30M	Red	30	20-40	30-Medium	800 to 550
	DC-45U	Brown	45	30-60	45-Universal	500
	DC-45M	Brown	45	30-60	45-Medium	500
Heavy stock removal. Enlarging holes in hardened steel.	DC-170H	Grey-Black	170		170M-Heavy	120 to 80

†The smaller the micron size, the finer the finish.

Thinner Lubricator

FOR DIAMOND COMPOUND

When polishing with Diamond Compound, stock removal may cause the compound to thicken. Thinner Lubricator is recommended to prevent this thickening and assure proper lubrication of the diamond particles. It is supplied in a convenient 4-ounce squeeze bottle.

ITEM NUMBER
TL-4



Mold Finish Comparison Kit

EXPANDED VERSION – 12 SAMPLES FINISHED TO SPI STANDARDS

- Eliminates errors or guesswork in achieving desired or specified finishes
- Saves time…eliminates over-polishing
- Provides a visual and numerical standard for specifying mold/part finishes



Professionally finished to SPI standards, this kit is an invaluable tool for both selection of finishes required and comparison to work in progress. The visual and numerical standards are also helpful in communications between end user, molder and moldmaker. Each finish has been generated on a 1" diameter x ⅜ -thick piece of H-13 steel. Edges are chamfered and O.D. is knurled for safe, easy pick-up and handling. Finish numbers are stamped on the back of each sample for quick reference. A molded plaque in the kit's lid shows the part finishes that result from each mold finish.

ITEM NUMBER
MFK-1200

FINISH TYPE	DESCRIPTION	ROUGHNESS AVERAGING (RA) micro-inches range	COMMENTS
A-1	grade # 3 diamond buff	0-1	• for mirror or optical finishes • most time consuming and costly finishes to achieve • steel grade important to results (D-M-E No. 3 or No. 5 steel recommended)
A-2	grade # 6 diamond buff	1-2	
A-3	grade # 15 diamond buff	2-3	
B-1	600 grit paper	2-3	• removes all tool and machining marks • provides good mold release • light reflecting finish on molded part, some sheen
B-2	400 grit paper	4-5	
B-3	320 grit paper	9-10	
C-1	600 stone	10-12	• removes all tool and machining marks • provides good mold release • mute finish on molded part, no sheen
C-2	400 stone	25-28	
C-3	320 stone	38-42	
D-1	dry blast glass bead #11 (8" distance at 100 psi; 5 secs.)	10-12	• for decorative finishes • often used for diecast and thermoset tooling • helps hide shrink marks and other imperfections • dull, non-reflecting finish on molded or cast part
D-2	dry blast # 240 oxide (5" distance at 100 psi; 6 secs.)	26-32	
D-3	dry blast # 24 oxide (6" distance at 100 psi; 5 secs.)	190-230	

Finishing Applications

The D-M-E Ultraform Ultrasonic Finishing and Polishing System is highly effective at rapid deburring, filing, stoning, polishing and lapping on a variety of surfaces, including EDM, tungsten carbide, and mold steel. Available in two types of ultrasonic models, the units replace costly, time-consuming hand finishing operations.

D-M-E carries a large selection of finishing and polishing hand tools, as well as mechanical devices, that are required to complete the final contours and finishes of molds.

In addition to the Ultraform, D-M-E carries a large selection of finishing and polishing hand tools, as well as mechanical devices, that are required to complete the final contours and finishes of molds. While mold finishers and polishers hone different techniques that are unique to each individual, most require access to a broad variety of tools and materials in order to accomplish a specific task.

Handpieces like those in the Minitor D Series perform well for light metal removal in the mold finishing process. A wide selection of carbide burrs, mounted stones and similar accessories in different shapes, sizes and grits provide the ability to achieve a preferred finish.

D-M-E's extensive selection of files, especially rifflers, offers a wide array of shapes, cuts and tooth structures. These tools are excellent at getting into areas that would be impossible to access with conventional files.

An assortment of abrasive products, including stone kits and abrasive sheets, cloths and discs, are available in various grit sizes. Polishing sticks for hand or Profiler applications are also stocked.

For that high polished "super" finish or "mirror" finish on a mold surface, D-M-E Diamond Compound is available in three applicator syringe sizes.



Important Mold Finishing Tips

- When hand grinding in the same direction of the cutting tool rotation, use extra caution since this motion can cause the stone to cut deeper than the desired depth. Also, don't try to cover too large of an area at any one time. Working on a number of small areas and blending them together provides more uniform results.
- Use extra care to remove all foreign substances when filing over an area on which some form of abrasive has previously been used. The grit from abrasive stones or cloths will usually be charged into the surface of the metal, causing the file to dull rapidly.
- When filing an area that must be flat, crisscross file strokes. This removes waves and ripples that develop when working in only one direction.
- Stones of the same grit, but made from different abrasive materials and with a different type of bond, may produce different finishes.
- Do not mix grades of diamond compound. And, if the first grade of diamond compound used does not remove marks from the most recent stoning operation, don't continue. These marks must be removed with a coarser grade of compound or the surface will have highly polished, shiny scratches.



D-M-E ProWeld™

MICRO-WELDING SYSTEM

FOR PRECISION MOLD REPAIR



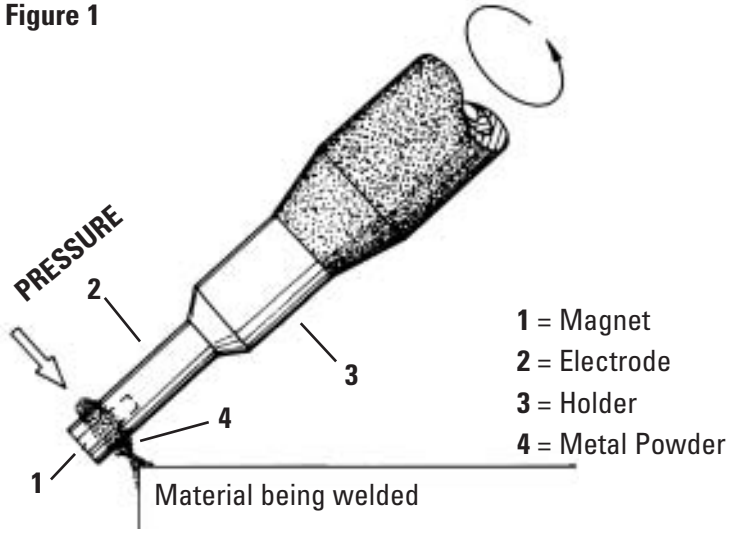
ProWeld™ Benefits

Advantages of ProWeld

- Perform high-quality repairs of very small mold areas
- Increase the life of a mold after repair
- Reduce repair costs up to 85% with special metal alloys developed for all conventional types of steel
- Modern control electronics ensure a homogenous welding pattern even under the most difficult working conditions
- Process emits almost no heat
- Weld material is not excessive – hand and machine finishing is easy
- Only gentle pressure is required on welding electrodes to prevent the formation of cavities or pin holes
- Magnetic electrodes pick up metal powder which can be easily placed on the workplate
- Suitable for all forms of mold damage; no need for other types of welding, e.g. argon, laser welding, TIG
- Safe and easy to operate, no special training needed
- Emits no harmful welding fumes or toxic gases
- No scaling or flaking. High-quality welding alloys are free of impurities. The resulting weld is strong, homogenous and reliable

Precision Mold Repairs and Alterations Made Easy with ProWeld

Figure 1



The Micro-Welding Method

With only gentle pressure ProWeld uses electrical pulses to fuse metal powder, metal sheets, strips or wire etc., to the contour of the mold under repair (Fig. 1).

Figure 2

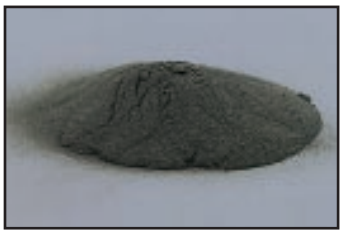
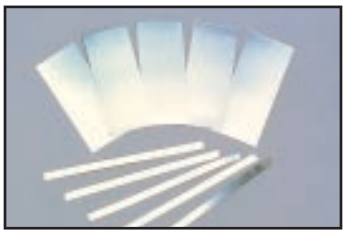


Figure 3



Using the appropriate electrode, powder (Fig. 2), metal or strips (Fig. 3), which contain alloying properties of the material being welded, are first fused then bonded to the base metal by a systematic and controlled supply of energy.

Figure 4



Figure 5



This produces a weld (Figs. 4 and 5) which also can be controlled by various adjustments of the power pack (frequency of the electrical pulses, output current). Special training is not needed to successfully perform this welding process.

ProWeld™ Standard Equipment





Standard Equipment

Complete ProWeld system includes:
(Dimensions in millimeters)

ITEM NUMBER	DESCRIPTION
UMW0001	Power pack with welding cord, grounding cord and plate, power cord, foot switch and all accessories listed below
UMW0002	N51–Standard SKH-51 steel powder (50 grams) (63 Rc; for D-2/M-2/S-7 steels)
UMW0003	N80–Standard NAK80 steel powder (50 grams) (38-40 Rc; for P-20/P-21 steels)
UMW0004	NAK80–Standard steel sheet (10 sheets, 0.1T x 5W x 100L) (38-40 Rc; for P-20/P-21 steels)
UMW0005	NTA1–Ni Alloy sheet (10 sheets, 0.1T x 30W x 70L) (135HV; for all steels)
UMW0006	NTA2–Ni Alloy sheet (10 sheets, 0.2T x 30W x 70L) (135HV; for all steels)
UMW0009	Magnet electrode (2 dia. x 50L)
UMW0010	Magnet electrode (3 dia. x 50L)
UMW0011	Magnet electrode (4 dia. x 60L)
UMW0012	Magnet electrode (4 dia. x 50L)
UMW0013	Standard electrode (2 dia. x 50L)
UMW0014	Standard electrode (3 dia. x 50L)
UMW0015	Standard electrode (4 dia. x 50L)
UMW0016	Standard electrode (1.2T x 5W x 35L)
UMW0017	Standard electrode holder (black) (used with UMW0015)
UMW0018	Magnet electrode holder (brown) (used with UMW0011 and UMW0012)
UMW0019	Standard electrode holder (black) (used with UMW0016)
UMW0020	Standard electrode holder (black) (used with UMW0013)
UMW0021	Standard electrode holder (black) (used with UMW0014)
UMW0022	Magnet electrode holder (brown) (used with UMW0009 and UMW0010)

NOTE: See next page for additional welding materials.

SPECIFICATIONS	
Input Voltage	120 VAC
Consumable Power	600 VA
Output Power	700W
Output Voltage	0 – 9V
Output Current	0 – 1100 Amps
Control System	SCR Switching System
Auto Timer On	0.5 sec.
Dimensions (inches)	W6.5 x D17.75 x H16
Weight	62 lbs

Additional Welding Materials for ProWeld™

Welding Material: Fine Powder – Precision Work

ITEM NO.	WELDING MATERIALS	JAPANESE MOLD STEEL	QUANTITY	HARDNESS ROCKWELL C	U.S. MOLD STEEL EQUIVALENT
UMPS010	SP-51	SKH-51	50 grams	Rc 63 Min.	D-2, M-2, S-7
UMPS011	SP-11	SKH-11	50 grams	Rc 50 Min.	A-2, D-2
UMPS012	SP-61	SKD-61	50 grams	Rc 53 Max.	H-13

Welding Material: Powder

ITEM NO.	WELDING MATERIALS	JAPANESE MOLD STEEL	QUANTITY	HARDNESS ROCKWELL C	U.S. MOLD STEEL EQUIVALENT
UMP0067	N-11	SKD-11	50 grams	Rc 50-60 Min.	A-2, D-2
UMP0072	N-38	HPM38	50 grams	Rc 30 Max.	All Die Steels 420SS (Prehardened)
UMP0073	N-39	PD555	50 grams	Rc 50-52	STAVAX
UMP0060	N-40	Ni-Cr Alloy	50 grams	Rc 36-42	All Mold Steels
UMP0062	N-50	Ni Alloy	50 grams	Rc 47-53	All Mold Steels
UMP0068	N-61	SKD61	50 grams	Rc 40-53 Max.	H-13, 420SS
UMP0063	N-13	Ni Alloy	50 grams	Rc 10-15	All Mold Steels
UMP0061	N-90	Ni Alloy	50 grams	Rc 16-20	All Mold Steels
UMPS017	N-14	SCM, PHM-2	50 grams	Rc 30-35	Good Choice for P-20
UMPS018	N-15	SNCM, HPM17	50 grams	Rc 30-35	Good Choice for P-20
UMPS019	N-16	SNCM, 2767	50 grams	Rc 30-35	Good Choice for P-20
UMP0071	N-55	NAK55	50 grams	Rc 38-41	P-21

Welding Material: Sheet *(dimensions in millimeters)*

ITEM NO.	WELDING MATERIALS	JAPANESE MOLD STEEL	QUANTITY	HARDNESS ROCKWELL C	U.S. MOLD STEEL EQUIVALENT
UMA0001	NT-6		10 / 0.2T x 5w x 100L	Rc 30	All Mold Steels
UMA0054	NS-1	SS Alloy	10 / 0.1T x 30w x 70L	Rb 90	All Mold Steels
UMA0055	NS-2	SS Alloy	10 / 0.2T x 30w x 70L	Rb 90	All Mold Steels
UMD0102	HPM-50	HPM50	10 / 0.2T x 5w x 100L	Rc 38-40	P-21 Improved
UMD0107	HPM-38	HPM38	10 / 0.2T x 5w x 100L	Rc 30-33	420SS
UMD0104	STAVAX	STAVAX	10 / 0.2T x 5w x 100L	Rc 50-52	STAVAX, 420SS
UMD0101	HPM-2	SCM440, IMPAX, HPM-2	10 / 0.2T x 5w x 100L	Rc 30-50	P-20
UMD0103	MAS1		10 / 0.2T x 5w x 100L	Rc 50-53	P-20
UMD0106	NAK55	NAK55	10 / 0.2T x 5w x 100L	Rc 38-40	P-21

Welding Material: Wire

ITEM NO.	WELDING MATERIALS	JAPANESE MOLD STEEL	QUANTITY	HARDNESS ROCKWELL C	U.S. MOLD STEEL EQUIVALENT
UMA0056	S2	SS Alloy	1 / 0.2 dia. x 5m	Rb 90	All Mold Steels
UMA0057	S3	SS Alloy	1 / 0.3 dia. x 5m	Rb 90	All Mold Steels
UMA0058	S4	SS Alloy	1 / 0.4 dia. x 5m	Rb 90	All Mold Steels
UMA0059	S5	SS Alloy	1 / 0.5 dia. x 5m	Rb 90	All Mold Steels



D-M-E Molding Supplies

THOUSANDS OF AUXILIARY ITEMS
THAT HELP KEEP YOUR
PROCESSING INITIATIVES AT
PEAK PERFORMANCE



Mold Cleaner and Mold Saver

Available in 12 oz. aerosol or 1 gallon non-aerosol...
individually or by the case.

D-M-E MOLD CLEANER

D-M-E Mold Cleaner is used to remove corrosion-forming substances such as lactic acid, urea and sodium chloride, which are common in perspiration residues left by ordinary handling of polished cavities. In addition to cleaning the polished cavity it also provides up to 20 days rust protection at temperatures to 120°F at 100% humidity.

Use D-M-E Mold Cleaner to clean polished mold surfaces and protect them for up to 20 days.
Use D-M-E Mold Saver for long-lasting protection from corrosion.



ITEM NUMBER	MOLD CLEANER DESCRIPTION
CLE 0001	(1) 12 oz. aerosol can
CLE 0012	Case of (12) 12 oz. aerosol cans
CLE 0004	(1) one gallon can
CLE 0016	Case of (4) one gallon cans

D-M-E MOLD SAVER

D-M-E Mold Saver is an ideal protective coating for molds to be stored over a long period of time. It protects polished cavities and all metal parts from costly corrosion damage. Its thin, transparent film averages about .0003" thick. It is soft, dry and waxy and can be easily wiped off without solvents. One can of Mold Saver covers about 80 square feet.



ITEM NUMBER	MOLD SAVER DESCRIPTION
SAV 0001	(1) 12 oz. aerosol can
SAV 0012	Case of (12) 12 oz. aerosol cans
SAV 0004	(1) one gallon can
SAV 0016	Case of (4) one gallon cans

ACCESSORIES FOR MOLD CLEANER AND MOLD SAVER



TRIGGER PUMPS
for 15 oz. cans

ITEM NUMBER	DESCRIPTION
SAV 0003	Package of (6) trigger pumps



"SURE SHOT" COMPRESSED-AIR SPRAY CANISTER

Holds one quart of Mold Cleaner or Mold Saver. Metal can is refillable and reusable. Includes stemmed air valve and safety valve.

ITEM NUMBER
SAV 0002

Mold Release Sprays



- Improves productivity and reduces rejects
- Virtually no build-up, extends the life of your mold
- Large, 16 oz. fill
- Three formulations to suit a wide range of release applications

D-M-E's line-up of Mold Release Sprays provide production-proven value at an economical price. These long-lasting, top-quality sprays are ideal for most applications and plastics materials. They will actually improve mold cycle times while reducing scrap. Try these specially formulated Mold Release Sprays and give yourself a competitive edge.

PREMIUM SILICONE MOLD RELEASE

This premium-quality silicone mold release has been formulated to provide superior performance for most plastics molding applications. The high silicone content and standard concentration of propellants are FDA approved for food industry applications under section 175.300 of the Food and Drugs Code of Federal Regulations. This long-lasting, low build-up mold release is the ideal product for tough, sticking problems that require a top-quality lubricant.

ITEM NUMBER*
MRFS514

SILICONE MOLD RELEASE

This all-purpose silicone mold release has been formulated to provide dependable performance with outstanding economy. The long-lasting, low build-up silicone concentration is ideal for most plastics molding applications.

ITEM NUMBER*
MRES414

PAINTABLE MOLD RELEASE

Contains no silicone

This high-quality mold release is a special formulation that will not interfere with cosmetic operations such as painting, plating, hot stamping, etc. The low concentration does not promote build-up, and is ideal for styrenes and most other plastic materials. For superior results, pre-cleaning of molded parts may be desirable.

ITEM NUMBER*
MRPS114

*Item numbers shown are for case of 12 cans. To order individual cans add "CAN" to item numbers shown (e.g. MRFS514CAN).

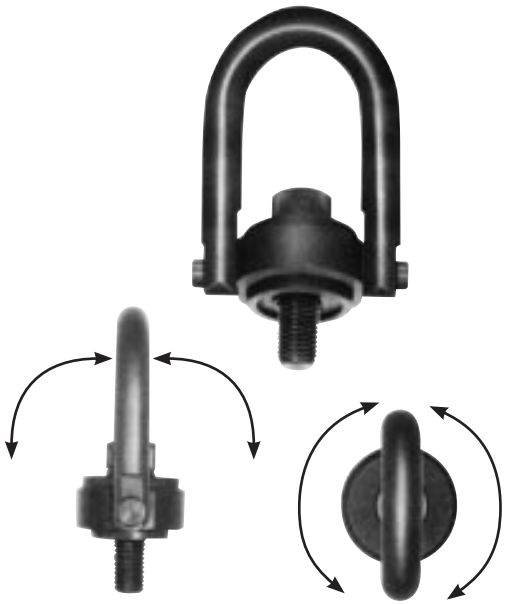
QUANTITY DISCOUNTS:
Discounts apply to current Net Prices.

2 to 5 cases ..... Less 3%
6 to 9 cases .....Less 5%
20 to 50 cases .....Less 8%
51 or more cases .....Less 12%

BLANKET ORDER DISCOUNT:
Money-saving blanket orders reduce your inventory costs and permit maximum savings over a 12-month period. They are accepted provided the combined annual order totals 20 cases or more. Split shipments against blanket orders must be in quantities of 10 cases or more.

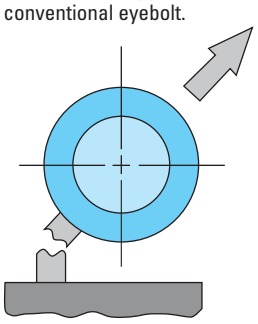
Hoist Rings – INCH

Whether you're hoisting an 800-pound mold base or a 15,000-pound piece of molding room equipment, D-M-E Hoist Rings can add a margin of performance and convenience to the job at hand. The inherent danger posed by conventional static eyebolts (side-load breakage and hook disengagement) combined with stricter safety regulations make D-M-E Hoist Rings an important addition to any mold shop or molding plant. Unlike eyebolts, these Hoist Rings will not yield to heavy side loads within their rated capacity and can pivot 180° and swivel 360° to compensate for pitch, roll and sway when lifting heavy, unbalanced loads. As with all mechanical devices, regular inspection for wear, and strict adherence to installation and operating guidelines is necessary to prevent failure due to misuse.



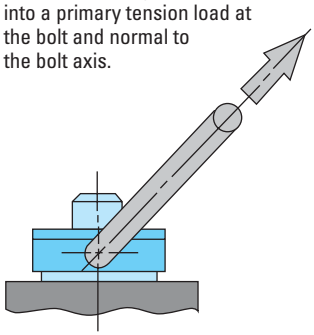
- Safer and stronger than conventional eyebolts
- Pivots and swivels to compensate for pitch, roll and sway when lifting heavy or unbalanced loads
- Prevents accidents caused by eyebolt breakage or lifting hook disengagement
- Will not yield to heavy side loads when used in accordance with manufacturer's instructions
- Manufactured from high-quality alloy steel (certified heat treatment)
- Meets or exceeds MIL-STD-1365 (OR-11) and MIL-STD-209C
- Seven sizes to handle loads from 800 to 15,000 pounds
- Safety factor is 5 times the rated load capacity in any direction

See what happens when heavy side loads are applied to a conventional eyebolt.



EXCESSIVE SIDE LOADS CAN CAUSE BOLT FAILURE.

The same load applied to a D-M-E Hoist Ring is translated into a primary tension load at the bolt and normal to the bolt axis.



HIGH-TENSION LOADS ARE WELL WITHIN THE DESIGNED SAFETY LIMITS OF THE STRESSED HOIST RING.



Hoist Rings – INCH
Installation and Ordering Information

Material: Alloy steel (certified heat treatment), black oxide
Safety Factor: 5 times rated load in any direction
Range of Movement.: 360° swivel; 180° pivot
Dimensions: Shown in inches (in)

Installation Data

Tap workpiece for hoist ring bolt with axis vertical to mounting surface. Work surface should be flat and smooth to provide full 360° flush seating for the bushing flange. For installation in ferrous materials, the screw should be tightened to the full torque loading recommended in column TL below, +25% – 0.

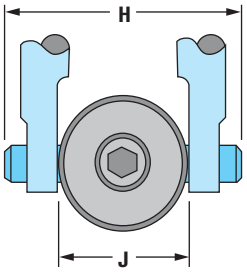
(SAFETY NOTE: Some loosening may develop after prolonged service in a permanent installation. It is advisable to periodically retighten the mounting bolt to maintain the specified torque value.)

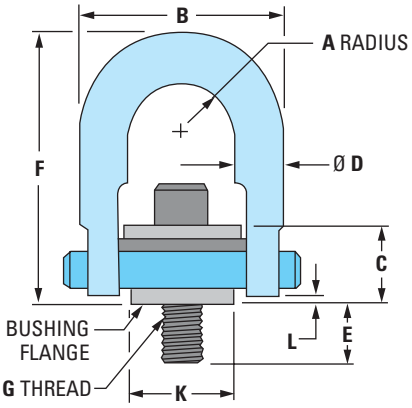
For maximum safety with soft metal workpieces such as aluminum, use extra length bolts with minimum effective thread engagement of 2 times thread diameter. The use of free fit spacers between the bushing flange and mounting surface is not recommended, as this will reduce the safe load rating on angularly applied loads. Hoist ring must be free to swivel 360° and pivot 180° at all times.











NOTE: Additional hoist ring sizes and bolt lengths (including metric versions) are also available on request.

Hoist Rings – SHR (includes bolt and retaining ring)

ITEM NUMBER	RATED LOAD (LBS)	A RADIUS	B	C	Ø D	E EFFECTIVE THREAD PROJECTION	F	G	H CLEARANCE DIMENSION	J	K	L	TL** FOOT LBS	WEIGHT
SHR0001	800	7/16	1 5/8	41/64	3/8	9/16	2 5/8	5/16-18	2	1	3/4	3/32	7	5 OZ.
SHR0002	1,000	7/16	1 5/8	41/64	3/8	9/16	2 5/8	3/8-16	2	1	3/4	3/32	12	5 OZ.
SHR0003	2,500	7/8	3 1/4	1 5/32	3/4	3/4	4 3/4	1/2-13	3 5/8	2	1 1/2	3/32	28	2 LB. 5 OZ.
SHR0004	4,000	7/8	3 1/4	1 5/32	3/4	1	4 3/4	5/8-11	3 5/8	2	1 1/2	3/32	60	2 LB. 7 OZ.
SHR0005	5,000	7/8	3 1/4	1 5/32	3/4	1	4 3/4	3/4-10	3 5/8	2	1 1/2	3/32	100	2 LB. 9 OZ.
SHR0006	10,000	1 13/32	4 13/16	1 11/16	1	1 1/2	6 1/2	1"-8	5 1/8	3	2 5/16	17/64	230	7 LB.
SHR0007	15,000	1 3/4	6	2 1/8	1 1/4	1 7/8	8 3/4	1 1/4-7	6 1/2	3 3/4	3 1/4	11/32	470	14 LB.

**Recommended torque load +25% – 0

Replacement Bolt Kits – SHK (includes bolt and retaining ring)

ITEM NUMBER	USED WITH	SIZE	E
SHK0001	SHR0001	5/16-18 X 1 1/4	9/16
SHK0002	SHR0002	3/8-16 X 1 1/4	9/16
SHK0003	SHR0003	1/2-13 X 2	3/4
*SHK0004		1/2-13 X 2 1/4	1
SHK0005	SHR0004	5/8-11 X 2 1/4	1
*SHK0006		5/8-11 X 2 1/2	1 1/4
SHK0007	SHR0005	3/4-10 X 2 1/4	1
*SHK0008		3/4-10 X 2 3/4	1 1/2
SHK0009	SHR0006	1"-8 X 3 1/4	1 1/2
*SHK0010		1"-8 X 3 3/4	2
SHK0011	SHR0007	1 1/4-7 X 4	1 7/8



QUANTITY DISCOUNTS:
Discounts apply to current Net Prices. Ring and replacement bolts counted separately for quantity discounts. Different sizes may be combined.
25 to 49 ..... Less 10%
50 to 99 ..... Less 13%
100 or more Quoted by request

NOTES:
E = Effective Thread Projection
*Bolts not marked with an asterisk (*) are identical to those supplied with hoist rings. Bolts marked with an asterisk are longer, to provide thread projection of twice the bolt diameter, recommended for use with softer metals.

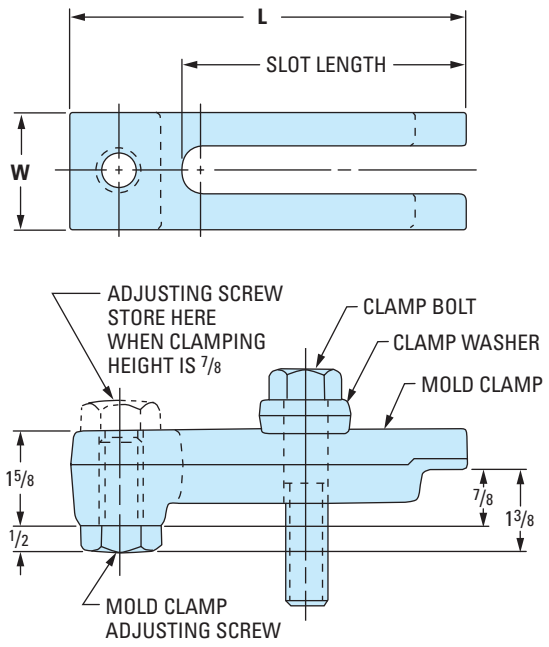
Mold Clamps

FOR PLASTICS MOLDS

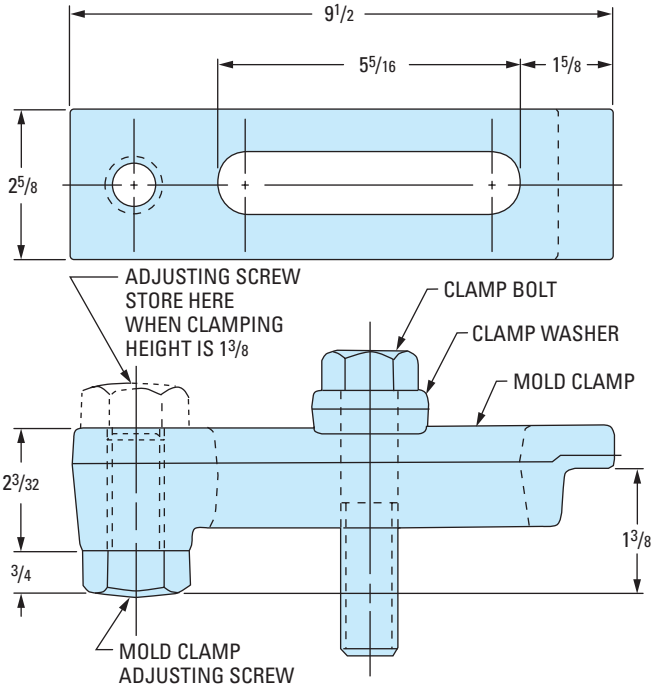
Forged from Hi-tensile steel and carbonitride hardened. The design features a hardened no-turn washer and a shape and range of sizes that permit universal application for any mold.



ITEM NO'S. MCA-4-4 TO MCA-6-7



ITEM NO. MCA-8-95



Mold Clamps for Plastics Molds (MCA)

ITEM NUMBER	CLAMP DIMENSIONS			CLAMP SCREW SIZE† THD. x LENGTH	REPLACEMENT PARTS	
	L LENGTH	W WIDTH	SLOT LENGTH		CLAMP BOLT AND WASHER KIT	ADJUSTING SCREW
MCA-4-4	4 3/16	1 5/8	2 13/16	1/2-13 x 3"	MCK-4	MCAS-5
MCA-5-5	5 3/16	1 7/8	3 3/8	5/8-11 x 3 1/2"	MCK-5	MCAS-6
MCA-5-7	7	1 7/8	5	5/8-11 x 3 1/2"		
MCA-6-5	5 3/16	2	3 3/8	3/4-10 x 3 1/2"	MCK-6	
MCA-6-7	7	2	5	3/4-10 x 3 1/2"		
MCA-8-95	9 1/2	2 5/8	5 5/16	1-8 x 4 1/2"	MCK-8	MCAS-8

Mold Assembly consists of:
1 – Mold Clamp
1 – Clamp Washer
1 – Clamp Bolt
1 – Mold Clamp Adjusting Screw

QUANTITY DISCOUNTS:
Discounts apply to current Net Prices. Standard sizes may be combined on one order for quantity discounts.

60 to 99 ..... Less 5%
100 or more cases ..... Less 10%

†NOTE:
Mold Clamp Screws supplied with assembly are of high-tensile strength alloy steel. Lengths shown will accommodate clamping ledges up to a maximum of 1.375. For Clamping ledges in excess of 1.375, use longer screws accordingly.

Jiffy-Tite® Connector Seals | Seal Removal Tool Kit & Wrenches | Heater Puller (with snap ring)

Jiffy-Tite® Connector Seals

For Replacement in Either Jiffy-Tite or Jiffy-Matic Sockets

Jiffy-Tite and Jiffy-Matic Sockets are supplied with Viton seals for use with air, water or heat-transfer oil applications that do not exceed 400°F and 200 psi. Seals should be replaced periodically as required to ensure leak-free connections.

MAXIMUM OPERATING TEMPERATURE/PRESSURE = 400°F/200 PSI			
FOR USE WITH	SEAL MATERIAL (I.D. COLOR)	ITEM NUMBER*	USED WITH SOCKETS
AIR, WATER OR HEAT TRANSFER OIL	VITON (GREEN)	P200-8	JS-204-(V/SV) TO 226-(V/SV)
		P300-8	JS-306-(V/SV) TO 328-(V/SV)
		P500-8	JS-504-(V) TO 526-(V)

***Packs of 10 (sold in packs of 10 only).**



Includes handle, interchangeable tools for all socket sizes, seal pick and vinyl storage pouch.

Jiffy-Tite® Seal Removal Tool Kit – JSTK

The Jiffy-Tite Seal Removal Tool Kit can be used for removal of connector seals from Jiffy-Matic Sockets (including SV Series). Can also be used with Jiffy-Tite Sockets to provide easier seal removal.

ITEM NUMBER
JSTK-235

NOTE: This tool kit is not required for "the original" or current line of Jiffy-Matic Sockets with removable hose stems.

Jiffy-Tite® Wrenches – SJP

For Jiffy-Tite Male, Female and Extension Plugs and Jiffy-Matic SV Series Male Plugs

D-M-E Jiffy-Tite wrenches are accurately made from selected alloy steel, heat-treated and chrome-plated. They are specially designed for servicing flush-mounted plugs.



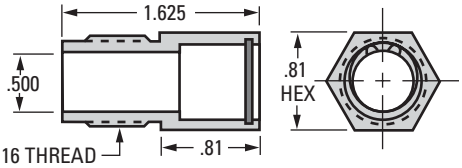
JIFFY-TITE WRENCHES FOR MALE AND EXTENSION PLUGS			
HEX SIZE	SQUARE DRIVE	ITEM NUMBER	FITS PLUGS
7/16	3/8	SJP-251	JP(B)-250, 251
9/16	3/8	SJP-252	JP(B)-252(SV) JP(B)-351, 352(SV)
11/16	3/8	SJP-253	JP(B)-253(SV) JP(B)-353(SV)
7/8	3/8	SJP-354	JP-354(SV)
7/8	1/2	SJP-554	JP-553, 554
1 1/8	1/2	SJP-556	JP-556

JIFFY-TITE WRENCHES FOR FEMALE PLUGS			
HEX SIZE	SQUARE DRIVE	ITEM NUMBER	FITS PLUGS
1/2	3/8	SJP-251F	JPF-0250, 0251
5/8	3/8	SJP-252F	JPF-0252 JPF-0351, 0352
3/4	3/8	SJP-253F	JPF-0253 JPF-0353
15/16	1/2	SJP-554F	JPF-0354 JPF-0553, 0554
1 1/8	1/2	SJP-556F	JPF-0556

Heater Puller (with snap ring)

Provides trouble-free removal of Shoulder-Style Cartridge Heater.





Puller with Ring

ITEM NUMBER
EHP0250

Replacement Snap Rings

ITEM NUMBER**
EHP0001

****Packs of 25.**

D-M-E Molding Supplies

The Best of Northern Supply, Nickerson and OHS

D-M-E Molding Supplies combines three great companies – Northern Supply, Nickerson and OHS – into one comprehensive, convenient source for high-quality, economical products.

Our worldwide sourcing and purchasing power provides you with the broadest array of great products at affordable prices. We're also bringing new products to market more quickly than ever. And, with deep inventories at four locations across North America, we can get you what you need fast.

Call toll-free to receive your copy of the D-M-E Molding Supplies catalog, complete with dozens of new products, plus thousands of selections that have been favorites of our plastics processing customers for decades. In the U.S., call 866-470-3542; in Canada, phone 888-808-0706.

D-M-E Molding Supplies is powered by D-M-E Company, an essential mold technologies resource to customers worldwide. In addition to offering the plastics industry's broadest range of market-leading products, D-M-E provides unsurpassed knowledge, a global logistics infrastructure and exceptional service every step of the way. This support ensures that customers get the speed, accuracy and quality they need across D-M-E's complete line of hot runner systems, control systems, mold bases and components, and moldmaking and molding equipment and supplies.



Drying Hoppers, Drawer Magnets, Storage Bins, Loaders, Tilters, Dumpers, Conveyors, etc.

Auxiliary Equipment



Aluminum Manifolds, Flow Regulators, Ball Valves, Couplers, PVC Air & Water Hose, etc.

Plumbing Products



Insulated Heaterbands, Thermocouples, Thermometers, DIN Controllers, etc.

Heaters and Sensors



Ceramic Knife, Sprue Pullers, Gatecutters, Electric Nippers, Mold Hammers, etc.

Cutter and Hand Tools



WD-40, Silcone Mold Release, Supergrease, Mold Cleaner, Anti-Seize, etc.

Releases and Lubricants



Screw Tips, Nozzle Bodies, Machine Mounts, Mold Clamps, Shutoff Nozzles, etc.

Machine Parts

Auxiliary Equipment

DRYING HOPPERS



Fully insulated, modular, stainless steel construction DRI-AIR's Modular Hoppers assure uniform material flow with: NO channeling, NO feedout problems, NO mixing problems, NO thru-put problems

- Standard capacity hoppers range from 5 to 600 lbs
- Dries less than a full hopper
- Dries material to the bottom of the slide gate
- Easy-to-clean diffuser cone directs air/material flow
- Hoppers include: Slide gate, Blank mounting adapter, Access door (RH60 and over), Insulation
- Laser-cut access doors provide a smooth, tight fit and eliminate troublesome gaskets
- RH400 & RH600 hoppers include full length sight glass and Bunting™ no-spill slide gate

DRAWER MAGNETS

- Ceramic 5
- Stainless Steel Magnetic Tubes, located on 2" Vertical and Horizontal Centers
- Cast Ductile Iron Housings
- 3/8" Polycarbonate Drawer Front
- Leak Proof Gasket



STORAGE BINS

Ideal for storage and transfer of material from grinders, surge bins, bags, drums or gaylords



- Mobile
- Self-Emptying
- Durable one piece reinforced lid suitable for mounting equipment
- Lightweight
- Stackable
- Stainless Steel Slidegate
- Vacuum Wand Access Tube
- Heavy-Duty Welded Steel Frame
- Forklift Channel
- Locking Casters

LOADERS, TILTERS AND DUMPERS



Loaders – designed to feed pellets, granules, and free flowing powders into an overhead hopper or storage vessel. Built with a variety of auger sizes and types and can deliver from 10 to 500 cu. ft. of material/hour.

- Direct Gear Drive for lower maintenance
- 20 cu. ft Hopper Capacity
- Quick Disconnect auger for easy cleaning
- 45° or 60° auger slope

Tilters – designed to assist in the vacuum unloading of gaylord containers. The automatic tilting feature allows complete removal of material from the container. The adjustable regulator permits setting initial lift at any desired weight.

- 1" Pillow block pivot bearings
- Double convoluted industrial air bag – set up so bag cannot get overstressed!
- Automatic or Manual Tilt Action
- Flow Control to adjust operating speed

Box Dumpers – built to handle the tough unloading jobs! Standard unit capacity is 2,500#, larger capacities are available. The box retainer is adjustable from 32" to 48", plus there's also a permanent safety retainer bar! Push button controls permit stopping the unit at any point in the cycle for added control and safety.

- 52" Wide Bucket available!
- Custom width bodies – for large or awkward containers, Increased lift capacity
- Custom discharge chutes



...AND MUCH MORE

Thousands of auxiliary items available beyond these popular featured products. D-M-E Molding Supplies offers a wide variety of other high-quality, low-cost auxiliary products, including conveyors, water and oil filters, hydraulic pumps, chillers, cooling towers, end-of-arm tooling, and much, much more.

Plumbing Products

ALUMINUM MANIFOLDS

Aluminum Manifolds offer many advantages over welded steel or pipe manifolds. These manifolds have no welds or seams of any kind and cannot rust, they will offer many years of trouble-free service. The heavy wall extrusion will withstand extreme abuse and the round center hole permits easy cleaning. We will custom make manifolds to your dimensions in just a few days.



- Rated to: 1000 PSI – Air; 3000 PSI – Hydraulic
- Heavy wall extruded 6061 aluminum
- No welds! No rust!
- Very low cost
- Easy to clean

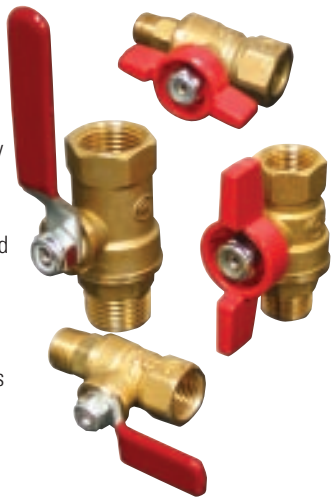
FLOW REGULATORS

Provide a unique, leak-free, singlepoint manual flow control. Incorporates the proven mechanical flowmeter and integral needle valve in a compact design. Very few moving parts improve reliability and leak-free operation. Brass valve, EPDM o-rings, and polysulfone viewing window are compatible with most process liquids. Brass quick-connect fittings are available.



- Compact size works well in restricted-space locations.
- Rugged construction gives years of dependable service.
- 240°F (115°C) Temperature Rating allows installation into a wide range of applications.
- Optional Temperature Gauge displays additional process information.
- No Mounting Restrictions ease installation in any position without extra brackets or hardware.

FORGED BRASS BALL VALVES



- Super-port BBV-MF is a full port 2-piece ball valve with features only found on more expensive valves.
- Extra heavy-duty bottom-loaded stem with a teflon thrust washer and Viton O-ring.
- Teflon® seats, thrust washer and stem packing
- Self cleaning chromium plated brass ball for maximum durability

HYDRAULIC COUPLERS

Double side shut off poppet type in Steel, Stainless Steel and Brass. Available with Buna-N or Viton seals.

Hardened nipples & sleeves and solid barstock construction assure a long service life providing maximum resistance to hydraulic shock and abuse common in industrial applications.

- Steel Body – Body, sleeve & valve are zinc plated steel.
- 303 Stainless Steel – Body, sleeves, valves, retaining rings, springs and locking balls are stainless.
- Brass Body – Body, sleeve and valves are brass.



PVC AIR & WATER HOSE

- Clear, red or blue
- Tough yet lightweight
- Very flexible
- Highly abrasion resistant
- Food grade PVC
- Resistant to most chemicals
- Temperature range: -20° to 150°F (-5° to 65°C)



...AND MUCH MORE

Thousands of plumbing items available beyond these popular featured products. D-M-E Molding Supplies offers a wide variety of other high-quality, low-cost plumbing products, including brass and steel hydraulic pipe, high-flow cascade assemblies, pipe elbows and fittings, hose assemblies, and much, much more.



Heaters and Sensors

MICA INSULATED HEATERBANDS

Time tested materials & manufacturing techniques make this heater a proven, economical, reliable performer.

- 1 and 2 piece bands
- Fiberglass leads, Stainless leads and Post terminals
- 120 and 240 volt styles
- Uniform heat, high watt density
- Custom bands available in rush and standard time options



CARTRIDGE HEATERS

- A superior for use where high watt densities, high temperatures and long life are required.
- Widely used throughout the industry as a rugged dependable heat source.
- High quality materials and craftsmanship



THERMOCOUPLES

Variable immersion depth of 1¼" to 1 ¾" with a tip length of 2½". These will accommodate most requirements in either a straight or 90˚ bend. Off the shelf delivery and a very low price make our standard thermocouples just what you need. Also available in K & RTD types.



NON-CONTACT IR THERMOMETERS

Compact thermometer with wide temperature range

- Measures temperature from -58 to 1000°F with 0.1° resolution up to 199.9°
- Built-in laser pointer identifies target area
- 2000 counts backlit display
- Overrange indicator
- Automatic Data Hold when trigger is released
- Fixed 0.95 emissivity covers 90% of surface applications
- Auto power off
- Complete with 9V battery



ELECTRONIC COMPONENT REPAIR SERVICE



Quick repairs normally less than 10 working days. Cost savings. Total reliability, all repairs are fully load tested. One full year warranty on both printed circuit board repairs as well as on complete control repairs. We repair ALL types of industrial electronic controls: temperature controllers, programmable controllers, timers and counters, instrument and machine tool controls, AC and DC drives, 1000s of new models added.

- Usually less than 1/2 the cost of a new controller
- We repair all types of controllers
- Fast, low cost, warrantied repair by qualified specialists
- Over 60,000 schematics in our library

DIN CONTROLLERS

Single channel controllers include a universal sensor input with up to three outputs that can be programmed for heat or cool temperature control, or to operate as process or deviation alarms.

- Infrared Communications
- Up to three outputs
- Ramp to set point
- Dual displays
- Variable Burst Fire – Prolongs heater life



...AND MUCH MORE

Thousands of heating and sensor items available beyond these popular featured products. D-M-E Molding Supplies offers a wide variety of other high-quality, low-cost heating and sensing products, including variable transformers, modular temperature controllers, wire and wire fittings, contactors, relays, and much, much more.



Cutter and Hand Tools

CERAMIC KNIFE

Heavy duty handle with Ceramix™ Q10 blade. Adjust the cutting angle between the blade and the material for best results and to prevent scratches. Flip blade for 2 types of jobs. OSHA Friendly! Even though ceramic blades remain sharp FAR longer than metal blades, it's practically impossible to cut yourself with them!



Unique Dual Blade Design!

- Cleans up to 6mm (0.236") sheets
- Cleans up to 4mm (0.157") sheets
- Cleans up surfaces

ELECTRIC NIPPERS

Just plug them in and they're ready for continuous use.
Well balanced and comfortable to hold for many hand sizes.

- Weight 290g AC Power Source (110v)
- Single stroke or continuous cut
- High speed and high power
- The blade opening and speed can be freely adjusted in the range of 2-5 times per second.
- A control circuit is built in the body. Transformers or control box is not needed.



BRONZE SPRUE PULLERS

- Strongest forged bronze alloy -Ampco 45; Alloy 630; AMS 4640
- Non Scratch-ideal for removing sprues and parts without damaging mold surfaces.
- Non Spark -For work around fuels, solvents, and other flammable chemicals.
- Non Magnetic -For work around MRIs and magnets.
- Corrosion Resistant -For work outdoors -marine use and corrosive environs.
- Thermal insulating, soft touch foam grip -To reduce fatigue and CTDs.
- Longer double ergonomic handles -For high leverage, less operator force.
- Easily re-sharpened.



MOLD HAMMERS

Mold Hammer with Interchangeable Tips

- Tips are removable and interchangeable
- Will not mar metal or plated finish
- Tips available in Medium or Hard Vinyl, Tough Nylon, Brass & Steel
- Non-sparking
- Non-magnetic



GATECUTTERS

- 5 Styles/Sizes Available
- Low Cost High Quality
- Slim Blade Design
- Resharpen Well
- Smooth Action
- Spring is steel coil
- Very Sharp
- Smooth Flat Cut
- Better than the Competition!



...AND MUCH MORE

Thousands of cutters and hand tools available beyond these popular featured products. D-M-E Molding Supplies offers a wide variety of other high-quality, low-cost cutters and hand tools, including brass mold tools, sprue punches, nozzle wrenches, deburring tools, barrel brushes, hammers, blowguns, flashlights, and much, much more.



Releases and Lubricants

WD-40



■ **Displaces Moisture.**
Formulated for ultra-high surface attraction to metal. It completely covers surfaces, including microscopic irregularities, even in the presence of moisture. A non-conductor of electricity and quickly eliminates moisture-induced short circuits.

■ **Penetrates.**
Ultra-high surface attraction results in a super penetrating action that loosens rust-to-metal bonds and frees stuck, frozen, or rusted metal parts.

■ **Protects.**
Deposits corrosion-resistant ingredients over the entire surface area, including microscopic irregularities. This protective barrier shields against moisture and other corrosive elements.

■ **Cleans.**
Ultra-high surface attraction enables it to get under dirt, grime, caked grease, and oil to clean the surface at WD – the same time it forms a corrosion resistant barrier.

■ **Lubricates.**
Ultra-high surface attraction assures the lubricating ingredients will be widely dispersed and tenaciously held to all moving parts.

SLIDE NEXGEN METAL & MOLD CLEANER



Direct alternative to trichloroethylene and methylene chloride. Food approved. Leaves no oily residue. No global warming compounds. Not a hazardous air pollutant. Non-corrosive and not sara reportable. Biodegradable and rinses with water. Meets tough health, safety and environmental regulations. High solvency for resins, polymers and dies. Formulated purely from citrus and vegetable products. It meets or exceeds the toughest health and safety issues, without sacrificing RAW CLEANING POWER. Biodegradable, it easily rinses away with water and leaves no residue.

- General cleaning and wiping
- Oil spill clean-up
- Ink, tar and adhesive removal
- Paint and Graffiti removal
- Removing silicone and lithium grease
- Degreasing

SLIDE ECONOSPRAY 6 SILICONE MOLD RELEASE



Works efficiently on both cold and hot molds. It is CFC-free and free of chlorinated solvents. Econo-Spray® Silicone imparts a smooth, dry film, which is FDA approved and USDA approved for food machinery. Operating temps: 35˚F – 600˚F

- No ozone depleting chemicals
- Non-chlorinated
- No methylene chloride
- No Chlorofluorocarbons (CFCs)
- Safe on solvent-sensitive plastics

COPPER & NICKEL ANTI-SEIZE

- Will Not Bleed, Separate or Harden
- Choose Copper or Nickel Base
- Copper Rated To 2000˚F.
- Nickel Rated To 2800˚F.
- Eliminates Galling & Seizing
- Suggested For: Nozzles, Screw Tips, Cylinder Bolts, Mold Clamps, Etc.



SLIDE SUPERGREASE



Colorless. Odorless. Non-toxic. FDA dielectric. Contains Teflon®* Will not freeze, melt, gum up. Compatible with other lubricants No silicones. Will not wash out. USDA listed H1. Repels water. Will not separate, run or fall out. Thixotropic properties provide excellent mechanical stability when sudden temperature changes occur. Exceptional load-bearing properties. Clear, clean, non-yellowing grease. For injection molds, mold assemblies, especially medical and food grade plastic parts. Prevents corrosion. Oper. temps: -65° to +650°F

*Trademark of DuPont Chemical Co.

...AND MUCH MORE



Thousands of auxiliary items available beyond these popular featured products. D-M-E Molding Supplies offers a wide variety of other high-quality, low-cost releases /lubricants /cleaners, including rtv silicone, GoJo® Hand cleaners, Boltlockers, Metal Polish, Teflon® thread sealant (both liquid and tape), and much, much more.

Machine Parts

SCREW TIPS



Top quality general purpose 3-piece Screw Tip of the Free-Flow design. Suitable for most molding applications including moderately abrasive or filled materials. Much tougher and longer lasting than standard OEM or H-13 Screw Tip. Manufactured from a combination of steels that provide wear-resistance in components subject to wear plus toughness and torque resistance in components subject to these stresses. Through hardened and Nitrided for long service.

NOZZLE BODIES



- Made of High Quality 4140 Tool Steel
- Holds Removable Tips
- Extension Tips and Dispersion Tips
- Externally Heated

MACHINE MOUNTS

UNISORB Quantum IM Mounts provide optimum leveling and alignment in minutes, without anchoring either the machine or mounts to the floor. Designed especially for injection molding and die casting machines, UNISORB Quantum IM Mounts dampen both vertical and horizontal impacts found in reciprocating machines. UNISORB Quantum IM Mounts meet applicable OSHA requirements.

- Increased equipment life
- Simplified machine installation
- Fast, accurate alignment
- Reduced shock and vibration
- Elimination of anchor bolts
- Uneven floors accommodated
- Machine “walking” prevented



MACHINED MOLD CLAMPS

Machined Mold Clamps fit $^{15}/_{32}$", $^{29}/_{32}$" or 1 $^{3}/_{8}$" mold flanges and can be inverted for other size flanges.

- Low Cost
- Nice Finish
- Machined Accuracy
- Versatile Fit & Design



SHUTOFF NOZZLES

EXTERNAL SPRING – external spring activated shut-off pin.

SHUT-OFF PIN – externally activated shut-off pin permits unrestricted material flow during injection.

REPLACEABLE TIP – special hardened tool steel tip can be changed in seconds.

AUTOMATIC OPERATION – operation is fully automatic and mechanical

- Completely mechanical, automatic operation
- No internal springs
- Eliminates cold slugs
- Controllable back flow during injection
- Reduces flashing
- Precise pressure control during cure
- Positive shut-off prevents drooling



...AND MUCH MORE

Thousands of machine parts available beyond these popular featured products. D-M-E Molding Supplies offers a wide variety of other high-quality, low-cost machine parts, including mixing nozzles, locating rings, sprue bushings, socket head cap screws, hoist rings, and much, much more.



D-M-E: Your Complete Mold Technologies Provider

D-M-E
Every step of the way

Check Out All of the D-M-E Mold Technology Catalogs And You'll See Why We're an Essential Resource to Thousands of Customers Worldwide!



CATALOG: 308 PAGES

D-M-E Mold Bases & Plates

Choose from the world's widest selection of mold bases from uniquely featured, off-the-shelf solutions to full-featured, custom-configured offerings. An array of standard and specially machined mold plate sizes gives you unlimited options.



CATALOG: 156 PAGES

MUD Quick-Change Systems From D-M-E

Reduce downtime by as much as 75 percent with an innovative approach to fast production changeovers. Master Unit Die is the leader in quick-change systems and the MUD Catalog offers many systems that will maximize your production volume.



CATALOG: 316 PAGES

D-M-E Mold Components

With the largest selection of mold components available around the globe, the D-M-E Mold Components Catalog has the products that will help you meet the unprecedented demands you face for speed, cost reduction and performance.



CATALOG: 76 PAGES

D-M-E Control Systems

Powerful. Flexible. Affordable. That's what molders want from today's generation of hot runner, valve gate, and process controls, and D-M-E delivers with a broad line of controllers sure to fit the most demanding application.



CATALOG: 174 PAGES

D-M-E Hot Runner Systems

Moldmakers, molders and mold designers worldwide look to the D-M-E Hot Runner Systems Catalog for essential hot runner solutions. From best-in-class components to complete, fully-functioning hot half systems, D-M-E has the broadest range of hot runner products and services.



CATALOG: 68 PAGES

D-M-E Technical Services

From powerful, online resources available 24/7, to our team of trained, experienced experts committed to helping customers achieve maximum productivity, reliable operation, and better performance, D-M-E's goal is simple: to be an essential resource for your molding challenges every step of the way.

D-M-E, an essential resource to the customers it serves worldwide, offers the industry's broadest range of market-leading products, unsurpassed knowledge and expertise, a global logistics infrastructure that ensures speed and accuracy, and a support organization unrivaled for its ability to assist customers when and where they need it. A complete line of hot runner systems, control systems, mold bases, MUD quick-change mold systems, mold components, moldmaking and molding equipment supplies, and technical services helps customers compete every step of the way.



D-M-E
Every step of the way

World Headquarters
D-M-E Company
29111 Stephenson Highway
Madison Heights, MI 48071
800-626-6653 *toll-free tel*
248-398-6000 *tel*
888-808-4363 *toll-free fax*
www.dme.net *web*
info@dme.net *e-mail*

D-M-E of Canada, Ltd.
6210 Northwest Drive
Mississauga, Ontario
Canada L4V 1J6
800-387-6600 *toll-free tel*
905-677-6370 *tel*
800-461-9965 *toll-free fax*
dme_canada@dme.net *e-mail*

D-M-E Europe C.V.B.A.
Industriepark Noord
B-2800 Mechelen Belgium
32-15-215011 *tel*
32-15-218235 *fax*
sales@dmeeu.com *e-mail*

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ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru





MOLD BASES AND PLATES





D-M-E
Every step of the way

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Terms and Conditions of Sale

1. **FOB POINT / PRICES:** Products are sold F.O.B. point of origin. Any taxes are in addition to the prices and may be invoiced later.
2. **SHIPPING SCHEDULE:** The shipping schedule is our current estimate of delivery dates and we agree to use reasonable efforts to comply with the schedule.
3. **WARRANTY:**
   (a) Any D-M-E trademarked or tradenamed product or part thereof manufactured by or for us which, under normal operating conditions in the plant of the Buyer thereof, proves defective in material or workmanship, as determined by our inspection, within 12 months from the date of shipment will be replaced or repaired free of charge to Buyer.

   This warranty is contingent upon the following conditions: *that we promptly receive notice of the defect; that Buyer establish that the product has been properly installed, maintained, and operated within the limits of related and normal usage as specified by us; and that, upon our request, Buyer will return to us at our expense the defective product or part thereof.*

   (b) The terms of this warranty do not in any way extend to any product or part thereof which have a life, under normal usage, inherently shorter than 12 months.
   (c) The conditions of actual production in each end user's plant vary considerably. Therefore, descriptions of the production or performance capabilities of any product or software materials are estimates only and are not warranted.
4. **EXCLUSIONS OF WARRANTIES:** THE WARRANTIES TO REPAIR OR REPLACE DEFECTIVE PRODUCTS OR PARTS AS SET FORTH IN PARAGRAPH 3, AND ANY ADDITIONAL WARRANTY EXPRESSLY STATED TO BE A WARRANTY AND SET FORTH IN WRITING AS PART OF THESE TERMS HEREIN ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
5. **LIMITATION OF REMEDIES AND LIABILITIES:**
   UNDER NO CIRCUMSTANCES SHALL WE OR ANY AFFILIATE OF OURS HAVE ANY LIABILITY WHATSOEVER FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES HOWSOEVER CAUSED OR ARISING (INCLUDING CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE), such as, but not limited to, loss of profit or revenue; loss of use of the product, part thereof; cost of capital; cost of replacement equipment; or claims resulting from contracts between Buyer, its customers and/or suppliers. Unless expressly provided for herein, in no event shall we or any affiliate of ours assume responsibility or liability for (a) penalties, penalty clauses or liquidated damages clauses of any description, (b) certifications or (c) indemnification of Buyer or others for costs, damages or expenses arising out of or related to the product or part thereof.
6. **CANCELLATION:** Unless otherwise agreed, Buyer may cancel all or any part of the order by written notice received by us before our completion of the order or applicable portion of the order. On receipt of such notice, all work on the order or part thereof canceled will be stopped as promptly as is reasonably possible. Buyer will then be invoiced for and will pay to us a cancellation charge. For completed items, the charge will be equal to their established prices. For items not completed, the charge will be equal to our full cost plus a premium in addition to a charge for any packing and storage and less a credit for the balance of the material as scrap.
7. **PAYMENT TERMS:** Payment is due in accordance with any applicable progress, advance or other agreed upon payment schedule, or, if no such schedule has been agreed to, upon Acceptance as specified in Paragraph 8, but in no event later than 30 days from the date of invoice. No cash discount is provided. If, in our judgment, Buyer's financial condition changes, we may stop work until financial arrangements satisfactory to us are made.
8. **ACCEPTANCE OF PRODUCT:** Each such product shall be deemed to be accepted within seven days after delivery of the product to the Buyer, unless we receive written notification of rejection for cause from Buyer within the seven day period.

   "Returned Goods": No goods are returnable without prior approval, prepaid transportation and an issued RMA number. All items are subject to our inspection before credit will be allowed. Special mold bases or steel, items involving custom work, or items not shown in our catalog are considered non-returnable. A minimum service charge of 10% will be made on all returned goods.
   NO GOODS ARE RETURNABLE LATER THAN THIRTY DAYS AFTER RECEIPT OF MERCHANDISE.
9. **PATENT INDEMNITY:** We shall defend any suit or proceeding brought against Buyer and pay all costs and damages awarded against Buyer provided that:
   (a) The suit or proceeding is based upon a claim that the product or part thereof is an infringement of any claim of a presently existing U.S. patent;
   (b) The claim of infringement is not based, directly or indirectly, upon (i) the manufacture, use, or sale of any product furnished by us which has been modified without our consent; or, (ii) the manufacture, use, or sale of any combination of a product furnished by us with products not furnished by us; or (iii) performance of a patented process using a product furnished by us or production thereby of a patented product; and,
   (c) We are notified promptly and given information and assistance (at our expense) and the authority to defend the suit or proceeding. We shall not be responsible hereunder for any settlement made without our written consent nor shall we be responsible for costs or expenses incurred without our written consent. If our product is adjudicated to be an infringement and its use in the U.S. by Buyer is enjoined, we shall, at our own expense, either:
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   (ii) replace it with a noninfringing product;
   (iii) modify it so it becomes noninfringing;
   (iv) remove the product or part thereof and refund Buyer's net book value and transportation costs attributable to it.
   The foregoing states our entire liability with respect to any patent infringement by our products or any parts thereof. To the extent that our product or any part thereof is supplied according to specifications and designs furnished by Buyer, Buyer agrees to indemnify us in the manner and to the extent set forth above insofar as the terms thereof are appropriate.
10. **FORCE MAJEURE:** We shall not be liable for any delay in performance or nonperformance which is due to war, fire, flood, acts of God, acts of third parties, acts of governmental authority or any agency or commission thereof, accident, breakdown of equipment, differences with employees or similar or dissimilar causes beyond our reasonable control, including but not limited to, those interfering with production, supply or transportation of products, raw materials or components or our ability to obtain, on terms we deem reasonable, material, labor, equipment or transportation.
11. **ACCEPTANCE OF ORDERS:** Buyer agrees that all orders, including any arising from our Proposal, shall include these terms and conditions only, notwithstanding any different or additional terms that may be embodied in Buyer's order. All orders are subject to our acceptance and we reserve the right to reject orders as, in our sole judgement, mandated by business conditions. We reserve the right to not proceed with any order until all necessary information is received from Buyer.
12. **MERGER CLAUSE:** This Agreement entirely supersedes any prior oral representations, correspondence, proposal, quotation, or agreement. This writing constitutes the final and total expression of such agreement between the parties, and it is a complete and exclusive statement of the terms of that agreement.
13. **ASSIGNMENT:** Neither party may assign this Agreement without the written consent of the other party, except that we may assign this Agreement to a third party that acquires substantially all of our assets or we may assign the flow of funds arising out of this Agreement.
14. **GOVERNING LAW:** This Agreement shall be governed by and construed in accordance with the laws of the State of Michigan.

Sales and Ordering Information

U.S.A.

TERMS AND CONDITIONS OF SALE: See previous page.

PHONE ORDERS – TOLL FREE: 800-626-6653. D-M-E's Customer Service Dept. operates Monday through Friday from 8 a.m. to 8 p.m. E.S.T. Calls can be made from anywhere in the continental U.S. and Puerto Rico (Puerto Rico: use "137" prefix instead of "1"). Our Customer Service Representatives will be happy to answer your questions on D-M-E products or services, provide on-the-spot feedback on product availability and shipping details, or take any messages you wish relayed to your local D-M-E sales, manufacturing or technical service representatives.

MAIL ORDERS: If you prefer to order by mail, please address your order to:

- D-M-E Company, 29111 Stephenson Highway, Madison Heights, Michigan 48071-2330
  ATTN: Customer Service Dept.

FAX: You may fax your order to:

- D-M-E Customer Service
  248-398-6174 • 888-808-4363

CHECKS OR MONEY ORDERS: When paying invoices by check or money order, please make payable to *D-M-E Company.* Include remittance copy of invoice and mail to:

- D-M-E Company, Department Lock Box 78242, P.O. Box 78000, Detroit, Michigan 48278-0242

WALK-IN ORDERS, PICK-UPS AND RETURNS: If desired, ordered products in stock at your nearest D-M-E Service Center can be picked up rather than shipped. Walk-in orders at Service Center locations can also be processed while you wait. Products being returned for repair or exchange should be processed through Customer Service prior to being returned.

SPECIAL MACHINING SERVICES: Prints for quotation on special machining work can be sent by EDI to dme_cad@dme.net or mailed to the Estimating Department of the D-M-E manufacturing location nearest you. Call our toll-free number if desired to clarify location which serves your area.

Estimating locations are:

- 70 East Hillis Street, Youngwood, Pa 15697, FAX: 724-925-2424
- 1117 Fairplains Street, Greenville, MI 48338, Tel. 616-754-4601, FAX: 616-225-3924
- 3275 Deziel Drive, Windsor, Ont N8W 5A5, Tel. 519-948-5001, FAX: 519-948-4652
- 464-466 Windy Point Drive, Glendale Heights, IL 60139, Tel. 630-469-4280, FAX: 630-469-4740 (estimating only)

Please add "D-M-E Company" and "Attn: Estimating Dept." to above addresses when mailing prints. To obtain prices and delivery on special mold base orders or to check status of special work in progress please contact Customer Service.

CANADA

TERMS AND CONDITIONS OF SALE: See previous page.

PHONE ORDERS: Contact our Mississauga, Ontario office at 800-387-6600, FAX: 800-461-9965.

MAIL ORDERS: Send to: D-M-E of Canada, Ltd., 6210 Northwest Drive, Mississauga, Ontario L4V 1J6.

CHECK OR MONEY ORDERS: Make payable to *D-M-E of Canada, Ltd.* Include remittance copy of invoice and mail to Mississauga address above.

WALK-IN ORDERS, PICK-UPS, RETURNS, AND SPECIAL MACHINING: Contact our Mississauga office.

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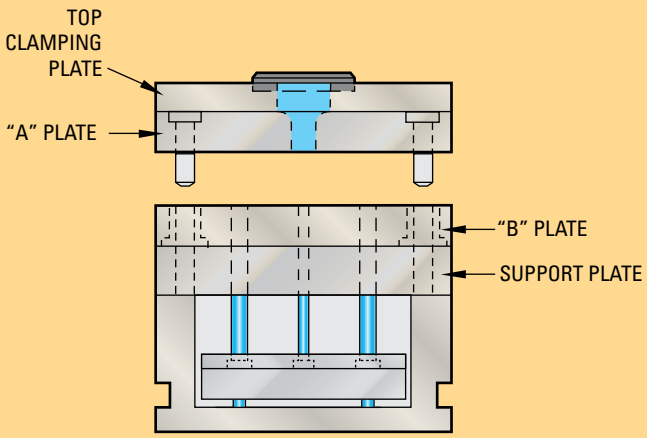
Mold Bases: What Every Molder Should Know

Today's mold-building process is a complex one for the molder, who must grapple with a long list of design details before placing a tooling order. It's understandable that much of the buyer's attention goes to the "heart" of the injection mold, the core and cavity inserts, since they have the most visible influence on the molded part. Yet all sorts of ancillary tooling components, to which the molder might not be inclined to give much thought, can also make or break a mold.

One item that sometimes gets lost in the shuffle is the mold base, even though the wrong one can severely limit a mold's productivity. Rather than an afterthought, mold base selection should be considered critical to the profitability of the entire molding project.

When selecting a mold base for a particular job, first ask a few key questions about the part's design and processing demands: What kind of ejection does it need? Does it have a cam action or some other mold-action device? What are the volume requirements? What type of machine will it run on?

Answer these design and processing questions, and you'll be well on your way to picking the standardized or special-purpose mold base best suited to your application.



A-Series Mold Base Assembly

The most frequently used standard assembly, the "A" Series Mold Base, is available in 43 sizes from 7.875 x 7.875 to 23.75 x 35.5.

"Core and cavity inserts … have the most visible influence on the molded part yet … mold base selection should be considered critical to the profitability of the entire molding project."

Standard Mold Base Styles

For most applications, a standard mold base will fit the bill. The most common of these is the "A-style," which has the flexibility to fit into the widest variety of molding applications.

A-style models have a four-plate design: (from top to bottom) top clamp plate, A-plate, B-plate, support plate, ejector retainer, ejector bar, and ejector housing. Mold makers using an A-style mold base typically machine through pockets in the "A" and "B" plates to accept just about any kind of core and cavity insert.

The B-style mold base represents an economy version of the A-style. The B-style's two-plate design combines the top clamp plate and the "A" plate into one component called the "A-Clamping Plate" or ACP. Likewise, a beefed-up "B" plate eliminates the need for a support plate on the core side of the mold.

Molders can use the less-costly "B" Series when the part design allows the cavity and core to be machined directly into the cavity plates. If the mold will be used with cavity inserts, they must be machined into blind pockets. The compactness of the "B" series mold base also makes it applicable whenever overall mold height must be limited in order to fit the tool in a given molding machine.

Special-Purpose Machines
Mold action and ejection requirements will often dictate the use one of three special-purpose mold bases instead of the simpler A- and B-styles.

One of these is the X-style, or stripper-plate, mold base. Sandwiched between the "A" and "B" plates, its stripper ("X") plate engages the edge of a part and pushes it off the core. Typically, the X-style sees use with round parts like cups, caps, and containers. This style of mold base comes in both five- and six-plate styles- -with the six-plate version including a support plate.

The AX-style mold base is used for parts requiring core detail in the cavity side of the mold. When the mold opens, that core detail is pulled so that the part remains on the ejector side of the mold. The AX-style is essentially an A-style mold base with an "X-1" plate, located between the "A" and "B" plates but attached to the top half of the mold so that it can pull the part off the core detail.

The "T" style, or three-plate, mold base is used when the molder would like to separate the part from the runner in the tool. "T" series mold bases consist of an "A" clamping plate, "X-1" plate, "X-2" plate, "B" plate, and the ejector assembly and housing. Unlike the other mold bases, the "T" series operates with two parting lines. The first parting line, which occurs between the X-1 and X-2 plates, separates the part from the gate prior to opening the main parting line. The main parting line then opens and the X-1 plate is actuated to pull the runner from the sprue-puller pin, thereby freeing the runner and allowing it to be ejected separately from the part being produced.

See page 11 for illustrations of standard mold base types.

Choosing A Steel
Steel selection is an important aspect of specifying the right mold base. Generally there are four standard grades of steel available. See page 8 for mold and die steel descriptions.

Molding Machine Considerations
After you've picked the right style and steel for your mold base, it's time to consider variables related to the molding machine: the locating-ring style, sprue bushing, and clamp slots.

The mold maker must select the type of locating ring that will match the platens of the machine in which the mold will be running. Locating rings are available in a wide variety of configurations to fit most injection machines, but the most common locating ring has a 3.990 in. outside diameter.

Sprue bushings must also match the machine, so be sure to determine the proper orifice and radius of the sprue bushing so it will match the machine nozzle. The most common type of sprue bushing is made from 6145 steel that has been hardened, ground, and polished for sprue release. In some applications it is desirable to use a high-conductivity copper-alloy sprue bushing.



"High-performance sprue bushings cool the sprue quickly when either the sprue weight is greater than the part weight, or a rigid target is needed for a robotic sprue picker …"

These "high-performance" sprue bushings can cool the sprue quickly when either the sprue weight is greater than the part weight, or a rigid target is needed for a robotic sprue picker, or when scrap would result from a hot sprue coming in contact with a finished part. High-performance sprue bushings are fully interchangeable with the standard bushings.

A number of different clamp-slot styles are available. Whatever the style, make sure it's compatible with the thickness of the top clamping plate on your mold base (ACP, "A" plate, or AX plate).

Finally, the molder needs to determine the correct mold base height in relation to the maximum space available in the press. A mold base that won't run in the appropriate size of press can turn potential profit into loss. In addition, be aware of the maximum stroke required to eject the part for the mold.

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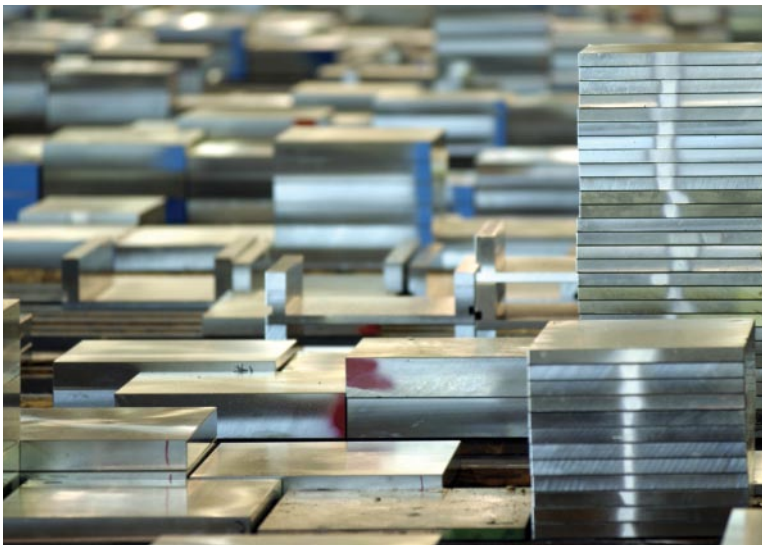
Mold and Die Steels

STEEL DESCRIPTIONS

Three Steels for Structural Sections

D-M-E NO. 1 STEEL

No. 1 Steel is a medium carbon (SAE 1030) or equivalent, silicon-killed forging quality steel with approximately 25% greater tensile strength than typical low-carbon warehouse steels. It machines easily, but is not "sticky," permitting a faster and smoother cut.



D-M-E NO. 2 STEEL

No. 2 Steel is an AISI 4130 or equivalent type steel. It is supplied pre-heat treated to 28-34 HRC (271-321 Bhn). A high strength steel, it is ideal for cavity and core retainer plates, clamping plates and support plates in molds and dies.

D-M-E NO. 7 STEEL

No. 7 Steel is a modified AISI 400 or equivalent series stainless steel for holder block applications. It is supplied pre-heat treated to 32-36 HRC (302-340 Bhn). This stainless steel offers corrosion-resistance and exceptional machinability but cannot be further hardened (see D-M-E No. 6). For humid environments, corrosive plastics, "clean room" or "100% stainless" applications, it is an ideal choice for all structural (non-cavity/core) mold plates.

Three Steels for Cavities and Cores

D-M-E NO. 3 STEEL

No. 3 Steel is a P-20 AISI 4130 (modified) type cavity steel. Exceptionally clean, it is pre-heat treated to 28-34 HRC (271-321 Bhn). It provides high hardness, good machinability and exceptional polishability for both plastics molds and die cast dies.

D-M-E NO. 5 STEEL

No. 5 Steel is a thermal shock resistant, hotwork die steel (AISI-SAE H-13 type) or equivalent. Supplied fully annealed 13-20 HRC (approx. 200 Bhn) for easy machinability, it can be subsequently heat treated to the desired hardness with a minimum of deformation.

Mainly used for die cast dies, it is also suitable for plastics molds with exceptional hardness or polishability requirements.

D-M-E NO. 5 Steel meets or exceeds the acceptance criteria established by the NADCA as detailed in Technical Digest Number 01-80-01D

D-M-E NO. 6 STEEL

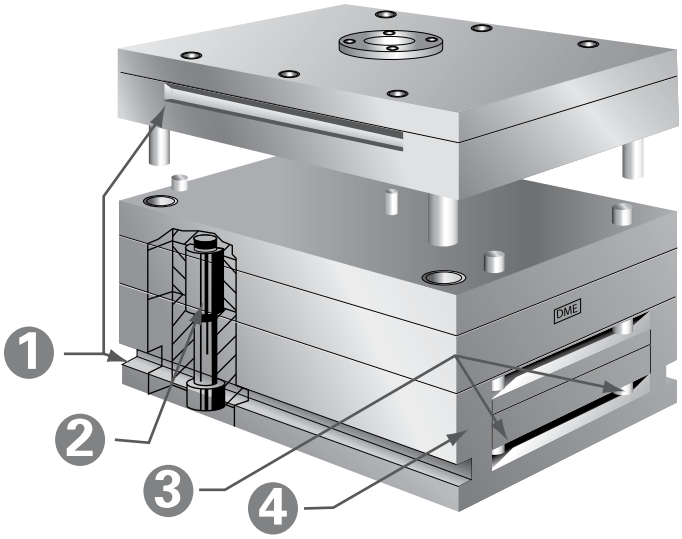
No. 6 Steel is T-420 type or equivalent stainless steel. It is supplied fully annealed to 8-23 HRC (179-241 Bhn), making it readily machinable. It can be used for injection, compression or transfer molds where the properties of the plastics materials or excessive condensation require a highly corrosion resistant cavity steel.

OTHER TYPES OF STEEL AVAILABLE ON SPECIAL ORDER. CONTACT D-M-E.

Benefits of Standard Mold Base Assemblies and Components

Seven major benefits of D-M-E Standard Mold Base Assemblies and Components

1. Made of high quality, pre-finished mold and die steels that give you more for your money; more metallurgical consistency; more cleanliness in cavity steels; more reliability.
2. Assemblies, plates and components are pre-engineered to give you the economic and technical benefits of interchangeability.
3. Manufactured with the most advanced, precision equipment — and quality control tested to give you reliable performance.
4. Gives designers more freedom and flexibility — more time to devote to the truly creative aspects of mold, die, and product design.
5. Gives mold and die makers more time to concentrate on cavities and cores — thus increasing productivity as much as 40%.
6. Gives molders more quality parts per hour, more profitability — with production proven construction that outlasts the longest runs.
7. Readily available as you need them. The more popular assemblies are always in stock for same-day service. Our nationwide network of Service Centers means you have the products and the people near you to help you save time, money and inventory costs.

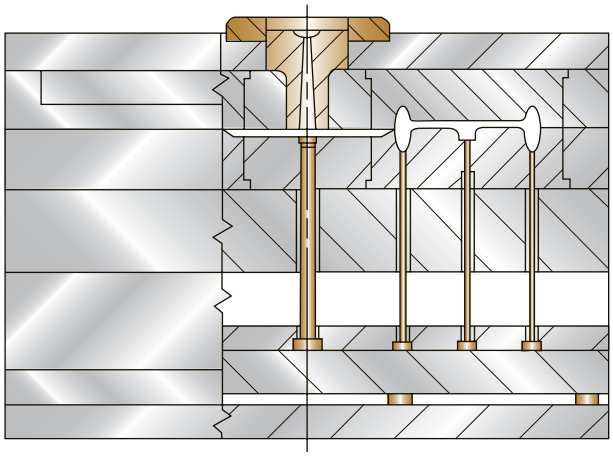


These four features have helped make D-M-E Standard Mold Bases the most frequently specified mold base assemblies in the world:

1. CLAMP SLOTS that save platen space and provide maximum cavity area
2. TUBULAR DOWELS that provide more room for waterlines
3. STOP PINS welded to ejector plate to prevent loosening and ejection interference
4. ONE-PIECE EJECTOR HOUSING that gives added strength and simplifies construction

INJECTION MOLDING

Injection molding is recognized as the single most important form of plastics processing. Beginning with just a handful of standardized mold bases and components in 1942, D-M-E now offers thousands of standardized mold base assemblies and a broad variety of mold components to satisfy the consistent need for high-quality injection molds. Primarily used for thermoplastics injection molding, most of our assemblies and components are readily adaptable for the injection molding of thermosets. Future product developments from D-M-E will include standardized components specifically designed for the injection molding of thermoset materials.



D-M-E Standard "A" Series Mold Base with Cavity Inserts

D-M-E Item Number System

The item number system employed by D-M-E not only prevents the duplication of item numbers, but helps lessen the chances of error in the writing and production of orders. This is accomplished by incorporating actual dimensional data into the item numbers as indicated below.

MOLD BASES — "A" AND "B" SERIES

The item numbers for Standard Mold Bases in the "A" and "B" Series combine the NOMINAL Size (width and length), the Series (A or B) and the thicknesses of the "A" (or "A"-Clamping) and "B" Plates.

Since all the standard mold plate thicknesses are a combination of a whole number and either $^3/_8$ or $^7/_8$, the designation 13 indicates 1 and $^3/_8$; 17 indicates 1 and $^7/_8$; 23 indicates 2 and $^3/_8$, etc.

For Example: 1016A-13-37 is the item number for a $9^7/_8 \times 16$" "A" Series Mold Base with "A" plate $1^3/_8$ and "B" plate $3^7/_8$ thick.

MOLD BASES — "X" OR STRIPPER PLATE SERIES

The item numbers for the Stripper Plate Series Mold Base combine the NOMINAL Size (width and length), the letter "X" for Stripper Plate, the numeral 5 or 6 (plate series) and the "AX" plate thickness.

Since the "X" plate thickness is constant at $^7/_8$ or $1^3/_8$, and the "BX" plate thickness is constant at $1^3/_8$, $1^7/_8$ or $2^3/_8$, depending on the mold base nominal size and number of plates in the assembly, these thicknesses are not represented in the item number.

For Example: 1818X-5-13 is the item number for a $17^7/_8 \times 18$", 5-plate "X" series Mold Base with a $1^3/_8$ thick "AX" plate. (In this case, the "X" plate is $1^3/_8$ thick, and the "BX" plate is $2^3/_8$ thick).

"AX" AND "T" SERIES MOLD BASES

The item numbers for the "AX" Series Mold Bases combine the NOMINAL Size (width and length), the letters "AX" and the thickness of the "A" and "B" plates. The "X-1" plate thickness is specified when ordering and is omitted from the item number.

For Example: 1212AX-13-37 is the item number for an $11^7/_8 \times 12$" "AX" Series Mold Base with a $1^3/_8$ thick "A" plate and $3^7/_8$ thick "B" plate. The "X-1" plate thickness (e.g. $^7/_8$) is then specified when ordering.

The item numbers for the "T" Series Mold Bases combine the NOMINAL Size (width and length), the letter "T" and the thickness of the "X-2" and "B" plates.

Since the thickness of the "A"-Clamping plate is constant at $1^7/_8$ or $2^3/_8$ and the "X-1" plate thickness is constant at $^7/_8$ or $1^3/_8$, depending on the nominal size of the mold base, these thicknesses are not represented in the item number.

For Example: 1012T-23-17 is the item number for a $9^7/_8 \times 11^7/_8$ "T" Series Mold Base with a $2^3/_8$ thick "X-2" plate and $1^7/_8$ thick "B" plate. (In this case, the "A"-Clamping plate is $1^7/_8$ thick and the "X-1" plate is $^7/_8$ thick).

CAVITY RETAINER SETS

Since Cavity Retainer Sets are made up solely of an "A" and "B" plate, the item numbers combine the NOMINAL Size, and the "A" and "B" plate thicknesses. (The absence of the letter "A", "B", "AX", or "T" distinguish these numbers from the item numbers of Standard Mold Bases).

For Example: 1215-33-47 is an $11^7/_8 \times 15$" Cavity Retainer Set with "A" plate $3^3/_8$ and "B" plate $4^7/_8$ thick.

MOLD PLATES

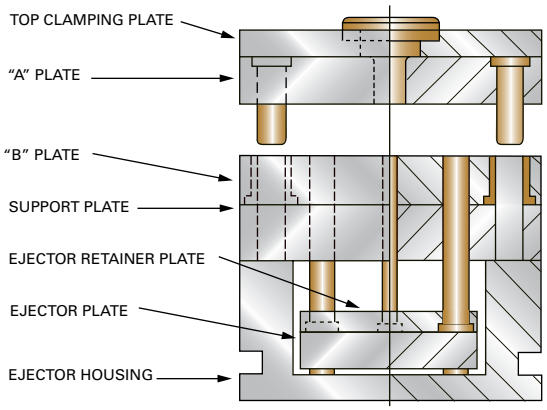
The same principle used for numbering Cavity Retainer Sets is applied to Standard Mold Plates; however, only one plate thickness is required. (Since the item numbers for retainer sets will always indicate two separate plate thicknesses, the distinction between these two items is easily identified).

For Example: 1318-47 is a $13^3/_8 \times 18$" Mold Plate, $4^7/_8$ thick.

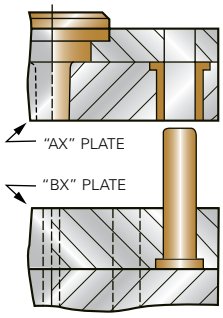
NOTE: While an understanding of this item number system can be very helpful in identifying and referring to the various standard sizes, the D-M-E catalog should be consulted when ordering any standard item.

Standard Mold Base Terminology

"A" AND REVERSE "A" SERIES ASSEMBLIES



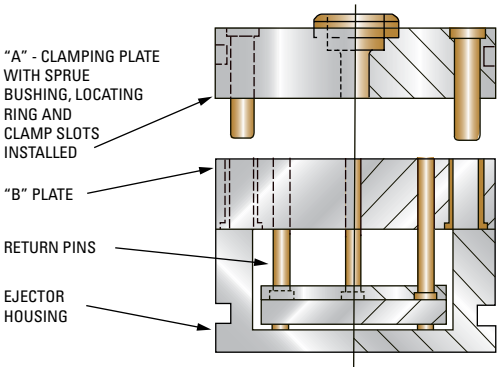
The most frequently used Standard Assembly, the "A" Series Mold Base is available in 43 sizes from $7\frac{7}{8} \times 7\frac{7}{8}$ to $23\frac{3}{4} \times 35\frac{1}{2}$. See pages 50-135 for complete information.



REVERSE "A" SERIES

Identical to the "A" Series, with leader pins and bushings "reversed." Specify "AX" and "BX" plate thicknesses when ordering (rather than "A" and "B").

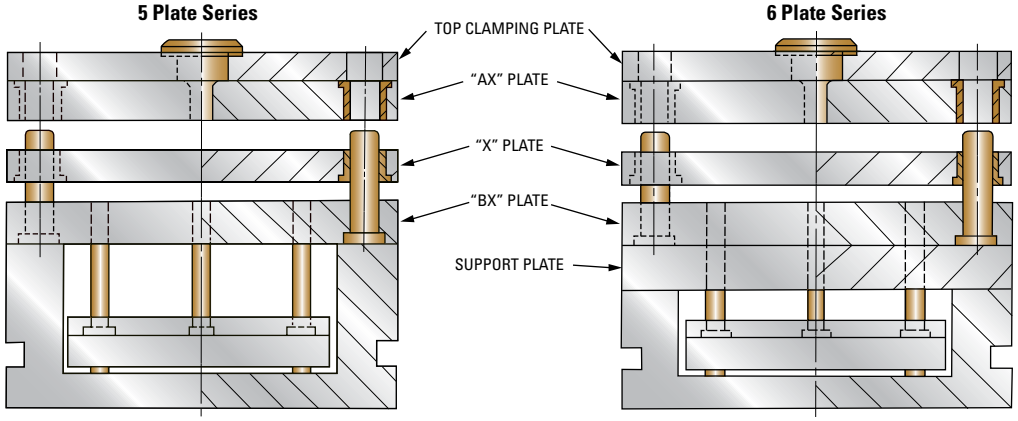
"B" SERIES ASSEMBLY



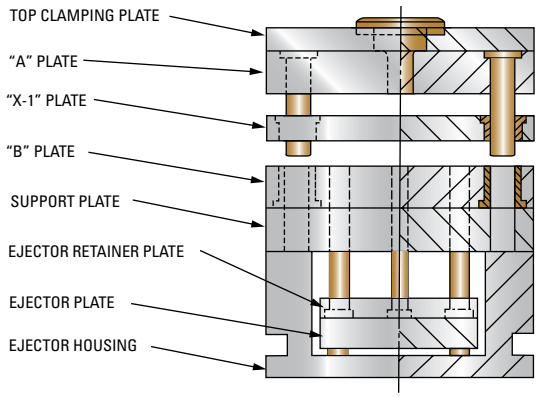
When cavities and cores are to be inserted into blind pockets, or machined directly into the "A" and "B" plates, the "B" Series Assembly is used. The Top Clamping Plate and Support Plate are omitted from the assembly.

"X" SERIES (STRIPPER PLATE) ASSEMBLY

Most frequently used for molds requiring stripper plate ejection, the "X" Series Assembly is available with a Support Plate (6-plate series) or without a Support Plate (5-plate series).

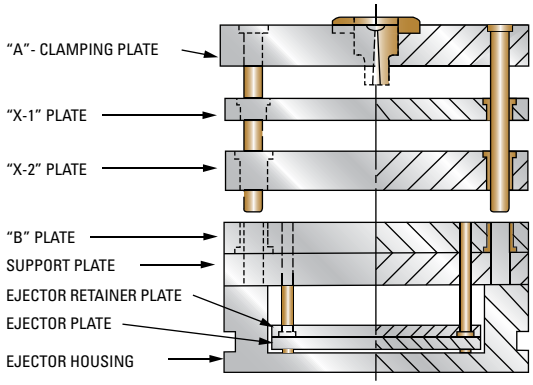


"AX" SERIES ASSEMBLY



The "AX" Series Assembly is used when the mold requires a floating plate to remain with the upper or stationary half of the assembly. It is basically an "A" Series Assembly with a floating plate ("X-1") added.

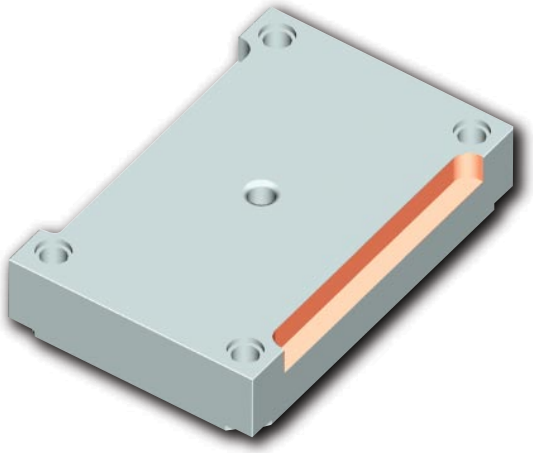
"T" SERIES ASSEMBLY



The "T" Series Assembly is used for top runner molds that require two floating plates ("X-1" — runner stripper plate, "X-2" — cavity plate) to remain with the upper or stationary half of the assembly.

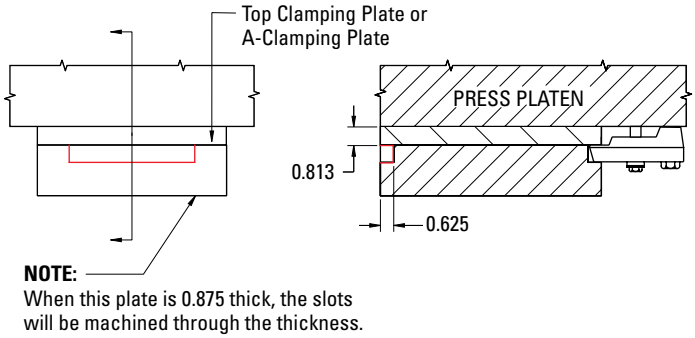
Machining of Clamp Slots

Clamp Slots facilitate clamping the mold to the platen of the press. D-M-E mold bases offer four slot types (shown below) to ensure the best fit for the requirements of your application.



Type A

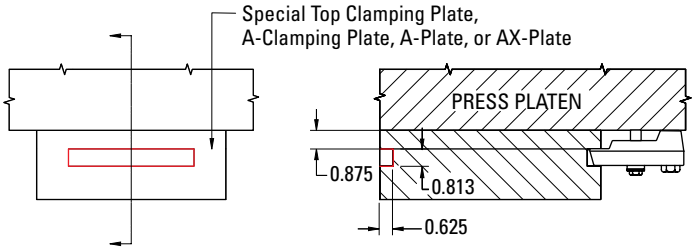
Machined when Top Clamping Plate is 0.875 or 1.375



NOTE:
When this plate is 0.875 thick, the slots will be machined through the thickness.

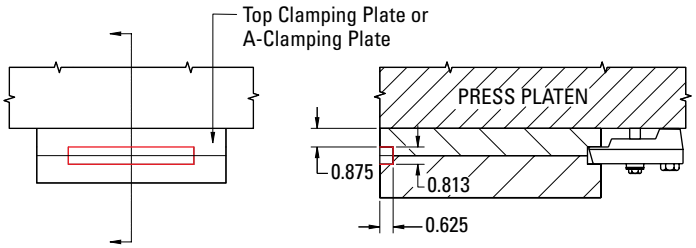
Type B

Machined in plates that are 2.375 or thicker



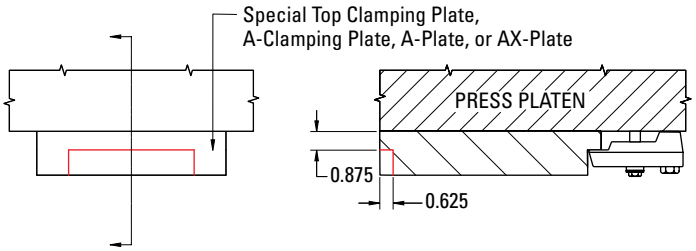
Type C

Machined only when specified by a customer



Type D

Machined plates that are 1.875 thick



D-M-E Mold Base and Plate Services

The fastest delivery of standard mold bases, special mold bases, and contour roughed mold plates







SAME-DAY SHIPMENTS

CONTOUR ROUGHING SERVICES

QUICK DELIVERY SPECIALS

D-M-E

Every step of the way

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

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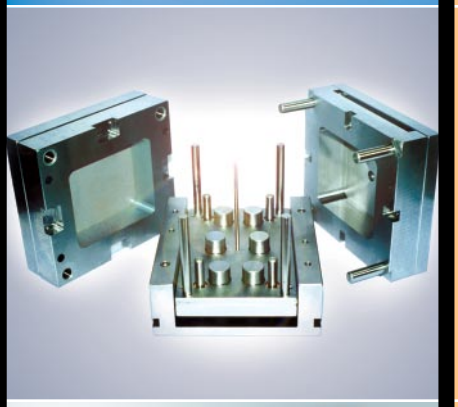
D-M-E Edge Mold Bases ..... 15 to 22

The lowest-priced mold base on the market is in stock in 70 different sizes



Quick Delivery Standards ..... 23 to 30

Featuring the fastest delivery of popular mold base sizes, including same-day shipments



Quick Delivery Specials ..... 31 to 33

Special mold bases with the features you want delivered with precision and speed



Contour Roughing Services 34

Unprecedented moldmaker demand now enables D-M-E to offer the rough milling of your complex part shapes into mold plates

Online Price Guide

Go to www.dme.net/prices for the latest pricing guide.

D-M-E Edge Mold Bases

THE LOWEST-PRICED
MOLD BASE ON THE MARKET
IS IN STOCK IN
70 DIFFERENT SIZES



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Providing a Competitive Advantage

THE NEW EDGE MOLD BASE GIVES YOUR CUSTOMERS A COMPETITIVE ADVANTAGE

What is the "Edge" concept? It's an A-Series Mold Base with seven features in D-M-E #3 steel with a 30-40% price advantage. And with every Edge Mold Base, you get seven decades of reliable D-M-E quality-assured manufacturing capabilities that includes the absolute best service, price and delivery that will have your customers coming back for more.

D-M-E has supported moldmakers, processors and designers around the globe since it innovated the standard mold base in 1942. Today, we offer the industry's broadest range of market-leading products. In a recent Moldmaking Industry Survey, moldmakers said they needed an edge to better compete. That's why our full featured, ready-to-ship mold base is called the Edge. Essentially, moldmakers named it for us! The Edge gives you the competitive and profitability advantages that D-M-E customers demand.

As you continue to positively impact your operations through process efficiencies, technology enhancements, and automation improvements, the D-M-E Edge Mold Base is with you every step of the way by providing the value, speed and exceptional quality that customers have long expected from the industry's standard-setter in mold technologies. Even our competitors look to us as standard-setters; so much so, that today, competitors still promote their products by comparing them to ours.

Get the Edge Mold Base and you'll have another ingredient for the formula for a successful, growing business, and a partnership with the global mold technologies leader.

FREQUENTLY ASKED QUESTIONS ABOUT D-M-E

Where is the Edge Mold Base manufactured?

The D-M-E Edge Mold Base is manufactured by D-M-E's sister company located in Brazil. D-M-E has had an extensive manufacturing and distributing presence in Brazil for over 20 years. The Edge Mold Base is manufactured using the same stringent quality-assured processes and standards that have been adhered to during the manufacture of D-M-E U.S.-made mold bases for many decades. This manufacturing consistency and repeatability on every continent ensures D-M-E customers that every mold base has the quality steel and construction that makes D-M-E mold bases the highest valued mold bases throughout the world.

I make my own mold bases; can the D-M-E Edge Mold Base make me more competitive?

Yes! With our low U.S. prices, the Edge Mold Base is more than competitive when compared against in-house manufactured bases. In today's marketplace, most moldmakers don't have the luxury of having tool makers and/or apprentices make mold bases. Factoring direct labor costs alone, the D-M-E Edge Mold Base is priced so low that even the most efficient shop will save money by purchasing instead of making.

Does D-M-E offer special machining services?

Yes! D-M-E has the most comprehensive worldwide product offering for in-house machining services! Whether you need simple pocket roughing, 3D contour roughing of core and cavity blocks, or a completely finished mold base that meets your exact specifications and tolerances, D-M-E is the industry leader for complete, comprehensive special machining both locally and globally. No one in our industry offers a wider range of special machining services, and no one in our industry has the decades of machining experience and steel supplier relationships that provide our competitive advantage.

Industry-leading D-M-E Manufacturing, Tolerances and Distribution!
Get the competitive and profitability advantage with the D-M-E Edge!

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Advantages and Features

EDGE MOLD BASE ADVANTAGES

70 different mold base assemblies ready for quick delivery
The lowest-priced mold base on the market
Most sizes available for same-day shipment
Seven popular mold base features
Reliable D-M-E quality-assured services, including manufacturing, inspection and distribution

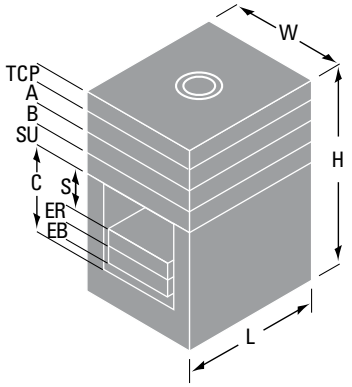


EDGE MOLD BASE FEATURES

- A-Plate, B-Plate and Support plates supplied with D-M-E #3 steel
- Pry slots installed on both sides of "B" plate
- Lift holes installed
- Return pins installed 0.125 inboard to allow for spring pockets
- Leader pin vents machined in the housing under the bushing location
- Guided ejection installed
- Three-piece ejector housing
- Center hole machining included

NOTE: See Standard & Optional Mold Base Features section for specifications regarding Edge Mold Base features.

Product Selection Tables



Variables

Below is a list of the variables for the Edge series mold bases and their definitions

W = Width
L = Length
TCP = Top clamp plate thickness
A = A plate thickness
B = B plate thickness
SU = Support plate thickness
C = Height of the riser
S = Maximum stroke of the ejector bar
H = Mold base height
EB = Ejector bar thickness
ER = Ejector retainer thickness
P = Housing riser thickness
RPx = Return pin location on the X axis (3 places)
RPy = Return pin location on the Y axis (4 places)
RPos = Return pin offset on the X axis (1 place)
RPg = Return pin diameter
LPg = Leader pin diameter

7.875 × 7.875

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA0808-07-07	7.875	7.875	0.875	0.875	2.500	0.813	7.375	111
EDA0808-13-13	7.875	7.875	1.375	1.375	2.500	0.813	8.375	129
EDA0808-17-17	7.875	7.875	1.875	1.875	2.500	0.813	9.375	147
EDA0808-23-23	7.875	7.875	2.375	2.375	3.000	1.313	10.875	167

All Items	W	7.875	EB	1.000	P	1.250	TCP	0.875	RPx	3.313	RPg	0.500
	L	7.875	ER	0.500	SU	1.375	RPos	3.188	RPy	1.500	LPg	0.750

7.875 × 11.875

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA0812-07-07	7.875	11.875	0.875	0.875	2.500	0.813	7.375	174
EDA0812-13-13	7.875	11.875	1.375	1.375	3.000	1.313	8.875	205
EDA0812-17-17	7.875	11.875	1.875	1.875	3.500	1.813	10.375	235
EDA0812-23-23	7.875	11.875	2.375	2.375	3.500	1.813	11.375	262

All Items	W	7.875	EB	1.000	P	1.250	TCP	0.875	RPx	5.313	RPg	0.500
	L	11.875	ER	0.500	SU	1.375	RPos	5.188	RPy	1.500	LPg	0.750

9.875 × 8.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1008-07-07	9.875	8.000	0.875	0.875	2.500	0.813	7.375	158
EDA1008-13-13	9.875	8.000	1.375	1.375	2.500	0.813	8.875	181
EDA1008-17-17	9.875	8.000	1.875	1.875	3.500	1.813	10.875	209

All Items	W	9.875	EB	1.000	P	1.438	TCP	0.875	RPx	3.250	RPg	0.625
	L	8.000	ER	0.500	SU	1.875	RPos	3.125	RPy	2.250	LPg	0.750

9.875 × 11.875

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1012-07-07	9.875	11.875	0.875	0.875	2.500	0.813	7.875	235
EDA1012-13-13	9.875	11.875	1.375	1.375	3.000	1.313	9.375	273
EDA1012-17-17	9.875	11.875	1.875	1.875	3.500	1.813	10.875	311
EDA1012-23-23	9.875	11.875	2.375	2.375	3.500	1.813	11.875	344

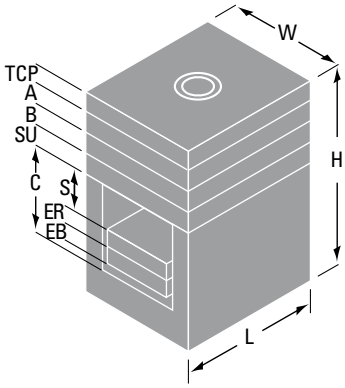
All Items	W	9.875	EB	1.000	P	1.438	TCP	0.875	RPx	5.188	RPg	0.625
	L	11.875	ER	0.500	SU	1.875	RPos	5.063	RPy	2.250	LPg	0.875

9.875 × 16.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1016-07-07	9.875	16.000	0.875	0.875	2.500	0.813	7.875	316
EDA1016-13-13	9.875	16.000	1.375	1.375	3.000	1.313	9.375	367
EDA1016-17-17	9.875	16.000	1.875	1.875	3.500	1.813	10.875	418
EDA1016-23-23	9.875	16.000	2.375	2.375	3.500	1.813	11.875	463

All Items	W	9.875	EB	1.000	P	1.438	TCP	0.875	RPx	7.250	RPg	0.625
	L	16.000	ER	0.500	SU	1.875	RPos	7.125	RPy	2.250	LPg	0.875

Product Selection Tables



Below is a list of the variables for the Edge series mold bases and their definitions

W = Width
L = Length
TCP = Top clamp plate thickness
A = A plate thickness
B = B plate thickness
SU = Support plate thickness
C = Height of the riser
S = Maximum stroke of the ejector bar
H = Mold base height
EB = Ejector bar thickness
ER = Ejector retainer thickness
P = Housing riser thickness
RPx = Return pin location on the X axis (3 places)
RPy = Return pin location on the Y axis (4 places)
RPos = Return pin offset on the X axis (1 place)
RPg = Return pin diameter
LPg = Leader pin diameter

9.875 × 20.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1020-13-13	9.875	20.000	1.375	1.375	3.000	1.313	9.375	459
EDA1020-17-17	9.875	20.000	1.875	1.875	3.500	1.813	10.875	523
EDA1020-23-23	9.875	20.000	2.375	2.375	3.500	1.813	11.875	579

All Items	W	9.875	EB	1.000	P	1.438	TCP	0.875	RPx	9.250	RPg	0.625
	L	20.000	ER	0.500	SU	1.875	RPos	9.125	RPy	2.250	LPg	0.875

10.875 × 12.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1112-13-13	10.875	12.000	1.375	1.375	3.000	1.313	9.375	305
EDA1112-17-17	10.875	12.000	1.875	1.875	3.500	1.813	10.875	347
EDA1112-23-23	10.875	12.000	2.375	2.375	3.500	1.813	11.875	384

All Items	W	10.875	EB	1.000	P	1.688	TCP	0.875	RPx	5.250	RPg	0.625
	L	12.000	ER	0.500	SU	1.875	RPos	5.125	RPy	2.813	LPg	0.875

10.875 × 14.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1114-13-13	10.875	14.000	1.375	1.375	3.000	1.313	9.375	355
EDA1114-17-17	10.875	14.000	1.875	1.875	3.500	1.813	10.875	405
EDA1114-23-23	10.875	14.000	2.375	2.375	3.500	1.813	11.875	448

All Items	W	10.875	EB	1.000	P	1.688	TCP	0.875	RPx	6.250	RPg	0.625
	L	14.000	ER	0.500	SU	1.875	RPos	6.125	RPy	2.813	LPg	0.875

10.875 × 18.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1118-13-13	10.875	18.000	1.375	1.375	3.000	1.313	9.375	457
EDA1118-17-17	10.875	18.000	1.875	1.875	3.500	1.813	10.875	521
EDA1118-23-23	10.875	18.000	2.375	2.375	3.500	1.813	11.875	576

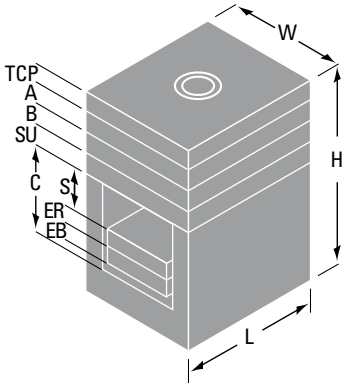
All Items	W	10.875	EB	1.000	P	1.688	TCP	0.875	RPx	8.250	RPg	0.625
	L	18.000	ER	0.500	SU	1.875	RPos	8.125	RPy	2.813	LPg	0.875

11.875 × 12.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1212-13-13	11.875	12.000	1.375	1.375	3.000	1.188	9.375	335
EDA1212-17-17	11.875	12.000	1.875	1.875	3.000	1.188	10.375	375
EDA1212-23-23	11.875	12.000	2.375	2.375	3.500	1.688	11.875	422
EDA1212-27-27	11.875	12.000	2.875	2.875	4.000	2.188	13.375	468

All Items	W	11.875	EB	1.125	P	1.688	TCP	0.875	RPx	5.125	RPg	0.750
	L	12.000	ER	0.500	SU	1.875	RPos	5.000	RPy	3.188	LPg	1.000

Product Selection Tables



Variables

Below is a list of the variables for the Edge series mold bases and their definitions

W = Width
L = Length
TCP = Top clamp plate thickness
A = A plate thickness
B = B plate thickness
SU = Support plate thickness
C = Height of the riser
S = Maximum stroke of the ejector bar
H = Mold base height
EB = Ejector bar thickness
ER = Ejector retainer thickness
P = Housing riser thickness
RPx = Return pin location on the X axis (3 places)
RPy = Return pin location on the Y axis (4 places)
RPos = Return pin offset on the X axis (1 place)
RPg = Return pin diameter
LPg = Leader pin diameter

11.875 × 15.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1215-13-13	11.875	15.000	1.375	1.375	3.000	1.188	9.375	419
EDA1215-17-17	11.875	15.000	1.875	1.875	3.000	1.188	10.375	469
EDA1215-23-23	11.875	15.000	2.375	2.375	3.500	1.688	11.875	527
EDA1215-27-27	11.875	15.000	2.875	2.875	4.000	2.188	13.375	584

All Items	W	11.875	EB	1.125	P	1.688	TCP	0.875	RPx	6.625	RPg	0.750
	L	15.000	ER	0.500	SU	1.875	RPos	6.500	RPy	3.188	LPg	1.000

11.875 × 20.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1220-13-13	11.875	20.000	1.375	1.375	3.000	1.188	9.375	558
EDA1220-17-17	11.875	20.000	1.875	1.875	3.000	1.188	10.375	625
EDA1220-23-23	11.875	20.000	2.375	2.375	3.500	1.688	11.875	702
EDA1220-27-27	11.875	20.000	2.875	2.875	4.000	2.188	13.375	779

All Items	W	11.875	EB	1.125	P	1.688	TCP	0.875	RPx	9.125	RPg	0.750
	L	20.000	ER	0.500	SU	1.875	RPos	9.000	RPy	3.188	LPg	1.000

13.375 × 15.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1315-13-13	13.375	15.000	1.375	1.375	3.000	1.063	9.875	505
EDA1315-17-17	13.375	15.000	1.875	1.875	3.000	1.063	10.875	562
EDA1315-23-23	13.375	15.000	2.375	2.375	3.500	1.563	12.375	627
EDA1315-27-27	13.375	15.000	2.875	2.875	4.000	2.063	13.875	692

All Items	W	13.375	EB	1.125	P	1.875	TCP	1.375	RPx	6.625	RPg	0.750
	L	15.000	ER	0.625	SU	1.875	RPos	6.500	RPy	3.813	LPg	1.000

13.375 × 18.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1318-13-13	13.375	18.000	1.375	1.375	3.000	1.063	9.875	606
EDA1318-17-17	13.375	18.000	1.875	1.875	3.000	1.063	10.875	675
EDA1318-23-23	13.375	18.000	2.375	2.375	3.500	1.563	12.375	752
EDA1318-27-27	13.375	18.000	2.875	2.875	4.000	2.063	13.875	830

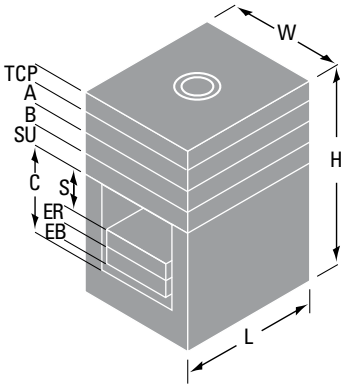
All Items	W	13.375	EB	1.125	P	1.875	TCP	1.375	RPx	8.125	RPg	0.750
	L	18.000	ER	0.625	SU	1.875	RPos	8.000	RPy	3.813	LPg	1.000

13.375 × 20.750

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1321-17-17	13.375	20.750	1.875	1.875	3.000	1.063	10.875	777
EDA1321-23-23	13.375	20.750	2.375	2.375	3.500	1.563	12.375	867
EDA1321-27-27	13.375	20.750	2.875	2.875	4.000	2.063	13.875	957

All Items	W	13.375	EB	1.125	P	1.875	TCP	1.375	RPx	9.500	RPg	0.750
	L	12.750	ER	0.625	SU	1.875	RPos	9.375	RPy	3.813	LPg	1.000

Product Selection Tables



Variables

Below is a list of the variables for the Edge series mold bases and their definitions

W = Width
L = Length
TCP = Top clamp plate thickness
A = A plate thickness
B = B plate thickness
SU = Support plate thickness
C = Height of the riser
S = Maximum stroke of the ejector bar
H = Mold base height
EB = Ejector bar thickness
ER = Ejector retainer thickness
P = Housing riser thickness
RPx = Return pin location on the X axis (3 places)
RPy = Return pin location on the Y axis (4 places)
RPos = Return pin offset on the X axis (1 place)
RPg = Return pin diameter
LPg = Leader pin diameter

13.375 × 23.500

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1323-17-17	13.375	23.500	1.875	1.875	3.000	1.063	10.875	881
EDA1323-23-23	13.375	23.500	2.375	2.375	3.500	1.563	12.375	982
EDA1323-27-27	13.375	23.500	2.875	2.875	4.000	2.063	13.875	1084

All Items	W	13.375	EB	1.125	P	1.875	TCP	1.375	RPx	10.875	RPg	0.750
	L	23.500	ER	0.625	SU	1.875	RPos	10.750	RPy	3.813	LPg	1.000

14.875 × 17.875

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1518-17-17	14.875	17.875	1.875	1.875	3.500	1.563	11.875	790
EDA1518-23-23	14.875	17.875	2.375	2.375	3.500	1.563	12.875	865
EDA1518-27-27	14.875	17.875	2.875	2.875	4.000	2.063	14.375	950

All Items	W	14.875	EB	1.125	P	1.875	TCP	1.375	RPx	8.063	RPg	0.750
	L	17.875	ER	0.625	SU	2.375	RPos	7.938	RPy	3.875	LPg	1.250

14.875 × 23.750

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1524-17-17	14.875	23.750	1.875	1.875	3.500	1.563	11.875	1050
EDA1524-23-23	14.875	23.750	2.375	2.375	3.500	1.563	12.875	1150
EDA1524-27-27	14.875	23.750	2.875	2.875	4.000	2.063	14.375	1262

All Items	W	14.875	EB	1.125	P	1.875	TCP	1.375	RPx	11.000	RPg	0.750
	L	23.750	ER	0.625	SU	2.375	RPos	10.875	RPy	3.875	LPg	1.250

15.875 × 16.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1616-23-23	15.875	16.000	2.375	2.375	3.500	1.563	12.875	825
EDA1616-27-27	15.875	16.000	2.875	2.875	4.000	2.063	14.375	906

All Items	W	15.875	EB	1.125	P	1.875	TCP	1.375	RPx	7.125	RPg	0.750
	L	16.000	ER	0.625	SU	2.375	RPos	7.000	RPy	4.375	LPg	1.250

15.875 × 20.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1620-23-23	15.875	20.000	2.375	2.375	3.500	1.563	12.875	1031
EDA1620-27-27	15.875	20.000	2.875	2.875	4.000	2.063	14.375	1132

All Items	W	15.875	EB	1.125	P	1.875	TCP	1.375	RPx	9.125	RPg	0.750
	L	20.000	ER	0.625	SU	2.375	RPos	9.000	RPy	4.375	LPg	1.250

15.875 × 23.500

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1623-23-23	15.875	23.500	2.375	2.375	3.500	1.563	12.875	1212
EDA1623-27-27	15.875	23.500	2.875	2.875	4.000	2.063	14.375	1330

All Items	W	15.875	EB	1.125	P	1.875	TCP	1.375	RPx	10.875	RPg	0.750
	L	23.500	ER	0.625	SU	2.375	RPos	10.750	RPy	4.375	LPg	1.250

Get the Edge with D-M-E Mold Components

D-M-E has been an innovator in the development of mold technologies ever since it standardized mold base offerings in the 1940s to enable moldmakers to focus their creativity on value-added core and cavity work. D-M-E continues its innovations by introducing new mold components that complement your Edge mold base, or any D-M-E mold base, for that matter.

Here are just a few of the mold components that will give your D-M-E mold base the edge:

Pins, sleeves and blades

A comprehensive line of pins, sleeves and blades – in Inch, DIN and JIS standards – all of which undergo rigorous D-M-E quality assurance testing, are available at competitive prices with fast delivery. From straight, shoulder or keyed ejector pins to nitrided ejector sleeves and close-tolerance ejector blades to core pins, return pins and sprue puller pins, D-M-E has the products that match your application needs.

Sprue bushings and locating rings

A wide range of hardened, ground and polished sprue bushings and more than a dozen locating ring options are available from D-M-E to prepare for maximum production performance.

Mold interlocks

For precise alignment of mold halves, mold plates or individual cavities or cores, D-M-E has a large selection of mold interlocks that are a perfect fit for all of your applications. From the innovative IN2 interlocks that offer interchangeable inserts to a variety of side, top, round and rectangular interlocks, D-M-E has the products to eliminate your mold alignment concerns.

Thousands of other mold components to complement your mold base selection

D-M-E has the broadest selection of market-leading mold technologies available around the globe, with many choices within hundreds of product lines. Our proven knowledge and expertise has made D-M-E the preferred supplier to many of the world's leading companies. Check out the D-M-E Mold Components Catalog for the products that match your application needs.



D-M-E Quick Delivery Standards

THOUSANDS OF MOLD BASE CONFIGURATIONS READY TO SHIP AS SOON AS TODAY!



ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Quick Delivery Standards Benefits

The QDS Advantage

- More than 3,800 popular mold base combinations available in 3 or 4 days or less
- Includes comparably sized retainer sets and mold plates
- Includes D-M-E #7 stainless steel in the A-Series mold base program (all plates and housing are stainless steel)

Call 800-626-6653 (800-387-6600 in Canada) by noon for guaranteed shipment.

D-M-E's Quick Delivery Standards (QDS™) program has expanded to offer even more sizes of mold bases, retainer sets and mold plates on a same-day, next-day, three-day or four-day basis.

Same-Day and Next-Day Shipments

The same-day and next-day shipment programs now offer 340 of the most popular A-Series mold bases in addition to rotary ground mold (RGM) plates of comparable size and thickness.

Three-Day Shipment

The new selection of three-day shipment A-Series or B-Series mold bases, cavity retainer sets, and finished or rotary ground mold plates now includes nearly 4,000 combinations.

Four-Day Shipment

The QDS program now includes A-Series mold bases in D-M-E #7 stainless steel available in four-day shipment.

With the ever-growing need for just-in-time deliveries, this expansion of the D-M-E QDS program can greatly enhance your competitive edge.

NOTE: A and B Series Mold Bases include:
- Optional 1-3/8 clamp plates where applicable
- Ejector bar same length as mold base
- Any standard leader pin length desired

Same-Day Shipment



A-Series Mold Bases

ITEM NUMBER	STANDARD CLAMP PLATE			OPTIONAL 1-3/8 CLAMP PLATE		
	STEEL			STEEL		
88A-7-7	1	2	3	1	2	—
88A-13-13	1	2	3	1	2	—
812A-13-13	1	2	—	1	2	—
108A-13-13	—	2	—	—	2	—
1114A-13-13	1	2	—	1	2	—
1016A-13-13	—	—	—	—	2	—
1114A-13-13	—	—	—	—	2	—
1215A-13-13	—	—	—	—	2	—
1315A-13-13	—	2	—	—	—	—

Supplied with catalog standard riser height (C) and leader pin length (A+B+1/2").

Next-Day Shipments

A-Series Mold Bases
(and Rotary Ground Mold Plates)*

***Key for Ordering Rotary Ground Mold Plates:**
Rotary ground mold plates are available in sizes and D-M-E steel types shown. Add "RGM" to end of item number and delete "A" (example: 88A-17-27 becomes 88-17RGM or 88-27RGM depending on thickness desired).

7 7/8 x 7 7/8

ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL		
88A-7-7	1	2	3	88A-13-7	1	2	3	88A-17-7	1	2	3	88A-23-7	1	2	3	88A-27-7	–	2	–	88A-33-7	–	2	–
88A-7-13	1	2	3	88A-13-13	1	2	3	88A-17-13	1	2	3	88A-23-13	1	2	3	88A-27-13	–	2	–	88A-33-13	–	2	–
88A-7-17	1	2	3	88A-13-17	1	2	3	88A-17-17	1	2	3	88A-23-17	1	2	3	88A-27-17	–	2	–	88A-33-17	–	2	–
88A-7-23	1	2	3	88A-13-23	1	2	3	88A-17-23	1	2	3	88A-23-23	1	2	3	88A-27-23	–	2	–	88A-33-23	–	2	–
88A-7-27	1	2	3	88A-13-27	1	2	3	88A-17-27	1	2	3	88A-23-27	1	2	3	88A-27-27	–	2	–	88A-33-27	–	2	–
																88A-27-33	–	2	–				

7 7/8 x 11 7/8

ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL		
812A-7-7	1	2	3	812A-13-7	1	2	3	812A-17-7	1	2	3	812A-23-7	1	2	3	812A-27-7	1	2	–
812A-7-13	1	2	3	812A-13-13	1	2	3	812A-17-13	1	2	3	812A-23-13	1	2	3	812A-27-13	1	2	–
812A-7-17	1	2	3	812A-13-17	1	2	3	812A-17-17	1	2	3	812A-23-17	1	2	3	812A-27-17	1	2	–
812A-7-23	1	2	3	812A-13-23	1	2	3	812A-17-23	1	2	3	812A-23-23	1	2	3	812A-27-23	1	2	–
812A-7-27	1	2	–	812A-13-27	1	2	–	812A-17-27	1	2	–	812A-23-27	1	2	–	812A-27-27	1	2	–

NOTE: Item numbers printed in blue indicate A-Series Mold Bases available same day in at least one D-M-E steel type shown (see page 24).

9 7/8 x 8"

ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL		
108A-7-7	1	2	3	108A-13-7	1	2	3	108A-17-7	1	2	3	108A-23-7	–	2	3
108A-7-13	1	2	3	108A-13-13	1	2	3	108A-17-13	1	2	3	108A-23-13	–	2	3
108A-7-17	1	2	3	108A-13-17	1	2	3	108A-17-17	1	2	3	108A-23-17	–	2	3
108A-7-23	–	2	3	108A-13-23	–	2	3	108A-17-23	–	2	3	108A-23-23	–	2	3
108A-7-27	–	2	3	108A-13-27	–	2	3	108A-17-27	–	2	3	108A-23-27	–	2	3

11 7/8 x 12"

ITEM NO.	STEEL		ITEM NO.	STEEL		ITEM NO.	STEEL		ITEM NO.	STEEL	
1212A-7-7	1	2	1212A-13-7	1	2	1212A-17-7	1	2	1212A-23-7	1	2
1212A-7-13	1	2	1212A-13-13	1	2	1212A-17-13	1	2	1212A-23-13	1	2
1212A-7-17	1	2	1212A-13-17	1	2	1212A-17-17	1	2	1212A-23-17	1	2
1212A-7-23	1	2	1212A-13-23	1	2	1212A-17-23	1	2	1212A-23-23	1	2
1212A-7-27	–	2	1212A-13-27	–	2	1212A-17-27	–	2	1212A-23-27	–	2

9 7/8 x 11 7/8

ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL		
1114A-7-7	1	2	3	1114A-13-7	1	2	3	1114A-17-7	1	2	3	1114A-23-7	1	2	3	1114A-27-7	1	2	3
1114A-7-13	1	2	3	1114A-13-13	1	2	3	1114A-17-13	1	2	3	1114A-23-13	1	2	3	1114A-27-13	1	2	3
1114A-7-17	1	2	3	1114A-13-17	1	2	3	1114A-17-17	1	2	3	1114A-23-17	1	2	3	1114A-27-17	1	2	3
1114A-7-23	1	2	3	1114A-13-23	1	2	3	1114A-17-23	1	2	3	1114A-23-23	1	2	3	1114A-27-23	1	2	3
1114A-7-27	1	2	3	1114A-13-27	1	2	3	1114A-17-27	1	2	3	1114A-23-27	1	2	3	1114A-27-27	1	2	3

11 7/8 x 20"

ITEM NO.	STEEL
1220A-27-13	2
1220A-27-17	2

9 7/8 x 16"

ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL		
1016A-7-7	1	2	–	1016A-13-7	1	2	–	1016A-17-7	1	2	–	1016A-23-7	1	2	–
1016A-7-13	1	2	3	1016A-13-13	1	2	3	1016A-17-13	1	2	3	1016A-23-13	1	2	–
1016A-7-17	1	2	3	1016A-13-17	1	2	3	1016A-17-17	1	2	3	1016A-23-17	1	2	–
1016A-7-23	1	2	3	1016A-13-23	1	2	3	1016A-17-23	1	2	3	1016A-23-23	1	2	–
1016A-7-27	1	2	3	1016A-13-27	1	2	3	1016A-17-27	1	2	3	1016A-23-27	1	2	–

11 7/8 x 15"

ITEM NO.	STEEL		ITEM NO.	STEEL		ITEM NO.	STEEL		ITEM NO.	STEEL	
1215A-7-7	1	2	1215A-13-7	1	2	1215A-17-7	1	2	1215A-23-7	1	2
1215A-7-13	1	2	1215A-13-13	1	2	1215A-17-13	1	2	1215A-23-13	1	2
1215A-7-17	1	2	1215A-13-17	1	2	1215A-17-17	1	2	1215A-23-17	1	2
1215A-7-23	1	2	1215A-13-23	1	2	1215A-17-23	1	2	1215A-23-23	1	2
1215A-7-27	–	2	1215A-13-27	–	2	1215A-17-27	–	2	1215A-23-27	–	2

10 7/8 x 12"

ITEM NO.	STEEL		ITEM NO.	STEEL		ITEM NO.	STEEL		ITEM NO.	STEEL	
1112A-7-7	1	2	1112A-13-7	1	2	1112A-17-7	1	2	1112A-23-7	1	2
1112A-7-13	1	2	1112A-13-13	1	2	1112A-17-13	1	2	1112A-23-13	1	2
1112A-7-17	1	2	1112A-13-17	1	2	1112A-17-17	1	2	1112A-23-17	1	2
1112A-7-23	1	2	1112A-13-23	1	2	1112A-17-23	1	2	1112A-23-23	1	2

13 3/8 x 15"

ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL		
1315A-13-13	1	2	3	1315A-17-13	1	2	3	1315A-23-13	1	2	3	1315A-27-13	1	2	3
1315A-13-17	1	2	3	1315A-17-17	1	2	3	1315A-23-17	1	2	3	1315A-27-17	1	2	3
1315A-13-23	1	2	3	1315A-17-23	1	2	3	1315A-23-23	1	2	3	1315A-27-23	1	2	3
1315A-13-27	1	2	3	1315A-17-27	1	2	3	1315A-23-27	1	2	3	1315A-27-27	1	2	3

10 7/8 x 14"

ITEM NO.	STEEL		ITEM NO.	STEEL		ITEM NO.	STEEL		ITEM NO.	STEEL	
1114A-7-7	1	2	1114A-13-7	1	2	1114A-17-7	1	2	1114A-23-7	1	2
1114A-7-13	1	2	1114A-13-13	1	2	1114A-17-13	1	2	1114A-23-13	1	2
1114A-7-17	1	2	1114A-13-17	1	2	1114A-17-17	1	2	1114A-23-17	1	2
1114A-7-23	1	2	1114A-13-23	1	2	1114A-17-23	1	2	1114A-23-23	1	2
1114A-7-27	–	2	1114A-13-27	–	2	1114A-17-27	–	2	1114A-23-27	–	2

13 3/8 x 18"

ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL		
1318A-13-13	1	2	3	1318A-17-13	1	2	3	1318A-23-13	1	2	3	1318A-27-7	1	2	–
1318A-13-17	1	2	3	1318A-17-17	1	2	3	1318A-23-17	1	2	3	1318A-27-13	1	2	–
1318A-13-23	1	2	3	1318A-17-23	1	2	3	1318A-23-23	1	2	3	1318A-27-17	1	2	–
1318A-13-27	1	2	–	1318A-17-27	1	2	–	1318A-23-27	1	2	–	1318A-27-23	1	2	–
												1318A-27-27	2	2	–

10 7/8 x 18"

ITEM NO.	STEEL		ITEM NO.	STEEL		ITEM NO.	STEEL		ITEM NO.	STEEL	
1118A-7-7	1	2	1118A-13-7	1	2	1118A-17-7	1	2	1118A-23-7	1	2
1118A-7-13	1	2	1118A-13-13	1	2	1118A-17-13	1	2	1118A-23-13	1	2
1118A-7-17	1	2	1118A-13-17	1	2	1118A-17-17	1	2	1118A-23-17	1	2
1118A-7-23	1	2	1118A-13-23	1	2	1118A-17-23	1	2	1118A-23-23	1	2
1118A-7-27	–	2	1118A-13-27	–	2	1118A-17-27	–	2	1118A-23-27	–	2

13 3/8 x 20 3/4

ITEM NO.	STEEL
1321A-13-17	2

13 3/8 x 20 3/4

ITEM NO.	STEEL
1518A-13-17	2
1518A-13-23	2
1518A-17-17	2
1518A-17-23	2

13 3/8 x 20 3/4

ITEM NO.	STEEL
1616A-13-13	2
1616A-13-17	2
1616A-13-23	2
1616A-17-13	2
1616A-17-17	2
1616A-17-23	2

13 3/8 x 20 3/4

ITEM NO.	STEEL
1620A-17-17	2
1620A-17-23	2

Three-Day Shipments

A-Series Mold Bases

(B-Series, Retainer Sets, Mold Plates)**

NOTE: Item numbers printed in blue indicate A-Series Mold Bases available same day in at least one D-M-E steel type shown (see page 24).

7 7/8 x 7 7/8

ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL
88A-7-7	1 2 3 7	88A-13-7	1 2 3 7	88A-17-7	1 2 3 7	88A-23-7	1 2 3 7	88A-27-7	1 2 3 7	88A-33-7	– 2 – –
88A-7-13	1 2 3 7	88A-13-13	1 2 3 7	88A-17-13	1 2 3 7	88A-23-13	1 2 3 7	88A-27-13	1 2 3 7	88A-33-13	– 2 – –
88A-7-17	1 2 3 7	88A-13-17	1 2 3 7	88A-17-17	1 2 3 7	88A-23-17	1 2 3 7	88A-27-17	1 2 3 7	88A-33-17	– 2 – –
88A-7-23	1 2 3 7	88A-13-23	1 2 3 7	88A-17-23	1 2 3 7	88A-23-23	1 2 3 7	88A-27-23	1 2 3 7	88A-33-23	– 2 – –
88A-7-27	1 2 3 7	88A-13-27	1 2 3 7	88A-17-27	1 2 3 7	88A-23-27	1 2 3 7	88A-27-27	1 2 3 7	88A-33-27	– 2 – –
88A-7-33	– 2 – –	88A-13-33	– 2 – –	88A-17-33	– 2 – –	88A-23-33	– 2 – –	88A-27-33	– 2 – –	88A-33-33	– 2 – –

7 7/8 x 11 7/8

ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL
812A-7-7	1 2 3 7	812A-13-7	1 2 3 7	812A-17-7	1 2 3 7	812A-23-7	1 2 3 7	812A-27-7	1 2 3 7	812A-33-7	1 2 – –	812A-37-7	– 2 – –
812A-7-13	1 2 3 7	812A-13-13	1 2 3 7	812A-17-13	1 2 3 7	812A-23-13	1 2 3 7	812A-27-13	1 2 3 7	812A-33-13	1 2 – –	812A-37-13	– 2 – –
812A-7-17	1 2 3 7	812A-13-17	1 2 3 7	812A-17-17	1 2 3 7	812A-23-17	1 2 3 7	812A-27-17	1 2 3 7	812A-33-17	1 2 – –	812A-37-17	– 2 – –
812A-7-23	1 2 3 7	812A-13-23	1 2 3 7	812A-17-23	1 2 3 7	812A-23-23	1 2 3 7	812A-27-23	1 2 3 7	812A-33-23	1 2 – –	812A-37-23	– 2 – –
812A-7-27	1 2 3 7	812A-13-27	1 2 3 7	812A-17-27	1 2 3 7	812A-23-27	1 2 3 7	812A-27-27	1 2 3 7	812A-33-27	1 2 – –	812A-37-27	– 2 – –
812A-7-33	1 2 – –	812A-13-33	1 2 – –	812A-17-33	1 2 – –	812A-23-33	1 2 – –	812A-27-33	1 2 – –	812A-33-33	1 2 – –	812A-37-33	– 2 – –
812A-7-37	– 2 – –	812A-13-37	– 2 – –	812A-17-37	– 2 – –	812A-23-37	– 2 – –	812A-27-37	– 2 – –	812A-33-37	– 2 – –	812A-37-37	– 2 – –

9 7/8 x 8"

ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL
108A-7-7	1 2 3 7	108A-13-7	1 2 3 7	108A-17-7	1 2 3 7	108A-23-7	1 2 3 7	108A-27-7	– 2 3 7	108A-33-7	– 2 – –
108A-7-13	1 2 3 7	108A-13-13	1 2 3 7	108A-17-13	1 2 3 7	108A-23-13	1 2 3 7	108A-27-13	– 2 3 7	108A-33-13	– 2 – –
108A-7-17	1 2 3 7	108A-13-17	1 2 3 7	108A-17-17	1 2 3 7	108A-23-17	1 2 3 7	108A-27-17	– 2 3 7	108A-33-17	– 2 – –
108A-7-23	1 2 3 7	108A-13-23	1 2 3 7	108A-17-23	1 2 3 7	108A-23-23	1 2 3 7	108A-27-23	– 2 3 7	108A-33-23	– 2 – –
108A-7-27	– 2 3 7	108A-13-27	– 2 3 7	108A-17-27	– 2 3 7	108A-23-27	– 2 3 7	108A-27-27	– 2 3 7	108A-33-27	– 2 – –
108A-7-33	– 2 – –	108A-13-33	– 2 – –	108A-17-33	– 2 – –	108A-23-33	– 2 – –	108A-27-33	– 2 – –	108A-33-33	– 2 – –

9 7/8 x 11 7/8

ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL
1114A-7-7	1 2 3 7	1114A-13-7	1 2 3 7	1114A-17-7	1 2 3 7	1114A-23-7	1 2 3 7	1114A-27-7	1 2 3 7	1114A-33-7	1 2 3 –	1114A-37-7	– 2 3 –
1114A-7-13	1 2 3 7	1114A-13-13	1 2 3 7	1114A-17-13	1 2 3 7	1114A-23-13	1 2 3 7	1114A-27-13	1 2 3 7	1114A-33-13	1 2 3 –	1114A-37-13	– 2 3 –
1114A-7-17	1 2 3 7	1114A-13-17	1 2 3 7	1114A-17-17	1 2 3 7	1114A-23-17	1 2 3 7	1114A-27-17	1 2 3 7	1114A-33-17	1 2 3 –	1114A-37-17	– 2 3 –
1114A-7-23	1 2 3 7	1114A-13-23	1 2 3 7	1114A-17-23	1 2 3 7	1114A-23-23	1 2 3 7	1114A-27-23	1 2 3 7	1114A-33-23	1 2 3 –	1114A-37-23	– 2 3 –
1114A-7-27	1 2 3 7	1114A-13-27	1 2 3 7	1114A-17-27	1 2 3 7	1114A-23-27	1 2 3 7	1114A-27-27	1 2 3 7	1114A-33-27	1 2 3 –	1114A-37-27	– 2 3 –
1114A-7-33	1 2 3 –	1114A-13-33	1 2 3 –	1114A-17-33	1 2 3 –	1114A-23-33	1 2 3 –	1114A-27-33	1 2 3 –	1114A-33-33	1 2 3 –	1114A-37-33	– 2 3 –
1114A-7-37	– 2 3 –	1114A-13-37	– 2 3 –	1114A-17-37	– 2 3 –	1114A-23-37	– 2 3 –	1114A-27-37	– 2 3 –	1114A-33-37	– 2 3 –	1114A-37-37	– 2 3 –

9 7/8 x 16"

ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL
1016A-7-7	1 2 3 7	1016A-13-7	1 2 3 7	1016A-17-7	1 2 3 7	1016A-23-7	1 2 3 7	1016A-27-7	1 2 3 7	1016A-33-7	– 2 – –	1016A-37-7	– 2 – –
1016A-7-13	1 2 3 7	1016A-13-13	1 2 3 7	1016A-17-13	1 2 3 7	1016A-23-13	1 2 3 7	1016A-27-13	1 2 3 7	1016A-33-13	– 2 – –	1016A-37-13	– 2 – –
1016A-7-17	1 2 3 7	1016A-13-17	1 2 3 7	1016A-17-17	1 2 3 7	1016A-23-17	1 2 3 7	1016A-27-17	1 2 3 7	1016A-33-17	– 2 – –	1016A-37-17	– 2 – –
1016A-7-23	1 2 3 7	1016A-13-23	1 2 3 7	1016A-17-23	1 2 3 7	1016A-23-23	1 2 3 7	1016A-27-23	1 2 3 7	1016A-33-23	– 2 – –	1016A-37-23	– 2 – –
1016A-7-27	1 2 3 7	1016A-13-27	1 2 3 7	1016A-17-27	1 2 3 7	1016A-23-27	1 2 3 7	1016A-27-27	1 2 3 7	1016A-33-27	– 2 – –	1016A-37-27	– 2 – –
1016A-7-33	– 2 – –	1016A-13-33	– 2 – –	1016A-17-33	– 2 – –	1016A-23-33	– 2 – –	1016A-27-33	– 2 – –	1016A-33-33	– 2 – –	1016A-37-33	– 2 – –
1016A-7-37	– 2 – –	1016A-13-37	– 2 – –	1016A-17-37	– 2 – –	1016A-23-37	– 2 – –	1016A-27-37	– 2 – –	1016A-33-37	– 2 – –	1016A-37-37	– 2 – –

9 7/8 x 20"

ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL
1020A-7-7	1 2 3 7	1020A-13-7	1 2 3 7	1020A-17-7	1 2 – 7	1020A-23-7	– 2 – 7	1020A-27-7	– 2 – 7	1020A-33-7	– 2 – –
1020A-7-13	1 2 3 7	1020A-13-13	1 2 3 7	1020A-17-13	1 2 – 7	1020A-23-13	– 2 – 7	1020A-27-13	– 2 – 7	1020A-33-13	– 2 – –
1020A-7-17	1 2 3 7	1020A-13-17	1 2 3 7	1020A-17-17	1 2 – 7	1020A-23-17	– 2 – 7	1020A-27-17	– 2 – 7	1020A-33-17	– 2 – –
1020A-7-23	– 2 – 7	1020A-13-23	– 2 – 7	1020A-17-23	– 2 – 7	1020A-23-23	– 2 – 7	1020A-27-23	– 2 – 7	1020A-33-23	– 2 – –
1020A-7-27	– 2 – 7	1020A-13-27	– 2 – 7	1020A-17-27	– 2 – 7	1020A-23-27	– 2 – 7	1020A-27-27	– 2 – 7	1020A-33-27	– 2 – –
1020A-7-33	– 2 – –	1020A-13-33	– 2 – –	1020A-17-33	– 2 – –	1020A-23-33	– 2 – –	1020A-27-33	– 2 – –	1020A-33-33	– 2 – –

*Three-day shipment for D-M-E #1, #2 and #3 steel types. Four-day shipment for D-M-E #7 stainless steel.

**Key for Ordering B-Series, Retainer Sets and Mold Plates:

For B-Series Mold Bases: Replace "A" in item number with "B" (minimum "A" plate in "B" series mold base is 1-7/8; minimum "B" plate is 7/8). Example: 88B-23-13

For Cavity Retainer Sets: Delete "A" from item number shown. Example: 88-23-13

For Finish Ground Mold Plates: Delete "A" and indicate plate thickness. Example: 88-23

For Rotary Ground Mold Plates: Delete "A" and indicate plate thickness plus "RGM." Example: 88-23RGM

Plate Thickness Codes: 7 = 7/8, 13 = 1-3/8, 27 = 2-7/8, etc.

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Three-Day Shipments

A-Series Mold Bases

(B-Series, Retainer Sets, Mold Plates)**

NOTE: Item numbers printed in blue indicate A-Series Mold Bases available same day in at least one D-M-E steel type shown (see page 24).

10 7/8 x 12"

ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL
1112A-7-7	1 2 3 7	1112A-13-7	1 2 3 7	1112A-17-7	1 2 3 7	1112A-23-7	1 2 3 7	1112A-27-7	– 2 3 7	1112A-33-7	– 2 – –
1112A-7-13	1 2 3 7	1112A-13-13	1 2 3 7	1112A-17-13	1 2 3 7	1112A-23-13	1 2 3 7	1112A-27-13	– 2 3 7	1112A-33-13	– 2 – –
1112A-7-17	1 2 3 7	1112A-13-17	1 2 3 7	1112A-17-17	1 2 3 7	1112A-23-17	1 2 3 7	1112A-27-17	– 2 3 7	1112A-33-17	– 2 – –
1112A-7-23	1 2 – 7	1112A-13-23	1 2 3 7	1112A-17-23	1 2 3 7	1112A-23-23	1 2 3 7	1112A-27-23	– 2 3 7	1112A-33-23	– 2 – –
1112A-7-27	– 2 3 7	1112A-13-27	– 2 3 7	1112A-17-27	– 2 3 7	1112A-23-27	– 2 3 7	1112A-27-27	– 2 3 7	1112A-33-27	– 2 – –
1112A-7-33	– 2 – –	1112A-13-33	– 2 – –	1112A-17-33	– 2 – –	1112A-23-33	– 2 – –	1112A-27-33	– 2 – –	1112A-33-33	– 2 – –

10 7/8 x 14"

ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL
1114A-7-7	1 2 3 7	1114A-13-7	1 2 3 7	1114A-17-7	1 2 3 7	1114A-23-7	1 2 3 7	1114A-27-7	1 2 3 7	1114A-33-7	– 2 – –	1114A-37-7	– 2 – –
1114A-7-13	1 2 3 7	1114A-13-13	1 2 3 7	1114A-17-13	1 2 3 7	1114A-23-13	1 2 3 7	1114A-27-13	1 2 3 7	1114A-33-13	– 2 – –	1114A-37-13	– 2 – –
1114A-7-17	1 2 3 7	1114A-13-17	1 2 3 7	1114A-17-17	1 2 3 7	1114A-23-17	1 2 3 7	1114A-27-17	1 2 3 7	1114A-33-17	– 2 – –	1114A-37-17	– 2 – –
1114A-7-23	1 2 3 7	1114A-13-23	1 2 3 7	1114A-17-23	1 2 3 7	1114A-23-23	1 2 3 7	1114A-27-23	1 2 3 7	1114A-33-23	– 2 – –	1114A-37-23	– 2 – –
1114A-7-27	1 2 3 7	1114A-13-27	1 2 3 7	1114A-17-27	1 2 3 7	1114A-23-27	1 2 3 7	1114A-27-27	1 2 3 7	1114A-33-27	– 2 – –	1114A-37-27	– 2 – –
1114A-7-33	– 2 – –	1114A-13-33	– 2 – –	1114A-17-33	– 2 – –	1114A-23-33	– 2 – –	1114A-27-33	– 2 – –	1114A-33-33	– 2 – –	1114A-37-33	– 2 – –
1114A-7-37	– 2 – –	1114A-13-37	– 2 – –	1114A-17-37	– 2 – –	1114A-23-37	– 2 – –	1114A-27-37	– 2 – –	1114A-33-37	– 2 – –	1114A-37-37	– 2 – –

10 7/8 x 18"

ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL
1118A-7-7	1 2 3 7	1118A-13-7	1 2 3 7	1118A-17-7	1 2 3 7	1118A-23-7	1 2 – 7	1118A-27-7	– 2 – 7	1118A-33-7	– 2 – –	1118A-37-7	– 2 – –
1118A-7-13	1 2 3 7	1118A-13-13	1 2 3 7	1118A-17-13	1 2 3 7	1118A-23-13	1 2 – 7	1118A-27-13	– 2 – 7	1118A-33-13	– 2 – –	1118A-37-13	– 2 – –
1118A-7-17	1 2 3 7	1118A-13-17	1 2 3 7	1118A-17-17	1 2 3 7	1118A-23-17	1 2 – 7	1118A-27-17	– 2 – 7	1118A-33-17	– 2 – –	1118A-37-17	– 2 – –
1118A-7-23	1 2 – 7	1118A-13-23	1 2 – 7	1118A-17-23	1 2 – 7	1118A-23-23	1 2 – 7	1118A-27-23	– 2 – 7	1118A-33-23	– 2 – –	1118A-37-23	– 2 – –
1118A-7-27	– 2 – 7	1118A-13-27	– 2 – 7	1118A-17-27	– 2 – 7	1118A-23-27	– 2 – 7	1118A-27-27	– 2 – 7	1118A-33-27	– 2 – –	1118A-37-27	– 2 – –
1118A-7-33	– 2 – –	1118A-13-33	– 2 – –	1118A-17-33	– 2 – –	1118A-23-33	– 2 – –	1118A-27-33	– 2 – –	1118A-33-33	– 2 – –	1118A-37-33	– 2 – –
1118A-7-37	– 2 – –	1118A-13-37	– 2 – –	1118A-17-37	– 2 – –	1118A-23-37	– 2 – –	1118A-27-37	– 2 – –	1118A-33-37	– 2 – –	1118A-37-37	– 2 – –

10 7/8 x 23 1/2

ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL
1123A-13-13	1 2 – 7	1123A-17-13	1 2 – 7	1123A-23-13	1 2 – 7
1123A-13-17	1 2 – 7	1123A-17-17	1 2 – 7	1123A-23-17	1 2 – 7
1123A-13-23	1 2 – 7	1123A-17-23	1 2 – 7	1123A-23-23	1 2 – 7

11 7/8 x 12"

ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL
1212A-7-7	1 2 3 7	1212A-13-7	1 2 3 7	1212A-17-7	1 2 3 7	1212A-23-7	1 2 3 7	1212A-27-7	1 2 3 7	1212A-33-7	– 2 – –	1212A-37-7	– 2 – –
1212A-7-13	1 2 3 7	1212A-13-13	1 2 3 7	1212A-17-13	1 2 3 7	1212A-23-13	1 2 3 7	1212A-27-13	1 2 3 7	1212A-33-13	– 2 3 –	1212A-37-13	– 2 – –
1212A-7-17	1 2 3 7	1212A-13-17	1 2 3 7	1212A-17-17	1 2 3 7	1212A-23-17	1 2 3 7	1212A-27-17	1 2 3 7	1212A-33-17	– 2 3 –	1212A-37-17	– 2 – –
1212A-7-23	1 2 3 7	1212A-13-23	1 2 3 7	1212A-17-23	1 2 3 7	1212A-23-23	1 2 3 7	1212A-27-23	1 2 3 7	1212A-33-23	– 2 3 –	1212A-37-23	– 2 – –
1212A-7-27	1 2 3 7	1212A-13-27	1 2 3 7	1212A-17-27	1 2 3 7	1212A-23-27	1 2 3 7	1212A-27-27	1 2 3 7	1212A-33-27	– 2 3 –	1212A-37-27	– 2 – –
1212A-7-33	– 2 3 –	1212A-13-33	– 2 3 –	1212A-17-33	– 2 3 –	1212A-23-33	– 2 3 –	1212A-27-33	– 2 3 –	1212A-33-33	– 2 3 –	1212A-37-33	– 2 – –
1212A-7-37	– 2 – –	1212A-13-37	– 2 – –	1212A-17-37	– 2 – –	1212A-23-37	– 2 – –	1212A-27-37	– 2 – –	1212A-33-37	– 2 – –	1212A-37-37	– 2 – –

11 7/8 x 15"

ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL
1215A-7-7	1 2 3 7	1215A-13-7	1 2 3 7	1215A-17-7	1 2 3 7	1215A-23-7	1 2 3 7	1215A-27-7	1 2 3 7	1215A-33-7	1 2 3 –	1215A-37-7	1 2 3 –
1215A-7-13	1 2 3 7	1215A-13-13	1 2 3 7	1215A-17-13	1 2 3 7	1215A-23-13	1 2 3 7	1215A-27-13	1 2 3 7	1215A-33-13	1 2 3 –	1215A-37-13	1 2 3 –
1215A-7-17	1 2 3 7	1215A-13-17	1 2 3 7	1215A-17-17	1 2 3 7	1215A-23-17	1 2 3 7	1215A-27-17	1 2 3 7	1215A-33-17	1 2 3 –	1215A-37-17	1 2 3 –
1215A-7-23	1 2 3 7	1215A-13-23	1 2 3 7	1215A-17-23	1 2 3 7	1215A-23-23	1 2 3 7	1215A-27-23	1 2 3 7	1215A-33-23	1 2 3 –	1215A-37-23	1 2 3 –
1215A-7-27	1 2 3 7	1215A-13-27	1 2 3 7	1215A-17-27	1 2 3 7	1215A-23-27	1 2 3 7	1215A-27-27	1 2 3 7	1215A-33-27	1 2 3 –	1215A-37-27	1 2 3 –
1215A-7-33	1 2 3 –	1215A-13-33	1 2 3 –	1215A-17-33	1 2 3 –	1215A-23-33	1 2 3 –	1215A-27-33	1 2 3 –	1215A-33-33	1 2 3 –	1215A-37-33	1 2 3 –
1215A-7-37	1 2 3 –	1215A-13-37	1 2 3 –	1215A-17-37	1 2 3 –	1215A-23-37	1 2 3 –	1215A-27-37	1 2 3 –	1215A-33-37	1 2 3 –	1215A-37-37	1 2 3 –

*Three-day shipment for D-M-E #1, #2 and #3 steel types. Four-day shipment for D-M-E #7 stainless steel.

**Key for Ordering B-Series, Retainer Sets and Mold Plates:

For B-Series Mold Bases: Replace "A" in item number with "B" (minimum "A" plate in "B" series mold base is 1-7/8; minimum "B" plate is 7/8). Example: 88B-23-13

For Cavity Retainer Sets: Delete "A" from item number shown. Example: 88-23-13

For Finish Ground Mold Plates: Delete "A" and indicate plate thickness. Example: 88-23

For Rotary Ground Mold Plates: Delete "A" and indicate plate thickness plus "RGM." Example: 88-23RGM

Plate Thickness Codes: 7 = 7/8, 13 = 1-3/8, 27 = 2-7/8, etc.

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Three-Day Shipments

A-Series Mold Bases
(B-Series, Retainer Sets, Mold Plates)**

NOTE: Item numbers printed in blue indicate A-Series Mold Bases available same day in at least one D-M-E steel type shown (see page 24).

11 7/8 x 20"

ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL
1220A-7-7	1 2 3 7	1220A-13-7	1 2 3 7	1220A-17-7	1 2 3 7	1220A-23-7	– 2 3 7	1220A-27-7	– 2 3 7	1220A-33-7	– 2 3 –	1220A-37-7	– 2 3 –
1220A-7-13	1 2 3 7	1220A-13-13	1 2 3 7	1220A-17-13	1 2 3 7	1220A-23-13	– 2 3 7	1220A-27-13	– 2 3 7	1220A-33-13	– 2 3 –	1220A-37-13	– 2 3 –
1220A-7-17	1 2 3 7	1220A-13-17	1 2 3 7	1220A-17-17	1 2 3 7	1220A-23-17	– 2 3 7	1220A-27-17	– 2 3 7	1220A-33-17	– 2 3 –	1220A-37-17	– 2 3 –
1220A-7-23	– 2 3 7	1220A-13-23	– 2 3 7	1220A-17-23	– 2 3 7	1220A-23-23	– 2 3 7	1220A-27-23	– 2 3 7	1220A-33-23	– 2 3 –	1220A-37-23	– 2 3 –
1220A-7-27	– 2 3 7	1220A-13-27	– 2 3 7	1220A-17-27	– 2 3 7	1220A-23-27	– 2 3 7	1220A-27-27	– 2 3 7	1220A-33-27	– 2 3 –	1220A-37-27	– 2 3 –
1220A-7-33	– 2 3 –	1220A-13-33	– 2 3 –	1220A-17-33	– 2 3 –	1220A-23-33	– 2 3 –	1220A-27-33	– 2 3 –	1220A-33-33	– 2 3 –	1220A-37-33	– 2 3 –
1220A-7-37	– 2 3 –	1220A-13-37	– 2 3 –	1220A-17-37	– 2 3 –	1220A-23-37	– 2 3 –	1220A-27-37	– 2 3 –	1220A-33-37	– 2 3 –	1220A-37-37	– 2 3 –

11 7/8 x 23 1/2

ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL
1223A-13-13	2 7	1223A-17-13	2 7	1223A-23-13	2 7	1223A-27-13	2 7	1223A-33-13	2 –
1223A-13-17	2 7	1223A-17-17	2 7	1223A-23-17	2 7	1223A-27-17	2 7	1223A-33-17	2 –
1223A-13-23	2 7	1223A-17-23	2 7	1223A-23-23	2 7	1223A-27-23	2 7	1223A-33-23	2 –
1223A-13-27	2 7	1223A-17-27	2 7	1223A-23-27	2 7	1223A-27-27	2 7	1223A-33-27	2 –
1223A-13-33	2 –	1223A-17-33	2 –	1223A-23-33	2 –	1223A-27-33	2 –	1223A-33-33	2 –

13 3/8 x 15"

ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL
										1315A-33-7	1 2 3 –	1315A-37-7	1 2 3 –
	1315A-13-13	1 2 3 7	1315A-17-13	1 2 3 7	1315A-23-13	1 2 3 7	1315A-27-13	1 2 3 7	1315A-33-13	1 2 3 –	1315A-37-13	1 2 3 –
	1315A-13-17	1 2 3 7	1315A-17-17	1 2 3 7	1315A-23-17	1 2 3 7	1315A-27-17	1 2 3 7	1315A-33-17	1 2 3 –	1315A-37-17	1 2 3 –
	1315A-13-23	1 2 3 7	1315A-17-23	1 2 3 7	1315A-23-23	1 2 3 7	1315A-27-23	1 2 3 7	1315A-33-23	1 2 3 –	1315A-37-23	1 2 3 –
	1315A-13-27	1 2 3 7	1315A-17-27	1 2 3 7	1315A-23-27	1 2 3 7	1315A-27-27	1 2 3 7	1315A-33-27	1 2 3 –	1315A-37-27	1 2 3 –
1315A-7-33	1 2 3 –	1315A-13-33	1 2 3 –	1315A-17-33	1 2 3 –	1315A-23-33	1 2 3 –	1315A-27-33	1 2 3 –	1315A-33-33	1 2 3 –	1315A-37-33	1 2 3 –
1315A-7-37	1 2 3 –	1315A-13-37	1 2 3 –	1315A-17-37	1 2 3 –	1315A-23-37	1 2 3 –	1315A-27-37	1 2 3 –	1315A-33-37	– 2 3 –	1315A-37-37	1 2 3 –

13 3/8 x 18"

ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL
								1318A-27-7		1318A-33-7	– 2 – –	1318A-37-7	– 2 – –
	1318A-13-13	1 2 3 7	1318A-17-13	1 2 3 7	1318A-23-13	1 2 3 7	1318A-27-13	1 2 3 7	1318A-33-13	– 2 – –	1318A-37-13	– 2 – –
	1318A-13-17	1 2 3 7	1318A-17-17	1 2 3 7	1318A-23-17	1 2 3 7	1318A-27-17	1 2 3 7	1318A-33-17	– 2 – –	1318A-37-17	– 2 – –
	1318A-13-23	1 2 3 7	1318A-17-23	1 2 3 7	1318A-23-23	1 2 3 7	1318A-27-23	1 2 3 7	1318A-33-23	– 2 – –	1318A-37-23	– 2 – –
	1318A-13-27	1 2 3 7	1318A-17-27	1 2 3 7	1318A-23-27	1 2 3 7	1318A-27-27	1 2 3 7	1318A-33-27	– 2 – –	1318A-37-27	– 2 – –
1318A-7-33	– 2 – –	1318A-13-33	– 2 – –	1318A-17-33	– 2 – –	1318A-23-33	– 2 – –	1318A-27-33	– 2 – –	1318A-33-33	– 2 – –	1318A-37-33	– 2 – –
1318A-7-37	– 2 – –	1318A-13-37	– 2 – –	1318A-17-37	– 2 – –	1318A-23-37	– 2 – –	1318A-27-37	– 2 – –	1318A-33-37	– 2 – –	1318A-37-37	– 2 – –

13 3/8 x 20 3/4

ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL
1321A-7-7	1 2 3 7	1321A-13-7	1 2 3 7	1321A-17-7	1 2 3 7	1321A-23-7	– 2 – 7	1321A-27-7	– 2 – 7	1321A-33-7	– 2 – –	1321A-37-7	– 2 – –
1321A-7-13	1 2 3 7	1321A-13-13	1 2 3 7	1321A-17-13	1 2 3 7	1321A-23-13	– 2 – 7	1321A-27-13	– 2 – 7	1321A-33-13	– 2 – –	1321A-37-13	– 2 – –
1321A-7-17	1 2 3 7	1321A-13-17	1 2 3 7	1321A-17-17	1 2 3 7	1321A-23-17	– 2 – 7	1321A-27-17	– 2 – 7	1321A-33-17	– 2 – –	1321A-37-17	– 2 – –
						1321A-23-23	– 2 – 7	1321A-27-23	– 2 – 7	1321A-33-23	– 2 – –	1321A-37-23	– 2 – –
1321A-7-27	– 2 – 7	1321A-13-27	– 2 – 7	1321A-17-27	– 2 – 7	1321A-23-27	– 2 – 7	1321A-27-27	– 2 – 7	1321A-33-27	– 2 – –	1321A-37-27	– 2 – –
1321A-7-33	– 2 – –	1321A-13-33	– 2 – –	1321A-17-33	– 2 – –	1321A-23-33	– 2 – –	1321A-27-33	– 2 – –	1321A-33-33	– 2 – –	1321A-37-33	– 2 – –
1321A-7-37	– 2 – –	1321A-13-37	– 2 – –	1321A-17-37	– 2 – –	1321A-23-37	– 2 – –	1321A-27-37	– 2 – –	1321A-33-37	– 2 – –	1321A-37-37	– 2 – –

13 3/8 x 23 1/2

ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL	ITEM NO.	STEEL
1323A-13-13	1 2 3 7	1323A-17-13	1 2 3 7	1323A-23-13	1 2 3 7	1323A-27-13	1 2 – 7	1323A-33-13	– 2 – –
1323A-13-17	1 2 3 7	1323A-17-17	1 2 3 7	1323A-23-17	1 2 3 7	1323A-27-17	1 2 – 7	1323A-33-17	– 2 – –
1323A-13-23	1 2 3 7	1323A-17-23	1 2 3 7	1323A-23-23	1 2 3 7	1323A-27-23	1 2 – 7	1323A-33-23	– 2 – –
1323A-13-27	1 2 – 7	1323A-17-27	1 2 – 7	1323A-23-27	1 2 – 7	1323A-27-27	1 2 – 7	1323A-33-27	– 2 – –
1323A-13-33	– 2 – –	1323A-17-33	– 2 – –	1323A-23-33	– 2 – –	1323A-27-33	– 2 – –	1323A-33-33	– 2 – –

*Three-day shipment for D-M-E #1, #2 and #3 steel types. Four-day shipment for D-M-E #7 stainless steel.

**Key for Ordering B-Series, Retainer Sets and Mold Plates:
For B-Series Mold Bases: Replace "A" in item number with "B" (minimum "A" plate in "B" series mold base is 1-7/8; minimum "B" plate is 7/8). Example: 88B-23-13
For Cavity Retainer Sets: Delete "A" from item number shown. Example: 88-23-13
For Finish Ground Mold Plates: Delete "A" and indicate plate thickness. Example: 88-23
For Rotary Ground Mold Plates: Delete "A" and indicate plate thickness plus "RGM." Example: 88-23RGM
Plate Thickness Codes: 7 = 7/8, 13 = 1-3/8, 27 = 2-7/8, etc.

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Three-Day Shipments

A-Series Mold Bases

(B-Series, Retainer Sets, Mold Plates)**

NOTE: Item numbers printed in blue indicate A-Series Mold Bases available same day in at least one D-M-E steel type shown (see page 24).

13 3/8 x 26"

ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL	
1326A-13-13	2	7		1326A-17-13	2	7		1326A-23-13	2	7
1326A-13-17	2	7		1326A-17-17	2	7		1326A-23-17	2	7
1326A-13-23	2	7		1326A-17-23	2	7		1326A-23-23	2	7

14 7/8 x 17 7/8

ITEM NO.	STEEL				ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL		
1518A-7-7	1	2	3	7	1518A-13-7	1	2	3	7	1518A-17-7	1	2	3	7	1518A-23-7	1	2	3	7	1518A-27-7	–	2	3	7	1518A-33-7	–	2	3	–	1518A-37-7	–	2	–	–
1518A-7-13	1	2	3	7	1518A-13-13	1	2	3	7	1518A-17-13	1	2	3	7	1518A-23-13	1	2	3	7	1518A-27-13	–	2	3	7	1518A-33-13	–	2	3	–	1518A-37-13	–	2	–	–
1518A-7-17	1	2	3	7	1518A-13-17	1	2	3	7	1518A-17-17	1	2	3	7	1518A-23-17	1	2	3	7	1518A-27-17	–	2	3	7	1518A-33-17	–	2	3	–	1518A-37-17	–	2	–	–
1518A-7-23	1	2	3	7	1518A-13-23	1	2	3	7	1518A-17-23	1	2	3	7	1518A-23-23	1	2	3	7	1518A-27-23	–	2	3	7	1518A-33-23	–	2	3	–	1518A-37-23	–	2	–	–
1518A-7-27	–	2	3	7	1518A-13-27	–	2	3	7	1518A-17-27	–	2	3	7	1518A-23-27	–	2	3	7	1518A-27-27	–	2	3	7	1518A-33-27	–	2	3	–	1518A-37-27	–	2	–	–
1518A-7-33	–	2	3	–	1518A-13-33	–	2	3	–	1518A-17-33	–	2	3	–	1518A-23-33	–	2	3	–	1518A-27-33	–	2	3	–	1518A-33-33	–	2	3	–	1518A-37-33	–	2	–	–
1518A-7-37	–	2	–	–	1518A-13-37	–	2	–	–	1518A-17-37	–	2	–	–	1518A-23-37	–	2	–	–	1518A-27-37	–	2	–	–	1518A-33-37	–	2	–	–	1518A-37-37	–	2	–	–

14 7/8 x 23 3/4

ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL		
1524A-13-13	1	2	7	1524A-17-13	1	2	7	1524A-23-13	1	2	7	1524A-27-13	–	2	7	1524A-33-13	–	2	–	1524A-37-13	–	2	–
1524A-13-17	1	2	7	1524A-17-17	1	2	7	1524A-23-17	–	2	7	1524A-27-17	–	2	7	1524A-33-17	–	2	–	1524A-37-17	–	2	–
1524A-13-23	1	2	7	1524A-17-23	1	2	7	1524A-23-23	1	2	7	1524A-27-23	–	2	7	1524A-33-23	–	2	–	1524A-37-23	–	2	–
1524A-13-27	–	2	7	1524A-17-27	–	2	7	1524A-23-27	–	2	7	1524A-27-27	–	2	7	1524A-33-27	–	2	–	1524A-37-27	–	2	–
1524A-13-33	–	2	–	1524A-17-33	–	2	–	1524A-23-33	–	2	–	1524A-27-33	–	2	–	1524A-33-33	–	2	–	1524A-37-33	–	2	–
1524A-13-37	–	2	–	1524A-17-37	–	2	–	1524A-23-37	–	2	–									1524A-37-37	–	2	–

15 7/8 x 16"

ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL		
1616A-7-7	1	2	7	1616A-13-7	1	2	7	1616A-17-7	1	2	7	1616A-23-7	1	2	7	1616A-27-7	1	2	7	1616A-33-7	–	2	–
1616A-7-13	1	2	7	1616A-13-13	1	2	7	1616A-17-13	1	2	7	1616A-23-13	1	2	7	1616A-27-13	1	2	7	1616A-33-13	–	2	–
1616A-7-17	1	2	7	1616A-13-17	1	2	7	1616A-17-17	1	2	7	1616A-23-17	1	2	7	1616A-27-17	1	2	7	1616A-33-17	–	2	–
1616A-7-23	1	2	7	1616A-13-23	1	2	7	1616A-17-23	1	2	7	1616A-23-23	1	2	7	1616A-27-23	1	2	7	1616A-33-23	–	2	–
1616A-7-27	1	2	7	1616A-13-27	1	2	7	1616A-17-27	1	2	7	1616A-23-27	1	2	7	1616A-27-27	1	2	7	1616A-33-27	–	2	–
1616A-7-33	–	2	–	1616A-13-33	1	2	–	1616A-17-33	1	2	–	1616A-23-33	1	2	–	1616A-27-33	1	2	–	1616A-33-33	–	2	–

15 7/8 x 20"

ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL		
1620A-7-7	1	2	7	1620A-13-7	1	2	7	1620A-17-7	1	2	7	1620A-23-7	1	2	7	1620A-27-7	1	2	7	1620A-33-7	–	2	–	1620A-37-7	–	2	–
1620A-7-13	1	2	7	1620A-13-13	1	2	7	1620A-17-13	1	2	7	1620A-23-13	1	2	7	1620A-27-13	1	2	7	1620A-33-13	–	2	–	1620A-37-13	–	2	–
1620A-7-17	1	2	7	1620A-13-17	1	2	7	1620A-17-17	1	2	7	1620A-23-17	1	2	7	1620A-27-17	1	2	7	1620A-33-17	–	2	–	1620A-37-17	–	2	–
1620A-7-23	1	2	7	1620A-13-23	1	2	7	1620A-17-23	1	2	7	1620A-23-23	1	2	7	1620A-27-23	1	2	7	1620A-33-23	–	2	–	1620A-37-23	–	2	–
1620A-7-27	1	2	7	1620A-13-27	1	2	7	1620A-17-27	1	2	7	1620A-23-27	1	2	7	1620A-27-27	1	2	7	1620A-33-27	–	2	–				
1620A-7-33	–	2	–	1620A-13-33	–	2	–	1620A-17-33	–	2	–	1620A-23-33	–	2	–	1620A-27-33	–	2	–	1620A-33-33	–	2	–	1620A-37-33	–	2	–
1620A-7-37	–	2	–	1620A-13-37	–	2	–	1620A-17-37	–	2	–	1620A-23-37	–	2	–									1620A-37-37	–	2	–

15 7/8 x 23 1/2

ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL		
1623A-13-13	1	2	7	1623A-17-13	1	2	7	1623A-23-13	1	2	7	1623A-27-13	–	2	7	1623A-33-13	–	2	–	1623A-37-13	–	2	–
1623A-13-17	1	2	7	1623A-17-17	1	2	7	1623A-23-17	1	2	7	1623A-27-17	–	2	7	1623A-33-17	–	2	–	1623A-37-17	–	2	–
1623A-13-23	1	2	7	1623A-17-23	1	2	7	1623A-23-23	1	2	7	1623A-27-23	–	2	7	1623A-33-23	–	2	–	1623A-37-23	–	2	–
1623A-13-27	–	2	7	1623A-17-27	–	2	7	1623A-23-27	–	2	7	1623A-27-27	–	2	7	1623A-33-27	–	2	–	1623A-37-33	–	2	–
1623A-13-33	–	2	–	1623A-17-33	–	2	–	1623A-23-33	–	2	–	1623A-27-33	–	2	–	1623A-33-33	–	2	–	1623A-37-37	–	2	–
1623A-13-37	–	2	–	1623A-17-37	1	2	–	1623A-23-37	–	2	–												

*Three-day shipment for D-M-E #1, #2 and #3 steel types. Four-day shipment for D-M-E #7 stainless steel.

**Key for Ordering B-Series, Retainer Sets and Mold Plates:

For B-Series Mold Bases: Replace "A" in item number with "B" (minimum "A" plate in "B" series mold base is 1-7/8; minimum "B" plate is 7/8). Example: 88B-23-13

For Cavity Retainer Sets: Delete "A" from item number shown. Example: 88-23-13

For Finish Ground Mold Plates: Delete "A" and indicate plate thickness. Example: 88-23

For Rotary Ground Mold Plates: Delete "A" and indicate plate thickness plus "RGM." Example: 88-23RGM

Plate Thickness Codes: 7 = 7/8, 13 = 1-3/8, 27 = 2-7/8, etc.

Three-Day Shipments

A-Series Mold Bases

(B-Series, Retainer Sets, Mold Plates)**

17 7/8 x 18"

ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL		
1818A-13-13	1	2	7	1818A-17-13	1	2	7	1818A-23-13	1	2	7	1818A-27-13	–	2	7	1818A-33-13	–	2	–
1818A-13-17	1	2	7	1818A-17-17	1	2	7	1818A-23-17	1	2	7	1818A-27-17	–	2	7	1818A-33-17	–	2	–
1818A-13-23	1	2	7	1818A-17-23	1	2	7	1818A-23-23	1	2	7	1818A-27-23	–	2	7	1818A-33-23	–	2	–
1818A-13-27	–	2	7	1818A-17-27	–	2	7	1818A-23-27	–	2	7	1818A-27-27	–	2	7	1818A-33-27	–	2	–
1818A-13-33	–	2	–	1818A-17-33	–	2	–	1818A-23-33	–	2	–	1818A-27-33	–	2	–	1818A-33-33	–	2	–

17 7/8 x 20"

ITEM NO.	STEEL		ITEM NO.	STEEL		ITEM NO.	STEEL		ITEM NO.	STEEL		ITEM NO.	STEEL		ITEM NO.	STEEL	
1820A-13-7	2	7															
1820A-13-13	2	7	1820A-17-13	2	7	1820A-23-13	2	7	1820A-27-13	2	7	1820A-33-13	2	–	1820A-37-13	2	–
1820A-13-17	2	7	1820A-17-17	2	7	1820A-23-17	2	7	1820A-27-17	2	7	1820A-33-17	2	–	1820A-37-17	2	–
1820A-13-23	2	7	1820A-17-23	2	7	1820A-23-23	2	7	1820A-27-23	2	7	1820A-33-23	2	–	1820A-37-23	2	–
1820A-13-27	2	7	1820A-17-27	2	7	1820A-23-27	2	7	1820A-27-27	2	7	1820A-33-27	2	–			
1820A-13-33	2	–	1820A-17-33	2	–	1820A-23-33	2	–	1820A-27-33	2	–	1820A-33-33	2	–	1820A-37-33	2	–
1820A-13-37	2	–	1820A-17-37	2	–	1820A-23-37	2	–							1820A-37-37	2	–

17 7/8 x 23 1/2

ITEM NO.	STEEL		ITEM NO.	STEEL		ITEM NO.	STEEL		ITEM NO.	STEEL		ITEM NO.	STEEL	
1823A-13-13	2	7	1823A-17-13	2	7	1823A-23-13	2	7	1823A-27-13	2	7	1823A-33-13	2	–
1823A-13-17	2	7	1823A-17-17	2	7	1823A-23-17	2	7	1823A-27-17	2	7	1823A-33-17	2	–
1823A-13-23	2	7	1823A-17-23	2	7	1823A-23-23	2	7	1823A-27-23	2	7	1823A-33-23	2	–
1823A-13-27	2	7	1823A-17-27	2	7	1823A-23-27	2	7	1823A-27-27	2	7	1823A-33-27	2	–
1823A-13-33	2	–	1823A-17-33	2	–	1823A-23-33	2	–	1823A-27-33	2	–	1823A-33-33	2	–

19 1/2 x 23 3/4

ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL			ITEM NO.	STEEL		
1924A-13-13	2	3	7	1924A-17-13	2	3	7	1924A-23-13	2	3	7	1924A-27-13	2	3	7	1924A-33-13	2	3	–	1924A-37-13	2	–	–
1924A-13-17	2	3	7	1924A-17-17	2	3	7	1924A-23-17	2	3	7	1924A-27-17	2	3	7	1924A-33-17	2	3	–	1924A-37-17	2	–	–
1924A-13-23	2	3	7	1924A-17-23	2	3	7	1924A-23-23	2	3	7	1924A-27-23	2	3	7	1924A-33-23	2	3	–	1924A-37-23	2	–	–
1924A-13-27	2	3	7	1924A-17-27	2	3	7	1924A-23-27	2	3	7	1924A-27-27	2	3	7	1924A-33-27	2	3	–	1924A-37-33	2	–	–
1924A-13-33	2	3	–	1924A-17-33	2	3	–	1924A-23-33	2	3	–	1924A-27-33	2	3	–	1924A-33-33	2	3	–	1924A-37-37	2	–	–
1924A-13-37	2	–	–	1924A-17-37	2	–	–	1924A-23-37	2	–	–												

*Three-day shipment for D-M-E #1, #2 and #3 steel types. Four-day shipment for D-M-E #7 stainless steel.

**Key for Ordering B-Series, Retainer Sets and Mold Plates:

For B-Series Mold Bases: Replace "A" in item number with "B" (minimum "A" plate in "B" series mold base is 1-7/8; minimum "B" plate is 7/8). Example: 88B-23-13

For Cavity Retainer Sets: Delete "A" from item number shown. Example: 88-23-13

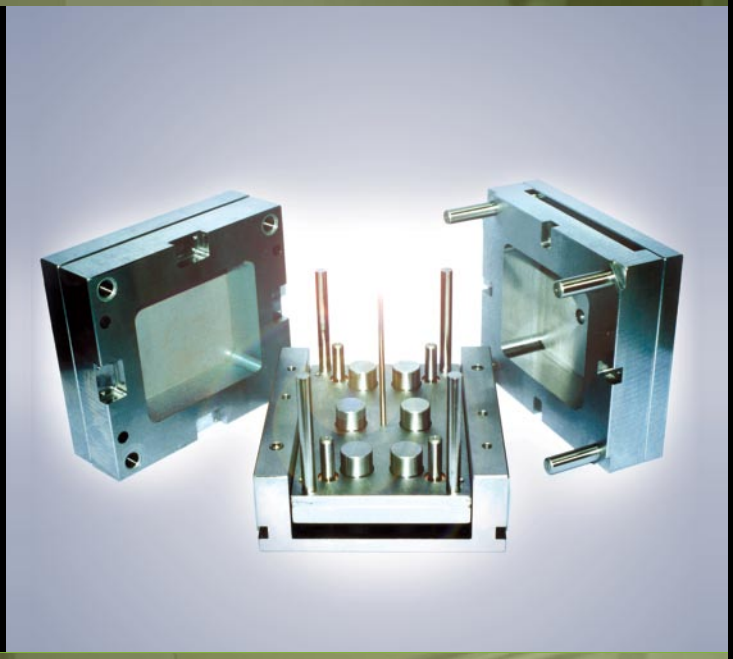
For Finish Ground Mold Plates: Delete "A" and indicate plate thickness. Example: 88-23

For Rotary Ground Mold Plates: Delete "A" and indicate plate thickness plus "RGM." Example: 88-23RGM

Plate Thickness Codes: 7 = 7/8, 13 = 1-3/8, 27 = 2-7/8, etc.

D-M-E Quick Delivery Specials

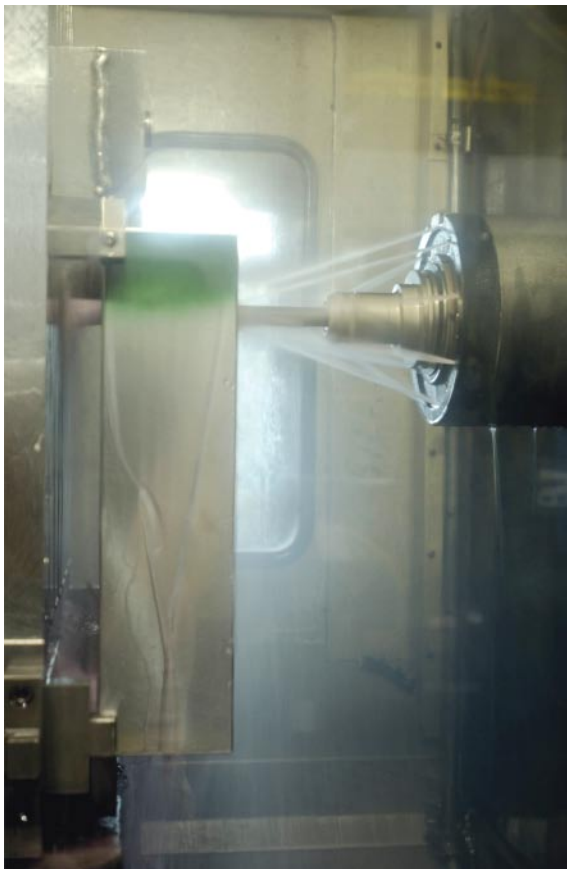
DOZENS OF MOLD BASE FEATURES
TO CHOOSE FROM IN A PROGRAM
THAT DELIVERS WITH SPEED,
QUALITY AND AFFORDABILITY

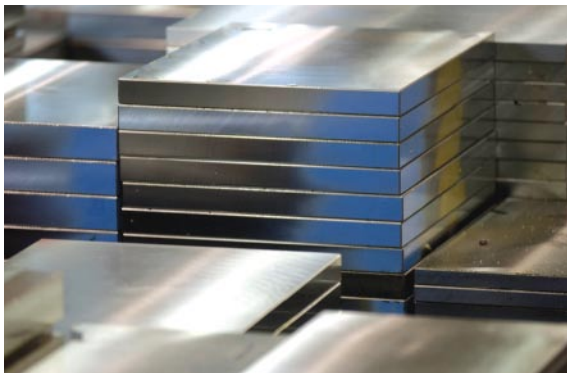


ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Quick Delivery Specials Features







D-M-E Standard Mold Bases Included in the QDS Program

- A-Series Mold Bases
- B-Series Mold Bases
- X-Series Mold Bases
- AX-Series Mold Bases
- T-Series Mold Bases
- Cavity Retainer Sets

Steel Types and Plate Thicknesses Included

- D-M-E #1, #2 and #3 steel from 7/8" thick to 5 7/8" thick
- D-M-E #7 steel from 7/8" thick to 2 7/8" thick

No Charge Features

Available on all D-M-E Mold Bases and Cavity Retainer Sets

- 1-piece or 3-piece housing (standard D-M-E rails)
- Ejector housing covers
- Relocate or omit return pins
- Relocate or omit assembly screws (top and/or bottom)
- Relocate or omit assembly screws in ejector set
- Relocate or omit leader pins and bushings
- Relocate or omit center holes
- Relocate or omit stop pins in ejector bar
- Sprue puller pin of your choice
- Machining for all D-M-E sprue bushings and most clamp slots
- Machining for most locating rings

All ship dates are calculated from receipt of final customer information.

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Quick Delivery Specials Features

Special Mold Bases Shipping in FIVE Working Days

Includes all D-M-E Standard Mold Bases #1, #2 and #3 steel (7/8" to 5 7/8" thick) and #7 steel (7/8" to 2 7/8" thick); and all "no charge" items, plus:

- Machine for and install guided ejection – 2 or 4 places
- Machine for and install support pillars
- Machine for and install additional stop pins
- Machine press knock-out in bottom clamp plate (tap in ejector bar, if required)
- Machine pry bar slots
- Machine leader pin vent slots in rails
- Machine for spring holes
- Drill and tap lifting holes
- Drill and tap safety strap holes (location ±1/32")
- Machine for and install extra assembly screws in top and/or bottom
- Machine for and install extra assembly screws in ejector assembly
- Machine for and install added return pins
- Rough mill/bore cavity and core pocket; blind or through (NOTE: 1/2" minimum radius required)

Special Mold Bases Shipping in SEVEN Working Days

Includes all features specified above in five working days, plus:

- Machine for D-M-E three-piece extension bushings
- Drill and tap horizontal water lines
- Drill water pipe clearance holes
- Drill vertical water lines (excluding o-ring machining)
- Machine for D-M-E angle pin inserts
- Finish mill/bore cavity and core pocket; blind or through (NOTE: 1/2" minimum radius required)

Special Mold Bases Shipping in ELEVEN Working Days

Includes all features specified above in seven working days, plus:

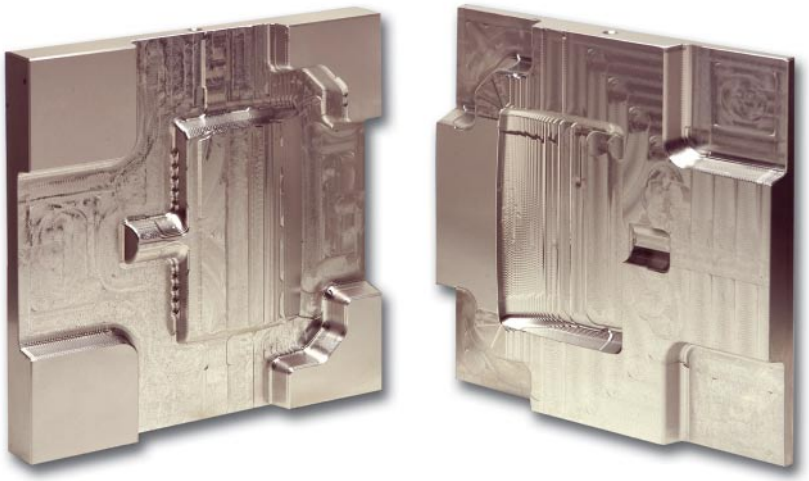
- Machine for D-M-E parting line interlocks
- Provide special thickness plates (maximum plate thickness of 5 7/8" in D-M-E #1, #2 and #3 steels, and 2 7/8" in D-M-E #7 steel

Contour Roughing Services

Key Advantages of Contour Roughing

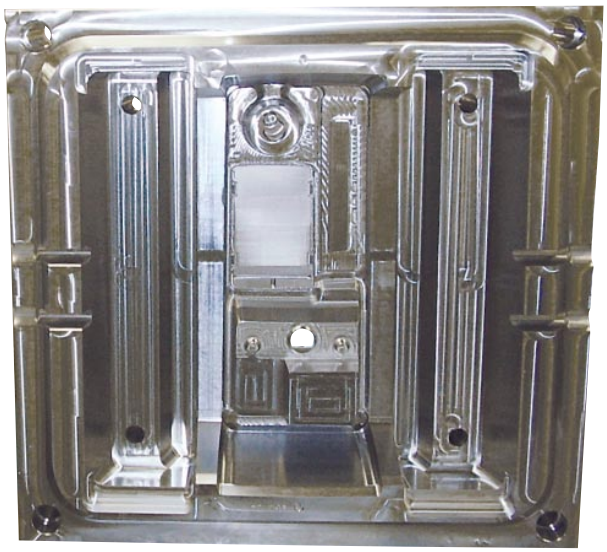
- Moldmakers can use this service to extend their in-house capacity, reduce lead time and focus on other high-value machining
- Consistent machining allowance throughout the surface of the cavity block provides even finishing without areas of heavy stock
- D-M-E can provide customers with the CAM program to continue the work where D-M-E left off, saving time and programming expense
- Contour roughing can be bundled with the option to stress-relieve cavity blocks and a custom mold base

At the request of moldmakers, D-M-E has begun to offer contour roughing services. D-M-E can rough mill complex part shapes into mold plates, even for milling that requires large and deep cavities.



- The Contour Roughing Service begins with complex core and cavity CAD files from customers
- D-M-E programs 3D cavity roughing tool paths that generate a rough milled surface, allowing machining stock for finishing by the customer
- D-M-E uses industry-leading CAM software for programming contour roughing tool paths leaving consistent machining allowance throughout the surface of the cavity block

For more details on the Contour Roughing Service, contact your D-M-E representative today.



D-M-E American Standard Mold Bases

Mold Bases with optional feature-based selections and rapid delivery



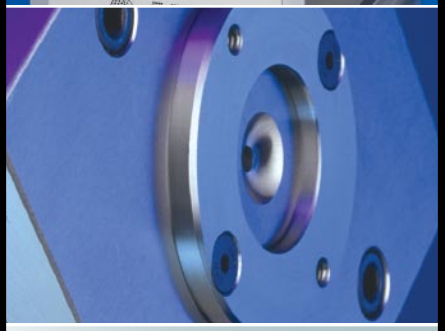
D-M-E
Every step of the way

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A-Series Mold Bases.....37 to 136

Available in 43 sizes from 7.875 x 7.875 to 23.75 x 35.5, the D-M-E A-Series Mold Base is the most frequently used standard assembly



Mold Base Standard & Optional Features .....137 to 170

From clamp slots and guided ejection to pockets and waterlines, D-M-E provides the mold base features you want, where you want them



X, AX, T-Series .....171 to 196

When you need a floating plate or two or stripper plate ejection, D-M-E has the mold base assemblies to get the job done



Small & Shuttle Mold Bases.....197 to 208

Lower your mold costs with Small Mold Base Adapter Plates and Shuttle Mold Bases



MoldBasics.....209 to 218

Economical mold bases stocked for immediate delivery

Online Price Guide

Go to www.dme.net/prices for the latest pricing guide.



D-M-E A-Series Mold Bases

OVER 75 TRILLION POSSIBLE
MOLD BASE CONFIGURATIONS



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1935A.....128-129
2424A.....130-131
2429A.....132-133
2435A.....134-135
B-Series Mold Bases 136

Mold Base Key Features

Nobody delivers like D-M-E. The American Standard Mold Base offers over 75 trillion possible configurations. Some key features and options include:

How to use this catalog

The following pages detail the choices available. If you have questions contact D-M-E and one of our knowledgeable representatives will assist you.

Key

S STANDARD FEATURES — Features supplied as standard unless otherwise specified

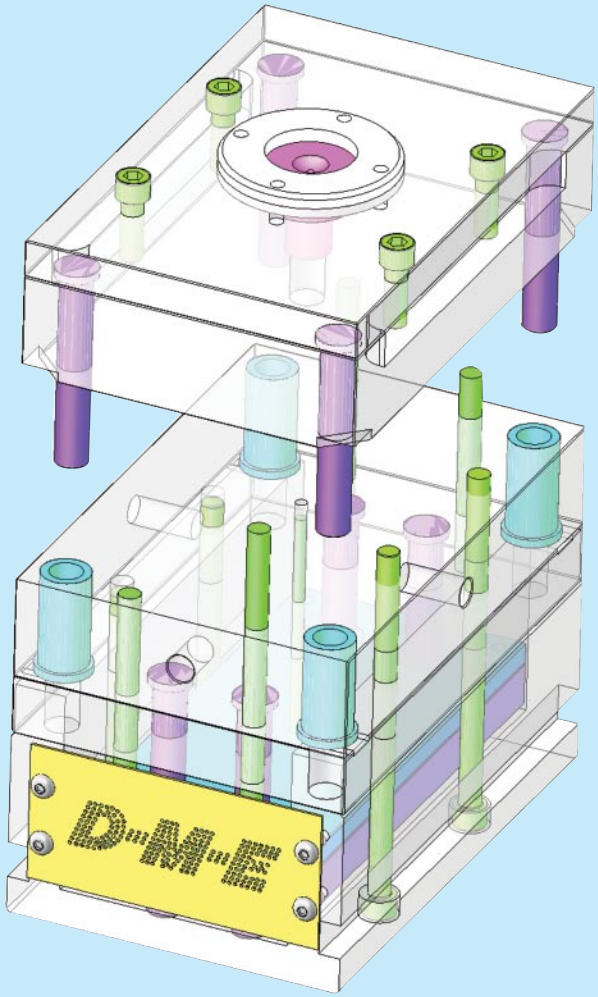
Delivery

5 5-DAY SHIPPING — Features available in 5 working days

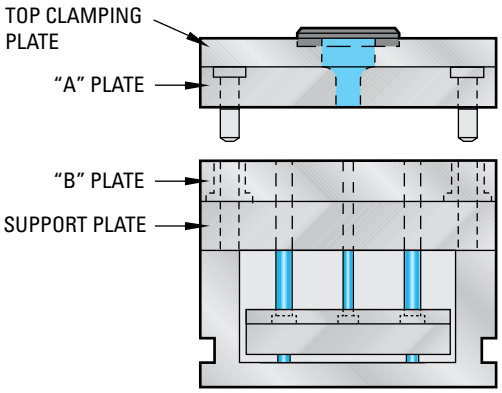
7 7-DAY SHIPPING — Features available in 7 working days

11 11-DAY SHIPPING — Features available in 11 working days

- 43 Nominal Sizes
- 9 Plate Thicknesses
- 4 Steel Types
- Guided Ejection
- Pry Slots
- Lifting Holes
- Leader Pin Vents
- Ejector Housing Cover
- Feature Positions
- Feature Omissions
- 3-Piece or Welded Housing Type
- Clamp Slot Type
- Mixed Steel
- Sprue Puller Pin Diameter
- Stop Pin Location

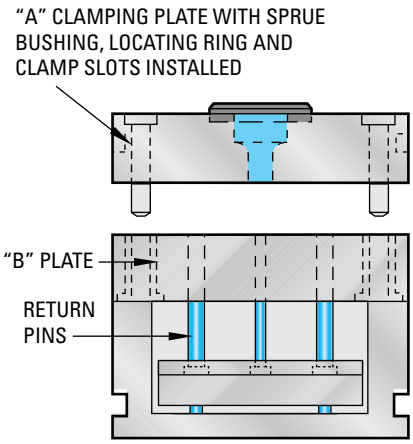


American Mold Base Standard Series Selections



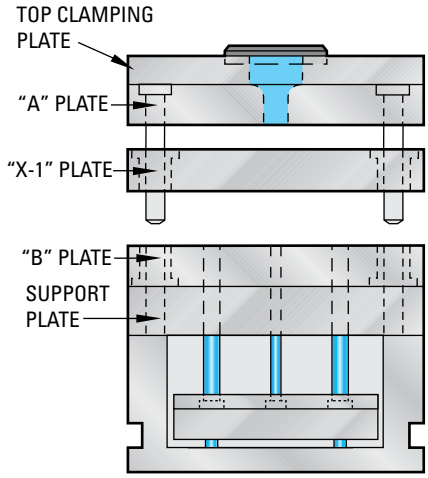
A-Series

The most frequently used Standard Assembly, the "A" Series Mold Base is available in 43 sizes from 7.875 x 7.875 to 23.75 x 35.5.



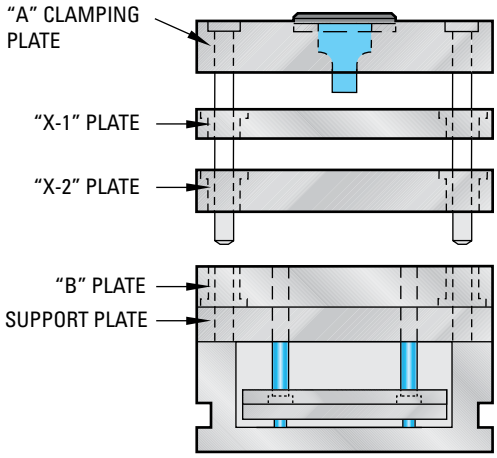
B-Series

When cavities and cores are to be inserted into blind pockets, or machined directly into the "A" and "B" plates, the "B" Series Assembly is used. The Top Clamping Plate and Support Plate are omitted from the assembly.



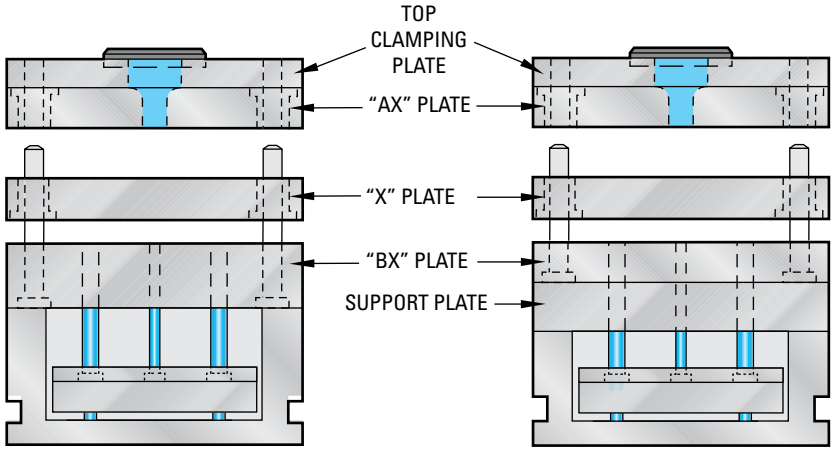
AX-Series

The "AX" Series Assembly is used when the mold requires a floating plate to remain with the upper or stationary half of the assembly. It is basically an "A" Series Assembly with a floating plate ("X-1") added.



T-Series

The "T" Series Assembly is used for top runner molds that require two floating plates ("X-1" — runner stripper plate, "X-2" — cavity plate) to remain with the upper or stationary half of the assembly.



X-Series (5 Plate)

X-Series (6 Plate)

Most frequently used for molds requiring stripper plate ejection, the "X" Series Assembly is available with a Support Plate (6-plate series) or without a Support Plate (5-plate series).

NOTE: Location and diameter of standard components are identical for all mold base series.

D-M-E American Standard Steel Types

Synonymous with mold making are the D-M-E American Standard Steel Types. Our experience in mold steel ensures the cleanliness, durability and machinability appropriate to your application.

Steels for Structural and Holder Block Applications

D-M-E #1 Steel is a medium carbon quality steel with greater tensile strength than typical plain carbon warehouse steels. It machines easily, but is not "sticky", permitting a faster and smoother cut. International comparisons: DIN 1.1178 (CK 30) and 1.1730 (C 45 W); JIS S 30 CM, S50C, S55C; ISO 683-1 C30E4.

D-M-E #2 Steel is a medium alloy steel specified for durability in structural applications. It is supplied pre-heat treated to 28-34 HRC (271-321 Bhn). A high strength steel, it is ideal for cavity and core retainer plates, clamping plates and support plates in molds. International comparisons: DIN 1.2312 (40CrMnMoS 8 6), 1.7218 (25CrMo4) and 1.2331 (41CrMoS4); JIS SCM 430; ISO 683-2 Type 1.

D-M-E #7 Steel is a modified AISI 400 series stainless steel for holder block applications. It is supplied pre-heat treated to 32-36 HRC (302-340 Bhn). This stainless steel offers corrosion-resistance and exceptional machinability but cannot be further hardened (see D-M-E #6). For humid environments, corrosive plastics, "clean room" or "100% stainless" applications, it is an ideal choice for all structural mold plates. International comparisons: none.

Steels for Cavity & Core Applications

D-M-E #3 Steel is a P-20 AISI 4130 type cavity steel. Exceptionally clean, it is pre-heat treated to 28-34 HRC (271-321 Bhn). It provides good machinability, the ability to heat treat to higher hardness, and exceptional polishability. International comparisons: DIN 1.2311 G40CrMnMo7; JIS none; ISO none.

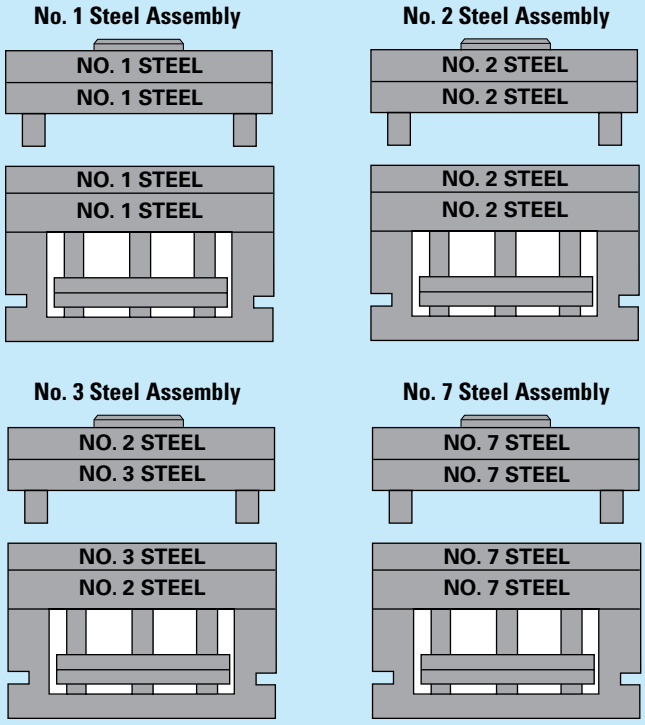
D-M-E #5 Steel is an AISI/SAE H-13 type thermal shock resistant, hotwork die steel. Supplied fully annealed (approximately 200 Bhn; 13-20 HRC) for easy machinability, it can be subsequently heat treated to the desired hardness with a minimum of deformation. Mainly used for die cast dies, it is also suitable for plastic molds with exceptional hardness or polishability requirements. D-M-E #5 Steel meets or exceeds the acceptance criteria established by the NADCA as detailed in Technical Digest Number 01-80-01D. International comparisons: DIN 1.2344 (X40CrMoV5-1); JIS SKD 61; ISO 4955 H13.

D-M-E #6 Steel is a modified AISI 420 type stainless steel. It is supplied fully annealed to 179-241 Bhn (8-23 HRC), making it readily machinable. Unlike D-M-E #7 steel, D-M-E #6 steel is a cavity-grade material that can be subsequently heat treated to the desired hardness and has excellent polishability. International comparisons: DIN 1.4028 (X30Cr13); JIS SUS 420 J 2; ISO none.



Typical Steel Types Configurations

"A" Series Mold Bases are available in over 40 standard sizes, 7-7/8 x 7-7/8 to 23-3/4 x 35-1/2. Each size offers a wide variety of standard cavity plate thickness combinations, plus your choice of D-M-E No. 1, No. 2, No. 3 or No. 7 steel.



Steel Selections: Available in 43 Nominal Sizes

MOLD PLATE		STEEL TYPES					
		#1	#2	#3	#7	#5	#6
TOP CLAMP PLATE		⚡	⚡	⚡	⚡		
AC PLATE		⚡	⚡	⚡	⚡		
A PLATE		⚡	⚡	⚡	⚡*		
B PLATE		⚡	⚡	⚡	⚡*		
AX, BX PLATES		⚡	⚡	⚡	⚡		
XP, X-1 AND X-2 PLATES		⚡	⚡	⚡	⚡		
SUPPORT PLATE		⚡	⚡	⚡	⚡		
EJECTOR RETAINER PLATE		⚡			⚡		
EJECTOR BAR PLATE		⚡			⚡		
EJECTOR HOUSING ASSEMBLY	WELDED	⚡					
	THREE PIECE	⚡			⚡		

D-M-E regularly mixes steel types within a mold base assembly to deliver plates configured to your application requirements. You can select steel types for each plate, as available from the table at left, in any combination for your mold base.

⚡ = Ships in 5 days or less

= Contact D-M-E for quote. D-M-E Customer Service can quote up to 5.875 thickness plates on all plates.

= Not available

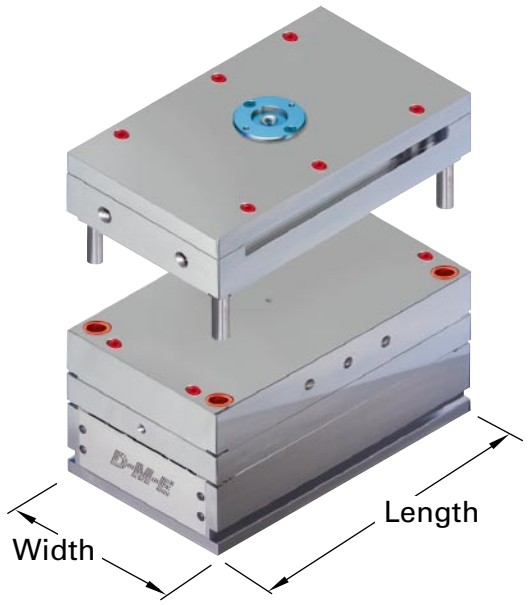
*Up to 2.375 thickness

NOTE: AC plates are not recommended.

The American Standard Mold Base is available in 43 nominal sizes to match the mold space requirements for your application.

As the creator of the American mold base standard, D-M-E has the largest selection of mold base sizes and most are available in less than five business days.

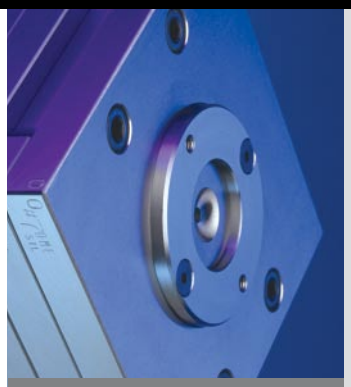
NOTE: Drilled complete replacement plates available with quick delivery.



NOMINAL SIZE	WIDTH (IN)	LENGTH (IN)	WEIGHT RANGE (LBS)	
			MIN	MAX
88	7.875	7.875	116	305
812	7.875	11.875	175	460
108	9.875	8.000	156	393
1012	9.875	11.875	235	592
1016	9.875	16.000	316	798
1020	9.875	20.000	395	997
1112	10.875	12.000	261	659
1114	10.875	14.000	305	769
1118	10.875	18.000	392	988
1123	10.875	23.500	511	1290
1212	11.875	12.000	285	719
1215	11.875	15.000	379	899
1220	11.875	20.000	505	1199
1223	11.875	23.500	594	1409
1315	13.375	15.000	427	1038
1318	13.375	18.000	512	1246
1321	13.375	20.750	590	1436
1323	13.375	23.500	669	1627
1326	13.375	26.000	740	1800
1329	13.375	29.500	839	2042
1518	14.875	17.875	599	1410
1524	14.875	23.750	796	1873
1529	14.875	29.500	989	2327
1616	15.875	16.000	573	1347
1620	15.875	20.000	716	1683
1623	15.875	23.500	841	1978
1626	15.875	26.000	930	2189
1629	15.875	29.500	1056	2483
1635	15.875	35.500	1270	2988
1724	16.500	23.750	883	2078
1729	16.500	29.500	1097	2581
1818	17.875	18.000	725	1706
1820	17.875	20.000	806	1896
1823	17.875	23.500	947	2227
1826	17.875	26.000	1048	2464
1829	17.875	29.500	1189	2796
1835	17.875	35.500	1430	3365
1924	19.500	23.750	1044	2456
1929	19.500	29.500	1297	3050
1935	19.500	35.500	1648	3758
2424	23.750	23.750	1343	3062
2429	23.750	29.500	1668	3804
2435	23.750	35.500	2008	4578

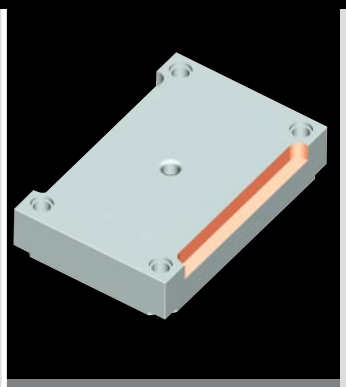
NOTE: Approximate mold base weight can be estimated with the following formula:
WEIGHT = WIDTH x LENGTH x HEIGHT x .283 x 90%

American Mold Base Standard Features



Locating Rings

The Locating Ring aligns the mold base to the stationary platen side of the press and positions the sprue bushing correctly.



Clamp Slots

Clamp Slots facilitate clamping the mold to the platen of the press. D-M-E mold bases offer four slot types to ensure the best fit for the requirements of your application.



Sprue Bushings

The Sprue Bushing provides a seat at the spherical radius for the nozzle of the press. This provides a path for the material from the nozzle to the runner system.



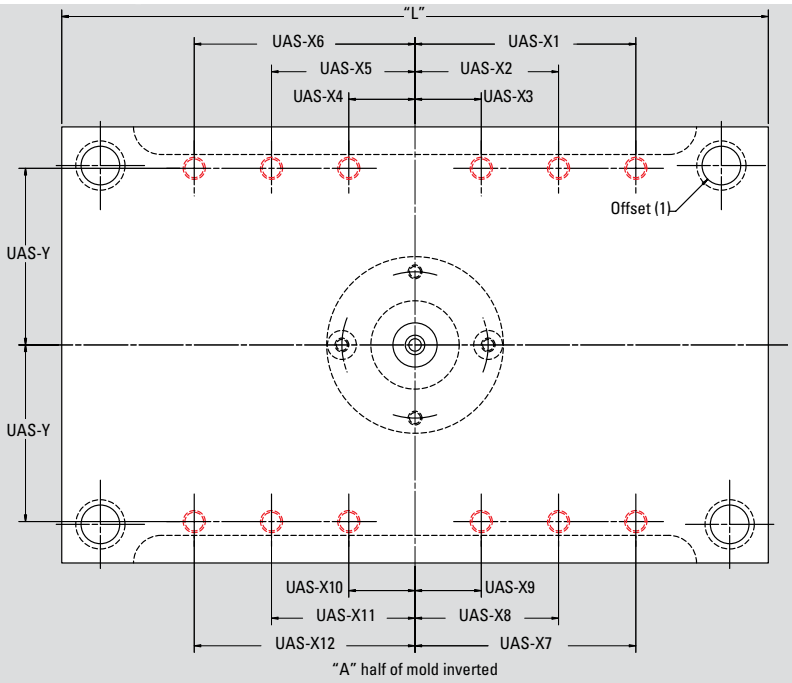
Leader Pins, Vents and Bushings

Leader Pins and Bushings align both halves of the mold at the parting line. Leader Pin Vents, which allow trapped air to escape from the mold, are designed into all 15-inch-and-wider series molds. When desired, they can be specified on smaller molds.



Upper and Lower Assembly Screws

Assembly screws are used to hold the plates of the upper and lower halves of the mold together. For simplicity, the upper and lower assembly screws are generally placed in similar positions



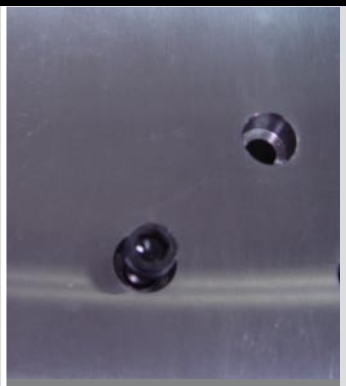
American Mold Base Standard Features



Ejector Housing and Cover

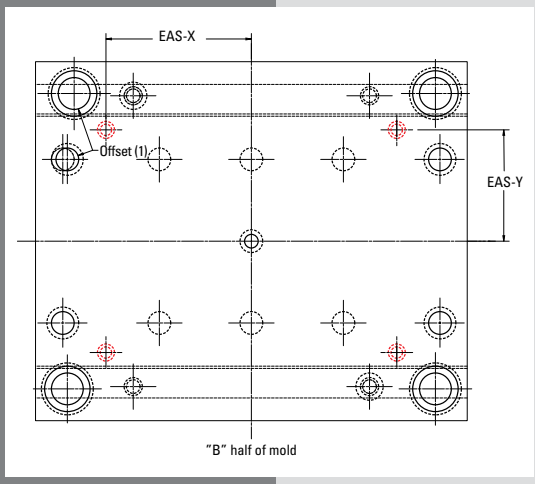
D-M-E offers a selection of housing types to fit application demands. A one-piece welded housing is available for customers requiring maximum rigidity and robust durability. For maximum flexibility of configuration options, a three-piece housing is also available.

For additional operator safety, D-M-E mold bases include an ejector housing cover, except when a longer length ejector bar is selected. The perforated D-M-E logo helps the operator to visually determine if the ejector plate and ejector retainer plate are in the returned position. The cover is fastened on both sides with 5/16-18 button-head cap screws. Once again, D-M-E is leading the industry into a safer work environment.



Ejector Assembly Screws

Ejector assembly screws are used to hold the plate of the ejector assembly together. Recommended position will be provided but you can specify any different position.





Return Pins, Stop Pins and Sprue Puller Pins

Return Pins are used to ensure correct return of the ejector assembly to the home position. D-M-E return pins are precision-ground from superior quality hotwork die steel. Stop Pins arrest travel – preventing excessive wear and possible housing damage. The Sprue Puller Pin removes material from the Sprue Bushing at the end of the molding cycle.



Self-Lubricating Bushings

Saves design and moldmaking costs for lubrication and fittings. Reduces wear and galling. Lowers maintenance and repair costs. Eliminates contamination... ideal for "clean room" environments.

American Mold Base Optional Features



Guided Ejection Systems

5-DAY SHIPPING

Guided Ejection Systems hold the ejector assembly in alignment and support the weight of the ejector assembly throughout the molding cycle – greatly reducing wear on ejection components and preventing cocking of the ejector assembly.



Pry Slots

5-DAY SHIPPING

D-M-E mold bases feature Pry Slots, installed in any plate specified, on the parting and/or non-parting line side. This provides handling ease when opening and/or disassembling a mold.



Lifting Holes

5-DAY SHIPPING

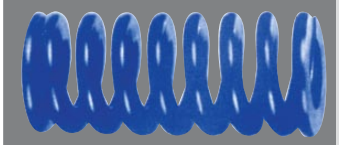
Lifting Holes can be used to install hoist rings for ease of handling. D-M-E mold bases can be configured only with Lifting Holes which are appropriate for the specific mold base size. Refer to D-M-E Mold Components catalog for a comprehensive selection of Hoist Rings.

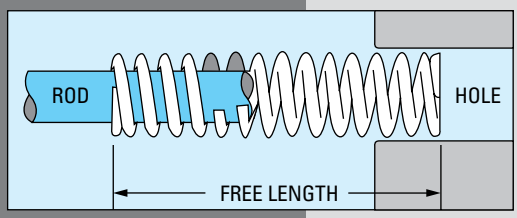


Pockets and Spring Pockets

5-DAY SHIPPING

Per customer specifications, D-M-E finishes any type of cavity and core pockets. See the D-M-E Mold Components catalog for spring free lengths and hole dimensions.





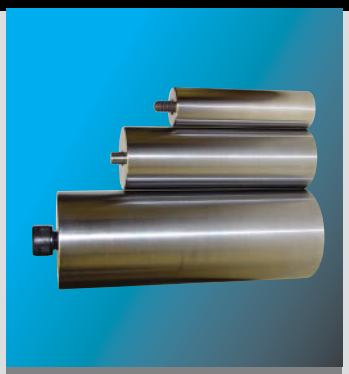


Mold Strap Holes

5-DAY SHIPPING

Machined holes will be for mounting mold straps. Please provide desired positions and quantity (minimum 2).

American Mold Base Optional Features



Support Pillars

5-DAY SHIPPING

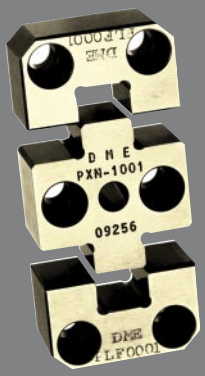
Support Pillars should be used liberally since they greatly increase the capacity of the mold to support the projected area of the cavities, runner and sprue. By providing additional support, they prevent deflection of the mold.



Interlocks

11-DAY SHIPPING

Provides positive alignment between adjacent plates when mold has one or multiple parting line openings. This provides close alignment for interlock cavities and cores in stripper plate type molds.



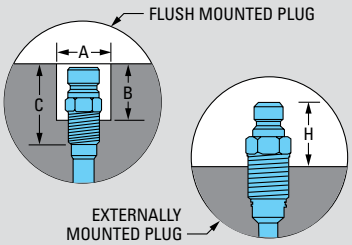


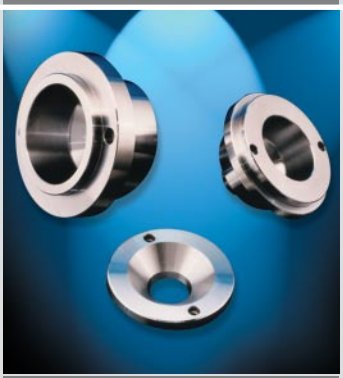


Waterlines

7-DAY SHIPPING

D-M-E will provide waterlines and plugs per customer specifications for optimal cooling efficiency.

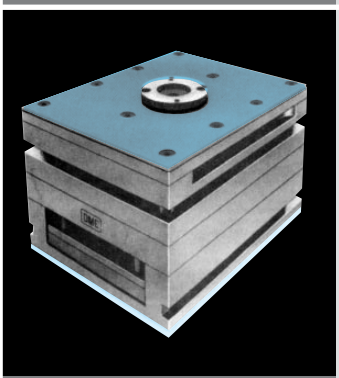




3-Plate Extension Bushings

7-DAY SHIPPING

These 3-plate extension bushings can save material, reduce cycle time and help prevent runner hang-ups in 3-plate molds.



Insulator Sheets

These sheets have excellent non-deformation characteristics and a compressive strength which is higher than asbestos and mica materials. Compression molded for high impact strength, they are supplied micro-finished top and bottom, parallel within ±.002.

D-M-E American Standard Mold Base Quote Request Form

D-M-E COMPANY
29111 Stephenson Highway
Madison Heights, MI 48071-2383

USA: Tel: 800-626-6653
Fax: 888-808-4363

Canada: Tel: 800-387-6600
Fax: 800-461-9965

dme_cad@dme.net

NOMINAL SIZE		
88	7.875	7.875
812	7.875	11.875
108	9.875	8.000
1012	9.875	11.875
1016	9.875	16.000
1020	9.875	20.000
1112	10.875	12.000
1114	10.875	14.000
1118	10.875	18.000
1123	10.875	23.500
1212	11.875	12.000
1215	11.875	15.000
1220	11.875	20.000
1223	11.875	23.500
1315	13.375	15.000
1318	13.375	18.000
1321	13.375	20.750
1323	13.375	23.500
1326	13.375	26.000
1329	13.375	29.500
1518	14.875	17.875
1524	14.875	23.750
1529	14.875	29.500
1616	15.875	16.000
1620	15.875	20.000
1623	15.875	23.500
1626	15.875	26.000
1629	15.875	29.500
1635	15.875	35.500
1724	16.500	23.750
1729	16.500	29.500
1818	17.875	18.000
1820	17.875	20.000
1823	17.875	23.500
1826	17.875	26.000
1829	17.875	29.500
1835	17.875	35.500
1924	19.500	23.750
1929	19.500	29.500
1935	19.500	35.500
2424	23.750	23.750
2429	23.750	29.500
2435	23.750	35.500

Company Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Email: _____

Account No.: _____ Date: _____

Contact: _____

Telephone: _____ Fax: _____

Cust. Proj. No.: _____ P.O. No.: _____

☐ **Order** ☐ **Quote Only**

NOTE: For feature selections left blank, the D-M-E Standard recommendation will be provided.

☐ _____ **Series (A, AX, B, X or T)**

Mold Base Item No.: _____

☐ **Retainer Set** Item No.: _____

Type of Steel: D-M-E No. _____

Top Clamp Plate: ☐ 7/8 ☐ 1-3/8 _____

"C" Riser Height: ☐ Standard _____

☐ Welded/Standard
☐ 3-Piece "BCP" Thickness _____

"E" Ejector Bar Length: ☐ Standard _____

Locating Ring: Item No.: _____

Sprue Bushing: ☐ Standard _____
"O" Orifice: _____
"R" Radius: _____

Clamp Slot Machining: ☐ Standard _____
☐ Type A ☐ Type B ☐ Type C ☐ Type D
☐ Omit Upper Slot Machining
☐ Machine Entire Length
☐ (4) Sides (Entire Width & Length)
☐ Omit Lower Clamp Slot Machining
NOTE: Three-piece housing supplied.

"L" Leader Pin Length: ☐ Standard _____
☐ Clearance in Housing:
Accommodate Length _____
Thru Housing _____
Ship w/Block of Wood _____

Leader Pin Bushings: ☐ Standard _____
Specify Diameter: _____
☐ Steel (STD) ☐ Self-Lubricating ☐ Bronze

Return Pin: ☐ Standard _____

Sprue Puller Pin: ☐ Standard _____

Omit the Following Holes:
☐ Locating Ring
☐ Sprue Bushing
☐ Sprue Puller Pin
☐ Upper Assembly Screws
☐ Leader Pins
☐ Leader Pin Bushings
☐ Return Pins
☐ Stop Pins
☐ Lower Assembly Screws
☐ Ejector Assembly Screws
☐ **Omit all center holes**

Omit the Following Parts:
☐ Locating Ring
☐ Sprue Bushing
☐ Sprue Puller Pin
☐ Upper Assembly Screws
☐ Leader Pins
☐ Leader Pin Bushings
☐ Return Pins
☐ Stop Pins
☐ Lower Assembly Screws
☐ Ejector Assembly Screws
☐ **Omit all center hole parts**

Relocate the Following Features:
☐ Center Holes
☐ Upper Assembly Screws
Return Pins:
☐ Position (D-M-E Standard)
☐ Position 2 (inboard for spring pockets)
☐ Custom Position

NOTE: Provide sketch or dimensions for custom positions (see p. 48).

☐ Stop Pins
☐ Lower Assembly Screws
☐ Ejector Assembly Screws
☐ Leader Pins and Bushings

Additional Comments/Notes: _____

D-M-E American Standard Mold Base Quote Request Form

Company Name:: _____ Date: _____

Additional Features – Ships in 5 Working Days

Guided Ejection:

Quantity: _____ Pin Dia.: _____ ☐ System 1 ☐ System 2

☐ Recommended Position ☐ Custom Position: GEx _____ GEy _____

☐ Bronze Bushing ☐ Self-Lubricating Bushing _____

Pry Slots: (4 places each plate)

(NOTE: P = Parting Line NP = Non Parting Line)

☐ TCP: P _____ NP _____

☐ A Plate: P _____ NP _____

☐ B Plate: P _____ NP _____

☐ Support Plate: P _____ NP _____

☐ Housing: P _____ NP _____

☐ _____ P _____ NP _____

Lift Holes: (Prints required if not on center)

☐ TCP: Quantity _____ Dia. _____

☐ A Plate: Quantity _____ Dia. _____

☐ B Plate: Quantity _____ Dia. _____

☐ Support Plate: Quantity _____ Dia. _____

☐ Housing:

☐ _____: Quantity _____ Dia. _____

☐ On center _____

☐ **Leader Pin Vents:**

(NOTE: Designed in all 15" and wider mold bases. When desired, can be specified on smaller molds.)

☐ **Rough Rectangular Pockets:** (Prints required) Length _____ Width _____

☐ Through ☐ Blind (specify depth): _____ Corner Radius (.50 min/1.00 max): _____

(NOTE: Rough Pocket tolerance -.062 per side)

☐ **Knock-out Holes:** (Prints required if not on center) Drill Quantity _____ Tap Quantity _____

☐ **Mold Strap Holes:** (Prints required) Quantity _____

☐ **Spring Pockets:** (Prints required) Quantity _____ Number of Plates _____

☐ **Support Pillars:** (Prints required) Quantity _____ Diameter _____ Style _____

Additional Components: (Prints required)

☐ Lower Assembly Screws: Quantity _____

☐ Upper Assembly Screws: Quantity _____

☐ Ejector Assembly Screws: Quantity _____

☐ Return Pins: Quantity _____

☐ Stop Pins: Quantity _____

Comments: _____

Additional Features – Ships in 7 Working Days (includes features listed in 5 working days)

☐ **Extension Bushing (T-Series):**

Extension Bushing Item Number: _____ Stripper Bushing: TEB-0001

☐ **Finished Rectangular Pockets:** (Prints required) Length _____ Width _____

☐ Through ☐ Blind (specify depth): _____ Corner Radius (.50 min/1.00 max): _____

(NOTE: Finished pocket tolerance +/- .001)

☐ **Waterlines:** (Prints required)

Diameter: _____

Number of Plates with Waterlines: _____

Total Length of Waterlines (in inches) in Each Plate: _____

Number of Sides: _____

Comments: _____

Additional Features – Ships in 11 Working Days (includes features listed in 7 working days)

☐ **Special Plate Thickness:**

Plate to be altered: _____ Thickness: _____

☐ **Parting Line Interlocks** (see Mold Components catalog; Print required)**:**

Quantity: _____

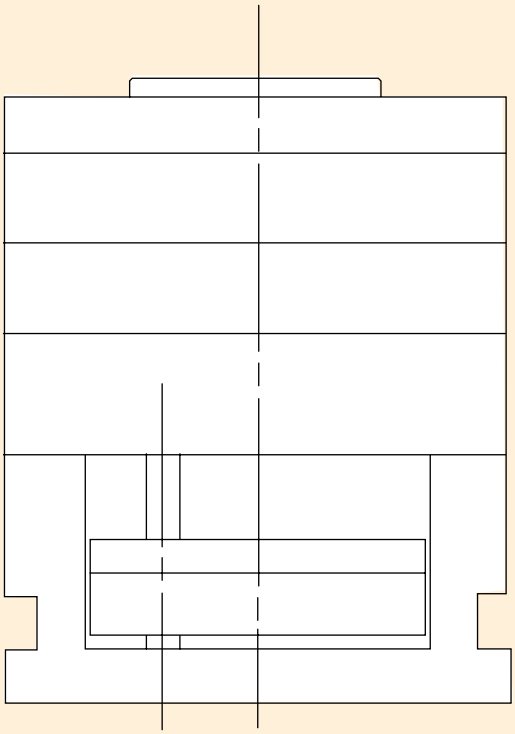
Part Numbers: _____

Comments: _____

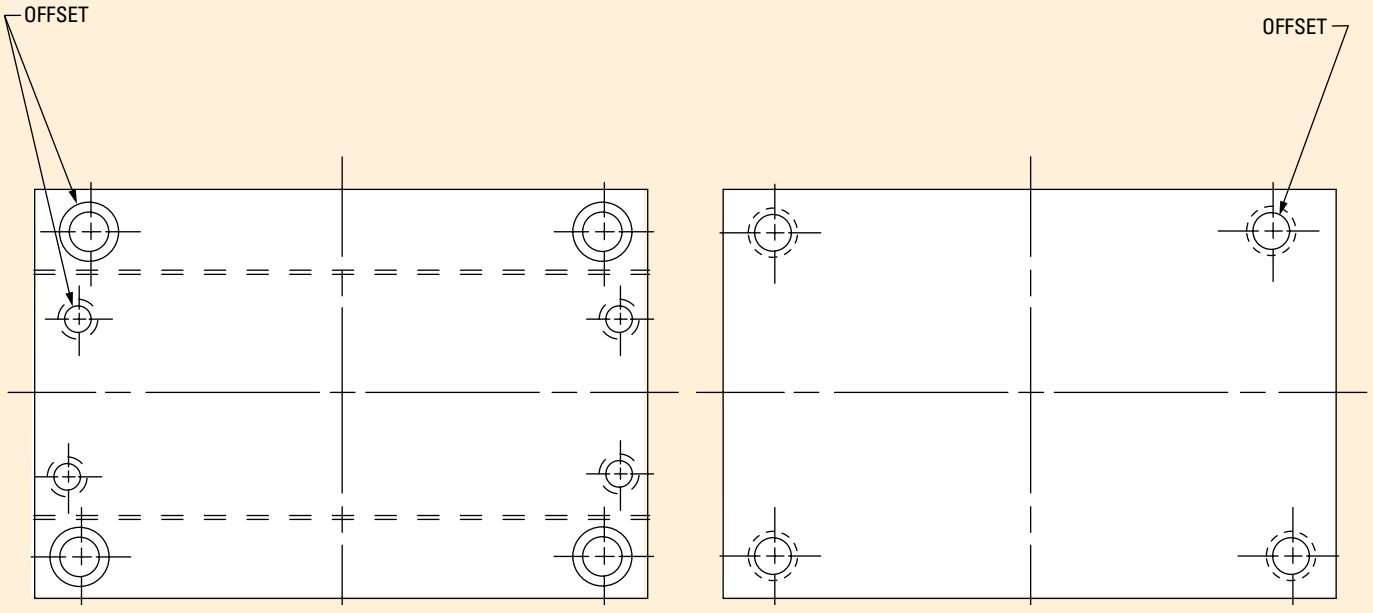
For additional work, contact Customer Service at 800-626-6653 or email drawing files to dme_cad@dme.net

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Special Feature Location Form



END VIEW



Steel Hardness Chart

CROSS-REFERENCE BETWEEN DIFFERENT HARDNESS MEASUREMENTS					
BRINELL HARDNESS BHN*	VICKERS HARDNESS HV	ROCKWELL HARDNESS HRA	ROCKWELL HARDNESS HRB	ROCKWELL HARDNESS HRC	SHORE HARDNESS HS
10mm BALL, 3000kgf LOAD	136° DIAMOND PYRAMID, 10kgf LOAD	BRALE PENETRATOR, 60kgf LOAD	1/16 INCH BALL, 100kgf LOAD	BRALE PENETRATOR, 150kgf LOAD	
86	90		48		
95	100		56.2		
105	110		62.3		
114	120		66.7		
124	130		71.2		20
133	140		75		21
143	150		78.7		22
152	160		81.7	(0)	24
162	170		85	(3)	25
171	180		87.1	(6)	26
181	190		89.5	(8.5)	28
190	200		91.5	(11)	29
200	210		93.4	(13.4)	30
209	220		95	(15.7)	32
219	230		96.7	(18)	33
228	240	60.7	98.1	20.3	34
238	250	61.6	99.5	22.2	36
247	260	62.4	(101)	24	37
256	270	63.1	(102)	25.6	38
265	280	63.8	(103.5)	27.1	40
275	290	64.5	(104.5)	28.5	41
284	300	65.2	(105.5)	29.8	42
303	320	66.4	(107)	32.2	45
322	340	67.6	(108)	34.4	47
341	360	68.7	(109)	36.6	50
360	380	69.8	(110)	38.8	52
379	400	70.8		40.8	55
397	420	71.8		42.7	57
415	440	72.8		44.5	59
433	460	73.6		46.1	62
452	480	74.5		47.7	64
471	500	75.3		49.1	66
488	520	76.1		50.5	67
507	540	76.7		51.7	69
525	560	77.4		53	71
545	580	78		54.1	72
564	600	78.6		55.2	74
582	620	79.2		56.3	75
601	640	79.8		57.3	77
620	660	80.3		58.3	79
638	680	80.8		59.2	80
656	700	81.3		60.1	81
670	720	81.8		61	83
684	740	82.2		61.8	84
698	760	82.6		62.5	86
710	780	83		63.3	87
722	800	83.4		64	88
745	840	84.1		65.3	91
767	880	84.7		66.4	93

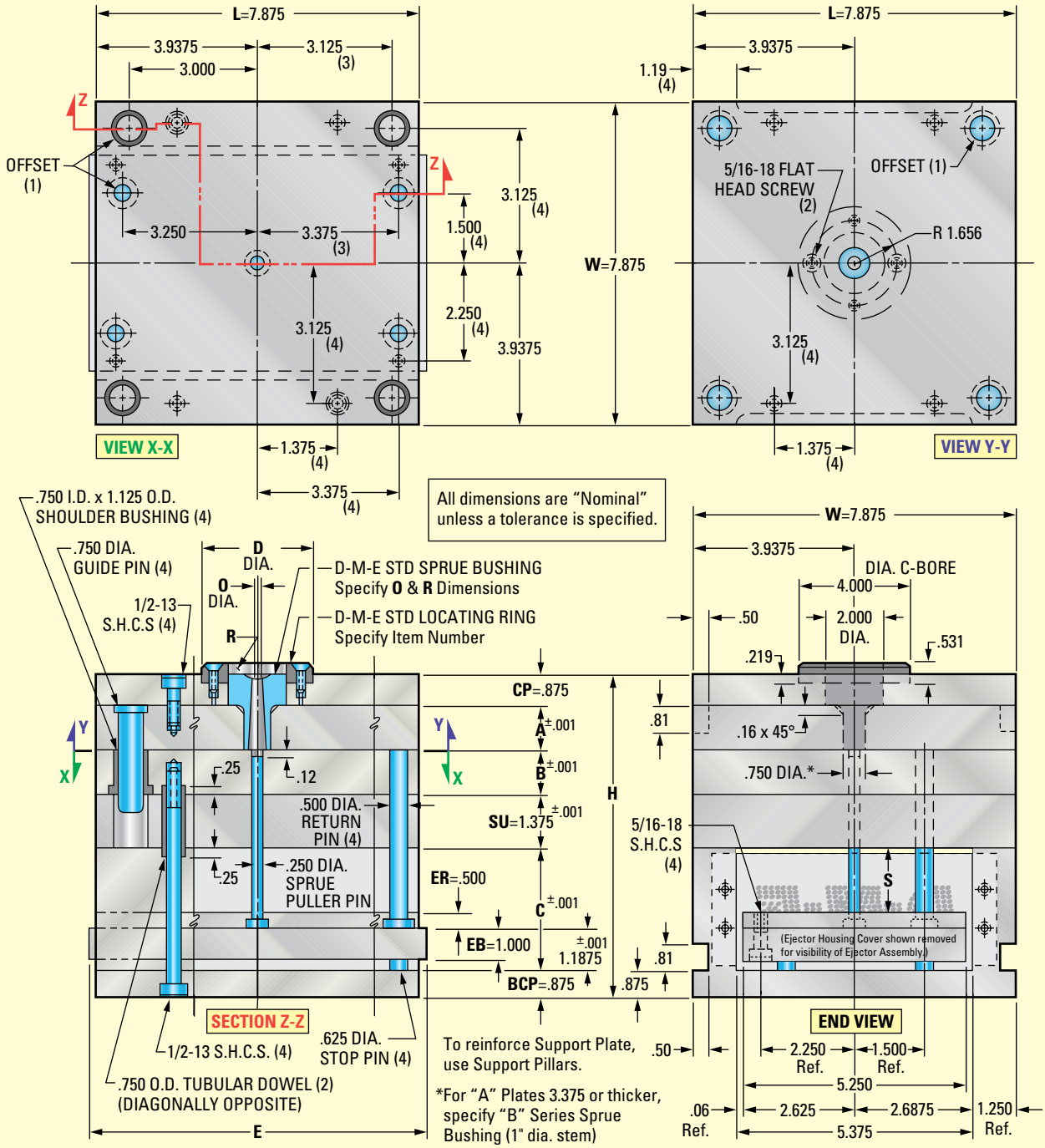
*A 10mm steel ball is used for 450 BHN and below. A 10mm carbide ball is used above 450 BHN.

Also known as Firth Diamond Hardness Number.

Values in parentheses are not contained in the normal definition range for hardness checking, but are often used in comparable measure.

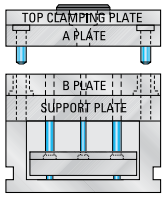
7⅞ x 7⅞ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

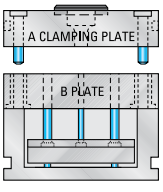


Mold Base Selections

A-Series Assembly



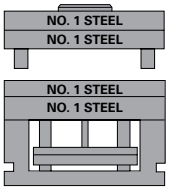
B-Series Assembly



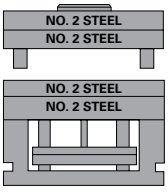
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

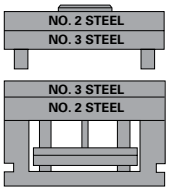
No. 1 Steel Assembly



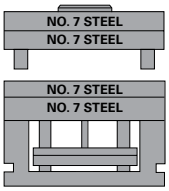
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

7⅞ x 7⅞ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
.875 (7/8)	0.875	2.500	7.375	88A-7-7	111
	1.375	2.500	7.875	88A-7-13	120
	1.875	2.500	8.375	88A-7-17	129
	2.375	2.500	8.875	88A-7-23	138
	2.875	3.000	9.875	88A-7-27	149
	3.375	3.500	10.875	88A-7-33	161
	3.875	3.500	11.375	88A-7-37	170
	4.875	4.500	13.375	88A-7-47	193
	5.875	4.500	14.375	88A-7-57	211

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	0.875	2.500	8.875	88A-23-7	138
	1.375	2.500	9.375	88A-23-13	147
	1.875	2.500	9.875	88A-23-17	155
	2.375	3.000	10.875	88A-23-23	167
	2.875	3.500	11.875	88A-23-27	179
	3.375	4.000	12.875	88A-23-33	190
	3.875	4.000	13.375	88A-23-37	199
	4.875	4.500	14.875	88A-23-47	219
	5.875	4.500	15.875	88A-23-57	237

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	0.875	3.000	10.875	88A-37-7	167
	1.375	3.500	11.875	88A-37-13	179
	1.875	3.500	12.375	88A-37-17	187
	2.375	4.000	13.375	88A-37-23	199
	2.875	4.000	13.875	88A-37-27	208
	3.375	4.000	14.375	88A-37-33	217
	3.875	4.500	15.375	88A-37-37	228
	4.875	4.500	16.375	88A-37-47	246
	5.875	4.500	17.375	88A-37-57	263

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	0.875	2.500	7.875	88A-13-7	120
	1.375	2.500	8.375	88A-13-13	129
	1.875	2.500	8.875	88A-13-17	138
	2.375	3.000	9.875	88A-13-23	149
	2.875	3.000	10.375	88A-13-27	158
	3.375	3.500	11.375	88A-13-33	170
	3.875	4.000	12.375	88A-13-37	181
	4.875	4.500	13.875	88A-13-47	202
	5.875	4.500	14.875	88A-13-57	219

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	0.875	3.000	9.875	88A-27-7	149
	1.375	3.000	10.375	88A-27-13	158
	1.875	3.500	11.375	88A-27-17	170
	2.375	3.500	11.875	88A-27-23	179
	2.875	4.000	12.875	88A-27-27	190
	3.375	4.000	13.375	88A-27-33	199
	3.875	4.000	13.875	88A-27-37	208
	4.875	4.500	15.375	88A-27-47	228
	5.875	4.500	16.375	88A-27-57	246

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	0.875	3.500	12.375	88A-47-7	187
	1.375	3.500	12.875	88A-47-13	196
	1.875	4.000	13.875	88A-47-17	208
	2.375	4.000	14.375	88A-47-23	217
	2.875	4.000	14.875	88A-47-27	225
	3.375	4.500	15.875	88A-47-33	237
	3.875	4.500	16.375	88A-47-37	246
	4.875	4.500	17.375	88A-47-47	263
	5.875	4.500	18.375	88A-47-57	281

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	0.875	2.500	8.375	88A-17-7	129
	1.375	2.500	8.875	88A-17-13	138
	1.875	2.500	9.375	88A-17-17	147
	2.375	3.000	10.375	88A-17-23	158
	2.875	3.500	11.375	88A-17-27	170
	3.375	3.500	11.875	88A-17-33	179
	3.875	4.000	12.875	88A-17-37	190
	4.875	4.500	14.375	88A-17-47	211
	5.875	4.500	15.375	88A-17-57	228

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	0.875	3.000	10.375	88A-33-7	158
	1.375	3.500	11.375	88A-33-13	170
	1.875	3.500	11.875	88A-33-17	182
	2.375	4.000	12.875	88A-33-23	190
	2.875	4.000	13.375	88A-33-27	199
	3.375	4.000	13.875	88A-33-33	208
	3.875	4.500	14.875	88A-33-37	219
	4.875	4.500	15.875	88A-33-47	237
	5.875	4.500	16.875	88A-33-57	255

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	0.875	3.500	13.375	88A-57-7	205
	1.375	3.500	13.875	88A-57-13	214
	1.875	4.000	14.875	88A-57-17	225
	2.375	4.000	15.375	88A-57-23	234
	2.875	4.000	15.875	88A-57-27	243
	3.375	4.500	16.875	88A-57-33	255
	3.875	4.500	17.375	88A-57-37	263
	4.875	4.500	18.375	88A-57-47	281
	5.875	4.500	19.375	88A-57-57	298

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	SU SUPPORT PLATE THICKNESS	BCP BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

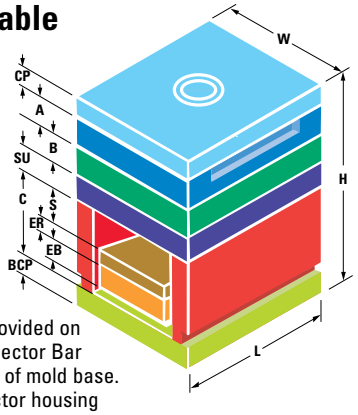
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	S MAX. STROKE OF EJECTOR BAR
2.500	25	0.813
3.000	30	1.313
3.500	35	1.813
4.000	40	2.313
4.500	45	2.813
5.000	50	3.313
5.500	55	3.813
6.000	60	4.313

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
7.875	8
11.875	12
16.00	16
20.00	20

See Item 6 below.



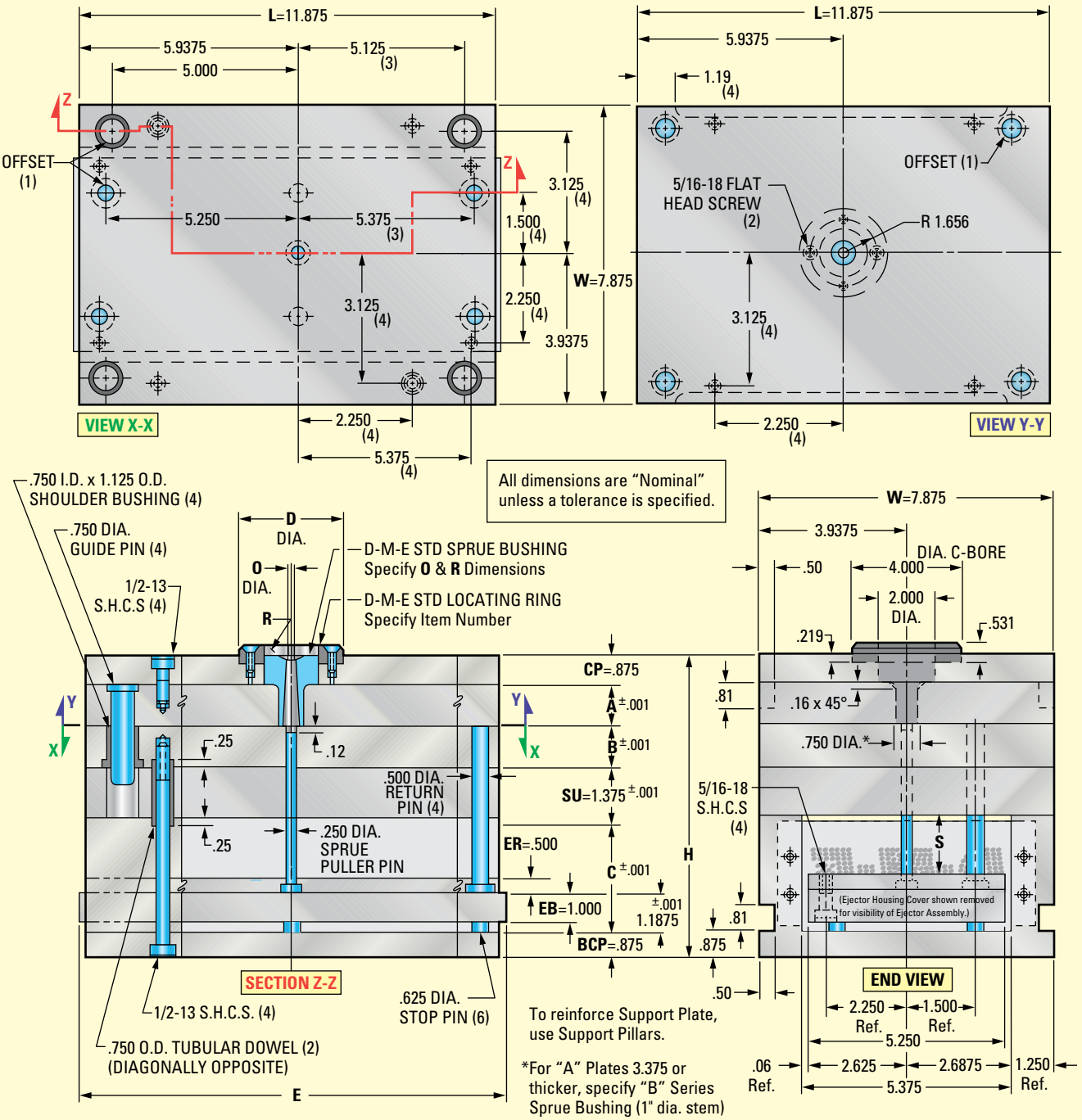
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., U, UV, UR, *B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218 or .281
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

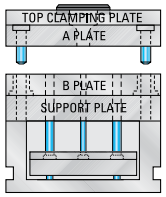
7⅞ x 11⅞ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

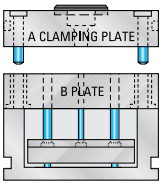


Mold Base Selections

A-Series Assembly



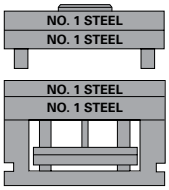
B-Series Assembly



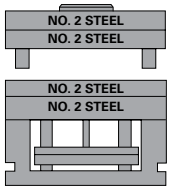
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

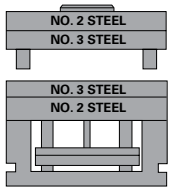
No. 1 Steel Assembly



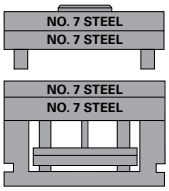
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

7⅞ x 11⅞ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
.875 (7/8)	0.875	2.500	7.375	812A-7-7	174
	1.375	3.000	8.375	812A-7-13	191
	1.875	3.000	8.875	812A-7-17	205
	2.375	3.500	9.875	812A-7-23	222
	2.875	3.500	10.375	812A-7-27	235
	3.375	4.000	11.375	812A-7-33	253
	3.875	4.000	11.875	812A-7-37	266
	4.875	4.500	13.375	812A-7-47	297
	5.875	4.500	14.375	812A-7-57	323

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	0.875	3.000	9.375	812A-23-7	218
	1.375	3.000	9.875	812A-23-13	231
	1.875	3.500	10.875	812A-23-17	249
	2.375	3.500	11.375	812A-23-23	262
	2.875	4.000	12.375	812A-23-27	279
	3.375	4.000	12.875	812A-23-33	293
	3.875	4.000	13.375	812A-23-37	306
	4.875	4.500	14.875	812A-23-47	336
	5.875	4.500	15.875	812A-23-57	363

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	0.875	3.000	10.875	812A-37-7	258
	1.375	3.500	11.875	812A-37-13	275
	1.875	3.500	12.375	812A-37-17	288
	2.375	4.000	13.375	812A-37-23	306
	2.875	4.000	13.875	812A-37-27	319
	3.375	4.000	14.375	812A-37-33	332
	3.875	4.500	15.375	812A-37-37	350
	4.875	4.500	16.375	812A-37-47	376
	5.875	4.500	17.375	812A-37-57	403

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	0.875	2.500	7.875	812A-13-7	187
	1.375	3.000	8.875	812A-13-13	205
	1.875	3.000	9.375	812A-13-17	218
	2.375	3.500	10.375	812A-13-23	235
	2.875	3.500	10.875	812A-13-27	249
	3.375	4.000	11.875	812A-13-33	266
	3.875	4.000	12.375	812A-13-37	279
	4.875	4.500	13.875	812A-13-47	310
	5.875	4.500	14.875	812A-13-57	336

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	0.875	3.000	9.875	812A-27-7	231
	1.375	3.000	10.375	812A-27-13	244
	1.875	3.500	11.375	812A-27-17	262
	2.375	3.500	11.875	812A-27-23	275
	2.875	4.000	12.875	812A-27-27	293
	3.375	4.000	13.375	812A-27-33	306
	3.875	4.000	13.875	812A-27-37	319
	4.875	4.500	15.375	812A-27-47	350
	5.875	4.500	16.375	812A-27-57	376

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	0.875	3.500	12.375	812A-47-7	288
	1.375	3.500	12.875	812A-47-13	302
	1.875	4.000	13.875	812A-47-17	319
	2.375	4.000	14.375	812A-47-23	332
	2.875	4.000	14.875	812A-47-27	346
	3.375	4.500	15.875	812A-47-33	363
	3.875	4.500	16.375	812A-47-37	376
	4.875	4.500	17.375	812A-47-47	403
	5.875	4.500	18.375	812A-47-57	429

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	0.875	2.500	8.375	812A-17-7	200
	1.375	3.000	9.375	812A-17-13	218
	1.875	3.500	10.375	812A-17-17	235
	2.375	3.500	10.875	812A-17-23	249
	2.875	4.000	11.875	812A-17-27	266
	3.375	4.000	12.375	812A-17-33	279
	3.875	4.000	12.875	812A-17-37	293
	4.875	4.500	14.375	812A-17-47	323
	5.875	4.500	15.375	812A-17-57	350

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	0.875	3.000	10.375	812A-33-7	244
	1.375	3.500	11.375	812A-33-13	262
	1.875	3.500	11.875	812A-33-17	275
	2.375	4.000	12.875	812A-33-23	293
	2.875	4.000	13.375	812A-33-27	306
	3.375	4.000	13.875	812A-33-33	319
	3.875	4.500	14.875	812A-33-37	336
	4.875	4.500	15.875	812A-33-47	363
	5.875	4.500	16.875	812A-33-57	389

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	0.875	3.500	13.375	812A-57-7	315
	1.375	3.500	13.875	812A-57-13	328
	1.875	4.000	14.875	812A-57-17	346
	2.375	4.000	15.375	812A-57-23	359
	2.875	4.000	15.875	812A-57-27	372
	3.375	4.500	16.875	812A-57-33	389
	3.875	4.500	17.375	812A-57-37	403
	4.875	4.500	18.375	812A-57-47	429
	5.875	4.500	19.375	812A-57-57	456

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	SU SUPPORT PLATE THICKNESS	BCP BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

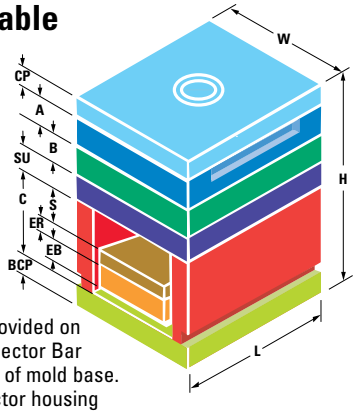
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	S MAX. STROKE OF EJECTOR BAR
2.500	25	0.813
3.000	30	1.313
3.500	35	1.813
4.000	40	2.313
4.500	45	2.813
5.000	50	3.313
5.500	55	3.813
6.000	60	4.313

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
11.875	12
16.00	16
20.00	20

See Item 6 below.



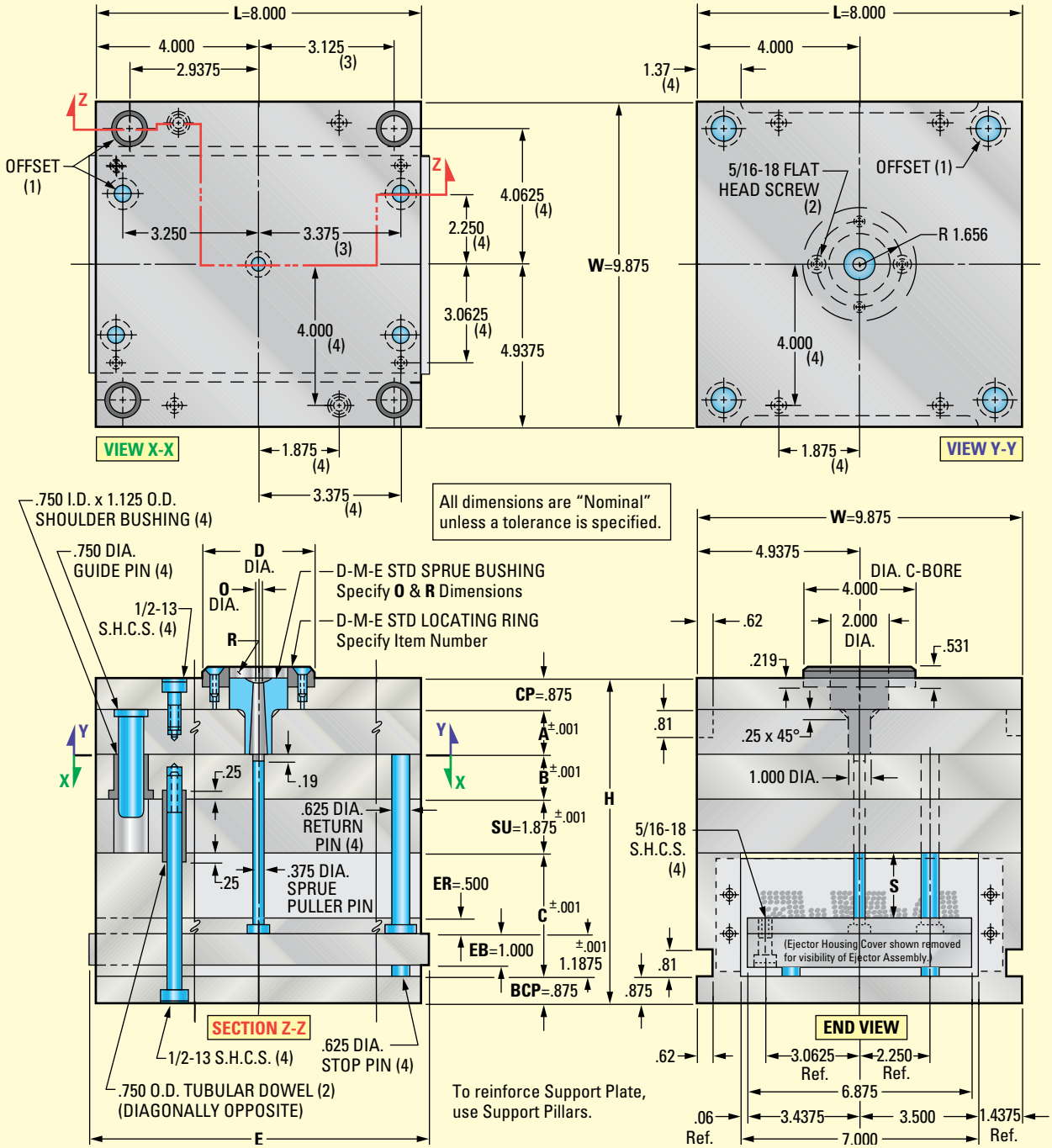
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., U, UV, UR, *B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218 or .281
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

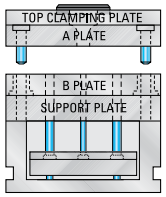
9⅞ x 8" A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

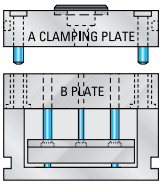


Mold Base Selections

A-Series Assembly



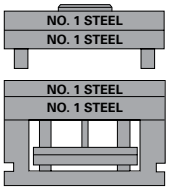
B-Series Assembly



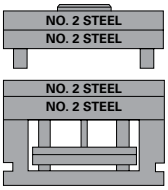
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

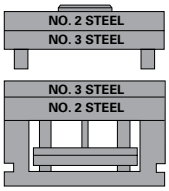
No. 1 Steel Assembly



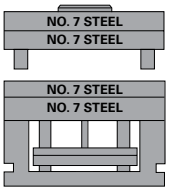
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

9⅞ x 8" A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
.875 (7/8)	0.875	2.500	7.875	108A-7-7	158
	1.375	2.500	8.375	108A-7-13	169
	1.875	2.500	8.875	108A-7-17	181
	2.375	3.000	9.875	108A-7-23	195
	2.875	3.500	10.875	108A-7-27	209
	3.375	4.000	11.875	108A-7-33	224
	3.875	4.000	12.375	108A-7-37	236
	4.875	4.500	13.875	108A-7-47	261
	5.875	4.500	14.875	108A-7-57	284

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	0.875	3.000	9.875	108A-23-7	195
	1.375	3.000	10.375	108A-23-13	206
	1.875	3.500	11.375	108A-23-17	221
	2.375	3.500	11.875	108A-23-23	232
	2.875	4.000	12.875	108A-23-27	246
	3.375	4.000	13.375	108A-23-33	257
	3.875	4.000	13.875	108A-23-37	269
	4.875	4.500	15.375	108A-23-47	294
	5.875	4.500	16.375	108A-23-57	317

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	0.875	3.000	11.375	108A-37-7	229
	1.375	3.500	12.375	108A-37-13	243
	1.875	3.500	12.875	108A-37-17	254
	2.375	4.000	13.875	108A-37-23	269
	2.875	4.000	14.375	108A-37-27	280
	3.375	4.000	14.875	108A-37-33	291
	3.875	4.500	15.875	108A-37-37	306
	4.875	4.500	16.875	108A-37-47	328
	5.875	4.500	17.875	108A-37-57	350

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	0.875	2.500	8.375	108A-13-7	169
	1.375	2.500	8.875	108A-13-13	181
	1.875	3.000	9.875	108A-13-17	196
	2.375	3.500	10.875	108A-13-23	209
	2.875	3.500	11.375	108A-13-27	221
	3.375	4.000	12.375	108A-13-33	235
	3.875	4.000	12.875	108A-13-37	246
	4.875	4.500	14.375	108A-13-47	272
	5.875	4.500	15.375	108A-13-57	294

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	0.875	3.000	10.375	108A-27-7	206
	1.375	3.000	10.875	108A-27-13	217
	1.875	3.500	11.875	108A-27-17	232
	2.375	3.500	12.375	108A-27-23	244
	2.875	4.000	13.375	108A-27-27	257
	3.375	4.000	13.875	108A-27-33	269
	3.875	4.000	14.375	108A-27-37	280
	4.875	4.500	15.875	108A-27-47	306
	5.875	4.500	16.875	108A-27-57	328

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	0.875	3.500	12.875	108A-47-7	254
	1.375	3.500	13.375	108A-47-13	265
	1.875	4.000	14.375	108A-47-17	280
	2.375	4.000	14.875	108A-47-23	291
	2.875	4.000	15.375	108A-47-27	302
	3.375	4.500	16.375	108A-47-33	317
	3.875	4.500	16.875	108A-47-37	328
	4.875	4.500	17.875	108A-47-47	350
	5.875	4.500	18.875	108A-47-57	373

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	0.875	2.500	8.875	108A-17-7	181
	1.375	3.000	9.875	108A-17-13	195
	1.875	3.500	10.875	108A-17-17	209
	2.375	3.500	11.375	108A-17-23	221
	2.875	4.000	12.375	108A-17-27	235
	3.375	4.000	12.875	108A-17-33	246
	3.875	4.000	13.375	108A-17-37	257
	4.875	4.500	14.875	108A-17-47	283
	5.875	4.500	15.875	108A-17-57	306

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	0.875	3.000	10.875	108A-33-7	217
	1.375	3.500	11.875	108A-33-13	232
	1.875	3.500	12.375	108A-33-17	243
	2.375	4.000	13.375	108A-33-23	257
	2.875	4.000	13.875	108A-33-27	269
	3.375	4.000	14.375	108A-33-33	280
	3.875	4.500	15.375	108A-33-37	294
	4.875	4.500	16.375	108A-33-47	317
	5.875	4.500	17.375	108A-33-57	339

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	0.875	3.500	13.875	108A-57-7	277
	1.375	3.500	14.375	108A-57-13	288
	1.875	4.000	15.375	108A-57-17	302
	2.375	4.000	15.875	108A-57-23	313
	2.875	4.000	16.375	108A-57-27	325
	3.375	4.500	17.375	108A-57-33	339
	3.875	4.500	17.875	108A-57-37	350
	4.875	4.500	18.875	108A-57-47	373
	5.875	4.500	19.875	108A-57-57	395

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

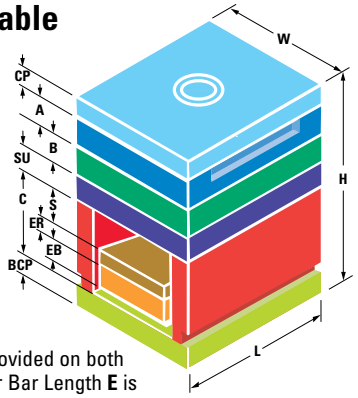
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
2.500	25	0.813
3.000	30	1.313
3.500	35	1.813
4.000	40	2.313
4.500	45	2.813
5.000	50	3.313
5.500	55	3.813
6.000	60	4.313

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
8.00	8
11.875	12
16.00	16
20.00	20
23.50	23
29.50	29

See Item 6 below.



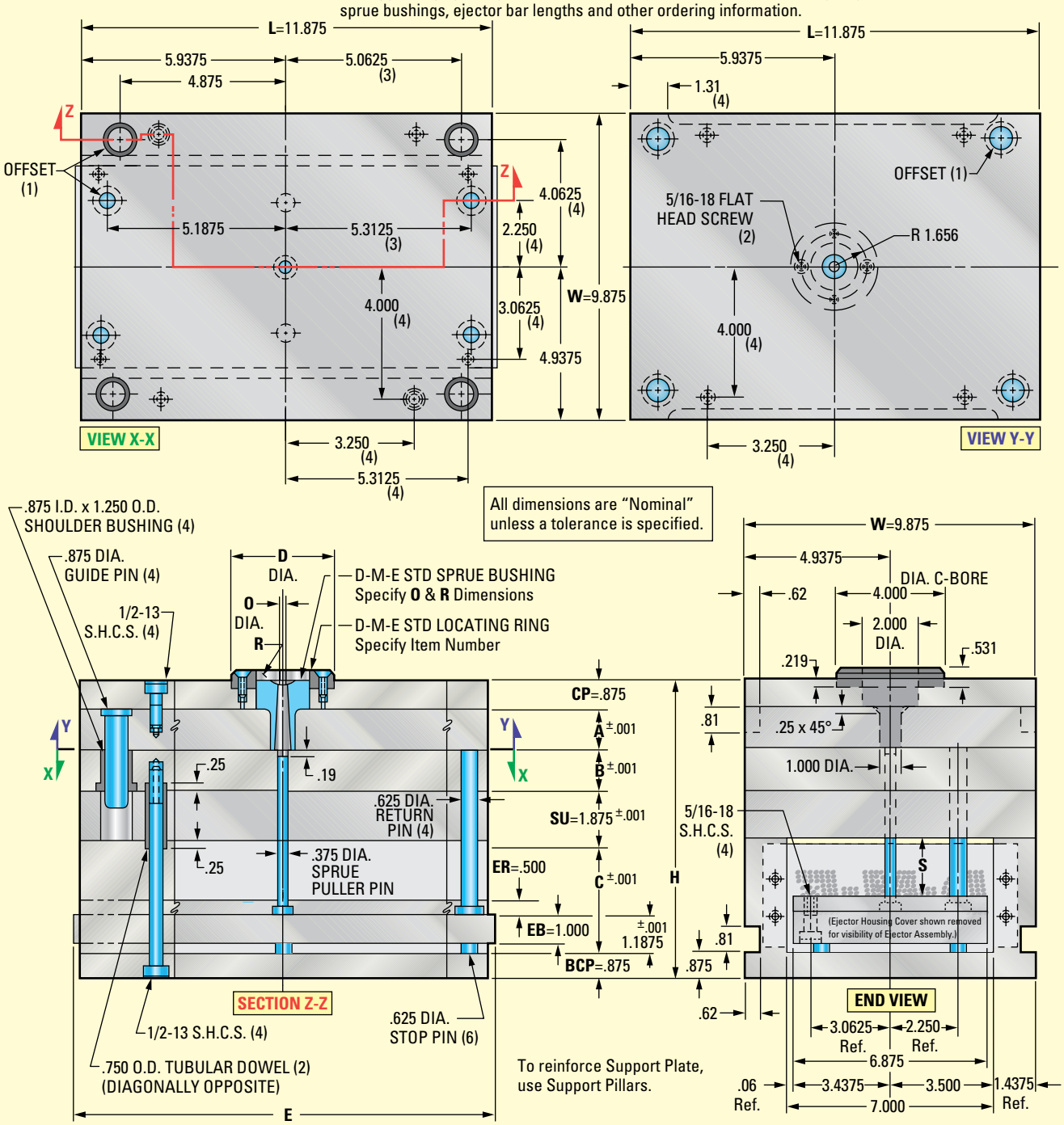
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

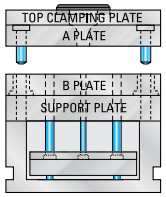
9⅞ x 11⅞ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

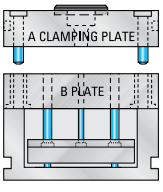


Mold Base Selections

A-Series Assembly



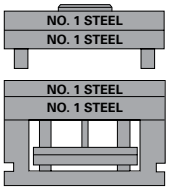
B-Series Assembly



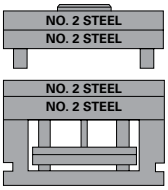
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

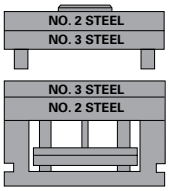
No. 1 Steel Assembly



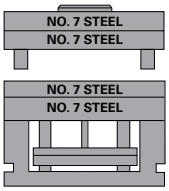
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

9⅞ x 11⅞ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
.875 (7/8)	0.875	2.500	7.875	1012A-7-7	235
	1.375	3.000	8.875	1012A-7-13	256
	1.875	3.000	9.375	1012A-7-17	273
	2.375	3.500	10.375	1012A-7-23	294
	2.875	3.500	10.875	1012A-7-27	311
	3.375	4.000	11.875	1012A-7-33	332
	3.875	4.000	12.375	1012A-7-37	349
	4.875	4.500	13.875	1012A-7-47	387
	5.875	4.500	14.875	1012A-7-57	420

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	0.875	3.000	9.875	1012A-23-7	289
	1.375	3.000	10.375	1012A-23-13	306
	1.875	3.500	11.375	1012A-23-17	327
	2.375	3.500	11.875	1012A-23-23	344
	2.875	4.000	12.875	1012A-23-27	365
	3.375	4.000	13.375	1012A-23-33	382
	3.875	4.000	13.875	1012A-23-37	399
	4.875	4.500	15.375	1012A-23-47	437
	5.875	4.500	16.375	1012A-23-57	470

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	0.875	3.000	11.375	1012A-37-7	339
	1.375	3.500	12.375	1012A-37-13	361
	1.875	3.500	12.875	1012A-37-17	377
	2.375	4.000	13.875	1012A-37-23	399
	2.875	4.000	14.375	1012A-37-27	415
	3.375	4.000	14.875	1012A-37-33	432
	3.875	4.500	15.875	1012A-37-37	453
	4.875	4.500	16.875	1012A-37-47	486
	5.875	4.500	17.875	1012A-37-57	520

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	0.875	2.500	8.375	1012A-13-7	251
	1.375	3.000	9.375	1012A-13-13	273
	1.875	3.000	9.875	1012A-13-17	289
	2.375	3.500	10.875	1012A-13-23	311
	2.875	3.500	11.375	1012A-13-27	327
	3.375	4.000	12.375	1012A-13-33	349
	3.875	4.000	12.875	1012A-13-37	365
	4.875	4.500	14.375	1012A-13-47	403
	5.875	4.500	15.375	1012A-13-57	437

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	0.875	3.000	10.375	1012A-27-7	306
	1.375	3.000	10.875	1012A-27-13	322
	1.875	3.500	11.875	1012A-27-17	344
	2.375	3.500	12.375	1012A-27-23	361
	2.875	4.000	13.375	1012A-27-27	382
	3.375	4.000	13.875	1012A-27-33	399
	3.875	4.000	14.375	1012A-27-37	415
	4.875	4.500	15.875	1012A-27-47	453
	5.875	4.500	16.875	1012A-27-57	486

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	0.875	3.500	12.875	1012A-47-7	377
	1.375	3.500	13.375	1012A-47-13	394
	1.875	4.000	14.375	1012A-47-17	415
	2.375	4.000	14.875	1012A-47-23	432
	2.875	4.000	15.375	1012A-47-27	448
	3.375	4.500	16.375	1012A-47-33	470
	3.875	4.500	16.875	1012A-47-37	486
	4.875	4.500	17.875	1012A-47-47	520
	5.875	4.500	18.875	1012A-47-57	553

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	0.875	2.500	8.875	1012A-17-7	268
	1.375	3.000	9.875	1012A-17-13	289
	1.875	3.500	10.875	1012A-17-17	311
	2.375	3.500	11.375	1012A-17-23	327
	2.875	4.000	12.375	1012A-17-27	349
	3.375	4.000	12.875	1012A-17-33	365
	3.875	4.000	13.375	1012A-17-37	382
	4.875	4.500	14.875	1012A-17-47	420
	5.875	4.500	15.875	1012A-17-57	453

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	0.875	3.000	10.875	1012A-33-7	322
	1.375	3.500	11.875	1012A-33-13	344
	1.875	3.500	12.375	1012A-33-17	361
	2.375	4.000	13.375	1012A-33-23	382
	2.875	4.000	13.875	1012A-33-27	399
	3.375	4.000	14.375	1012A-33-33	415
	3.875	4.500	15.375	1012A-33-37	437
	4.875	4.500	16.375	1012A-33-47	470
	5.875	4.500	17.375	1012A-33-57	503

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	0.875	3.500	13.875	1012A-57-7	410
	1.375	3.500	14.375	1012A-57-13	427
	1.875	4.000	15.375	1012A-57-17	448
	2.375	4.000	15.875	1012A-57-23	465
	2.875	4.000	16.375	1012A-57-27	482
	3.375	4.500	17.375	1012A-57-33	503
	3.875	4.500	17.875	1012A-57-37	520
	4.875	4.500	18.875	1012A-57-47	553
	5.875	4.500	19.875	1012A-57-57	586

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	SU SUPPORT PLATE THICKNESS	BCP BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

See Items 7 & 8 below.

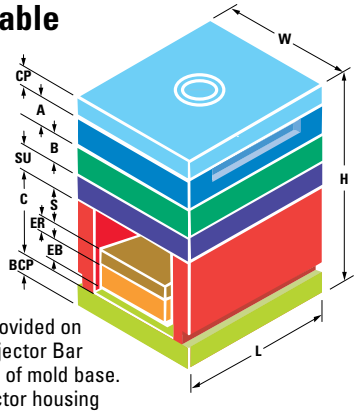
C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	S MAX. STROKE OF EJECTOR BAR
2.500	25	0.813
3.000	30	1.313
3.500	35	1.813
4.000	40	2.313
4.500	45	2.813
5.000	50	3.313
5.500	55	3.813
6.000	60	4.313

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
11.875	12
16.00	16
20.00	20
23.50	23
29.50	29

See Item 6 below.

Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

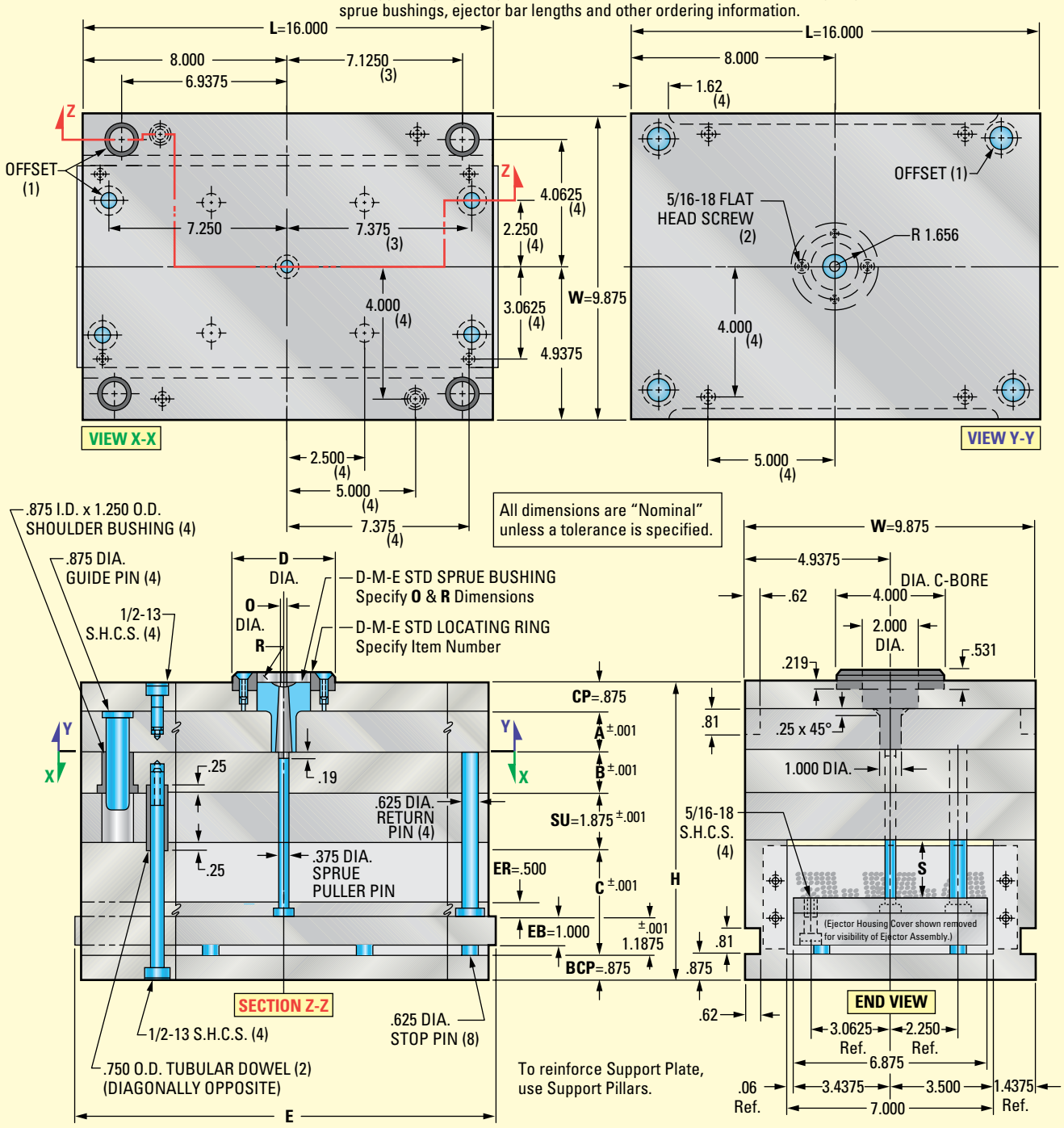


WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

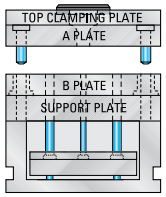
9⅞ x 16" A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

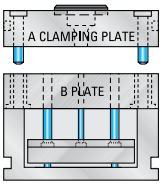


Mold Base Selections

A-Series Assembly



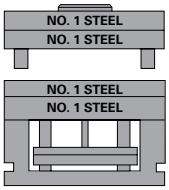
B-Series Assembly



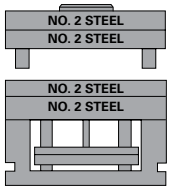
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

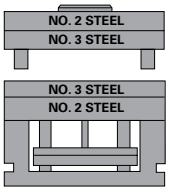
No. 1 Steel Assembly



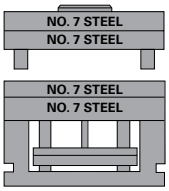
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

9⅞ x 16" A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
.875 (7/8)	0.875	2.500	7.875	1016A-7-7	316
	1.375	3.000	8.875	1016A-7-13	345
	1.875	3.000	9.375	1016A-7-17	367
	2.375	3.500	10.375	1016A-7-23	396
	2.875	3.500	10.875	1016A-7-27	418
	3.375	4.000	11.875	1016A-7-33	447
	3.875	4.000	12.375	1016A-7-37	470
	4.875	4.500	13.875	1016A-7-47	521
	5.875	4.500	14.875	1016A-7-57	566

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	0.875	3.000	9.875	1016A-23-7	389
	1.375	3.000	10.375	1016A-23-13	412
	1.875	3.500	11.375	1016A-23-17	441
	2.375	3.500	11.875	1016A-23-23	463
	2.875	4.000	12.875	1016A-23-27	492
	3.375	4.000	13.375	1016A-23-33	514
	3.875	4.000	13.875	1016A-23-37	537
	4.875	4.500	15.375	1016A-23-47	588
	5.875	4.500	16.375	1016A-23-57	633

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	0.875	3.000	11.375	1016A-37-7	457
	1.375	3.500	12.375	1016A-37-13	485
	1.875	3.500	12.875	1016A-37-17	508
	2.375	4.000	13.875	1016A-37-23	537
	2.875	4.000	14.375	1016A-37-27	559
	3.375	4.000	14.875	1016A-37-33	582
	3.875	4.500	15.875	1016A-37-37	610
	4.875	4.500	16.875	1016A-37-47	655
	5.875	4.500	17.875	1016A-37-57	700

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	0.875	2.500	8.375	1016A-13-7	338
	1.375	3.000	9.375	1016A-13-13	367
	1.875	3.000	9.875	1016A-13-17	389
	2.375	3.500	10.875	1016A-13-23	418
	2.875	3.500	11.375	1016A-13-27	441
	3.375	4.000	12.375	1016A-13-33	470
	3.875	4.000	12.875	1016A-13-37	492
	4.875	4.500	14.375	1016A-13-47	543
	5.875	4.500	15.375	1016A-13-57	588

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	0.875	3.000	10.375	1016A-27-7	412
	1.375	3.000	10.875	1016A-27-13	434
	1.875	3.500	11.875	1016A-27-17	463
	2.375	3.500	12.375	1016A-27-23	485
	2.875	4.000	13.375	1016A-27-27	514
	3.375	4.000	13.875	1016A-27-33	537
	3.875	4.000	14.375	1016A-27-37	559
	4.875	4.500	15.875	1016A-27-47	610
	5.875	4.500	16.875	1016A-27-57	655

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	0.875	3.500	12.875	1016A-47-7	508
	1.375	3.500	13.375	1016A-47-13	530
	1.875	4.000	14.375	1016A-47-17	559
	2.375	4.000	14.875	1016A-47-23	582
	2.875	4.000	15.375	1016A-47-27	604
	3.375	4.500	16.375	1016A-47-33	633
	3.875	4.500	16.875	1016A-47-37	655
	4.875	4.500	17.875	1016A-47-47	700
	5.875	4.500	18.875	1016A-47-57	745

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	0.875	2.500	8.875	1016A-17-7	361
	1.375	3.000	9.875	1016A-17-13	389
	1.875	3.500	10.875	1016A-17-17	418
	2.375	3.500	11.375	1016A-17-23	441
	2.875	4.000	12.375	1016A-17-27	470
	3.375	4.000	12.875	1016A-17-33	492
	3.875	4.000	13.375	1016A-17-37	514
	4.875	4.500	14.875	1016A-17-47	566
	5.875	4.500	15.875	1016A-17-57	610

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	0.875	3.000	10.875	1016A-33-7	434
	1.375	3.500	11.875	1016A-33-13	463
	1.875	3.500	12.375	1016A-33-17	485
	2.375	4.000	13.375	1016A-33-23	514
	2.875	4.000	13.875	1016A-33-27	537
	3.375	4.000	14.375	1016A-33-33	559
	3.875	4.500	15.375	1016A-33-37	588
	4.875	4.500	16.375	1016A-33-47	633
	5.875	4.500	17.375	1016A-33-57	678

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	0.875	3.500	13.875	1016A-57-7	553
	1.375	3.500	14.375	1016A-57-13	575
	1.875	4.000	15.375	1016A-57-17	604
	2.375	4.000	15.875	1016A-57-23	626
	2.875	4.000	16.375	1016A-57-27	649
	3.375	4.500	17.375	1016A-57-33	678
	3.875	4.500	17.875	1016A-57-37	700
	4.875	4.500	18.875	1016A-57-47	745
	5.875	4.500	19.875	1016A-57-57	789

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	SU SUPPORT PLATE THICKNESS	BCP BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

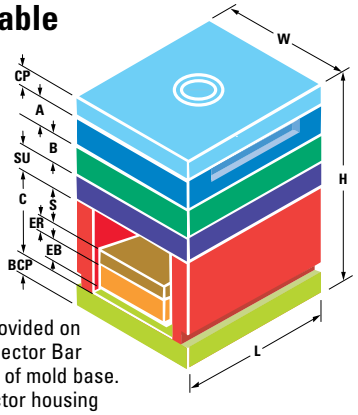
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	S MAX. STROKE OF EJECTOR BAR
2.500	25	0.813
3.000	30	1.313
3.500	35	1.813
4.000	40	2.313
4.500	45	2.813
5.000	50	3.313
5.500	55	3.813
6.000	60	4.313

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
16.00	16
20.00	20
23.50	23
29.50	29

See Item 6 below.



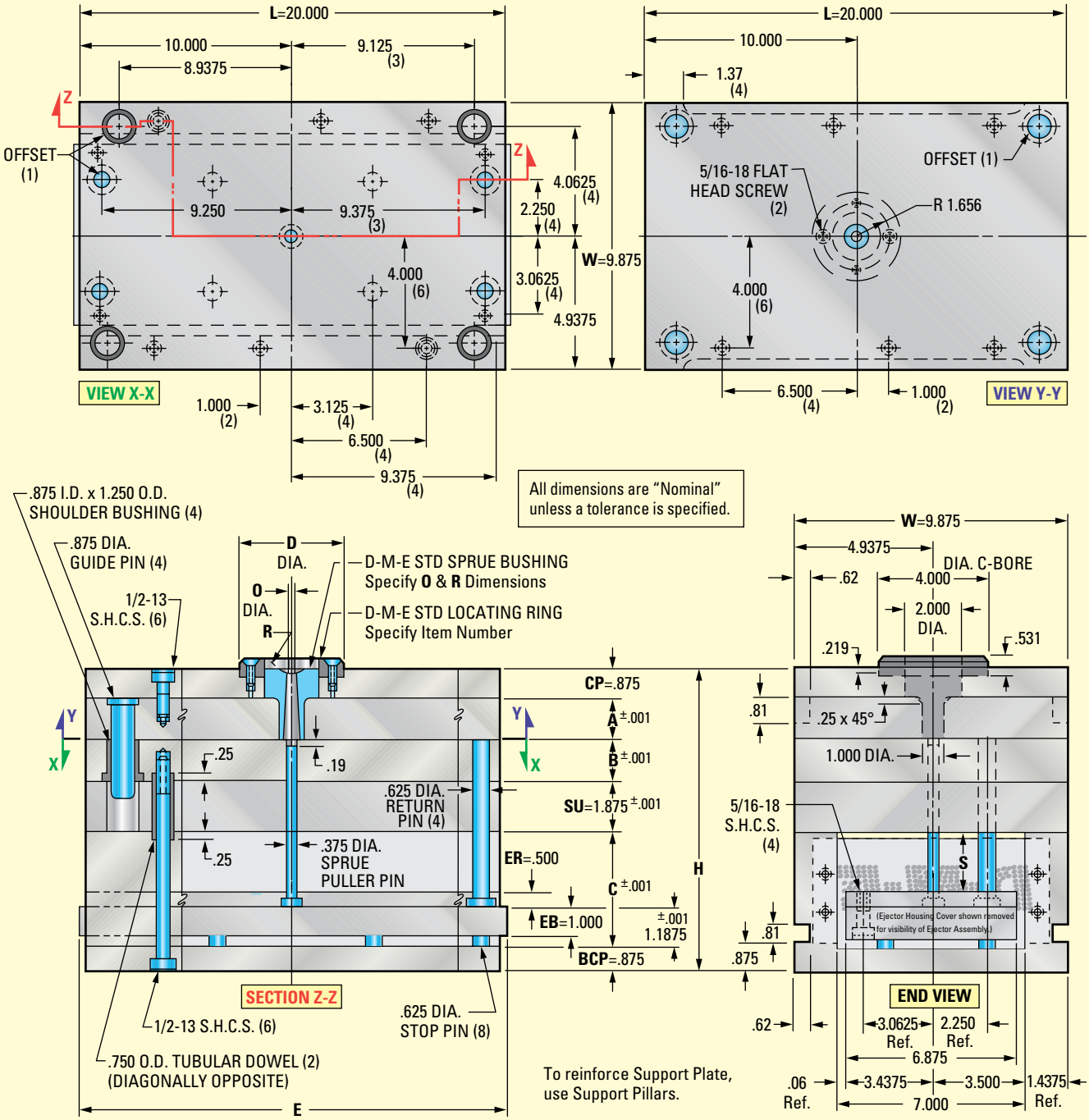
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

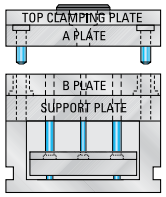
9⅞ x 20" A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

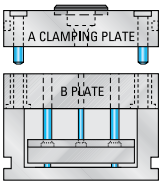


Mold Base Selections

A-Series Assembly



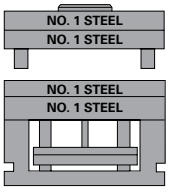
B-Series Assembly



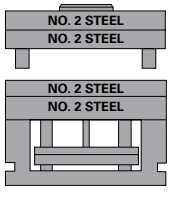
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

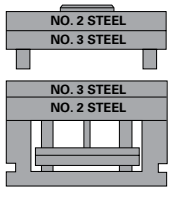
No. 1 Steel Assembly



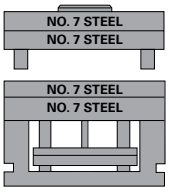
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

9⅞ x 20" A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
.875 (7/8)	0.875	2.500	7.875	1020A-7-7	395
	1.375	3.000	8.875	1020A-7-13	431
	1.875	3.000	9.375	1020A-7-17	459
	2.375	3.500	10.375	1020A-7-23	495
	2.875	3.500	10.875	1020A-7-27	523
	3.375	4.000	11.875	1020A-7-33	559
	3.875	4.000	12.375	1020A-7-37	587
	4.875	4.500	13.875	1020A-7-47	651
	5.875	4.500	14.875	1020A-7-57	707

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	0.875	3.000	9.875	1020A-23-7	487
	1.375	3.000	10.375	1020A-23-13	515
	1.875	3.500	11.375	1020A-23-17	551
	2.375	3.500	11.875	1020A-23-23	579
	2.875	4.000	12.875	1020A-23-27	615
	3.375	4.000	13.375	1020A-23-33	643
	3.875	4.000	13.875	1020A-23-37	671
	4.875	4.500	15.375	1020A-23-47	735
	5.875	4.500	16.375	1020A-23-57	791

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	0.875	3.000	11.375	1020A-37-7	571
	1.375	3.500	12.375	1020A-37-13	607
	1.875	3.500	12.875	1020A-37-17	635
	2.375	4.000	13.875	1020A-37-23	671
	2.875	4.000	14.375	1020A-37-27	699
	3.375	4.000	14.875	1020A-37-33	727
	3.875	4.500	15.875	1020A-37-37	763
	4.875	4.500	16.875	1020A-37-47	819
	5.875	4.500	17.875	1020A-37-57	875

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	0.875	2.500	8.375	1020A-13-7	423
	1.375	3.000	9.375	1020A-13-13	459
	1.875	3.000	9.875	1020A-13-17	487
	2.375	3.500	10.875	1020A-13-23	523
	2.875	3.500	11.375	1020A-13-27	551
	3.375	4.000	12.375	1020A-13-33	587
	3.875	4.000	12.875	1020A-13-37	615
	4.875	4.500	14.375	1020A-13-47	679
	5.875	4.500	15.375	1020A-13-57	735

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	0.875	3.000	10.375	1020A-27-7	515
	1.375	3.000	10.875	1020A-27-13	543
	1.875	3.500	11.875	1020A-27-17	579
	2.375	3.500	12.375	1020A-27-23	607
	2.875	4.000	13.375	1020A-27-27	643
	3.375	4.000	13.875	1020A-27-33	671
	3.875	4.000	14.375	1020A-27-37	699
	4.875	4.500	15.875	1020A-27-47	763
	5.875	4.500	16.875	1020A-27-57	819

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	0.875	3.500	12.875	1020A-47-7	635
	1.375	3.500	13.375	1020A-47-13	663
	1.875	4.000	14.375	1020A-47-17	699
	2.375	4.000	14.875	1020A-47-23	727
	2.875	4.000	15.375	1020A-47-27	755
	3.375	4.500	16.375	1020A-47-33	791
	3.875	4.500	16.875	1020A-47-37	819
	4.875	4.500	17.875	1020A-47-47	875
	5.875	4.500	18.875	1020A-47-57	931

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	0.875	2.500	8.875	1020A-17-7	451
	1.375	3.000	9.875	1020A-17-13	487
	1.875	3.500	10.875	1020A-17-17	523
	2.375	3.500	11.375	1020A-17-23	551
	2.875	4.000	12.375	1020A-17-27	587
	3.375	4.000	12.875	1020A-17-33	615
	3.875	4.000	13.375	1020A-17-37	643
	4.875	4.500	14.875	1020A-17-47	707
	5.875	4.500	15.875	1020A-17-57	763

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	0.875	3.000	10.875	1020A-33-7	543
	1.375	3.500	11.875	1020A-33-13	579
	1.875	3.500	12.375	1020A-33-17	607
	2.375	4.000	13.375	1020A-33-23	643
	2.875	4.000	13.875	1020A-33-27	671
	3.375	4.000	14.375	1020A-33-33	699
	3.875	4.500	15.375	1020A-33-37	735
	4.875	4.500	16.375	1020A-33-47	791
	5.875	4.500	17.375	1020A-33-57	847

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	0.875	3.500	13.875	1020A-57-7	691
	1.375	3.500	14.375	1020A-57-13	719
	1.875	4.000	15.375	1020A-57-17	755
	2.375	4.000	15.875	1020A-57-23	783
	2.875	4.000	16.375	1020A-57-27	811
	3.375	4.500	17.375	1020A-57-33	847
	3.875	4.500	17.875	1020A-57-37	875
	4.875	4.500	18.875	1020A-57-47	931
	5.875	4.500	19.875	1020A-57-57	987

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

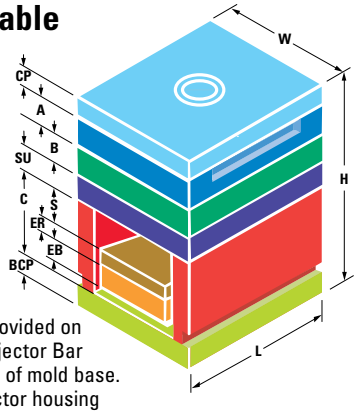
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
2.500	25	0.813
3.000	30	1.313
3.500	35	1.813
4.000	40	2.313
4.500	45	2.813
5.000	50	3.313
5.500	55	3.813
6.000	60	4.313

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
20.00	20
23.50	23
29.50	29

See Item 6 below.



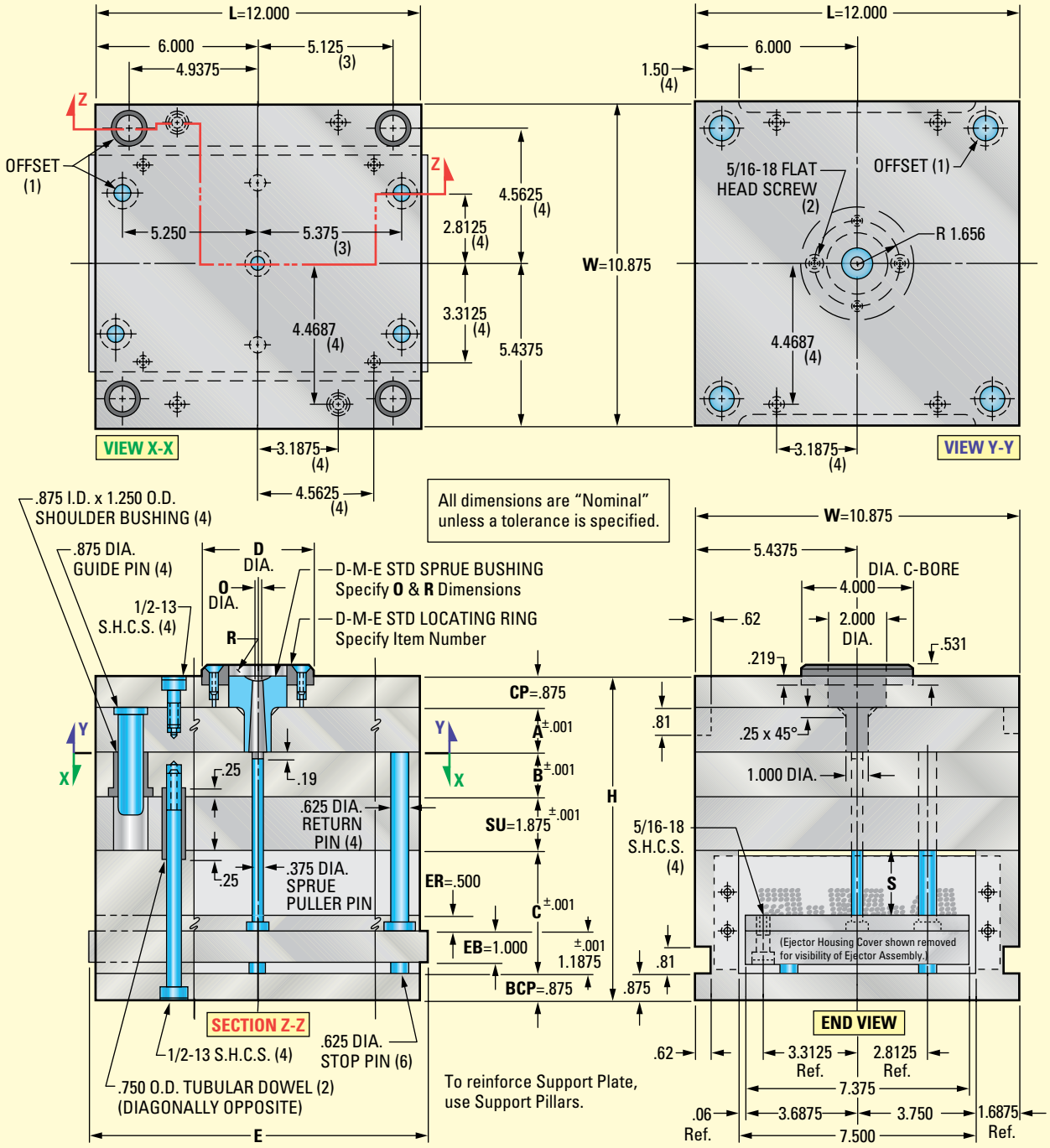
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

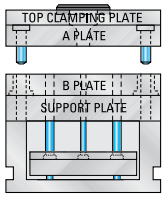
10⅞ x 12" A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

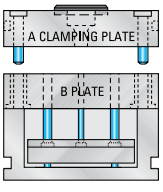


Mold Base Selections

A-Series Assembly



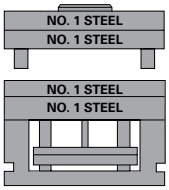
B-Series Assembly



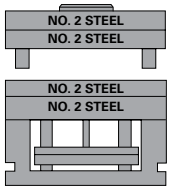
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

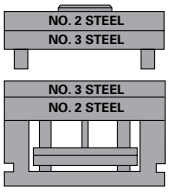
No. 1 Steel Assembly



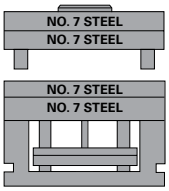
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

10⅞ x 12" A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
.875 (7/8)	0.875	2.500	7.875	1112A-7-7	262
	1.375	3.000	8.875	1112A-7-13	286
	1.875	3.000	9.375	1112A-7-17	305
	2.375	3.500	10.375	1112A-7-23	329
	2.875	3.500	10.875	1112A-7-27	347
	3.375	4.000	11.875	1112A-7-33	372
	3.875	4.000	12.375	1112A-7-37	390
	4.875	4.500	13.875	1112A-7-47	433
	5.875	4.500	14.875	1112A-7-57	470

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	0.875	3.000	9.875	1112A-23-7	323
	1.375	3.000	10.375	1112A-23-13	342
	1.875	3.500	11.375	1112A-23-17	366
	2.375	3.500	11.875	1112A-23-23	384
	2.875	4.000	12.875	1112A-23-27	409
	3.375	4.000	13.375	1112A-23-33	427
	3.875	4.000	13.875	1112A-23-37	446
	4.875	4.500	15.375	1112A-23-47	488
	5.875	4.500	16.375	1112A-23-57	525

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	0.875	3.000	11.375	1112A-37-7	379
	1.375	3.500	12.375	1112A-37-13	403
	1.875	3.500	12.875	1112A-37-17	421
	2.375	4.000	13.875	1112A-37-23	446
	2.875	4.000	14.375	1112A-37-27	464
	3.375	4.000	14.875	1112A-37-33	483
	3.875	4.500	15.875	1112A-37-37	507
	4.875	4.500	16.875	1112A-37-47	544
	5.875	4.500	17.875	1112A-37-57	581

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	0.875	2.500	8.375	1112A-13-7	281
	1.375	3.000	9.375	1112A-13-13	305
	1.875	3.000	9.875	1112A-13-17	323
	2.375	3.500	10.875	1112A-13-23	347
	2.875	3.500	11.375	1112A-13-27	366
	3.375	4.000	12.375	1112A-13-33	390
	3.875	4.000	12.875	1112A-13-37	409
	4.875	4.500	14.375	1112A-13-47	451
	5.875	4.500	15.375	1112A-13-57	488

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	0.875	3.000	10.375	1112A-27-7	342
	1.375	3.000	10.875	1112A-27-13	361
	1.875	3.500	11.875	1112A-27-17	384
	2.375	3.500	12.375	1112A-27-23	403
	2.875	4.000	13.375	1112A-27-27	427
	3.375	4.000	13.875	1112A-27-33	446
	3.875	4.000	14.375	1112A-27-37	464
	4.875	4.500	15.875	1112A-27-47	507
	5.875	4.500	16.875	1112A-27-57	544

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	0.875	3.500	12.875	1112A-47-7	421
	1.375	3.500	13.375	1112A-47-13	440
	1.875	4.000	14.375	1112A-47-17	464
	2.375	4.000	14.875	1112A-47-23	483
	2.875	4.000	15.375	1112A-47-27	501
	3.375	4.500	16.375	1112A-47-33	525
	3.875	4.500	16.875	1112A-47-37	544
	4.875	4.500	17.875	1112A-47-47	581
	5.875	4.500	18.875	1112A-47-57	618

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	0.875	2.500	8.875	1112A-17-7	299
	1.375	3.000	9.875	1112A-17-13	323
	1.875	3.500	10.875	1112A-17-17	347
	2.375	3.500	11.375	1112A-17-23	366
	2.875	4.000	12.375	1112A-17-27	390
	3.375	4.000	12.875	1112A-17-33	409
	3.875	4.000	13.375	1112A-17-37	427
	4.875	4.500	14.875	1112A-17-47	470
	5.875	4.500	15.875	1112A-17-57	507

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	0.875	3.000	10.875	1112A-33-7	360
	1.375	3.500	11.875	1112A-33-13	384
	1.875	3.500	12.375	1112A-33-17	403
	2.375	4.000	13.375	1112A-33-23	427
	2.875	4.000	13.875	1112A-33-27	446
	3.375	4.000	14.375	1112A-33-33	464
	3.875	4.500	15.375	1112A-33-37	488
	4.875	4.500	16.375	1112A-33-47	525
	5.875	4.500	17.375	1112A-33-57	563

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	0.875	3.500	13.875	1112A-57-7	458
	1.375	3.500	14.375	1112A-57-13	477
	1.875	4.000	15.375	1112A-57-17	501
	2.375	4.000	15.875	1112A-57-23	520
	2.875	4.000	16.375	1112A-57-27	538
	3.375	4.500	17.375	1112A-57-33	562
	3.875	4.500	17.875	1112A-57-37	581
	4.875	4.500	18.875	1112A-57-47	618
	5.875	4.500	19.875	1112A-57-57	655

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	SU SUPPORT PLATE THICKNESS	BCP BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

See Items 7 & 8 below.

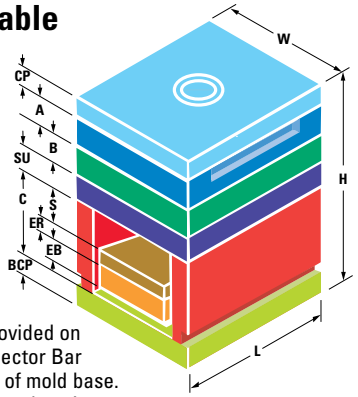
C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	S MAX. STROKE OF EJECTOR BAR
2.500	25	0.813
3.000	30	1.313
3.500	35	1.813
4.000	40	2.313
4.500	45	2.813
5.000	50	3.313
5.500	55	3.813
6.000	60	4.313

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
12.00	12
14.00	14
18.00	18
23.50	23
29.50	29

See Item 6 below.

Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

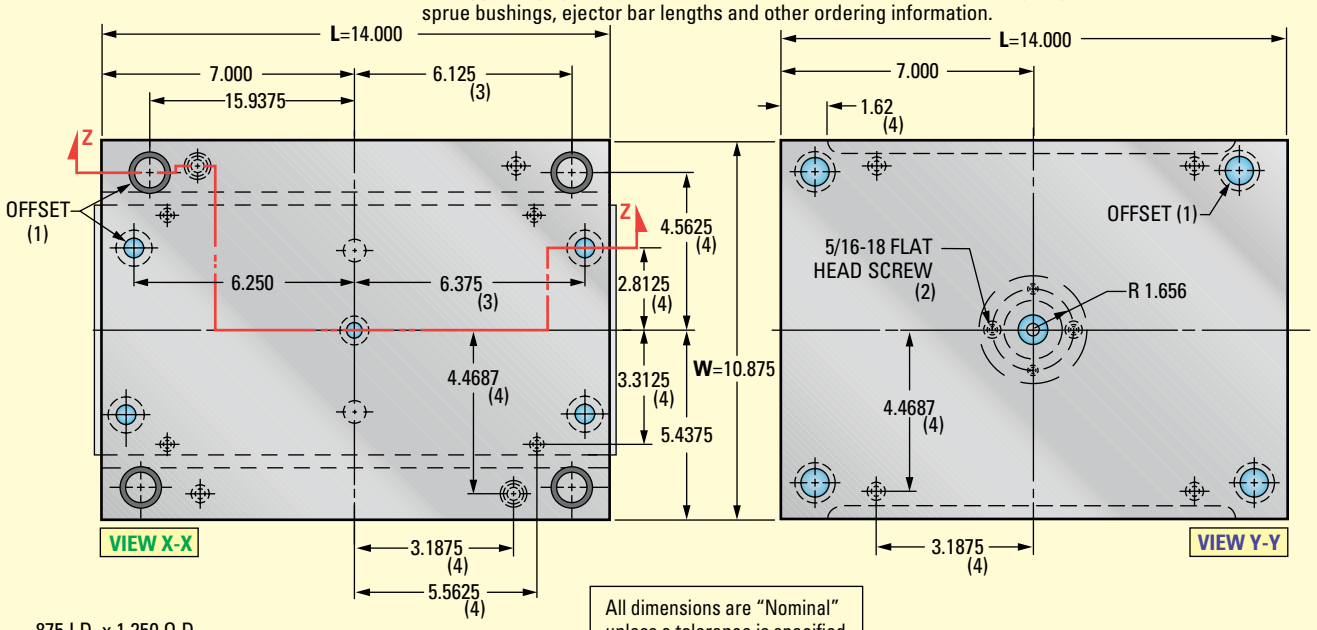


WHEN ORDERING, PLEASE SPECIFY:

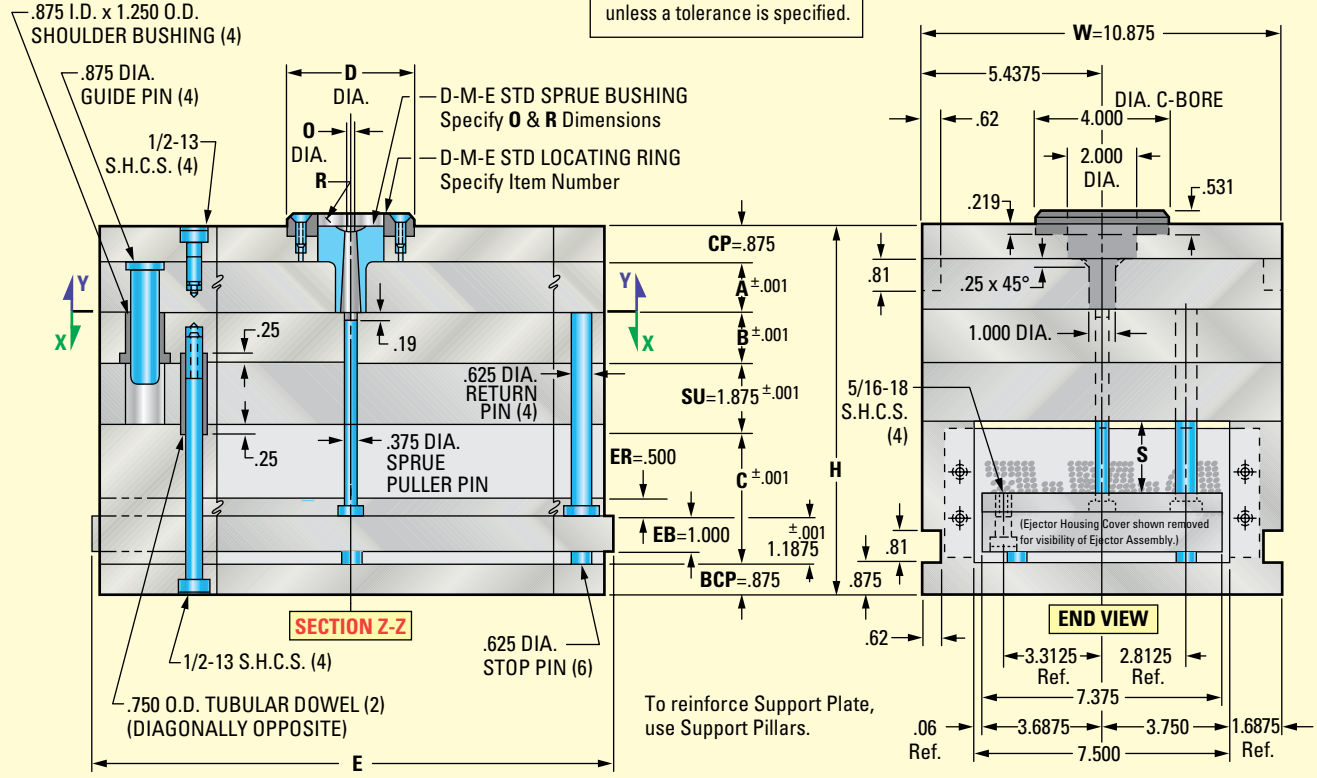
1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

10⅞ x 14" A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

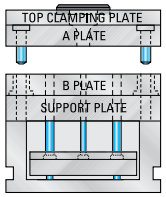


All dimensions are "Nominal" unless a tolerance is specified.

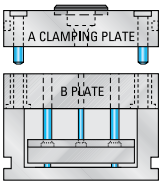


Mold Base Selections

A-Series Assembly



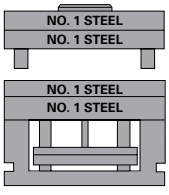
B-Series Assembly



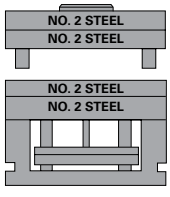
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

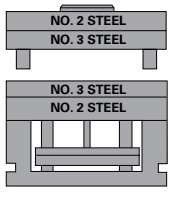
No. 1 Steel Assembly



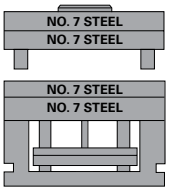
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

10⅞ x 14" A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
.875 (7/8)	0.875	2.500	7.875	1114A-7-7	306
	1.375	3.000	8.875	1114A-7-13	334
	1.875	3.000	9.375	1114A-7-17	355
	2.375	3.500	10.375	1114A-7-23	384
	2.875	3.500	10.875	1114A-7-27	405
	3.375	4.000	11.875	1114A-7-33	434
	3.875	4.000	12.375	1114A-7-37	455
	4.875	4.500	13.875	1114A-7-47	505
	5.875	4.500	14.875	1114A-7-57	548

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	0.875	3.000	9.875	1114A-23-7	377
	1.375	3.000	10.375	1114A-23-13	399
	1.875	3.500	11.375	1114A-23-17	427
	2.375	3.500	11.875	1114A-23-23	448
	2.875	4.000	12.875	1114A-23-27	477
	3.375	4.000	13.375	1114A-23-33	498
	3.875	4.000	13.875	1114A-23-37	520
	4.875	4.500	15.375	1114A-23-47	570
	5.875	4.500	16.375	1114A-23-57	613

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	0.875	3.000	11.375	1114A-37-7	442
	1.375	3.500	12.375	1114A-37-13	470
	1.875	3.500	12.875	1114A-37-17	492
	2.375	4.000	13.875	1114A-37-23	520
	2.875	4.000	14.375	1114A-37-27	541
	3.375	4.000	14.875	1114A-37-33	563
	3.875	4.500	15.875	1114A-37-37	591
	4.875	4.500	16.875	1114A-37-47	634
	5.875	4.500	17.875	1114A-37-57	678

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	0.875	2.500	8.375	1114A-13-7	327
	1.375	3.000	9.375	1114A-13-13	355
	1.875	3.000	9.875	1114A-13-17	377
	2.375	3.500	10.875	1114A-13-23	405
	2.875	3.500	11.375	1114A-13-27	427
	3.375	4.000	12.375	1114A-13-33	455
	3.875	4.000	12.875	1114A-13-37	477
	4.875	4.500	14.375	1114A-13-47	527
	5.875	4.500	15.375	1114A-13-57	570

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	0.875	3.000	10.375	1114A-27-7	399
	1.375	3.000	10.875	1114A-27-13	420
	1.875	3.500	11.875	1114A-27-17	448
	2.375	3.500	12.375	1114A-27-23	470
	2.875	4.000	13.375	1114A-27-27	498
	3.375	4.000	13.875	1114A-27-33	520
	3.875	4.000	14.375	1114A-27-37	541
	4.875	4.500	15.875	1114A-27-47	591
	5.875	4.500	16.875	1114A-27-57	634

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	0.875	3.500	12.875	1114A-47-7	492
	1.375	3.500	13.375	1114A-47-13	513
	1.875	4.000	14.375	1114A-47-17	541
	2.375	4.000	14.875	1114A-47-23	563
	2.875	4.000	15.375	1114A-47-27	585
	3.375	4.500	16.375	1114A-47-33	613
	3.875	4.500	16.875	1114A-47-37	634
	4.875	4.500	17.875	1114A-47-47	678
	5.875	4.500	18.875	1114A-47-57	721

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	0.875	2.500	8.875	1114A-17-7	349
	1.375	3.000	9.875	1114A-17-13	377
	1.875	3.500	10.875	1114A-17-17	405
	2.375	3.500	11.375	1114A-17-23	427
	2.875	4.000	12.375	1114A-17-27	455
	3.375	4.000	12.875	1114A-17-33	477
	3.875	4.000	13.375	1114A-17-37	498
	4.875	4.500	14.875	1114A-17-47	548
	5.875	4.500	15.875	1114A-17-57	591

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	0.875	3.000	10.875	1114A-33-7	420
	1.375	3.500	11.875	1114A-33-13	448
	1.875	3.500	12.375	1114A-33-17	470
	2.375	4.000	13.375	1114A-33-23	498
	2.875	4.000	13.875	1114A-33-27	520
	3.375	4.000	14.375	1114A-33-33	542
	3.875	4.500	15.375	1114A-33-37	570
	4.875	4.500	16.375	1114A-33-47	613
	5.875	4.500	17.375	1114A-33-57	656

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	0.875	3.500	13.875	1114A-57-7	535
	1.375	3.500	14.375	1114A-57-13	556
	1.875	4.000	15.375	1114A-57-17	585
	2.375	4.000	15.875	1114A-57-23	606
	2.875	4.000	16.375	1114A-57-27	628
	3.375	4.500	17.375	1114A-57-33	656
	3.875	4.500	17.875	1114A-57-37	678
	4.875	4.500	18.875	1114A-57-47	721
	5.875	4.500	19.875	1114A-57-57	764

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	SU SUPPORT PLATE THICKNESS	BCP BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

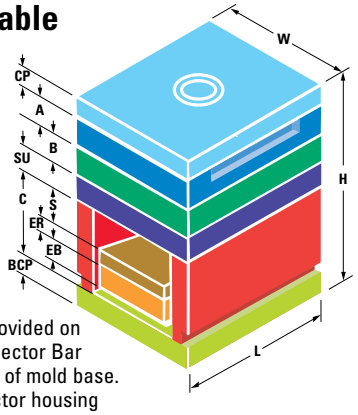
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	S MAX. STROKE OF EJECTOR BAR
2.500	25	0.813
3.000	30	1.313
3.500	35	1.813
4.000	40	2.313
4.500	45	2.813
5.000	50	3.313
5.500	55	3.813
6.000	60	4.313

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
14.00	14
18.00	18
23.50	23
29.50	29

See Item 6 below.



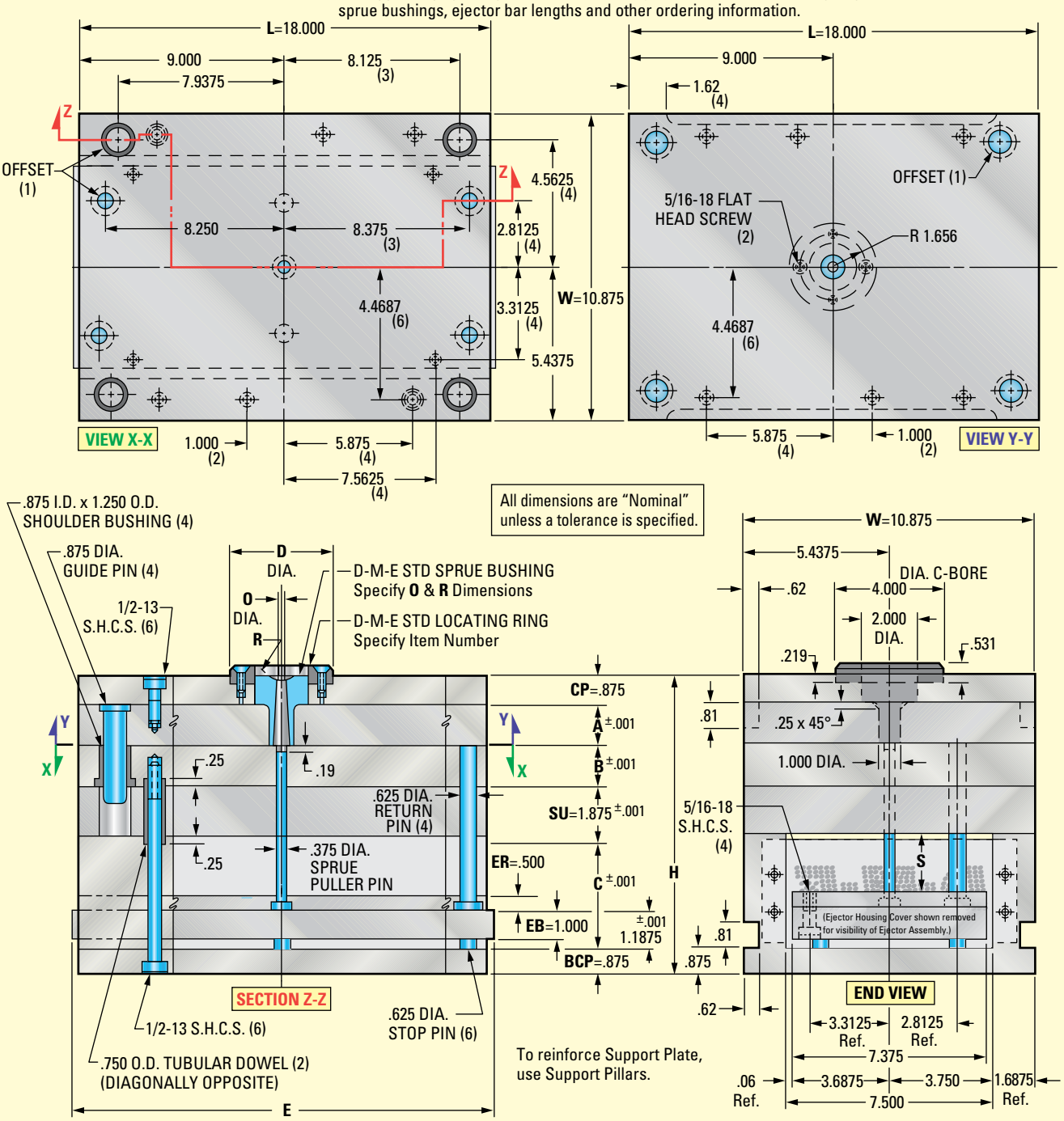
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

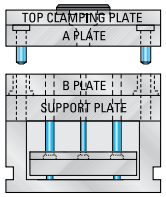
10⅞ x 18" A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

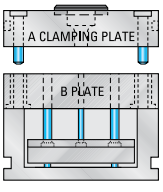


Mold Base Selections

A-Series Assembly



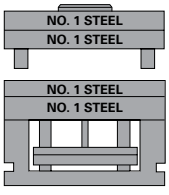
B-Series Assembly



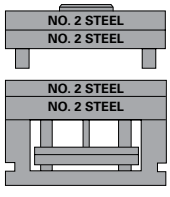
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

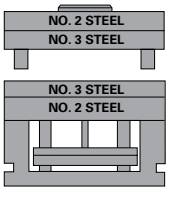
No. 1 Steel Assembly



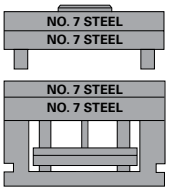
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

10⅞ x 18" A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
.875 (7/8)	0.875	2.500	7.875	1118A-7-7	393
	1.375	3.000	8.875	1118A-7-13	429
	1.875	3.000	9.375	1118A-7-17	457
	2.375	3.500	10.375	1118A-7-23	493
	2.875	3.500	10.875	1118A-7-27	521
	3.375	4.000	11.875	1118A-7-33	557
	3.875	4.000	12.375	1118A-7-37	585
	4.875	4.500	13.875	1118A-7-47	649
	5.875	4.500	14.875	1118A-7-57	705

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	0.875	3.000	9.875	1118A-23-7	485
	1.375	3.000	10.375	1118A-23-13	513
	1.875	3.500	11.375	1118A-23-17	549
	2.375	3.500	11.875	1118A-23-23	576
	2.875	4.000	12.875	1118A-23-27	613
	3.375	4.000	13.375	1118A-23-33	641
	3.875	4.000	13.875	1118A-23-37	668
	4.875	4.500	15.375	1118A-23-47	732
	5.875	4.500	16.375	1118A-23-57	788

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	0.875	3.000	11.375	1118A-37-7	568
	1.375	3.500	12.375	1118A-37-13	604
	1.875	3.500	12.875	1118A-37-17	632
	2.375	4.000	13.875	1118A-37-23	668
	2.875	4.000	14.375	1118A-37-27	696
	3.375	4.000	14.875	1118A-37-33	724
	3.875	4.500	15.875	1118A-37-37	760
	4.875	4.500	16.875	1118A-37-47	816
	5.875	4.500	17.875	1118A-37-57	871

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	0.875	2.500	8.375	1118A-13-7	421
	1.375	3.000	9.375	1118A-13-13	457
	1.875	3.000	9.875	1118A-13-17	485
	2.375	3.500	10.875	1118A-13-23	521
	2.875	3.500	11.375	1118A-13-27	549
	3.375	4.000	12.375	1118A-13-33	585
	3.875	4.000	12.875	1118A-13-37	613
	4.875	4.500	14.375	1118A-13-47	677
	5.875	4.500	15.375	1118A-13-57	732

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	0.875	3.000	10.375	1118A-27-7	512
	1.375	3.000	10.875	1118A-27-13	540
	1.875	3.500	11.875	1118A-27-17	576
	2.375	3.500	12.375	1118A-27-23	604
	2.875	4.000	13.375	1118A-27-27	641
	3.375	4.000	13.875	1118A-27-33	668
	3.875	4.000	14.375	1118A-27-37	696
	4.875	4.500	15.875	1118A-27-47	760
	5.875	4.500	16.875	1118A-27-57	816

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	0.875	3.500	12.875	1118A-47-7	632
	1.375	3.500	13.375	1118A-47-13	660
	1.875	4.000	14.375	1118A-47-17	696
	2.375	4.000	14.875	1118A-47-23	724
	2.875	4.000	15.375	1118A-47-27	751
	3.375	4.500	16.375	1118A-47-33	788
	3.875	4.500	16.875	1118A-47-37	816
	4.875	4.500	17.875	1118A-47-47	871
	5.875	4.500	18.875	1118A-47-57	926

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	0.875	2.500	8.875	1118A-17-7	448
	1.375	3.000	9.875	1118A-17-13	485
	1.875	3.500	10.875	1118A-17-17	521
	2.375	3.500	11.375	1118A-17-23	549
	2.875	4.000	12.375	1118A-17-27	585
	3.375	4.000	12.875	1118A-17-33	613
	3.875	4.000	13.375	1118A-17-37	641
	4.875	4.500	14.875	1118A-17-47	705
	5.875	4.500	15.875	1118A-17-57	760

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	0.875	3.000	10.875	1118A-33-7	540
	1.375	3.500	11.875	1118A-33-13	576
	1.875	3.500	12.375	1118A-33-17	604
	2.375	4.000	13.375	1118A-33-23	641
	2.875	4.000	13.875	1118A-33-27	668
	3.375	4.000	14.375	1118A-33-33	696
	3.875	4.500	15.375	1118A-33-37	732
	4.875	4.500	16.375	1118A-33-47	788
	5.875	4.500	17.375	1118A-33-57	843

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	0.875	3.500	13.875	1118A-57-7	687
	1.375	3.500	14.375	1118A-57-13	715
	1.875	4.000	15.375	1118A-57-17	751
	2.375	4.000	15.875	1118A-57-23	779
	2.875	4.000	16.375	1118A-57-27	807
	3.375	4.500	17.375	1118A-57-33	843
	3.875	4.500	17.875	1118A-57-37	871
	4.875	4.500	18.875	1118A-57-47	926
	5.875	4.500	19.875	1118A-57-57	982

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

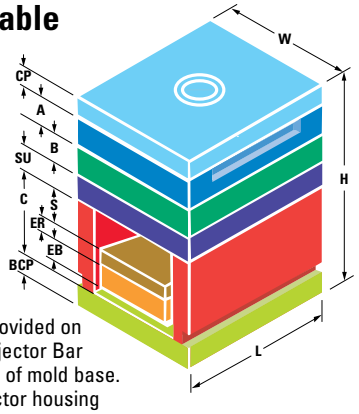
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
2.500	25	0.813
3.000	30	1.313
3.500	35	1.813
4.000	40	2.313
4.500	45	2.813
5.000	50	3.313
5.500	55	3.813
6.000	60	4.313

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
18.00	18
23.50	23
29.50	29

See Item 6 below.



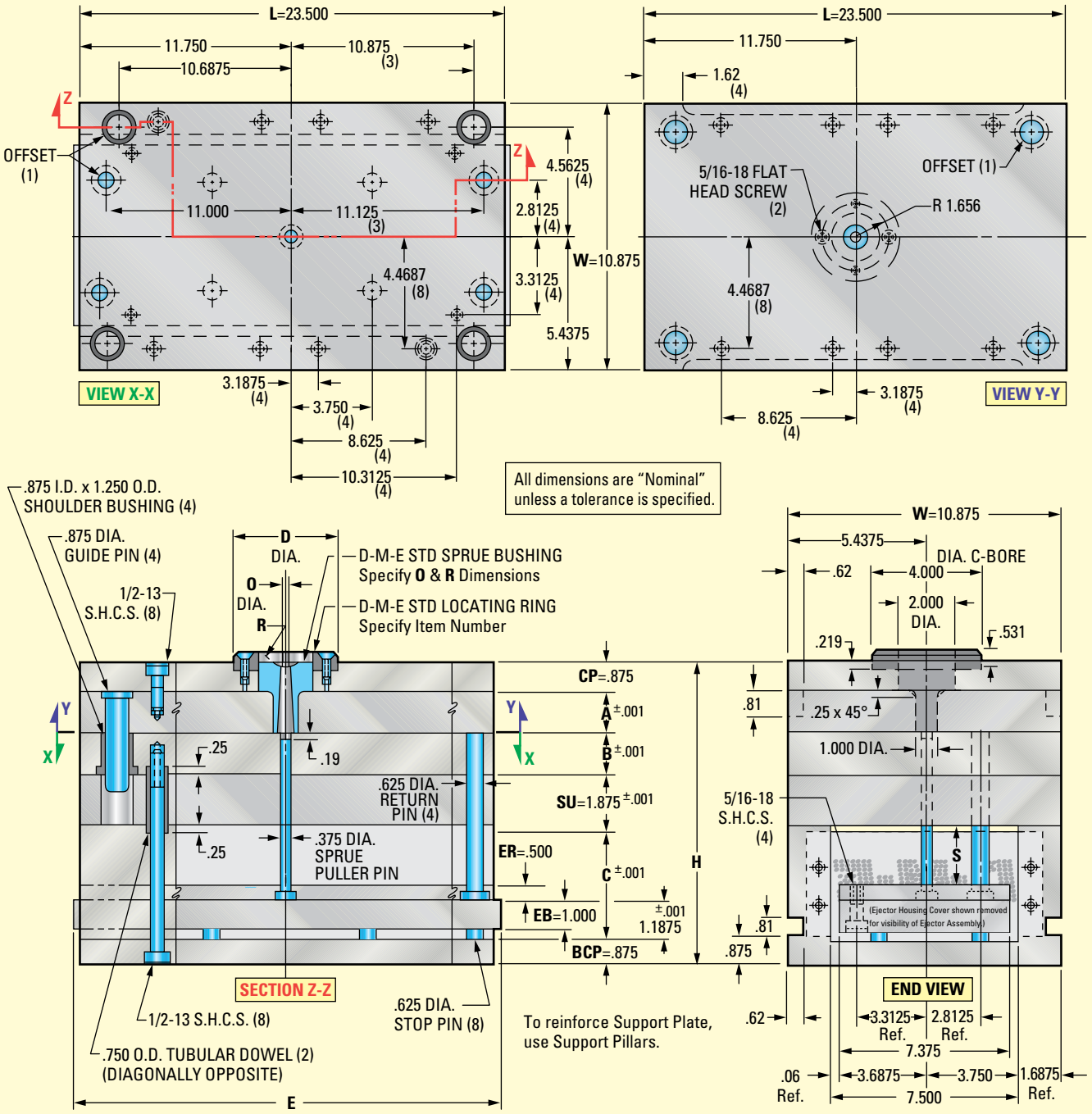
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

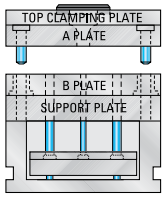
10⅞ x 23½ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

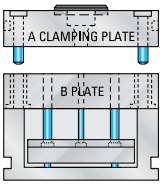


Mold Base Selections

A-Series Assembly



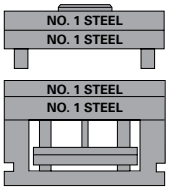
B-Series Assembly



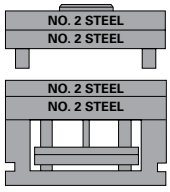
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

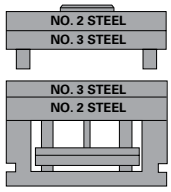
No. 1 Steel Assembly



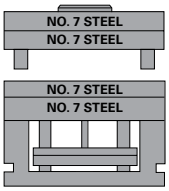
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

10⅞ x 23½ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	9.375	1123A-13-13	596
	1.875	3.000	9.875	1123A-13-17	633
	2.375	3.500	10.875	1123A-13-23	680
	2.875	3.500	11.375	1123A-13-27	716
	3.375	4.000	12.375	1123A-13-33	764
	3.875	4.000	12.875	1123A-13-37	800
	4.875	4.500	14.375	1123A-13-47	883
	5.875	4.500	15.375	1123A-13-57	956

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.000	10.875	1123A-27-13	705
	1.875	3.500	11.875	1123A-27-17	752
	2.375	3.500	12.375	1123A-27-23	789
	2.875	4.000	13.375	1123A-27-27	836
	3.375	4.000	13.875	1123A-27-33	872
	3.875	4.000	14.375	1123A-27-37	908
	4.875	4.500	15.875	1123A-27-47	992
	5.875	4.500	16.875	1123A-27-57	1063

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	3.500	13.375	1123A-47-13	861
	1.875	4.000	14.375	1123A-47-17	908
	2.375	4.000	14.875	1123A-47-23	945
	2.875	4.000	15.375	1123A-47-27	981
	3.375	4.500	16.375	1123A-47-33	1028
	3.875	4.500	16.875	1123A-47-37	1064
	4.875	4.500	17.875	1123A-47-47	1137
	5.875	4.500	18.875	1123A-47-57	1209

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	9.875	1123A-17-13	633
	1.875	3.500	10.875	1123A-17-17	680
	2.375	3.500	11.375	1123A-17-23	716
	2.875	4.000	12.375	1123A-17-27	764
	3.375	4.000	12.875	1123A-17-33	800
	3.875	4.000	13.375	1123A-17-37	836
	4.875	4.500	14.875	1123A-17-47	920
	5.875	4.500	15.875	1123A-17-57	992

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	3.500	11.875	1123A-33-13	752
	1.875	3.500	12.375	1123A-33-17	789
	2.375	4.000	13.375	1123A-33-23	836
	2.875	4.000	13.875	1123A-33-27	872
	3.375	4.000	14.375	1123A-33-33	908
	3.875	4.500	15.375	1123A-33-37	956
	4.875	4.500	16.375	1123A-33-47	1028
	5.875	4.500	17.375	1123A-33-57	1101

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	3.500	14.375	1123A-57-13	933
	1.875	4.000	15.375	1123A-57-17	981
	2.375	4.000	15.875	1123A-57-23	1017
	2.875	4.000	16.375	1123A-57-27	1053
	3.375	4.500	17.375	1123A-57-33	1101
	3.875	4.500	17.875	1123A-57-37	1137
	4.875	4.500	18.875	1123A-57-47	1209
	5.875	4.500	19.875	1123A-57-57	1282

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.000	10.375	1123A-23-13	669
	1.875	3.500	11.375	1123A-23-17	716
	2.375	3.500	11.875	1123A-23-23	752
	2.875	4.000	12.875	1123A-23-27	800
	3.375	4.000	13.375	1123A-23-33	836
	3.875	4.000	13.875	1123A-23-37	872
	4.875	4.500	15.375	1123A-23-47	956
	5.875	4.500	16.375	1123A-23-57	1028

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	3.500	12.375	1123A-37-13	789
	1.875	3.500	12.875	1123A-37-17	825
	2.375	4.000	13.875	1123A-37-23	872
	2.875	4.000	14.375	1123A-37-27	908
	3.375	4.000	14.875	1123A-37-33	945
	3.875	4.500	15.875	1123A-37-37	992
	4.875	4.500	16.875	1123A-37-47	1064
	5.875	4.500	17.875	1123A-37-57	1137

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

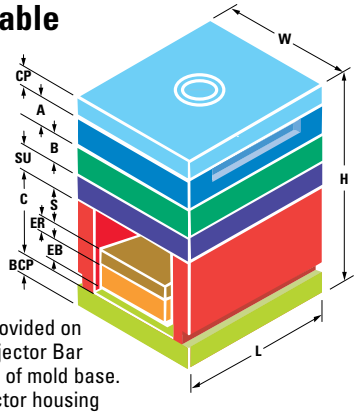
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.313
3.500	35	1.813
4.000	40	2.313
4.500	45	2.813
5.000	50	3.313
5.500	55	3.813
6.000	60	4.313

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
23.50	23
29.50	29

See Item 6 below.



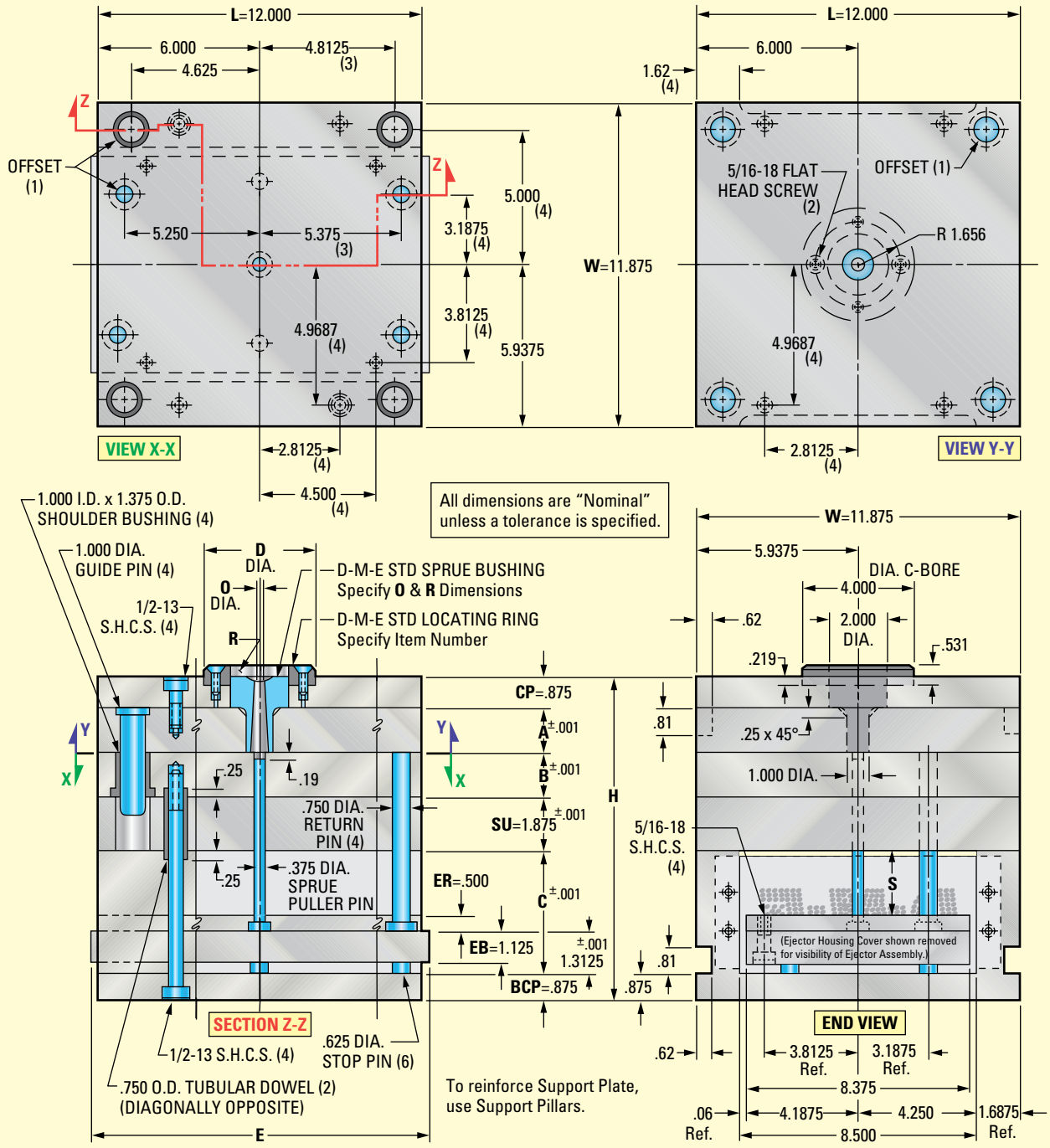
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

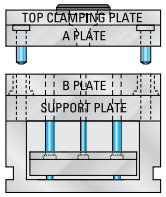
11⅞ x 12" A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

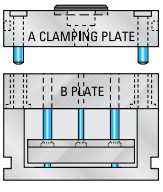


Mold Base Selections

A-Series Assembly



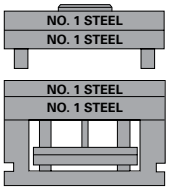
B-Series Assembly



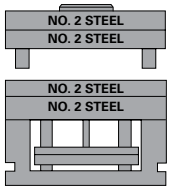
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

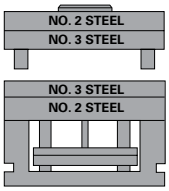
No. 1 Steel Assembly



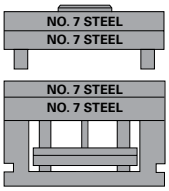
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

11⅞ x 12" A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
.875 (7/8)	0.875	3.000	8.375	1212A-7-7	295
	1.375	3.000	8.875	1212A-7-13	315
	1.875	3.000	9.375	1212A-7-17	335
	2.375	3.500	10.375	1212A-7-23	361
	2.875	3.500	10.875	1212A-7-27	381
	3.375	4.000	11.875	1212A-7-33	407
	3.875	4.000	12.375	1212A-7-37	427
	4.875	4.500	13.875	1212A-7-47	473
	5.875	4.500	14.875	1212A-7-57	514

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	0.875	3.000	9.875	1212A-23-7	355
	1.375	3.500	10.875	1212A-23-13	381
	1.875	3.500	11.375	1212A-23-17	401
	2.375	3.500	11.875	1212A-23-23	422
	2.875	4.000	12.875	1212A-23-27	448
	3.375	4.000	13.375	1212A-23-33	468
	3.875	4.000	13.875	1212A-23-37	488
	4.875	4.500	15.375	1212A-23-47	534
	5.875	4.500	16.375	1212A-23-57	574

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	0.875	3.500	11.875	1212A-37-7	422
	1.375	3.500	12.375	1212A-37-13	442
	1.875	4.000	13.375	1212A-37-17	468
	2.375	4.500	14.375	1212A-37-23	494
	2.875	4.500	14.875	1212A-37-27	514
	3.375	4.500	15.375	1212A-37-33	534
	3.875	4.500	15.875	1212A-37-37	554
	4.875	4.500	16.875	1212A-37-47	595
	5.875	4.500	17.875	1212A-37-57	635

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	0.875	3.000	8.875	1212A-13-7	315
	1.375	3.000	9.375	1212A-13-13	335
	1.875	3.000	9.875	1212A-13-17	355
	2.375	3.500	10.875	1212A-13-23	381
	2.875	3.500	11.375	1212A-13-27	401
	3.375	4.000	12.375	1212A-13-33	427
	3.875	4.000	12.875	1212A-13-37	448
	4.875	4.500	14.375	1212A-13-47	494
	5.875	4.500	15.375	1212A-13-57	534

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	0.875	3.000	10.375	1212A-27-7	375
	1.375	3.500	11.375	1212A-27-13	401
	1.875	3.500	11.875	1212A-27-17	422
	2.375	3.500	12.375	1212A-27-23	442
	2.875	4.000	13.375	1212A-27-27	468
	3.375	4.000	13.875	1212A-27-33	488
	3.875	4.000	14.375	1212A-27-37	508
	4.875	4.500	15.875	1212A-27-47	554
	5.875	4.500	16.875	1212A-27-57	595

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	0.875	3.500	12.875	1212A-47-7	462
	1.375	3.500	13.375	1212A-47-13	482
	1.875	4.000	14.375	1212A-47-17	508
	2.375	4.500	15.375	1212A-47-23	534
	2.875	4.500	15.875	1212A-47-27	554
	3.375	4.500	16.375	1212A-47-33	574
	3.875	4.500	16.875	1212A-47-37	595
	4.875	4.500	17.875	1212A-47-47	635
	5.875	4.500	18.875	1212A-47-57	675

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	0.875	3.000	9.375	1212A-17-7	335
	1.375	3.000	9.875	1212A-17-13	355
	1.875	3.000	10.375	1212A-17-17	375
	2.375	3.500	11.375	1212A-17-23	401
	2.875	3.500	11.875	1212A-17-27	422
	3.375	4.000	12.875	1212A-17-33	448
	3.875	4.000	13.375	1212A-17-37	468
	4.875	4.500	14.875	1212A-17-47	514
	5.875	4.500	15.875	1212A-17-57	554

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	0.875	3.500	11.375	1212A-33-7	401
	1.375	3.500	11.875	1212A-33-13	422
	1.875	3.500	12.375	1212A-33-17	442
	2.375	4.000	13.375	1212A-33-23	468
	2.875	4.000	13.875	1212A-33-27	488
	3.375	4.500	14.875	1212A-33-33	514
	3.875	4.500	15.375	1212A-33-37	534
	4.875	4.500	16.375	1212A-33-47	574
	5.875	4.500	17.375	1212A-33-57	615

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	0.875	3.500	13.875	1212A-57-7	502
	1.375	4.000	14.875	1212A-57-13	528
	1.875	4.500	15.875	1212A-57-17	554
	2.375	4.500	16.375	1212A-57-23	574
	2.875	4.500	16.875	1212A-57-27	595
	3.375	4.500	17.375	1212A-57-33	615
	3.875	4.500	17.875	1212A-57-37	635
	4.875	4.500	18.875	1212A-57-47	675
	5.875	4.500	19.875	1212A-57-57	716

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

See Items 7 & 8 below.

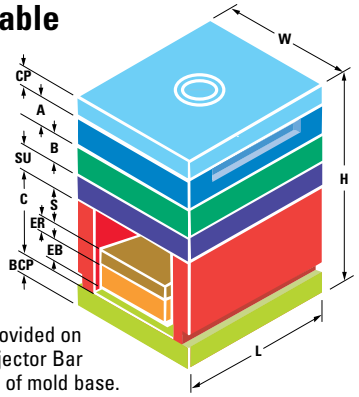
C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.188
3.500	35	1.688
4.000	40	2.188
4.500	45	2.688
5.000	50	3.188
5.500	55	3.688
6.000	60	4.188

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
12.00	12
15.00	15
20.00	20
23.50	23
29.50	29

See Item 6 below.

Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

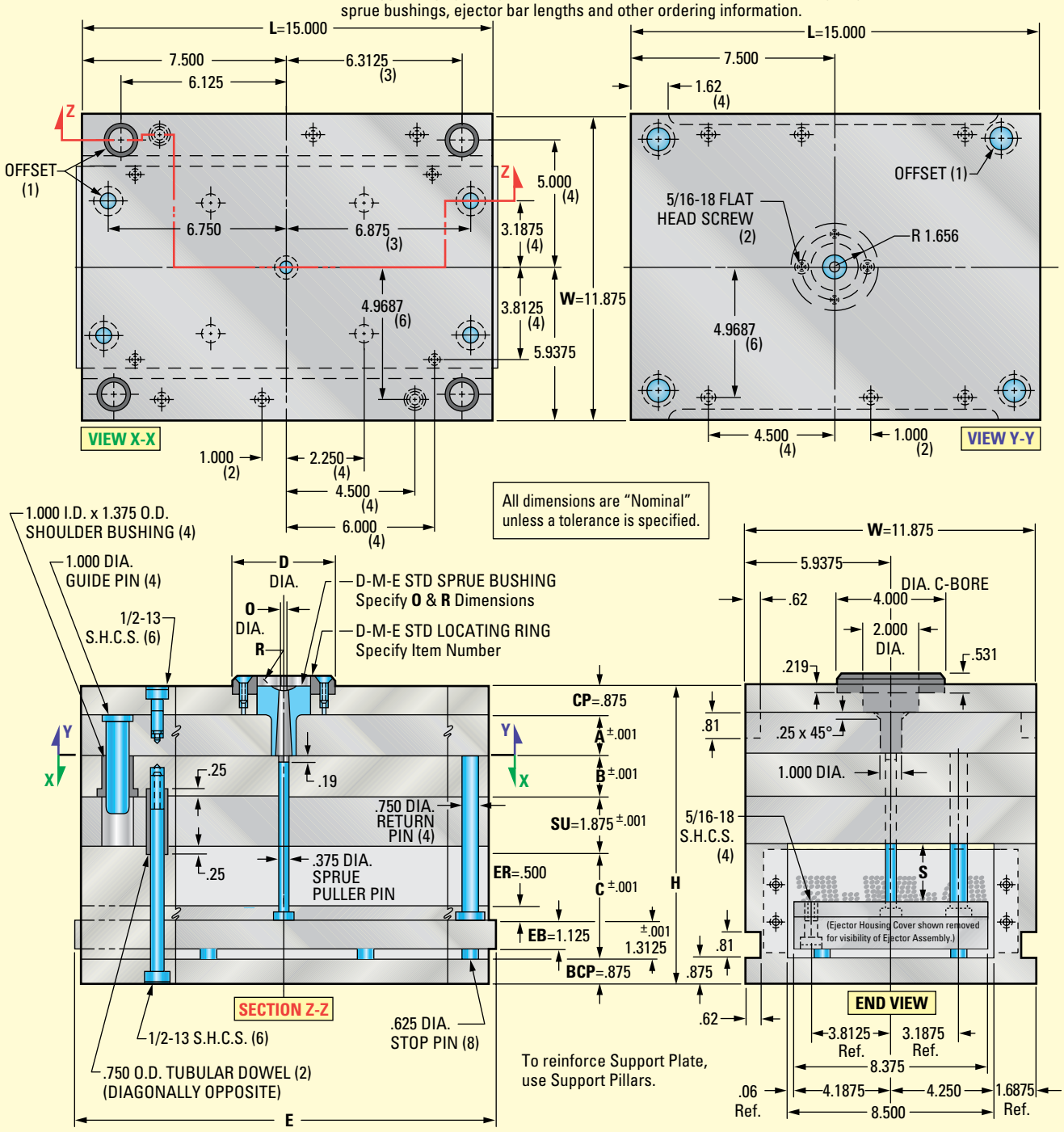


WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

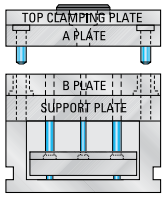
11⅞ x 15" A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

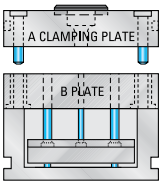


Mold Base Selections

A-Series Assembly



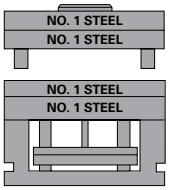
B-Series Assembly



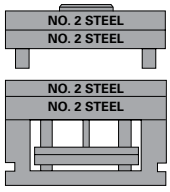
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

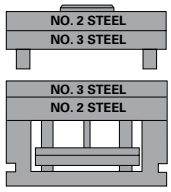
No. 1 Steel Assembly



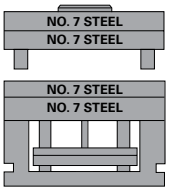
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

11⅞ x 15" A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
.875 (7/8)	0.875	3.000	8.375	1215A-7-7	368
	1.375	3.000	8.875	1215A-7-13	393
	1.875	3.000	9.375	1215A-7-17	419
	2.375	3.500	10.375	1215A-7-23	451
	2.875	3.500	10.875	1215A-7-27	476
	3.375	4.000	11.875	1215A-7-33	509
	3.875	4.000	12.375	1215A-7-37	534
	4.875	4.500	13.875	1215A-7-47	592
	5.875	4.500	14.875	1215A-7-57	642

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	0.875	3.000	9.875	1215A-23-7	444
	1.375	3.500	10.875	1215A-23-13	476
	1.875	3.500	11.375	1215A-23-17	502
	2.375	3.500	11.875	1215A-23-23	527
	2.875	4.000	12.875	1215A-23-27	559
	3.375	4.000	13.375	1215A-23-33	584
	3.875	4.000	13.875	1215A-23-37	610
	4.875	4.500	15.375	1215A-23-47	667
	5.875	4.500	16.375	1215A-23-57	718

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	0.875	3.500	11.875	1215A-37-7	527
	1.375	3.500	12.375	1215A-37-13	552
	1.875	4.000	13.375	1215A-37-17	584
	2.375	4.500	14.375	1215A-37-23	617
	2.875	4.500	14.875	1215A-37-27	642
	3.375	4.500	15.375	1215A-37-33	667
	3.875	4.500	15.875	1215A-37-37	692
	4.875	4.500	16.875	1215A-37-47	743
	5.875	4.500	17.875	1215A-37-57	793

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	0.875	3.000	8.875	1215A-13-7	393
	1.375	3.000	9.375	1215A-13-13	419
	1.875	3.000	9.875	1215A-13-17	444
	2.375	3.500	10.875	1215A-13-23	476
	2.875	3.500	11.375	1215A-13-27	502
	3.375	4.000	12.375	1215A-13-33	534
	3.875	4.000	12.875	1215A-13-37	559
	4.875	4.500	14.375	1215A-13-47	617
	5.875	4.500	15.375	1215A-13-57	667

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	0.875	3.000	10.375	1215A-27-7	469
	1.375	3.500	11.375	1215A-27-13	502
	1.875	3.500	11.875	1215A-27-17	527
	2.375	3.500	12.375	1215A-27-23	552
	2.875	4.000	13.375	1215A-27-27	584
	3.375	4.000	13.875	1215A-27-33	610
	3.875	4.000	14.375	1215A-27-37	635
	4.875	4.500	15.875	1215A-27-47	692
	5.875	4.500	16.875	1215A-27-57	743

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	0.875	3.500	12.875	1215A-47-7	577
	1.375	3.500	13.375	1215A-47-13	602
	1.875	4.000	14.375	1215A-47-17	635
	2.375	4.500	15.375	1215A-47-23	667
	2.875	4.500	15.875	1215A-47-27	692
	3.375	4.500	16.375	1215A-47-33	718
	3.875	4.500	16.875	1215A-47-37	743
	4.875	4.500	17.875	1215A-47-47	793
	5.875	4.500	18.875	1215A-47-57	844

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	0.875	3.000	9.375	1215A-17-7	419
	1.375	3.000	9.875	1215A-17-13	444
	1.875	3.000	10.375	1215A-17-17	469
	2.375	3.500	11.375	1215A-17-23	502
	2.875	3.500	11.875	1215A-17-27	527
	3.375	4.000	12.875	1215A-17-33	559
	3.875	4.000	13.375	1215A-17-37	584
	4.875	4.500	14.875	1215A-17-47	642
	5.875	4.500	15.875	1215A-17-57	692

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	0.875	3.500	11.375	1215A-33-7	502
	1.375	3.500	11.875	1215A-33-13	527
	1.875	3.500	12.375	1215A-33-17	552
	2.375	4.000	13.375	1215A-33-23	584
	2.875	4.000	13.875	1215A-33-27	610
	3.375	4.500	14.875	1215A-33-33	642
	3.875	4.500	15.375	1215A-33-37	667
	4.875	4.500	16.375	1215A-33-47	718
	5.875	4.500	17.375	1215A-33-57	768

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	0.875	3.500	13.875	1215A-57-7	628
	1.375	4.000	14.875	1215A-57-13	660
	1.875	4.500	15.875	1215A-57-17	692
	2.375	4.500	16.375	1215A-57-23	718
	2.875	4.500	16.875	1215A-57-27	743
	3.375	4.500	17.375	1215A-57-33	768
	3.875	4.500	17.875	1215A-57-37	793
	4.875	4.500	18.875	1215A-57-47	844
	5.875	4.500	19.875	1215A-57-57	894

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

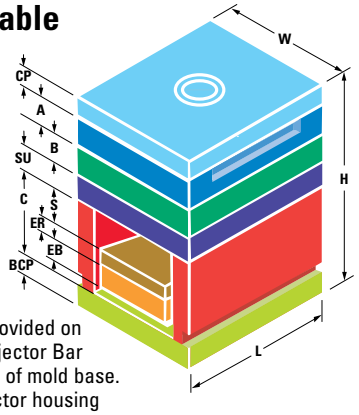
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.188
3.500	35	1.688
4.000	40	2.188
4.500	45	2.688
5.000	50	3.188
5.500	55	3.688
6.000	60	4.188

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
15.00	15
20.00	20
23.50	23
29.50	29

See Item 6 below.



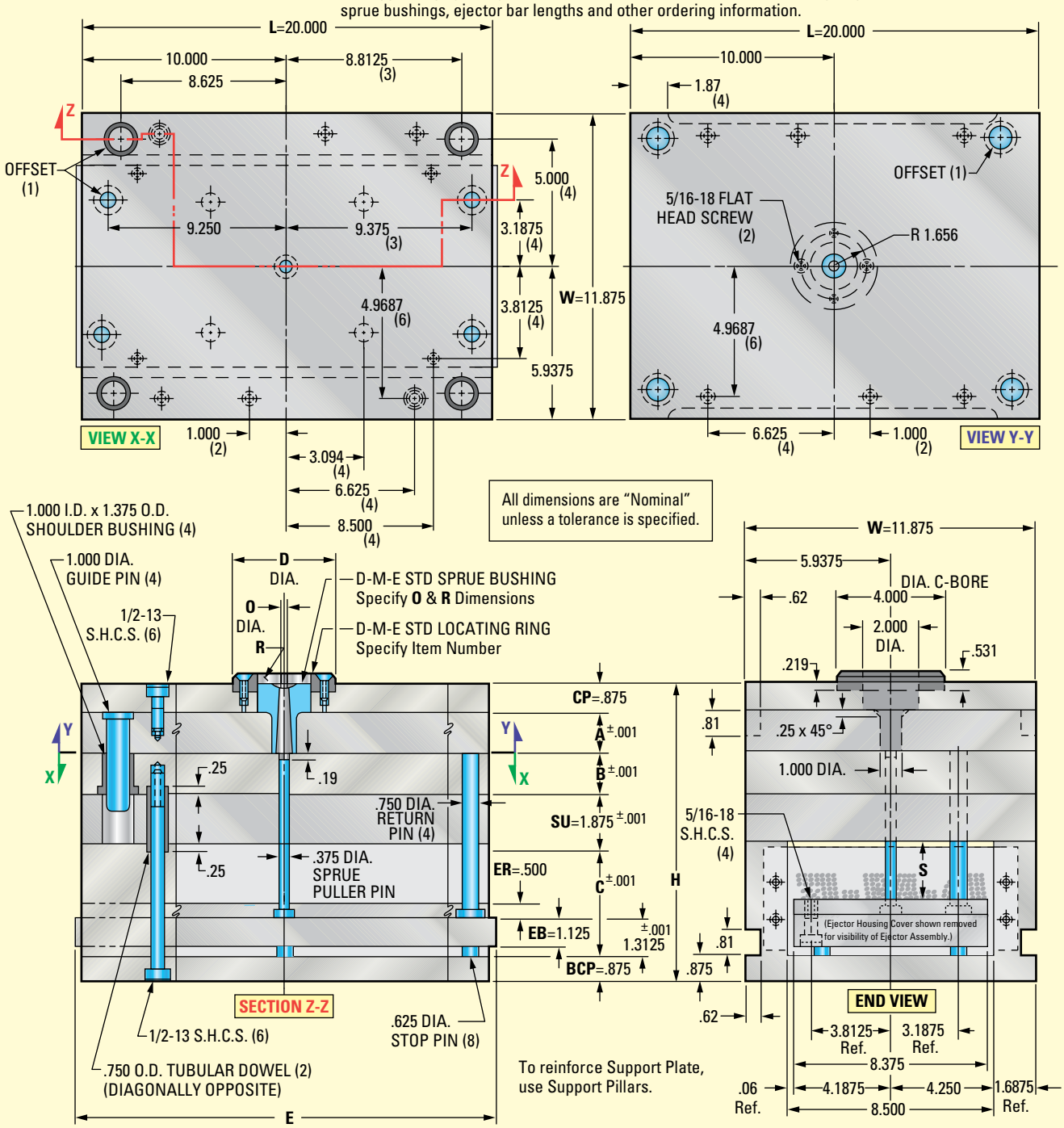
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

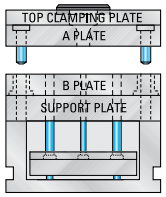
11⅞ x 20" A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

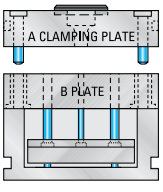


Mold Base Selections

A-Series Assembly



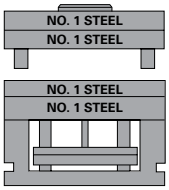
B-Series Assembly



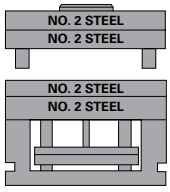
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

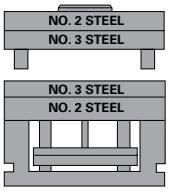
No. 1 Steel Assembly



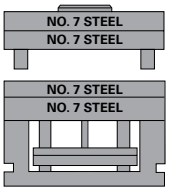
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

11⅞ x 20" A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
.875 (7/8)	0.875	3.000	8.375	1220A-7-7	491
	1.375	3.000	8.875	1220A-7-13	525
	1.875	3.000	9.375	1220A-7-17	558
	2.375	3.500	10.375	1220A-7-23	601
	2.875	3.500	10.875	1220A-7-27	635
	3.375	4.000	11.875	1220A-7-33	678
	3.875	4.000	12.375	1220A-7-37	712
	4.875	4.500	13.875	1220A-7-47	788
	5.875	4.500	14.875	1220A-7-57	856

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	0.875	3.000	9.875	1220A-23-7	592
	1.375	3.500	10.875	1220A-23-13	635
	1.875	3.500	11.375	1220A-23-17	669
	2.375	3.500	11.875	1220A-23-23	702
	2.875	4.000	12.875	1220A-23-27	746
	3.375	4.000	13.375	1220A-23-33	779
	3.875	4.000	13.875	1220A-23-37	813
	4.875	4.500	15.375	1220A-23-47	890
	5.875	4.500	16.375	1220A-23-57	957

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	0.875	3.500	11.875	1220A-37-7	702
	1.375	3.500	12.375	1220A-37-13	736
	1.875	4.000	13.375	1220A-37-17	779
	2.375	4.500	14.375	1220A-37-23	822
	2.875	4.500	14.875	1220A-37-27	856
	3.375	4.500	15.375	1220A-37-33	890
	3.875	4.500	15.875	1220A-37-37	923
	4.875	4.500	16.875	1220A-37-47	991
	5.875	4.500	17.875	1220A-37-57	1058

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	0.875	3.000	8.875	1220A-13-7	525
	1.375	3.000	9.375	1220A-13-13	558
	1.875	3.000	9.875	1220A-13-17	592
	2.375	3.500	10.875	1220A-13-23	635
	2.875	3.500	11.375	1220A-13-27	669
	3.375	4.000	12.375	1220A-13-33	712
	3.875	4.000	12.875	1220A-13-37	746
	4.875	4.500	14.375	1220A-13-47	822
	5.875	4.500	15.375	1220A-13-57	890

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	0.875	3.000	10.375	1220A-27-7	625
	1.375	3.500	11.375	1220A-27-13	669
	1.875	3.500	11.875	1220A-27-17	702
	2.375	3.500	12.375	1220A-27-23	736
	2.875	4.000	13.375	1220A-27-27	779
	3.375	4.000	13.875	1220A-27-33	813
	3.875	4.000	14.375	1220A-27-37	846
	4.875	4.500	15.875	1220A-27-47	923
	5.875	4.500	16.875	1220A-27-57	991

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	0.875	3.500	12.875	1220A-47-7	770
	1.375	3.500	13.375	1220A-47-13	803
	1.875	4.000	14.375	1220A-47-17	846
	2.375	4.500	15.375	1220A-47-23	890
	2.875	4.500	15.875	1220A-47-27	923
	3.375	4.500	16.375	1220A-47-33	957
	3.875	4.500	16.875	1220A-47-37	991
	4.875	4.500	17.875	1220A-47-47	1058
	5.875	4.500	18.875	1220A-47-57	1125

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	0.875	3.000	9.375	1220A-17-7	558
	1.375	3.000	9.875	1220A-17-13	592
	1.875	3.000	10.375	1220A-17-17	625
	2.375	3.500	11.375	1220A-17-23	669
	2.875	3.500	11.875	1220A-17-27	702
	3.375	4.000	12.875	1220A-17-33	746
	3.875	4.000	13.375	1220A-17-37	779
	4.875	4.500	14.875	1220A-17-47	856
	5.875	4.500	15.875	1220A-17-57	923

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	0.875	3.500	11.375	1220A-33-7	669
	1.375	3.500	11.875	1220A-33-13	702
	1.875	3.500	12.375	1220A-33-17	736
	2.375	4.000	13.375	1220A-33-23	779
	2.875	4.000	13.875	1220A-33-27	813
	3.375	4.500	14.875	1220A-33-33	856
	3.875	4.500	15.375	1220A-33-37	890
	4.875	4.500	16.375	1220A-33-47	957
	5.875	4.500	17.375	1220A-33-57	1024

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	0.875	3.500	13.875	1220A-57-7	837
	1.375	4.000	14.875	1220A-57-13	880
	1.875	4.500	15.875	1220A-57-17	923
	2.375	4.500	16.375	1220A-57-23	957
	2.875	4.500	16.875	1220A-57-27	991
	3.375	4.500	17.375	1220A-57-33	1024
	3.875	4.500	17.875	1220A-57-37	1058
	4.875	4.500	18.875	1220A-57-47	1125
	5.875	4.500	19.875	1220A-57-57	1192

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

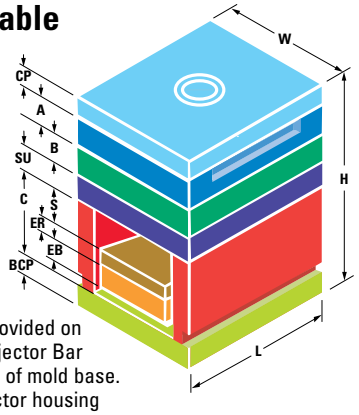
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.188
3.500	35	1.688
4.000	40	2.188
4.500	45	2.688
5.000	50	3.188
5.500	55	3.688
6.000	60	4.188

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
20.00	20
23.50	23
29.50	29

See Item 6 below.



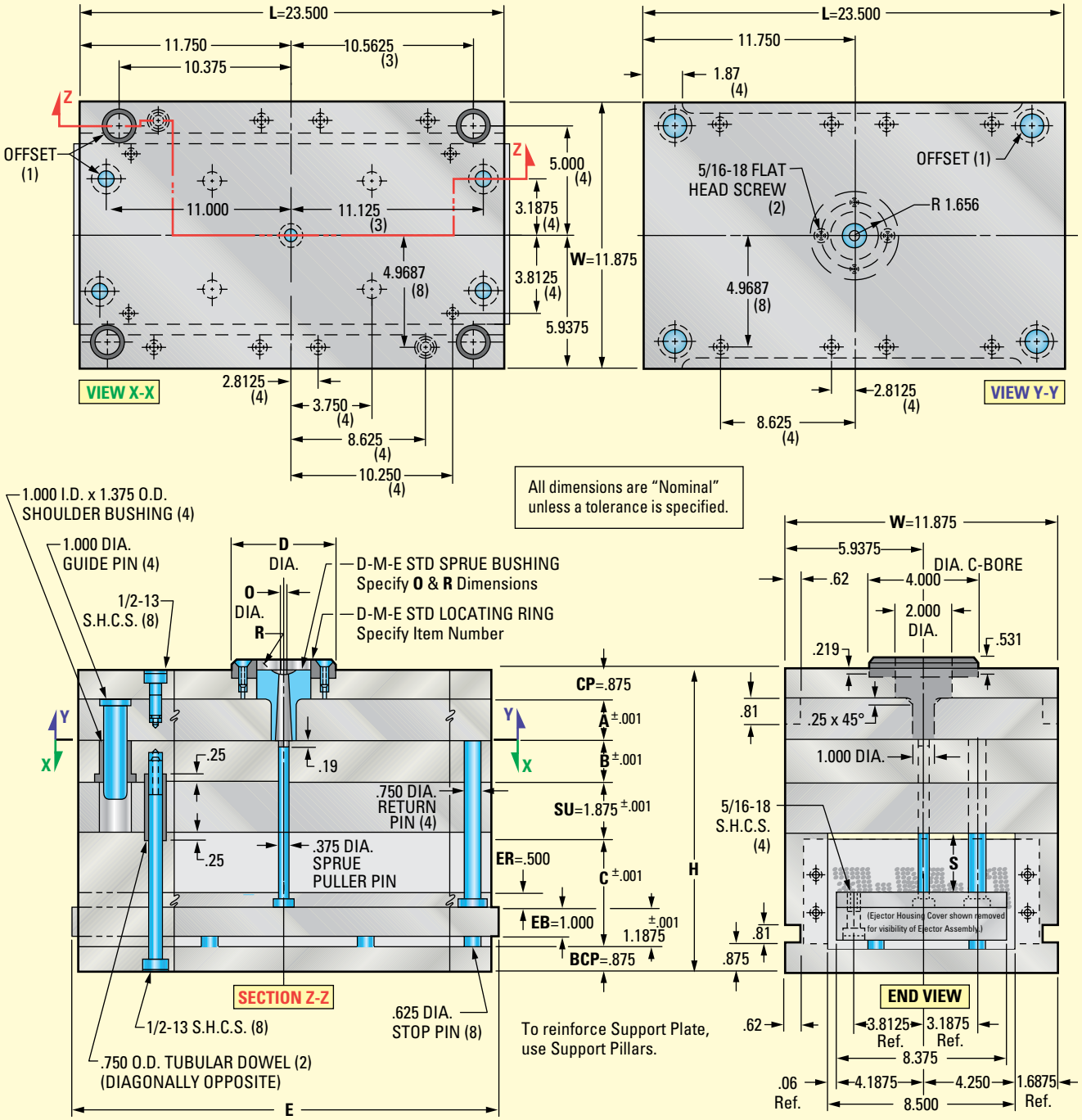
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

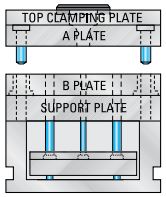
11⅞ x 23½ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

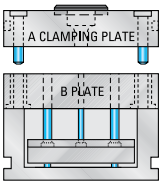


Mold Base Selections

A-Series Assembly



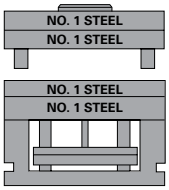
B-Series Assembly



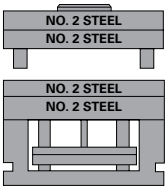
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

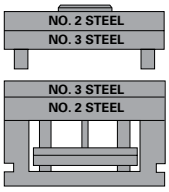
No. 1 Steel Assembly



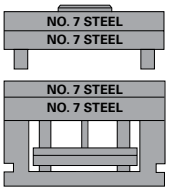
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

11⅞ x 23½ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	9.375	1223A-13-13	656
	1.875	3.000	9.875	1223A-13-17	695
	2.375	3.500	10.875	1223A-13-23	746
	2.875	3.500	11.375	1223A-13-27	786
	3.375	4.000	12.375	1223A-13-33	836
	3.875	4.000	12.875	1223A-13-37	876
	4.875	4.500	14.375	1223A-13-47	966
	5.875	4.500	15.375	1223A-13-57	1045

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.500	11.375	1223A-27-13	786
	1.875	3.500	11.875	1223A-27-17	825
	2.375	3.500	12.375	1223A-27-23	865
	2.875	4.000	13.375	1223A-27-27	915
	3.375	4.000	13.875	1223A-27-33	955
	3.875	4.000	14.375	1223A-27-37	994
	4.875	4.500	15.875	1223A-27-47	1085
	5.875	4.500	16.875	1223A-27-57	1164

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	3.500	13.375	1223A-47-13	944
	1.875	4.000	14.375	1223A-47-17	994
	2.375	4.500	15.375	1223A-47-23	1045
	2.875	4.500	15.875	1223A-47-27	1085
	3.375	4.500	16.375	1223A-47-33	1124
	3.875	4.500	16.875	1223A-47-37	1164
	4.875	4.500	17.875	1223A-47-47	1243
	5.875	4.500	18.875	1223A-47-57	1322

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	9.875	1223A-17-13	696
	1.875	3.000	10.375	1223A-17-17	735
	2.375	3.500	11.375	1223A-17-23	786
	2.875	3.500	11.875	1223A-17-27	825
	3.375	4.000	12.875	1223A-17-33	876
	3.875	4.000	13.375	1223A-17-37	915
	4.875	4.500	14.875	1223A-17-47	1006
	5.875	4.500	15.875	1223A-17-57	1085

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	3.500	11.875	1223A-33-13	825
	1.875	3.500	12.375	1223A-33-17	865
	2.375	4.000	13.375	1223A-33-23	915
	2.875	4.000	13.875	1223A-33-27	955
	3.375	4.500	14.875	1223A-33-33	1006
	3.875	4.500	15.375	1223A-33-37	1045
	4.875	4.500	16.375	1223A-33-47	1124
	5.875	4.500	17.375	1223A-33-57	1203

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	4.000	14.875	1223A-57-13	1034
	1.875	4.500	15.875	1223A-57-17	1085
	2.375	4.500	16.375	1223A-57-23	1124
	2.875	4.500	16.875	1223A-57-27	1164
	3.375	4.500	17.375	1223A-57-33	1203
	3.875	4.500	17.875	1223A-57-37	1243
	4.875	4.500	18.875	1223A-57-47	1322
	5.875	4.500	19.875	1223A-57-57	1401

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.500	10.875	1223A-23-13	746
	1.875	3.500	11.375	1223A-23-17	786
	2.375	3.500	11.875	1223A-23-23	825
	2.875	4.000	12.875	1223A-23-27	876
	3.375	4.000	13.375	1223A-23-33	915
	3.875	4.000	13.875	1223A-23-37	955
	4.875	4.500	15.375	1223A-23-47	1045
	5.875	4.500	16.375	1223A-23-57	1124

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	3.500	12.375	1223A-37-13	865
	1.875	4.000	13.375	1223A-37-17	915
	2.375	4.500	14.375	1223A-37-23	966
	2.875	4.500	14.875	1223A-37-27	1006
	3.375	4.500	15.375	1223A-37-33	1045
	3.875	4.500	15.875	1223A-37-37	1085
	4.875	4.500	16.875	1223A-37-47	1164
	5.875	4.500	17.875	1223A-37-57	1243

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

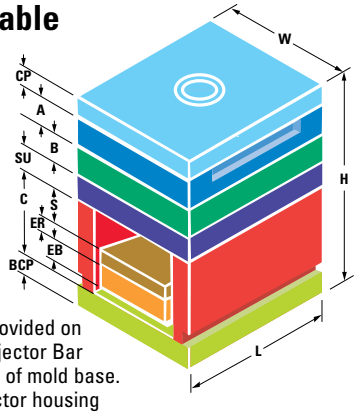
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.188
3.500	35	1.688
4.000	40	2.188
4.500	45	2.688
5.000	50	3.188
5.500	55	3.688
6.000	60	4.188

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
23.50	23
29.50	29

See Item 6 below.



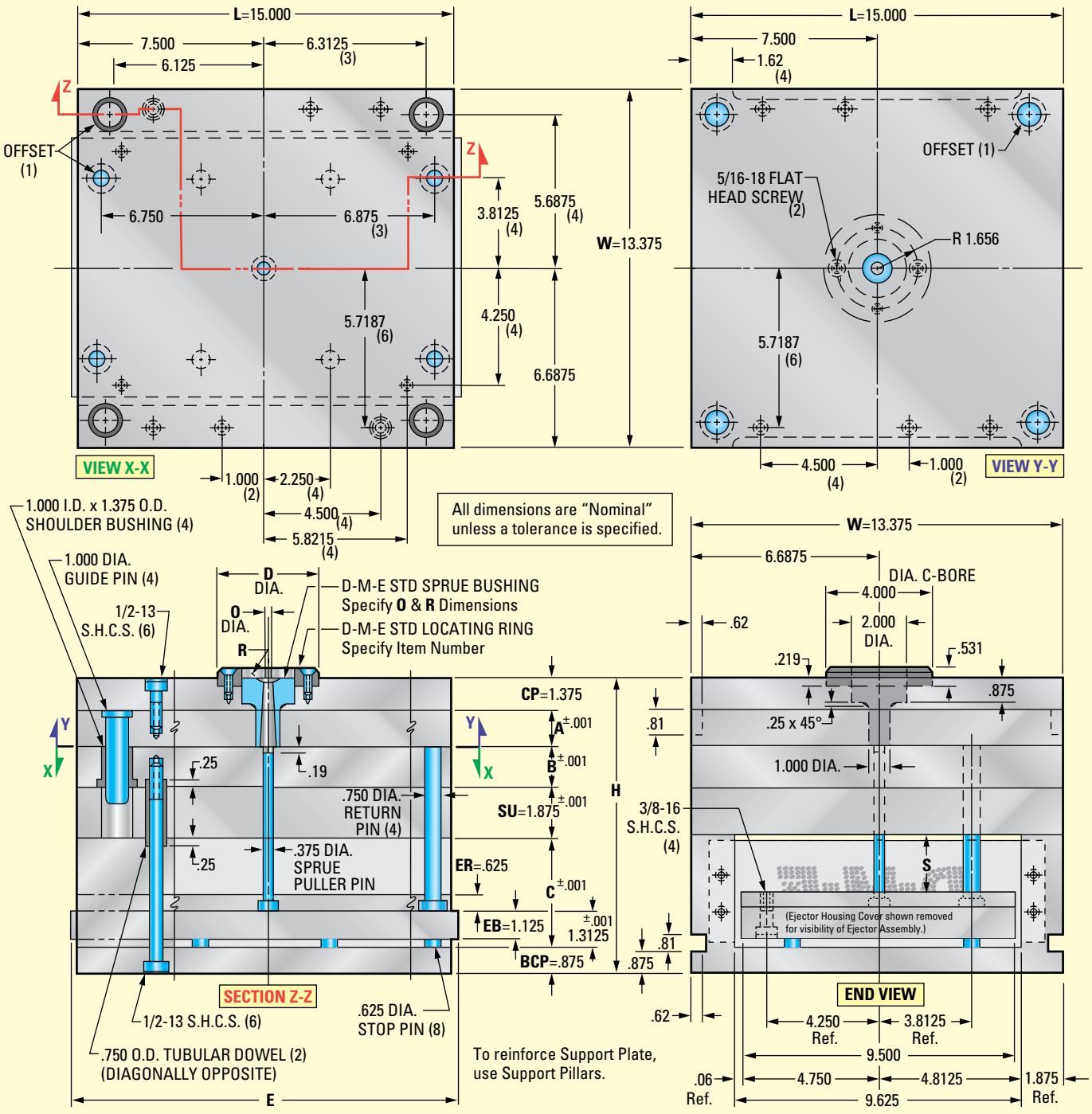
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

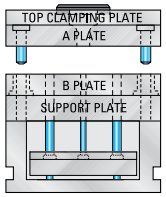
13⅜ x 15" A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

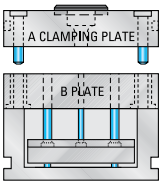


Mold Base Selections

A-Series Assembly



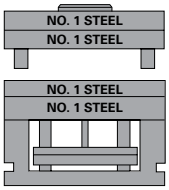
B-Series Assembly



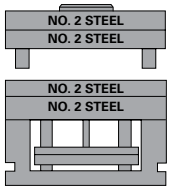
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

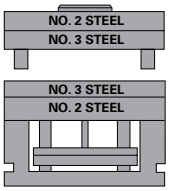
No. 1 Steel Assembly



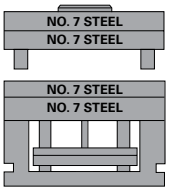
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

13⅜ x 15" A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
.875 (7/8)	0.875	3.000	8.875	1315A-7-7	449
	1.375	3.000	9.375	1315A-7-13	477
	1.875	3.000	9.875	1315A-7-17	505
	2.375	3.500	10.875	1315A-7-23	542
	2.875	3.500	11.375	1315A-7-27	570
	3.375	4.000	12.375	1315A-7-33	607
	3.875	4.000	12.875	1315A-7-37	635
	4.875	4.500	14.375	1315A-7-47	700
	5.875	4.500	15.375	1315A-7-57	757

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	0.875	3.000	10.375	1315A-23-7	534
	1.375	3.500	11.375	1315A-23-13	570
	1.875	3.500	11.875	1315A-23-17	599
	2.375	3.500	12.375	1315A-23-23	627
	2.875	4.000	13.375	1315A-23-27	663
	3.375	4.000	13.875	1315A-23-33	692
	3.875	4.000	14.375	1315A-23-37	720
	4.875	4.500	15.875	1315A-23-47	785
	5.875	4.500	16.875	1315A-23-57	842

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	0.875	3.500	12.375	1315A-37-7	627
	1.375	3.500	12.875	1315A-37-13	655
	1.875	4.000	13.875	1315A-37-17	692
	2.375	4.500	14.875	1315A-37-23	728
	2.875	4.500	15.375	1315A-37-27	757
	3.375	4.500	15.875	1315A-37-33	785
	3.875	4.500	16.375	1315A-37-37	813
	4.875	4.500	17.375	1315A-37-47	870
	5.875	4.500	18.375	1315A-37-57	927

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	0.875	3.000	9.375	1315A-13-7	477
	1.375	3.000	9.875	1315A-13-13	505
	1.875	3.000	10.375	1315A-13-17	534
	2.375	3.500	11.375	1315A-13-23	570
	2.875	3.500	11.875	1315A-13-27	599
	3.375	4.000	12.875	1315A-13-33	635
	3.875	4.000	13.375	1315A-13-37	663
	4.875	4.500	14.875	1315A-13-47	728
	5.875	4.500	15.875	1315A-13-57	785

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	0.875	3.000	10.875	1315A-27-7	562
	1.375	3.500	11.875	1315A-27-13	599
	1.875	3.500	12.375	1315A-27-17	627
	2.375	3.500	12.875	1315A-27-23	655
	2.875	4.000	13.875	1315A-27-27	692
	3.375	4.000	14.375	1315A-27-33	720
	3.875	4.000	14.875	1315A-27-37	749
	4.875	4.500	16.375	1315A-27-47	813
	5.875	4.500	17.375	1315A-27-57	870

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	0.875	3.500	13.375	1315A-47-7	684
	1.375	3.500	13.875	1315A-47-13	712
	1.875	4.000	14.875	1315A-47-17	749
	2.375	4.500	15.875	1315A-47-23	785
	2.875	4.500	16.375	1315A-47-27	813
	3.375	4.500	16.875	1315A-47-33	842
	3.875	4.500	17.375	1315A-47-37	870
	4.875	4.500	18.375	1315A-47-47	927
	5.875	4.500	19.375	1315A-47-57	984

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	0.875	3.000	9.875	1315A-17-7	505
	1.375	3.000	10.375	1315A-17-13	534
	1.875	3.000	10.875	1315A-17-17	562
	2.375	3.500	11.875	1315A-17-23	599
	2.875	3.500	12.375	1315A-17-27	627
	3.375	4.000	13.375	1315A-17-33	663
	3.875	4.000	13.875	1315A-17-37	692
	4.875	4.500	15.375	1315A-17-47	757
	5.875	4.500	16.375	1315A-17-57	813

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	0.875	3.500	11.875	1315A-33-7	599
	1.375	3.500	12.375	1315A-33-13	627
	1.875	3.500	12.875	1315A-33-17	655
	2.375	4.000	13.875	1315A-33-23	692
	2.875	4.000	14.375	1315A-33-27	720
	3.375	4.500	15.375	1315A-33-33	757
	3.875	4.500	15.875	1315A-33-37	785
	4.875	4.500	16.875	1315A-33-47	842
	5.875	4.500	17.875	1315A-33-57	899

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	0.875	3.500	14.375	1315A-57-7	741
	1.375	4.000	15.375	1315A-57-13	777
	1.875	4.500	16.375	1315A-57-17	813
	2.375	4.500	16.875	1315A-57-23	842
	2.875	4.500	17.375	1315A-57-27	870
	3.375	4.500	17.875	1315A-57-33	899
	3.875	4.500	18.375	1315A-57-37	927
	4.875	4.500	19.375	1315A-57-47	984
	5.875	4.500	20.375	1315A-57-57	1041

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

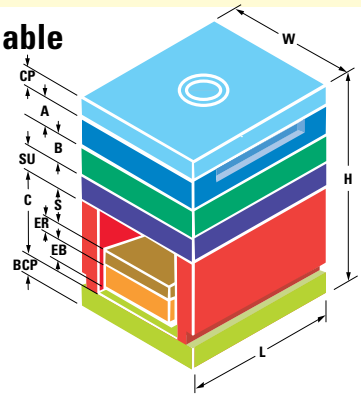
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
15.00	15
18.00	18
20.75	21
23.50	23
26.00	26
29.50	29
35.50	35

See Item 6 below.



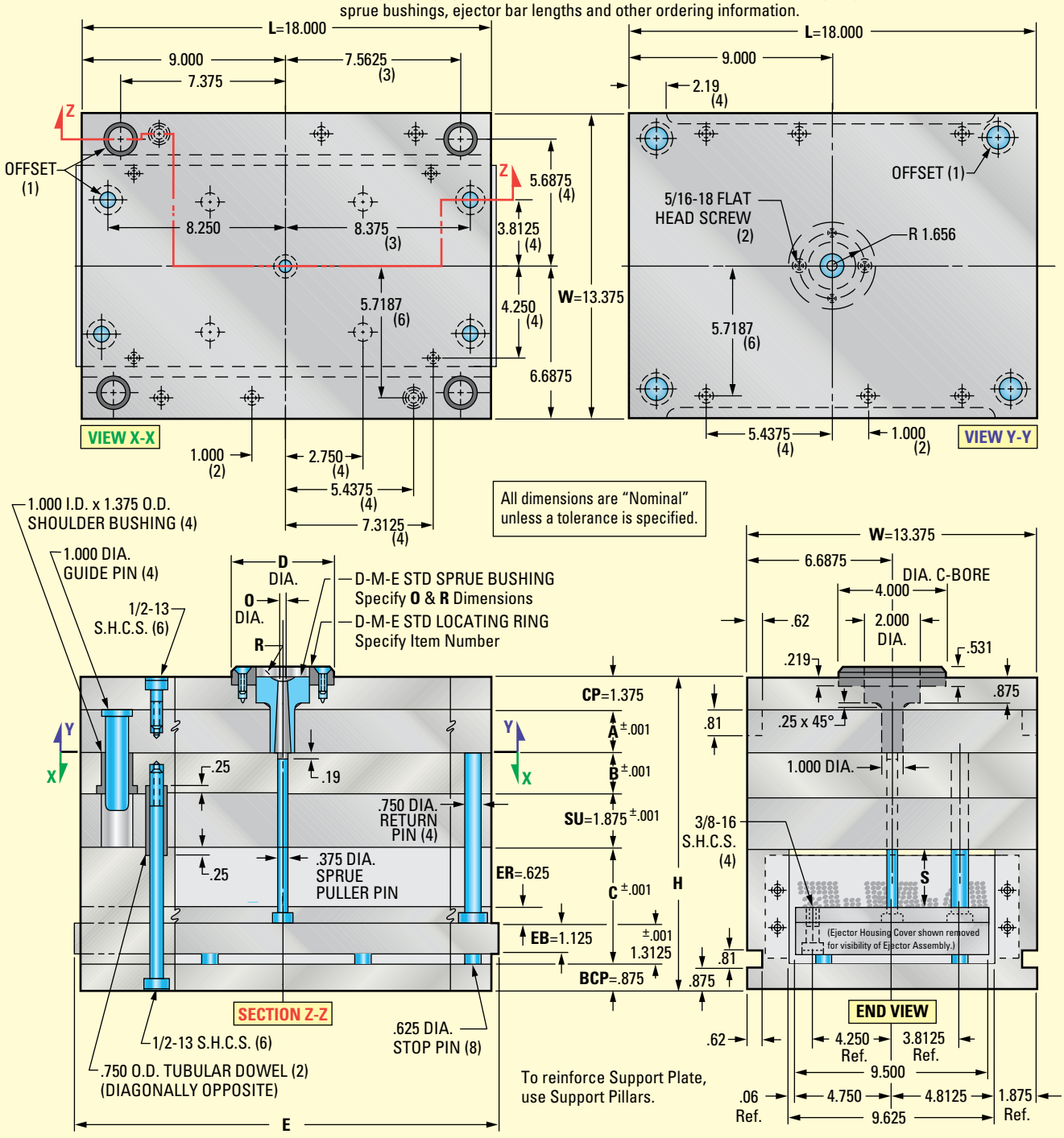
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

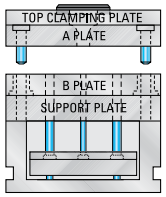
13⅜ x 18" A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

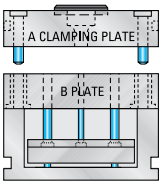


Mold Base Selections

A-Series Assembly



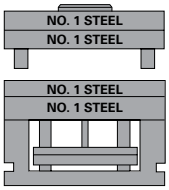
B-Series Assembly



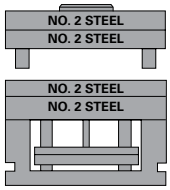
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

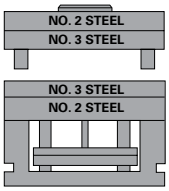
No. 1 Steel Assembly



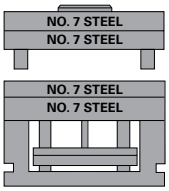
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

13⅜ x 18" A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
.875 (7/8)	0.875	3.000	8.875	1318A-7-7	538
	1.375	3.000	9.375	1318A-7-13	572
	1.875	3.000	9.875	1318A-7-17	606
	2.375	3.500	10.875	1318A-7-23	650
	2.875	3.500	11.375	1318A-7-27	684
	3.375	4.000	12.375	1318A-7-33	728
	3.875	4.000	12.875	1318A-7-37	762
	4.875	4.500	14.375	1318A-7-47	840
	5.875	4.500	15.375	1318A-7-57	908

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	0.875	3.000	10.375	1318A-23-7	640
	1.375	3.500	11.375	1318A-23-13	684
	1.875	3.500	11.875	1318A-23-17	718
	2.375	3.500	12.375	1318A-23-23	752
	2.875	4.000	13.375	1318A-23-27	796
	3.375	4.000	13.875	1318A-23-33	830
	3.875	4.000	14.375	1318A-23-37	864
	4.875	4.500	15.875	1318A-23-47	942
	5.875	4.500	16.875	1318A-23-57	1010

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	0.875	3.500	12.375	1318A-37-7	752
	1.375	3.500	12.875	1318A-37-13	786
	1.875	4.000	13.875	1318A-37-17	830
	2.375	4.500	14.875	1318A-37-23	874
	2.875	4.500	15.375	1318A-37-27	908
	3.375	4.500	15.875	1318A-37-33	942
	3.875	4.500	16.375	1318A-37-37	976
	4.875	4.500	17.375	1318A-37-47	1044
	5.875	4.500	18.375	1318A-37-57	1112

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	0.875	3.000	9.375	1318A-13-7	572
	1.375	3.000	9.875	1318A-13-13	606
	1.875	3.000	10.375	1318A-13-17	640
	2.375	3.500	11.375	1318A-13-23	684
	2.875	3.500	11.875	1318A-13-27	718
	3.375	4.000	12.875	1318A-13-33	762
	3.875	4.000	13.375	1318A-13-37	796
	4.875	4.500	14.875	1318A-13-47	874
	5.875	4.500	15.875	1318A-13-57	942

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	0.875	3.000	10.875	1318A-27-7	675
	1.375	3.500	11.875	1318A-27-13	718
	1.875	3.500	12.375	1318A-27-17	752
	2.375	3.500	12.875	1318A-27-23	786
	2.875	4.000	13.875	1318A-27-27	830
	3.375	4.000	14.375	1318A-27-33	864
	3.875	4.000	14.875	1318A-27-37	898
	4.875	4.500	16.375	1318A-27-47	976
	5.875	4.500	17.375	1318A-27-57	1044

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	0.875	3.500	13.375	1318A-47-7	821
	1.375	3.500	13.875	1318A-47-13	855
	1.875	4.000	14.875	1318A-47-17	898
	2.375	4.500	15.875	1318A-47-23	942
	2.875	4.500	16.375	1318A-47-27	976
	3.375	4.500	16.875	1318A-47-33	1010
	3.875	4.500	17.375	1318A-47-37	1044
	4.875	4.500	18.375	1318A-47-47	1112
	5.875	4.500	19.375	1318A-47-57	1181

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	0.875	3.000	9.875	1318A-17-7	606
	1.375	3.000	10.375	1318A-17-13	640
	1.875	3.000	10.875	1318A-17-17	675
	2.375	3.500	11.875	1318A-17-23	718
	2.875	3.500	12.375	1318A-17-27	752
	3.375	4.000	13.375	1318A-17-33	796
	3.875	4.000	13.875	1318A-17-37	830
	4.875	4.500	15.375	1318A-17-47	908
	5.875	4.500	16.375	1318A-17-57	976

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	0.875	3.500	11.875	1318A-33-7	718
	1.375	3.500	12.375	1318A-33-13	752
	1.875	3.500	12.875	1318A-33-17	786
	2.375	4.000	13.875	1318A-33-23	830
	2.875	4.000	14.375	1318A-33-27	864
	3.375	4.500	15.375	1318A-33-33	908
	3.875	4.500	15.875	1318A-33-37	942
	4.875	4.500	16.875	1318A-33-47	1010
	5.875	4.500	17.875	1318A-33-57	1078

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	0.875	3.500	14.375	1318A-57-7	889
	1.375	4.000	15.375	1318A-57-13	932
	1.875	4.500	16.375	1318A-57-17	976
	2.375	4.500	16.875	1318A-57-23	1010
	2.875	4.500	17.375	1318A-57-27	1044
	3.375	4.500	17.875	1318A-57-33	1078
	3.875	4.500	18.375	1318A-57-37	1112
	4.875	4.500	19.375	1318A-57-47	1181
	5.875	4.500	20.375	1318A-57-57	1249

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	SU SUPPORT PLATE THICKNESS	BCP BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

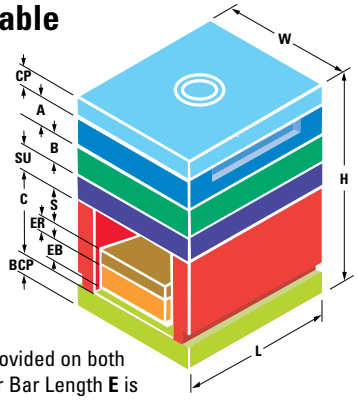
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	S MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
18.00	18
20.75	21
23.50	23
26.00	26
29.50	29
35.50	35

See Item 6 below.



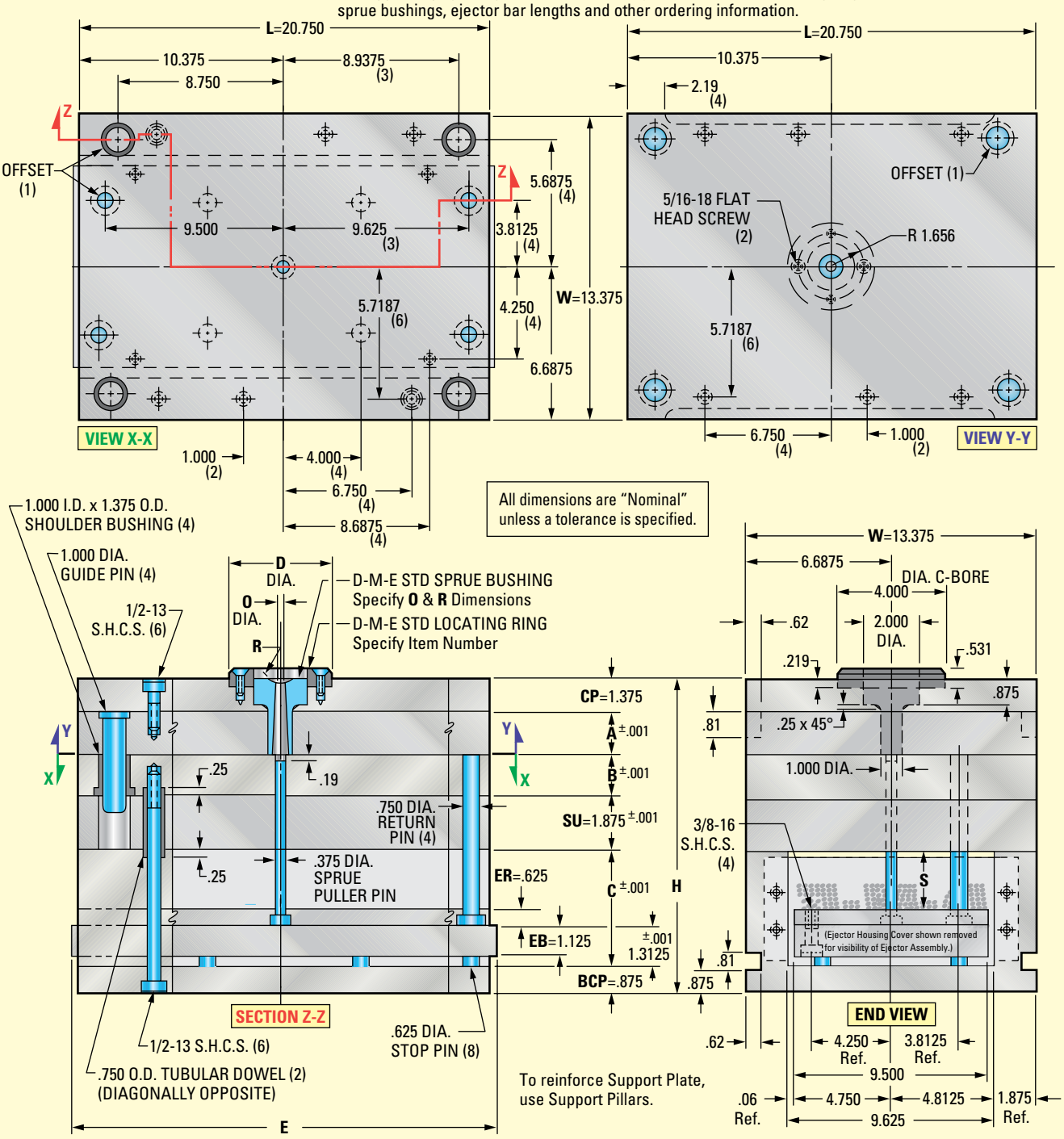
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

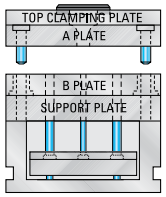
13⅜ x 20¾ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

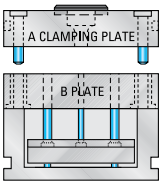


Mold Base Selections

A-Series Assembly



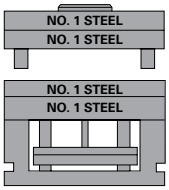
B-Series Assembly



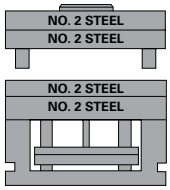
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

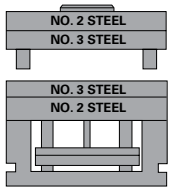
No. 1 Steel Assembly



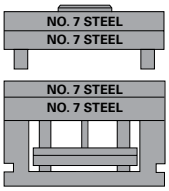
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

13⅜ x 20¾ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
.875 (7/8)	0.875	3.000	8.875	1321A-7-7	620
	1.375	3.000	9.375	1321A-7-13	660
	1.875	3.000	9.875	1321A-7-17	699
	2.375	3.500	10.875	1321A-7-23	749
	2.875	3.500	11.375	1321A-7-27	789
	3.375	4.000	12.375	1321A-7-33	839
	3.875	4.000	12.875	1321A-7-37	878
	4.875	4.500	14.375	1321A-7-47	968
	5.875	4.500	15.375	1321A-7-57	1046

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	0.875	3.000	10.375	1321A-23-7	738
	1.375	3.500	11.375	1321A-23-13	789
	1.875	3.500	11.875	1321A-23-17	828
	2.375	3.500	12.375	1321A-23-23	867
	2.875	4.000	13.375	1321A-23-27	917
	3.375	4.000	13.875	1321A-23-33	957
	3.875	4.000	14.375	1321A-23-37	996
	4.875	4.500	15.875	1321A-23-47	1086
	5.875	4.500	16.875	1321A-23-57	1164

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	0.875	3.500	12.375	1321A-37-7	867
	1.375	3.500	12.875	1321A-37-13	906
	1.875	4.000	13.875	1321A-37-17	957
	2.375	4.500	14.875	1321A-37-23	1007
	2.875	4.500	15.375	1321A-37-27	1046
	3.375	4.500	15.875	1321A-37-33	1086
	3.875	4.500	16.375	1321A-37-37	1125
	4.875	4.500	17.375	1321A-37-47	1204
	5.875	4.500	18.375	1321A-37-57	1282

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	0.875	3.000	9.375	1321A-13-7	660
	1.375	3.000	9.875	1321A-13-13	699
	1.875	3.000	10.375	1321A-13-17	738
	2.375	3.500	11.375	1321A-13-23	789
	2.875	3.500	11.875	1321A-13-27	828
	3.375	4.000	12.875	1321A-13-33	878
	3.875	4.000	13.375	1321A-13-37	917
	4.875	4.500	14.875	1321A-13-47	1007
	5.875	4.500	15.875	1321A-13-57	1086

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	0.875	3.000	10.875	1321A-27-7	777
	1.375	3.500	11.875	1321A-27-13	828
	1.875	3.500	12.375	1321A-27-17	867
	2.375	3.500	12.875	1321A-27-23	906
	2.875	4.000	13.875	1321A-27-27	957
	3.375	4.000	14.375	1321A-27-33	996
	3.875	4.000	14.875	1321A-27-37	1035
	4.875	4.500	16.375	1321A-27-47	1125
	5.875	4.500	17.375	1321A-27-57	1204

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	0.875	3.500	13.375	1321A-47-7	946
	1.375	3.500	13.875	1321A-47-13	985
	1.875	4.000	14.875	1321A-47-17	1035
	2.375	4.500	15.875	1321A-47-23	1086
	2.875	4.500	16.375	1321A-47-27	1125
	3.375	4.500	16.875	1321A-47-33	1164
	3.875	4.500	17.375	1321A-47-37	1204
	4.875	4.500	18.375	1321A-47-47	1282
	5.875	4.500	19.375	1321A-47-57	1361

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	0.875	3.000	9.875	1321A-17-7	699
	1.375	3.000	10.375	1321A-17-13	738
	1.875	3.000	10.875	1321A-17-17	777
	2.375	3.500	11.875	1321A-17-23	828
	2.875	3.500	12.375	1321A-17-27	867
	3.375	4.000	13.375	1321A-17-33	917
	3.875	4.000	13.875	1321A-17-37	957
	4.875	4.500	15.375	1321A-17-47	1046
	5.875	4.500	16.375	1321A-17-57	1125

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	0.875	3.500	11.875	1321A-33-7	828
	1.375	3.500	12.375	1321A-33-13	867
	1.875	3.500	12.875	1321A-33-17	906
	2.375	4.000	13.875	1321A-33-23	957
	2.875	4.000	14.375	1321A-33-27	996
	3.375	4.500	15.375	1321A-33-33	1046
	3.875	4.500	15.875	1321A-33-37	1086
	4.875	4.500	16.875	1321A-33-47	1164
	5.875	4.500	17.875	1321A-33-57	1243

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	0.875	3.500	14.375	1321A-57-7	1024
	1.375	4.000	15.375	1321A-57-13	1075
	1.875	4.500	16.375	1321A-57-17	1125
	2.375	4.500	16.875	1321A-57-23	1164
	2.875	4.500	17.375	1321A-57-27	1204
	3.375	4.500	17.875	1321A-57-33	1243
	3.875	4.500	18.375	1321A-57-37	1282
	4.875	4.500	19.375	1321A-57-47	1361
	5.875	4.500	20.375	1321A-57-57	1440

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

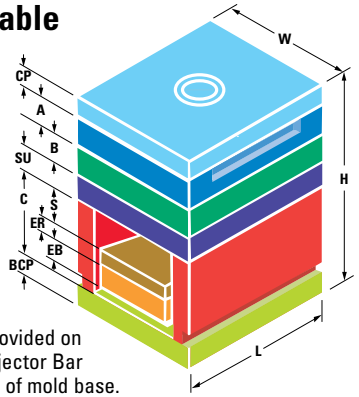
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.062
3.500	35	1.562
4.000	40	2.062
4.500	45	2.562
5.000	50	3.062
5.500	55	3.562
6.000	60	4.062

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
20.75	21
23.50	23
26.00	26
29.50	29
35.50	35

See Item 6 below.



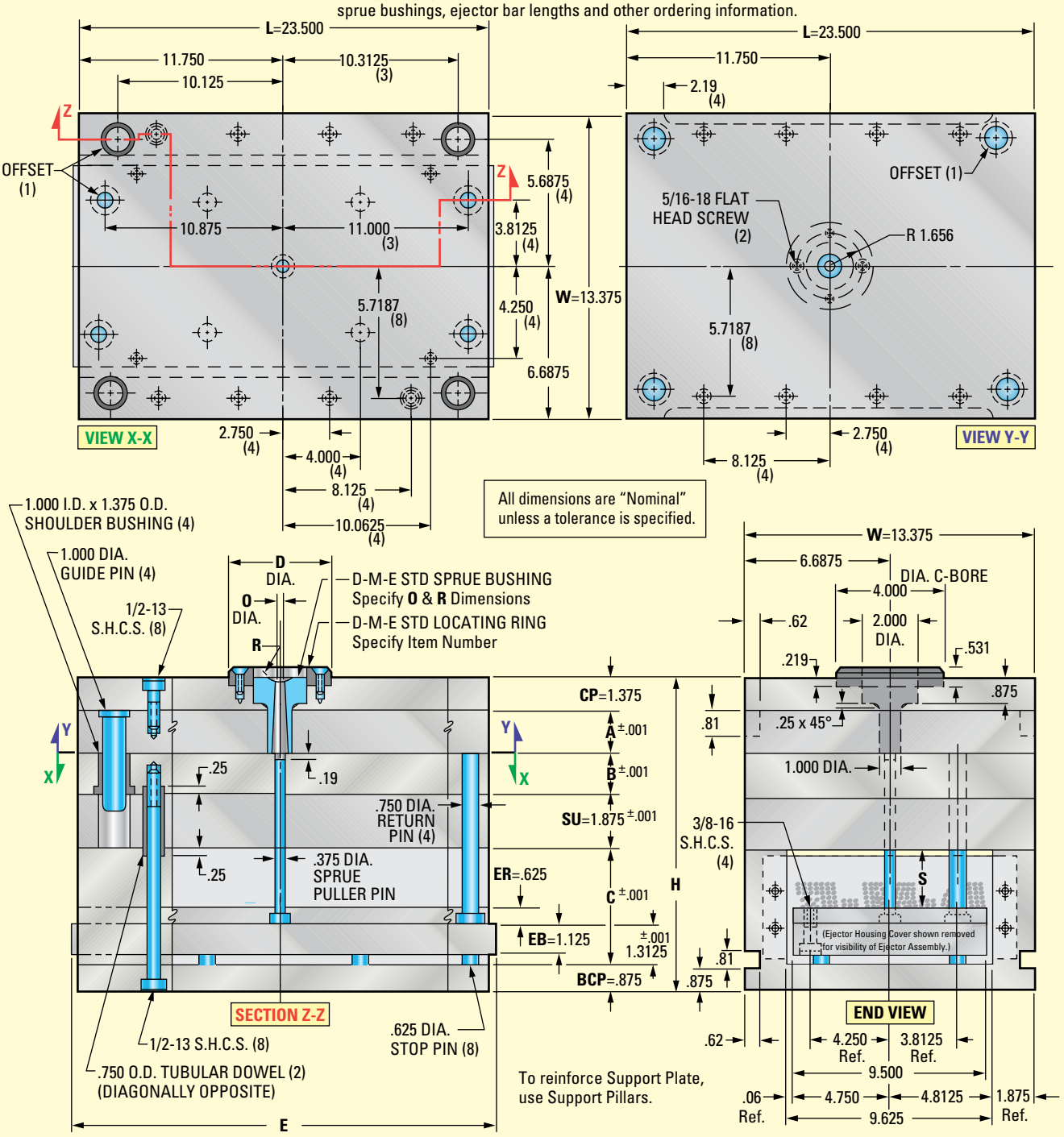
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

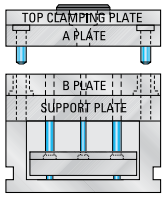
13⅜ x 23½ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

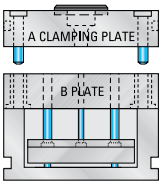


Mold Base Selections

A-Series Assembly



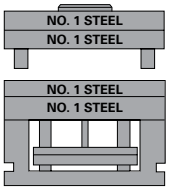
B-Series Assembly



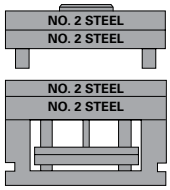
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

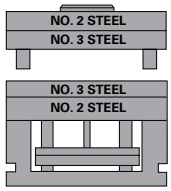
No. 1 Steel Assembly



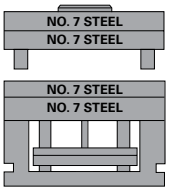
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

13⅜ x 23½ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	9.875	1323A-13-13	791
	1.875	3.000	10.375	1323A-13-17	836
	2.375	3.500	11.375	1323A-13-23	893
	2.875	3.500	11.875	1323A-13-27	938
	3.375	4.000	12.875	1323A-13-33	995
	3.875	4.000	13.375	1323A-13-37	1039
	4.875	4.500	14.875	1323A-13-47	1141
	5.875	4.500	15.875	1323A-13-57	1230

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.500	11.875	1323A-27-13	938
	1.875	3.500	12.375	1323A-27-17	982
	2.375	3.500	12.875	1323A-27-23	1027
	2.875	4.000	13.875	1323A-27-27	1084
	3.375	4.000	14.375	1323A-27-33	1128
	3.875	4.000	14.875	1323A-27-37	1173
	4.875	4.500	16.375	1323A-27-47	1274
	5.875	4.500	17.375	1323A-27-57	1363

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	3.500	13.875	1323A-47-13	1116
	1.875	4.000	14.875	1323A-47-17	1173
	2.375	4.500	15.875	1323A-47-23	1230
	2.875	4.500	16.375	1323A-47-27	1274
	3.375	4.500	16.875	1323A-47-33	1319
	3.875	4.500	17.375	1323A-47-37	1363
	4.875	4.500	18.375	1323A-47-47	1452
	5.875	4.500	19.375	1323A-47-57	1541

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	10.375	1323A-17-13	836
	1.875	3.000	10.875	1323A-17-17	881
	2.375	3.500	11.875	1323A-17-23	938
	2.875	3.500	12.375	1323A-17-27	982
	3.375	4.000	13.375	1323A-17-33	1039
	3.875	4.000	13.875	1323A-17-37	1084
	4.875	4.500	15.375	1323A-17-47	1185
	5.875	4.500	16.375	1323A-17-57	1274

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	3.500	12.375	1323A-33-13	982
	1.875	3.500	12.875	1323A-33-17	1027
	2.375	4.000	13.875	1323A-33-23	1084
	2.875	4.000	14.375	1323A-33-27	1128
	3.375	4.500	15.375	1323A-33-33	1185
	3.875	4.500	15.875	1323A-33-37	1230
	4.875	4.500	16.875	1323A-33-47	1319
	5.875	4.500	17.875	1323A-33-57	1408

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	4.000	15.375	1323A-57-13	1217
	1.875	4.500	16.375	1323A-57-17	1274
	2.375	4.500	16.875	1323A-57-23	1319
	2.875	4.500	17.375	1323A-57-27	1363
	3.375	4.500	17.875	1323A-57-33	1408
	3.875	4.500	18.375	1323A-57-37	1452
	4.875	4.500	19.375	1323A-57-47	1541
	5.875	4.500	20.375	1323A-57-57	1630

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.500	11.375	1323A-23-13	893
	1.875	3.500	11.875	1323A-23-17	938
	2.375	3.500	12.375	1323A-23-23	982
	2.875	4.000	13.375	1323A-23-27	1039
	3.375	4.000	13.875	1323A-23-33	1084
	3.875	4.000	14.375	1323A-23-37	1128
	4.875	4.500	15.875	1323A-23-47	1230
	5.875	4.500	16.875	1323A-23-57	1319

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	3.500	12.875	1323A-37-13	1027
	1.875	4.000	13.875	1323A-37-17	1084
	2.375	4.500	14.875	1323A-37-23	1141
	2.875	4.500	15.375	1323A-37-27	1185
	3.375	4.500	15.875	1323A-37-33	1230
	3.875	4.500	16.375	1323A-37-37	1274
	4.875	4.500	17.375	1323A-37-47	1363
	5.875	4.500	18.375	1323A-37-57	1452

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

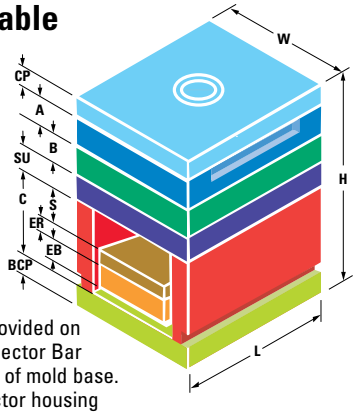
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
23.50	23
26.00	26
29.50	29
35.50	35

See Item 6 below.



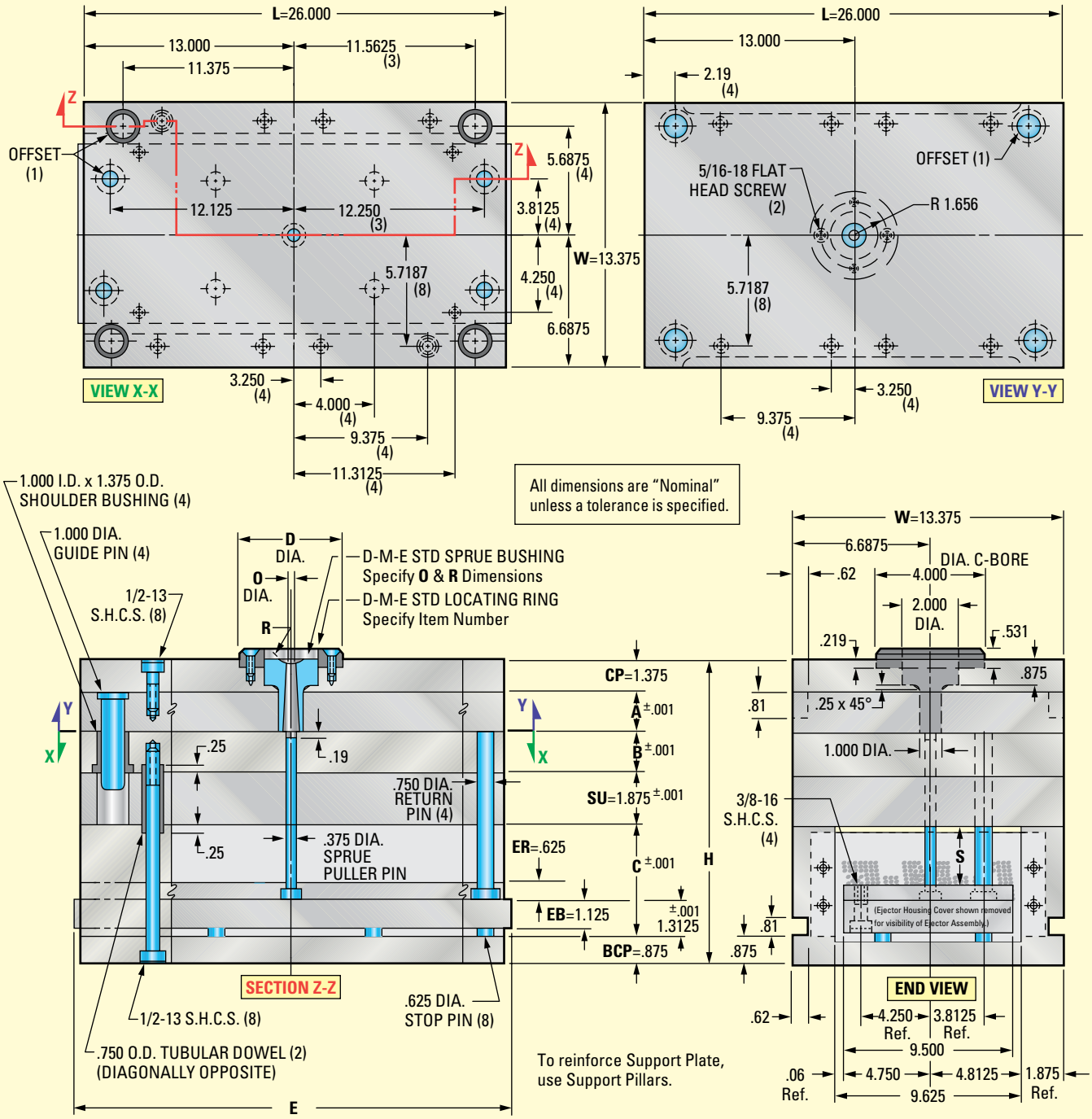
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

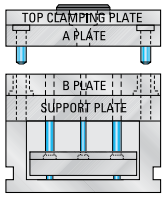
13⅜ x 26" A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

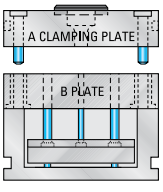


Mold Base Selections

A-Series Assembly



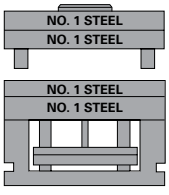
B-Series Assembly



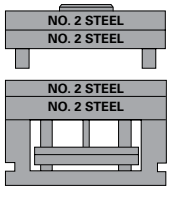
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

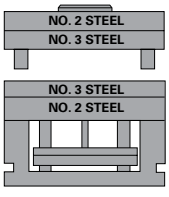
No. 1 Steel Assembly



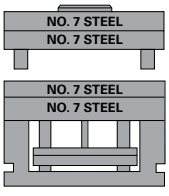
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

13⅜ x 26" A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	9.875	1326A-13-13	876
	1.875	3.000	10.375	1326A-13-17	925
	2.375	3.500	11.375	1326A-13-23	988
	2.875	3.500	11.875	1326A-13-27	1037
	3.375	4.000	12.875	1326A-13-33	1100
	3.875	4.000	13.375	1326A-13-37	1150
	4.875	4.500	14.875	1326A-13-47	1262
	5.875	4.500	15.875	1326A-13-57	1360

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.500	11.875	1326A-27-13	1037
	1.875	3.500	12.375	1326A-27-17	1086
	2.375	3.500	12.875	1326A-27-23	1136
	2.875	4.000	13.875	1326A-27-27	1199
	3.375	4.000	14.375	1326A-27-33	1248
	3.875	4.000	14.875	1326A-27-37	1297
	4.875	4.500	16.375	1326A-27-47	1410
	5.875	4.500	17.375	1326A-27-57	1508

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	3.500	13.875	1326A-47-13	1234
	1.875	4.000	14.875	1326A-47-17	1297
	2.375	4.500	15.875	1326A-47-23	1360
	2.875	4.500	16.375	1326A-47-27	1410
	3.375	4.500	16.875	1326A-47-33	1459
	3.875	4.500	17.375	1326A-47-37	1508
	4.875	4.500	18.375	1326A-47-47	1607
	5.875	4.500	19.375	1326A-47-57	1705

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	10.375	1326A-17-13	925
	1.875	3.000	10.875	1326A-17-17	974
	2.375	3.500	11.875	1326A-17-23	1037
	2.875	3.500	12.375	1326A-17-27	1086
	3.375	4.000	13.375	1326A-17-33	1150
	3.875	4.000	13.875	1326A-17-37	1199
	4.875	4.500	15.375	1326A-17-47	1311
	5.875	4.500	16.375	1326A-17-57	1410

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	3.500	12.375	1326A-33-13	1086
	1.875	3.500	12.875	1326A-33-17	1136
	2.375	4.000	13.875	1326A-33-23	1199
	2.875	4.000	14.375	1326A-33-27	1248
	3.375	4.500	15.375	1326A-33-33	1311
	3.875	4.500	15.875	1326A-33-37	1360
	4.875	4.500	16.875	1326A-33-47	1459
	5.875	4.500	17.875	1326A-33-57	1557

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	4.000	15.375	1326A-57-13	1347
	1.875	4.500	16.375	1326A-57-17	1410
	2.375	4.500	16.875	1326A-57-23	1459
	2.875	4.500	17.375	1326A-57-27	1508
	3.375	4.500	17.875	1326A-57-33	1557
	3.875	4.500	18.375	1326A-57-37	1607
	4.875	4.500	19.375	1326A-57-47	1705
	5.875	4.500	20.375	1326A-57-57	1804

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.500	11.375	1326A-23-13	988
	1.875	3.500	11.875	1326A-23-17	1037
	2.375	3.500	12.375	1326A-23-23	1086
	2.875	4.000	13.375	1326A-23-27	1150
	3.375	4.000	13.875	1326A-23-33	1199
	3.875	4.000	14.375	1326A-23-37	1248
	4.875	4.500	15.875	1326A-23-47	1360
	5.875	4.500	16.875	1326A-23-57	1459

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	3.500	12.875	1326A-37-13	1136
	1.875	4.000	13.875	1326A-37-17	1199
	2.375	4.500	14.875	1326A-37-23	1262
	2.875	4.500	15.375	1326A-37-27	1311
	3.375	4.500	15.875	1326A-37-33	1360
	3.875	4.500	16.375	1326A-37-37	1410
	4.875	4.500	17.375	1326A-37-47	1508
	5.875	4.500	18.375	1326A-37-57	1607

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

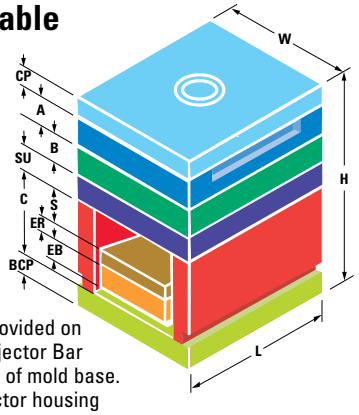
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
26.00	26
29.50	29
35.50	35

See Item 6 below.



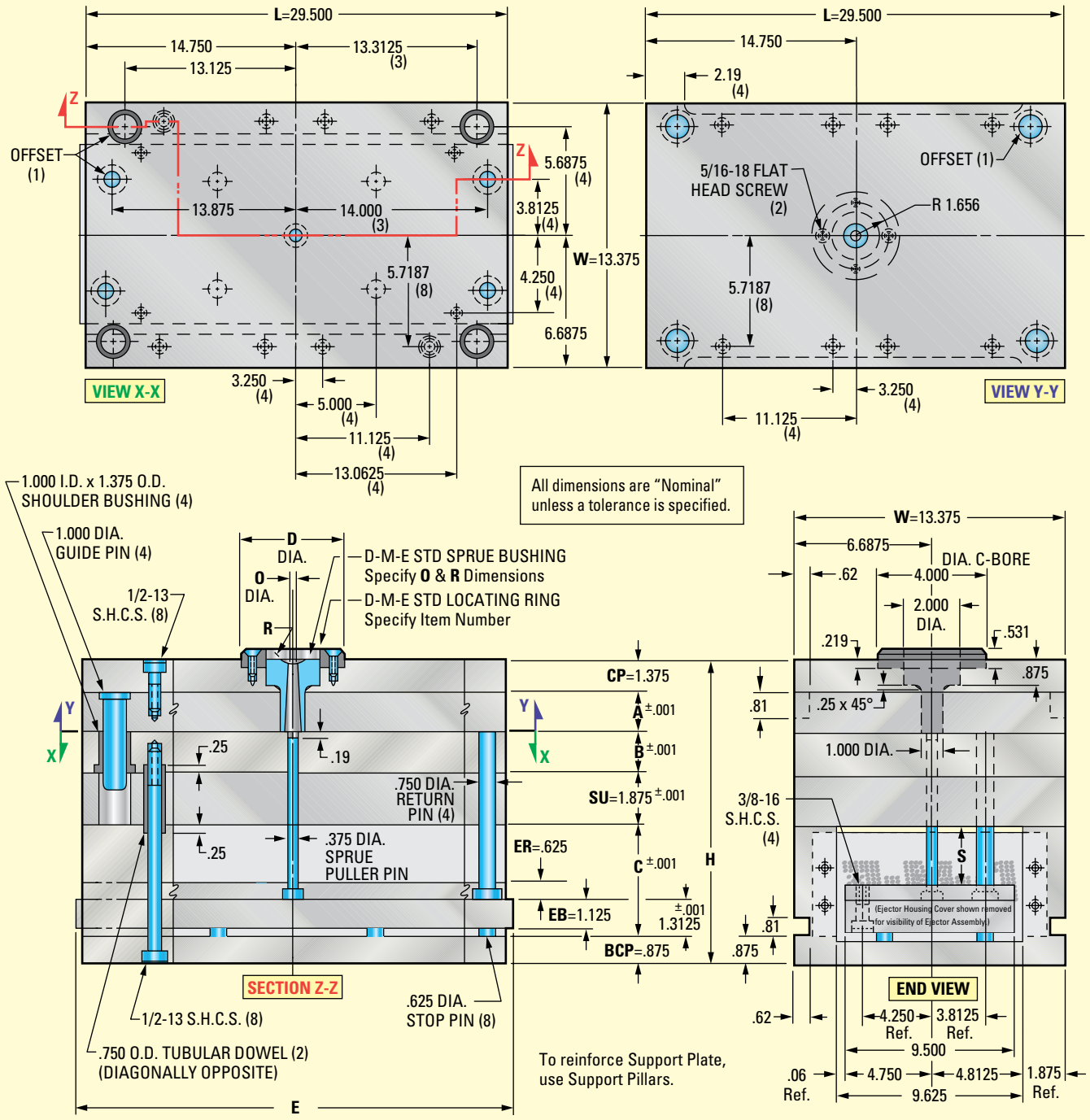
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

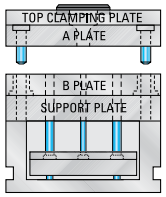
13⅜ x 29½ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

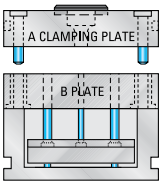


Mold Base Selections

A-Series Assembly



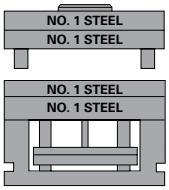
B-Series Assembly



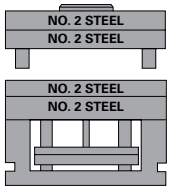
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

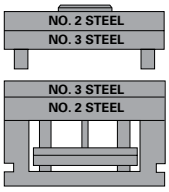
No. 1 Steel Assembly



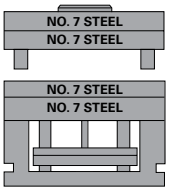
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

13⅜ x 29½ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	9.875	1329A-13-13	993
	1.875	3.000	10.375	1329A-13-17	1049
	2.375	3.500	11.375	1329A-13-23	1121
	2.875	3.500	11.875	1329A-13-27	1177
	3.375	4.000	12.875	1329A-13-33	1248
	3.875	4.000	13.375	1329A-13-37	1304
	4.875	4.500	14.875	1329A-13-47	1432
	5.875	4.500	15.875	1329A-13-57	1543

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.500	11.875	1329A-27-13	1177
	1.875	3.500	12.375	1329A-27-17	1233
	2.375	3.500	12.875	1329A-27-23	1288
	2.875	4.000	13.875	1329A-27-27	1360
	3.375	4.000	14.375	1329A-27-33	1416
	3.875	4.000	14.875	1329A-27-37	1472
	4.875	4.500	16.375	1329A-27-47	1599
	5.875	4.500	17.375	1329A-27-57	1711

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	3.500	13.875	1329A-47-13	1400
	1.875	4.000	14.875	1329A-47-17	1472
	2.375	4.500	15.875	1329A-47-23	1543
	2.875	4.500	16.375	1329A-47-27	1599
	3.375	4.500	16.875	1329A-47-33	1655
	3.875	4.500	17.375	1329A-47-37	1711
	4.875	4.500	18.375	1329A-47-47	1823
	5.875	4.500	19.375	1329A-47-57	1935

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	10.375	1329A-17-13	1049
	1.875	3.000	10.875	1329A-17-17	1105
	2.375	3.500	11.875	1329A-17-23	1177
	2.875	3.500	12.375	1329A-17-27	1233
	3.375	4.000	13.375	1329A-17-33	1304
	3.875	4.000	13.875	1329A-17-37	1360
	4.875	4.500	15.375	1329A-17-47	1488
	5.875	4.500	16.375	1329A-17-57	1599

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	3.500	12.375	1329A-33-13	1233
	1.875	3.500	12.875	1329A-33-17	1288
	2.375	4.000	13.875	1329A-33-23	1360
	2.875	4.000	14.375	1329A-33-27	1416
	3.375	4.500	15.375	1329A-33-33	1488
	3.875	4.500	15.875	1329A-33-37	1543
	4.875	4.500	16.875	1329A-33-47	1655
	5.875	4.500	17.875	1329A-33-57	1767

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	4.000	15.375	1329A-57-13	1528
	1.875	4.500	16.375	1329A-57-17	1599
	2.375	4.500	16.875	1329A-57-23	1655
	2.875	4.500	17.375	1329A-57-27	1711
	3.375	4.500	17.875	1329A-57-33	1767
	3.875	4.500	18.375	1329A-57-37	1823
	4.875	4.500	19.375	1329A-57-47	1935
	5.875	4.500	20.375	1329A-57-57	2046

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.500	11.375	1329A-23-13	1121
	1.875	3.500	11.875	1329A-23-17	1177
	2.375	3.500	12.375	1329A-23-23	1233
	2.875	4.000	13.375	1329A-23-27	1304
	3.375	4.000	13.875	1329A-23-33	1360
	3.875	4.000	14.375	1329A-23-37	1416
	4.875	4.500	15.875	1329A-23-47	1546
	5.875	4.500	16.875	1329A-23-57	1655

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	3.500	12.875	1329A-37-13	1288
	1.875	4.000	13.875	1329A-37-17	1360
	2.375	4.500	14.875	1329A-37-23	1432
	2.875	4.500	15.375	1329A-37-27	1488
	3.375	4.500	15.875	1329A-37-33	1543
	3.875	4.500	16.375	1329A-37-37	1599
	4.875	4.500	17.375	1329A-37-47	1711
	5.875	4.500	18.375	1329A-37-57	1823

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

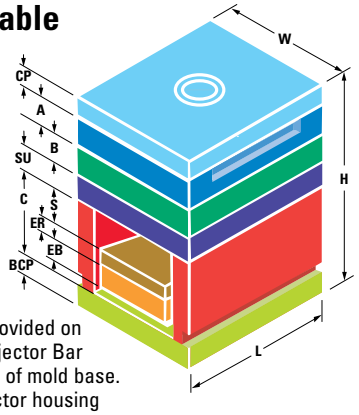
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
29.50	29
35.50	35

See Item 6 below.



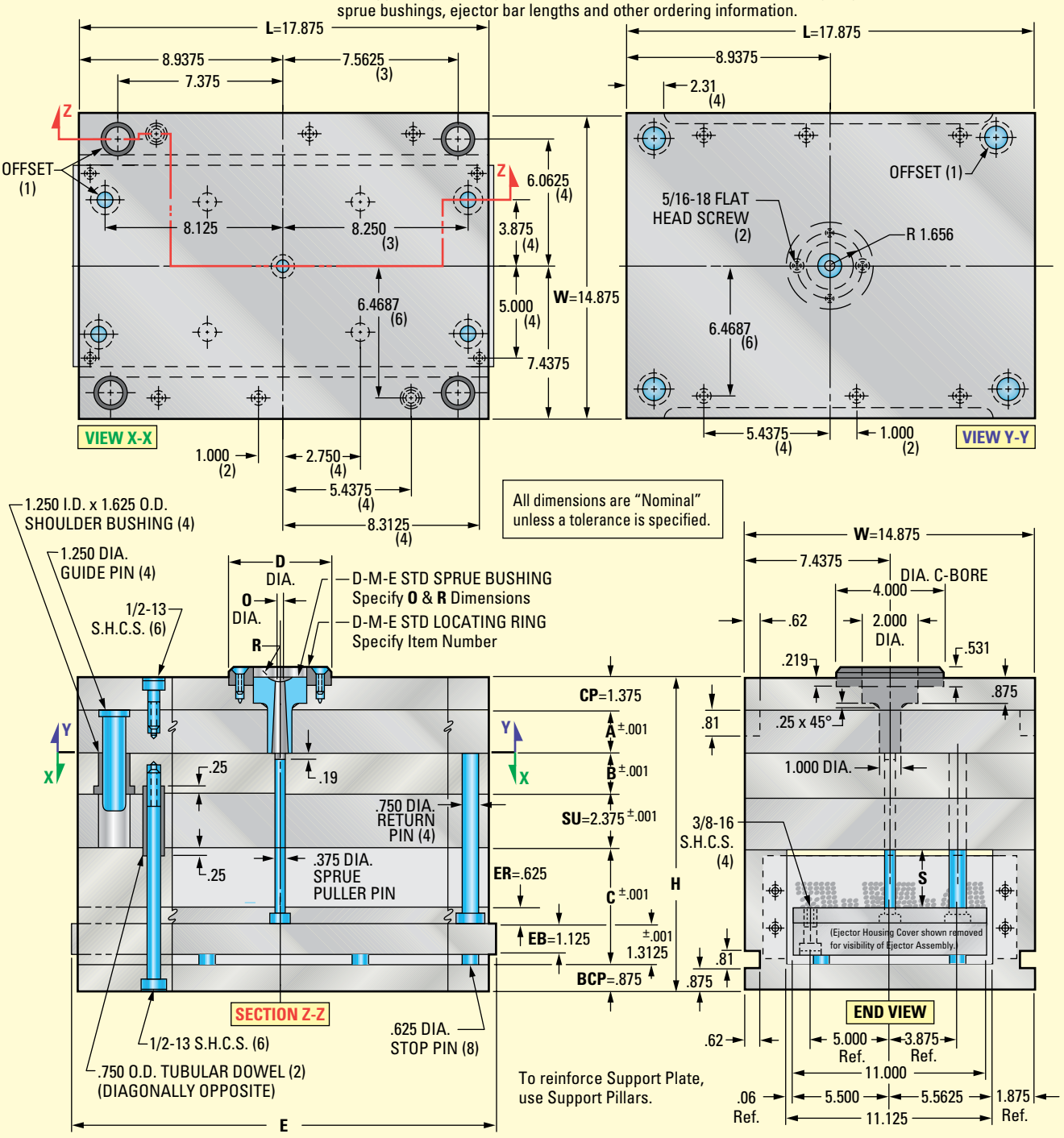
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

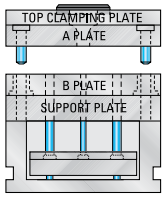
14⁷/₈ x 17⁷/₈ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

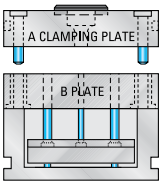


Mold Base Selections

A-Series Assembly



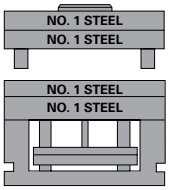
B-Series Assembly



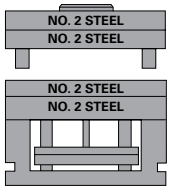
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

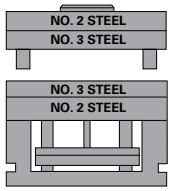
No. 1 Steel Assembly



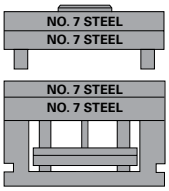
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

14⅞ x 17⅞ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
.875 (7/8)	0.875	3.000	9.375	1518A-7-7	630
	1.375	3.000	9.875	1518A-7-13	668
	1.875	3.000	10.375	1518A-7-17	705
	2.375	3.500	11.375	1518A-7-23	752
	2.875	3.500	11.875	1518A-7-27	790
	3.375	4.000	12.875	1518A-7-33	837
	3.875	4.000	13.375	1518A-7-37	875
	4.875	4.500	14.875	1518A-7-47	960
	5.875	4.500	15.875	1518A-7-57	1035

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	0.875	3.000	10.875	1518A-23-7	743
	1.375	3.500	11.875	1518A-23-13	790
	1.875	3.500	12.375	1518A-23-17	828
	2.375	3.500	12.875	1518A-23-23	865
	2.875	4.000	13.875	1518A-23-27	913
	3.375	4.000	14.375	1518A-23-33	950
	3.875	4.000	14.875	1518A-23-37	988
	4.875	4.500	16.375	1518A-23-47	1073
	5.875	4.500	17.375	1518A-23-57	1148

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	0.875	3.500	12.875	1518A-37-7	865
	1.375	4.000	13.875	1518A-37-13	913
	1.875	4.000	14.375	1518A-37-17	950
	2.375	4.500	15.375	1518A-37-23	997
	2.875	4.500	15.875	1518A-37-27	1035
	3.375	4.500	16.375	1518A-37-33	1073
	3.875	4.500	16.875	1518A-37-37	1110
	4.875	4.500	17.875	1518A-37-47	1185
	5.875	4.500	18.875	1518A-37-57	1261

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	0.875	3.000	9.875	1518A-13-7	668
	1.375	3.000	10.375	1518A-13-13	705
	1.875	3.000	10.875	1518A-13-17	743
	2.375	3.500	11.875	1518A-13-23	790
	2.875	3.500	12.375	1518A-13-27	828
	3.375	4.000	13.375	1518A-13-33	875
	3.875	4.000	13.875	1518A-13-37	913
	4.875	4.500	15.375	1518A-13-47	997
	5.875	4.500	16.375	1518A-13-57	1073

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	0.875	3.000	11.375	1518A-27-7	781
	1.375	3.500	12.375	1518A-27-13	828
	1.875	3.500	12.875	1518A-27-17	865
	2.375	3.500	13.375	1518A-27-23	903
	2.875	4.000	14.375	1518A-27-27	950
	3.375	4.000	14.875	1518A-27-33	988
	3.875	4.000	15.375	1518A-27-37	1026
	4.875	4.500	16.875	1518A-27-47	1110
	5.875	4.500	17.875	1518A-27-57	1186

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	0.875	3.500	13.875	1518A-47-7	941
	1.375	4.000	14.875	1518A-47-13	988
	1.875	4.000	15.375	1518A-47-17	1026
	2.375	4.500	16.375	1518A-47-23	1073
	2.875	4.500	16.875	1518A-47-27	1110
	3.375	4.500	17.375	1518A-47-33	1148
	3.875	4.500	17.875	1518A-47-37	1186
	4.875	4.500	18.875	1518A-47-47	1261
	5.875	4.500	19.875	1518A-47-57	1336

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	0.875	3.000	10.375	1518A-17-7	705
	1.375	3.000	10.875	1518A-17-13	743
	1.875	3.500	11.875	1518A-17-17	790
	2.375	3.500	12.375	1518A-17-23	828
	2.875	4.000	13.375	1518A-17-27	875
	3.375	4.000	13.875	1518A-17-33	913
	3.875	4.000	14.375	1518A-17-37	950
	4.875	4.500	15.875	1518A-17-47	1035
	5.875	4.500	16.875	1518A-17-57	1110

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	0.875	3.500	12.375	1518A-33-7	828
	1.375	4.000	13.375	1518A-33-13	875
	1.875	4.000	13.875	1518A-33-17	913
	2.375	4.000	14.375	1518A-33-23	950
	2.875	4.500	15.375	1518A-33-27	997
	3.375	4.500	15.875	1518A-33-33	1035
	3.875	4.500	16.375	1518A-33-37	1073
	4.875	4.500	17.375	1518A-33-47	1148
	5.875	4.500	18.375	1518A-33-57	1223

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	0.875	4.000	15.375	1518A-57-7	1026
	1.375	4.000	15.875	1518A-57-13	1063
	1.875	4.500	16.875	1518A-57-17	1110
	2.375	4.500	17.375	1518A-57-23	1148
	2.875	4.500	17.875	1518A-57-27	1186
	3.375	4.500	18.375	1518A-57-33	1223
	3.875	4.500	18.875	1518A-57-37	1261
	4.875	4.500	19.875	1518A-57-47	1336
	5.875	4.500	20.875	1518A-57-57	1412

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

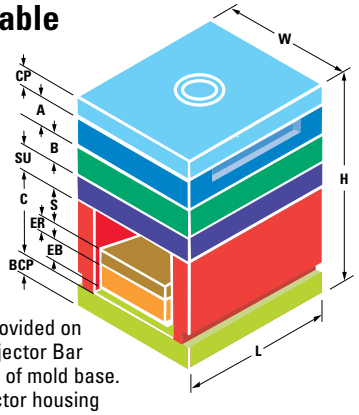
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
17.875	18
23.75	23
29.50	29
35.50	35

See Item 6 below.



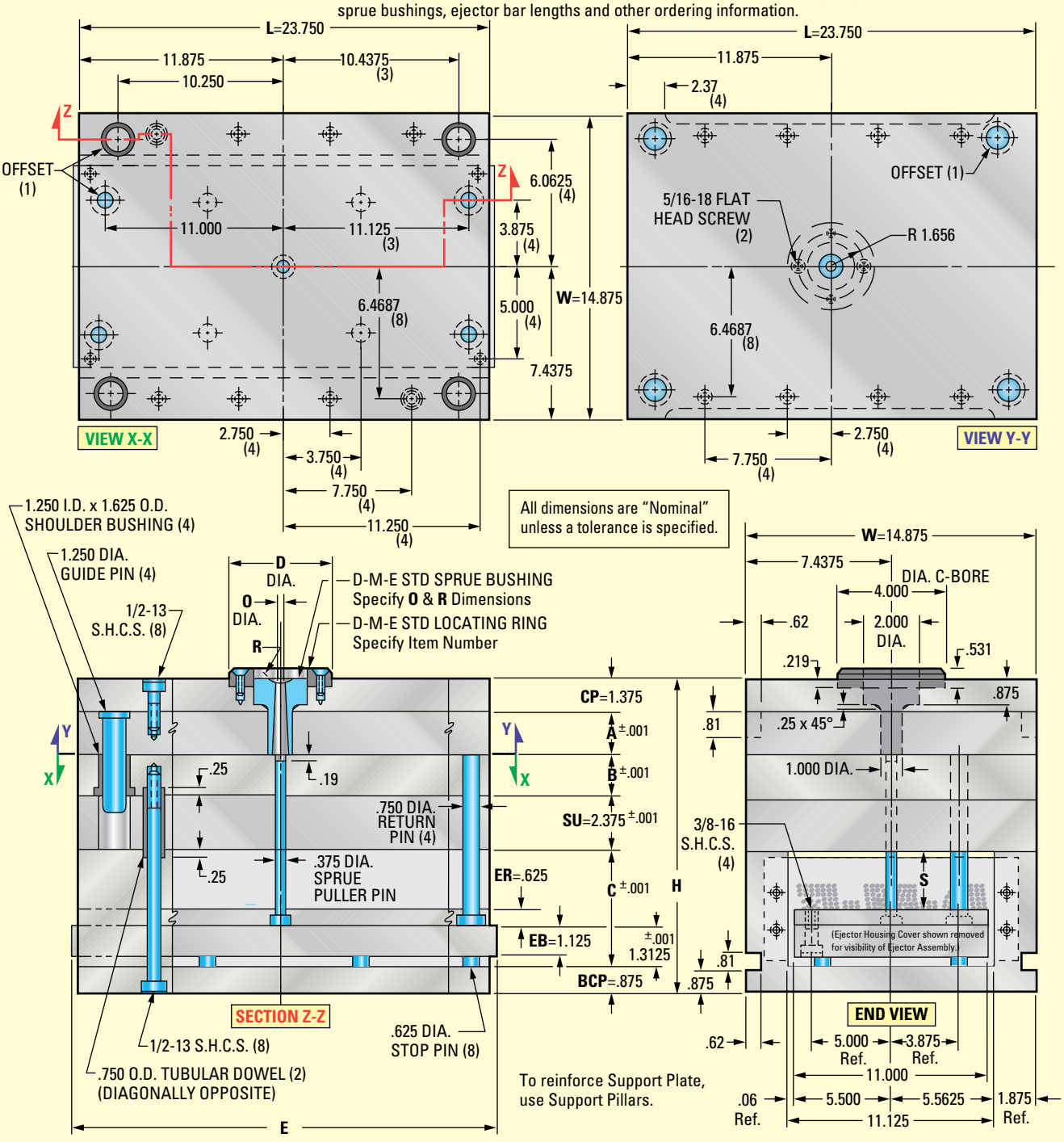
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

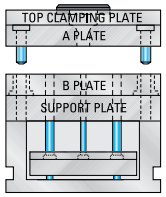
14⁷/₈ x 23³/₄ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

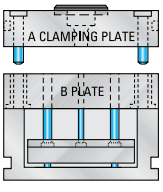


Mold Base Selections

A-Series Assembly



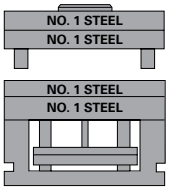
B-Series Assembly



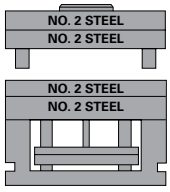
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

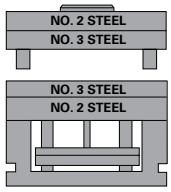
No. 1 Steel Assembly



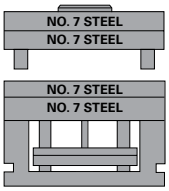
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

14⁷/₈ x 23³/₄ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	10.375	1524A-13-13	937
	1.875	3.000	10.875	1524A-13-17	987
	2.375	3.500	11.875	1524A-13-23	1050
	2.875	3.500	12.375	1524A-13-27	1100
	3.375	4.000	13.375	1524A-13-33	1162
	3.875	4.000	13.875	1524A-13-37	1212
	4.875	4.500	15.375	1524A-13-47	1325
	5.875	4.500	16.375	1524A-13-57	1425

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.500	12.375	1524A-27-13	1100
	1.875	3.500	12.875	1524A-27-17	1150
	2.375	3.500	13.375	1524A-27-23	1200
	2.875	4.000	14.375	1524A-27-27	1262
	3.375	4.000	14.875	1524A-27-33	1312
	3.875	4.000	15.375	1524A-27-37	1363
	4.875	4.500	16.875	1524A-27-47	1475
	5.875	4.500	17.875	1524A-27-57	1575

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	4.000	14.875	1524A-47-13	1312
	1.875	4.000	15.375	1524A-47-17	1363
	2.375	4.500	16.375	1524A-47-23	1425
	2.875	4.500	16.875	1524A-47-27	1475
	3.375	4.500	17.375	1524A-47-33	1525
	3.875	4.500	17.875	1524A-47-37	1575
	4.875	4.500	18.875	1524A-47-47	1675
	5.875	4.500	19.875	1524A-47-57	1775

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	10.875	1524A-17-13	987
	1.875	3.500	11.875	1524A-17-17	1050
	2.375	3.500	12.375	1524A-17-23	1100
	2.875	4.000	13.375	1524A-17-27	1162
	3.375	4.000	13.875	1524A-17-33	1212
	3.875	4.000	14.375	1524A-17-37	1262
	4.875	4.500	15.875	1524A-17-47	1375
	5.875	4.500	16.875	1524A-17-57	1475

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	4.000	13.375	1524A-33-13	1162
	1.875	4.000	13.875	1524A-33-17	1212
	2.375	4.000	14.375	1524A-33-23	1262
	2.875	4.500	15.375	1524A-33-27	1325
	3.375	4.500	15.875	1524A-33-33	1375
	3.875	4.500	16.375	1524A-33-37	1425
	4.875	4.500	17.375	1524A-33-47	1525
	5.875	4.500	18.375	1524A-33-57	1625

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	4.000	15.875	1524A-57-13	1413
	1.875	4.500	16.875	1524A-57-17	1475
	2.375	4.500	17.375	1524A-57-23	1525
	2.875	4.500	17.875	1524A-57-27	1575
	3.375	4.500	18.375	1524A-57-33	1625
	3.875	4.500	18.875	1524A-57-37	1675
	4.875	4.500	19.875	1524A-57-47	1775
	5.875	4.500	20.875	1524A-57-57	1876

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.500	11.875	1524A-23-13	1050
	1.875	3.500	12.375	1524A-23-17	1100
	2.375	3.500	12.875	1524A-23-23	1150
	2.875	4.000	13.875	1524A-23-27	1212
	3.375	4.000	14.375	1524A-23-33	1262
	3.875	4.000	14.875	1524A-23-37	1312
	4.875	4.500	16.375	1524A-23-47	1425
	5.875	4.500	17.375	1524A-23-57	1525

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	4.000	13.875	1524A-37-13	1212
	1.875	4.000	14.375	1524A-37-17	1262
	2.375	4.500	15.375	1524A-37-23	1325
	2.875	4.500	15.875	1524A-37-27	1375
	3.375	4.500	16.375	1524A-37-33	1425
	3.875	4.500	16.875	1524A-37-37	1475
	4.875	4.500	17.875	1524A-37-47	1575
	5.875	4.500	18.875	1524A-37-57	1675

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

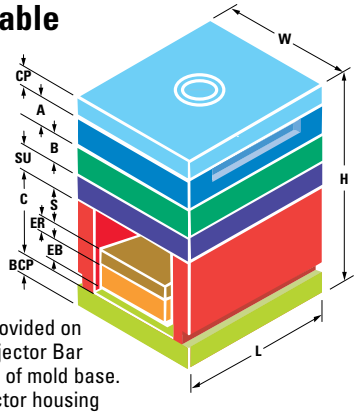
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
23.75	24
29.50	29
35.50	35

See Item 6 below.



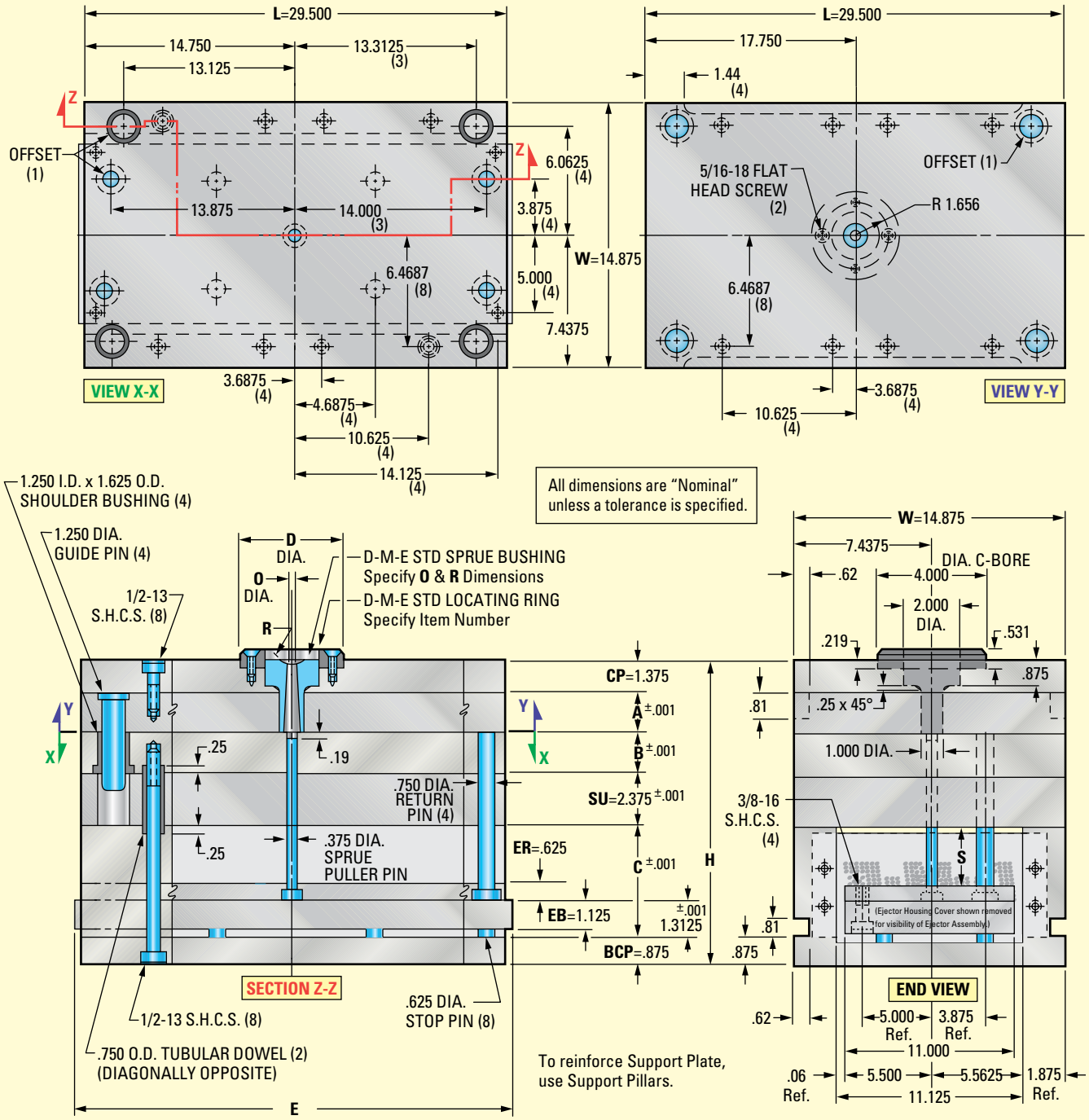
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

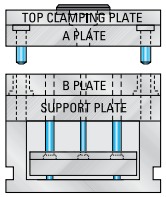
14⅞ x 29½ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

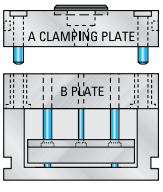


Mold Base Selections

A-Series Assembly



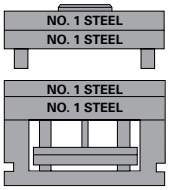
B-Series Assembly



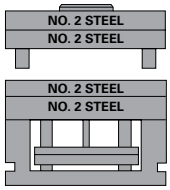
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

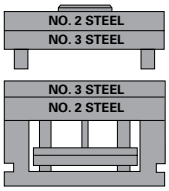
No. 1 Steel Assembly



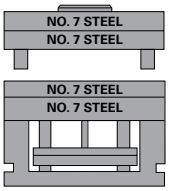
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

14⅞ x 29½ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	10.375	1529A-13-13	1164
	1.875	3.000	10.875	1529A-13-17	1226
	2.375	3.500	11.875	1529A-13-23	1304
	2.875	3.500	12.375	1529A-13-27	1366
	3.375	4.000	13.375	1529A-13-33	1444
	3.875	4.000	13.875	1529A-13-37	1506
	4.875	4.500	15.375	1529A-13-47	1646
	5.875	4.500	16.375	1529A-13-57	1770

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.500	12.375	1529A-27-13	1366
	1.875	3.500	12.875	1529A-27-17	1428
	2.375	3.500	13.375	1529A-27-23	1490
	2.875	4.000	14.375	1529A-27-27	1568
	3.375	4.000	14.875	1529A-27-33	1630
	3.875	4.000	15.375	1529A-27-37	1692
	4.875	4.500	16.875	1529A-27-47	1832
	5.875	4.500	17.875	1529A-27-57	1957

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	4.000	14.875	1529A-47-13	1630
	1.875	4.000	15.375	1529A-47-17	1692
	2.375	4.500	16.375	1529A-47-23	1770
	2.875	4.500	16.875	1529A-47-27	1832
	3.375	4.500	17.375	1529A-47-33	1894
	3.875	4.500	17.875	1529A-47-37	1957
	4.875	4.500	18.875	1529A-47-47	2081
	5.875	4.500	19.875	1529A-47-57	2205

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	10.875	1529A-17-13	1226
	1.875	3.500	11.875	1529A-17-17	1304
	2.375	3.500	12.375	1529A-17-23	1366
	2.875	4.000	13.375	1529A-17-27	1444
	3.375	4.000	13.875	1529A-17-33	1506
	3.875	4.000	14.375	1529A-17-37	1568
	4.875	4.500	15.875	1529A-17-47	1708
	5.875	4.500	16.875	1529A-17-57	1832

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	4.000	13.375	1529A-33-13	1444
	1.875	4.000	13.875	1529A-33-17	1506
	2.375	4.000	14.375	1529A-33-23	1568
	2.875	4.500	15.375	1529A-33-27	1646
	3.375	4.500	15.875	1529A-33-33	1708
	3.875	4.500	16.375	1529A-33-37	1770
	4.875	4.500	17.375	1529A-33-47	1894
	5.875	4.500	18.375	1529A-33-57	2019

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	4.000	15.875	1529A-57-13	1755
	1.875	4.500	16.875	1529A-57-17	1832
	2.375	4.500	17.375	1529A-57-23	1894
	2.875	4.500	17.875	1529A-57-27	1957
	3.375	4.500	18.375	1529A-57-33	2019
	3.875	4.500	18.875	1529A-57-37	2081
	4.875	4.500	19.875	1529A-57-47	2205
	5.875	4.500	20.875	1529A-57-57	2330

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.500	11.875	1529A-23-13	1304
	1.875	3.500	12.375	1529A-23-17	1366
	2.375	3.500	12.875	1529A-23-23	1428
	2.875	4.000	13.875	1529A-23-27	1506
	3.375	4.000	14.375	1529A-23-33	1568
	3.875	4.000	14.875	1529A-23-37	1630
	4.875	4.500	16.375	1529A-23-47	1770
	5.875	4.500	17.375	1529A-23-57	1894

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	4.000	13.875	1529A-37-13	1506
	1.875	4.000	14.375	1529A-37-17	1568
	2.375	4.500	15.375	1529A-37-23	1646
	2.875	4.500	15.875	1529A-37-27	1708
	3.375	4.500	16.375	1529A-37-33	1770
	3.875	4.500	16.875	1529A-37-37	1832
	4.875	4.500	17.875	1529A-37-47	1957
	5.875	4.500	18.875	1529A-37-57	2081

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

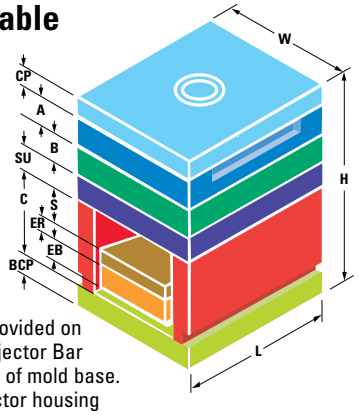
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
29.50	29
35.50	35

See Item 6 below.



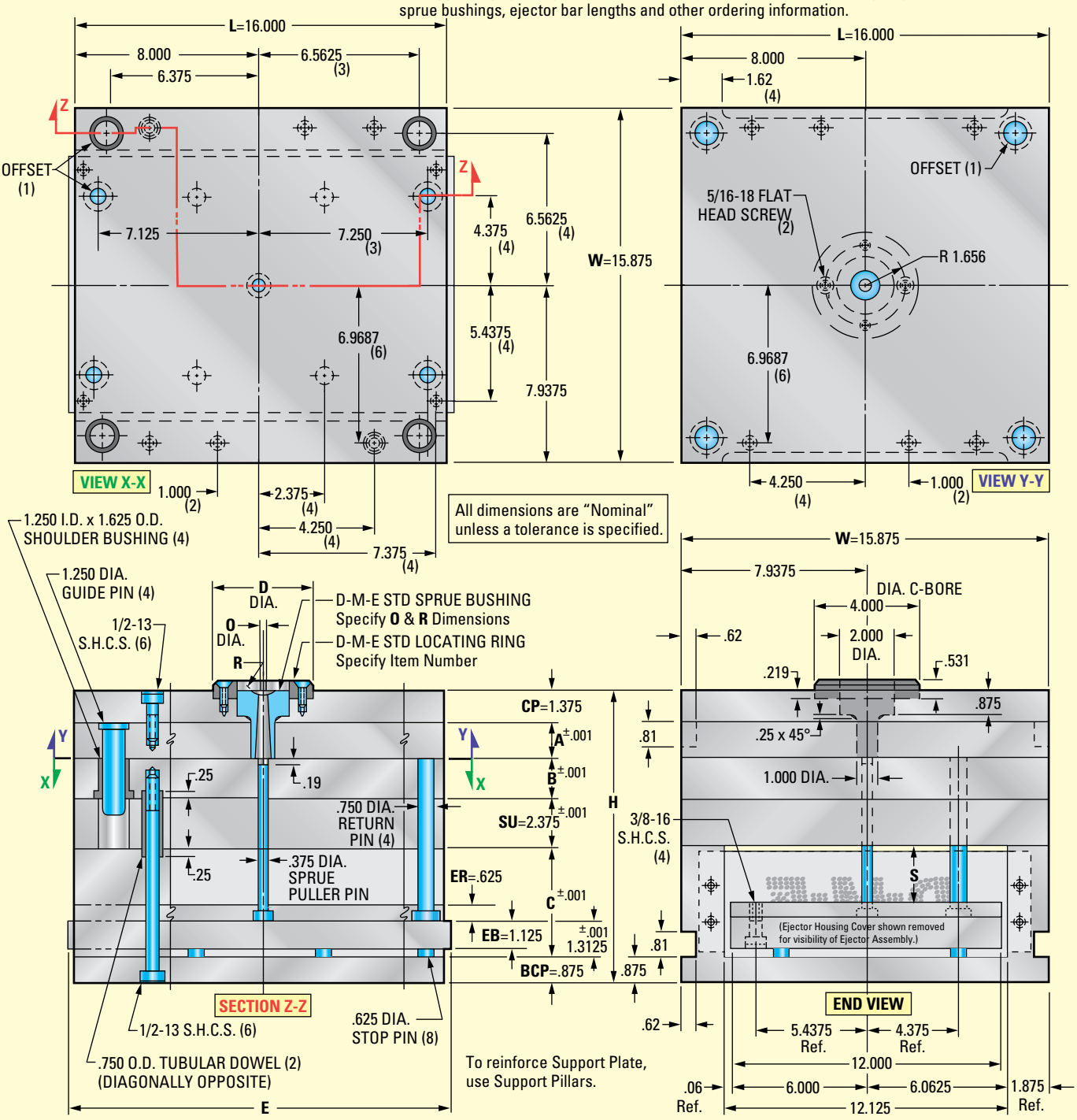
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

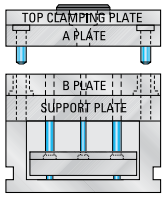
15⅞ x 16" A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

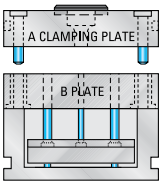


Mold Base Selections

A-Series Assembly



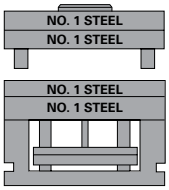
B-Series Assembly



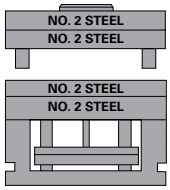
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

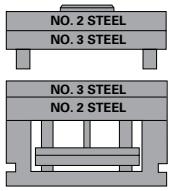
No. 1 Steel Assembly



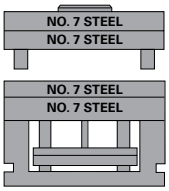
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

15⅞ x 16" A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
.875 (7/8)	0.875	3.000	9.375	1616A-7-7	601
	1.375	3.000	9.875	1616A-7-13	637
	1.875	3.000	10.375	1616A-7-17	673
	2.375	3.500	11.375	1616A-7-23	717
	2.875	3.500	11.875	1616A-7-27	753
	3.375	4.000	12.875	1616A-7-33	798
	3.875	4.000	13.375	1616A-7-37	834
	4.875	4.500	14.875	1616A-7-47	914
	5.875	4.500	15.875	1616A-7-57	986

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	0.875	3.000	10.875	1616A-23-7	709
	1.375	3.500	11.875	1616A-23-13	753
	1.875	3.500	12.375	1616A-23-17	789
	2.375	3.500	12.875	1616A-23-23	825
	2.875	4.000	13.875	1616A-23-27	870
	3.375	4.000	14.375	1616A-23-33	906
	3.875	4.000	14.875	1616A-23-37	942
	4.875	4.500	16.375	1616A-23-47	1022
	5.875	4.500	17.375	1616A-23-57	1094

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	0.875	3.500	12.875	1616A-37-7	825
	1.375	4.000	13.875	1616A-37-13	870
	1.875	4.000	14.375	1616A-37-17	906
	2.375	4.500	15.375	1616A-37-23	950
	2.875	4.500	15.875	1616A-37-27	986
	3.375	4.500	16.375	1616A-37-33	1022
	3.875	4.500	16.875	1616A-37-37	1058
	4.875	4.500	17.875	1616A-37-47	1130
	5.875	4.500	18.875	1616A-37-57	1202

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	0.875	3.000	9.875	1616A-13-7	637
	1.375	3.000	10.375	1616A-13-13	673
	1.875	3.000	10.875	1616A-13-17	709
	2.375	3.500	11.875	1616A-13-23	753
	2.875	3.500	12.375	1616A-13-27	789
	3.375	4.000	13.375	1616A-13-33	834
	3.875	4.000	13.875	1616A-13-37	870
	4.875	4.500	15.375	1616A-13-47	950
	5.875	4.500	16.375	1616A-13-57	1022

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	0.875	3.000	11.375	1616A-27-7	745
	1.375	3.500	12.375	1616A-27-13	789
	1.875	3.500	12.875	1616A-27-17	825
	2.375	3.500	13.375	1616A-27-23	861
	2.875	4.000	14.375	1616A-27-27	906
	3.375	4.000	14.875	1616A-27-33	942
	3.875	4.000	15.375	1616A-27-37	978
	4.875	4.500	16.875	1616A-27-47	1058
	5.875	4.500	17.875	1616A-27-57	1130

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	0.875	3.500	13.875	1616A-47-7	897
	1.375	4.000	14.875	1616A-47-13	942
	1.875	4.000	15.375	1616A-47-17	978
	2.375	4.500	16.375	1616A-47-23	1022
	2.875	4.500	16.875	1616A-47-27	1058
	3.375	4.500	17.375	1616A-47-33	1094
	3.875	4.500	17.875	1616A-47-37	1130
	4.875	4.500	18.875	1616A-47-47	1202
	5.875	4.500	19.875	1616A-47-57	1274

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	0.875	3.000	10.375	1616A-17-7	673
	1.375	3.000	10.875	1616A-17-13	709
	1.875	3.500	11.875	1616A-17-17	753
	2.375	3.500	12.375	1616A-17-23	789
	2.875	4.000	13.375	1616A-17-27	834
	3.375	4.000	13.875	1616A-17-33	870
	3.875	4.000	14.375	1616A-17-37	906
	4.875	4.500	15.875	1616A-17-47	986
	5.875	4.500	16.875	1616A-17-57	1058

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	0.875	3.500	12.375	1616A-33-7	789
	1.375	4.000	13.375	1616A-33-13	834
	1.875	4.000	13.875	1616A-33-17	870
	2.375	4.000	14.375	1616A-33-23	906
	2.875	4.500	15.375	1616A-33-27	950
	3.375	4.500	15.875	1616A-33-33	986
	3.875	4.500	16.375	1616A-33-37	1022
	4.875	4.500	17.375	1616A-33-47	1094
	5.875	4.500	18.375	1616A-33-57	1166

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	0.875	4.000	15.375	1616A-57-7	978
	1.375	4.000	15.875	1616A-57-13	1014
	1.875	4.500	16.875	1616A-57-17	1058
	2.375	4.500	17.375	1616A-57-23	1094
	2.875	4.500	17.875	1616A-57-27	1130
	3.375	4.500	18.375	1616A-57-33	1166
	3.875	4.500	18.875	1616A-57-37	1202
	4.875	4.500	19.875	1616A-57-47	1274
	5.875	4.500	20.875	1616A-57-57	1346

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	SU SUPPORT PLATE THICKNESS	BCP BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

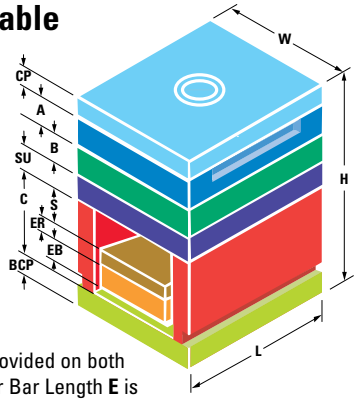
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	S MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
16.00	16
20.00	20
23.50	23
26.00	26
29.50	29
35.50	35

See Item 6 below.



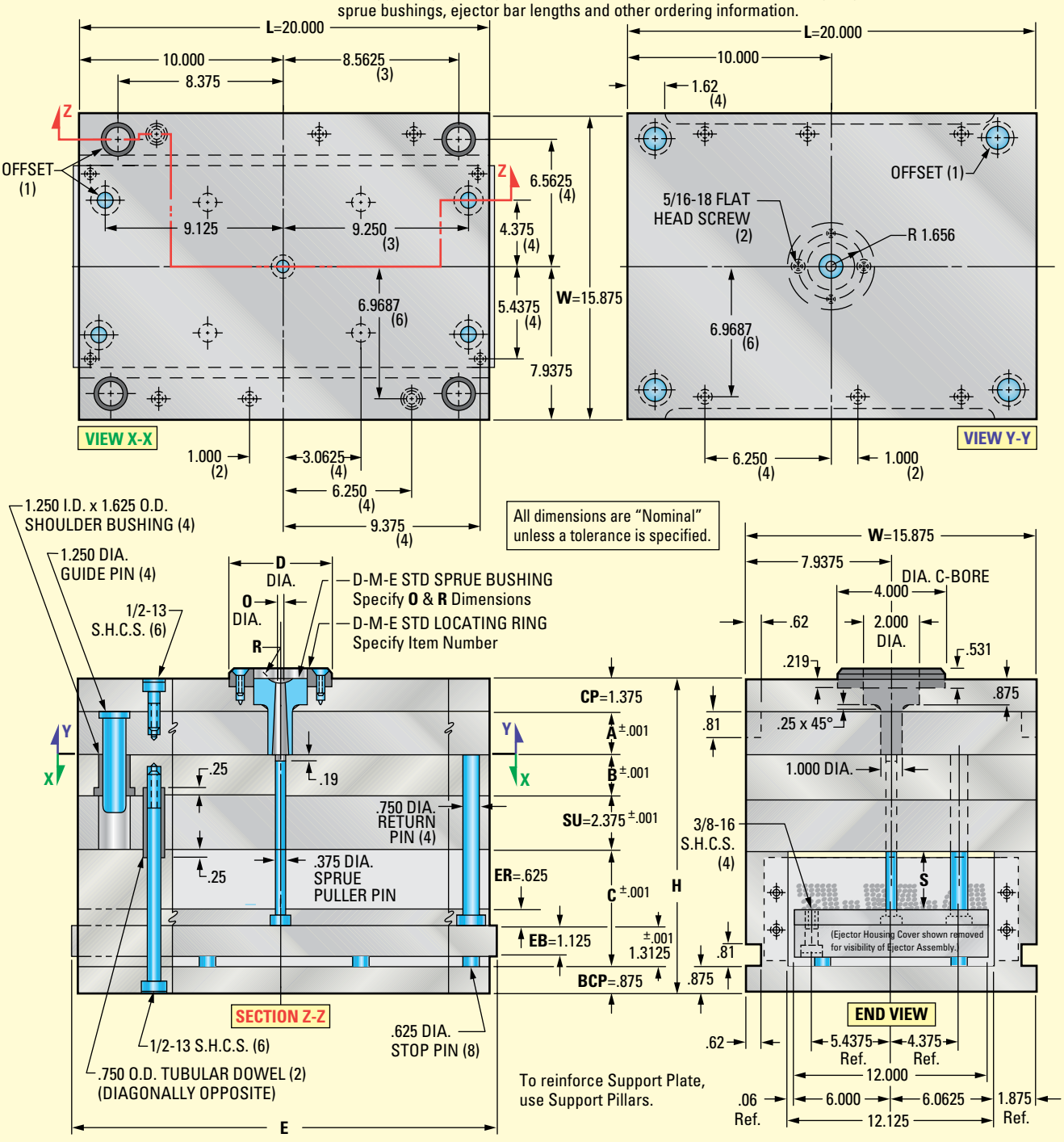
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

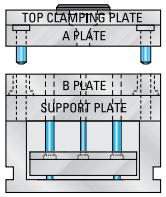
15⅞ x 20" A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

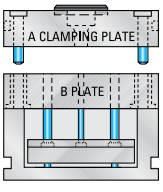


Mold Base Selections

A-Series Assembly



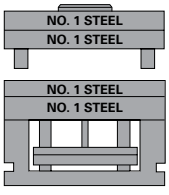
B-Series Assembly



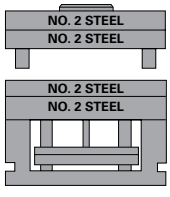
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

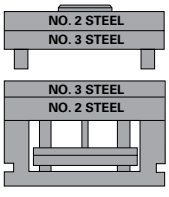
No. 1 Steel Assembly



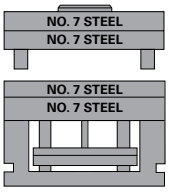
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

15⅞ x 20" A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
.875 (7/8)	0.875	3.000	9.375	1620A-7-7	751
	1.375	3.000	9.875	1620A-7-13	796
	1.875	3.000	10.375	1620A-7-17	841
	2.375	3.500	11.375	1620A-7-23	896
	2.875	3.500	11.875	1620A-7-27	941
	3.375	4.000	12.875	1620A-7-33	997
	3.875	4.000	13.375	1620A-7-37	1042
	4.875	4.500	14.875	1620A-7-47	1143
	5.875	4.500	15.875	1620A-7-57	1232

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	0.875	3.000	10.875	1620A-23-7	886
	1.375	3.500	11.875	1620A-23-13	941
	1.875	3.500	12.375	1620A-23-17	986
	2.375	3.500	12.875	1620A-23-23	1031
	2.875	4.000	13.875	1620A-23-27	1087
	3.375	4.000	14.375	1620A-23-33	1132
	3.875	4.000	14.875	1620A-23-37	1177
	4.875	4.500	16.375	1620A-23-47	1277
	5.875	4.500	17.375	1620A-23-57	1367

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	0.875	3.500	12.875	1620A-37-7	1031
	1.375	4.000	13.875	1620A-37-13	1087
	1.875	4.000	14.375	1620A-37-17	1132
	2.375	4.500	15.375	1620A-37-23	1187
	2.875	4.500	15.875	1620A-37-27	1232
	3.375	4.500	16.375	1620A-37-33	1277
	3.875	4.500	16.875	1620A-37-37	1322
	4.875	4.500	17.875	1620A-37-47	1412
	5.875	4.500	18.875	1620A-37-57	1502

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	0.875	3.000	9.875	1620A-13-7	796
	1.375	3.000	10.375	1620A-13-13	841
	1.875	3.000	10.875	1620A-13-17	886
	2.375	3.500	11.875	1620A-13-23	941
	2.875	3.500	12.375	1620A-13-27	986
	3.375	4.000	13.375	1620A-13-33	1042
	3.875	4.000	13.875	1620A-13-37	1087
	4.875	4.500	15.375	1620A-13-47	1187
	5.875	4.500	16.375	1620A-13-57	1277

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	0.875	3.000	11.375	1620A-27-7	931
	1.375	3.500	12.375	1620A-27-13	986
	1.875	3.500	12.875	1620A-27-17	1031
	2.375	3.500	13.375	1620A-27-23	1076
	2.875	4.000	14.375	1620A-27-27	1132
	3.375	4.000	14.875	1620A-27-33	1177
	3.875	4.000	15.375	1620A-27-37	1222
	4.875	4.500	16.875	1620A-27-47	1322
	5.875	4.500	17.875	1620A-27-57	1412

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	0.875	3.500	13.875	1620A-47-7	1121
	1.375	4.000	14.875	1620A-47-13	1177
	1.875	4.000	15.375	1620A-47-17	1222
	2.375	4.500	16.375	1620A-47-23	1277
	2.875	4.500	16.875	1620A-47-27	1322
	3.375	4.500	17.375	1620A-47-33	1367
	3.875	4.500	17.875	1620A-47-37	1412
	4.875	4.500	18.875	1620A-47-47	1502
	5.875	4.500	19.875	1620A-47-57	1592

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	0.875	3.000	10.375	1620A-17-7	841
	1.375	3.000	10.875	1620A-17-13	886
	1.875	3.500	11.875	1620A-17-17	941
	2.375	3.500	12.375	1620A-17-23	986
	2.875	4.000	13.375	1620A-17-27	1042
	3.375	4.000	13.875	1620A-17-33	1087
	3.875	4.000	14.375	1620A-17-37	1132
	4.875	4.500	15.875	1620A-17-47	1232
	5.875	4.500	16.875	1620A-17-57	1322

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	0.875	3.500	12.375	1620A-33-7	986
	1.375	4.000	13.375	1620A-33-13	1042
	1.875	4.000	13.875	1620A-33-17	1087
	2.375	4.000	14.375	1620A-33-23	1132
	2.875	4.500	15.375	1620A-33-27	1187
	3.375	4.500	15.875	1620A-33-33	1232
	3.875	4.500	16.375	1620A-33-37	1277
	4.875	4.500	17.375	1620A-33-47	1367
	5.875	4.500	18.375	1620A-33-57	1457

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	0.875	4.000	15.375	1620A-57-7	1222
	1.375	4.000	15.875	1620A-57-13	1267
	1.875	4.500	16.875	1620A-57-17	1322
	2.375	4.500	17.375	1620A-57-23	1367
	2.875	4.500	17.875	1620A-57-27	1412
	3.375	4.500	18.375	1620A-57-33	1457
	3.875	4.500	18.875	1620A-57-37	1502
	4.875	4.500	19.875	1620A-57-47	1592
	5.875	4.500	20.875	1620A-57-57	1682

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	SU SUPPORT PLATE THICKNESS	BCP BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

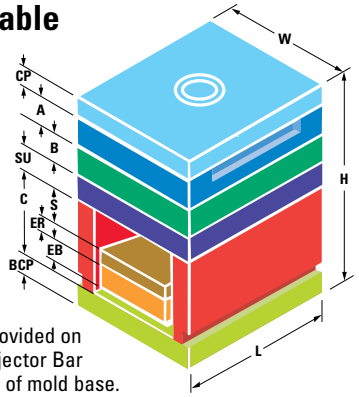
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	S MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
20.00	20
23.50	23
26.00	26
29.50	29
35.50	35

See Item 6 below.



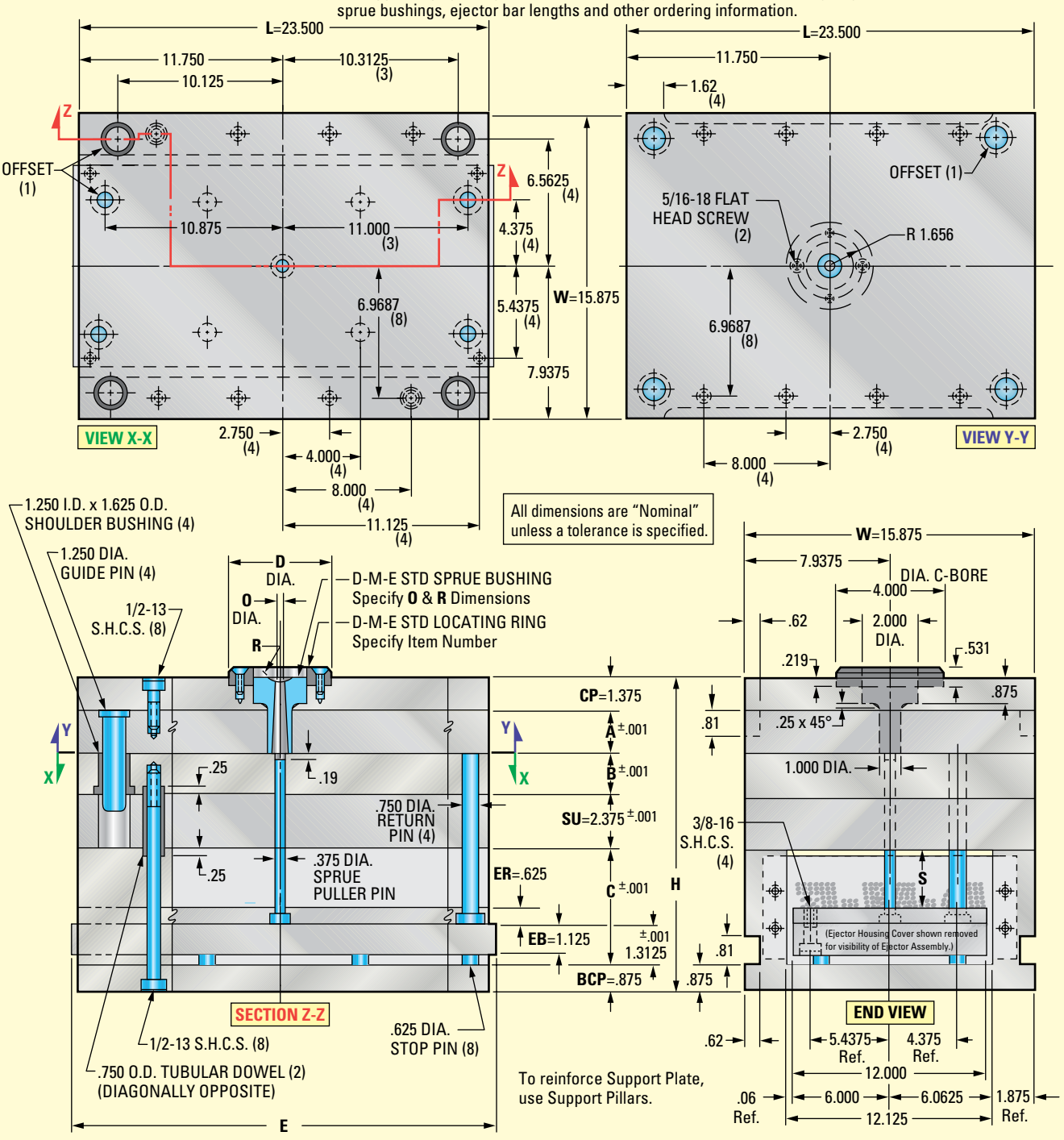
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

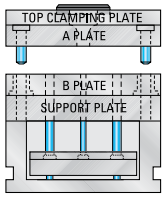
15⅞ x 23½ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

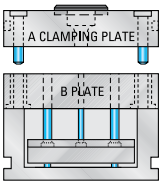


Mold Base Selections

A-Series Assembly



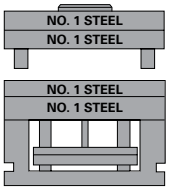
B-Series Assembly



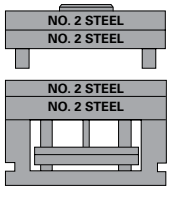
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

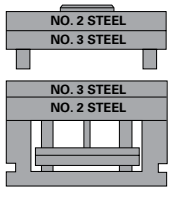
No. 1 Steel Assembly



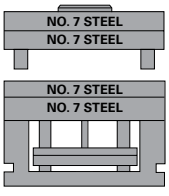
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

15⅞ x 23½ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	10.375	1623A-13-13	988
	1.875	3.000	10.875	1623A-13-17	1041
	2.375	3.500	11.875	1623A-13-23	1106
	2.875	3.500	12.375	1623A-13-27	1159
	3.375	4.000	13.375	1623A-13-33	1224
	3.875	4.000	13.875	1623A-13-37	1277
	4.875	4.500	15.375	1623A-13-47	1395
	5.875	4.500	16.375	1623A-13-57	1501

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.500	12.375	1623A-27-13	1159
	1.875	3.500	12.875	1623A-27-17	1212
	2.375	3.500	13.375	1623A-27-23	1265
	2.875	4.000	14.375	1623A-27-27	1330
	3.375	4.000	14.875	1623A-27-33	1383
	3.875	4.000	15.375	1623A-27-37	1436
	4.875	4.500	16.875	1623A-27-47	1554
	5.875	4.500	17.875	1623A-27-57	1659

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	4.000	14.875	1623A-47-13	1383
	1.875	4.000	15.375	1623A-47-17	1436
	2.375	4.500	16.375	1623A-47-23	1501
	2.875	4.500	16.875	1623A-47-27	1554
	3.375	4.500	17.375	1623A-47-33	1607
	3.875	4.500	17.875	1623A-47-37	1659
	4.875	4.500	18.875	1623A-47-47	1765
	5.875	4.500	19.875	1623A-47-57	1871

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	10.875	1623A-17-13	1041
	1.875	3.000	11.375	1623A-17-17	1106
	2.375	3.500	12.375	1623A-17-23	1159
	2.875	3.500	12.875	1623A-17-27	1224
	3.375	4.000	13.875	1623A-17-33	1277
	3.875	4.000	14.375	1623A-17-37	1330
	4.875	4.500	15.875	1623A-17-47	1448
	5.875	4.500	16.875	1623A-17-57	1554

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	4.000	13.375	1623A-33-13	1224
	1.875	4.000	13.875	1623A-33-17	1277
	2.375	4.000	14.375	1623A-33-23	1330
	2.875	4.500	15.375	1623A-33-27	1395
	3.375	4.500	15.875	1623A-33-33	1448
	3.875	4.500	16.375	1623A-33-37	1501
	4.875	4.500	17.375	1623A-33-47	1607
	5.875	4.500	18.375	1623A-33-57	1712

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	4.000	15.875	1623A-57-13	1488
	1.875	4.500	16.875	1623A-57-17	1554
	2.375	4.500	17.375	1623A-57-23	1607
	2.875	4.500	17.875	1623A-57-27	1659
	3.375	4.500	18.375	1623A-57-33	1712
	3.875	4.500	18.875	1623A-57-37	1765
	4.875	4.500	19.875	1623A-57-47	1871
	5.875	4.500	20.875	1623A-57-57	1976

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.500	11.875	1623A-23-13	1106
	1.875	3.500	12.375	1623A-23-17	1159
	2.375	3.500	12.875	1623A-23-23	1212
	2.875	4.000	13.875	1623A-23-27	1277
	3.375	4.000	14.375	1623A-23-33	1330
	3.875	4.000	14.875	1623A-23-37	1383
	4.875	4.500	16.375	1623A-23-47	1501
	5.875	4.500	17.375	1623A-23-57	1607

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	4.000	13.875	1623A-37-13	1277
	1.875	4.000	14.375	1623A-37-17	1330
	2.375	4.500	15.375	1623A-37-23	1395
	2.875	4.500	15.875	1623A-37-27	1448
	3.375	4.500	16.375	1623A-37-33	1501
	3.875	4.500	16.875	1623A-37-37	1554
	4.875	4.500	17.875	1623A-37-47	1659
	5.875	4.500	18.875	1623A-37-57	1765

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

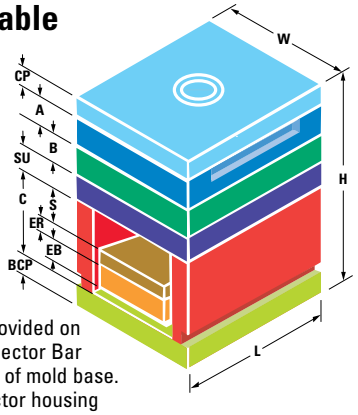
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
23.50	23
26.00	26
29.50	29
35.50	35

See Item 6 below.



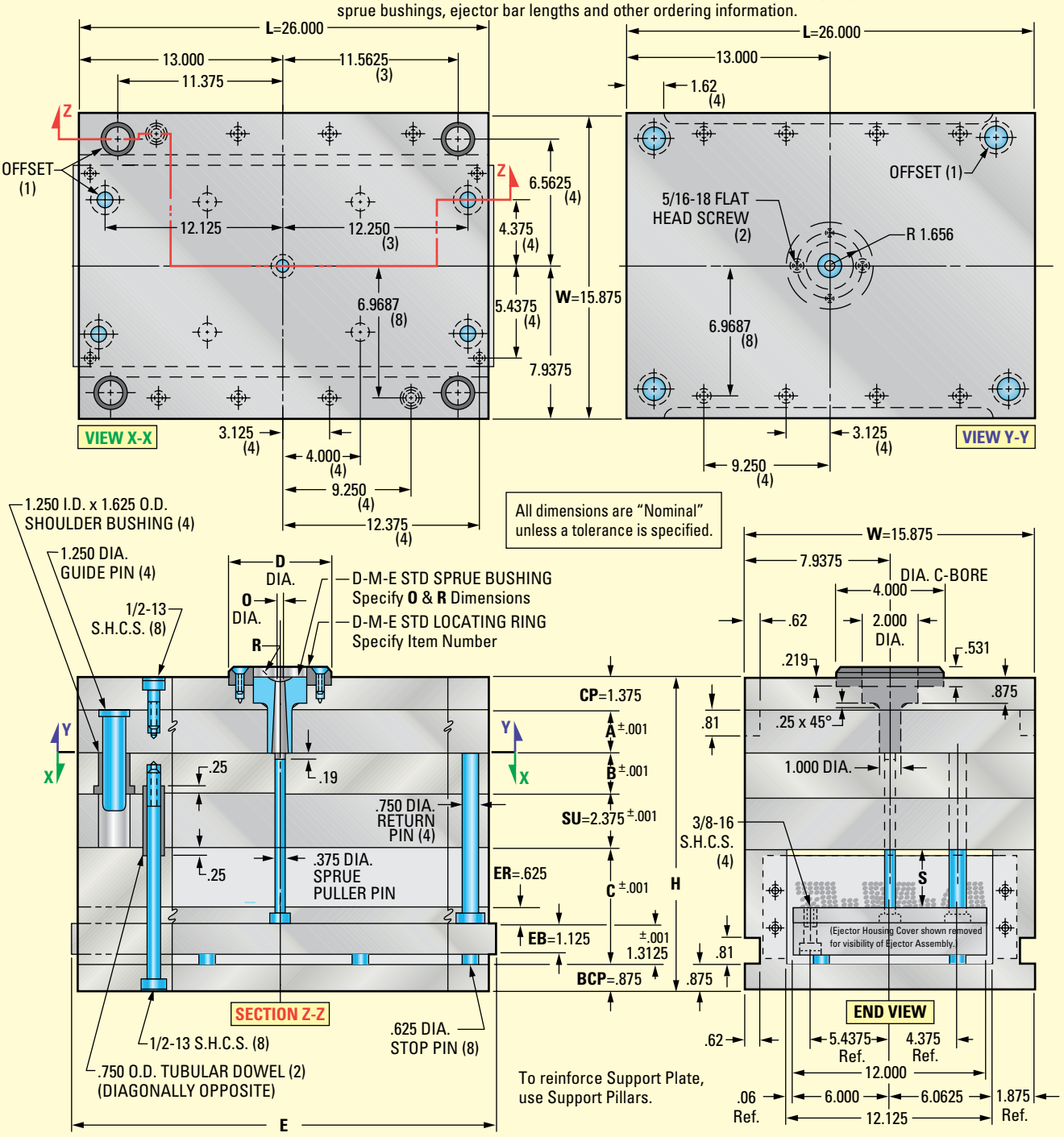
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

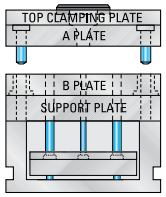
15⅞ x 26" A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

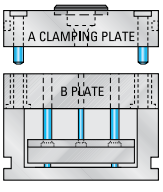


Mold Base Selections

A-Series Assembly



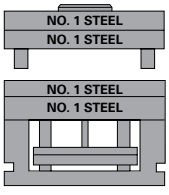
B-Series Assembly



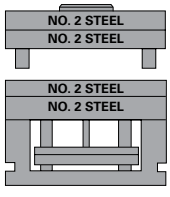
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

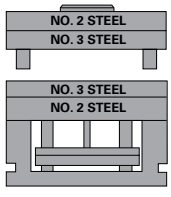
No. 1 Steel Assembly



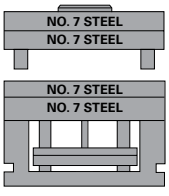
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

15⅞ x 26" A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	10.375	1626A-13-13	1093
	1.875	3.000	10.875	1626A-13-17	1151
	2.375	3.500	11.875	1626A-13-23	1224
	2.875	3.500	12.375	1626A-13-27	1282
	3.375	4.000	13.375	1626A-13-33	1354
	3.875	4.000	13.875	1626A-13-37	1413
	4.875	4.500	15.375	1626A-13-47	1544
	5.875	4.500	16.375	1626A-13-57	1661

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.500	12.375	1626A-27-13	1282
	1.875	3.500	12.875	1626A-27-17	1341
	2.375	3.500	13.375	1626A-27-23	1399
	2.875	4.000	14.375	1626A-27-27	1471
	3.375	4.000	14.875	1626A-27-33	1530
	3.875	4.000	15.375	1626A-27-37	1588
	4.875	4.500	16.875	1626A-27-47	1719
	5.875	4.500	17.875	1626A-27-57	1836

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	4.000	14.875	1626A-47-13	1530
	1.875	4.000	15.375	1626A-47-17	1588
	2.375	4.500	16.375	1626A-47-23	1661
	2.875	4.500	16.875	1626A-47-27	1719
	3.375	4.500	17.375	1626A-47-33	1778
	3.875	4.500	17.875	1626A-47-37	1836
	4.875	4.500	18.875	1626A-47-47	1953
	5.875	4.500	19.875	1626A-47-57	2070

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	10.875	1626A-17-13	1151
	1.875	3.000	11.375	1626A-17-17	1224
	2.375	3.500	12.375	1626A-17-23	1282
	2.875	3.500	12.875	1626A-17-27	1354
	3.375	4.000	13.875	1626A-17-33	1413
	3.875	4.000	14.375	1626A-17-37	1471
	4.875	4.500	15.875	1626A-17-47	1602
	5.875	4.500	16.875	1626A-17-57	1719

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	4.000	13.375	1626A-33-13	1354
	1.875	4.000	13.875	1626A-33-17	1413
	2.375	4.000	14.375	1626A-33-23	1471
	2.875	4.500	15.375	1626A-33-27	1544
	3.375	4.500	15.875	1626A-33-33	1602
	3.875	4.500	16.375	1626A-33-37	1661
	4.875	4.500	17.375	1626A-33-47	1778
	5.875	4.500	18.375	1626A-33-57	1894

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	4.000	15.875	1626A-57-13	1647
	1.875	4.500	16.875	1626A-57-17	1719
	2.375	4.500	17.375	1626A-57-23	1778
	2.875	4.500	17.875	1626A-57-27	1836
	3.375	4.500	18.375	1626A-57-33	1894
	3.875	4.500	18.875	1626A-57-37	1953
	4.875	4.500	19.875	1626A-57-47	2070
	5.875	4.500	20.875	1626A-57-57	2187

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.500	11.875	1626A-23-13	1224
	1.875	3.500	12.375	1626A-23-17	1282
	2.375	3.500	12.875	1626A-23-23	1341
	2.875	4.000	13.875	1626A-23-27	1413
	3.375	4.000	14.375	1626A-23-33	1471
	3.875	4.000	14.875	1626A-23-37	1530
	4.875	4.500	16.375	1626A-23-47	1661
	5.875	4.500	17.375	1626A-23-57	1778

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	4.000	13.875	1626A-37-13	1413
	1.875	4.000	14.375	1626A-37-17	1471
	2.375	4.500	15.375	1626A-37-23	1544
	2.875	4.500	15.875	1626A-37-27	1602
	3.375	4.500	16.375	1626A-37-33	1661
	3.875	4.500	16.875	1626A-37-37	1719
	4.875	4.500	17.875	1626A-37-47	1836
	5.875	4.500	18.875	1626A-37-57	1953

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

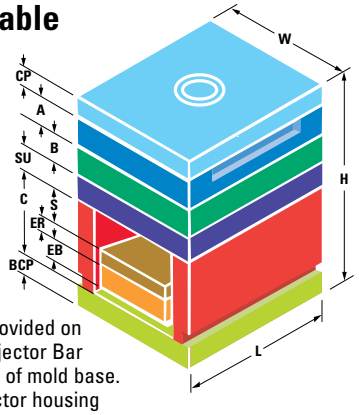
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
26.00	26
29.50	29
35.50	35

See Item 6 below.



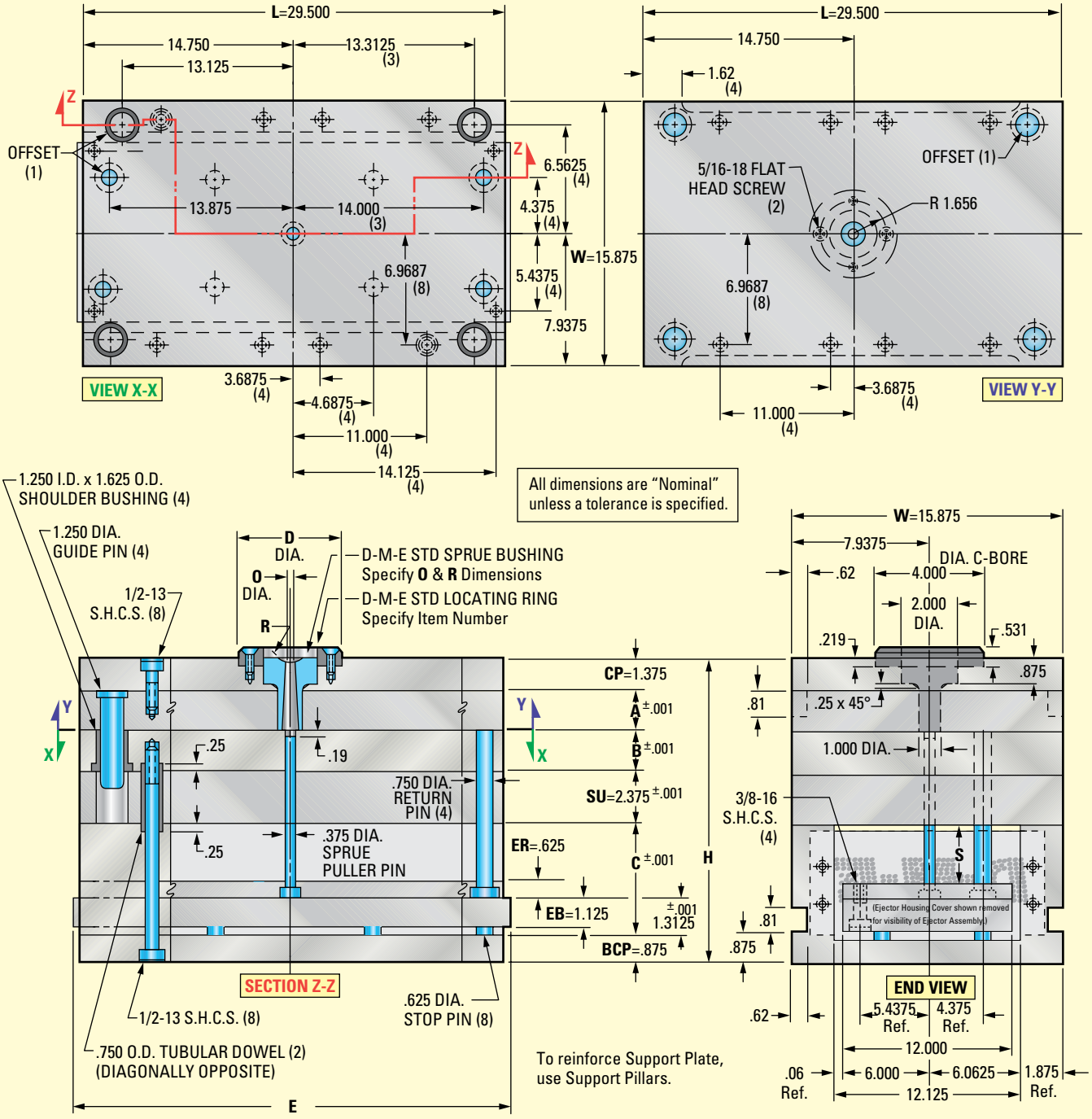
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

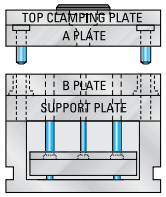
15⅞ x 29½ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

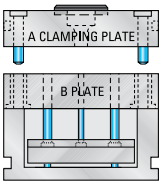


Mold Base Selections

A-Series Assembly



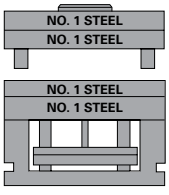
B-Series Assembly



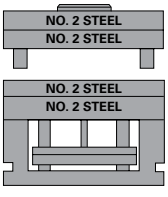
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

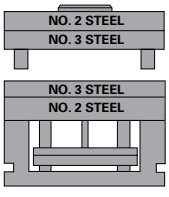
No. 1 Steel Assembly



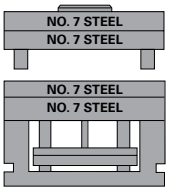
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

15⅞ x 29½ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	10.375	1629A-13-13	1240
	1.875	3.000	10.875	1629A-13-17	1306
	2.375	3.500	11.875	1629A-13-23	1388
	2.875	3.500	12.375	1629A-13-27	1455
	3.375	4.000	13.375	1629A-13-33	1537
	3.875	4.000	13.875	1629A-13-37	1603
	4.875	4.500	15.375	1629A-13-47	1751
	5.875	4.500	16.375	1629A-13-57	1884

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.500	12.375	1629A-27-13	1455
	1.875	3.500	12.875	1629A-27-17	1521
	2.375	3.500	13.375	1629A-27-23	1587
	2.875	4.000	14.375	1629A-27-27	1669
	3.375	4.000	14.875	1629A-27-33	1736
	3.875	4.000	15.375	1629A-27-37	1802
	4.875	4.500	16.875	1629A-27-47	1950
	5.875	4.500	17.875	1629A-27-57	2083

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	4.000	14.875	1629A-47-13	1736
	1.875	4.000	15.375	1629A-47-17	1802
	2.375	4.500	16.375	1629A-47-23	1884
	2.875	4.500	16.875	1629A-47-27	1950
	3.375	4.500	17.375	1629A-47-33	2017
	3.875	4.500	17.875	1629A-47-37	1083
	4.875	4.500	18.875	1629A-47-47	2216
	5.875	4.500	19.875	1629A-47-57	2348

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	10.875	1629A-17-13	1306
	1.875	3.000	11.375	1629A-17-17	1388
	2.375	3.500	12.375	1629A-17-23	1455
	2.875	3.500	12.875	1629A-17-27	1537
	3.375	4.000	13.875	1629A-17-33	1603
	3.875	4.000	14.375	1629A-17-37	1669
	4.875	4.500	15.875	1629A-17-47	1818
	5.875	4.500	16.875	1629A-17-57	1950

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	4.000	13.375	1629A-33-13	1537
	1.875	4.000	13.875	1629A-33-17	1603
	2.375	4.000	14.375	1629A-33-23	1669
	2.875	4.500	15.375	1629A-33-27	1751
	3.375	4.500	15.875	1629A-33-33	1818
	3.875	4.500	16.375	1629A-33-37	1884
	4.875	4.500	17.375	1629A-33-47	2017
	5.875	4.500	18.375	1629A-33-57	2149

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	4.000	15.875	1629A-57-13	1868
	1.875	4.500	16.875	1629A-57-17	1950
	2.375	4.500	17.375	1629A-57-23	2017
	2.875	4.500	17.875	1629A-57-27	2083
	3.375	4.500	18.375	1629A-57-33	2149
	3.875	4.500	18.875	1629A-57-37	2216
	4.875	4.500	19.875	1629A-57-47	2348
	5.875	4.500	20.875	1629A-57-57	2481

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.500	11.875	1629A-23-13	1388
	1.875	3.500	12.375	1629A-23-17	1455
	2.375	3.500	12.875	1629A-23-23	1521
	2.875	4.000	13.875	1629A-23-27	1603
	3.375	4.000	14.375	1629A-23-33	1669
	3.875	4.000	14.875	1629A-23-37	1736
	4.875	4.500	16.375	1629A-23-47	1884
	5.875	4.500	17.375	1629A-23-57	2017

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	4.000	13.875	1629A-37-13	1603
	1.875	4.000	14.375	1629A-37-17	1669
	2.375	4.500	15.375	1629A-37-23	1751
	2.875	4.500	15.875	1629A-37-27	1818
	3.375	4.500	16.375	1629A-37-33	1884
	3.875	4.500	16.875	1629A-37-37	1950
	4.875	4.500	17.875	1629A-37-47	2-93
	5.875	4.500	18.875	1629A-37-57	2216

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

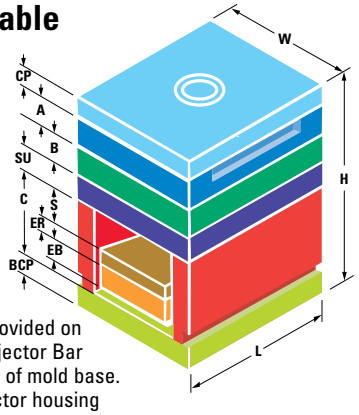
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
29.50	29
35.50	35

See Item 6 below.



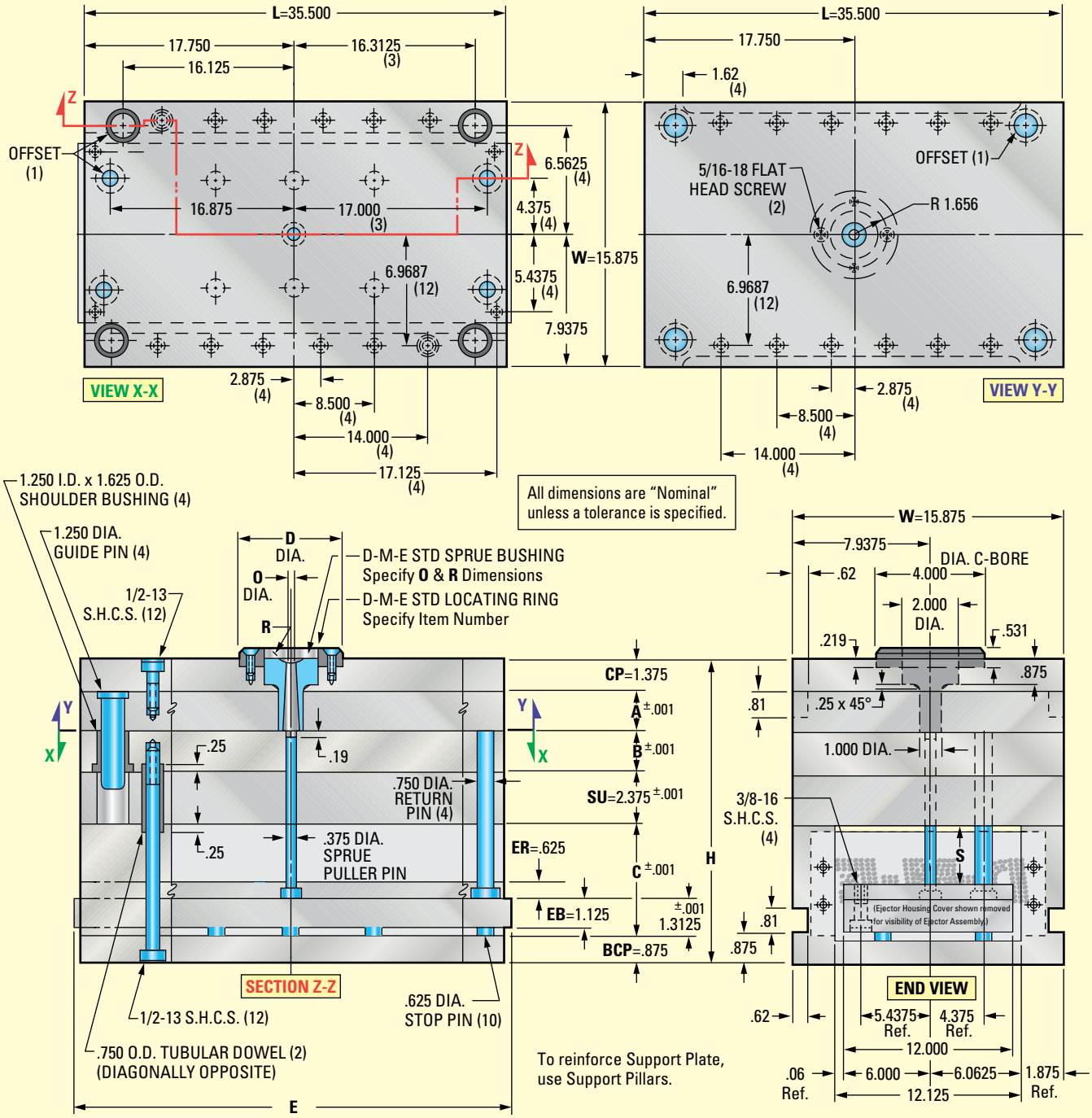
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

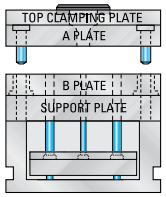
15⅞ x 35½ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

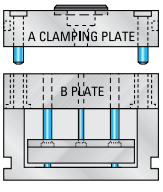


Mold Base Selections

A-Series Assembly



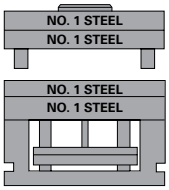
B-Series Assembly



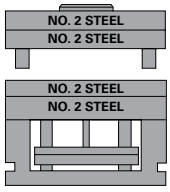
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

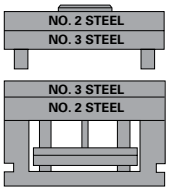
No. 1 Steel Assembly



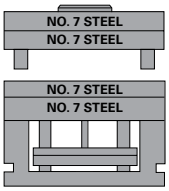
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

15⅞ x 35½ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	10.375	1635A-13-13	1492
	1.875	3.000	10.875	1635A-13-17	1572
	2.375	3.500	11.875	1635A-13-23	1671
	2.875	3.500	12.375	1635A-13-27	1750
	3.375	4.000	13.375	1635A-13-33	1849
	3.875	4.000	13.875	1635A-13-37	1929
	4.875	4.500	15.375	1635A-13-47	2107
	5.875	4.500	16.375	1635A-13-57	2267

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.500	12.375	1635A-27-13	1750
	1.875	3.500	12.875	1635A-27-17	1830
	2.375	3.500	13.375	1635A-27-23	1910
	2.875	4.000	14.375	1635A-27-27	2009
	3.375	4.000	14.875	1635A-27-33	2089
	3.875	4.000	15.375	1635A-27-37	2168
	4.875	4.500	16.875	1635A-27-47	2347
	5.875	4.500	17.875	1635A-27-57	2507

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	4.000	14.875	1635A-47-13	2089
	1.875	4.000	15.375	1635A-47-17	2168
	2.375	4.500	16.375	1635A-47-23	2267
	2.875	4.500	16.875	1635A-47-27	2347
	3.375	4.500	17.375	1635A-47-33	2427
	3.875	4.500	17.875	1635A-47-37	2507
	4.875	4.500	18.875	1635A-47-47	2666
	5.875	4.500	19.875	1635A-47-57	2826

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	10.875	1635A-17-13	1572
	1.875	3.000	11.375	1635A-17-17	1671
	2.375	3.500	12.375	1635A-17-23	1750
	2.875	3.500	12.875	1635A-17-27	1849
	3.375	4.000	13.875	1635A-17-33	1929
	3.875	4.000	14.375	1635A-17-37	2009
	4.875	4.500	15.875	1635A-17-47	2187
	5.875	4.500	16.875	1635A-17-57	2347

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	4.000	13.375	1635A-33-13	1849
	1.875	4.000	13.875	1635A-33-17	1929
	2.375	4.000	14.375	1635A-33-23	2009
	2.875	4.500	15.375	1635A-33-27	2107
	3.375	4.500	15.875	1635A-33-33	2187
	3.875	4.500	16.375	1635A-33-37	2267
	4.875	4.500	17.375	1635A-33-47	2427
	5.875	4.500	18.375	1635A-33-57	2586

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	4.000	15.875	1635A-57-13	2248
	1.875	4.500	16.875	1635A-57-17	2347
	2.375	4.500	17.375	1635A-57-23	2427
	2.875	4.500	17.875	1635A-57-27	2507
	3.375	4.500	18.375	1635A-57-33	2586
	3.875	4.500	18.875	1635A-57-37	2666
	4.875	4.500	19.875	1635A-57-47	2826
	5.875	4.500	20.875	1635A-57-57	2987

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.500	11.875	1635A-23-13	1671
	1.875	3.500	12.375	1635A-23-17	1750
	2.375	3.500	12.875	1635A-23-23	1830
	2.875	4.000	13.875	1635A-23-27	1929
	3.375	4.000	14.375	1635A-23-33	2009
	3.875	4.000	14.875	1635A-23-37	2089
	4.875	4.500	16.375	1635A-23-47	2267
	5.875	4.500	17.375	1635A-23-57	2427

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	4.000	13.875	1635A-37-13	1929
	1.875	4.000	14.375	1635A-37-17	2009
	2.375	4.500	15.375	1635A-37-23	2107
	2.875	4.500	15.875	1635A-37-27	2187
	3.375	4.500	16.375	1635A-37-33	2267
	3.875	4.500	16.875	1635A-37-37	2347
	4.875	4.500	17.875	1635A-37-47	2507
	5.875	4.500	18.875	1635A-37-57	2666

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

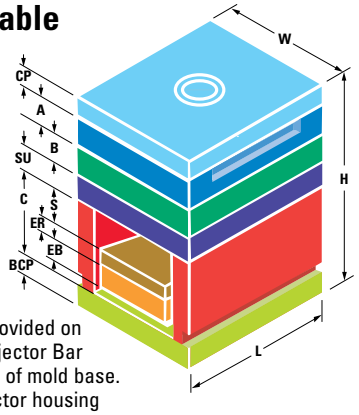
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
35.50	35

See Item 6 below.



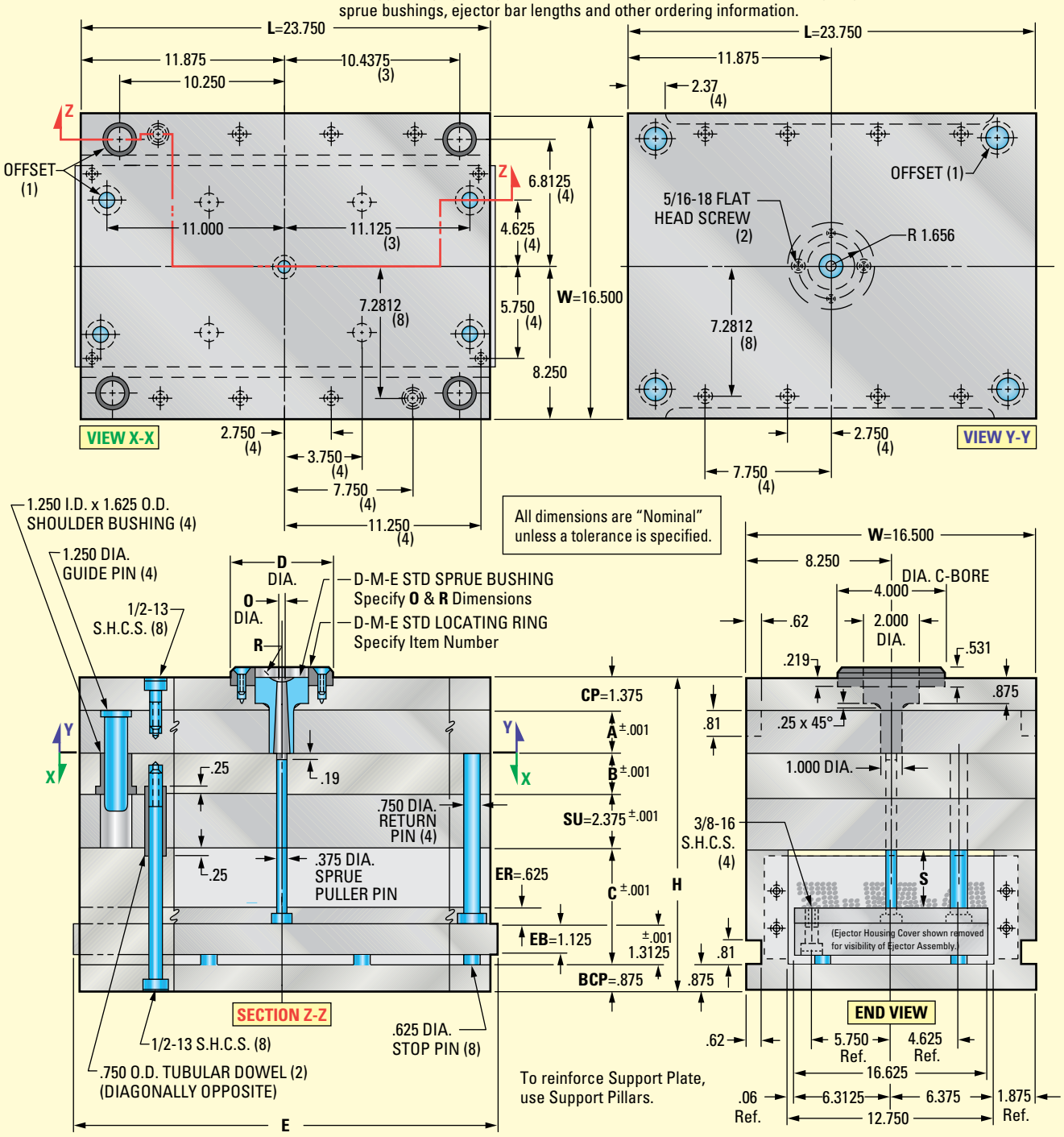
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

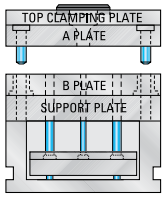
16½ x 23¾ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

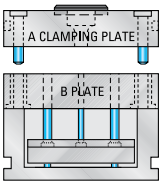


Mold Base Selections

A-Series Assembly



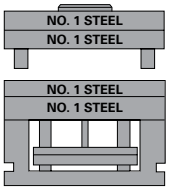
B-Series Assembly



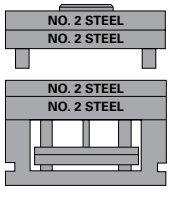
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

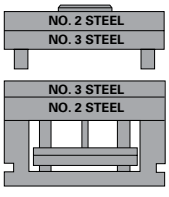
No. 1 Steel Assembly



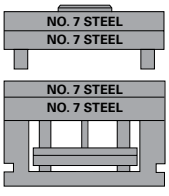
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

16½ x 23¾ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	10.375	1724A-13-13	1037
	1.875	3.000	10.875	1724A-13-17	1092
	2.375	3.500	11.875	1724A-13-23	1160
	2.875	3.500	12.375	1724A-13-27	1216
	3.375	4.000	13.375	1724A-13-33	1284
	3.875	4.000	13.875	1724A-13-37	1340
	4.875	4.500	15.375	1724A-13-47	1463
	5.875	4.500	16.375	1724A-13-57	1574

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.500	12.375	1724A-27-13	1216
	1.875	3.500	12.875	1724A-27-17	1271
	2.375	3.500	13.375	1724A-27-23	1327
	2.875	4.000	14.375	1724A-27-27	1395
	3.375	4.000	14.875	1724A-27-33	1451
	3.875	4.000	15.375	1724A-27-37	1506
	4.875	4.500	16.875	1724A-27-47	1630
	5.875	4.500	17.875	1724A-27-57	1741

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	4.000	14.875	1724A-47-13	1451
	1.875	4.000	15.375	1724A-47-17	1506
	2.375	4.500	16.375	1724A-47-23	1574
	2.875	4.500	16.875	1724A-47-27	1630
	3.375	4.500	17.375	1724A-47-33	1685
	3.875	4.500	17.875	1724A-47-37	1741
	4.875	4.500	18.875	1724A-47-47	1852
	5.875	4.500	19.875	1724A-47-57	1963

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	10.875	1724A-17-13	1092
	1.875	3.000	11.375	1724A-17-17	1160
	2.375	3.500	12.375	1724A-17-23	1216
	2.875	3.500	12.875	1724A-17-27	1284
	3.375	4.000	13.875	1724A-17-33	1340
	3.875	4.000	14.375	1724A-17-37	1395
	4.875	4.500	15.875	1724A-17-47	1519
	5.875	4.500	16.875	1724A-17-57	1630

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	4.000	13.375	1724A-33-13	1284
	1.875	4.000	13.875	1724A-33-17	1340
	2.375	4.000	14.375	1724A-33-23	1395
	2.875	4.500	15.375	1724A-33-27	1463
	3.375	4.500	15.875	1724A-33-33	1519
	3.875	4.500	16.375	1724A-33-37	1574
	4.875	4.500	17.375	1724A-33-47	1685
	5.875	4.500	18.375	1724A-33-57	1796

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	4.000	15.875	1724A-57-13	1562
	1.875	4.500	16.875	1724A-57-17	1630
	2.375	4.500	17.375	1724A-57-23	1685
	2.875	4.500	17.875	1724A-57-27	1741
	3.375	4.500	18.375	1724A-57-33	1796
	3.875	4.500	18.875	1724A-57-37	1852
	4.875	4.500	19.875	1724A-57-47	1963
	5.875	4.500	20.875	1724A-57-57	2074

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.500	11.875	1724A-23-13	1160
	1.875	3.500	12.375	1724A-23-17	1216
	2.375	3.500	12.875	1724A-23-23	1271
	2.875	4.000	13.875	1724A-23-27	1340
	3.375	4.000	14.375	1724A-23-33	1395
	3.875	4.000	14.875	1724A-23-37	1451
	4.875	4.500	16.375	1724A-23-47	1574
	5.875	4.500	17.375	1724A-23-57	1685

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	4.000	13.875	1724A-37-13	1340
	1.875	4.000	14.375	1724A-37-17	1395
	2.375	4.500	15.375	1724A-37-23	1463
	2.875	4.500	15.875	1724A-37-27	1519
	3.375	4.500	16.375	1724A-37-33	1574
	3.875	4.500	16.875	1724A-37-37	1630
	4.875	4.500	17.875	1724A-37-47	1741
	5.875	4.500	18.875	1724A-37-57	1852

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

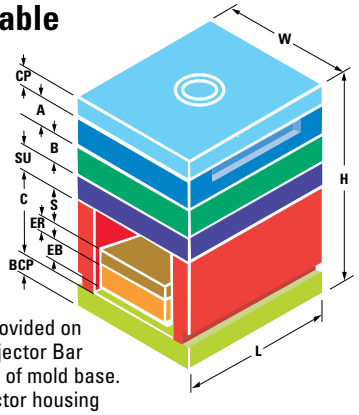
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
23.75	24
29.50	29
35.50	35

See Item 6 below.



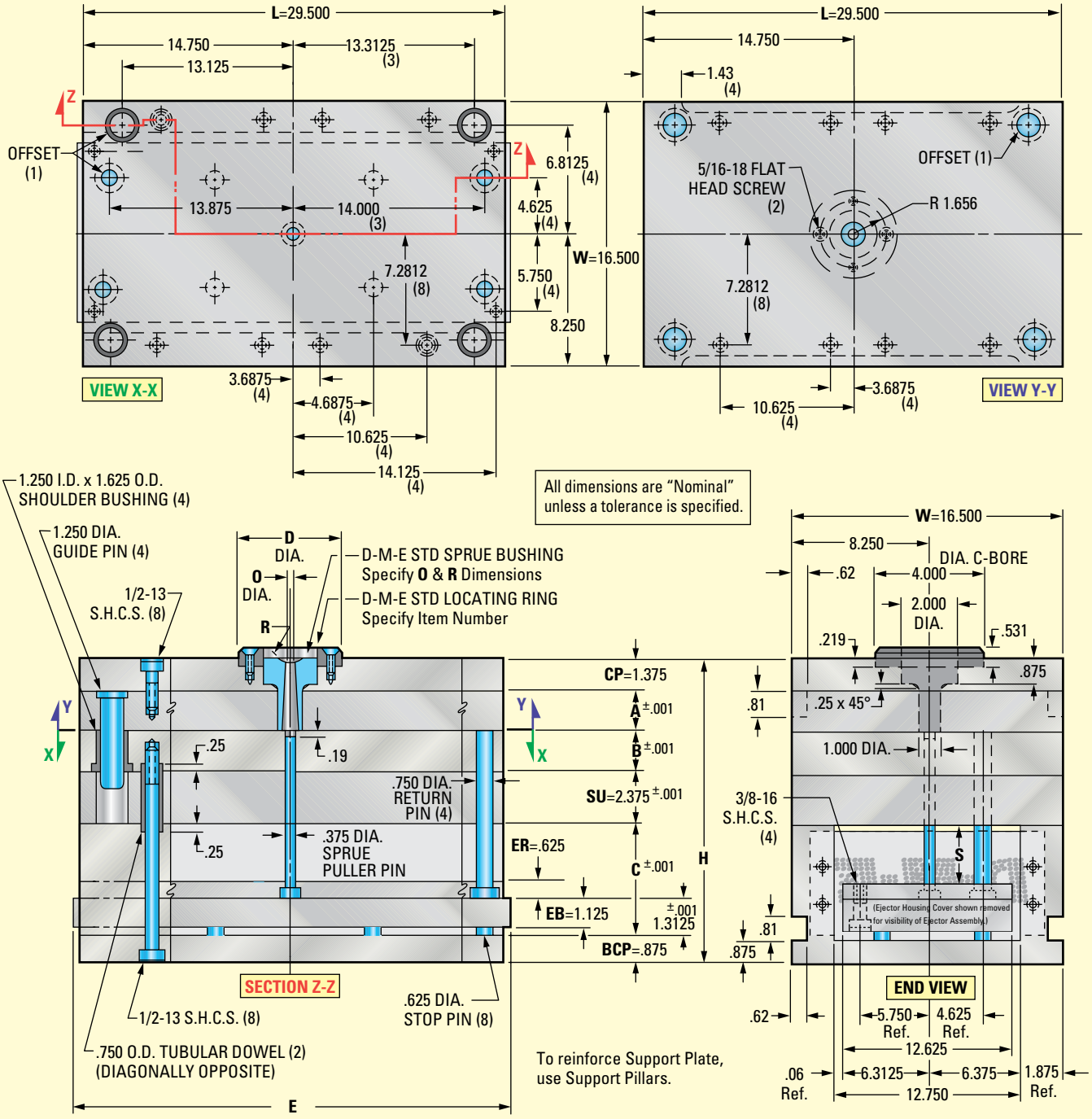
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

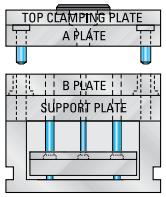
16½ x 29½ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

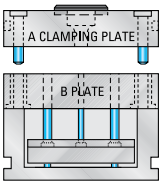


Mold Base Selections

A-Series Assembly



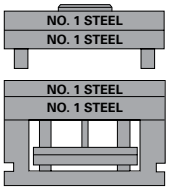
B-Series Assembly



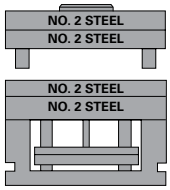
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

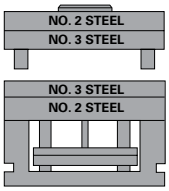
No. 1 Steel Assembly



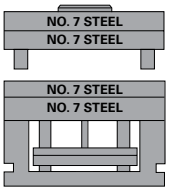
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

16½ x 29½ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	10.375	1729A-13-13	1288
	1.875	3.000	10.875	1729A-13-17	1357
	2.375	3.500	11.875	1729A-13-23	1441
	2.875	3.500	12.375	1729A-13-27	1510
	3.375	4.000	13.375	1729A-13-33	1595
	3.875	4.000	13.875	1729A-13-37	1664
	4.875	4.500	15.375	1729A-13-47	1817
	5.875	4.500	16.375	1729A-13-57	1955

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.500	12.375	1729A-27-13	1510
	1.875	3.500	12.875	1729A-27-17	1579
	2.375	3.500	13.375	1729A-27-23	1648
	2.875	4.000	14.375	1729A-27-27	1733
	3.375	4.000	14.875	1729A-27-33	1802
	3.875	4.000	15.375	1729A-27-37	1871
	4.875	4.500	16.875	1729A-27-47	2024
	5.875	4.500	17.875	1729A-27-57	2162

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	4.000	14.875	1729A-47-13	1802
	1.875	4.000	15.375	1729A-47-17	1871
	2.375	4.500	16.375	1729A-47-23	1955
	2.875	4.500	16.875	1729A-47-27	2024
	3.375	4.500	17.375	1729A-47-33	2093
	3.875	4.500	17.875	1729A-47-37	2162
	4.875	4.500	18.875	1729A-47-47	2300
	5.875	4.500	19.875	1729A-47-57	2438

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	10.875	1729A-17-13	1357
	1.875	3.000	11.375	1729A-17-17	1441
	2.375	3.500	12.375	1729A-17-23	1510
	2.875	3.500	12.875	1729A-17-27	1595
	3.375	4.000	13.875	1729A-17-33	1664
	3.875	4.000	14.375	1729A-17-37	1733
	4.875	4.500	15.875	1729A-17-47	1886
	5.875	4.500	16.875	1729A-17-57	2024

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	4.000	13.375	1729A-33-13	1595
	1.875	4.000	13.875	1729A-33-17	1664
	2.375	4.000	14.375	1729A-33-23	1733
	2.875	4.500	15.375	1729A-33-27	1817
	3.375	4.500	15.875	1729A-33-33	1886
	3.875	4.500	16.375	1729A-33-37	1955
	4.875	4.500	17.375	1729A-33-47	2093
	5.875	4.500	18.375	1729A-33-57	2231

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	4.000	15.875	1729A-57-13	1940
	1.875	4.500	16.875	1729A-57-17	2024
	2.375	4.500	17.375	1729A-57-23	2093
	2.875	4.500	17.875	1729A-57-27	2162
	3.375	4.500	18.375	1729A-57-33	2231
	3.875	4.500	18.875	1729A-57-37	2300
	4.875	4.500	19.875	1729A-57-47	2438
	5.875	4.500	20.875	1729A-57-57	2576

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.500	11.875	1729A-23-13	1441
	1.875	3.500	12.375	1729A-23-17	1510
	2.375	3.500	12.875	1729A-23-23	1579
	2.875	4.000	13.875	1729A-23-27	1664
	3.375	4.000	14.375	1729A-23-33	1733
	3.875	4.000	14.875	1729A-23-37	1802
	4.875	4.500	16.375	1729A-23-47	1955
	5.875	4.500	17.375	1729A-23-57	2093

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	4.000	13.875	1729A-37-13	1664
	1.875	4.000	14.375	1729A-37-17	1733
	2.375	4.500	15.375	1729A-37-23	1817
	2.875	4.500	15.875	1729A-37-27	1886
	3.375	4.500	16.375	1729A-37-33	1955
	3.875	4.500	16.875	1729A-37-37	2024
	4.875	4.500	17.875	1729A-37-47	2162
	5.875	4.500	18.875	1729A-37-57	2300

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

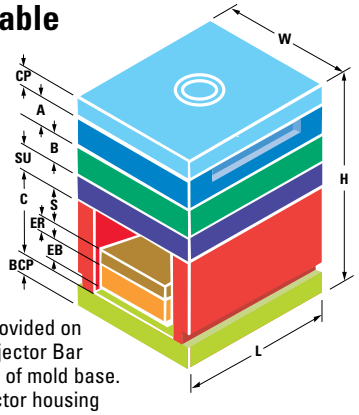
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
29.50	29
35.50	35

See Item 6 below.



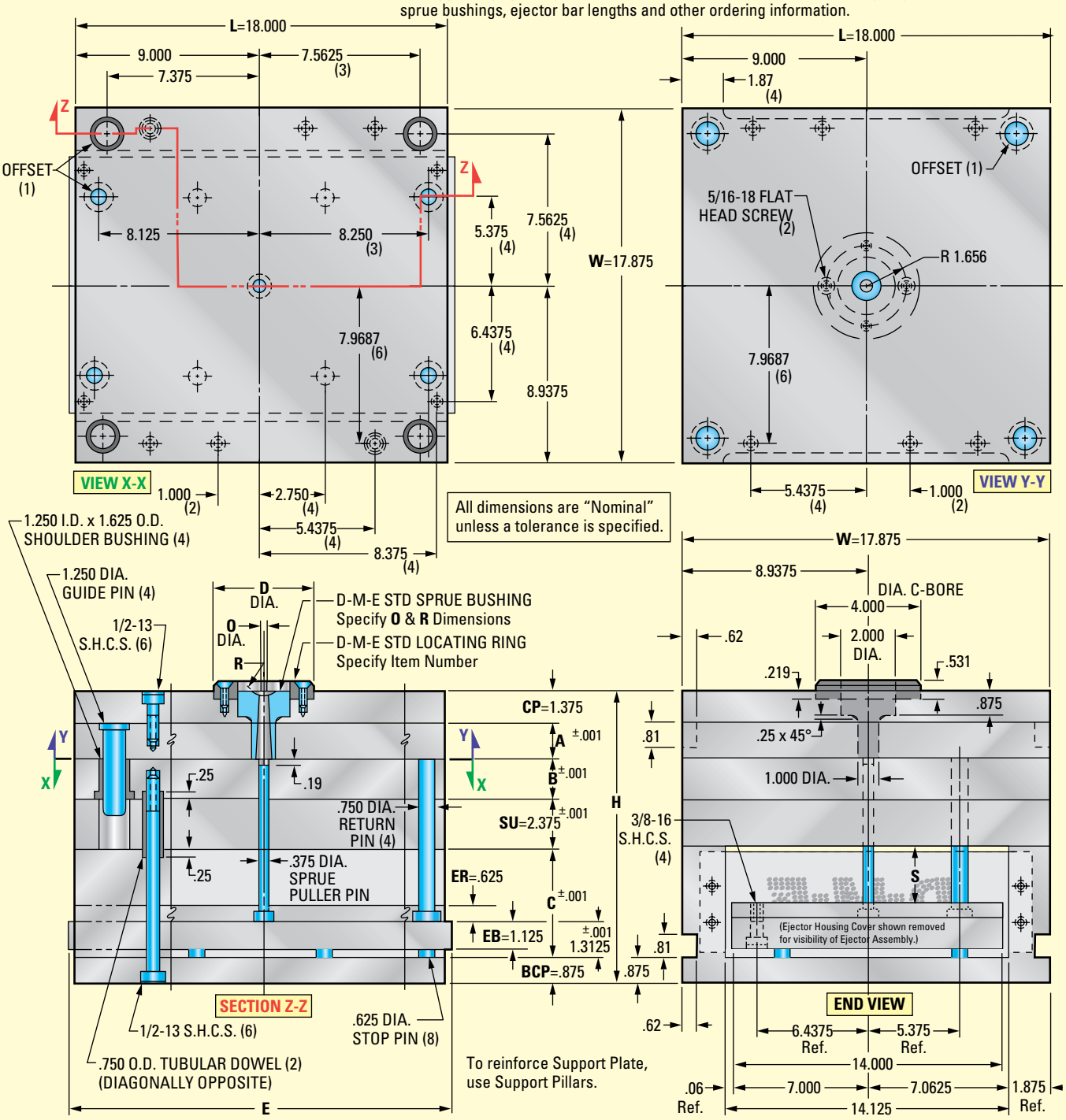
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

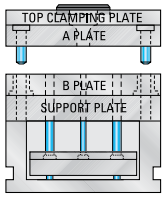
17⅞ x 18" A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

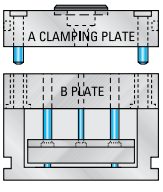


Mold Base Selections

A-Series Assembly



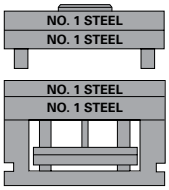
B-Series Assembly



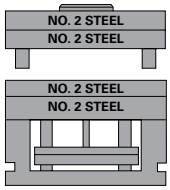
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

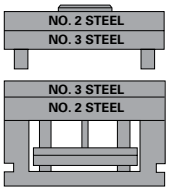
No. 1 Steel Assembly



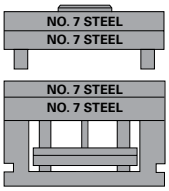
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

17⅞ x 18" A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	10.375	1818A-13-13	850
	1.875	3.000	10.875	1818A-13-17	985
	2.375	3.500	11.875	1818A-13-23	951
	2.875	3.500	12.375	1818A-13-27	996
	3.375	4.000	13.375	1818A-13-33	1051
	3.875	4.000	13.875	1818A-13-37	1097
	4.875	4.500	15.375	1818A-13-47	1198
	5.875	4.500	16.375	1818A-13-57	1289

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.500	12.375	1818A-27-13	996
	1.875	3.500	12.875	1818A-27-17	1042
	2.375	3.500	13.375	1818A-27-23	107
	2.875	4.000	14.375	1818A-27-27	1142
	3.375	4.000	14.875	1818A-27-33	1188
	3.875	4.000	15.375	1818A-27-37	1234
	4.875	4.500	16.875	1818A-27-47	1334
	5.875	4.500	17.875	1818A-27-57	1426

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	4.000	14.875	1818A-47-13	1188
	1.875	4.000	15.375	1818A-47-17	1234
	2.375	4.500	16.375	1818A-47-23	1289
	2.875	4.500	16.875	1818A-47-27	1334
	3.375	4.500	17.375	1818A-47-33	1380
	3.875	4.500	17.875	1818A-47-37	1426
	4.875	4.500	18.875	1818A-47-47	1517
	5.875	4.500	19.875	1818A-47-57	1608

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	10.875	1818A-17-13	895
	1.875	3.000	11.375	1818A-17-17	941
	2.375	3.500	12.375	1818A-17-23	996
	2.875	3.500	12.875	1818A-17-27	1042
	3.375	4.000	13.875	1818A-17-33	1097
	3.875	4.000	14.375	1818A-17-37	1142
	4.875	4.500	15.875	1818A-17-47	1243
	5.875	4.500	16.875	1818A-17-57	1334

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	4.000	13.375	1818A-33-13	1051
	1.875	4.000	13.875	1818A-33-17	1097
	2.375	4.000	14.375	1818A-33-23	1142
	2.875	4.500	15.375	1818A-33-27	1198
	3.375	4.500	15.875	1818A-33-33	1243
	3.875	4.500	16.375	1818A-33-37	1289
	4.875	4.500	17.375	1818A-33-47	1380
	5.875	4.500	18.375	1818A-33-57	1471

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	4.000	15.875	1818A-57-13	1279
	1.875	4.500	16.875	1818A-57-17	1334
	2.375	4.500	17.375	1818A-57-23	1380
	2.875	4.500	17.875	1818A-57-27	1426
	3.375	4.500	18.375	1818A-57-33	1471
	3.875	4.500	18.875	1818A-57-37	1517
	4.875	4.500	19.875	1818A-57-47	1608
	5.875	4.500	20.875	1818A-57-57	1699

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.500	11.875	1818A-23-13	951
	1.875	3.500	12.375	1818A-23-17	996
	2.375	3.500	12.875	1818A-23-23	1042
	2.875	4.000	13.875	1818A-23-27	1097
	3.375	4.000	14.375	1818A-23-33	1142
	3.875	4.000	14.875	1818A-23-37	1188
	4.875	4.500	16.375	1818A-23-47	1289
	5.875	4.500	17.375	1818A-23-57	1380

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	4.000	13.875	1818A-37-13	1097
	1.875	4.000	14.375	1818A-37-17	1142
	2.375	4.500	15.375	1818A-37-23	1198
	2.875	4.500	15.875	1818A-37-27	1243
	3.375	4.500	16.375	1818A-37-33	1289
	3.875	4.500	16.875	1818A-37-37	1334
	4.875	4.500	17.875	1818A-37-47	1426
	5.875	4.500	18.875	1818A-37-57	1517

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

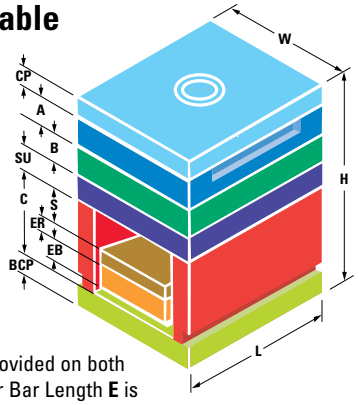
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
18.00	18
20.00	20
23.50	23
26.00	26
29.50	29
35.50	35

See Item 6 below.



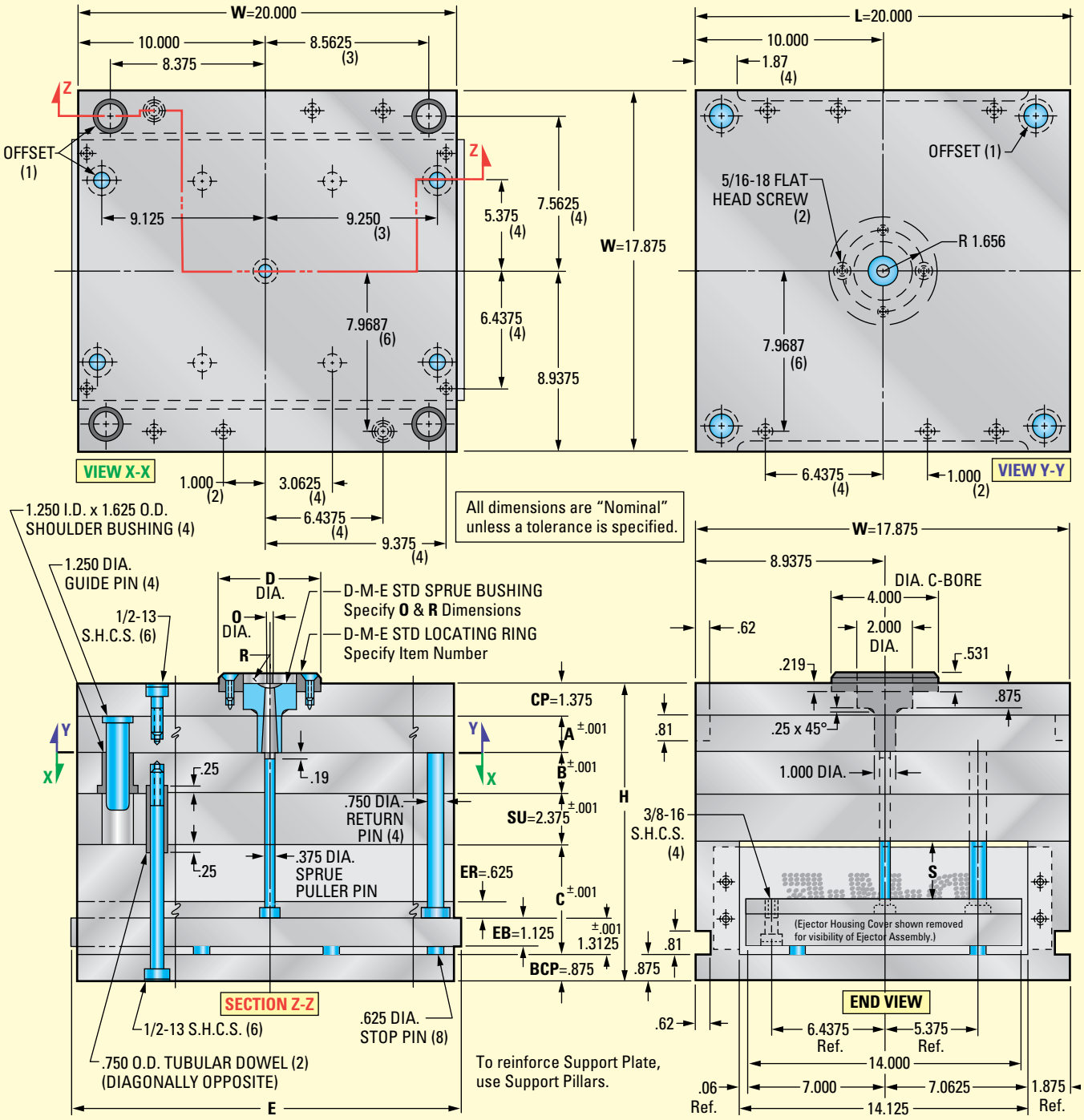
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

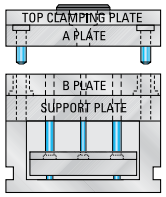
17⅞ x 20" A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

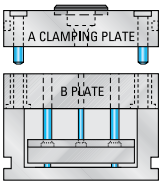


Mold Base Selections

A-Series Assembly



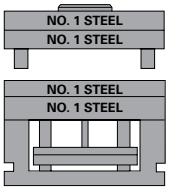
B-Series Assembly



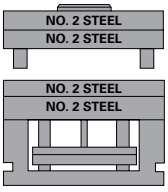
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

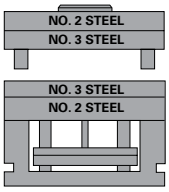
No. 1 Steel Assembly



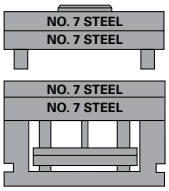
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

17⅞ x 20" A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	10.375	1820A-13-13	944
	1.875	3.000	10.875	1820A-13-17	995
	2.375	3.500	11.875	1820A-13-23	1056
	2.875	3.500	12.375	1820A-13-27	1107
	3.375	4.000	13.375	1820A-13-33	1168
	3.875	4.000	13.875	1820A-13-37	1219
	4.875	4.500	15.375	1820A-13-47	1331
	5.875	4.500	16.375	1820A-13-57	1432

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.500	12.375	1820A-27-13	1107
	1.875	3.500	12.875	1820A-27-17	1157
	2.375	3.500	13.375	1820A-27-23	1208
	2.875	4.000	14.375	1820A-27-27	1269
	3.375	4.000	14.875	1820A-27-33	1320
	3.875	4.000	15.375	1820A-27-37	1371
	4.875	4.500	16.875	1820A-27-47	1483
	5.875	4.500	17.875	1820A-27-57	1584

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	4.000	14.875	1820A-47-13	1320
	1.875	4.000	15.375	1820A-47-17	1371
	2.375	4.500	16.375	1820A-47-23	1432
	2.875	4.500	16.875	1820A-47-27	1483
	3.375	4.500	17.375	1820A-47-33	1533
	3.875	4.500	17.875	1820A-47-37	1584
	4.875	4.500	18.875	1820A-47-47	1685
	5.875	4.500	19.875	1820A-47-57	1786

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	10.875	1820A-17-13	995
	1.875	3.000	11.375	1820A-17-17	1046
	2.375	3.500	12.375	1820A-17-23	1107
	2.875	3.500	12.875	1820A-17-27	1157
	3.375	4.000	13.875	1820A-17-33	1219
	3.875	4.000	14.375	1820A-17-37	1269
	4.875	4.500	15.875	1820A-17-47	1381
	5.875	4.500	16.875	1820A-17-57	1483

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	4.000	13.375	1820A-33-13	1168
	1.875	4.000	13.875	1820A-33-17	1219
	2.375	4.000	14.375	1820A-33-23	1269
	2.875	4.500	15.375	1820A-33-27	1331
	3.375	4.500	15.875	1820A-33-33	1381
	3.875	4.500	16.375	1820A-33-37	1432
	4.875	4.500	17.375	1820A-33-47	1533
	5.875	4.500	18.375	1820A-33-57	1634

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	4.000	15.875	1820A-57-13	1421
	1.875	4.500	16.875	1820A-57-17	1483
	2.375	4.500	17.375	1820A-57-23	1533
	2.875	4.500	17.875	1820A-57-27	1584
	3.375	4.500	18.375	1820A-57-33	1634
	3.875	4.500	18.875	1820A-57-37	1685
	4.875	4.500	19.875	1820A-57-47	1786
	5.875	4.500	20.875	1820A-57-57	1888

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.500	11.875	1820A-23-13	1056
	1.875	3.500	12.375	1820A-23-17	1107
	2.375	3.500	12.875	1820A-23-23	1157
	2.875	4.000	13.875	1820A-23-27	1219
	3.375	4.000	14.375	1820A-23-33	1269
	3.875	4.000	14.875	1820A-23-37	1320
	4.875	4.500	16.375	1820A-23-47	1432
	5.875	4.500	17.375	1820A-23-57	1533

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	4.000	13.875	1820A-37-13	1219
	1.875	4.000	14.375	1820A-37-17	1269
	2.375	4.500	15.375	1820A-37-23	1331
	2.875	4.500	15.875	1820A-37-27	1381
	3.375	4.500	16.375	1820A-37-33	1432
	3.875	4.500	16.875	1820A-37-37	1483
	4.875	4.500	17.875	1820A-37-47	1584
	5.875	4.500	18.875	1820A-37-57	1685

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

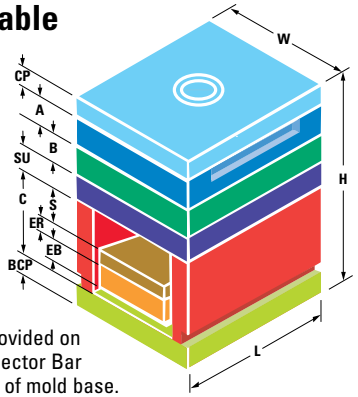
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
20.00	20
23.50	23
26.00	26
29.50	29
35.50	35

See Item 6 below.



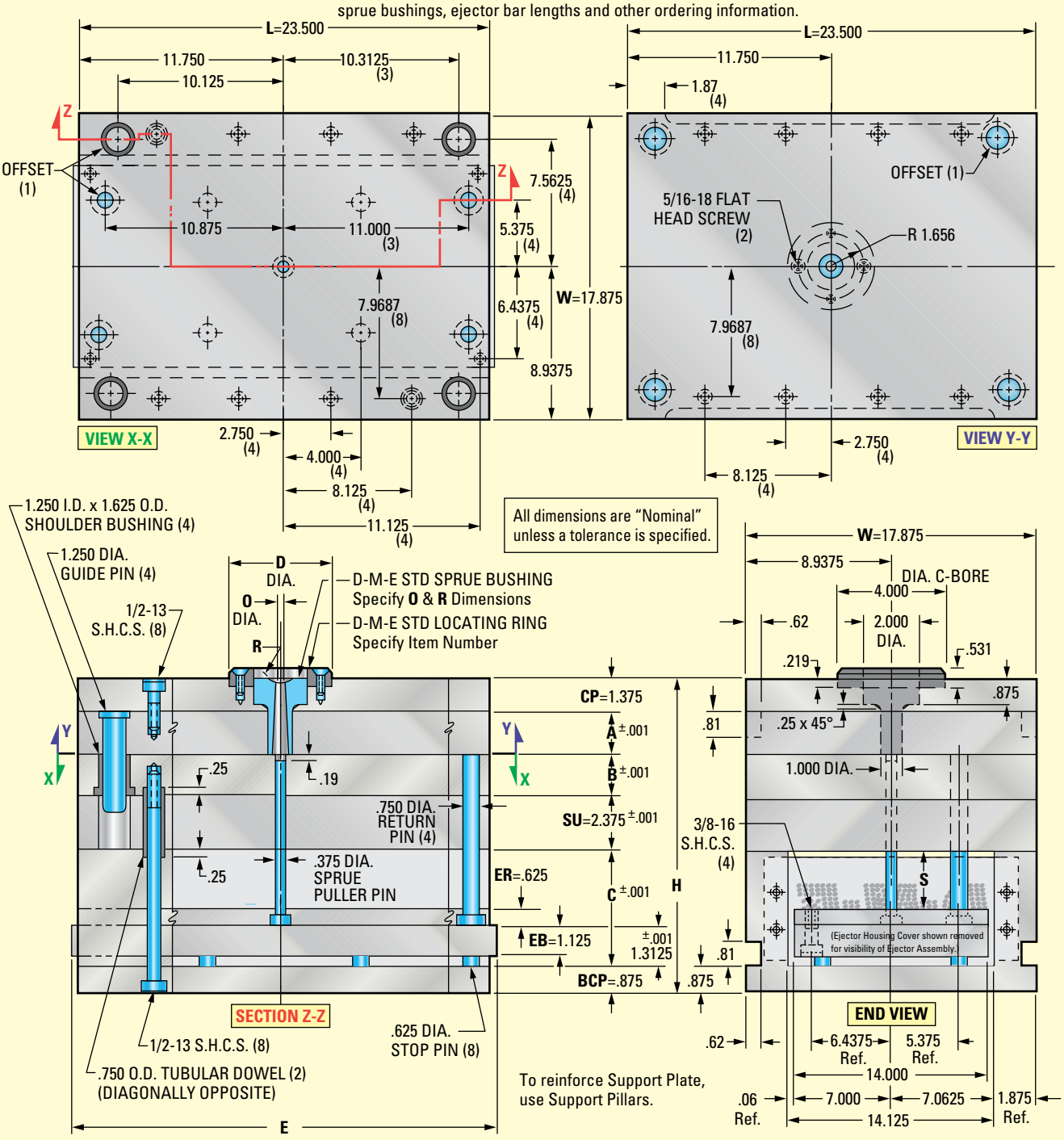
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

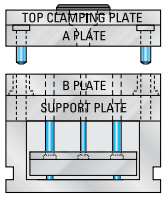
17⅞ x 23½ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

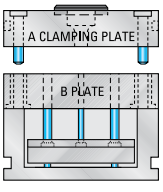


Mold Base Selections

A-Series Assembly



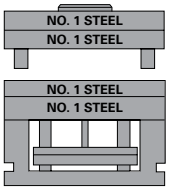
B-Series Assembly



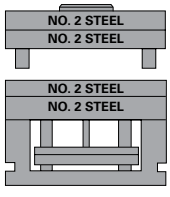
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

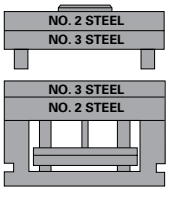
No. 1 Steel Assembly



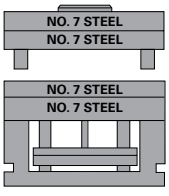
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

17⅞ x 23½ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	10.375	1823A-13-13	1109
	1.875	3.000	10.875	1823A-13-17	1169
	2.375	3.500	11.875	1823A-13-23	1241
	2.875	3.500	12.375	1823A-13-27	1300
	3.375	4.000	13.375	1823A-13-33	1372
	3.875	4.000	13.875	1823A-13-37	1432
	4.875	4.500	15.375	1823A-13-47	1563
	5.875	4.500	16.375	1823A-13-57	1682

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.500	12.375	1823A-27-13	1300
	1.875	3.500	12.875	1823A-27-17	1360
	2.375	3.500	13.375	1823A-27-23	1419
	2.875	4.000	14.375	1823A-27-27	1491
	3.375	4.000	14.875	1823A-27-33	1551
	3.875	4.000	15.375	1823A-27-37	1610
	4.875	4.500	16.875	1823A-27-47	1742
	5.875	4.500	17.875	1823A-27-57	1861

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	4.000	14.875	1823A-47-13	1551
	1.875	4.000	15.375	1823A-47-17	1610
	2.375	4.500	16.375	1823A-47-23	1682
	2.875	4.500	16.875	1823A-47-27	1742
	3.375	4.500	17.375	1823A-47-33	1801
	3.875	4.500	17.875	1823A-47-37	1861
	4.875	4.500	18.875	1823A-47-47	1980
	5.875	4.500	19.875	1823A-47-57	2099

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	10.875	1823A-17-13	1169
	1.875	3.000	11.375	1823A-17-17	1228
	2.375	3.500	12.375	1823A-17-23	1300
	2.875	3.500	12.875	1823A-17-27	1360
	3.375	4.000	13.875	1823A-17-33	1432
	3.875	4.000	14.375	1823A-17-37	1491
	4.875	4.500	15.875	1823A-17-47	1623
	5.875	4.500	16.875	1823A-17-57	1742

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	4.000	13.375	1823A-33-13	1372
	1.875	4.000	13.875	1823A-33-17	1432
	2.375	4.000	14.375	1823A-33-23	1491
	2.875	4.500	15.375	1823A-33-27	1563
	3.375	4.500	15.875	1823A-33-33	1623
	3.875	4.500	16.375	1823A-33-37	1682
	4.875	4.500	17.375	1823A-33-47	1801
	5.875	4.500	18.375	1823A-33-57	1920

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	4.000	15.875	1823A-57-13	1670
	1.875	4.500	16.875	1823A-57-17	1742
	2.375	4.500	17.375	1823A-57-23	1801
	2.875	4.500	17.875	1823A-57-27	1861
	3.375	4.500	18.375	1823A-57-33	1920
	3.875	4.500	18.875	1823A-57-37	1980
	4.875	4.500	19.875	1823A-57-47	2099
	5.875	4.500	20.875	1823A-57-57	2218

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.500	11.875	1823A-23-13	1241
	1.875	3.500	12.375	1823A-23-17	1300
	2.375	3.500	12.875	1823A-23-23	1360
	2.875	4.000	13.875	1823A-23-27	1432
	3.375	4.000	14.375	1823A-23-33	1491
	3.875	4.000	14.875	1823A-23-37	1551
	4.875	4.500	16.375	1823A-23-47	1682
	5.875	4.500	17.375	1823A-23-57	1801

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	4.000	13.875	1823A-37-13	1432
	1.875	4.000	14.375	1823A-37-17	1491
	2.375	4.500	15.375	1823A-37-23	1563
	2.875	4.500	15.875	1823A-37-27	1623
	3.375	4.500	16.375	1823A-37-33	1682
	3.875	4.500	16.875	1823A-37-37	1842
	4.875	4.500	17.875	1823A-37-47	1861
	5.875	4.500	18.875	1823A-37-57	1980

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	SU SUPPORT PLATE THICKNESS	BCP BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

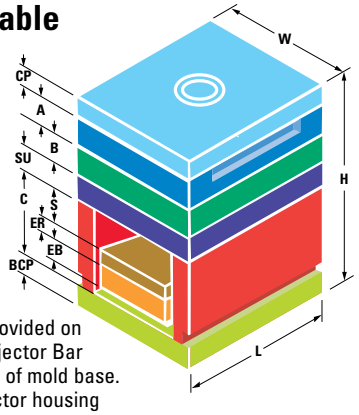
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	S MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
23.50	23
26.00	26
29.50	29
35.50	35

See Item 6 below.



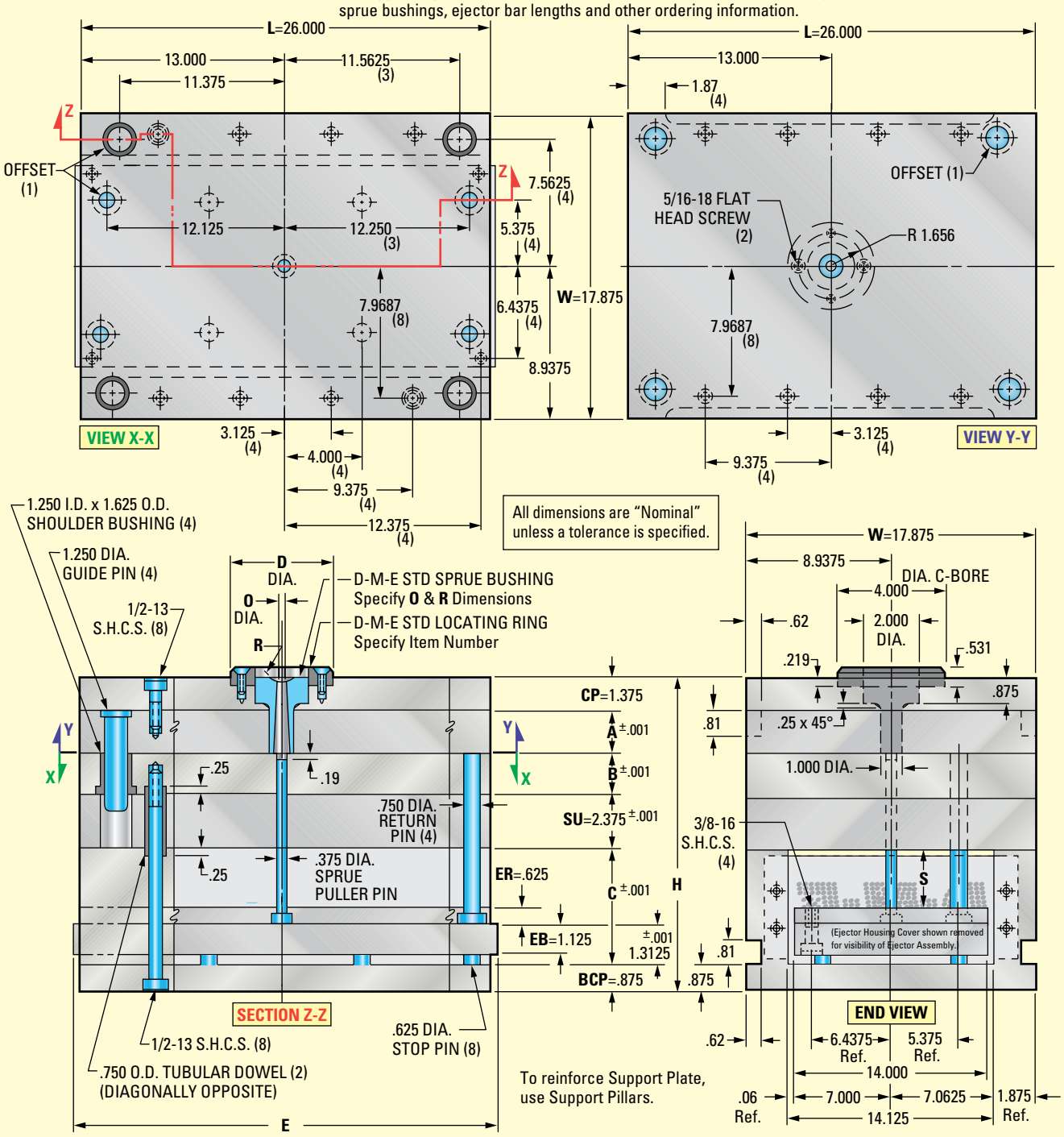
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

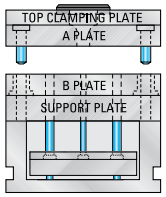
17⅞ x 26" A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

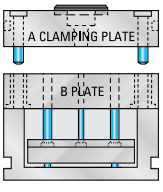


Mold Base Selections

A-Series Assembly



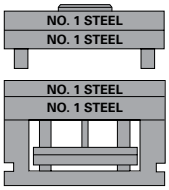
B-Series Assembly



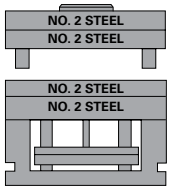
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

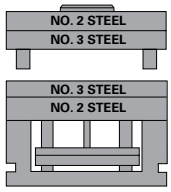
No. 1 Steel Assembly



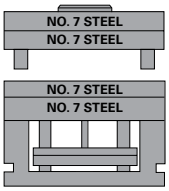
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

17⅞ x 26" A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	10.375	1826A-13-13	1227
	1.875	3.000	10.875	1826A-13-17	1293
	2.375	3.500	11.875	1826A-13-23	1373
	2.875	3.500	12.375	1826A-13-27	1439
	3.375	4.000	13.375	1826A-13-33	1518
	3.875	4.000	13.875	1826A-13-37	1584
	4.875	4.500	15.375	1826A-13-47	1730
	5.875	4.500	16.375	1826A-13-57	1861

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.500	12.375	1826A-27-13	1439
	1.875	3.500	12.875	1826A-27-17	1504
	2.375	3.500	13.375	1826A-27-23	1570
	2.875	4.000	14.375	1826A-27-27	1650
	3.375	4.000	14.875	1826A-27-33	1716
	3.875	4.000	15.375	1826A-27-37	1782
	4.875	4.500	16.875	1826A-27-47	1927
	5.875	4.500	17.875	1826A-27-57	2059

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	4.000	14.875	1826A-47-13	1716
	1.875	4.000	15.375	1826A-47-17	1782
	2.375	4.500	16.375	1826A-47-23	1861
	2.875	4.500	16.875	1826A-47-27	1927
	3.375	4.500	17.375	1826A-47-33	1993
	3.875	4.500	17.875	1826A-47-37	2059
	4.875	4.500	18.875	1826A-47-47	2190
	5.875	4.500	19.875	1826A-47-57	2322

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	10.875	1826A-17-13	1293
	1.875	3.000	11.375	1826A-17-17	1359
	2.375	3.500	12.375	1826A-17-23	1439
	2.875	3.500	12.875	1826A-17-27	1504
	3.375	4.000	13.875	1826A-17-33	1584
	3.875	4.000	14.375	1826A-17-37	1650
	4.875	4.500	15.875	1826A-17-47	1795
	5.875	4.500	16.875	1826A-17-57	1927

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	4.000	13.375	1826A-33-13	1518
	1.875	4.000	13.875	1826A-33-17	1584
	2.375	4.000	14.375	1826A-33-23	1650
	2.875	4.500	15.375	1826A-33-27	1730
	3.375	4.500	15.875	1826A-33-33	1795
	3.875	4.500	16.375	1826A-33-37	1861
	4.875	4.500	17.375	1826A-33-47	1993
	5.875	4.500	18.375	1826A-33-57	2125

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	4.000	15.875	1826A-57-13	1847
	1.875	4.500	16.875	1826A-57-17	1927
	2.375	4.500	17.375	1826A-57-23	1993
	2.875	4.500	17.875	1826A-57-27	2059
	3.375	4.500	18.375	1826A-57-33	2125
	3.875	4.500	18.875	1826A-57-37	2190
	4.875	4.500	19.875	1826A-57-47	2322
	5.875	4.500	20.875	1826A-57-57	2454

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.500	11.875	1826A-23-13	1373
	1.875	3.500	12.375	1826A-23-17	1439
	2.375	3.500	12.875	1826A-23-23	1504
	2.875	4.000	13.875	1826A-23-27	1584
	3.375	4.000	14.375	1826A-23-33	1650
	3.875	4.000	14.875	1826A-23-37	1716
	4.875	4.500	16.375	1826A-23-47	1861
	5.875	4.500	17.375	1826A-23-57	1993

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	4.000	13.875	1826A-37-13	1584
	1.875	4.000	14.375	1826A-37-17	1650
	2.375	4.500	15.375	1826A-37-23	1730
	2.875	4.500	15.875	1826A-37-27	1795
	3.375	4.500	16.375	1826A-37-33	1861
	3.875	4.500	16.875	1826A-37-37	1927
	4.875	4.500	17.875	1826A-37-47	2059
	5.875	4.500	18.875	1826A-37-57	2190

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	SU SUPPORT PLATE THICKNESS	BCP BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

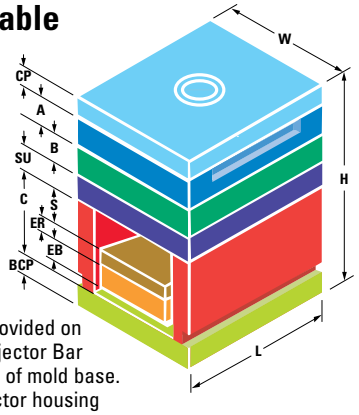
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	S MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
26.00	26
29.50	29
35.50	35

See Item 6 below.



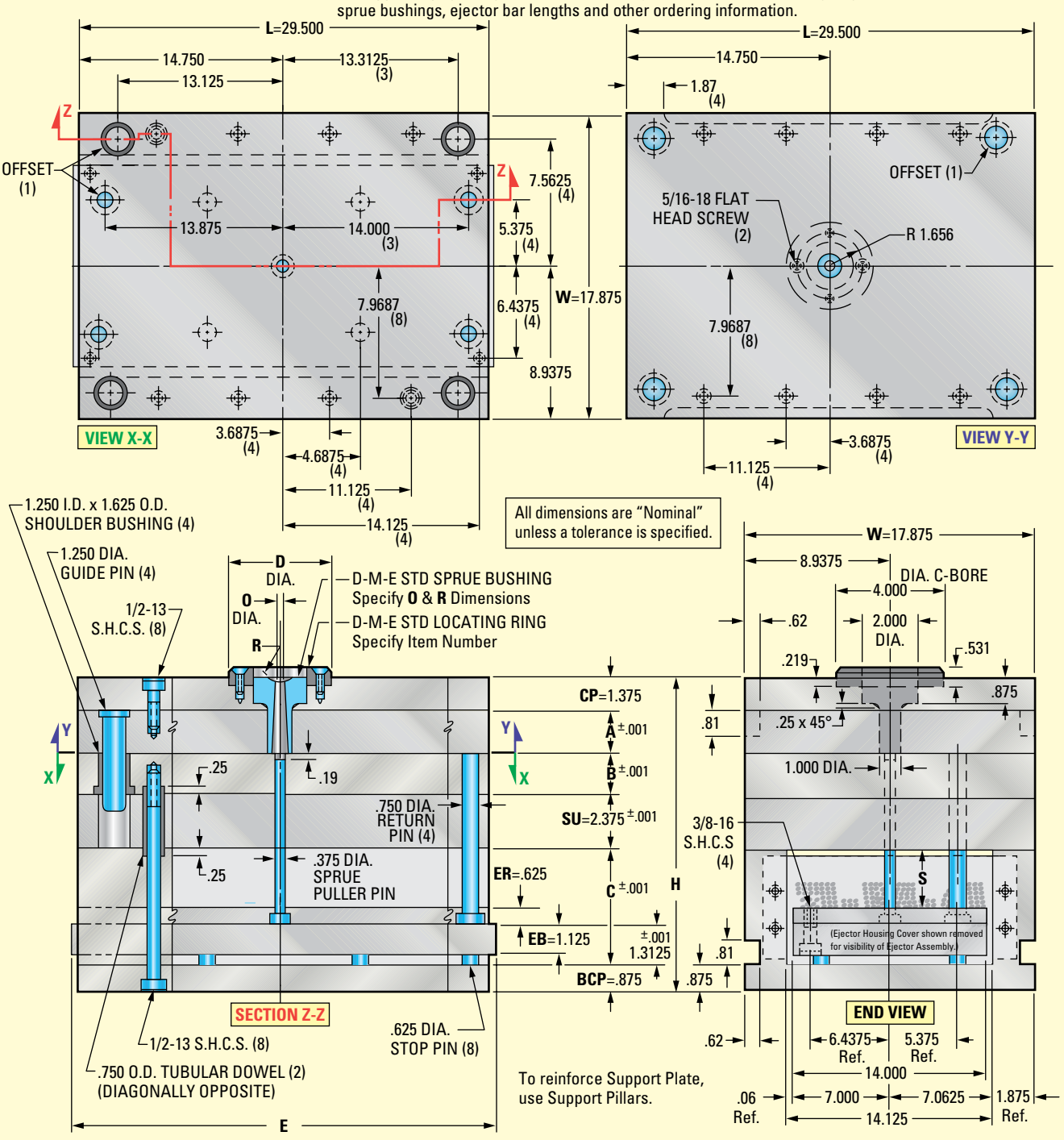
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

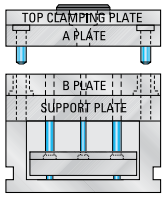
17⅞ x 29½ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

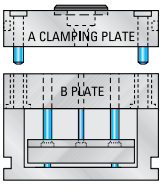


Mold Base Selections

A-Series Assembly



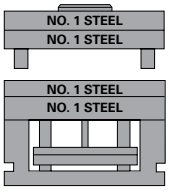
B-Series Assembly



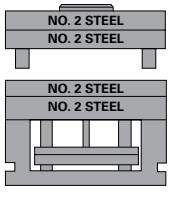
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

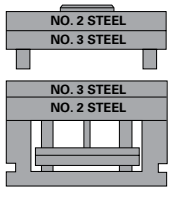
No. 1 Steel Assembly



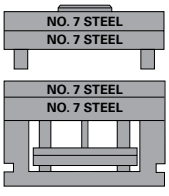
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

17⅞ x 29½ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	10.375	1829A-13-13	1392
	1.875	3.000	10.875	1829A-13-17	1467
	2.375	3.500	11.875	1829A-13-23	1558
	2.875	3.500	12.375	1829A-13-27	1632
	3.375	4.000	13.375	1829A-13-33	1723
	3.875	4.000	13.875	1829A-13-37	1797
	4.875	4.500	15.375	1829A-13-47	1962
	5.875	4.500	16.375	1829A-13-57	2112

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.500	12.375	1829A-27-13	1632
	1.875	3.500	12.875	1829A-27-17	1707
	2.375	3.500	13.375	1829A-27-23	1782
	2.875	4.000	14.375	1829A-27-27	1872
	3.375	4.000	14.875	1829A-27-33	1947
	3.875	4.000	15.375	1829A-27-37	2021
	4.875	4.500	16.875	1829A-27-47	2186
	5.875	4.500	17.875	1829A-27-57	2336

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	4.000	14.875	1829A-47-13	1947
	1.875	4.000	15.375	1829A-47-17	2021
	2.375	4.500	16.375	1829A-47-23	2112
	2.875	4.500	16.875	1829A-47-27	2186
	3.375	4.500	17.375	1829A-47-33	2261
	3.875	4.500	17.875	1829A-47-37	2336
	4.875	4.500	18.875	1829A-47-47	2485
	5.875	4.500	19.875	1829A-47-57	2635

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	10.875	1829A-17-13	1467
	1.875	3.000	11.375	1829A-17-17	1542
	2.375	3.500	12.375	1829A-17-23	1632
	2.875	3.500	12.875	1829A-17-27	1707
	3.375	4.000	13.875	1829A-17-33	1797
	3.875	4.000	14.375	1829A-17-37	1872
	4.875	4.500	15.875	1829A-17-47	2037
	5.875	4.500	16.875	1829A-17-57	2186

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	4.000	13.375	1829A-33-13	1723
	1.875	4.000	13.875	1829A-33-17	1797
	2.375	4.000	14.375	1829A-33-23	1872
	2.875	4.500	15.375	1829A-33-27	1962
	3.375	4.500	15.875	1829A-33-33	2037
	3.875	4.500	16.375	1829A-33-37	2112
	4.875	4.500	17.375	1829A-33-47	2261
	5.875	4.500	18.375	1829A-33-57	2410

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	4.000	15.875	1829A-57-13	2096
	1.875	4.500	16.875	1829A-57-17	2186
	2.375	4.500	17.375	1829A-57-23	2261
	2.875	4.500	17.875	1829A-57-27	2336
	3.375	4.500	18.375	1829A-57-33	2410
	3.875	4.500	18.875	1829A-57-37	2485
	4.875	4.500	19.875	1829A-57-47	2635
	5.875	4.500	20.875	1829A-57-57	2784

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.500	11.875	1829A-23-13	1558
	1.875	3.500	12.375	1829A-23-17	1632
	2.375	3.500	12.875	1829A-23-23	1707
	2.875	4.000	13.875	1829A-23-27	1797
	3.375	4.000	14.375	1829A-23-33	1872
	3.875	4.000	14.875	1829A-23-37	1947
	4.875	4.500	16.375	1829A-23-47	2112
	5.875	4.500	17.375	1829A-23-57	2261

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	4.000	13.875	1829A-37-13	1797
	1.875	4.000	14.375	1829A-37-17	1872
	2.375	4.500	15.375	1829A-37-23	1962
	2.875	4.500	15.875	1829A-37-27	2037
	3.375	4.500	16.375	1829A-37-33	2112
	3.875	4.500	16.875	1829A-37-37	2186
	4.875	4.500	17.875	1829A-37-47	2336
	5.875	4.500	18.875	1829A-37-57	2485

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	SU SUPPORT PLATE THICKNESS	BCP BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

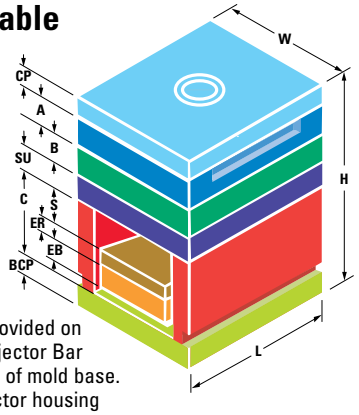
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	S MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
29.50	29
35.50	35

See Item 6 below.



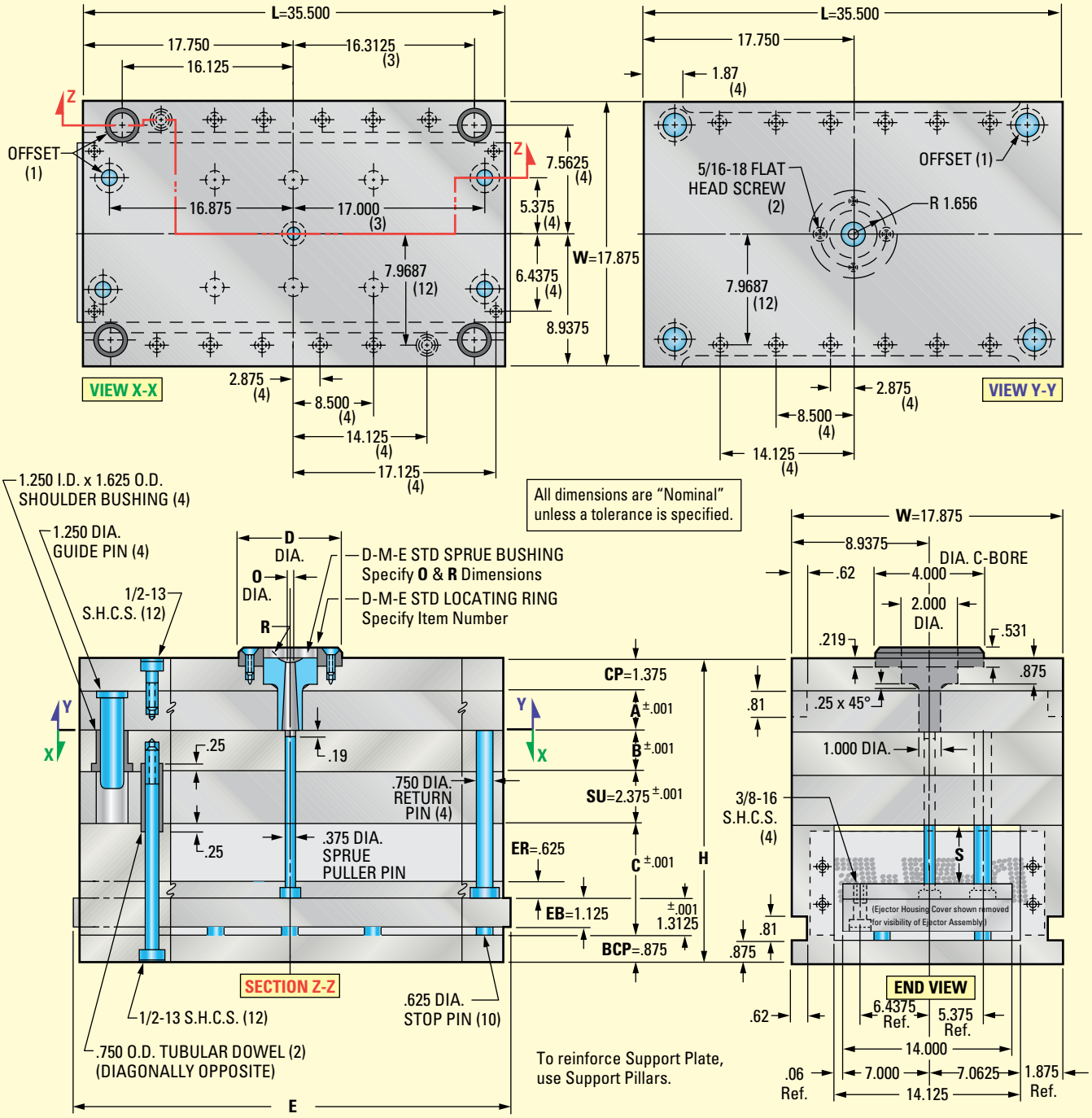
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

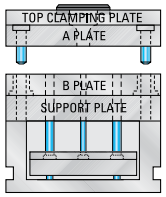
17⅞ x 35½ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

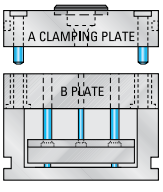


Mold Base Selections

A-Series Assembly



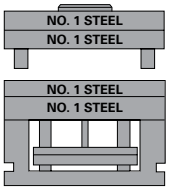
B-Series Assembly



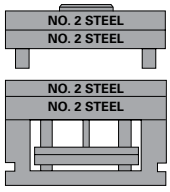
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

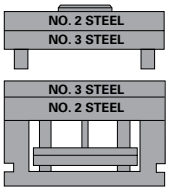
No. 1 Steel Assembly



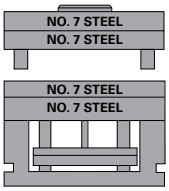
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

17⅞ x 35½ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	10.375	1835A-13-13	1676
	1.875	3.000	10.875	1835A-13-17	1766
	2.375	3.500	11.875	1835A-13-23	1874
	2.875	3.500	12.375	1835A-13-27	1964
	3.375	4.000	13.375	1835A-13-33	2073
	3.875	4.000	13.875	1835A-13-37	2163
	4.875	4.500	15.375	1835A-13-47	2361
	5.875	4.500	16.375	1835A-13-57	2541

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.500	12.375	1835A-27-13	1964
	1.875	3.500	12.875	1835A-27-17	2054
	2.375	3.500	13.375	1835A-27-23	2144
	2.875	4.000	14.375	1835A-27-27	2253
	3.375	4.000	14.875	1835A-27-33	2343
	3.875	4.000	15.375	1835A-27-37	2433
	4.875	4.500	16.875	1835A-27-47	2631
	5.875	4.500	17.875	1835A-27-57	2811

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	4.000	14.875	1835A-47-13	2343
	1.875	4.000	15.375	1835A-47-17	2433
	2.375	4.500	16.375	1835A-47-23	2541
	2.875	4.500	16.875	1835A-47-27	2631
	3.375	4.500	17.375	1835A-47-33	2721
	3.875	4.500	17.875	1835A-47-37	2811
	4.875	4.500	18.875	1835A-47-47	2991
	5.875	4.500	19.875	1835A-47-57	3170

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	10.875	1835A-17-13	1766
	1.875	3.000	11.375	1835A-17-17	1855
	2.375	3.500	12.375	1835A-17-23	1964
	2.875	3.500	12.875	1835A-17-27	2054
	3.375	4.000	13.875	1835A-17-33	2163
	3.875	4.000	14.375	1835A-17-37	2253
	4.875	4.500	15.875	1835A-17-47	2451
	5.875	4.500	16.875	1835A-17-57	2631

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	4.000	13.375	1835A-33-13	2073
	1.875	4.000	13.875	1835A-33-17	2163
	2.375	4.000	14.375	1835A-33-23	2253
	2.875	4.500	15.375	1835A-33-27	2361
	3.375	4.500	15.875	1835A-33-33	2451
	3.875	4.500	16.375	1835A-33-37	2541
	4.875	4.500	17.375	1835A-33-47	2721
	5.875	4.500	18.375	1835A-33-57	2901

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	4.000	15.875	1835A-57-13	2522
	1.875	4.500	16.875	1835A-57-17	2631
	2.375	4.500	17.375	1835A-57-23	2721
	2.875	4.500	17.875	1835A-57-27	2811
	3.375	4.500	18.375	1835A-57-33	2901
	3.875	4.500	18.875	1835A-57-37	2991
	4.875	4.500	19.875	1835A-57-47	3170
	5.875	4.500	20.875	1835A-57-57	3350

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.500	11.875	1835A-23-13	1874
	1.875	3.500	12.375	1835A-23-17	1964
	2.375	3.500	12.875	1835A-23-23	2054
	2.875	4.000	13.875	1835A-23-27	2163
	3.375	4.000	14.375	1835A-23-33	2253
	3.875	4.000	14.875	1835A-23-37	2343
	4.875	4.500	16.375	1835A-23-47	2541
	5.875	4.500	17.375	1835A-23-57	2721

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	4.000	13.875	1835A-37-13	2163
	1.875	4.000	14.375	1835A-37-17	2253
	2.375	4.500	15.375	1835A-37-23	2361
	2.875	4.500	15.875	1835A-37-27	2451
	3.375	4.500	16.375	1835A-37-33	2541
	3.875	4.500	16.875	1835A-37-37	2631
	4.875	4.500	17.875	1835A-37-47	2811
	5.875	4.500	18.875	1835A-37-57	2991

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

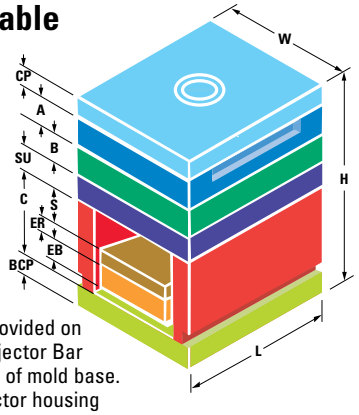
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
35.50	35

See Item 6 below.



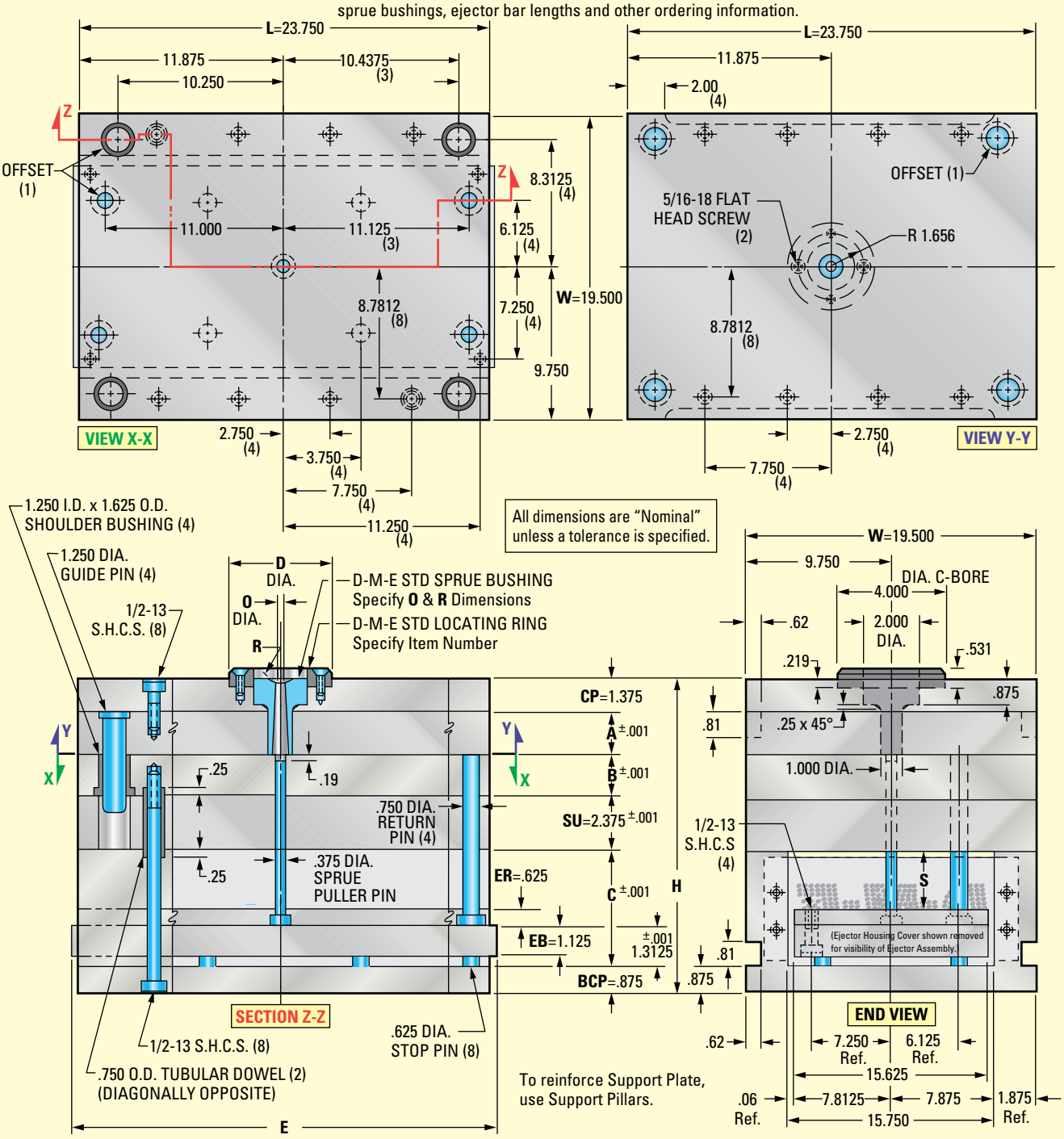
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

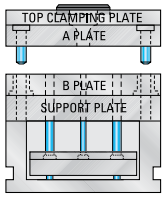
19½ x 23¾ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

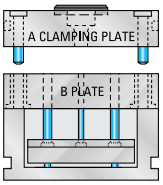


Mold Base Selections

A-Series Assembly



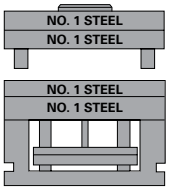
B-Series Assembly



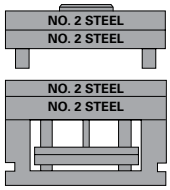
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

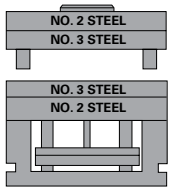
No. 1 Steel Assembly



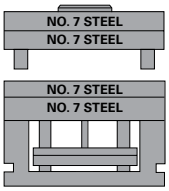
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

19½ x 23¾ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	10.375	1924A-13-13	1221
	1.875	3.000	10.875	1924A-13-17	1287
	2.375	3.500	11.875	1924A-13-23	1365
	2.875	3.500	12.375	1924A-13-27	1430
	3.375	4.000	13.375	1924A-13-33	1509
	3.875	4.000	13.875	1924A-13-37	1574
	4.875	4.500	15.375	1924A-13-47	1718
	5.875	4.500	16.375	1924A-13-57	1849

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.500	12.375	1924A-27-13	1430
	1.875	3.500	12.875	1924A-27-17	1496
	2.375	3.500	13.375	1924A-27-23	1562
	2.875	4.000	14.375	1924A-27-27	1640
	3.375	4.000	14.875	1924A-27-33	1705
	3.875	4.000	15.375	1924A-27-37	1771
	4.875	4.500	16.875	1924A-27-47	1915
	5.875	4.500	17.875	1924A-27-57	2046

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	4.000	14.875	1924A-47-13	1705
	1.875	4.000	15.375	1924A-47-17	1771
	2.375	4.500	16.375	1924A-47-23	1849
	2.875	4.500	16.875	1924A-47-27	1915
	3.375	4.500	17.375	1924A-47-33	1980
	3.875	4.500	17.875	1924A-47-37	2046
	4.875	4.500	18.875	1924A-47-47	2177
	5.875	4.500	19.875	1924A-47-57	2308

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	10.875	1924A-17-13	1287
	1.875	3.000	11.375	1924A-17-17	1352
	2.375	3.500	12.375	1924A-17-23	1430
	2.875	3.500	12.875	1924A-17-27	1496
	3.375	4.000	13.875	1924A-17-33	1574
	3.875	4.000	14.375	1924A-17-37	1640
	4.875	4.500	15.875	1924A-17-47	1784
	5.875	4.500	16.875	1924A-17-57	1915

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	4.000	13.375	1924A-33-13	1509
	1.875	4.000	13.875	1924A-33-17	1574
	2.375	4.000	14.375	1924A-33-23	1640
	2.875	4.500	15.375	1924A-33-27	1718
	3.375	4.500	15.875	1924A-33-33	1784
	3.875	4.500	16.375	1924A-33-37	1849
	4.875	4.500	17.375	1924A-33-47	1980
	5.875	4.500	18.375	1924A-33-57	2112

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	4.000	15.875	1924A-57-13	1837
	1.875	4.500	16.875	1924A-57-17	1915
	2.375	4.500	17.375	1924A-57-23	1980
	2.875	4.500	17.875	1924A-57-27	2046
	3.375	4.500	18.375	1924A-57-33	2112
	3.875	4.500	18.875	1924A-57-37	2177
	4.875	4.500	19.875	1924A-57-47	2308
	5.875	4.500	20.875	1924A-57-57	2440

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.500	11.875	1924A-23-13	1365
	1.875	3.500	12.375	1924A-23-17	1430
	2.375	3.500	12.875	1924A-23-23	1496
	2.875	4.000	13.875	1924A-23-27	1574
	3.375	4.000	14.375	1924A-23-33	1640
	3.875	4.000	14.875	1924A-23-37	1705
	4.875	4.500	16.375	1924A-23-47	1849
	5.875	4.500	17.375	1924A-23-57	1980

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	4.000	13.875	1924A-37-13	1574
	1.875	4.000	14.375	1924A-37-17	1640
	2.375	4.500	15.375	1924A-37-23	1718
	2.875	4.500	15.875	1924A-37-27	1784
	3.375	4.500	16.375	1924A-37-33	1849
	3.875	4.500	16.875	1924A-37-37	1915
	4.875	4.500	17.875	1924A-37-47	2046
	5.875	4.500	18.875	1924A-37-57	2177

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

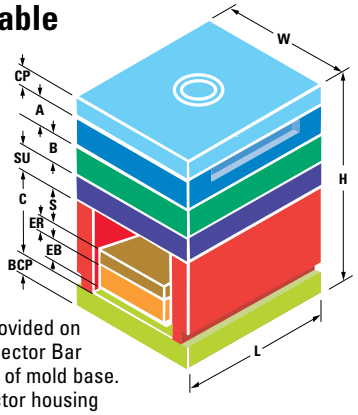
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
23.75	24
29.50	29
35.50	35

See Item 6 below.



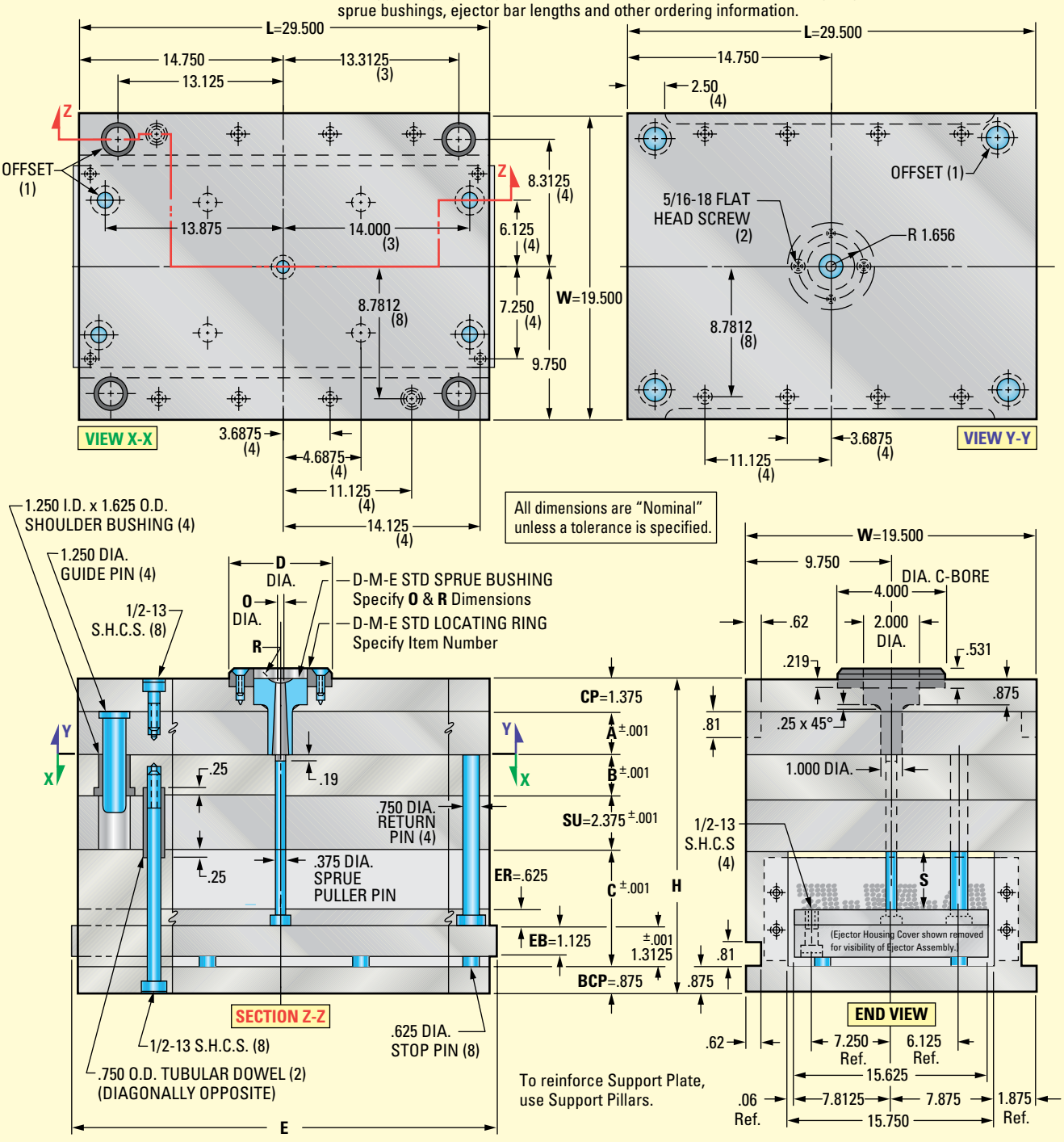
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

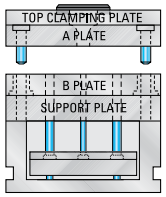
19½ x 29½ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

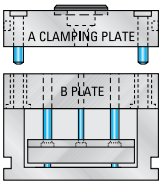


Mold Base Selections

A-Series Assembly



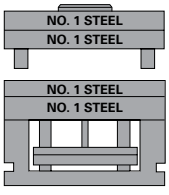
B-Series Assembly



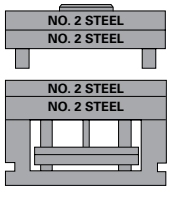
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

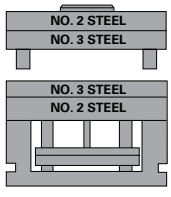
No. 1 Steel Assembly



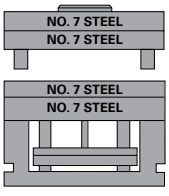
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

19½ x 29½ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	10.375	1929A-13-13	1516
	1.875	3.000	10.875	1929A-13-17	1598
	2.375	3.500	11.875	1929A-13-23	1695
	2.875	3.500	12.375	1929A-13-27	1777
	3.375	4.000	13.375	1929A-13-33	1874
	3.875	4.000	13.875	1929A-13-37	1955
	4.875	4.500	15.375	1929A-13-47	2134
	5.875	4.500	16.375	1929A-13-57	2297

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.500	12.375	1929A-27-13	1777
	1.875	3.500	12.875	1929A-27-17	1858
	2.375	3.500	13.375	1929A-27-23	1849
	2.875	4.000	14.375	1929A-27-27	2037
	3.375	4.000	14.875	1929A-27-33	2118
	3.875	4.000	15.375	1929A-27-37	2200
	4.875	4.500	16.875	1929A-27-47	2378
	5.875	4.500	17.875	1929A-27-57	2541

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	4.000	14.875	1929A-47-13	2118
	1.875	4.000	15.375	1929A-47-17	2200
	2.375	4.500	16.375	1929A-47-23	2297
	2.875	4.500	16.875	1929A-47-27	2378
	3.375	4.500	17.375	1929A-47-33	2460
	3.875	4.500	17.875	1929A-47-37	2541
	4.875	4.500	18.875	1929A-47-47	2704
	5.875	4.500	19.875	1929A-47-57	2867

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	10.875	1929A-17-13	1598
	1.875	3.000	11.375	1929A-17-17	1679
	2.375	3.500	12.375	1929A-17-23	1777
	2.875	3.500	12.875	1929A-17-27	1858
	3.375	4.000	13.875	1929A-17-33	1955
	3.875	4.000	14.375	1929A-17-37	2037
	4.875	4.500	15.875	1929A-17-47	2215
	5.875	4.500	16.875	1929A-17-57	2378

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	4.000	13.375	1929A-33-13	1874
	1.875	4.000	13.875	1929A-33-17	1955
	2.375	4.000	14.375	1929A-33-23	2037
	2.875	4.500	15.375	1929A-33-27	2134
	3.375	4.500	15.875	1929A-33-33	2215
	3.875	4.500	16.375	1929A-33-37	2297
	4.875	4.500	17.375	1929A-33-47	2460
	5.875	4.500	18.375	1929A-33-57	2623

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	4.000	15.875	1929A-57-13	2281
	1.875	4.500	16.875	1929A-57-17	2378
	2.375	4.500	17.375	1929A-57-23	2460
	2.875	4.500	17.875	1929A-57-27	2541
	3.375	4.500	18.375	1929A-57-33	2623
	3.875	4.500	18.875	1929A-57-37	2704
	4.875	4.500	19.875	1929A-57-47	2867
	5.875	4.500	20.875	1929A-57-57	3030

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.500	11.875	1929A-23-13	1695
	1.875	3.500	12.375	1929A-23-17	1777
	2.375	3.500	12.875	1929A-23-23	1858
	2.875	4.000	13.875	1929A-23-27	1955
	3.375	4.000	14.375	1929A-23-33	2037
	3.875	4.000	14.875	1929A-23-37	2118
	4.875	4.500	16.375	1929A-23-47	2297
	5.875	4.500	17.375	1929A-23-57	2460

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	4.000	13.875	1929A-37-13	1955
	1.875	4.000	14.375	1929A-37-17	2037
	2.375	4.500	15.375	1929A-37-23	2134
	2.875	4.500	15.875	1929A-37-27	2215
	3.375	4.500	16.375	1929A-37-33	2297
	3.875	4.500	16.875	1929A-37-37	2378
	4.875	4.500	17.875	1929A-37-47	2541
	5.875	4.500	18.875	1929A-37-57	2704

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

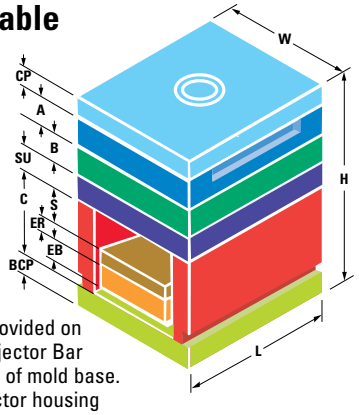
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
29.50	29
35.50	35

See Item 6 below.



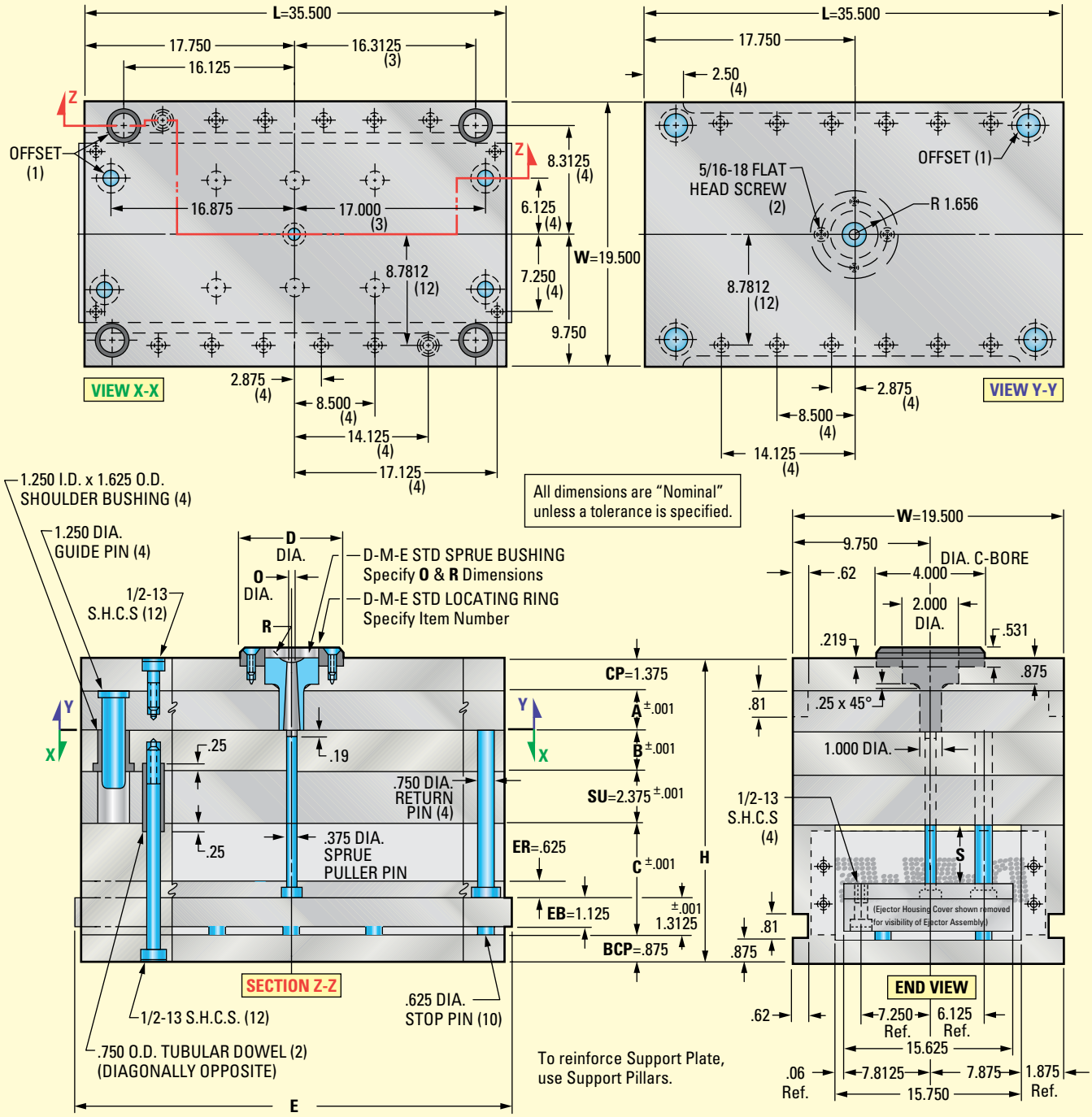
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

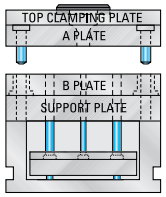
19½ x 35½ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

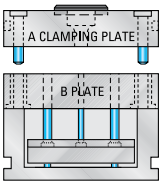


Mold Base Selections

A-Series Assembly



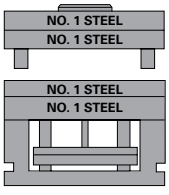
B-Series Assembly



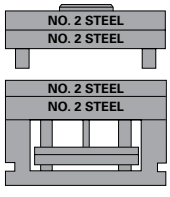
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

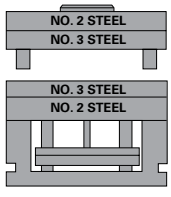
No. 1 Steel Assembly



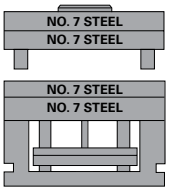
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

19½ x 35½ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	10.375	1935A-13-13	1825
	1.875	3.000	10.875	1935A-13-17	1923
	2.375	3.500	11.875	1935A-13-23	2040
	2.875	3.500	12.375	1935A-13-27	2138
	3.375	4.000	13.375	1935A-13-33	2255
	3.875	4.000	13.875	1935A-13-37	2353
	4.875	4.500	15.375	1935A-13-47	2568
	5.875	4.500	16.375	1935A-13-57	2764

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.500	12.375	1935A-27-13	2138
	1.875	3.500	12.875	1935A-27-17	2236
	2.375	3.500	13.375	1935A-27-23	2334
	2.875	4.000	14.375	1935A-27-27	2451
	3.375	4.000	14.875	1935A-27-33	2549
	3.875	4.000	15.375	1935A-27-37	2647
	4.875	4.500	16.875	1935A-27-47	2862
	5.875	4.500	17.875	1935A-27-57	3058

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	4.000	14.875	1935A-47-13	2549
	1.875	4.000	15.375	1935A-47-17	2647
	2.375	4.500	16.375	1935A-47-23	2764
	2.875	4.500	16.875	1935A-47-27	2862
	3.375	4.500	17.375	1935A-47-33	2960
	3.875	4.500	17.875	1935A-47-37	3058
	4.875	4.500	18.875	1935A-47-47	3254
	5.875	4.500	19.875	1935A-47-57	3450

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	10.875	1935A-17-13	1923
	1.875	3.000	11.375	1935A-17-17	2021
	2.375	3.500	12.375	1935A-17-23	2138
	2.875	3.500	12.875	1935A-17-27	2236
	3.375	4.000	13.875	1935A-17-33	2353
	3.875	4.000	14.375	1935A-17-37	2451
	4.875	4.500	15.875	1935A-17-47	2666
	5.875	4.500	16.875	1935A-17-57	2862

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	4.000	13.375	1935A-33-13	2255
	1.875	4.000	13.875	1935A-33-17	2353
	2.375	4.000	14.375	1935A-33-23	2451
	2.875	4.500	15.375	1935A-33-27	2568
	3.375	4.500	15.875	1935A-33-33	2666
	3.875	4.500	16.375	1935A-33-37	2764
	4.875	4.500	17.375	1935A-33-47	2960
	5.875	4.500	18.375	1935A-33-57	3156

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	4.000	15.875	1935A-57-13	2745
	1.875	4.500	16.875	1935A-57-17	2862
	2.375	4.500	17.375	1935A-57-23	2960
	2.875	4.500	17.875	1935A-57-27	3058
	3.375	4.500	18.375	1935A-57-33	3156
	3.875	4.500	18.875	1935A-57-37	3254
	4.875	4.500	19.875	1935A-57-47	3450
	5.875	4.500	20.875	1935A-57-57	3646

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.500	11.875	1935A-23-13	2040
	1.875	3.500	12.375	1935A-23-17	2138
	2.375	3.500	12.875	1935A-23-23	2236
	2.875	4.000	13.875	1935A-23-27	2353
	3.375	4.000	14.375	1935A-23-33	2451
	3.875	4.000	14.875	1935A-23-37	2549
	4.875	4.500	16.375	1935A-23-47	2764
	5.875	4.500	17.375	1935A-23-57	2960

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	4.000	13.875	1935A-37-13	2353
	1.875	4.000	14.375	1935A-37-17	2451
	2.375	4.500	15.375	1935A-37-23	2568
	2.875	4.500	15.875	1935A-37-27	2666
	3.375	4.500	16.375	1935A-37-33	2764
	3.875	4.500	16.875	1935A-37-37	2862
	4.875	4.500	17.875	1935A-37-47	3058
	5.875	4.500	18.875	1935A-37-57	3254

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

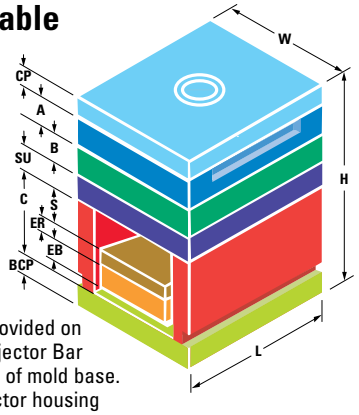
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
35.50	35

See Item 6 below.



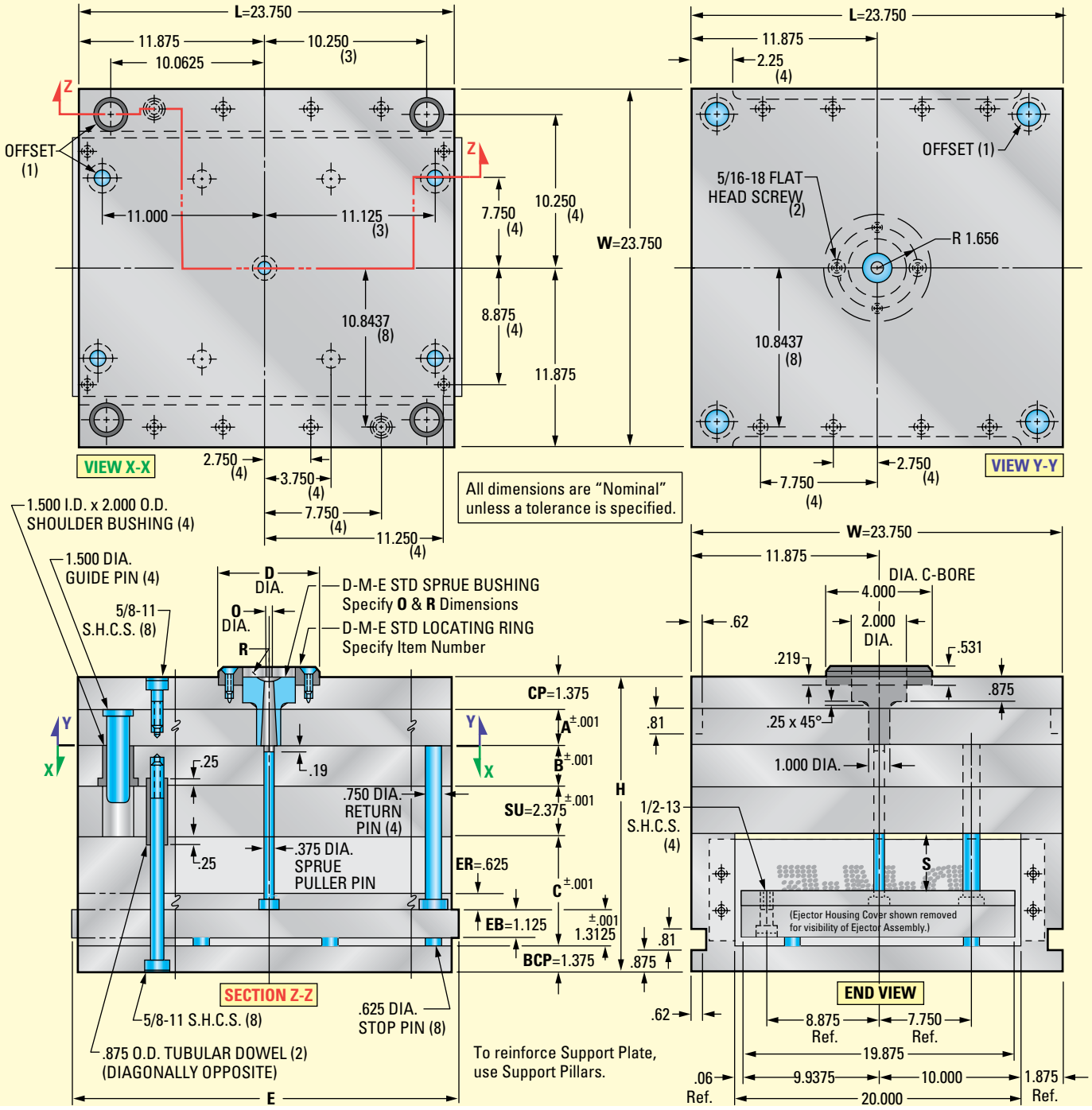
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

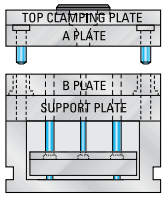
23¾ x 23¾ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

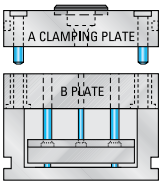


Mold Base Selections

A-Series Assembly



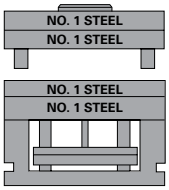
B-Series Assembly



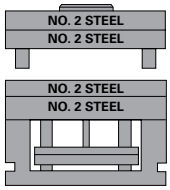
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

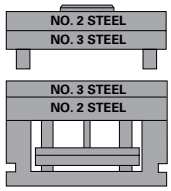
No. 1 Steel Assembly



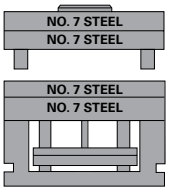
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

23¾ x 23¾ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	10.875	2424A-13-13	1562
	1.875	3.000	11.375	2424A-13-17	1642
	2.375	3.500	12.375	2424A-13-23	1734
	2.875	3.500	12.875	2424A-13-27	1814
	3.375	4.000	13.875	2424A-13-33	1907
	3.875	4.000	14.375	2424A-13-37	1987
	4.875	4.500	15.875	2424A-13-47	2159
	5.875	4.500	16.875	2424A-13-57	2319

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.500	12.875	2424A-27-13	1814
	1.875	3.500	13.375	2424A-27-17	1894
	2.375	3.500	13.875	2424A-27-23	1974
	2.875	4.000	14.875	2424A-27-27	2066
	3.375	4.000	15.375	2424A-27-33	2146
	3.875	4.000	15.875	2424A-27-37	2226
	4.875	4.500	17.375	2424A-27-47	2399
	5.875	4.500	18.375	2424A-27-57	2558

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	4.000	15.375	2424A-47-13	2146
	1.875	4.000	15.875	2424A-47-17	2226
	2.375	4.500	16.875	2424A-47-23	2319
	2.875	4.500	17.375	2424A-47-27	2399
	3.375	4.500	17.875	2424A-47-33	2479
	3.875	4.500	18.375	2424A-47-37	2558
	4.875	4.500	19.375	2424A-47-47	2718
	5.875	4.500	20.375	2424A-47-57	2878

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	11.375	2424A-17-13	1642
	1.875	3.000	11.875	2424A-17-17	1722
	2.375	3.500	12.875	2424A-17-23	1814
	2.875	3.500	13.375	2424A-17-27	1894
	3.375	4.000	14.375	2424A-17-33	1987
	3.875	4.000	14.875	2424A-17-37	2066
	4.875	4.500	16.375	2424A-17-47	2239
	5.875	4.500	17.375	2424A-17-57	2399

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	4.000	13.875	2424A-33-13	1907
	1.875	4.000	14.375	2424A-33-17	1987
	2.375	4.000	14.875	2424A-33-23	2066
	2.875	4.500	15.875	2424A-33-27	2159
	3.375	4.500	16.375	2424A-33-33	2239
	3.875	4.500	16.875	2424A-33-37	2319
	4.875	4.500	17.875	2424A-33-47	2479
	5.875	4.500	18.875	2424A-33-57	2638

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	4.000	16.375	2424A-57-13	2306
	1.875	4.500	17.375	2424A-57-17	2399
	2.375	4.500	17.875	2424A-57-23	2479
	2.875	4.500	18.375	2424A-57-27	2558
	3.375	4.500	18.875	2424A-57-33	2638
	3.875	4.500	19.375	2424A-57-37	2718
	4.875	4.500	20.375	2424A-57-47	1878
	5.875	4.500	21.375	2424A-57-57	3038

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.500	12.375	2424A-23-13	1734
	1.875	3.500	12.875	2424A-23-17	1814
	2.375	3.500	13.375	2424A-23-23	1894
	2.875	4.000	14.375	2424A-23-27	1987
	3.375	4.000	14.875	2424A-23-33	2066
	3.875	4.000	15.375	2424A-23-37	2146
	4.875	4.500	16.875	2424A-23-47	2319
	5.875	4.500	17.875	2424A-23-57	2479

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	4.000	14.375	2424A-37-13	1987
	1.875	4.000	14.875	2424A-37-17	2066
	2.375	4.500	15.875	2424A-37-23	2159
	2.875	4.500	16.375	2424A-37-27	2239
	3.375	4.500	16.875	2424A-37-33	2319
	3.875	4.500	17.375	2424A-37-37	2399
	4.875	4.500	18.375	2424A-37-47	2558
	5.875	4.500	19.375	2424A-37-57	2718

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

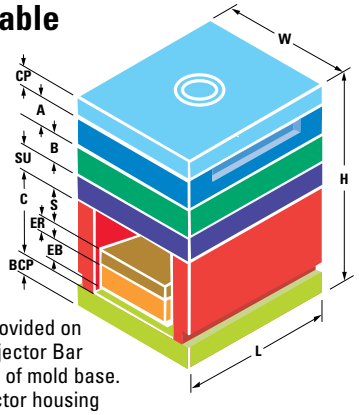
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
23.75	24
29.50	29
35.50	35

See Item 6 below.



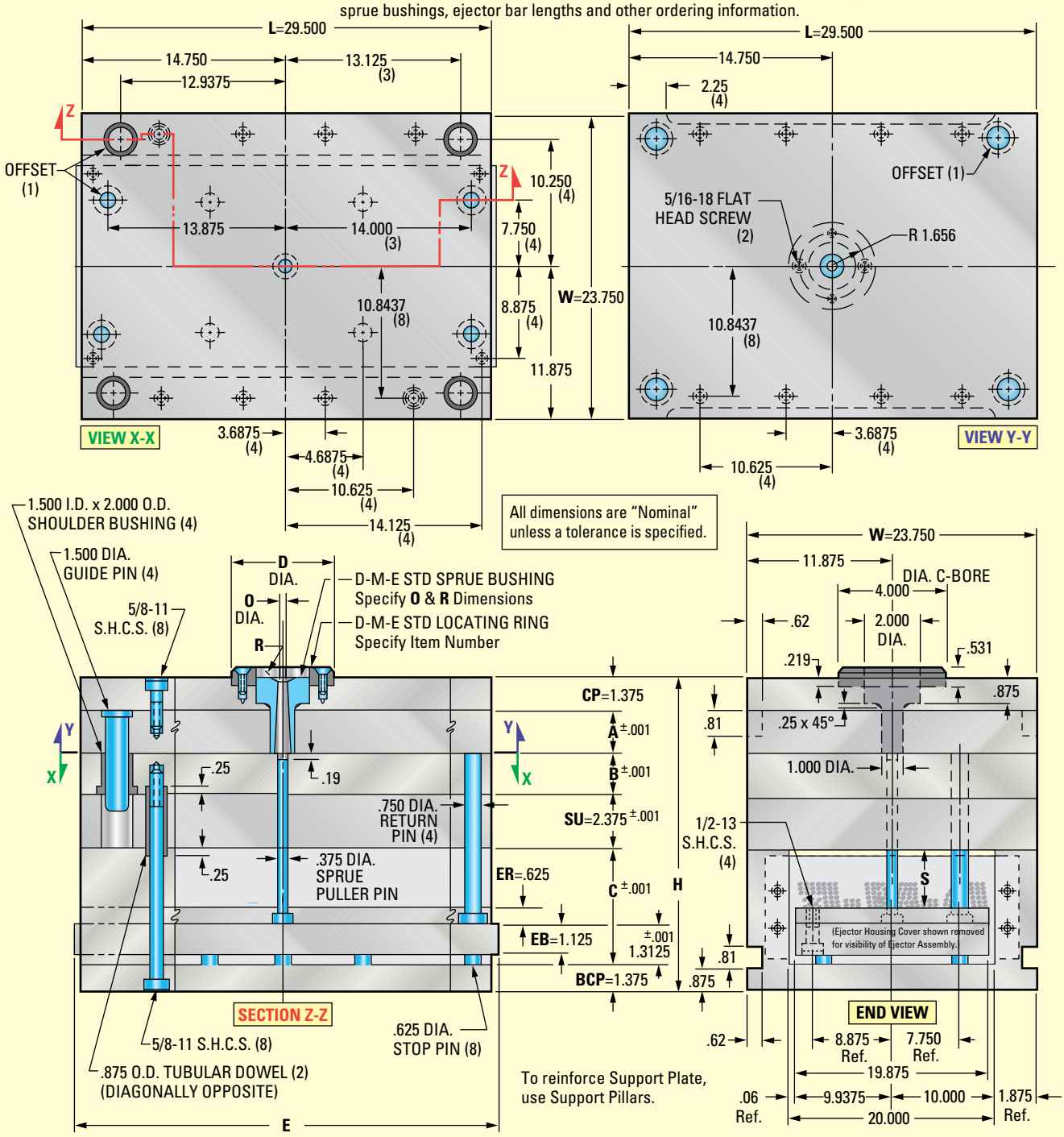
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

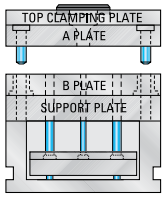
23¾ x 29½ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

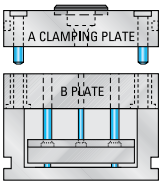


Mold Base Selections

A-Series Assembly



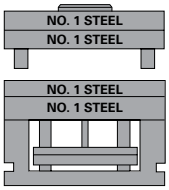
B-Series Assembly



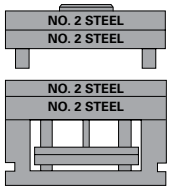
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

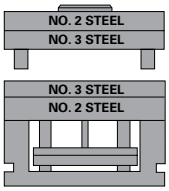
No. 1 Steel Assembly



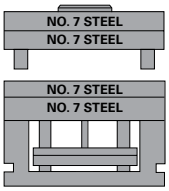
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

23¾ x 29½ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	10.875	2429A-13-13	1940
	1.875	3.000	11.375	2429A-13-17	2039
	2.375	3.500	12.375	2429A-13-23	2154
	2.875	3.500	12.875	2429A-13-27	2253
	3.375	4.000	13.875	2429A-13-33	2368
	3.875	4.000	14.375	2429A-13-37	2467
	4.875	4.500	15.875	2429A-13-47	2681
	5.875	4.500	16.875	2429A-13-57	2880

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.500	12.875	2429A-27-13	2253
	1.875	3.500	13.375	2429A-27-17	2352
	2.375	3.500	13.875	2429A-27-23	2452
	2.875	4.000	14.875	2429A-27-27	2567
	3.375	4.000	15.375	2429A-27-33	2666
	3.875	4.000	15.875	2429A-27-37	2765
	4.875	4.500	17.375	2429A-27-47	2979
	5.875	4.500	18.375	2429A-27-57	3178

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	4.000	15.375	2429A-47-13	2666
	1.875	4.000	15.875	2429A-47-17	2765
	2.375	4.500	16.875	2429A-47-23	2880
	2.875	4.500	17.375	2429A-47-27	2979
	3.375	4.500	17.875	2429A-47-33	3078
	3.875	4.500	18.375	2429A-47-37	3178
	4.875	4.500	19.375	2429A-47-47	3376
	5.875	4.500	20.375	2429A-47-57	3575

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	11.375	2429A-17-13	2039
	1.875	3.000	11.875	2429A-17-17	2138
	2.375	3.500	12.875	2429A-17-23	2253
	2.875	3.500	13.375	2429A-17-27	2352
	3.375	4.000	14.375	2429A-17-33	2467
	3.875	4.000	14.875	2429A-17-37	2567
	4.875	4.500	16.375	2429A-17-47	2781
	5.875	4.500	17.375	2429A-17-57	2979

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	4.000	13.875	2429A-33-13	2368
	1.875	4.000	14.375	2429A-33-17	2467
	2.375	4.000	14.875	2429A-33-23	2567
	2.875	4.500	15.875	2429A-33-27	2681
	3.375	4.500	16.375	2429A-33-33	2781
	3.875	4.500	16.875	2429A-33-37	2880
	4.875	4.500	17.875	2429A-33-47	3078
	5.875	4.500	18.875	2429A-33-57	3277

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	4.000	16.375	2429A-57-13	2864
	1.875	4.500	17.375	2429A-57-17	2979
	2.375	4.500	17.875	2429A-57-23	3078
	2.875	4.500	18.375	2429A-57-27	3178
	3.375	4.500	18.875	2429A-57-33	3277
	3.875	4.500	19.375	2429A-57-37	3376
	4.875	4.500	20.375	2429A-57-47	3575
	5.875	4.500	21.375	2429A-57-57	3773

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.500	12.375	2429A-23-13	2154
	1.875	3.500	12.875	2429A-23-17	2253
	2.375	3.500	13.375	2429A-23-23	2352
	2.875	4.000	14.375	2429A-23-27	2467
	3.375	4.000	14.875	2429A-23-33	2567
	3.875	4.000	15.375	2429A-23-37	2666
	4.875	4.500	16.875	2429A-23-47	2880
	5.875	4.500	17.875	2429A-23-57	3078

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	4.000	14.375	2429A-37-13	2467
	1.875	4.000	14.875	2429A-37-17	2567
	2.375	4.500	15.875	2429A-37-23	2681
	2.875	4.500	16.375	2429A-37-27	2781
	3.375	4.500	16.875	2429A-37-33	2880
	3.875	4.500	17.375	2429A-37-37	2979
	4.875	4.500	18.375	2429A-37-47	3178
	5.875	4.500	19.375	2429A-37-57	3376

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	**SU** SUPPORT PLATE THICKNESS	**BCP** BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

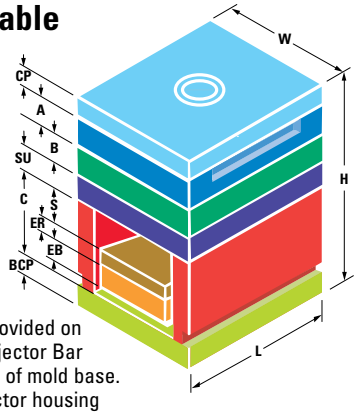
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	**S** MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
29.50	29
35.50	35

See Item 6 below.



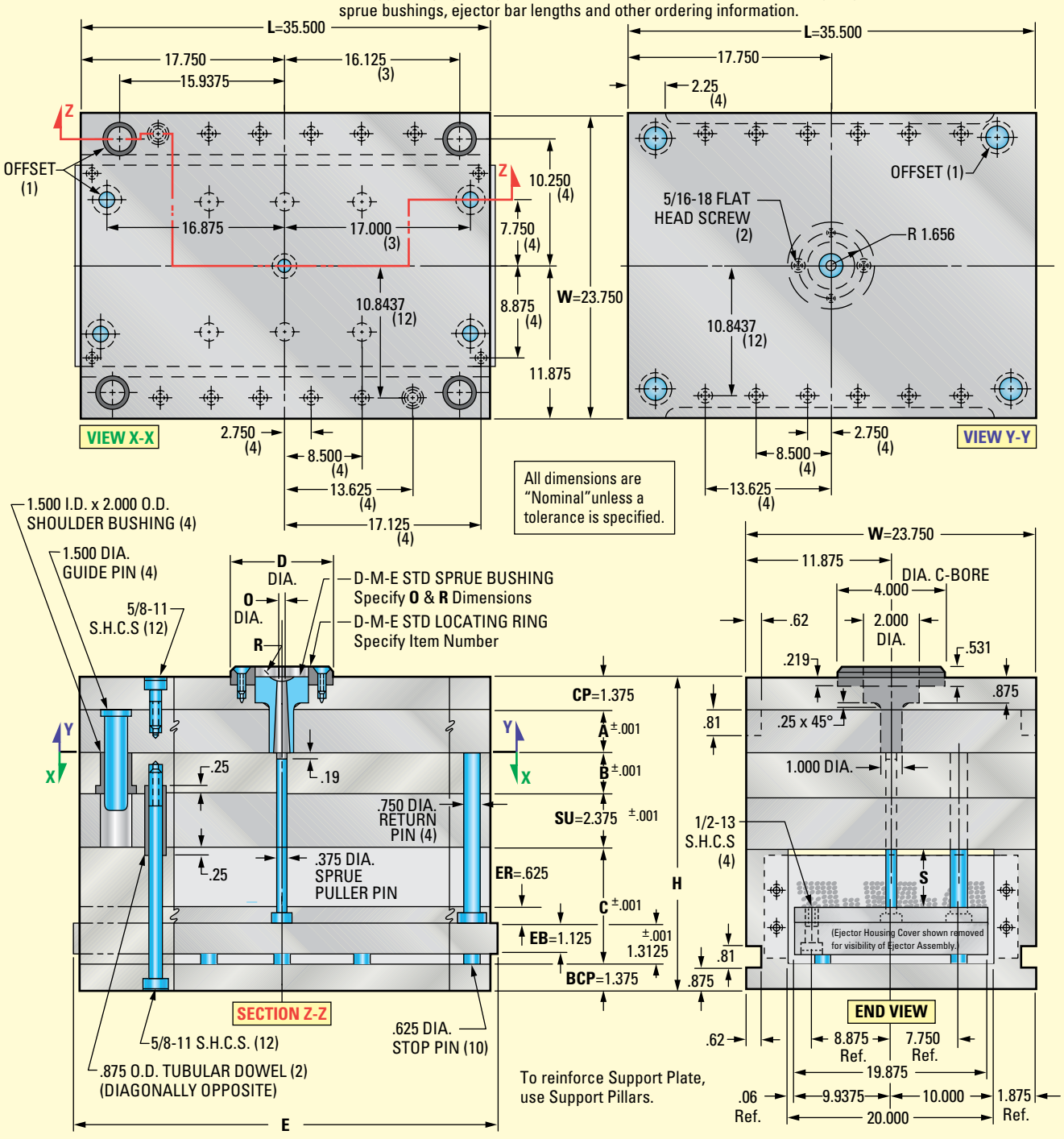
Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

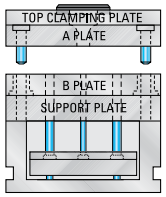
23¾ x 35½ A-Series Mold Bases

See opposite page for general dimensions, ejector stroke data, locating rings, sprue bushings, ejector bar lengths and other ordering information.

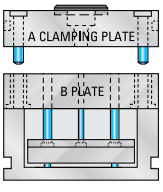


Mold Base Selections

A-Series Assembly



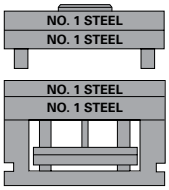
B-Series Assembly



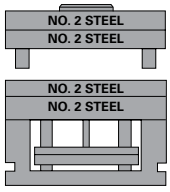
(For X-Series Stripper Plate, AX-Series and T-Series Mold Bases, see pages 171-196.)

Steel Configurations available in:

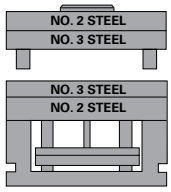
No. 1 Steel Assembly



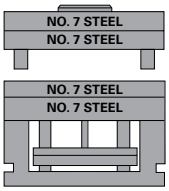
No. 2 Steel Assembly



No. 3 Steel Assembly



No. 7 Steel Assembly



Other steel combinations also available. (Ejector Plates and Housings are No. 1 Steel, unless otherwise specified.) For additional Steel information, see page 40.

23¾ x 35½ A-Series Mold Bases

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.375 (1-3/8)	1.375	3.000	10.875	2435A-13-13	2334
	1.875	3.000	11.375	2435A-13-17	2454
	2.375	3.500	12.375	2435A-13-23	2592
	2.875	3.500	12.875	2435A-13-27	2711
	3.375	4.000	13.875	2435A-13-33	2850
	3.875	4.000	14.375	2435A-13-37	2969
	4.875	4.500	15.875	2435A-13-47	3227
	5.875	4.500	16.875	2435A-13-57	3466

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.875 (2-7/8)	1.375	3.500	12.875	2435A-27-13	2711
	1.875	3.500	13.375	2435A-27-17	2831
	2.375	3.500	13.875	2435A-27-23	2950
	2.875	4.000	14.875	2435A-27-27	3089
	3.375	4.000	15.375	2435A-27-33	3208
	3.875	4.000	15.875	2435A-27-37	3327
	4.875	4.500	17.375	2435A-27-47	3585
	5.875	4.500	18.375	2435A-27-57	3824

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
4.875 (4-7/8)	1.375	4.000	15.375	2435A-47-13	3208
	1.875	4.000	15.875	2435A-47-17	3327
	2.375	4.500	16.875	2435A-47-23	3466
	2.875	4.500	17.375	2435A-47-27	3585
	3.375	4.500	17.875	2435A-47-33	3705
	3.875	4.500	18.375	2435A-47-37	3824
	4.875	4.500	19.375	2435A-47-47	4063
	5.875	4.500	20.375	2435A-47-57	4302

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
1.875 (1-7/8)	1.375	3.000	11.375	2435A-17-13	2454
	1.875	3.000	11.875	2435A-17-17	2573
	2.375	3.500	12.875	2435A-17-23	2711
	2.875	3.500	13.375	2435A-17-27	2831
	3.375	4.000	14.375	2435A-17-33	2969
	3.875	4.000	14.875	2435A-17-37	3089
	4.875	4.500	16.375	2435A-17-47	3346
	5.875	4.500	17.375	2435A-17-57	3585

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.375 (3-3/8)	1.375	4.000	13.875	2435A-33-13	2850
	1.875	4.000	14.375	2435A-33-17	2969
	2.375	4.000	14.875	2435A-33-23	3089
	2.875	4.500	15.875	2435A-33-27	3227
	3.375	4.500	16.375	2435A-33-33	3346
	3.875	4.500	16.875	2435A-33-37	3466
	4.875	4.500	17.875	2435A-33-47	3705
	5.875	4.500	18.875	2435A-33-57	3943

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
5.875 (5-7/8)	1.375	4.000	16.375	2435A-57-13	3447
	1.875	4.500	17.375	2435A-57-17	3585
	2.375	4.500	17.875	2435A-57-23	3705
	2.875	4.500	18.375	2435A-57-27	3824
	3.375	4.500	18.875	2435A-57-33	3943
	3.875	4.500	19.375	2435A-57-37	4063
	4.875	4.500	20.375	2435A-57-47	4302
	5.875	4.500	21.375	2435A-57-57	4541

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
2.375 (2-3/8)	1.375	3.500	12.375	2435A-23-13	2592
	1.875	3.500	12.875	2435A-23-17	2711
	2.375	3.500	13.375	2435A-23-23	2831
	2.875	4.000	14.375	2435A-23-27	2969
	3.375	4.000	14.875	2435A-23-33	3089
	3.875	4.000	15.375	2435A-23-37	3208
	4.875	4.500	16.875	2435A-23-47	3466
	5.875	4.500	17.875	2435A-23-57	3705

A	B	C	H	ASSEMBLY ITEM NO.	NET WT.
3.875 (3-7/8)	1.375	4.000	14.375	2435A-37-13	2969
	1.875	4.000	14.875	2435A-37-17	3089
	2.375	4.500	15.875	2435A-37-23	3227
	2.875	4.500	16.375	2435A-37-27	3346
	3.375	4.500	16.875	2435A-37-33	3466
	3.875	4.500	17.375	2435A-37-37	3585
	4.875	4.500	18.375	2435A-37-47	3824
	5.875	4.500	19.375	2435A-37-57	4063

Other plate thickness, riser height and ejector bar length options available

CP TOP CLAMP PLATE THICKNESS	SU SUPPORT PLATE THICKNESS	BCP BOTTOM CLAMP PLATE THICKNESS	PLATE THICKNESS NO.
0.875	0.875	0.875	7
1.375	1.375	1.375	13
1.875	1.875	1.875	17
2.375	2.375	2.375	23
2.875	2.875	2.875	27
3.375	3.375	3.375	33
3.875	3.875	3.875	37
4.875	4.875	4.875	47
5.875	5.875	5.875	57

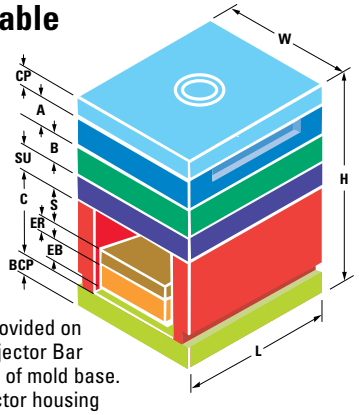
See Items 7 & 8 below.

C RISER		
C RISER HEIGHT	RISER HEIGHT NO.	S MAX. STROKE OF EJECTOR BAR
3.000	30	1.063
3.500	35	1.563
4.000	40	2.063
4.500	45	2.563
5.000	50	3.063
5.500	55	3.563
6.000	60	4.063

See Item 8 below.

EB EJECTOR BAR	
E LENGTH NOM.	EJECTOR BAR LENGTH NO.
35.50	35

See Item 6 below.



Ejector Housing Covers provided on both ends of mold when Ejector Bar Length **E** is nominal length of mold base. Customer to fabricate ejector housing covers for extended ejector bars.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (For "B" Series, replace "A" with "B")
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **CP** Top Clamp Plate or **SU** Support Plate thicknesses as needed (Recommended thicknesses are highlighted in yellow)
8. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a Three-Piece Housing (for other steels, please specify)
9. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
10. Method of shipment
    (For inch decimal to fractional conversion table, see page 286.)

Available in 43 Nominal Sizes

The D-M-E "B" Series Mold Base offers economy of design without sacrificing the high-quality steel and workmanship of the "A" Series. The two mold bases are identical except for the "B" Series "two-plate" design. A thicker "A" plate acts as both Top Clamping Plate and upper Cavity Plate. Similarly, a thicker "B" plate eliminates the need for a Support Plate on the "B" side of the mold. The "B" Series is sometimes specified for single-cavity plastics molds or die-cast dies where the cavity and core are machined directly into the Cavity Plates; or where overall mold height is critical. As a two-plate design, cavity inserts have to be installed into "blind" pockets.

Instructions for ordering:

"B" Series Mold Bases are available in the same variety of steels, sizes and plate combinations as the "A" Series. Since the clamp slots are located in the "A" plate, the recommended minimum "A" plate thickness for a "B" Series Mold Base is 1.875. If an "A" plate less than 1.875 is desired, exact clamp slot and center hold specifications must be provided.

Unless otherwise specified, the size and location of return pins and screws will be identical to those of the corresponding size "A" Series Mold Base. In addition, unless otherwise specified, the riser height will be supplied to conform with the standard "C" dimension listed for the corresponding size "A" Series Mold Base.

To create assembly item number:

Use item number prefix shown in chart at right, followed by A and B plate thickness codes.

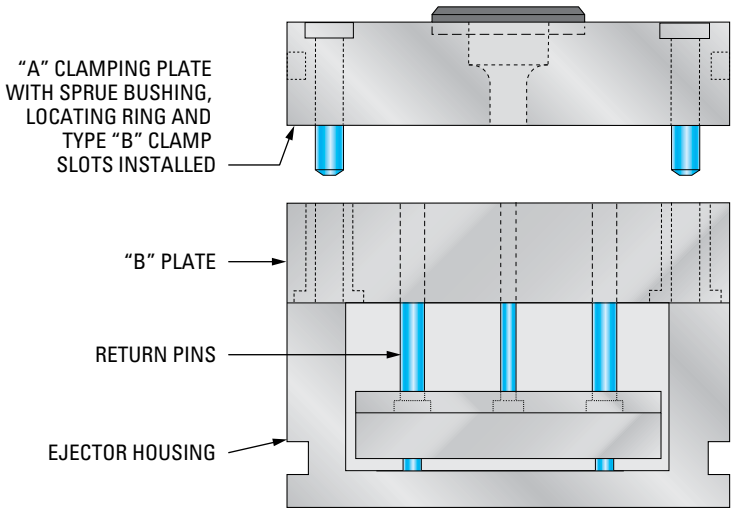
Example: 10.875 x 14 B-Series with 2.375 A-Plate and 2.875 B-Plate = 1114B-23-27

PLATE THICKNESS CODES	
THICKNESS	CODE
.875*	7
1.375*	13
1.875	17
2.375	23
2.875	27
3.375	33
3.875	37
4.875	47
5.875	57

*Not recommended for "A" Plate. See instructions for ordering on this page.

STANDARD SIZE		ITEM NO. PREFIX
W	L	
7.875	7.875	88B
	11.875	812B
9.875	8.000	108B
	11.875	1012B
	16.000	1016B
	20.000	1020B
10.875	12.000	1112B
	14.000	1114B
	18.000	1118B
	23.500	1123B
11.875	12.000	1212B
	15.000	1215B
	20.000	1220B
	23.500	1223B
13.375	15.000	1315B
	18.000	1318B
	20.750	1321B
	23.500	1323B
	26.000	1326B
	29.500	1329B
14.875	17.875	1518B
	23.750	1524B
	29.500	1529B

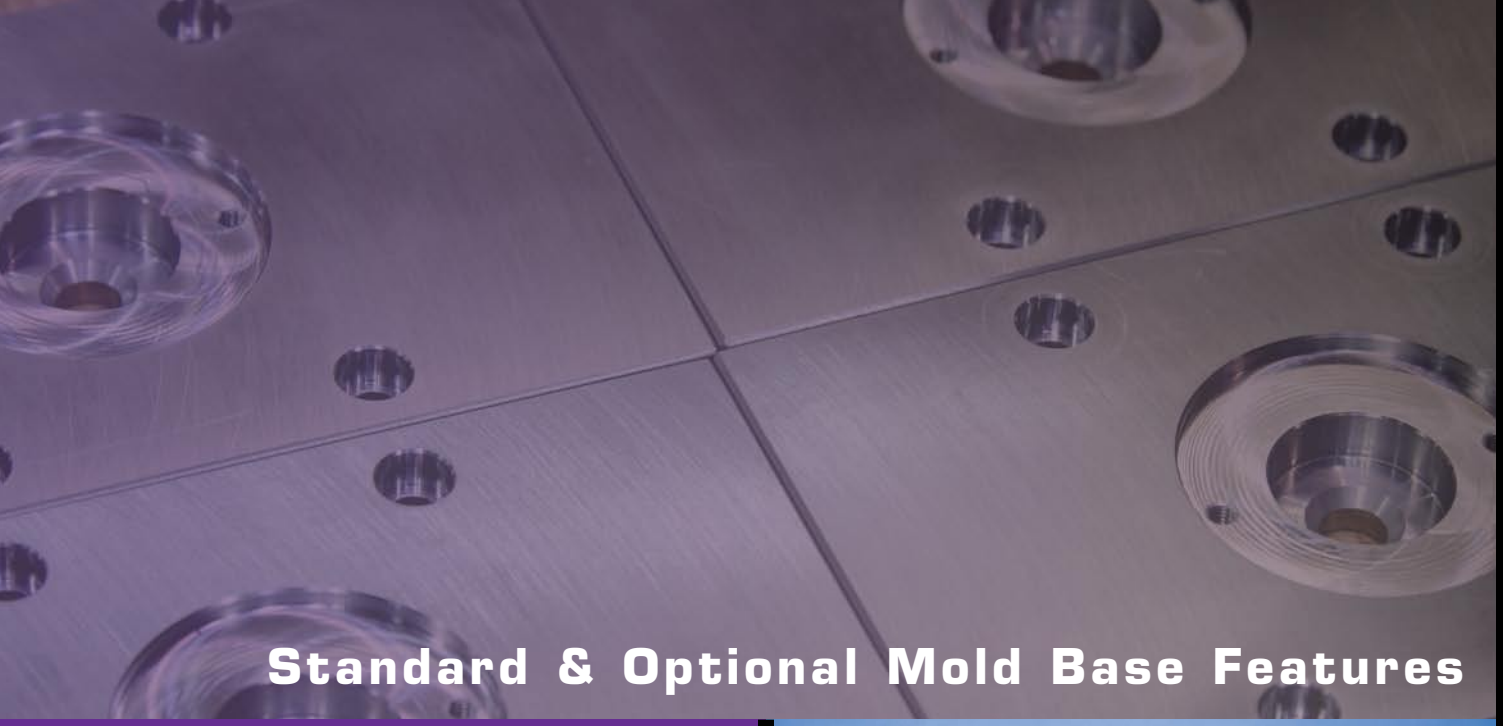
STANDARD SIZE		ITEM NO. PREFIX
W	L	
15.875	16.000	1616B
	20.000	1620B
	23.500	1623B
	26.000	1626B
	29.500	1629B
	35.500	1635B
16.500	23.750	1724B
	29.500	1729B
17.875	18.000	1818B
	20.000	1820B
	23.500	1823B
	26.000	1826B
	29.500	1829B
	35.500	1835B
19.500	23.750	1924B
	29.500	1929B
	35.500	1935B
23.750	23.750	2424B
	29.500	2429B
	35.500	2435B



WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Assembly Item Number (as created above)
3. Steel: #1, #2, #3 or #7 (for other steels, please specify)
4. Locating ring item number:
   Item No. 6501 (**D** = 3.990 Diameter of Locating Ring) standard
   Item No. 6504 (**D** = 3.990 Diameter of Locating Ring) clamp type
   (For other rings see D-M-E Mold Components Catalog)
5. Type of sprue bushing, series letters: (i.e., B, etc.)
   O = Small dia. of sprue bushing orifice: .156, .218, .281 or .343
   R = Spherical radius of sprue bushing: .500 or .750
   (For sprue bushings see D-M-E Mold Components Catalog)
6. Ejector Bar Length **E** (Ejector Bar Length at nominal length of mold base is highlighted in yellow. All other lengths provide an extended ejector bar)
7. Other **C** Riser heights as needed. Also, other **BCP** Bottom Clamp Plate thicknesses as needed. Riser height **C** and **BCP** Bottom Clamp Plate thicknesses which are highlighted in yellow are available in #1 Steel in a one-piece Welded Housing. Also, all Riser heights **C** and all **BCP** Bottom Clamp Plate thicknesses are available in #1 or #7 Steel in a three-piece Housing (for other steels, please specify)
8. Other features as needed (i.e. Guided Ejection, Lifting Holes, Pry Bar Slots, as well as Leader Pin, Return Pin, or Assembly Screw Relocations, etc.)
9. Method of shipment

(For inch decimal to fractional conversion table, see page 286.)



Standard & Optional Mold Base Features

CONFIGURE YOUR MOLD BASE
TO YOUR EXACT NEEDS



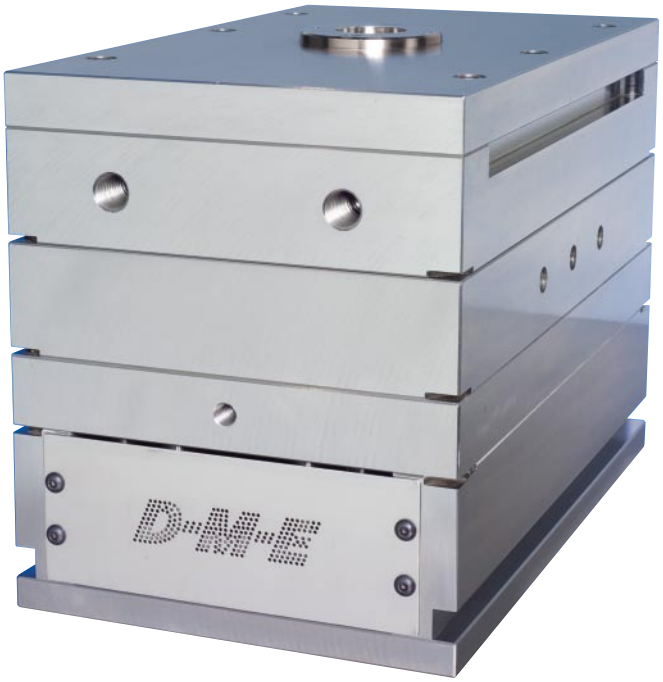
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UNLIMITED Mold Base Selections



With **D-M-E,** the only limit to your mold base is your imagination. Need guided ejection? Want vented leader pins? Prefer a three-piece ejector housing? D-M-E Custom Mold Bases are available in over 75 trillion possible configurations – one of them is perfect for your specific application.

All this and more, and at a competitive price. And, because it's from D-M-E, you know it'll be done right the first time, on time – *every* time.

A whole new way of ordering

You can choose from an extensive menu of options to configure exactly the mold base you need. What some companies would call "a special" is no problem with D-M-E.

Widest range of features and sizes available

D-M-E's Custom Mold Bases aren't just a limited range of common sizes – no one offers more than D-M-E. More sizes. More high-quality steel types. More plate thicknesses. More value-added features.





D-M-E
Every step of the way

Made to order

What you want – not just what's in stock. That's the philosophy of D-M-E. Our leading-edge manufacturing and workflow technologies enable us to build your custom-configured mold base with unparalleled speed. Most configurations can be shipped in only a few days.

Buy only the features you need

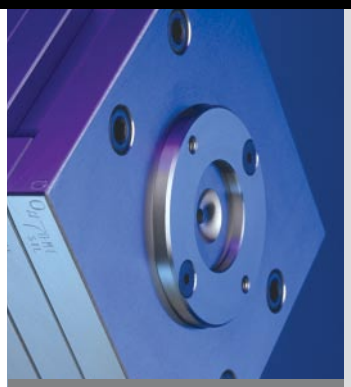
D-M-E is driven by a simple premise: Your mold base is made up of only the specific features you want. No paying for "extras" that you didn't need. You can even specify the steel type – at the plate level – to enable customization to meet your objectives.

Why D-M-E?

At D-M-E, we understand the challenges you face. We know that anything that gives you an edge in today's competitive marketplace can enable a business advantage. That's why we work to get you a mold base that's configured exactly the way you need it, as quickly as possible, without price premiums.

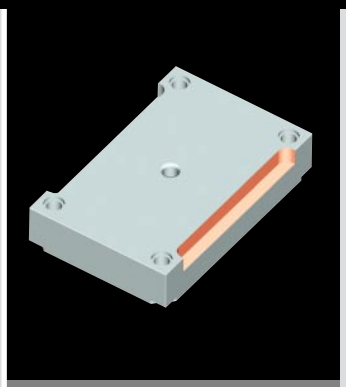
ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

American Mold Base Standard Features



Locating Rings

The Locating Ring aligns the mold base to the stationary platen side of the press and positions the sprue bushing correctly.



Clamp Slots

Clamp Slots facilitate clamping the mold to the platen of the press. D-M-E mold bases offer four slot types to ensure the best fit for the requirements of your application.



Sprue Bushings

The Sprue Bushing provides a seat at the spherical radius for the nozzle of the press. This provides a path for the material from the nozzle to the runner system.



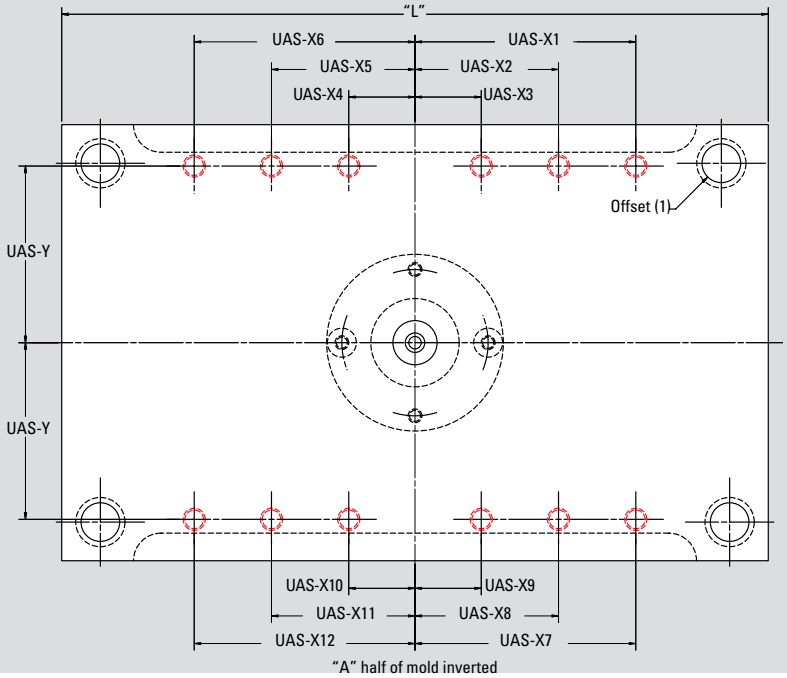
Leader Pins, Vents and Bushings

Leader Pins and Bushings align both halves of the mold at the parting line. Leader Pin Vents, which allow trapped air to escape from the mold, are designed into all 15-inch-and-wider series molds. When desired, they can be specified on smaller molds.



Upper and Lower Assembly Screws

Assembly screws are used to hold the plates of the upper and lower halves of the mold together. For simplicity, the upper and lower assembly screws are generally placed in similar positions.



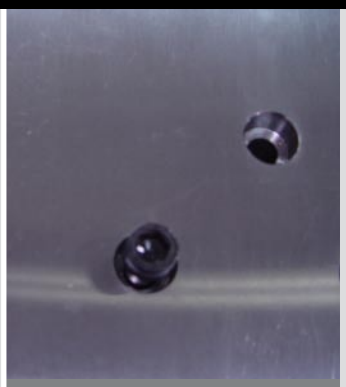
American Mold Base Standard Features



Ejector Housing and Cover

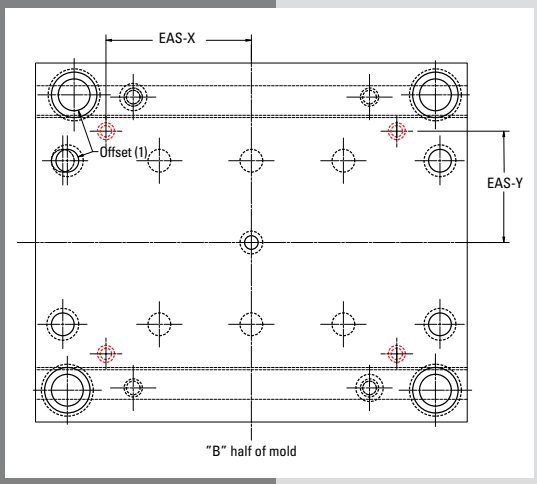
D-M-E offers a selection of housing types to fit application demands. A one-piece welded housing is available for customers requiring maximum rigidity and robust durability. For maximum flexibility of configuration options, a three-piece housing is also available.

For additional operator safety, D-M-E mold bases include an ejector housing cover, except when a longer length ejector bar is selected. The perforated D-M-E logo helps the operator to visually determine if the ejector plate and ejector retainer plate are in the returned position. The cover is fastened on both sides with 5/16-18 button-head cap screws. Once again, D-M-E is leading the industry into a safer work environment.



Ejector Assembly Screws

Ejector assembly screws are used to hold the plate of the ejector assembly together. Recommended position will be provided but you can specify any different position.





Return Pins, Stop Pins and Sprue Puller Pins

Return Pins are used to ensure correct return of the ejector assembly to the home position. D-M-E return pins are precision-ground from superior quality hotwork die steel. Stop Pins arrest travel – preventing excessive wear and possible housing damage. The Sprue Puller Pin removes material from the Sprue Bushing at the end of the molding cycle.



Self-Lubricating Bushings

Saves design and moldmaking costs for lubrication and fittings. Reduces wear and galling. Lowers maintenance and repair costs. Eliminates contamination... ideal for "clean room" environments.

American Mold Base Optional Features



Guided Ejection Systems

Guided Ejection Systems hold the ejector assembly in alignment and support the weight of the ejector assembly throughout the molding cycle – greatly reducing wear on ejection components and preventing cocking of the ejector assembly.

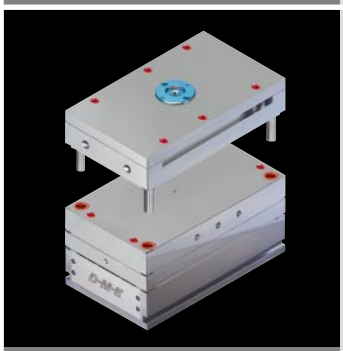
5-DAY SHIPPING



Pry Slots

D-M-E mold bases feature Pry Slots, installed in any plate specified, on the parting and/or non-parting line side. This provides handling ease when opening and/or disassembling a mold.

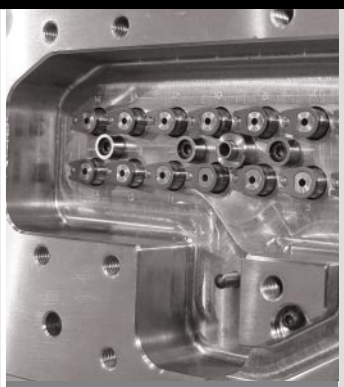
5-DAY SHIPPING



Lifting Holes

Lifting Holes can be used to install hoist rings for ease of handling. D-M-E mold bases can be configured only with Lifting Holes which are appropriate for the specific mold base size. Refer to D-M-E Mold Components catalog for a comprehensive selection of Hoist Rings.

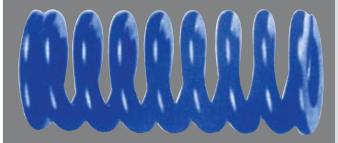
5-DAY SHIPPING

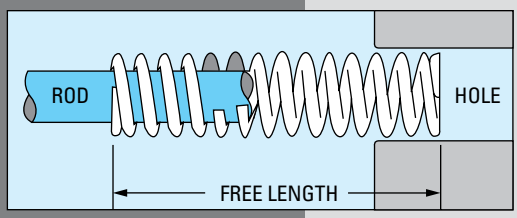


Pockets and Spring Pockets

Per customer specifications, D-M-E finishes any type of cavity and core pockets. See the D-M-E Mold Components catalog for spring free lengths and hole dimensions.

5-DAY SHIPPING





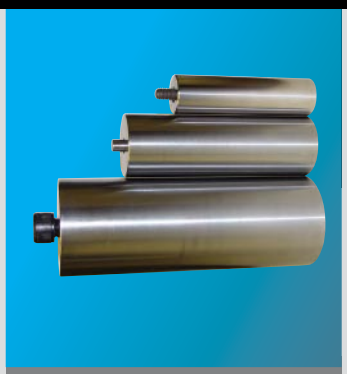


Mold Strap Holes

Machined holes will be for mounting mold straps. Please provide desired positions and quantity (minimum 2).

5-DAY SHIPPING

American Mold Base Optional Features



Support Pillars

5-DAY SHIPPING

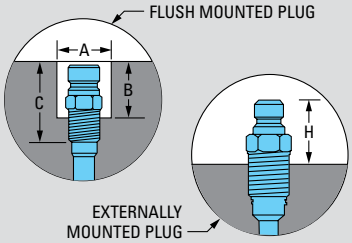
Support pillars should be used liberally since they greatly increase the capacity of the mold to support the projected area of the cavities, runner and sprue. By providing additional support, they prevent deflection of the mold.

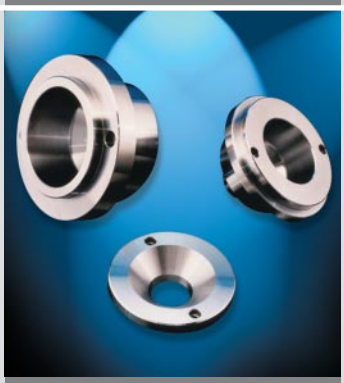


Waterlines

7-DAY SHIPPING

D-M-E will provide water-lines and plugs per customer specifications for optimal cooling efficiency.





3-Plate Extension Bushings

7-DAY SHIPPING

These 3-plate extension bushings can save material, reduce cycle time and help prevent runner hang-ups in 3-plate molds.



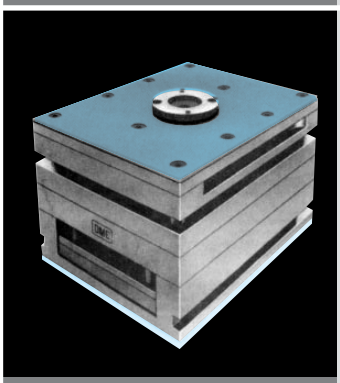
Interlocks

11-DAY SHIPPING

Provides positive alignment between adjacent plates when mold has one or multiple parting line openings. This provides close alignment for interlock cavities and cores in stripper plate type molds.







Insulator Sheets

These sheets have excellent non-deformation characteristics and a compressive strength which is higher than asbestos and mica materials. Compression molded for high impact strength, they are supplied micro-finished top and bottom, parallel within ±.002.

Locating Rings

Features supplied as standard unless otherwise specified.

The Locating Ring aligns the mold base to the stationary platen side of the press and positions the sprue bushing correctly.

FOR QUOTING OR ORDERING, SPECIFY:

Locating Rings

❑ Standard 6501 D = 3.990

Other _____
(refer to table below and D-M-E Mold Components catalog)

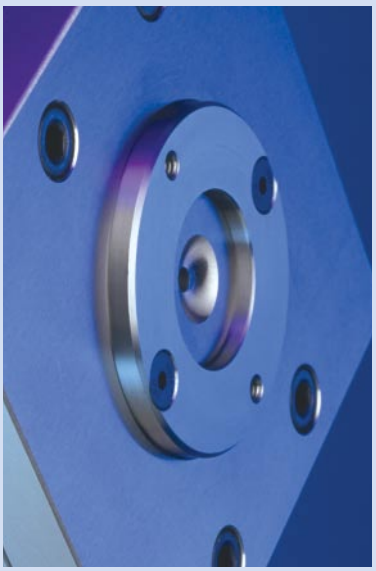
Position/Omission:

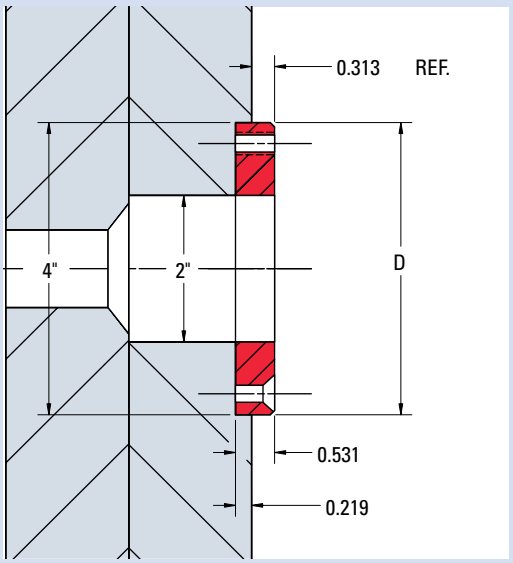
Position on center ❑ Center

or relocate to

X _____ Y _____

❑ Omit locating ring machining
❑ Omit locating ring
❑ Rotate tapped holes





Locating ring #6501 shown; refer to D-M-E Mold Components catalog for dimensions of other locating rings.

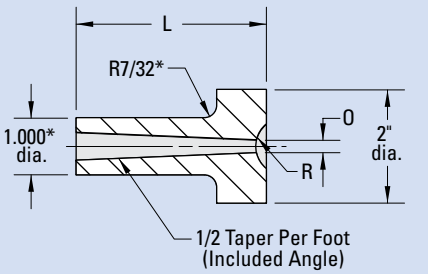
Locating Ring Options

ITEM NUMBER	Ø D	DESCRIPTION
6500	2.615	
6501	3.990	STANDARD SERIES
6501LN	3.990	LN SERIES
6502	4.990	
6503	2.000	
6504	3.990	CLAMP TYPE
6505LN	5.990	LN SERIES
6510	7.995	
6511	2.990	
6520	3.990	EXTENSION NOZZLE TYPE
6521	3.990	STANDARD SERIES
6522	3.990	EXTENSION NOZZLE TYPE
6524	3.990	CLAMP TYPE
6534**	1.574	TOP AND BOTTOM RING
6535	3.541	
6536	4.331	TOP RING
6537	4.331	BOTTOM RING
6541*	3.990	STANDARD SERIES
6544*	3.990	CLAMP TYPE

* For use with high-temperature insulator sheets.
** For use with 3.5 x 3.75 Arburg Mold Bases.
See D-M-E Mold Components catalog for dimensions of other locating rings.

Sprue Bushings

The Sprue Bushing provides a seat at the spherical radius for the nozzle of the press. This provides a path for the material from the nozzle to the runner system.



*For 88 & 812 mold base diameter is .750 and R equals 1/8

Features supplied as standard unless otherwise specified.

FOR QUOTING OR ORDERING, SPECIFY:

Sprue Bushing Series

Standard "B" or "U" (for 88 and 812 mold bases) Series or select any standard D-M-E sprue bushings including D-M-E high-performance sprue bushings.

O (Orifice) _____

R (Radius) _____

NOTE: Refer to D-M-E Mold Components catalog for more information on our complete line of sprue bushings.

Position/Omission:

Position on center ❑ Center

or relocate to

X _____ Y _____

❑ Omit sprue bushing hole

❑ Omit sprue bushing part

Upper and Lower Assembly Screws

Features supplied as standard unless otherwise specified.

Assembly screws are used to hold the plates of the upper and lower halves of the mold together. For simplicity, the upper and lower assembly screws are generally placed in similar positions.

FOR QUOTING OR ORDERING, SPECIFY:

Upper Assembly Screws

Recommended position from table (see opposite page) provided standard. If a different position is required, specify below.

Position: ❑ **STD** ❑ **Specify**

UASx1 _____
UASx2 _____
UASx3 _____
UASx4 _____
UASx5 _____
UASx6 _____
UASx7 _____
UASx8 _____
UASx9 _____
UASx10 _____
UASx11 _____
UASx12 _____
UASy _____
Omit hole _____
Omit part _____

❑ Omit upper assembly holes

❑ Omit upper assembly screws

Lower Assembly Screws

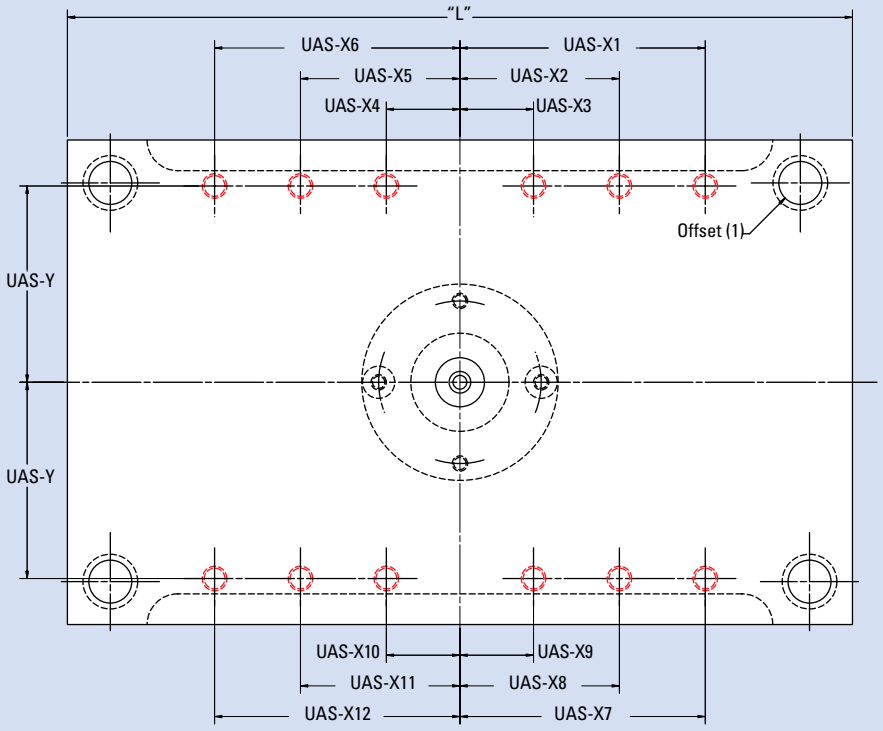
Recommended position from table (see opposite page) provided standard. If a different position is required, specify below.

Position: ❑ **STD** ❑ **Specify**

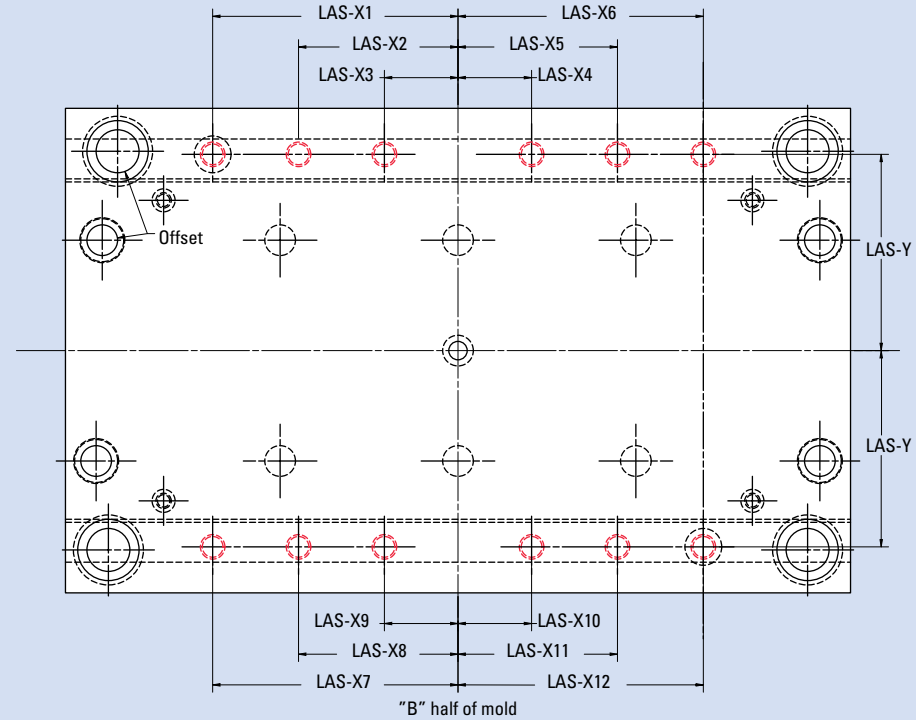
LASx1 _____
LASx2 _____
LASx3 _____
LASx4 _____
LASx5 _____
LASx6 _____
LASx7 _____
LASx8 _____
LASx9 _____
LASx10 _____
LASx11 _____
LASx12 _____
LASy _____
Omit Hole _____
Omit Part _____

❑ Omit lower assembly holes

❑ Omit lower assembly screws



"A" half of mold inverted



"B" half of mold

Upper and Lower Assembly Screw Positions

BASE SIZE	SCREW SIZE	UASy LASy	UASx1 LASx1	UASx2 LASx2	UASx3 LASx3	UASx4 LASx4	UASx5 LASx5	UASx6 LASx6	UASx7 LASx7	UASx8 LASx8	UASx9 LASx9	UASx10 LASx10	UASx11 LASx11	UASx12 LASx12
88	1/2-13	3.125	1.375	—	—	—	—	1.375	1.375	—	—	—	—	1.375
812	1/2-13	3.125	2.250	—	—	—	—	2.250	2.250	—	—	—	—	2.250
108	1/2-13	4.000	1.875	—	—	—	—	1.875	1.875	—	—	—	—	1.875
1012	1/2-13	4.000	3.250	—	—	—	—	3.250	3.250	—	—	—	—	3.250
1016	1/2-13	4.000	5.000	—	—	—	—	5.000	5.000	—	—	—	—	5.000
1020	1/2-13	4.000	6.500	—	—	1.000	—	6.500	6.500	—	1.000	—	—	6.500
1112	1/2-13	4.469	3.188	—	—	—	—	3.188	3.188	—	—	—	—	3.188
1114	1/2-13	4.469	3.188	—	—	—	—	3.188	3.188	—	—	—	—	3.188
1118	1/2-13	4.469	5.875	—	—	1.000	—	5.875	5.875	—	1.000	—	—	5.875
1123	1/2-13	4.469	8.625	—	3.188	3.188	—	8.625	8.625	—	3.188	3.188	—	8.625
1212	1/2-13	4.469	2.812	—	—	—	—	2.812	2.812	—	—	—	—	2.812
1215	1/2-13	4.469	4.500	—	—	1.000	—	4.500	4.500	—	1.000	—	—	4.500
1220	1/2-13	4.469	6.625	—	—	1.000	—	6.625	6.625	—	1.000	—	—	6.625
1223	1/2-13	4.469	8.625	—	2.812	2.812	—	8.625	8.625	—	2.812	2.812	—	8.625
1315	1/2-13	5.719	4.500	—	—	1.000	—	4.500	4.500	—	1.000	—	—	4.500
1318	1/2-13	5.719	5.438	—	—	1.000	—	5.438	5.438	—	1.000	—	—	5.438
1321	1/2-13	5.719	6.750	—	—	1.000	—	6.750	6.750	—	1.000	—	—	6.750
1323	1/2-13	5.719	8.125	—	2.750	2.750	—	8.125	8.125	—	2.750	2.750	—	8.125
1326	1/2-13	5.719	9.375	—	3.250	3.250	—	9.375	9.375	—	3.250	3.250	—	9.375
1329	1/2-13	5.719	11.125	—	3.250	3.250	—	11.125	11.125	—	3.250	3.250	—	11.125
1518	1/2-13	6.469	5.438	—	—	1.000	—	5.438	5.438	—	1.000	—	—	5.438
1524	1/2-13	6.469	7.750	—	2.750	2.750	—	7.750	7.750	—	2.750	2.750	—	7.750
1529	1/2-13	6.469	10.625	—	3.688	3.688	—	10.625	10.625	—	3.688	3.688	—	10.625
1616	1/2-13	6.969	4.250	—	—	1.000	—	4.250	4.250	—	1.000	—	—	4.250
1620	1/2-13	6.969	6.250	—	—	1.000	—	6.250	6.250	—	1.000	—	—	6.250
1623	1/2-13	6.969	8.000	—	2.750	2.750	—	8.000	8.000	—	2.750	2.750	—	8.000
1626	1/2-13	6.969	9.250	—	3.125	3.125	—	9.250	9.250	—	3.125	3.125	—	9.250
1629	1/2-13	6.969	11.000	—	3.688	3.688	—	11.000	11.000	—	3.688	3.688	—	11.000
1635	1/2-13	6.969	14.000	8.500	2.875	2.875	8.500	14.000	14.000	8.500	2.875	2.875	8.500	14.000
1724	1/2-13	7.281	7.750	—	2.750	2.750	—	7.750	7.750	—	2.750	2.750	—	7.750
1729	1/2-13	7.281	10.625	—	3.688	3.688	—	10.625	10.625	—	3.688	3.688	—	10.625
1818	1/2-13	7.969	5.438	—	—	1.000	—	5.438	5.438	—	1.000	—	—	5.438
1820	1/2-13	7.969	6.438	—	—	1.000	—	6.438	6.438	—	1.000	—	—	6.438
1823	1/2-13	7.969	8.125	—	2.750	2.750	—	8.125	8.125	—	2.750	2.750	—	8.125
1826	1/2-13	7.969	9.375	—	3.125	3.125	—	9.375	9.375	—	3.125	3.125	—	9.375
1829	1/2-13	7.969	11.125	—	3.688	3.688	—	11.125	11.125	—	3.688	3.688	—	11.125
1835	1/2-13	7.969	14.125	8.500	2.875	2.875	8.500	14.125	14.125	8.500	2.875	2.875	8.500	14.125
1924	1/2-13	8.781	7.750	—	2.750	2.750	—	7.750	7.750	—	2.750	2.750	—	7.750
1929	1/2-13	8.781	11.125	—	3.688	3.688	—	11.125	11.125	—	3.688	3.688	—	11.125
1935	1/2-13	8.781	14.125	8.500	2.875	2.875	8.500	14.125	14.125	8.500	2.875	2.875	8.500	14.125
2424	5/8-11	10.844	7.750	—	2.750	2.750	—	7.750	7.750	—	2.750	2.750	—	7.750
2429	5/8-11	10.844	10.625	—	3.688	3.688	—	10.625	10.625	—	3.688	3.688	—	10.625
2435	5/8-11	10.844	13.625	8.500	2.750	2.750	8.500	13.625	13.625	8.500	2.750	2.750	8.500	13.625

Clamp Slots

Clamp Slots facilitate clamping the mold to the platen of the press. D-M-E American Standard Mold Base offers four slot types (shown below) to ensure the best fit for the requirements of your application.

Features supplied as standard unless otherwise specified.

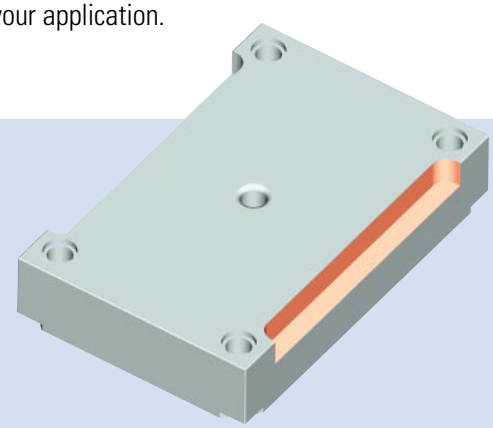
FOR QUOTING OR ORDERING, SPECIFY:

Clamp Slot Type

- ❑ **Type A** - Machined when Top Clamping Plate is 0.875 or 1.375
- ❑ **Type B** - Machined in plates that are 2.375 or thicker
- ❑ **Type C** - Machined only when specified by a customer and top clamp plate is 1.375
- ❑ **Type D** - Machined plates that are 1.875 thick

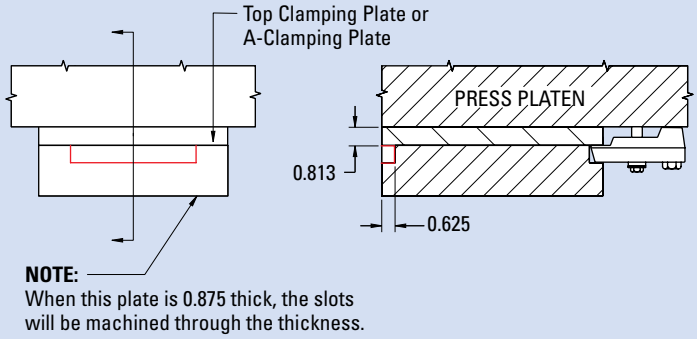
Other options include:

- ❑ Omit upper clamp slot
- ❑ Omit lower clamp slot (3-piece housing supplied)
- ❑ Machine entire length
- ❑ Machine all four sides



Type A

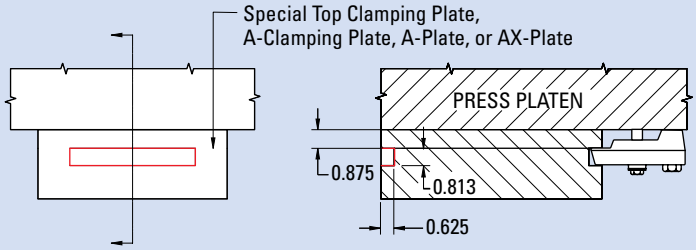
Machined when Top Clamping Plate is 0.875 or 1.375



NOTE:
When this plate is 0.875 thick, the slots will be machined through the thickness.

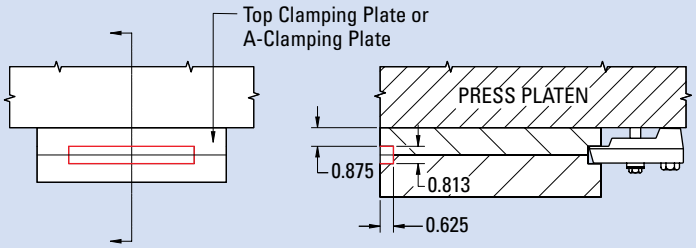
Type B

Machined in plates that are 2.375 or thicker



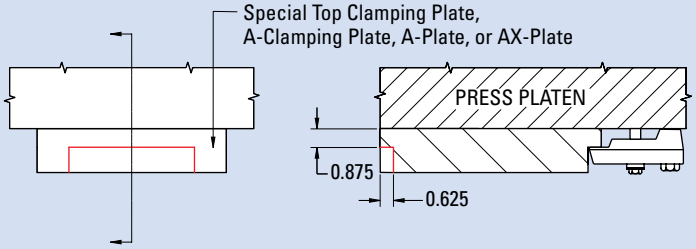
Type C

Machined only when specified by a customer



Type D

Machined plates that are 1.875 thick

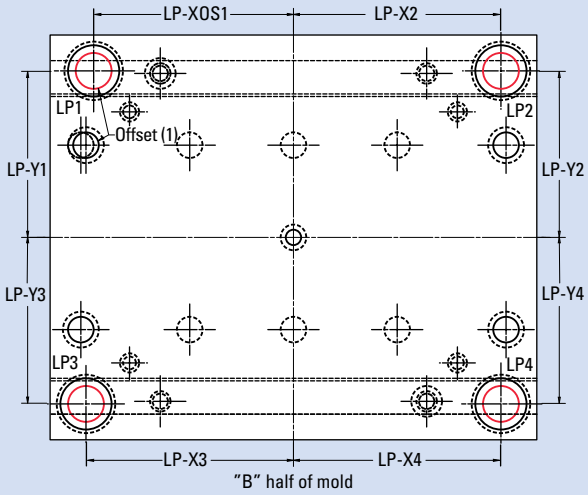


Guide Pins and Bushings

Guide Pins and Bushings align both halves of the mold at the parting line.

Features supplied as standard unless otherwise specified.





Guide Pin Positions

SIZE	DIA	LPxos	LPx	LPy
88	0.750	3.000	3.125	3.125
812	0.750	5.000	5.125	3.125
108	0.750	2.938	3.125	4.062
1012	0.875	4.875	5.062	4.062
1016	0.875	6.938	7.125	4.062
1020	0.875	8.938	9.125	4.062
1112	0.875	4.938	5.125	4.562
1114	0.875	5.938	6.125	4.562
1118	0.875	7.938	8.125	4.562
1123	0.875	10.688	10.875	4.562
1212	1.000	4.625	4.812	5.000
1215	1.000	6.125	6.312	5.000
1220	1.000	8.625	8.812	5.000
1223	1.000	10.375	10.562	5.000
1315	1.000	6.125	6.312	5.688
1318	1.000	7.375	7.562	5.688
1321	1.000	8.750	8.938	5.688
1323	1.000	10.125	10.312	5.688
1326	1.000	11.375	11.562	5.688
1329	1.000	13.125	13.312	5.688
1518	1.250	7.375	7.562	6.062
1524	1.250	10.250	10.438	6.062
1529	1.250	13.125	13.312	6.062
1616	1.250	6.375	6.562	6.562
1620	1.250	8.375	8.562	6.562
1623	1.250	10.125	10.312	6.562
1626	1.250	11.375	11.562	6.562
1629	1.250	13.125	13.312	6.562
1635	1.250	16.125	16.312	6.562
1724	1.250	10.250	10.438	6.812
1729	1.250	13.125	13.312	6.812
1818	1.250	7.375	7.562	7.562
1820	1.250	8.375	8.562	7.562
1823	1.250	10.125	10.312	7.562
1826	1.250	11.375	11.562	7.562
1829	1.250	13.125	13.312	7.562
1835	1.250	16.125	16.312	7.562
1924	1.250	10.250	10.438	8.312
1929	1.250	13.125	13.312	8.312
1935	1.250	16.125	16.312	8.312
2424	1.500	10.062	10.250	10.250
2429	1.500	12.938	13.125	10.250
2435	1.500	15.938	16.125	10.250

FOR QUOTING OR ORDERING, SPECIFY:

Guide Pins

Diameter: ❑ **STD** ❑ **Specify**

Recommended diameter from table provided standard. If a different diameter is required, specify below.

Diameter Options:

❑ 0.750 ❑ 2.000
❑ 0.875 ❑ 2.500
❑ 1.000 ❑ 3.000
❑ 1.500

Length: ❑ **STD** ❑ **Specify**

Recommended pin length for A-Series mold base (A Plate Thickness + B Plate Thickness + 1/2) provided standard. If a different pin length is required, specify below.

Specify Pin Length: _____

Position: ❑ **STD** ❑ **Specify**

Recommended position from table provided standard (bushing location will correspond). If a different position is required, specify below.

LPxos1 _____ LPy1 _____
LPx2 _____ LPy2 _____
LPx3 _____ LPy3 _____
LPx4 _____ LPy4 _____

Guide Pin Bushings

Type/Omission:

❑ Steel
❑ Bronze
❑ Self-Lubricating
❑ Omit Machining for Leader Pin and Bushings
❑ Omit Guide Pin and Bushing

Return Pins, Stop Pins and Sprue Puller Pins

Features supplied as standard unless otherwise specified.

Return Pins are used to ensure correct return of the ejector assembly to the home position. D-M-E return pins are precision-ground from superior quality hotwork die steel.

Stop Pins arrest travel — preventing excessive wear and possible housing damage.

The Sprue Puller Pin removes material from the Sprue Bushing at the end of the molding cycle. It's positioned directly below the Sprue Bushing and is retained between the ejector bar and ejector retainer.

FOR QUOTING OR ORDERING, SPECIFY:

Return Pins

Position: ❑ **STD** ❑ **Specify**

Recommended position from table provided standard. If a different position is required, specify below.

❑ **Position 1**
Standard outboard position for maximum space.

❑ **Position 2**
Inboard position to allow for spring pockets.

Position/Omission:

RPxos1 _____ RPy1 _____
RPx2 _____ RPy2 _____
RPx3 _____ RPy3 _____
RPx4 _____ RPy4 _____

❑ Omit machining for return pins

❑ Omit return pins

Length: ❑ **STD** ❑ **Specify**_____

Diameter: ❑ **STD** ❑ **Specify**_____

Sprue Puller Pins

Diameter: ❑ **STD** ❑ **Specify**

Recommended diameter provided standard (.375 diameter, except 88 and 812 are .250 diameter). If a different diameter is required, specify below.

❑ .250
❑ .3125
❑ .375

Length: ❑ **STD** ❑ **Specify**

Position/Omission:

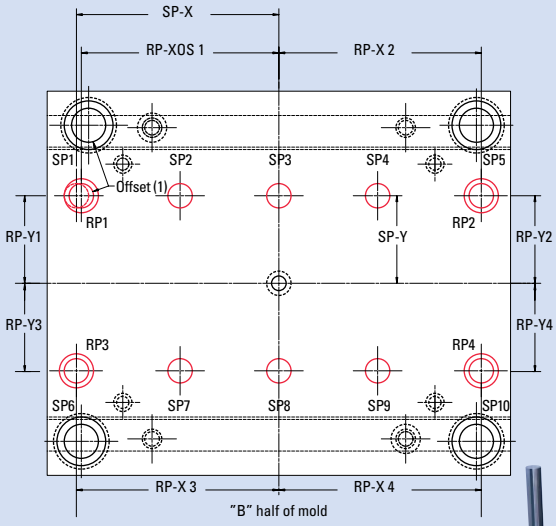
Position on center ❑ Center

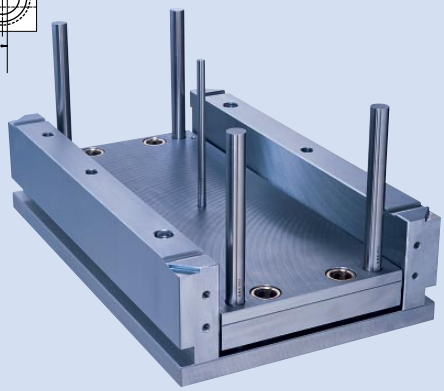
or relocate to

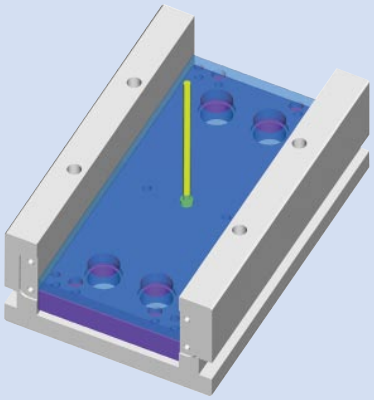
X _____ Y _____

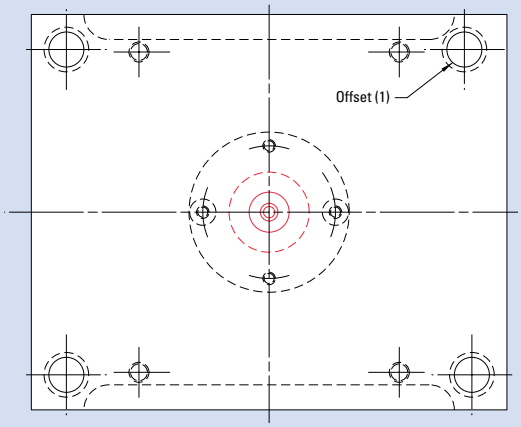
❑ Omit machining for sprue puller pin

❑ Omit sprue puller pin









Return Pins, Stop Pins and Sprue Puller Pins

Mold Base Return Pin and Stop Pin Positions

BASE SIZE	RP DIAMETER (RECOMMENDED)	RP-y SP-y	POSITION 1		POSITION 2		SP-x1 SP-x6	SP-x2 SP-x7	SP-x3 SP-x8	SP-x4 SP-x9	SP-x5 SP-x10
			RP-xos	RP-x	RP-xos	RP-x					
88	0.500	1.500	3.250	3.375	3.188	3.312	3.375				3.375
812	0.500	1.500	5.250	5.375	5.188	5.312	5.375		On Center		5.375
108	0.625	2.250	3.250	3.375	3.125	3.250	3.375				3.375
1012	0.625	2.250	5.188	5.312	5.063	5.188	5.312		On Center		5.312
1016	0.625	2.250	7.250	7.375	7.125	7.250	7.375	2.500		2.500	7.375
1020	0.625	2.250	9.250	9.375	9.125	9.250	9.375	3.125		3.125	9.375
1112	0.625	2.812	5.250	5.375	5.125	5.250	5.375		On Center		5.375
1114	0.625	2.812	6.250	6.375	6.125	6.250	6.375		On Center		6.375
1118	0.625	2.812	8.250	8.375	8.125	8.250	8.375		On Center		8.375
1123	0.625	2.812	11.000	11.125	10.875	11.000	11.125	3.750		3.750	11.125
1212	0.750	3.188	5.250	5.375	5.000	5.125	5.375		On Center		5.375
1215	0.750	3.188	6.750	6.875	6.500	6.625	6.875	2.250		2.250	6.875
1220	0.750	3.188	9.250	9.375	9.000	9.125	9.375	3.094		3.094	9.375
1223	0.750	3.188	11.000	11.125	10.750	10.875	11.125	3.750		3.750	11.125
1315	0.750	3.812	6.750	6.875	6.500	6.625	6.875	2.250		2.250	6.875
1318	0.750	3.812	8.250	8.375	8.000	8.125	8.375	2.750		2.750	8.375
1321	0.750	3.812	9.500	9.625	9.375	9.500	9.625	4.000		4.000	9.625
1323	0.750	3.812	10.875	11.000	10.750	10.875	11.000	4.000		4.000	11.000
1326	0.750	3.812	12.125	12.250	12.000	12.125	12.250	4.000		4.000	12.250
1329	0.750	3.812	13.875	14.000	13.750	13.875	14.000	5.000		5.000	14.000
1518	0.750	3.875	8.125	8.250	7.938	8.062	8.250	2.750		2.750	8.250
1524	0.750	3.875	11.000	11.125	10.875	11.000	11.125	3.750		3.750	11.125
1529	0.750	3.875	13.875	14.000	13.750	13.875	14.000	4.688		4.688	14.000
1616	0.750	4.375	7.125	7.250	7.000	7.125	7.250	2.375		2.375	7.250
1620	0.750	4.375	9.125	9.250	9.000	9.125	9.250	3.062		3.062	9.250
1623	0.750	4.375	10.875	11.000	10.750	10.875	11.000	4.000		4.000	11.000
1626	0.750	4.375	12.125	12.250	12.000	12.125	12.250	4.000		4.000	12.250
1629	0.750	4.375	13.875	14.000	13.750	13.875	14.000	4.688		4.688	14.000
1635	0.750	4.375	16.875	17.000	16.750	16.875	17.000	8.500	On Center	8.500	17.000
1724	0.750	4.625	11.000	11.125	10.875	11.000	11.125	3.750		3.750	11.125
1729	0.750	4.625	13.875	14.000	13.750	13.875	14.000	4.688		4.688	14.000
1818	0.750	5.375	8.125	8.250	8.000	8.125	8.250	2.750		2.750	8.250
1820	0.750	5.375	9.125	9.250	9.000	9.125	9.250	3.062		3.062	9.250
1823	0.750	5.375	10.875	11.000	10.750	10.875	11.000	4.000		4.000	11.000
1826	0.750	5.375	12.125	12.250	12.000	12.125	12.250	4.000		4.000	12.250
1829	0.750	5.375	13.875	14.000	13.750	13.875	14.000	4.688		4.688	14.000
1835	0.750	5.375	16.875	17.000	16.750	16.875	17.000	8.500	On Center	8.500	17.000
1924	0.750	6.125	11.000	11.125	10.875	11.000	11.125	3.750		3.750	11.125
1929	0.750	6.125	13.875	14.000	13.750	13.875	14.000	4.688		4.688	14.000
1935	0.750	6.125	16.875	17.000	16.750	16.875	17.000	8.500	On Center	8.500	17.000
2424	0.750	7.750	11.000	11.125	10.875	11.000	11.125	3.750		3.750	11.125
2429	0.750	7.750	13.875	14.000	13.750	13.875	14.000	4.688		4.688	14.000
2435	0.750	7.750	16.875	17.000	16.750	16.875	17.000	8.500	On Center	8.500	17.000

Ejector Housing and Cover

Features supplied as standard unless otherwise specified.

FOR QUOTING OR ORDERING, SPECIFY:

Ejector Housing Type

❑ **Welded Housing**

Available in #1 steel

❑ **3-Piece Housing**

❑ D-M-E #1 steel

❑ D-M-E #7 steel

Riser Height:

❑ 2.500	❑ 4.500
❑ 3.000	❑ 5.000*
❑ 3.500	❑ 5.500*
❑ 4.000	❑ 6.000*

❑ Other _____

*Available in 3-Piece only

Bottom Clamp Plate Thickness for 3-Piece Housing

❑ 0.875	❑ 3.375
❑ 1.375	❑ 3.875
❑ 1.875	❑ 4.875
❑ 2.375	❑ 5.875
❑ 2.875	

❑ Other _____

Ejector Housing Cover

For additional operator safety, D-M-E Standard Mold Bases include an ejector housing cover, except when a longer length ejector bar is selected. The perforated D-M-E logo helps the operator to visually determine if the ejector plate and ejector retainer plate are in the returned position. The cover is fastened on both sides with 5/16-18 button-head cap screws. Once again, D-M-E is leading the industry into a safer work environment.

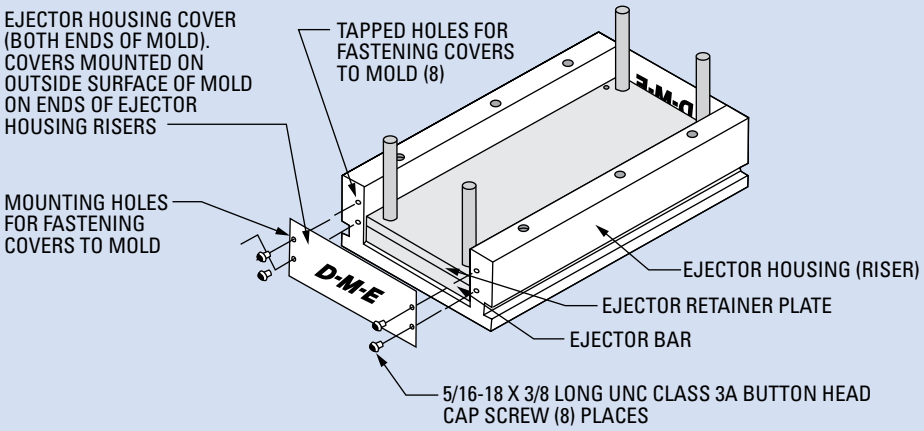
Ejector Housing

D-M-E offers a selection of housing types to fit application demands. A one-piece welded housing is available for customers requiring maximum rigidity and robust durability. For maximum flexibility of configuration options, a three-piece housing is also available.

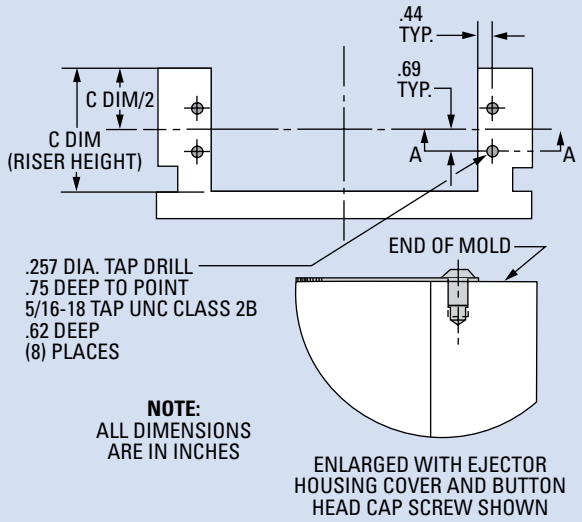




Ejector Housing and Cover



Recommended Dimensions for Drilling and Tapping





Ejector Housing Cover Item Numbers

HOUSING WIDTH CODE	RISER HEIGHT CODE							
	25	30	35	40	45	50	55	60
08	EHCS0825	EHCS0830	EHCS0835	EHCS0840	EHCS0845	EHCS0850	EHCS0855	EHCS0860
10	EHCS1025	EHCS1030	EHCS1035	EHCS1040	EHCS1045	EHCS1050	EHCS1055	EHCS1060
11	EHCS1125	EHCS1130	EHCS1135	EHCS1140	EHCS1145	EHCS1150	EHCS1155	EHCS1160
12	EHCS1225	EHCS1230	EHCS1235	EHCS1240	EHCS1245	EHCS1250	EHCS1255	EHCS1260
13	EHCS1325	EHCS1330	EHCS1335	EHCS1340	EHCS1345	EHCS1350	EHCS1355	EHCS1360
15	EHCS1525	EHCS1530	EHCS1535	EHCS1540	EHCS1545	EHCS1550	EHCS1555	EHCS1560
16	EHCS1625	EHCS1630	EHCS1635	EHCS1640	EHCS1645	EHCS1650	EHCS1655	EHCS1660
17	EHCS1725	EHCS1730	EHCS1735	EHCS1740	EHCS1745	EHCS1750	EHCS1755	EHCS1760
18	EHCS1825	EHCS1830	EHCS1835	EHCS1840	EHCS1845	EHCS1850	EHCS1855	EHCS1860
19	EHCS1925	EHCS1930	EHCS1935	EHCS1940	EHCS1945	EHCS1950	EHCS1955	EHCS1960
24	EHCS2425	EHCS2430	EHCS2435	EHCS2440	EHCS2445	EHCS2450	EHCS2455	EHCS2460

NOTE: EHC item numbers are assembled from the prefix EHCS plus the width code and thickness code. Example: EHCS0825 would be the cover for an 88 or 812 with a riser of 2.5".

Ejector Assembly Screws

Features supplied as standard unless otherwise specified.

Ejector Assembly Screws are used to hold the plates of the ejector assembly together (including the ejector bar and retainer).

FOR QUOTING OR ORDERING, SPECIFY:

Ejector Assembly Screws

Position: ❑ **STD** ❑ **Specify**

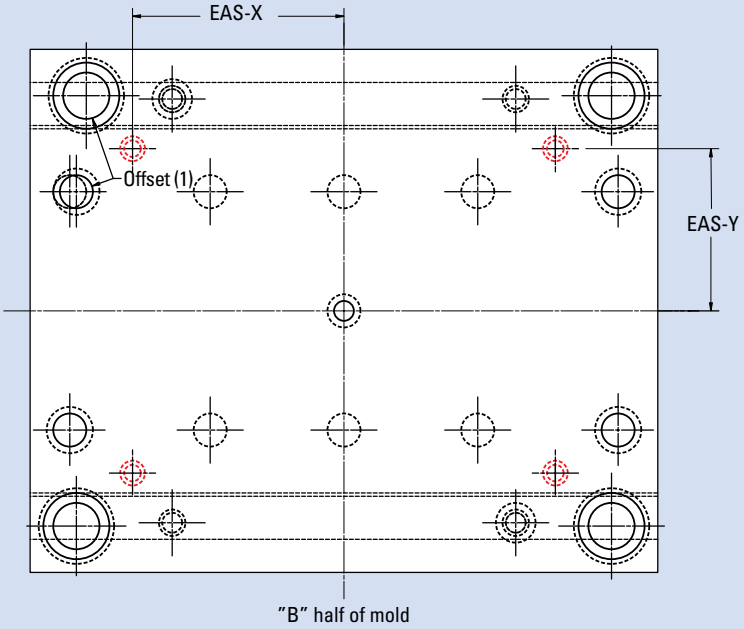
Recommended position from table provided standard. If a different position is required, specify below.

EASx _____

EASy _____

❑ Omit upper assembly holes

❑ Omit upper assembly screws



Ejector Assembly Screw Positions

BASE SIZE	SCREW SIZE	EASx	EASy	BASE SIZE	SCREW SIZE	EASx	EASy
88	5/16-18	3.375	2.250	1518	3/8-16	8.312	5.000
812	5/16-18	5.375	2.250	1524	3/8-16	11.250	5.000
108	5/16-18	3.375	3.062	1529	3/8-16	14.125	5.000
1012	5/16-18	5.312	3.062	1616	3/8-16	7.375	5.438
1016	5/16-18	7.375	3.062	1620	3/8-16	9.375	5.438
1020	5/16-18	9.375	3.062	1623	3/8-16	11.125	5.438
1112	5/16-18	4.562	3.312	1626	3/8-16	12.375	5.438
1114	5/16-18	5.562	3.312	1629	3/8-16	14.125	5.438
1118	5/16-18	7.562	3.312	1635	3/8-16	17.125	5.438
1123	5/16-18	10.312	3.312	1724	3/8-16	11.250	5.750
1212	5/16-18	4.500	3.812	1729	3/8-16	14.125	5.750
1215	5/16-18	6.000	3.812	1818	3/8-16	8.375	6.438
1220	5/16-18	8.500	3.812	1820	3/8-16	9.375	6.438
1223	5/16-18	10.250	3.812	1823	3/8-16	11.125	6.438
*1315	3/8-16	5.812	4.250	1826	3/8-16	12.375	6.438
*1318	3/8-16	7.312	4.250	1829	3/8-16	14.125	6.438
1321	3/8-16	8.688	4.250	1835	3/8-16	17.125	6.438
1323	3/8-16	10.062	4.250	1924	1/2-13	11.250	7.250
1326	3/8-16	11.312	4.250	1929	1/2-13	14.125	7.250
1329	3/8-16	13.062	4.250	1935	1/2-13	17.125	7.250
				2424	1/2-13	11.250	8.875
				2429	1/2-13	14.125	8.875
				2435	1/2-13	17.125	8.875

*New X dimension effective 10/02.

Minimum Recommended Additional Assembly SHCS

MOLD BASE SIZE	A PLATE THICKNESS	EXISTING TOTAL NUMBER OF SHCS	MOLDING MACHINE FORCE (TONS) / MOLD OPENING FORCE (LBS.)										
			15 THROUGH 400 3000 THROUGH 80,000	425 85,000	450 90,000	475 95,000	500 100,000	525 105,000	550 110,000	575 115,000	600 120,000	625 125,000	650 130,000
88	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
812	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
108	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1012	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1016	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1020	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1112	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1114	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1118	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1123	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1212	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1215	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1220	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1223	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1315	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1318	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1321	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1323	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1326	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1329	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1518	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1524	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1529	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1616	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1620	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1623	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1626	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1629	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1635	.0875	12	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	12	0	0	0	0	0	0	0	0	0	0	0
1724	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1729	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1818	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1820	.0875	4	0	+1	+1	+1	+1	+1	+2	+2	+2	+2	+2
	1.375 TO 5.875	4	0	0	0	0	0	+1	+1	+1	+1	+1	+2
1823	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1826	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1829	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1835	.0875	12	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	12	0	0	0	0	0	0	0	0	0	0	0
1924	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1929	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
1935	.0875	12	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	12	0	0	0	0	0	0	0	0	0	0	0
2424	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
2429	.0875	8	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	8	0	0	0	0	0	0	0	0	0	0	0
2435	.0875	12	0	0	0	0	0	0	0	0	0	0	0
	1.375 TO 5.875	12	0	0	0	0	0	0	0	0	0	0	0

NOTES:

1. Blue color configurations require additional assembly screws.
2. Numbers of additional assembly screws suggested are minimum required.
3. No safety factor considered. The moldmaker is entirely responsible for the chosen configuration.

KEY:

- = No additional assembly screws required
- = Add screws as noted (+)
- N/A = Not available/not recommended

Minimum Recommended Additional Assembly SHCS

MOLD BASE SIZE	A PLATE THICKNESS	EXISTING TOTAL NUMBER OF SHCS	MOLDING MACHINE FORCE (TONS) / MOLD OPENING FORCE (LBS.)													
			675 135,000	700 140,000	725 145,000	750 150,000	775 155,000	800 160,000	825 165,000	850 170,000	875 175,000	900 180,000	925 185,000	950 190,000	975 195,000	1000 200,000
88	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	N/A +4	N/A +4	N/A +4
812	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	N/A +4	N/A +4	N/A +4
108	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	N/A +4	N/A +4	N/A +4
1012	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	N/A +4	N/A +4	N/A +4
1016	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	N/A +4	N/A +4	N/A +4
1020	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	N/A +4	N/A +4	N/A +4
1112	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	N/A +4	N/A +4	N/A +4
1114	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	N/A +4	N/A +4	N/A +4
1118	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	N/A +4	N/A +4	N/A +4
1123	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1212	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+6 +4	+6 +4	+6 +4
1215	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+6 +4	+6 +4	+6 +4
1220	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+6 +4	+6 +4	+6 +4
1223	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1315	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+6 +4	+6 +4	+6 +4
1318	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+6 +4	+6 +4	+6 +4
1321	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+6 +4	+6 +4	+6 +4
1323	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1326	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1329	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1518	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+6 +4	+6 +4	+6 +4
1524	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1529	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1616	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+6 +4	+6 +4	+6 +4
1620	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+6 +4	+6 +4	+6 +4
1623	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1626	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1629	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1635	.0875 1.375 TO 5.875	12 12	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
1724	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1729	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1818	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+6 +4	+6 +4	+6 +4
1820	.0875 1.375 TO 5.875	4 4	+4 +2	+4 +2	+4 +2	+4 +2	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+4 +4	+6 +4	+6 +4	+6 +4
1823	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1826	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1829	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1835	.0875 1.375 TO 5.875	12 12	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
1924	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1929	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
1935	.0875 1.375 TO 5.875	12 12	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
2424	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
2429	.0875 1.375 TO 5.875	8 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	+2 0	+2 0	+2 0
2435	.0875 1.375 TO 5.875	12 12	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0

NOTES:

1. Blue color configurations require additional assembly screws.
2. Numbers of additional assembly screws suggested are minimum required.
3. No safety factor considered. The moldmaker is entirely responsible for the chosen configuration.

KEY:

- = No additional assembly screws required
- = Add screws as noted (+)
- N/A = Not available/not recommended

American Mold Base Features and Delivery Time



Special Mold Bases Shipping in FIVE Working Days

Includes all D-M-E Standard Mold Bases #1, #2 and #3 steel (7/8" to 5 7/8" thick) and #7 steel (7/8" to 2 7/8" thick); and all "no charge" items, plus:

- Machine for and install guided ejection – 2 or 4 places
- Machine for and install support pillars
- Machine for and install additional stop pins
- Machine press knock-out in bottom clamp plate (tap in ejector bar, if required)
- Machine pry bar slots
- Machine leader pin vent slots in rails
- Machine for spring holes
- Drill and tap lifting holes
- Drill and tap mold strap holes (location ±1/32")
- Machine for and install extra assembly screws in top and/or bottom
- Machine for and install extra assembly screws in ejector assembly
- Machine for and install added return pins
- Rough mill/bore cavity and core pocket; blind or through (NOTE: 1/2" minimum radius required)



Special Mold Bases Shipping in SEVEN Working Days

Includes all features specified in FIVE working days, plus:

- Machine for D-M-E three-piece extension bushings
- Drill and tap horizontal water lines
- Drill water pipe clearance holes
- Drill vertical water lines (excluding o-ring machining)
- Machine for D-M-E angle pin inserts
- Finish mill/bore cavity and core pocket; blind or through (NOTE: 1/2" minimum radius required)



Special Mold Bases Shipping in ELEVEN Working Days

Includes all features specified in SEVEN working days, plus:

- Machine for D-M-E parting line interlocks
- Provide special thickness plates (maximum plate thickness of 5 7/8" in D-M-E #1, #2 and #3 steels, and 2 7/8" in D-M-E #7 steel)

Self-Lubricating Bushings

5-DAY SHIPPING

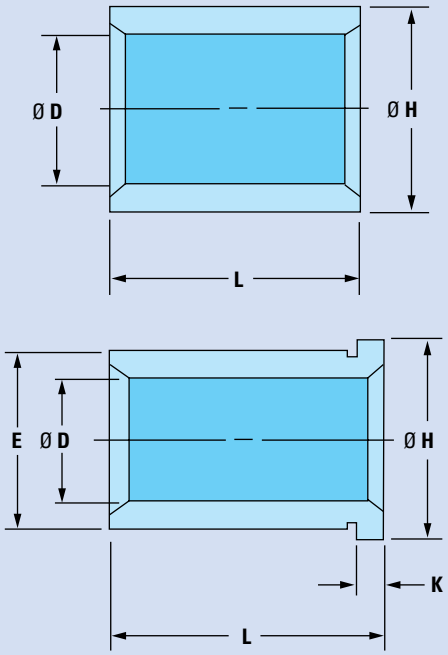
D-M-E Self-Lubricating Bushings save time and money in the design, construction and operation of injection molds. Their built-in lubrication capability also makes them a good choice for fast cycling, high-production molds.

FOR QUOTING OR ORDERING, SPECIFY:

Self-Lubricating Bushings

Item Number:_____

Quantity: _____





General Dimensions

NOMINAL I.D.	Ø E +.0005 -.0000	H +.000 -.030	K
3/4	1.1255	1.302	3/16
7/8	1.2505	1.427	
1"	1.3755	1.552	
1 1/4	1.6255	1.802	
1 1/2	2.0005	2.177	
2"	2.5005	2.677	
2 1/2	3.2505	3.427	
3"	3.7505	3.990	1/2

Self-Lubricating Straight Bushings

NOMINAL I.D.	Ø D +.0005 -.0000	L +.00 -.06 LENGTH	H +.0005 -.0000	ITEM NUMBER
3/4	.7505	7/8	1.1255	GBS-06-07
		1 3/8	1.1255	GBS-06-13
7/8	.8755	1 3/8	1.2505	GBS-07-13
1"	1.0005	1 3/8	1.3755	GBS-08-13
1 1/4	1.2505	1 3/8	1.6255	GBS-10-13
		1 7/8	1.6255	GBS-10-17
1 1/2	1.5005	1 3/8	2.0005	GBS-12-13
		1 7/8	2.0005	GBS-12-17
2"	2.0005	3 7/8	2.5005	GBS-16-37
2 1/2	2.5005	4 7/8	3.2505	GBS-20-47
3"	3.0005	4 7/8	3.7505	GBS-24-47

Pry Slots

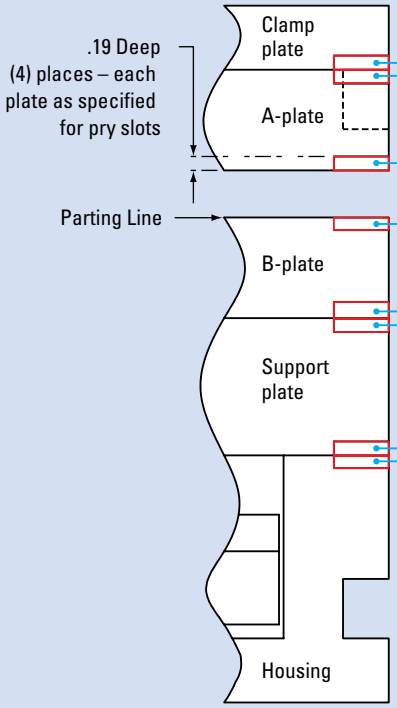
Mold base features Pry Slots, installed in any plate specified, on the parting and/or non-parting line side. This provides handling ease when opening and/or disassembling a mold.

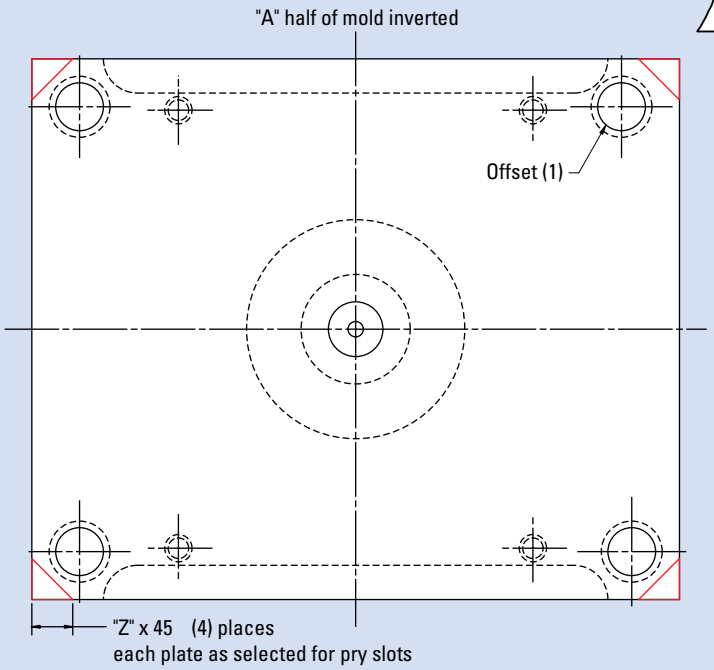
5-DAY SHIPPING

Pry Slot Options

BASE SIZE	SLOT LENGTH Z
88-1123	.56 x 45°
1212-1315	.88 x 45°
1318-2435	1.00 x 45°







FOR QUOTING OR ORDERING, SPECIFY:

Pry Slot options:

- ❑ Clamp Plate – parting line
- ❑ A Plate – non-parting line
- ❑ A Plate – parting line
- ❑ B Plate – parting line
- ❑ B Plate – non-parting line
- ❑ Support Plate – parting line
- ❑ Support Plate – non-parting line
- ❑ Housing – parting line

Guided Ejection Systems

5-DAY SHIPPING

Guided Ejection Systems hold the ejector assembly in alignment and support the weight of the ejector assembly throughout the molding cycle – greatly reducing wear on ejection components and preventing cocking of the ejector assembly.

FOR QUOTING OR ORDERING, SPECIFY:

Guided Ejection System Type

- ❑ System 1
- ❑ System 2

Quantity (2 or 4): _____

Guided Ejection Bushing Type

- ❑ Bronze-Plated Steel Bushings
- ❑ Self-Lubricating Bushings

Guided Ejection

Position:

❑ **STD** ❑ **Specify**

Recommended position from table provided standard (see opposite page). If a different position is required, specify below.

GEx_____

GEy_____

Diameter:

❑ **STD** ❑ **Specify**

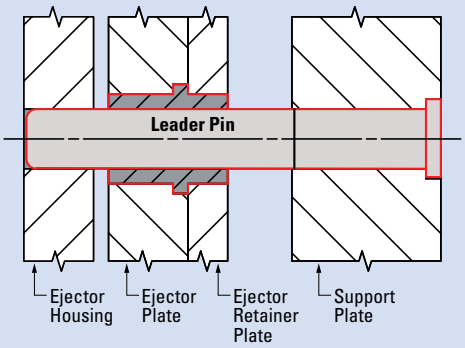
Recommended diameter from table provided standard. If a different diameter is required, it will require a positioning change; specify below.

Available diameters:

- ❑ 0.750
- ❑ 0.875
- ❑ 1.000
- ❑ 1.250

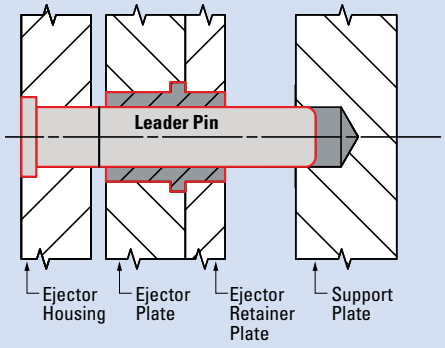
SYSTEM 1

When pins are installed in the support plate, the ejector housing can be removed from the mold without removing ejector plates. This permits easy access to service the ejector system.



SYSTEM 2

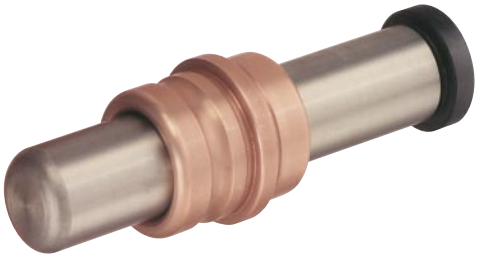
Pins installed in the ejector housing permit fast installation. When the ejector housing is removed from the mold base, the complete ejector assembly is removed.

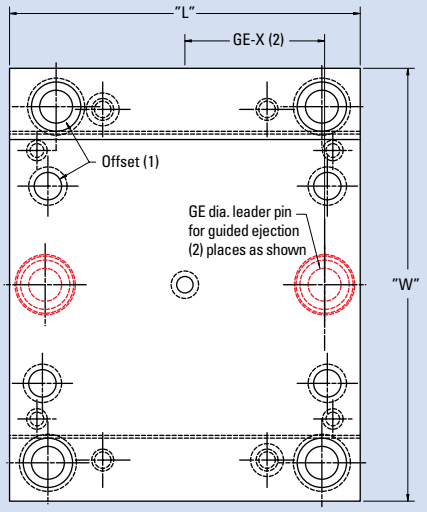




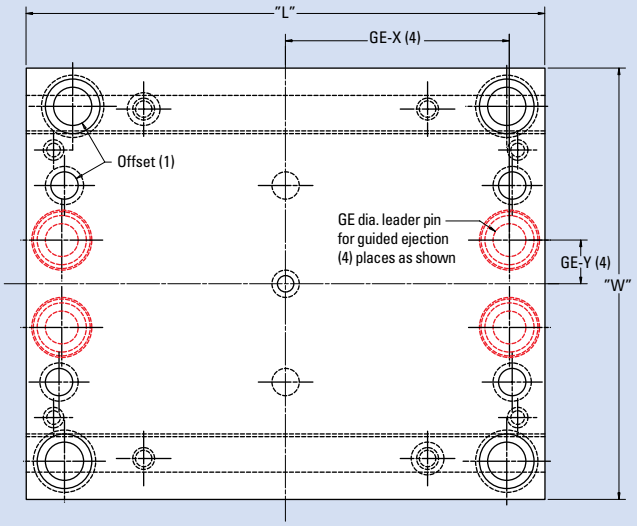
Guided Ejection Systems







**"B" HALF OF MOLD
FOR 88, 812 & 108 MOLD BASE
SIZE ONLY**



**"B" HALF OF MOLD
FOR 1012 – 2435 BASES**

Guided Ejection Positions

PIN DIAMETER (RECOMMENDED)	BASE SIZE	GEx	GEy
0.750	88	3.000	Center
	812	5.000	Center
	108	3.062	Center
	1012	5.000	1.000
	1016	7.062	1.000
	1020	9.062	1.000
	1112	5.062	1.625
	1114	6.062	1.625
	1118	8.062	1.625
	1123	10.812	1.625
0.875	212	5.000	1.750
	1215	6.500	1.750
	1220	9.000	1.750
	1223	10.750	1.750
	1315	6.500	2.375
	1318	8.000	2.375
	1321	9.375	2.375
	1323	10.750	2.375
	1326	12.000	2.375
	1329	13.750	2.375

PIN DIAMETER (RECOMMENDED)	BASE SIZE	GEx	GEy
1.000	1518	7.875	2.375
	1524	10.812	2.375
	1529	13.688	2.375
	1616	6.938	2.875
	1620	8.938	2.875
	1623	10.688	2.875
	1626	11.938	2.875
	1629	13.688	2.875
	1635	16.688	2.875
	1724	10.812	3.125
	1729	13.688	3.125
	1818	7.938	3.875
	1820	8.938	3.875
	1823	10.688	3.875
	1826	11.038	3.875
	1829	13.688	3.875
	1835	16.688	3.875
	1924	10.812	4.625
	1929	13.688	4.625
	1935	16.688	4.625
1.250	2424	10.688	6.125
	2429	13.562	6.125
	2435	16.562	6.125

Lifting Holes

5-DAY SHIPPING

Lifting Holes can be used to install hoist rings for ease of handling. Mold base can be configured only with Lifting Holes which are appropriate for the specific mold base size. Refer to the D-M-E Mold Components catalog for a comprehensive selection of hoist rings.

FOR QUOTING OR ORDERING, SPECIFY:

Lifting Holes

Lifting holes can be selected up to three per plate edge. They are available in top clamp plate, A-plate, B-plate, support plate, and bottom clamp plate.

Note that for safety reasons, only the recommended hole diameters (or larger) shown in the table are offered.

Diameter _____

Quantity in each plate _____

Plates with lift holes _____

_____

_____

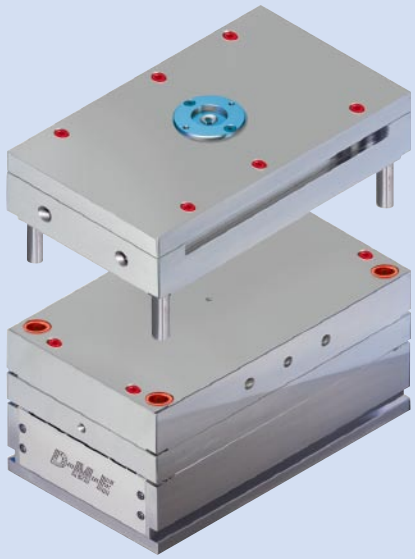
_____

_____

(Prints required if not on center)

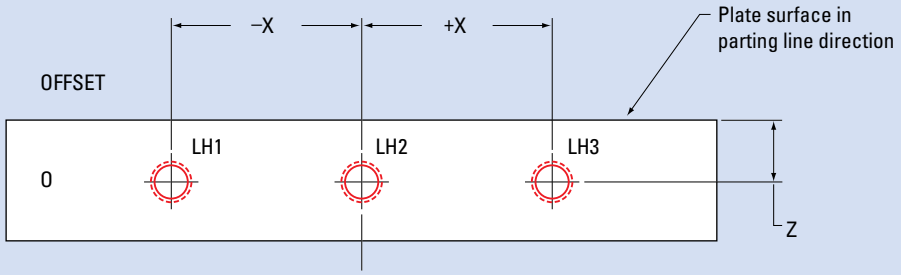
Lifting Hole Diameters

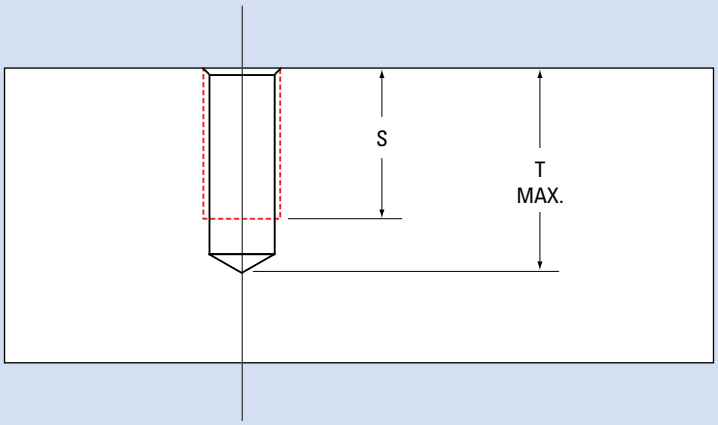
BASE SIZE	PLATE THICKNESS	
	0.875	1.375
88-1118	1/2-13 UNC	1/2-13 UNC
1123-1524	5/8-11 UNC	5/8-11 UNC
1529-1829	5/8-11 UNC	3/4-10 UNC
1835-2429	5/8-11 UNC	1"-8 UNC
2435	N/A	1"-8 UNC



Lifting Holes

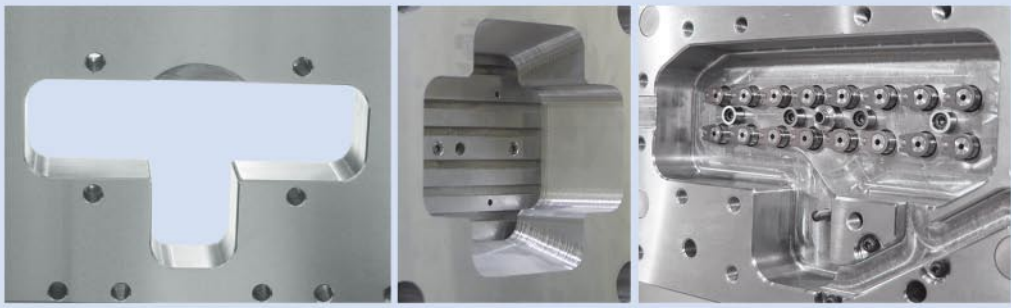
THREAD SIZE	S	T MAX.
1/2-13	1.00	1.38
5/8-11	1.25	1.75
3/4-10	1.50	2.00
1"-8	2.00	2.62





Pockets

Per customer specifications, D-M-E finishes any type of cavity and core pockets.
See D-M-E Mold Components catalog for spring free lengths and hole dimensions.



Quick delivery on any type of cavity or core pockets



FOR QUOTING OR ORDERING, SPECIFY:

Rectangular Pockets

- ❑ Rough rectangular pockets: 5 days
- ❑ Finished rectangular pockets: 7 days

Length _____

Width _____

- ❑ Through
- ❑ Blind _____ (specify depth)

Corner Radius _____ (.50 min/1.00 max)

NOTE: Rough pocket tolerance -.062 per side; finished pocket tolerance ±.001

Support Pillars

5-DAY SHIPPING

Support Pillars greatly increase the capacity of the mold to support the projected area of the cavities, runner and sprue. By providing additional support, they prevent deflection of the mold. Support Pillars are universally adaptable for cap screw, threaded locating pin, or socket set screw application.

FOR QUOTING OR ORDERING, SPECIFY:

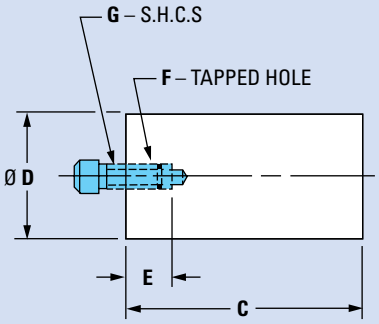
Support Pillars

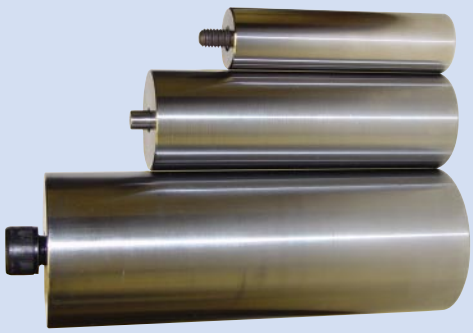
Quantity: _____

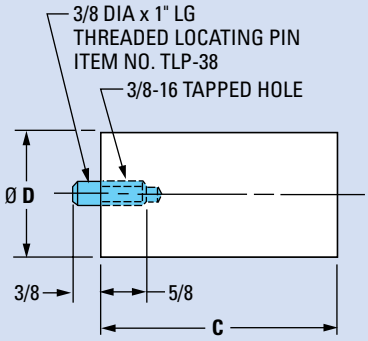
Diameter: _____

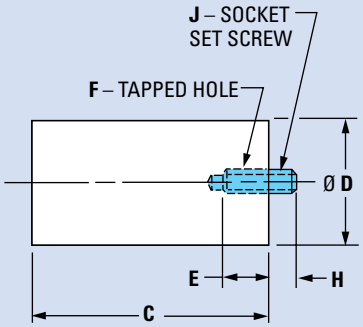
Style:

- ❑ Cap screw
- ❑ Threaded locating pin
- ❑ Socket set screw

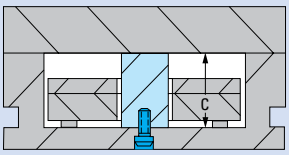




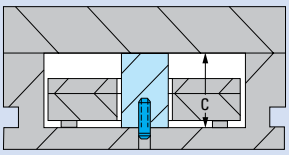




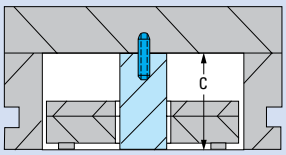
Cap Screw Application



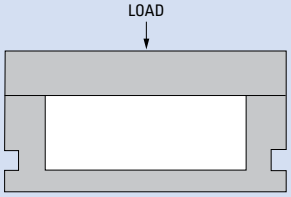
Threaded Locating Pin Application



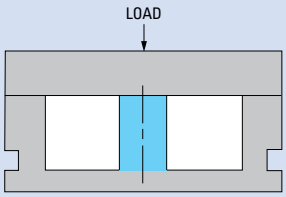
Socket Set Screw Application



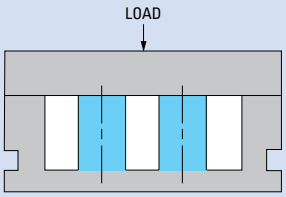
No support pillars



One row of support pillars increases the permissible cavity area 4 times



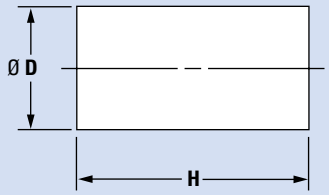
Two rows of support pillars increase the permissible cavity area 9 times



Ø D	E	F	H (APPROX)	J SOCKET SET SCREW
1", $1^1/_4$, $1^1/_2$, 2"	$^5/_8$	$^3/_8$ – 16	$^1/_2$	ITEM NO. SSS-38114
3", 4"	$1^1/_4$	$^5/_8$ – 11	$^3/_8$	ITEM NO. SSS-582

NOTE: Order SHCS separately.

Support Pillars



Support Pillars

Ø D +.000 -.060	H +.001 -.000 HEIGHT	ITEM NUMBER
1"	2.500	6090
	3.000	6091
	3.500	6092
	4.000	6093
	4.500	6094
1 1/4	2.500	6130
	3.000	6131
	3.500	6132
	4.000	6133
	4.500	6134
	5.000	6135
	6.000	6136
1 1/2	2.500	6140
	3.000	6141
	3.500	6142
	4.000	6143
	4.500	6144
	5.000	6145
	6.000	6146
2"	2.500	6150
	3.000	6151
	3.500	6152
	4.000	6153
	4.500	6154
	5.000	6155
	6.000	6156
3"	5.000	6235
	6.000	6236
	8.000	6238
4"	5.000	6245
	6.000	6246
	8.000	6248

Support pillars are universally adaptable for cap screw, threaded locating pin, or socket set screw applications.

Order pillars from chart at left and required "fasteners" as listed below.

Cap Screw (S.H.C.S.) Applications

3/8-16 or 5/8-11 socket head cap screws can be ordered in length required, see D-M-E Mold Components Catalog.

Threaded Locating Pin Applications

Locating pins unavailable for 3" and 4" diameter pillars.

Ø D PILLAR	ITEM NUMBER
1" TO 2"	TLP-38

Socket Set Screw Applications

Order pins and screws in package lots only.

Ø D PILLAR	ITEM NUMBER	QTY PER PACKAGE
1" TO 2"	SSS-38114	10
3" AND 4"	SSS-582	5

Leader Pin Vents, Spring Pockets & Mold Strap Holes

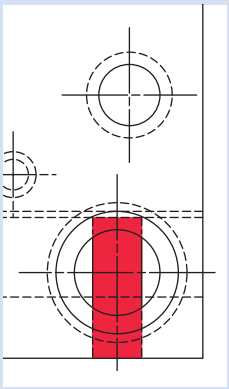
5-DAY SHIPPING

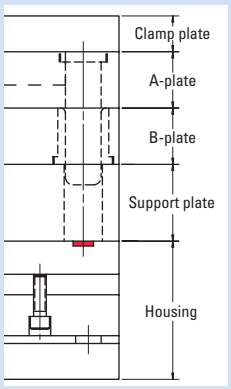
FOR QUOTING OR ORDERING, SPECIFY:

❑ Leader Pin Vents

Leader Pin Vents (0.50 wide x 0.12 deep) can be machined in the housing under the bushing location.

Leader Pin Vents, which allow trapped air to escape from the mold, are designed into all 15-inch-and-wider series molds. When desired, they can be specified on smaller molds.



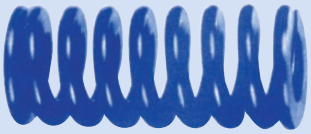


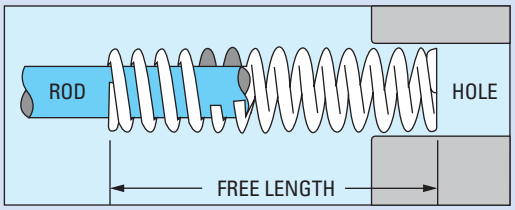
❑ Spring Pockets

Quantity: _____

Plate(s) with pockets: _____

Per customer specifications, D-M-E finishes any type of cavity and core pockets. See D-M-E Mold Components catalog for spring free lengths and hole dimensions.





❑ Mold Strap Holes

Provide desired positions and quantity (minimum 2).

Quantity: _____

Positions: _____

Machined holes will be for mounting mold straps. Please provide desired positions and quantity (minimum 2).

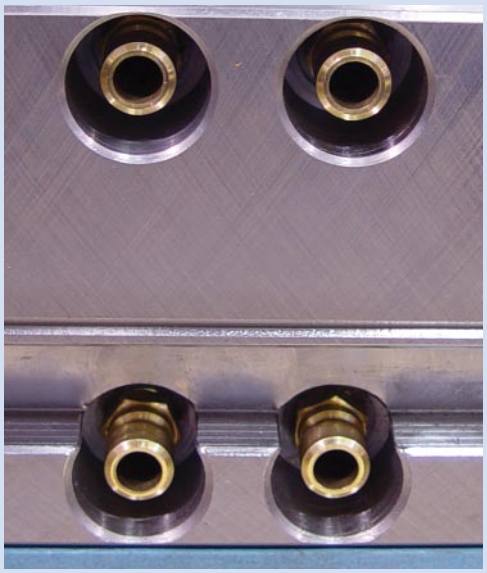




Waterlines

D-M-E will provide waterlines and plugs per customer specifications.

7-DAY SHIPPING





FOR QUOTING OR ORDERING, SPECIFY:

Waterlines

Diameter: _____

Specify plates with waterlines:

_____

_____

_____

_____

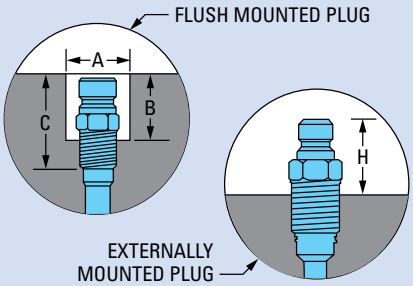
Total length (in inches) of waterlines in each plate:

_____

_____

_____

_____



Jiffy-Tite® Plugs (JP)

Male Plug Mounting Information

ITEM NUMBER	NPT	HEX SIZE	A	B	C	H
JP-250	1/16	7/16	11/16	11/16	1"	5/8
JP-251	1/8	7/16	11/16	11/16	1"	5/8
JP-252-(SV)	1/4	9/16	27/32	15/16	1 3/16	7/8
JP-253-(SV)	3/8	11/16	1.000	15/16	1 1/4	29/32
JP-351	1/8	9/16	1.000	15/16	1 1/4	7/8
JP-352-(SV)	1/4	9/16	1.000	1 3/32	1 7/16	1 1/32
JP-353-(SV)	3/8	11/16	1.000	1 1/8	1 7/16	1 1/16
JP-354-(SV)	1/2	7/8	1 3/16	1 1/4	1 9/16	1 3/16
JP-553	3/8	7/8	1 1/4	1 3/16	1 5/8	1 1/8
JP-554	1/2	7/8	1 1/4	1 1/2	1 13/16	1 7/16
JP-556	3/4	1 1/8	1 1/2	1 9/16	1 7/8	1 1/2

3-Plate Extension Bushings

7-DAY SHIPPING

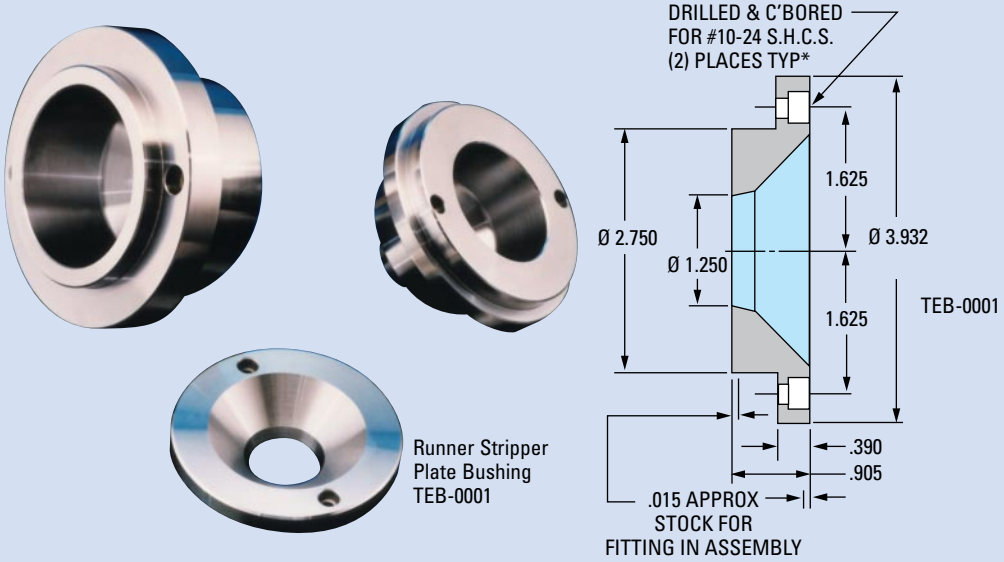
Three-Plate Extension Bushings can save material, reduce cycle time and help prevent runner hang-ups in 3-plate molds.

FOR QUOTING OR ORDERING, SPECIFY:

Extension Bushings

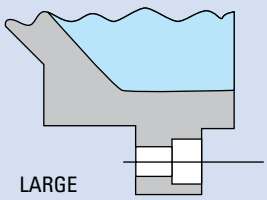
Item Number: _____

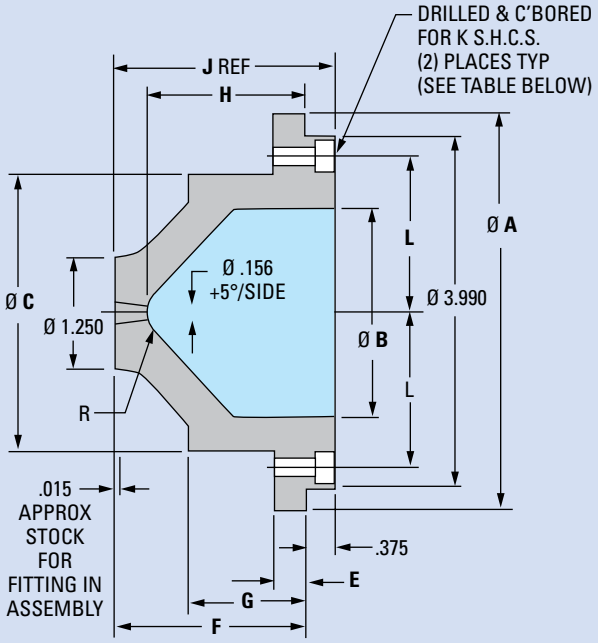
Quantity: _____



NOTES:

1. Stripper plate bushing TEB-0001 is used with all small and large extension nozzle bushings.
2. Appropriate S.H.C.S. are included with all bushings (TEB-0001 thru TEB-0009).
3. Select small or large bushing based on "A" clamping plate (A.C.P.) thickness, X-1 stripper plate thickness, machine nozzle spherical radius and machine nozzle clearance requirements.



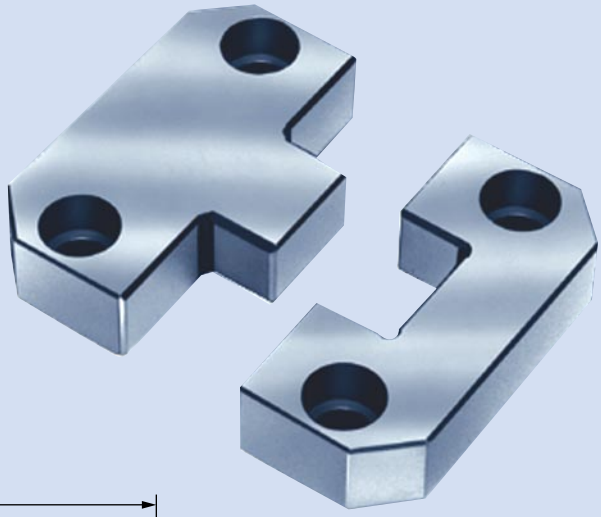


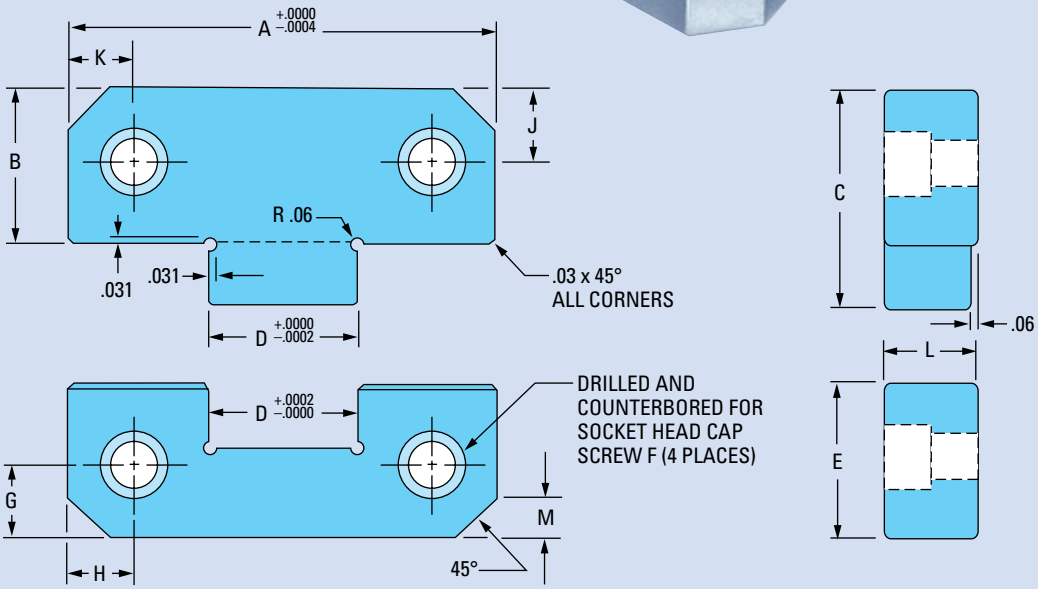
ITEM NUMBER	R SPH. RAD	Ø A	Ø B	Ø C	E	F	G	H	J	K	L
TEB-0002	1/2	4.490	2.375	3.120	.375	2.265	1.377	1.875	2.640	#10-24 x 7/8 LONG (2) INCLUDED	1.781
TEB-0003	3/4							1.812			
TEB-0004	1/2					2.765	1.877	2.375	3.140		
TEB-0005	3/4							2.312			
TEB-0006	1/2	5.490	3.250	3.932	.750	2.765	1.877	2.375	3.140	5/16-18 x 7/8 LONG (2) INCLUDED	2.312
TEB-0007	3/4							2.312			
TEB-0008	1/2					3.265	2.377	2.875	3.640		
TEB-0009	3/4							2.812			

Interlocks

D-M-E Interlocks are precision toleranced and precision manufactured to provide off-the-shelf interchangeability and accurate alignment of mold halves.

11-DAY SHIPPING





ITEM NUMBER	A NOMINAL	B	C	D NOMINAL	E	F*	G	H	J	K	L	M
PLM-0001	1.5000	.870	1.18	.5000	.870	1/4-20 X 3/4	.281	.281	.437	.281	.620	.19
PLF-0001												
PLM-0002	2.0000	.870	1.18	.6800	.870	1/4-20 X 3/4	.375	.375	.437	.375	.620	.19
PLF-0002												
PLM-0003	3.0000	1.360	1.910	1.0000	1.370	3/8-16 X 1	.688	.375	.688	.375	.745	.19
PLF-0003												
PLM-0004	4.0000	1.870	2.640	1.3750	1.870	3/8-16 X 1	.875	.625	.875	.625	.745	.50
PLF-0004												
PLM-0005	5.0000	1.870	2.640	1.7500	1.870	1/2-13 X 1 1/4	.875	.750	.875	.750	1.120	.50
PLF-0005												

*(2) F size SHCS included with each interlock.

FOR QUOTING OR ORDERING, SPECIFY:

Interlocks

Quantity: _____

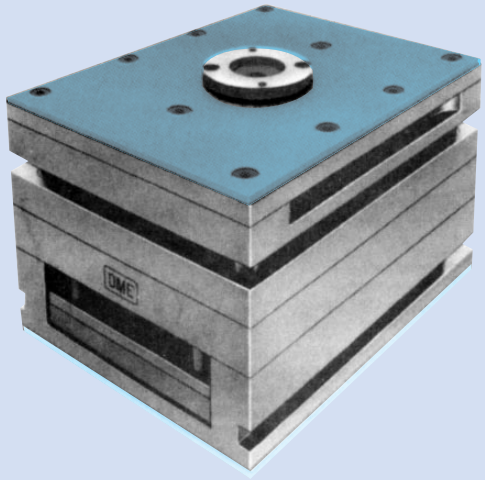
Item Number: _____

NOTE: See D-M-E Mold Components catalog for additional interlock options.

Insulator Sheets

D-M-E High Temperature Insulator Sheets are used on molds and dies between the top clamping plate and the stationary platen, and between the bottom of the ejector housing and the movable platen.

- Asbestos-free material
- High compression strength
- Machinable with high-speed cutting tools



ENERGY SAVINGS
1/4 THICK = 27,508 BTU/HR
1/2 THICK = 31,004 BTU/HR

General Data

COMPRESSIVE STRENGTH	(ASTM D-229)	49,400 PSI AT 75°F 27,200 PSI AT 300°F 18,000 PSI AT 400°F 17,100 PSI AT 500°F 15,000 PSI AT 550°F
MODULUS OF ELASTICITY IN COMPRESSION	(ASTM D-229	1.8 x 10° PSI AT 75°F 2.9 x 10° PSI AT 425°F
WATER ABSORPTION	(ASTM D-229)	0.2%
THERMAL CONDUCTIVITY (K FACTOR), (BTU/HR/FT²/IN/°F)	(ASTM C-177)	1.9 AT 75°F 2.1 AT 425°F
FLAME RESISTANCE	(UL SUBJECT 94)	94V-0
EXPANSION ACROSS THICKNESS EXPANSION ACROSS SURFACE		6.43×10^{-5} IN/IN/°F 1.24×10^{-5} IN/IN/°F
MAXIMUM RECOMMENDED SERVICE TEMPERATURE		550°F

High Temperature Insulator Sheets

THICKNESS	LENGTH	WIDTH	ITEM NUMBER	NET WEIGHT
1/4	36"	18"	HTIS-1836-2	12
		24"	HTIS-2436-2	16
		36"	HTIS-3636-2	24
1/4	96"	48"	HTIS-4896-2	105
1/2	36"	18"	HTIS-1836-4	24
		24"	HTIS-2436-4	32
		36"	HTIS-3636-4	48

NOTE: Special sizes available on special order: Max. length = 96", Max thickness = 1", Max. width = 48", Min. thickness = 1/8
Installation: Use 1/4-20 flat head screws. Drill and tap base to suit.

D-M-E X-, AX- and T-Series Mold Bases

A WIDE SELECTION OF D-M-E STANDARD STRIPPER PLATE, AX- AND T-SERIES MOLD BASES AVAILABLE IN DOZENS OF STANDARD SIZES



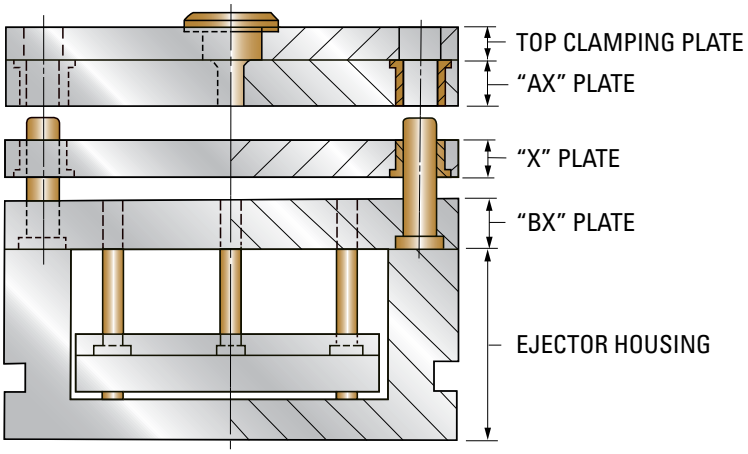
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Stripper Plate Series Mold Base Features

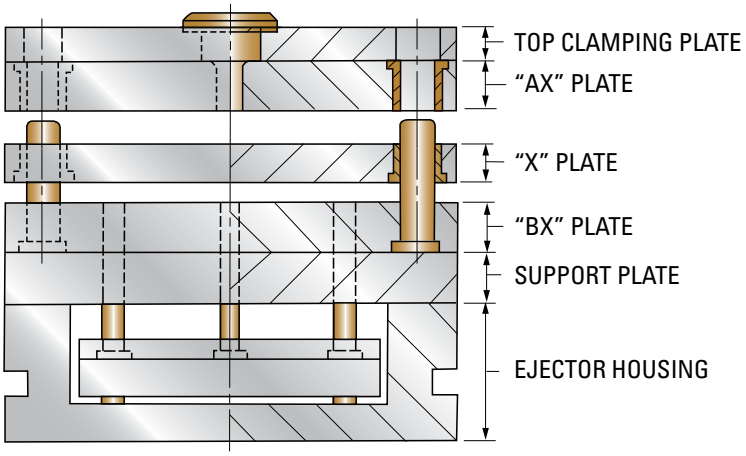
D-M-E Standard Stripper ("X" Series) Mold Bases are available with either the 5- or 6-plate construction. The location of the return pins, leader pins, screws and dowels are identical to the Standard "A" Series Mold Bases. Specifications are listed for every D-M-E Standard size from 7.875 × 7.875 to 23.75 × 35.5.

5 PLATE SERIES





6 PLATE SERIES



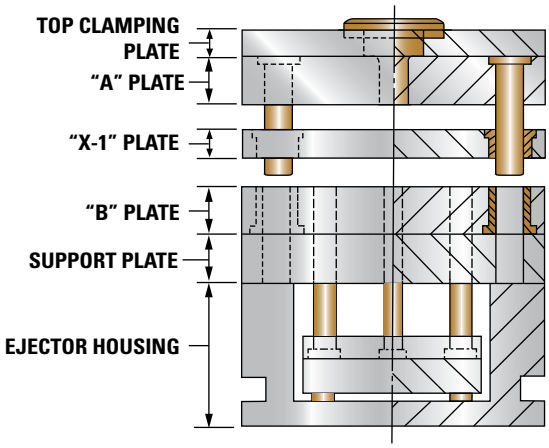


AX- and T-Series Mold Base Features

"AX" Series Mold Bases

A D-M-E Standard "AX" Series Mold Base is basically an "A" Series type mold base with a floating plate ("X-1" plate) added between the cavity plates. This type assembly is used when it is desirable to have the floating plate remain with the upper half of the assembly.

"AX" SERIES

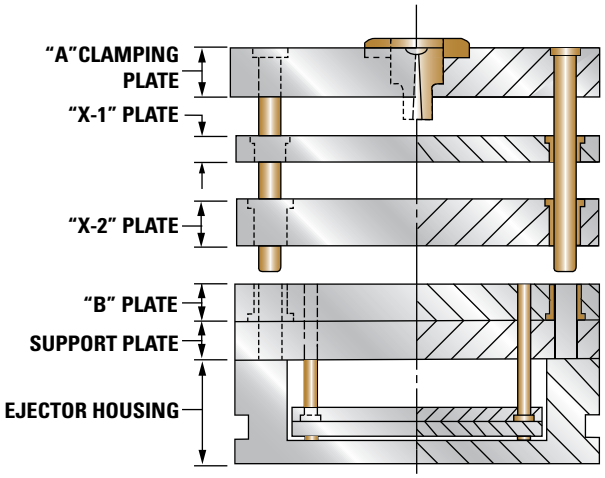




"T" Series Mold Bases

D-M-E Standard "T" Series Mold Bases are available in 42 standard sizes, from 7.875 × 7.875 to 23.75 × 35.5. They are used for top runner molds that require two floating plates ("X-1" – runner stripper plate, "X-2" – cavity plate) to remain with the upper or stationary half of the assembly.

"T" SERIES





7⅞" and 9⅞" Stripper Plate Mold Bases

NO. 1 & NO. 2 STEEL ASSEMBLIES

All plates above ejector housing are No. 1 or No. 2 Steel, respectively.

NO. 3 STEEL ASSEMBLIES

"AX", "X", and "BX" plates are No. 3 Steel. Top clamping and support plates are No. 2 Steel.

NO. 7 STEEL ASSEMBLIES

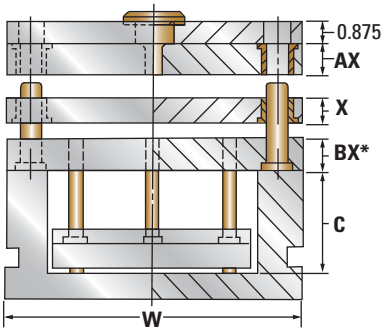
Any or all plates available as requested.

W	L	TCP	AX	C	5 PLATE		6 PLATE	
					ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.
7.875	7.875	0.875	0.875	2.5	88X-5-7	111	88X-6-7	136
			1.375	2.5	88X-5-13	120	88X-6-13	145
			1.875	2.5	88X-5-17	129	88X-6-17	154
			2.375	2.5	88X-5-23	138	88X-6-23	163
	11.875	0.875	0.875	2.5	812X-5-7	174	812X-6-7	211
			1.375	3	812X-5-13	187	812X-6-13	224
			1.875	3.5	812X-5-17	200	812X-6-17	237
			2.375	3.5	812X-5-23	214	812X-6-23	251
9.875	8	0.875	0.875	2.5	108X-5-7	158	108X-6-7	189
			1.375	3	108X-5-13	173	108X-6-13	204
			1.875	3.5	108X-5-17	187	108X-6-17	218
			2.375	3.5	108X-5-23	198	108X-6-23	229
			2.875	4	108X-5-27	213	108X-6-27	244
			3.375	4.5	108X-5-33	227	108X-6-33	258
	11.875	0.875	0.875	2.5	1012X-5-7	235	1012X-6-7	281
			1.375	3	1012X-5-13	256	1012X-6-13	302
			1.875	3.5	1012X-5-17	277	1012X-6-17	323
			2.375	3.5	1012X-5-23	294	1012X-6-23	340
			2.875	4	1012X-5-27	316	1012X-6-27	362
			3.375	4.5	1012X-5-33	337	1012X-6-33	383
	16	0.875	0.875	2.5	1016X-5-7	316	1016X-6-7	378
			1.375	3	1016X-5-13	345	1016X-6-13	407
			1.875	3.5	1016X-5-17	374	1016X-6-17	436
			2.375	3.5	1016X-5-23	396	1016X-6-23	458
			2.875	4	1016X-5-27	425	1016X-6-27	487
			3.375	4.5	1016X-5-33	454	1016X-6-33	516
	20	0.875	0.875	2.5	1020X-5-7	395	1020X-6-7	472
			1.375	3	1020X-5-13	431	1020X-6-13	508
			1.875	3.5	1020X-5-17	467	1020X-6-17	544
			2.375	3.5	1020X-5-23	495	1020X-6-23	572
			2.875	4	1020X-5-27	531	1020X-6-27	608
			3.375	4.5	1020X-5-33	567	1020X-6-33	644

NOTE: Mold bases listed above may be ordered with "X", "AX", and "BX" plate thicknesses other than those shown in chart. Prices on request.

Refer to corresponding size "A" Series Mold Base for detail dimensions

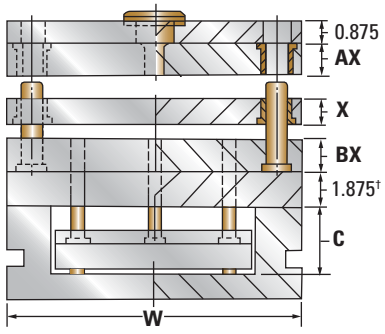
5 PLATE SERIES



BX = 1.875* X = 0.875

*1.375 for 88X and 812X only

6 PLATE SERIES



BX = 1.375 X = 0.875

†1.375 for 88X and 812X only

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3, or No. 7 Steel
3. Locating Ring Item Number
4. E, O and R Dimensions
5. Method of Shipment
6. 1.375 Top Clamping Plate if desired

10⅞" Stripper Plate Mold Bases

NO. 1 & NO. 2 STEEL ASSEMBLIES

All plates above ejector housing are No. 1 or No. 2 Steel, respectively.

NO. 3 STEEL ASSEMBLIES

"AX", "X", and "BX" plates are No. 3 Steel. Top clamping and support plates are No. 2 Steel.

NO. 7 STEEL ASSEMBLIES

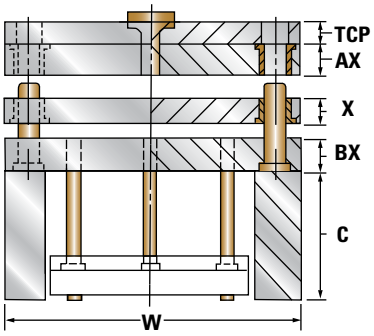
Any or all plates available as requested.

W	L	TCP	AX	C	5 PLATE BX = 1.875 X = 0.875		6 PLATE BX = 1.375 X = 0.875	
					ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.
10.875	12	0.875	0.875	2.5	1112X-5-7	262	1112X-6-7	313
			1.375	3	1112X-5-13	286	1112X-6-13	337
			1.875	3.5	1112X-5-17	310	1112X-6-17	361
			2.375	3.5	1112X-5-23	329	1112X-6-23	380
			2.875	4	1112X-5-27	353	1112X-6-27	404
			3.375	4.5	1112X-5-33	377	1112X-6-33	428
	14	0.875	0.875	2.5	1114X-5-7	306	1114X-6-7	366
			1.375	3	1114X-5-13	334	1114X-6-13	394
			1.875	3.5	1114X-5-17	362	1114X-6-17	422
			2.375	3.5	1114X-5-23	384	1114X-6-23	444
			2.875	4	1114X-5-27	412	1114X-6-27	472
			3.375	4.5	1114X-5-33	440	1114X-6-33	500
	18	0.875	0.875	2.5	1118X-5-7	393	1118X-6-7	470
			1.375	3	1118X-5-13	429	1118X-6-13	506
			1.875	3.5	1118X-5-17	466	1118X-6-17	543
			2.375	3.5	1118X-5-23	493	1118X-6-23	570
			2.875	4	1118X-5-27	530	1118X-6-27	607
			3.375	4.5	1118X-5-33	566	1118X-6-33	643
	23.5	0.875	0.875	2.5	1123X-5-7	513	1123X-6-7	613
			1.375	3	1123X-5-13	560	1123X-6-13	660
			1.875	3.5	1123X-5-17	608	1123X-6-17	708
			2.375	3.5	1123X-5-23	644	1123X-6-23	744
			2.875	4	1123X-5-27	691	1123X-6-27	791
			3.375	4.5	1123X-5-33	739	1123X-6-33	839

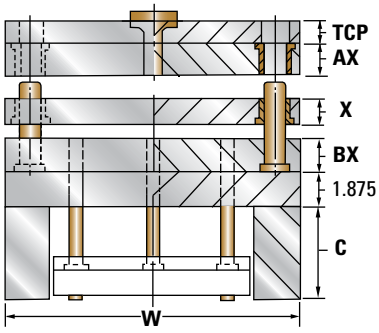
NOTE: Mold bases listed above may be ordered with "X ", "AX", and "BX" plate thicknesses other than those shown in chart. Prices on request.

Refer to corresponding size "A" Series Mold Base for detail dimensions

5 PLATE SERIES



6 PLATE SERIES



WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3, or No. 7 Steel
3. Locating Ring Item Number
4. E, O and R Dimensions
5. Method of Shipment
6. 1.375 Top Clamping Plate if desired

11⅞" Stripper Plate Mold Bases

NO. 1 & NO. 2 STEEL ASSEMBLIES

All plates above ejector housing are No. 1 or No. 2 Steel, respectively.

NO. 3 STEEL ASSEMBLIES

"AX", "X", and "BX" plates are No. 3 Steel.

Top clamping and support plates are No. 2 Steel.

NO. 7 STEEL ASSEMBLIES

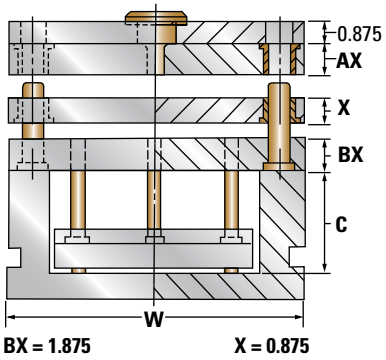
Any or all plates available as requested.

W	L	AX	C	5 PLATE		6 PLATE	
				ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.
11.875	12	1.375	3	1212X-5-13	315	1212X-6-13	371
		1.875	3.5	1212X-5-17	341	1212X-6-17	397
		2.375	3.5	1212X-5-23	361	1212X-6-23	417
		2.875	4	1212X-5-27	387	1212X-6-27	443
		3.375	4	1212X-5-33	407	1212X-6-33	463
		3.875	4.5	1212X-5-37	433	1212X-6-37	489
	15	1.375	3	1215X-5-13	393	1215X-6-13	463
		1.875	3.5	1215X-5-17	426	1215X-6-17	496
		2.375	3.5	1215X-5-23	451	1215X-6-23	521
		2.875	4	1215X-5-27	483	1215X-6-27	553
		3.375	4	1215X-5-33	509	1215X-6-33	579
		3.875	4.5	1215X-5-37	541	1215X-6-37	611
	20	1.375	3	1220X-5-13	525	1220X-6-13	618
		1.875	3.5	1220X-5-17	568	1220X-6-17	661
		2.375	3.5	1220X-5-23	601	1220X-6-23	694
		2.875	4	1220X-5-27	645	1220X-6-27	738
		3.375	4	1220X-5-33	678	1220X-6-33	771
		3.875	4.5	1220X-5-37	721	1220X-6-37	814
	23.5	1.375	3	1223X-5-13	616	1223X-6-13	725
		1.875	3.5	1223X-5-17	667	1223X-6-17	776
		2.375	3.5	1223X-5-23	706	1223X-6-23	815
		2.875	4	1223X-5-27	757	1223X-6-27	866
		3.375	4	1223X-5-33	797	1223X-6-33	906
		3.875	4.5	1223X-5-37	848	1223X-6-37	957

NOTE: Mold bases listed above may be ordered with "X", "AX", and "BX" plate thicknesses other than those shown in chart. Prices on request.

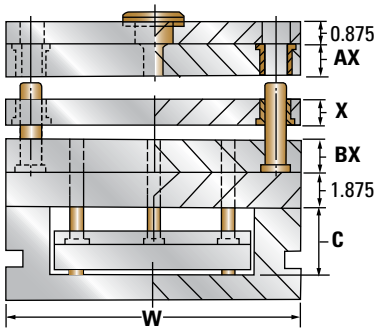
Refer to corresponding size "A" Series Mold Base for detail dimensions.

5 PLATE SERIES



BX = 1.875 X = 0.875

6 PLATE SERIES



BX = 1.375 X = 0.875

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3, or No. 7 Steel
3. Locating Ring Item Number
4. E, O and R Dimensions
5. Method of Shipment
6. 1.375 Top Clamping Plate if desired

13 3/8" Stripper Plate Mold Bases

NO. 1 & NO. 2 STEEL ASSEMBLIES

All plates above ejector housing are No. 1 or No. 2 Steel, respectively.

NO. 3 STEEL ASSEMBLIES

"AX", "X", and "BX" plates are No. 3 Steel.

Top clamping and support plates are No. 2 Steel.

NO. 7 STEEL ASSEMBLIES

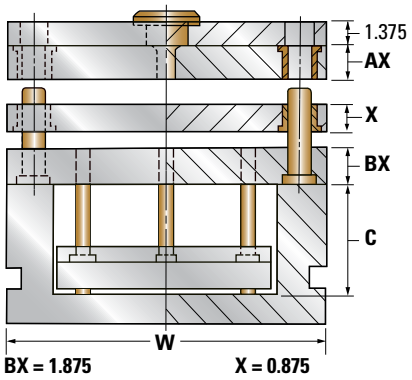
Any or all plates available as requested.

W	L	AX	C	5 PLATE		6 PLATE	
				ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.
13.375	15	1.375	3	1315X-5-13	477	1315X-6-13	556
		1.875	3.5	1315X-5-17	513	1315X-6-17	592
		2.375	3.5	1315X-5-23	542	1315X-6-23	621
		2.875	4	1315X-5-27	578	1315X-6-27	657
		3.375	4	1315X-5-33	607	1315X-6-33	686
		3.875	4.5	1315X-5-37	643	1315X-6-37	722
	18	1.375	3	1318X-5-13	572	1318X-6-13	666
		1.875	3.5	1318X-5-17	616	1318X-6-17	710
		2.375	3.5	1318X-5-23	650	1318X-6-23	744
		2.875	4	1318X-5-27	694	1318X-6-27	788
		3.375	4	1318X-5-33	728	1318X-6-33	822
		3.875	4.5	1318X-5-37	771	1318X-6-37	865
	20.75	1.375	3	1321X-5-13	660	1321X-6-13	769
		1.875	3.5	1321X-5-17	710	1321X-6-17	819
		2.375	3.5	1321X-5-23	749	1321X-6-23	858
		2.875	4	1321X-5-27	800	1321X-6-27	909
		3.375	4	1321X-5-33	839	1321X-6-33	948
		3.875	4.5	1321X-5-37	889	1321X-6-37	998
	23.5	1.375	3	1323X-5-13	747	1323X-6-13	870
		1.875	3.5	1323X-5-17	804	1323X-6-17	927
		2.375	3.5	1323X-5-23	849	1323X-6-23	972
		2.875	4	1323X-5-27	906	1323X-6-27	1029
		3.375	4	1323X-5-33	950	1323X-6-33	1073
		3.875	4.5	1323X-5-37	1007	1323X-6-37	1130
	26	1.375	3	1326X-5-13	826	1326X-6-13	962
		1.875	3.5	1326X-5-17	889	1326X-6-17	1025
		2.375	3.5	1326X-5-23	939	1326X-6-23	1075
		2.875	4	1326X-5-27	1002	1326X-6-27	1138
		3.375	4	1326X-5-33	1051	1326X-6-33	1187
		3.875	4.5	1326X-5-37	1114	1326X-6-37	1250
	29.5	1.375	3	1323X-5-13	938	1329X-6-13	1092
		1.875	3.5	1329X-5-17	1009	1329X-6-17	1163
		2.375	3.5	1329X-5-23	1065	1329X-6-23	1219
		2.875	4	1329X-5-27	1137	1329X-6-27	1291
		3.375	4	1329X-5-33	1192	1329X-6-33	1346
		3.875	4.5	1329X-5-37	1264	1329X-6-37	1418

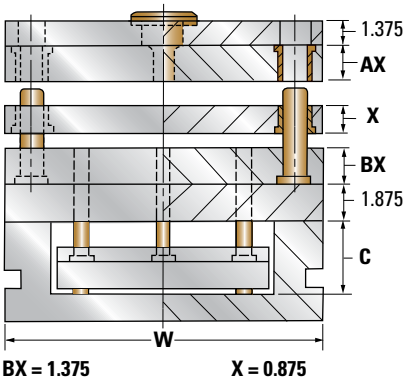
NOTE: Mold bases listed above may be ordered with "X", "AX", and "BX" plate thicknesses other than those shown in chart. Prices on request.

Refer to corresponding size "A" Series Mold Base for detail dimensions.

5 PLATE SERIES



6 PLATE SERIES



WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3, or No. 7 Steel
3. Locating Ring Item Number
4. E, O and R Dimensions
5. Method of Shipment

14⅞" Stripper Plate Mold Bases

NO. 1 & NO. 2 STEEL ASSEMBLIES

All plates above ejector housing are No. 1 or No. 2 Steel, respectively.

NO. 3 STEEL ASSEMBLIES

"AX", "X", and "BX" plates are No. 3 Steel.

Top clamping and support plates are No. 2 Steel.

NO. 7 STEEL ASSEMBLIES

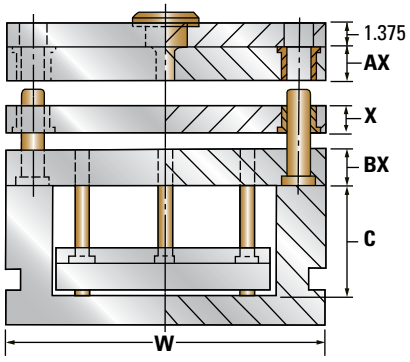
Any or all plates available as requested.

W	L	AX	C	5 PLATE		6 PLATE	
				ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.
14.875	17.875	1.375	3	1518X-5-13	668	1518X-6-13	772
		1.875	3.5	1518X-5-17	715	1518X-6-17	819
		2.375	3.5	1518X-5-23	752	1518X-6-23	856
		2.875	4	1518X-5-27	800	1518X-6-27	904
		3.375	4	1518X-5-33	837	1518X-6-33	941
		3.875	4.5	1518X-5-37	885	1518X-6-37	989
	23.75	1.375	3	1524X-5-13	887	1524X-6-13	1025
		1.875	3.5	1524X-5-17	950	1524X-6-17	1088
		2.375	3.5	1524X-5-23	1000	1524X-6-23	1138
		2.875	4	1524X-5-27	1063	1524X-6-27	1201
		3.375	4	1524X-5-33	1112	1524X-6-33	1250
		3.875	4.5	1524X-5-37	1175	1524X-6-37	1313
	29.5	1.375	3	1529X-5-13	1102	1529X-6-13	1273
		1.875	3.5	1529X-5-17	1180	1529X-6-17	1351
		2.375	3.5	1529X-5-23	1242	1529X-6-23	1413
		2.875	4	1529X-5-27	1320	1529X-6-27	1491
		3.375	4	1529X-5-33	1382	1529X-6-33	1553
		3.875	4.5	1529X-5-37	1460	1529X-6-37	1631

NOTE: Mold bases listed above may be ordered with "X", "AX", and "BX" plate thicknesses other than those shown in chart. Prices on request.

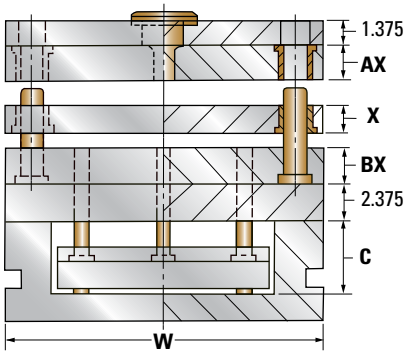
Refer to corresponding size "A" Series Mold Base for detail dimensions.

5 PLATE SERIES



BX = 2.375 **X = 0.875**

6 PLATE SERIES



BX = 1.375 **X = 0.875**

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3, or No. 7 Steel
3. Locating Ring Item Number
4. E, O and R Dimensions
5. Method of Shipment

15⅞" and 16½" Stripper Plate Mold Bases

NO. 1 & NO. 2 STEEL ASSEMBLIES

All plates above ejector housing are No. 1 or No. 2 Steel, respectively.

NO. 3 STEEL ASSEMBLIES

"AX", "X", and "BX" plates are No. 3 Steel.

Top clamping and support plates are No. 2 Steel.

NO. 7 STEEL ASSEMBLIES

Any or all plates available as requested.

5 PLATE SERIES



6 PLATE SERIES



W	L	AX	C	5 PLATE		6 PLATE	
				ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.
15.875	16	1.375	3	1616X-5-13	637	1616X-6-13	736
		1.875	3.5	1616X-5-17	682	1616X-6-17	781
		2.375	3.5	1616X-5-23	717	1616X-6-23	816
		2.875	4	1616X-5-27	762	1616X-6-27	861
		3.375	4	1616X-5-33	798	1616X-6-33	897
		3.875	4.5	1616X-5-37	843	1616X-6-37	942
	20	1.375	3	1620X-5-13	796	1620X-6-13	920
		1.875	3.5	1620X-5-17	852	1620X-6-17	976
		2.375	3.5	1620X-5-23	896	1620X-6-23	1020
		2.875	4	1620X-5-27	952	1620X-6-27	1076
		3.375	4	1620X-5-33	997	1620X-6-33	1121
		3.875	4.5	1620X-5-37	1053	1620X-6-37	1177
	23.5	1.375	3	1623X-5-13	935	1623X-6-13	1081
		1.875	3.5	1623X-5-17	1001	1623X-6-17	1147
		2.375	3.5	1623X-5-23	1053	1623X-6-23	1199
		2.875	4	1623X-5-27	1119	1623X-6-27	1265
		3.375	4	1623X-5-33	1171	1623X-6-33	1317
		3.875	4.5	1623X-5-37	1237	1623X-6-37	1383
	26	1.375	3	1626X-5-13	1034	1626X-6-13	1195
		1.875	3.5	1626X-5-17	1107	1626X-6-17	1268
		2.375	3.5	1626X-5-23	1165	1626X-6-23	1326
		2.875	4	1626X-5-27	1238	1626X-6-27	1399
		3.375	4	1626X-5-33	1296	1626X-6-33	1457
		3.875	4.5	1626X-5-37	1368	1626X-6-37	1529
	29.5	1.375	3	1629X-5-13	1174	1629X-6-13	1357
		1.875	3.5	1629X-5-17	1256	1629X-6-17	1439
		2.375	3.5	1629X-5-23	1322	1629X-6-23	1505
		2.875	4	1629X-5-27	1404	1629X-6-27	1587
		3.375	4	1629X-5-33	1470	1629X-6-33	1653
		3.875	4.5	1629X-5-37	1553	1629X-6-37	1736
	35.5	1.375	3	1635X-5-13	1412	1635X-6-13	1632
		1.875	3.5	1635X-5-17	1511	1635X-6-17	1731
		2.375	3.5	1635X-5-23	1591	1635X-6-23	1811
		2.875	4	1635X-5-27	1690	1635X-6-27	1910
		3.375	4	1635X-5-33	1769	1635X-6-33	1989
		3.875	4.5	1635X-5-37	1868	1635X-6-37	2088
16.5	23.75	1.375	3	1724X-5-13	981	1724X-6-13	1134
		1.875	3.5	1724X-5-17	1050	1724X-6-17	1203
		2.375	3.5	1724X-5-23	1105	1724X-6-23	1258
		2.875	4	1724X-5-27	1173	1724X-6-27	1326
		3.375	4	1724X-5-33	1229	1724X-6-33	1382
		3.875	4.5	1724X-5-37	1297	1724X-6-37	1450
	29.5	1.375	3	1729X-5-13	1219	1729X-6-13	1409
		1.875	3.5	1729X-5-17	1304	1729X-6-17	1494
		2.375	3.5	1729X-5-23	1372	1729X-6-23	1562
		2.875	4	1729X-5-27	1457	1729X-6-27	1647
		3.375	4	1729X-5-33	1526	1729X-6-33	1716
		3.875	4.5	1729X-5-37	1611	1729X-6-37	1801

NOTE: Mold bases listed above may be ordered with "X ", "AX", and "BX" plate thicknesses other than those shown in chart. Prices on request.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3, or No. 7 Steel
3. Locating Ring Item Number
4. E, O and R Dimensions
5. Method of Shipment

17⅞" Stripper Plate Mold Bases

NO. 1 & NO. 2 STEEL ASSEMBLIES

All plates above ejector housing are No. 1 or No. 2 Steel, respectively.

NO. 3 STEEL ASSEMBLIES

"AX", "X", and "BX" plates are No. 3 Steel.

Top clamping and support plates are No. 2 Steel.

NO. 7 STEEL ASSEMBLIES

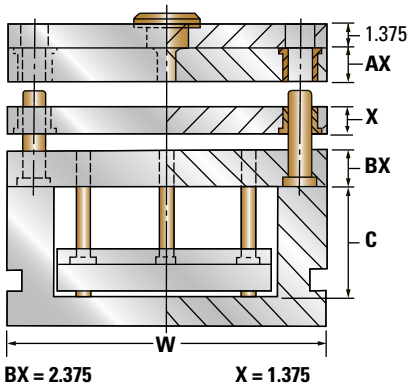
Any or all plates available as requested.

W	L	AX	C	5 PLATE		6 PLATE	
				ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.
17.875	18	1.375	3	1818X-5-13	850	1818X-6-13	976
		1.875	3.5	1818X-5-17	905	1818X-6-17	1031
		2.375	3.5	1818X-5-23	951	1818X-6-23	1077
		2.875	4	1818X-5-27	1006	1818X-6-27	1132
		3.375	4	1818X-5-33	1051	1818X-6-33	1177
		3.875	4.5	1818X-5-37	1107	1818X-6-37	1233
	20	1.375	3	1820X-5-13	944	1820X-6-13	1084
		1.875	3.5	1820X-5-17	1006	1820X-6-17	1146
		2.375	3.5	1820X-5-23	1056	1820X-6-23	1196
		2.875	4	1820X-5-27	1118	1820X-6-27	1258
		3.375	4	1820X-5-33	1168	1820X-6-33	1308
		3.875	4.5	1820X-5-37	1230	1820X-6-37	1370
	23.5	1.375	3	1823X-5-13	1109	1823X-6-13	1273
		1.875	3.5	1823X-5-17	1182	1823X-6-17	1346
		2.375	3.5	1823X-5-23	1241	1823X-6-23	1405
		2.875	4	1823X-5-27	1313	1823X-6-27	1477
		3.375	4	1823X-5-33	1372	1823X-6-33	1536
		3.875	4.5	1823X-5-37	1445	1823X-6-37	1609
	26	1.375	3	1826X-5-13	1227	1826X-6-13	1409
		1.875	3.5	1826X-5-17	1307	1826X-6-17	1489
		2.375	3.5	1826X-5-23	1373	1826X-6-23	1555
		2.875	4	1826X-5-27	1453	1826X-6-27	1635
		3.375	4	1826X-5-33	1518	1826X-6-33	1700
		3.875	4.5	1826X-5-37	1598	1826X-6-37	1780
	29.5	1.375	3	1829X-5-13	1392	1829X-6-13	1598
		1.875	3.5	1829X-5-17	1483	1829X-6-17	1689
		2.375	3.5	1829X-5-23	1558	1829X-6-23	1764
		2.875	4	1829X-5-27	1648	1829X-6-27	1854
		3.375	4	1829X-5-33	1723	1829X-6-33	1929
		3.875	4.5	1829X-5-37	1813	1829X-6-37	2019
	35.5	1.375	3	1835X-5-13	1676	1835X-6-13	1924
		1.875	3.5	1835X-5-17	1785	1835X-6-17	2033
		2.375	3.5	1835X-5-23	1874	1835X-6-23	2122
		2.875	4	1835X-5-27	1983	1835X-6-27	2231
		3.375	4	1835X-5-33	2073	1835X-6-33	2321
		3.875	4.5	1835X-5-37	2182	1835X-6-37	2430

NOTE: Mold bases listed above may be ordered with "X", "AX", and "BX" plate thicknesses other than those shown in chart. Prices on request.

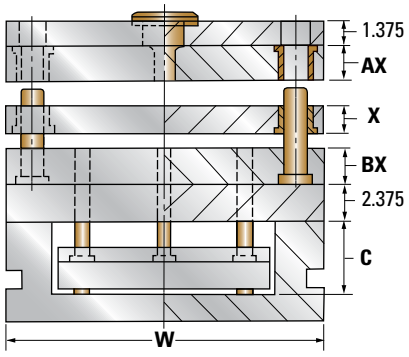
Refer to corresponding size "A" Series Mold Base for detail dimensions.

5 PLATE SERIES



BX = 2.375 X = 1.375

6 PLATE SERIES



BX = 1.375 X = 1.375

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3, or No. 7 Steel
3. Locating Ring Item Number
4. E, O and R Dimensions
5. Method of Shipment

19½" and 23¾" Stripper Plate Mold Bases

NO. 1 & NO. 2 STEEL ASSEMBLIES

All plates above ejector housing are No. 1 or No. 2 Steel, respectively.

NO. 3 STEEL ASSEMBLIES

"AX", "X", and "BX" plates are No. 3 Steel.

Top clamping and support plates are No. 2 Steel.

NO. 7 STEEL ASSEMBLIES

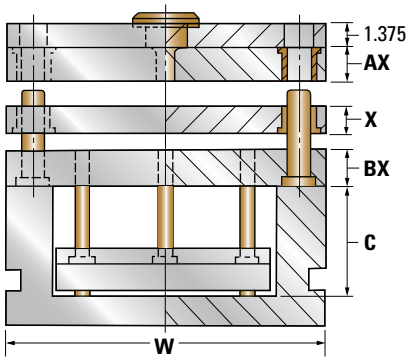
Any or all plates available as requested.

W	L	AX	C	5 PLATE		6 PLATE	
				ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.
19.5	23.75	1.375	3	1924X-5-13	1221	1924X-6-13	1402
		1.875	3.5	1924X-5-17	1300	1924X-6-17	1481
		2.375	3.5	1924X-5-23	1365	1924X-6-23	1546
		2.875	4	1924X-5-27	1443	1924X-6-27	1624
		3.375	4	1924X-5-33	1509	1924X-6-33	1690
		3.875	4.5	1924X-5-37	1587	1924X-6-37	1768
	29.5	1.375	3	1929X-5-13	1516	1929X-6-13	1741
		1.875	3.5	1929X-5-17	1614	1929X-6-17	1839
		2.375	3.5	1929X-5-23	1695	1929X-6-23	1920
		2.875	4	1929X-5-27	1793	1929X-6-27	2018
		3.375	4	1929X-5-33	1874	1929X-6-33	2099
		3.875	4.5	1929X-5-37	1971	1929X-6-37	2196
	35.5	1.375	3	1935X-5-13	1825	1935X-6-13	2095
		1.875	3.5	1935X-5-17	1942	1935X-6-17	2212
		2.375	3.5	1935X-5-23	2040	1935X-6-23	2310
		2.875	4	1935X-5-27	2157	1935X-6-27	2427
		3.375	4	1935X-5-33	2255	1935X-6-33	2525
		3.875	4.5	1935X-5-37	2372	1935X-6-37	2642
23.75	23.75	1.375	3	2424X-5-13	1562	2424X-6-13	1782
		1.875	3.5	2424X-5-17	1655	2424X-6-17	1875
		2.375	3.5	2424X-5-23	1734	2424X-6-23	1954
		2.875	4	2424X-5-27	1827	2424X-6-27	2047
		3.375	4	2424X-5-33	1907	2424X-6-33	2127
		3.875	4.5	2424X-5-37	2000	2424X-6-37	2220
	29.5	1.375	3	2429X-5-13	1940	2429X-6-13	2213
		1.875	3.5	2429X-5-17	2055	2429X-6-17	2328
		2.375	3.5	2429X-5-23	2154	2429X-6-23	2427
		2.875	4	2429X-5-27	2269	2429X-6-27	2542
		3.375	4	2429X-5-33	2368	2429X-6-33	2641
		3.875	4.5	2429X-5-37	2483	2429X-6-37	2756
	35.5	1.375	3	2435X-5-13	2334	2435X-6-13	2663
		1.875	3.5	2435X-5-17	2473	2435X-6-17	2802
		2.375	3.5	2435X-5-23	2592	2435X-6-23	2921
		2.875	4	2435X-5-27	2730	2435X-6-27	3059
		3.375	4	2435X-5-33	2850	2435X-6-33	3179
		3.875	4.5	2435X-5-37	2988	2435X-6-37	3317

NOTE: Mold bases listed above may be ordered with "X ", "AX", and "BX" plate thicknesses other than those shown in chart. Prices on request.

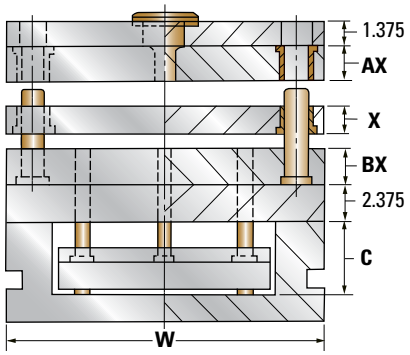
Refer to corresponding size "A" Series Mold Base for detail dimensions.

5 PLATE SERIES



BX = 2.375 X = 1.375

6 PLATE SERIES



BX = 1.375 X = 1.375

WHEN ORDERING, PLEASE SPECIFY:

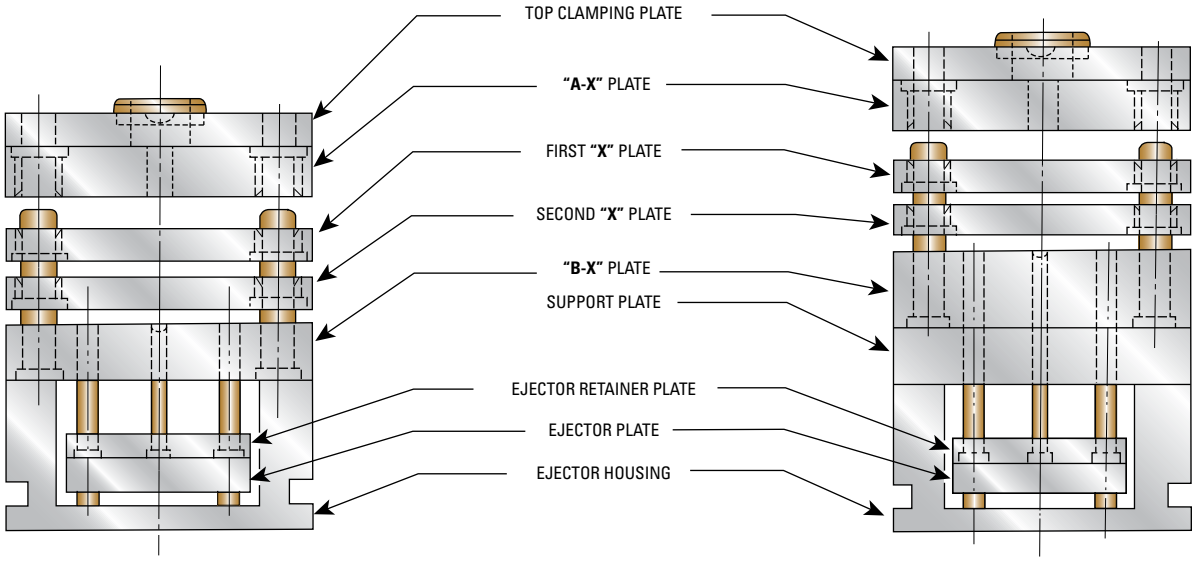
1. Quantity & Item Number
2. No. 1, No. 2, No. 3, or No. 7 Steel
3. Locating Ring Item Number
4. E, O and R Dimensions
5. Method of Shipment

Multiple Stripper Plate Mold Bases

Multiple Stripper Plate Mold Bases consist of a 5 or 6 plate "X" Series Mold Base with one or more floating plates added to the assembly. The assembly "without the support plate" has the same construction as the 5 Plate "X" Series. When this type of assembly is required please refer to the plate designations listed below. Prices quoted on request.

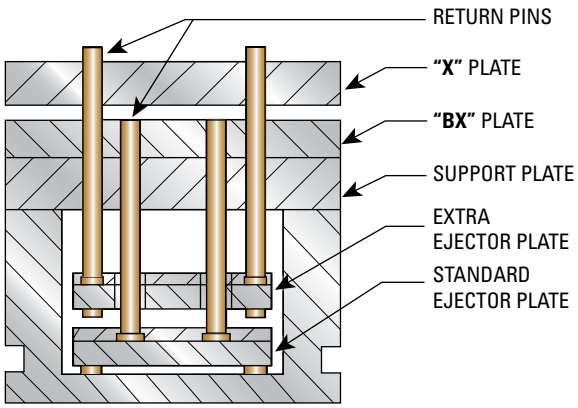
WITHOUT SUPPORT PLATE

WITH SUPPORT PLATE



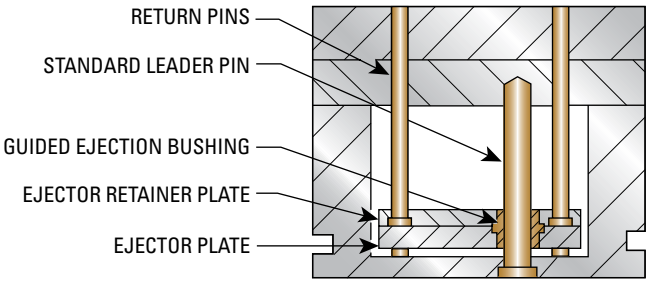
VARIATIONS IN EJECTOR ASSEMBLY

DOUBLE EJECTION



Double ejection is sometimes required when using multiple stripper plate mold assemblies. Prices quoted on request.

GUIDED EJECTION



When an exceptionally long stroke is required, or when ejector pin diameters are extremely small a guided ejector assembly can give additional rigidity.

AX-Series Mold Bases

NO. 1 OR NO. 2 STEEL ASSEMBLIES

All plates above ejector housing are No. 1 or No. 2 Steel, respectively.

NO. 3 STEEL ASSEMBLIES

"A", "X-1", and "B" plates are No. 3 Steel.

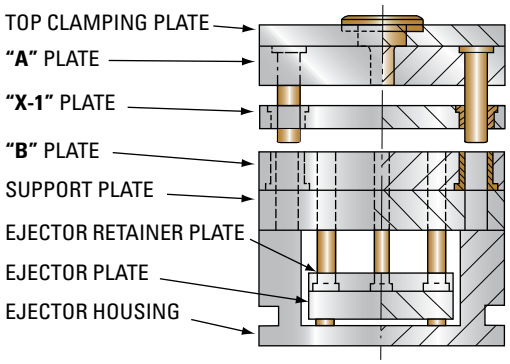
Top clamping and support plates are No. 2 Steel.

NO. 7 STEEL ASSEMBLIES

Any or all plates available as requested.



"AX" Series Assembly



MOLD BASE SIZE WIDTH (W)	TOP CLAMPING PLATE THICKNESS
7.875 to 11.875	0.875
13.375 to 23.75	1.375

"X-1" PLATE THICKNESSES AVAILABLE:
0.875, 1.375, 1.875, 2.375, 2.875, 3.375, 4.875, 5.875

A D-M-E Standard "AX" Series Mold Base is basically an "A" series type mold base with a floating plate ("X-1" plate) added between the "A" and "B" Plates. This type assembly is used where it is desirable to have the floating plate remain with the upper half of the assembly.

STANDARD MOLD BASE SIZE W	STANDARD MOLD BASE SIZE L	ITEM NUMBER PREFIX
7.875	7.875	88AX
	11.875	812AX
9.875	8	108AX
	11.875	1012AX
	16	1016AX
	20	1020AX
10.875	12	1112AX
	14	1114AX
	18	1118AX
	23.5	1123AX
11.875	12	1212AX
	15	1215AX
	20	1220AX
	23.5	1223AX
13.375	15	1315AX
	18	1318AX
	20.75	1321AX
	23.5	1323AX
	26	1326AX
	29.5	1329AX
14.875	17.875	1518AX
	23.75	1524AX
	29.5	1529AX

STANDARD MOLD BASE SIZE W	STANDARD MOLD BASE SIZE L	ITEM NUMBER PREFIX
15.875	16	1616AX
	20	1620AX
	23.5	1623AX
	26	1626AX
	29.5	1629AX
	35.5	1635AX
16.5	23.75	1724AX
	29.5	1729AX
17.875	18	1818AX
	20	1820AX
	23.5	1823AX
	26	1826AX
	29.5	1829AX
	35.5	1835AX
19.5	23.75	1924AX
	29.5	1929AX
	35.5	1935AX
23.75	23.75	2424AX
	29.5	2429AX
	35.5	2435AX

INSTRUCTIONS FOR ORDERING:

When ordering "AX" Series Mold Bases, refer to the corresponding size "A" Series Mold Base for detailed dimensions.

To create a Item number, add an "X" after the "A" in Item number of corresponding size A-Series mold base, and follow with thickness of the (1) A-Plate, (2) X-1 Plate and (3) B-Plate.

Example: 1012AX-13-17-23

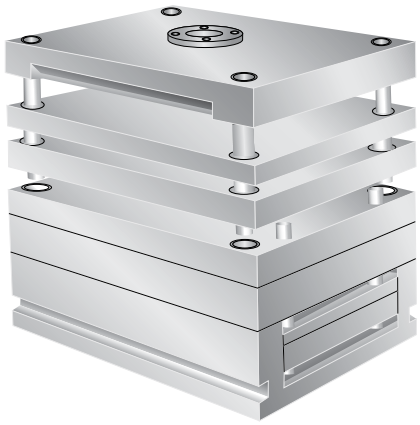
WHEN ORDERING, PLEASE SPECIFY:

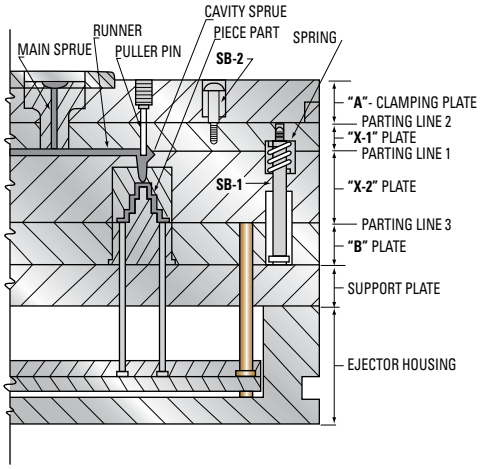
1. Quantity & Item Number
2. No. 1, No. 2, No. 3, or No. 7 Steel
3. X-1 Plate Thickness
4. Locating Ring Item Number
5. E, O and R Dimensions
6. Method of Shipment
7. 1.375 Top Clamping Plate if desired

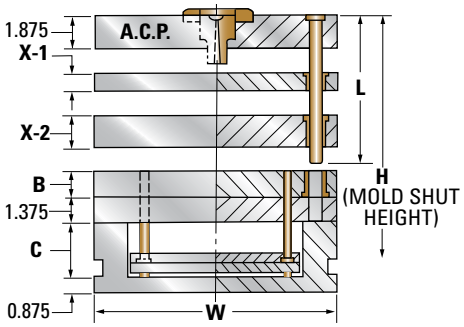
7⅞" T-Series (3-Plate) Mold Bases

A typical 3-plate top runner mold operates as follows: The mold opens first at Parting Line 1 (spring loaded). The runner and cavity sprues are pulled from the cavities in the "X-2" Plate and held against the "X-1" Plate by undercut puller pins.

As the mold continues to open ("X-2" Plate moving forward), stripper bolts SB-1 pull the "X-1" Plate forward (at the end of the "X-2" Plate movement). The "X-1" Plate travel is determined by stripper bolts SB-2. The travel of the "X-1" Plate (breaking at Parting Line 2) strips the entire runner system from the puller pins, breaks the main sprue (held to a minimum length), and allows the runner to drop free. Mold opening at Parting Line 3 then takes place for piece part ejection.







For detailed dimensions, see corresponding size "A" Series Mold Base

X-1 = 0.875				7.875 × 7.875	
X-2	B	C	H	ITEM NUMBER	NET WT.
1.375	0.875	2.5	9.75	88T-13-7	153
	1.375	2.5	10.25	88T-13-13	162
	1.875	2.5	10.75	88T-13-17	171
1.875	0.875	2.5	10.25	88T-17-7	162
	1.375	2.5	10.75	88T-17-13	171
	1.875	2.5	11.25	88T-17-17	180
2.375	1.375	2.5	11.25	88T-23-13	180
	1.875	2.5	11.75	88T-23-17	188
	2.375	3	12.75	88T-23-23	200
2.875	1.375	3	12.25	88T-27-13	191
	1.875	3.5	13.25	88T-27-17	203
	2.375	3.5	13.75	88T-27-23	212
3.375	1.875	3.5	13.75	88T-33-17	212
	2.375	4	14.75	88T-33-23	223
	2.875	4	15.25	88T-33-27	232
3.875	1.875	3.5	14.25	88T-37-17	220
	2.375	4	15.25	88T-37-23	232
	2.875	4	15.75	88T-37-27	241
4.875	2.375	4	16.25	88T-47-23	250
	2.875	4	16.75	88T-47-27	258
	3.375	4.5	17.75	88T-47-33	270

X-1 = 0.875				7.875 × 11.875	
X-2	B	C	H	ITEM NUMBER	NET WT.
1.375	0.875	2.5	9.75	812T-13-7	237
	1.375	3	10.75	812T-13-13	254
	1.875	3	11.25	812T-13-17	268
1.875	0.875	2.5	10.25	812T-17-7	250
	1.375	3	11.25	812T-17-13	268
	1.875	3.5	12.25	812T-17-17	285
2.375	1.375	3	11.75	812T-23-13	281
	1.875	3.5	12.75	812T-23-17	298
	2.375	3.5	13.25	812T-23-23	312
2.875	1.375	3	12.25	812T-27-13	294
	1.875	3.5	13.25	812T-27-17	312
	2.375	3.5	13.75	812T-27-23	325
3.375	1.875	3.5	13.75	812T-33-17	325
	2.375	4	14.75	812T-33-23	342
	2.875	4	15.25	812T-33-27	355
3.875	1.875	3.5	14.25	812T-37-17	338
	2.375	4	15.25	812T-37-23	355
	2.875	4	15.75	812T-37-27	369
4.875	2.375	4	16.25	812T-47-23	382
	2.875	4	16.75	812T-47-27	395
	3.375	4.5	17.75	812T-47-33	413

NOTE: Stripper bolts, puller pins and spring shown are not included. When gating directly into the cavity from a top runner, the 3-plate "T" Series assembly may be used. It incorporates an additional runner stripper plate ("X-1") to facilitate automatic removal of the runner from the mold.

The "X-1" and "X-2" Plates have standard shoulder bushings and ride on standard leader pins. (When heavy "X-2" Plates are required, moldmaker may want to specify larger diameter leader pins and have them relocated. Contact customer service for a quotation to your specifications). The "X-1" Plate is supplied without a center hole. A standard sprue bushing long enough to extend through the "X-1" Plate is provided to allow the moldmaker to finish the sprue bushing hole as desired, or to install a recessed bushing to give the shortest main sprue length for minimum stripper plate movement.

Detailed dimensions for the "T" Series are identical to corresponding size "A" Series Mold Bases. Center sprue puller pin and pin holes as well as the socket head cap screws in the "A" — Clamping Plate are omitted since the are not required.

9⅞" T-Series Mold Bases

X-1 = 0.875				9.875 × 8"	
X-2	B	C	H	ITEM NUMBER	NET WT.
1.375	0.875	2.5	10.25	108T-13-7	211
	1.375	2.5	10.75	108T-13-13	223
	1.875	3	11.75	108T-13-17	237
1.875	0.875	2.5	10.75	108T-17-7	223
	1.375	3	11.75	108T-17-13	237
	1.875	3.5	12.75	108T-17-17	251
2.375	1.375	3	12.25	108T-23-13	248
	1.875	3.5	13.25	108T-23-17	263
	2.375	3.5	13.75	108T-23-23	274
2.875	1.375	3	12.75	108T-27-13	259
	1.875	3.5	13.75	108T-27-17	274
	2.375	3.5	14.25	108T-27-23	285
3.375	1.875	3.5	14.25	108T-33-17	285
	2.375	4	15.25	108T-33-23	299
	2.875	4	15.75	108T-33-27	311
3.875	1.875	3.5	14.75	108T-37-17	296
	2.375	4	15.75	108T-37-23	311
	2.875	4	16.25	108T-37-27	322
4.875	2.375	4	16.75	108T-47-23	333
	2.875	4	17.25	108T-47-27	344
	3.375	4.5	18.25	108T-47-33	359

X-1 = 0.875				9.875 × 16"	
X-2	B	C	H	ITEM NUMBER	NET WT.
1.375	0.875	2.5	10.25	1016T-13-7	422
	1.375	3	11.25	1016T-13-13	451
	1.875	3	11.75	1016T-13-17	473
1.875	0.875	2.5	10.75	1016T-17-7	444
	1.375	3	11.75	1016T-17-13	473
	1.875	3.5	12.75	1016T-17-17	502
2.375	1.375	3	12.25	1016T-23-13	496
	1.875	3.5	13.25	1016T-23-17	525
	2.375	3.5	13.75	1016T-23-23	547
2.875	1.375	3	12.75	1016T-27-13	518
	1.875	3.5	13.75	1016T-27-17	547
	2.375	3.5	14.25	1016T-27-23	569
3.375	1.875	3.5	14.25	1016T-33-17	569
	2.375	4	15.25	1016T-33-23	598
	2.875	4	15.75	1016T-33-27	621
3.875	1.875	3.5	14.75	1016T-37-17	592
	2.375	4	15.75	1016T-37-23	621
	2.875	4	16.25	1016T-37-27	643
4.875	2.375	4	16.75	1016T-47-23	665
	2.875	4	17.25	1016T-47-27	688
	3.375	4.5	18.25	1016T-47-33	717

X-1 = 0.875				9.875 × 11.875	
X-2	B	C	H	ITEM NUMBER	NET WT.
1.375	0.875	2.5	10.25	1012T-13-7	313
	1.375	3	11.25	1012T-13-13	335
	1.875	3	11.75	1012T-13-17	351
1.875	0.875	2.5	10.75	1012T-17-7	330
	1.375	3	11.75	1012T-17-13	352
	1.875	3.5	12.75	1012T-17-17	373
2.375	1.375	3	12.25	1012T-23-13	368
	1.875	3.5	13.25	1012T-23-17	390
	2.375	3.5	13.75	1012T-23-23	406
2.875	1.375	3	12.75	1012T-27-13	385
	1.875	3.5	13.75	1012T-27-17	406
	2.375	3.5	14.25	1012T-27-23	423
3.375	1.875	3.5	14.25	1012T-33-17	423
	2.375	4	15.25	1012T-33-23	444
	2.875	4	15.75	1012T-33-27	461
3.875	1.875	3.5	14.75	1012T-37-17	439
	2.375	4	15.75	1012T-37-23	461
	2.875	4	16.25	1012T-37-27	477
4.875	2.375	4	16.75	1012T-47-23	494
	2.875	4	17.25	1012T-47-27	511
	3.375	4.5	18.25	1012T-47-33	532

X-1 = 0.875				9.875 × 20"	
X-2	B	C	H	ITEM NUMBER	NET WT.
1.375	0.875	2.5	10.25	1020T-13-7	528
	1.375	3	11.25	1020T-13-13	564
	1.875	3	11.75	1020T-13-17	592
1.875	0.875	2.5	10.75	1020T-17-7	556
	1.375	3	11.75	1020T-17-13	592
	1.875	3.5	12.75	1020T-17-17	628
2.375	1.375	3	12.25	1020T-23-13	620
	1.875	3.5	13.25	1020T-23-17	656
	2.375	3.5	13.75	1020T-23-23	684
2.875	1.375	3	12.75	1020T-27-13	648
	1.875	3.5	13.75	1020T-27-17	684
	2.375	3.5	14.25	1020T-27-23	712
3.375	1.875	3.5	14.25	1020T-33-17	712
	2.375	4	15.25	1020T-33-23	748
	2.875	4	15.75	1020T-33-27	776
3.875	1.875	3.5	14.75	1020T-37-17	740
	2.375	4	15.75	1020T-37-23	776
	2.875	4	16.25	1020T-37-27	804
4.875	2.375	4	16.75	1020T-47-23	832
	2.875	4	17.25	1020T-47-27	860
	3.375	4.5	18.25	1020T-47-33	896

NO. 1 OR NO. 2 STEEL ASSEMBLIES

All plates above ejector housing are No. 1 or No. 2 Steel, respectively.

NO. 3 STEEL ASSEMBLIES

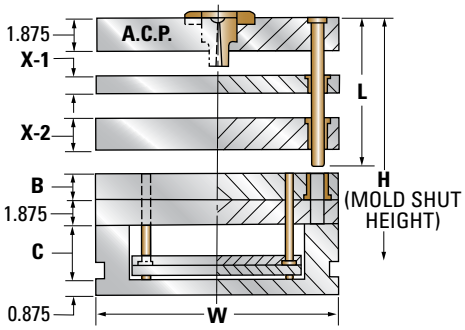
"X-1", "X-2" and "B" Plates are No. 3 Steel.

"A" -Clamping and Support Plates are No. 2 Steel.

NO. 7 STEEL ASSEMBLIES

Any or all plates available as requested.

NOTE: For 3-Plate Extension Bushings, see page 195.



For detailed dimensions, see corresponding size "A" Series Mold Bases.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3, or No. 7 Steel
3. Locating Ring Item Number
4. E, O and R Dimensions
5. L Dimension (Leader Pin Length)
6. Method of Shipment

10⅞" T-Series Mold Bases

NO. 1 OR NO. 2 STEEL ASSEMBLIES

All plates above ejector housing are No. 1 or No. 2 Steel, respectively.

NO. 3 STEEL ASSEMBLIES

"X-1", "X-2" and "B" Plates are No. 3 Steel.

"A"- Clamping and Support Plates are No. 2 Steel.

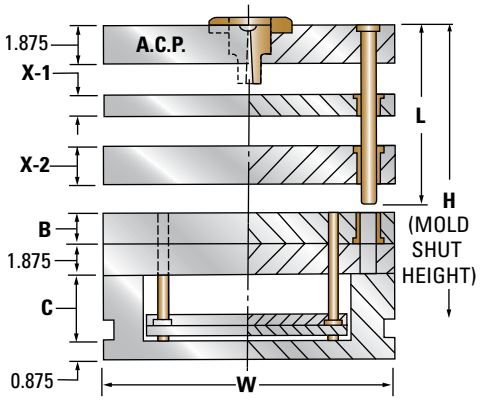
NO. 7 STEEL ASSEMBLIES

Any or all plates available as requested.

NOTE: For 3-Plate Extension Bushings, see page 195.

X-1 = 0.875				10.875 × 12"	
X-2	B	C	H	ITEM NUMBER	NET WT.
1.875	0.875	2.5	10.75	1112T-17-7	368
	1.375	3	11.75	1112T-17-13	393
	1.875	3.5	12.75	1112T-17-17	417
2.375	1.375	3	12.25	1112T-23-13	411
	1.875	3.5	13.25	1112T-23-17	435
	2.375	3.5	13.75	1112T-23-23	454
2.875	1.375	3	12.75	1112T-27-13	430
	1.875	3.5	13.75	1112T-27-17	454
	2.375	3.5	14.25	1112T-27-23	472
3.375	1.875	3.5	14.25	1112T-33-17	472
	2.375	4	15.25	1112T-33-23	497
	2.875	4	15.75	1112T-33-27	515
3.875	1.875	3.5	14.75	1112T-37-17	491
	2.375	4	15.75	1112T-37-23	515
	2.875	4	16.25	1112T-37-27	534
4.875	2.375	4	16.75	1112T-47-23	552
	2.875	4	17.25	1112T-47-27	570
	3.375	4.5	18.25	1112T-47-33	595
5.875	2.875	4	18.25	1112T-57-27	607
	3.875	4.5	19.75	1112T-57-37	650
	4.875	4.5	20.75	1112T-57-47	687

X-1 = 0.875				10.875 × 18"	
X-2	B	C	H	ITEM NUMBER	NET WT.
1.875	0.875	2.5	10.75	1118T-17-7	552
	1.375	3	11.75	1118T-17-13	589
	1.875	3.5	12.75	1118T-17-17	625
2.375	1.375	3	12.25	1118T-23-13	616
	1.875	3.5	13.25	1118T-23-17	653
	2.375	3.5	13.75	1118T-23-23	680
2.875	1.375	3	12.75	1118T-27-13	644
	1.875	3.5	13.75	1118T-27-17	680
	2.375	3.5	14.25	1118T-27-23	708
3.375	1.875	3.5	14.25	1118T-33-17	708
	2.375	4	15.25	1118T-33-23	745
	2.875	4	15.75	1118T-33-27	772
3.875	1.875	3.5	14.75	1118T-37-17	736
	2.375	4	15.75	1118T-37-23	772
	2.875	4	16.25	1118T-37-27	800
4.875	2.375	4	16.75	1118T-47-23	828
	2.875	4	17.25	1118T-47-27	855
	3.375	4.5	18.25	1118T-47-33	892
5.875	2.875	4	18.25	1118T-57-27	911
	3.875	4.5	19.75	1118T-57-37	975
	4.875	4.5	20.75	1118T-57-47	1030



For detailed dimensions, see corresponding size "A" Series Mold Bases.

X-1 = 0.875				10.875 × 14"	
X-2	B	C	H	ITEM NUMBER	NET WT.
1.875	0.875	2.5	10.75	1114T-17-7	430
	1.375	3	11.75	1114T-17-13	458
	1.875	3.5	12.75	1114T-17-17	486
2.375	1.375	3	12.25	1114T-23-13	480
	1.875	3.5	13.25	1114T-23-17	508
	2.375	3.5	13.75	1114T-23-23	529
2.875	1.375	3	12.75	1114T-27-13	501
	1.875	3.5	13.75	1114T-27-17	529
	2.375	3.5	14.25	1114T-27-23	551
3.375	1.875	3.5	14.25	1114T-33-17	551
	2.375	4	15.25	1114T-33-23	579
	2.875	4	15.75	1114T-33-27	601
3.875	1.875	3.5	14.75	1114T-37-17	573
	2.375	4	15.75	1114T-37-23	601
	2.875	4	16.25	1114T-37-27	622
4.875	2.375	4	16.75	1114T-47-23	644
	2.875	4	17.25	1114T-47-27	665
	3.375	4.5	18.25	1114T-47-33	694
5.875	2.875	4	18.25	1114T-57-27	709
	3.875	4.5	19.75	1114T-57-37	758
	4.875	4.5	20.75	1114T-57-47	802

X-1 = 1.375				10.875 × 23.5"	
X-2	B	C	H	ITEM NUMBER	NET WT.
1.875	1.375	3	12.25	1123T-17-13	805
	1.875	3.5	13.25	1123T-17-17	852
	2.375	3.5	13.75	1123T-17-23	888
2.375	1.375	3	12.75	1123T-23-13	841
	1.875	3.5	13.75	1123T-23-17	888
	2.375	3.5	14.25	1123T-23-23	924
2.875	1.375	3	13.25	1123T-27-13	877
	1.875	3.5	14.25	1123T-27-17	924
	2.375	3.5	14.75	1123T-27-23	961
3.375	1.875	3.5	14.75	1123T-33-17	961
	2.375	4	15.75	1123T-33-23	1008
	2.875	4	16.25	1123T-33-27	1044
3.875	1.875	3.5	15.25	1123T-37-17	997
	2.375	4	16.25	1123T-37-23	1044
	2.875	4	16.75	1123T-37-27	1080
4.875	2.375	4	17.25	1123T-47-23	1117
	2.875	4	17.75	1123T-47-27	1153
	3.375	4.5	18.75	1123T-47-33	1200
5.875	2.875	4	18.75	1123T-57-27	1225
	3.875	4.5	20.25	1123T-57-37	1309
	4.875	4.5	21.25	1123T-57-47	1381

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel
3. Locating Ring Item Number
4. E, O and R Dimensions
5. L Dimension (Leader Pin Length)
6. Method of Shipment

11⅞" T-Series Mold Bases

X-1 = 0.875				11.875 × 12″	
X-2	B	C	H	ITEM NUMBER	NET WT.
	0.875	3	11.25	1212T-17-7	411
1.875	1.375	3	11.75	1212T-17-13	431
	1.875	3	12.25	1212T-17-17	451
	1.375	3.5	12.75	1212T-23-13	457
2.375	1.875	3.5	13.25	1212T-23-17	477
	2.375	3.5	13.75	1212T-23-23	497
	1.375	3.5	13.25	1212T-27-13	477
2.875	1.875	3.5	13.75	1212T-27-17	497
	2.375	3.5	14.25	1212T-27-23	518
	1.875	3.5	14.25	1212T-33-17	518
3.375	2.375	4	15.25	1212T-33-23	543
	2.875	4	15.75	1212T-33-27	564
	1.875	4	15.25	1212T-37-17	543
3.875	2.375	4.5	16.25	1212T-37-23	569
	2.875	4.5	16.75	1212T-37-27	590
	2.375	4.5	17.25	1212T-47-23	610
4.875	2.875	4.5	17.75	1212T-47-27	630
	3.375	4.5	18.25	1212T-47-33	650
	2.875	4.5	18.75	1212T-57-27	670
5.875	3.875	4.5	19.75	1212T-57-37	711
	4.875	4.5	20.75	1212T-57-47	751

X-1 = 0.875				11.875 × 20″	
X-2	B	C	H	ITEM NUMBER	NET WT.
	0.875	3	11.25	1220T-17-7	684
1.875	1.375	3	11.75	1220T-17-13	718
	1.875	3	12.25	1220T-17-17	752
	1.375	3.5	12.75	1220T-23-13	761
2.375	1.875	3.5	13.25	1220T-23-17	795
	2.375	3.5	13.75	1220T-23-23	828
	1.375	3.5	13.25	1220T-27-13	795
2.875	1.875	3.5	13.75	1220T-27-17	828
	2.375	3.5	14.25	1220T-27-23	862
	1.875	3.5	14.25	1220T-33-17	862
3.375	2.375	4	15.25	1220T-33-23	905
	2.875	4	15.75	1220T-33-27	939
	1.875	4	15.25	1220T-37-17	905
3.875	2.375	4.5	16.25	1220T-37-23	949
	2.875	4.5	16.75	1220T-37-27	982
	2.375	4.5	17.25	1220T-47-23	1016
4.875	2.875	4.5	17.75	1220T-47-27	1049
	3.375	4.5	18.25	1220T-47-33	1083
	2.875	4.5	18.75	1220T-57-27	1117
5.875	3.875	4.5	19.75	1220T-57-37	1184
	4.875	4.5	20.75	1220T-57-47	1251

NO. 1 OR NO. 2 STEEL ASSEMBLIES

All plates above ejector housing are No. 1 or No. 2 Steel, respectively.

NO. 3 STEEL ASSEMBLIES

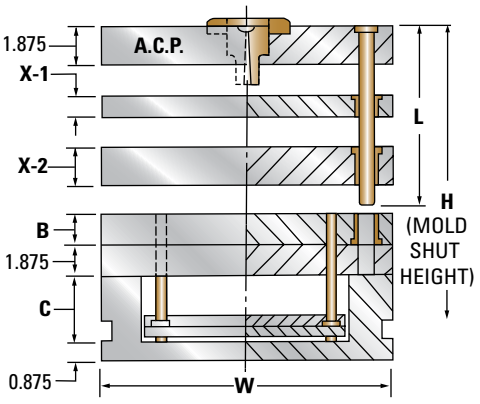
"X-1", "X-2" and "B" Plates are No. 3 Steel.

"A"-Clamping and Support Plates are No. 2 Steel.

NO. 7 STEEL ASSEMBLIES

Any or all plates available as requested.

NOTE: For 3-Plate Extension Bushings, see page 195.



For detailed dimensions, see corresponding size "A" Series Mold Bases.

X-1 = 0.875				11.875 × 15″	
X-2	B	C	H	ITEM NUMBER	NET WT.
	0.875	3	11.25	1215T-17-7	513
1.875	1.375	3	11.75	1215T-17-13	539
	1.875	3	12.25	1215T-17-17	564
	1.375	3.5	12.75	1215T-23-13	571
2.375	1.875	3.5	13.25	1215T-23-17	596
	2.375	3.5	13.75	1215T-23-23	621
	1.375	3.5	13.25	1215T-27-13	596
2.875	1.875	3.5	13.75	1215T-27-17	621
	2.375	3.5	14.25	1215T-27-23	647
	1.875	3.5	14.25	1215T-33-17	647
3.375	2.375	4	15.25	1215T-33-23	679
	2.875	4	15.75	1215T-33-27	704
	1.875	4	15.25	1215T-37-17	679
3.875	2.375	4.5	16.25	1215T-37-23	711
	2.875	4.5	16.75	1215T-37-27	737
	2.375	4.5	17.25	1215T-47-23	762
4.875	2.875	4.5	17.75	1215T-47-27	787
	3.375	4.5	18.25	1215T-47-33	812
	2.875	4.5	18.75	1215T-57-27	839
5.875	3.875	4.5	19.75	1215T-57-37	888
	4.875	4.5	20.75	1215T-57-47	939

X-1 = 1.375				11.875 × 23.5″	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	12.25	1223T-17-13	883
1.875	1.875	3	12.75	1223T-17-17	923
	2.375	3.5	13.75	1223T-17-23	973
	1.375	3.5	13.25	1223T-23-13	934
2.375	1.875	3.5	13.75	1223T-23-17	973
	2.375	3.5	14.25	1223T-23-23	1013
	1.375	3.5	13.75	1223T-27-13	973
2.875	1.875	3.5	14.25	1223T-27-17	1013
	2.375	3.5	14.75	1223T-27-23	1052
	1.875	3.5	14.75	1223T-33-17	1052
3.375	2.375	4	15.75	1223T-33-23	1103
	2.875	4	16.25	1223T-33-27	1143
	1.875	4	15.75	1223T-37-17	1103
3.875	2.375	4.5	16.75	1223T-37-23	1154
	2.875	4.5	17.25	1223T-37-27	1193
	2.375	4.5	17.75	1223T-47-23	1233
4.875	2.875	4.5	18.25	1223T-47-27	1272
	3.375	4.5	18.75	1223T-47-33	1312
	2.875	4.5	19.25	1223T-57-27	1352
5.875	3.875	4.5	20.25	1223T-57-37	1431
	4.875	4.5	21.25	1223T-57-47	1510

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel
3. Locating Ring Item Number
4. E, O and R Dimensions
5. L Dimension (Leader Pin Length)
6. Method of Shipment

13 3/8" T-Series Mold Bases

NO. 1 OR NO. 2 STEEL ASSEMBLIES

All plates above ejector housing are No. 1 or No. 2 Steel, respectively.

NO. 3 STEEL ASSEMBLIES

"X-1", "X-2", and "B" Plates are No. 3 Steel.
"A" -Clamping and Support Plates are No. 2 Steel.

NO. 7 STEEL ASSEMBLIES

Any or all plates available as requested.

X-1 = 0.875				13.375 × 15"	
X-2	B	C	H	ITEM NUMBER	NET WT.
	0.875	3	11.25	1315T-17-7	584
1.875	1.375	3	11.75	1315T-17-13	612
	1.875	3	12.25	1315T-17-17	640
	1.375	3.5	12.75	1315T-23-13	648
2.375	1.875	3.5	13.25	1315T-23-17	677
	2.375	3.5	13.75	1315T-23-23	705
	1.375	3.5	13.25	1315T-27-13	677
2.875	1.875	3.5	13.75	1315T-27-17	705
	2.375	3.5	14.25	1315T-27-23	734
	1.875	3.5	14.25	1315T-33-17	734
3.375	2.375	4	15.25	1315T-33-23	770
	2.875	4	15.75	1315T-33-27	798
	1.875	4	15.25	1315T-37-17	770
3.875	2.375	4.5	16.25	1315T-37-23	806
	2.875	4.5	16.75	1315T-37-27	835
	2.375	4.5	17.25	1315T-47-23	863
4.875	2.875	4.5	17.75	1315T-47-27	892
	3.375	4.5	18.25	1315T-47-33	920
	2.875	4.5	18.75	1315T-57-27	949
5.875	3.875	4.5	19.75	1315T-57-37	1005
	4.875	4.5	20.75	1315T-57-47	1062

X-1 = 0.875				13.375 × 20.75"	
X-2	B	C	H	ITEM NUMBER	NET WT.
	0.875	3	11.25	1321T-17-7	807
1.875	1.375	3	11.75	1321T-17-13	846
	1.875	3	12.25	1321T-17-17	886
	1.375	3.5	12.75	1321T-23-13	897
2.375	1.875	3.5	13.25	1321T-23-17	936
	2.375	3.5	13.75	1321T-23-23	975
	1.375	3.5	13.25	1321T-27-13	936
2.875	1.875	3.5	13.75	1321T-27-17	975
	2.375	3.5	14.25	1321T-27-23	1015
	1.875	3.5	14.25	1321T-33-17	1015
3.375	2.375	4	15.25	1321T-33-23	1065
	2.875	4	15.75	1321T-33-27	1104
	1.875	4	15.25	1321T-37-17	1065
3.875	2.375	4.5	16.25	1321T-37-23	1115
	2.875	4.5	16.75	1321T-37-27	1155
	2.375	4.5	17.25	1321T-47-23	1194
4.875	2.875	4.5	17.75	1321T-47-27	1233
	3.375	4.5	18.25	1321T-47-33	1272
	2.875	4.5	18.75	1321T-57-27	1312
5.875	3.875	4.5	19.75	1321T-57-37	1390
	4.875	4.5	20.75	1321T-57-47	1469

X-1 = 1.375				13.375 × 26"	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	12.25	1326T-17-13	1110
1.875	1.875	3	12.75	1326T-17-17	1159
	2.375	3.5	13.75	1326T-17-23	1222
	1.375	3.5	13.25	1326T-23-13	1173
2.375	1.875	3.5	13.75	1326T-23-17	1222
	2.375	3.5	14.25	1326T-23-23	1271
	1.375	3.5	13.75	1326T-27-13	1222
2.875	1.875	3.5	14.25	1326T-27-17	1271
	2.375	3.5	14.75	1326T-27-23	1320
	1.875	3.5	14.75	1326T-33-17	1320
3.375	2.375	4	15.75	1326T-33-23	1384
	2.875	4	16.25	1326T-33-27	1433
	1.875	4	15.75	1326T-37-17	1384
3.875	2.375	4.5	16.75	1326T-37-23	1447
	2.875	4.5	17.25	1326T-37-27	1496
	2.375	4.5	17.75	1326T-47-23	1545
4.875	2.875	4.5	18.25	1326T-47-27	1594
	3.375	4.5	18.75	1326T-47-33	1644
	2.875	4.5	19.25	1326T-57-27	1693
5.875	3.875	4.5	20.25	1326T-57-37	1791
	4.875	4.5	21.25	1326T-57-47	1890

X-1 = 0.875				13.375 × 18"	
X-2	B	C	H	ITEM NUMBER	NET WT.
	0.875	3	11.25	1318T-17-7	700
1.875	1.375	3	11.75	1318T-17-13	734
	1.875	3	12.25	1318T-17-17	768
	1.375	3.5	12.75	1318T-23-13	778
2.375	1.875	3.5	13.25	1318T-23-17	812
	2.375	3.5	13.75	1318T-23-23	846
	1.375	3.5	13.25	1318T-27-13	812
2.875	1.875	3.5	13.75	1318T-27-17	846
	2.375	3.5	14.25	1318T-27-23	880
	1.875	3.5	14.25	1318T-33-17	880
3.375	2.375	4	15.25	1318T-33-23	924
	2.875	4	15.75	1318T-33-27	958
	1.875	4	15.25	1318T-37-17	924
3.875	2.375	4.5	16.25	1318T-37-23	968
	2.875	4.5	16.75	1318T-37-27	1002
	2.375	4.5	17.25	1318T-47-23	1036
4.875	2.875	4.5	17.75	1318T-47-27	1070
	3.375	4.5	18.25	1318T-47-33	1104
	2.875	4.5	18.75	1318T-57-27	1138
5.875	3.875	4.5	19.75	1318T-57-37	1206
	4.875	4.5	20.75	1318T-57-47	1274

X-1 = 1.375				13.375 × 23.5	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	12.25	1323T-17-13	1003
1.875	1.875	3	12.75	1323T-17-17	1047
	2.375	3.5	13.75	1323T-17-23	1104
	1.375	3.5	13.25	1323T-23-13	1060
2.375	1.875	3.5	13.75	1323T-23-17	1104
	2.375	3.5	14.25	1323T-23-23	1149
	1.375	3.5	13.75	1323T-27-13	1104
2.875	1.875	3.5	14.25	1323T-27-17	1149
	2.375	3.5	14.75	1323T-27-23	1194
	1.875	3.5	14.75	1323T-33-17	1194
3.375	2.375	4	15.75	1323T-33-23	1251
	2.875	4	16.25	1323T-33-27	1295
	1.875	4	15.75	1323T-37-17	1251
3.875	2.375	4.5	16.75	1323T-37-23	1308
	2.875	4.5	17.25	1323T-37-27	1352
	2.375	4.5	17.75	1323T-47-23	1397
4.875	2.875	4.5	18.25	1323T-47-27	1441
	3.375	4.5	18.75	1323T-47-33	1486
	2.875	4.5	19.25	1323T-57-27	1530
5.875	3.875	4.5	20.25	1323T-57-37	1619
	4.875	4.5	21.25	1323T-57-47	1708

X-1 = 1.375				13.375 × 29.5	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	12.25	1329T-17-13	1259
1.875	1.875	3	12.75	1329T-17-17	1315
	2.375	3.5	13.75	1329T-17-23	1386
	1.375	3.5	13.25	1329T-23-13	1330
2.375	1.875	3.5	13.75	1329T-23-17	1386
	2.375	3.5	14.25	1329T-23-23	1442
	1.375	3.5	13.75	1329T-27-13	1386
2.875	1.875	3.5	14.25	1329T-27-17	1442
	2.375	3.5	14.75	1329T-27-23	1498
	1.875	3.5	14.75	1329T-33-17	1498
3.375	2.375	4	15.75	1329T-33-23	1570
	2.875	4	16.25	1329T-33-27	1626
	1.875	4	15.75	1329T-37-17	1570
3.875	2.375	4.5	16.75	1329T-37-23	1641
	2.875	4.5	17.25	1329T-37-27	1697
	2.375	4.5	17.75	1329T-47-23	1753
4.875	2.875	4.5	18.25	1329T-47-27	1809
	3.375	4.5	18.75	1329T-47-33	1865
	2.875	4.5	19.25	1329T-57-27	1921
5.875	3.875	4.5	20.25	1329T-57-37	2032
	4.875	4.5	21.25	1329T-57-47	2145

For detailed dimensions, see corresponding size "A" Series Mold Bases.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3, or No. 7 Steel
3. Locating Ring Item Number
4. E, O and R Dimension
5. L Dimension (Leader Pin Length)
6. Method of Shipment

NOTE: For 3-Plate Extension Bushings, see page 195.

14⅞" T-Series Mold Bases

NO. 1 OR NO. 2 STEEL ASSEMBLIES

All plates above ejector housing are No. 1 or No. 2 Steel, respectively.

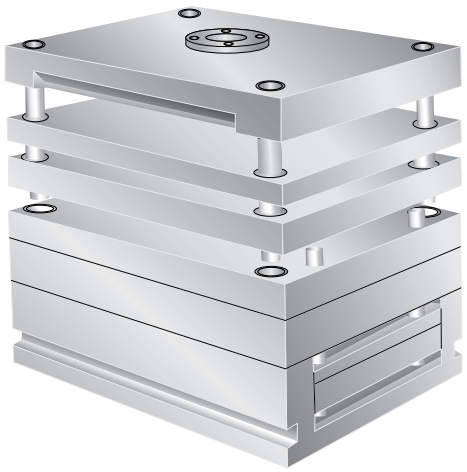
NO. 3 STEEL ASSEMBLIES

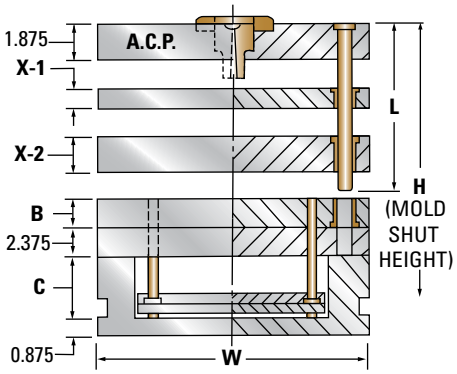
"X-1", "X-2" and "B" Plates are No. 3 Steel.

"A" -Clamping and Support Plates are No. 2 Steel.

NO. 7 STEEL ASSEMBLIES

Any or all plates available as requested.





For detailed dimensions, see corresponding size "A" Series Mold Bases.

X-1 = 0.875				14.875 × 17.875	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	12.25	1518T-17-13	847
1.875	1.875	3.5	13.25	1518T-17-17	894
	2.375	3.5	13.75	1518T-17-23	931
	1.375	3.5	13.25	1518T-23-13	894
2.375	1.875	3.5	13.75	1518T-23-17	931
	2.375	3.5	14.25	1518T-23-23	969
	1.375	3.5	13.75	1518T-27-13	931
2.875	1.875	3.5	14.25	1518T-27-17	969
	2.375	3.5	14.75	1518T-27-23	1007
	1.875	4	15.25	1518T-33-17	1016
3.375	2.375	4	15.75	1518T-33-23	1054
	2.875	4.5	16.75	1518T-33-27	1101
	1.875	4	15.75	1518T-37-17	1054
3.875	2.375	4.5	16.75	1518T-37-23	1101
	2.875	4.5	17.25	1518T-37-27	1139
	2.375	4.5	17.75	1518T-47-23	1176
4.875	2.875	4.5	18.25	1518T-47-27	1214
	3.375	4.5	18.75	1518T-47-33	1252
	2.875	4.5	19.25	1518T-57-27	1289
5.875	3.875	4.5	20.25	1518T-57-37	1365
	4.875	4.5	21.25	1518T-57-47	1440

X-1 = 1.375				14.875 × 23.75	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	12.75	1524T-17-13	1175
1.875	1.875	3.5	13.75	1524T-17-17	1237
	2.375	3.5	14.25	1524T-17-23	1287
	1.375	3.5	13.75	1524T-23-13	1237
2.375	1.875	3.5	14.25	1524T-23-17	1287
	2.375	3.5	14.75	1524T-23-23	1337
	1.375	3.5	14.25	1524T-27-13	1287
2.875	1.875	3.5	14.75	1524T-27-17	1337
	2.375	3.5	15.25	1524T-27-23	1387
	1.875	4	15.75	1524T-33-17	1400
3.375	2.375	4	16.25	1524T-33-23	1450
	2.875	4.5	17.25	1524T-33-27	1513
	1.875	4	16.25	1524T-37-17	1450
3.875	2.375	4.5	17.25	1524T-37-23	1513
	2.875	4.5	17.75	1524T-37-27	1563
	2.375	4.5	18.25	1524T-47-23	1613
4.875	2.875	4.5	18.75	1524T-47-27	1663
	3.375	4.5	19.25	1524T-47-33	1713
	2.875	4.5	19.75	1524T-57-27	1763
5.875	3.875	4.5	20.75	1524T-57-37	1863
	4.875	4.5	21.75	1524T-57-47	1963

X-1 = 1.375				14.875 × 29.5	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	12.75	1529T-17-13	1459
1.875	1.875	3.5	13.75	1529T-17-17	1537
	2.375	3.5	14.25	1529T-17-23	1599
	1.375	3.5	13.75	1529T-23-13	1537
2.375	1.875	3.5	14.25	1529T-23-17	1599
	2.375	3.5	14.75	1529T-23-23	1661
	1.375	3.5	14.25	1529T-27-13	1599
2.875	1.875	3.5	14.75	1529T-27-17	1661
	2.375	3.5	15.25	1529T-27-23	1723
	1.875	4	15.75	1529T-33-17	1739
3.375	2.375	4	16.25	1529T-33-23	1801
	2.875	4.5	17.25	1529T-33-27	1879
	1.875	4	16.25	1529T-37-17	1801
3.875	2.375	4.5	17.25	1529T-37-23	1879
	2.875	4.5	17.75	1529T-37-27	1941
	2.375	4.5	18.25	1529T-47-23	2003
4.875	2.875	4.5	18.75	1529T-47-27	2065
	3.375	4.5	19.25	1529T-47-33	2128
	2.875	4.5	19.75	1529T-57-27	2190
5.875	3.875	4.5	20.75	1529T-57-37	2314
	4.875	4.5	21.75	1529T-57-47	2438

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3, or No. 7 Steel
3. Locating Ring Item Number
4. E, O and R Dimensions
5. L Dimension (Leader Pin Length)
6. Method of Shipment

NOTE: For 3-Plate Extension Bushings, see page 195.

15⅞" T-Series Mold Bases

NO. 1 OR NO. 2 STEEL ASSEMBLIES

All plates above ejector housing are No. 1 or No. 2 Steel, respectively.

NO. 3 STEEL ASSEMBLIES

"X-1", "X-2", and "B" Plates are No. 3 Steel.
"A" -Clamping and Support Plates are No. 2 Steel.

NO. 7 STEEL ASSEMBLIES

Any or all plates available as requested.

X-1 = 0.875				15.875 × 16"	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	12.25	1616T-17-13	808
1.875	1.875	3.5	13.25	1616T-17-17	852
	2.375	3.5	13.75	1616T-17-23	888
	1.375	3.5	13.25	1616T-23-13	852
2.375	1.875	3.5	13.75	1616T-23-17	888
	2.375	3.5	14.25	1616T-23-23	924
	1.375	3.5	13.75	1616T-27-13	888
2.875	1.875	3.5	14.25	1616T-27-17	924
	2.375	3.5	14.75	1616T-27-23	960
	1.875	4	15.25	1616T-33-17	969
3.375	2.375	4	15.75	1616T-33-23	1005
	2.875	4.5	16.75	1616T-33-27	1049
	1.875	4	15.75	1616T-37-17	1005
3.875	2.375	4.5	16.75	1616T-37-23	1049
	2.875	4.5	17.25	1616T-37-27	1085
	2.375	4.5	17.75	1616T-47-23	1121
4.875	2.875	4.5	18.25	1616T-47-27	1157
	3.375	4.5	18.75	1616T-47-33	1193
	2.875	4.5	19.25	1616T-57- 27	1229
5.875	3.875	4.5	20.25	1616T-57-37	1301
	4.875	4.5	21.25	1616T-57-47	1373

X-1 = 1.375				15.875 × 23.5	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	12.75	1623T-17-13	1239
1.875	1.875	3.5	13.75	1623T-17-17	1304
	2.375	3.5	14.25	1623T-17-23	1357
	1.375	3.5	13.75	1623T-23-13	1304
2.375	1.875	3.5	14.25	1623T-23-17	1357
	2.375	3.5	14.75	1623T-23-23	1410
	1.375	3.5	14.25	1623T-27-13	1357
2.875	1.875	3.5	14.75	1623T-27-17	1410
	2.375	3.5	15.25	1623T-27-23	1463
	1.875	4	15.75	1623T-33-17	1475
3.375	2.375	4	16.25	1623T-33-23	1528
	2.875	4.5	17.25	1623T-33-27	1593
	1.875	4	16.25	1623T-37-17	1528
3.875	2.375	4.5	17.25	1623T-37-23	1593
	2.875	4.5	17.75	1623T-37-27	1646
	2.375	4.5	18.25	1623T-47-23	1699
4.875	2.875	4.5	18.75	1623T-47-27	1752
	3.375	4.5	19.25	1623T-47-33	1805
	2.875	4.5	19.75	1623T-57-27	1858
5.875	3.875	4.5	20.75	1623T-57-37	1963
	4.875	4.5	21.75	1623T-57-47	2069

X-1 = 1.375				15.875 × 29.5	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	12.75	1629T-17-13	1555
1.875	1.875	3.5	13.75	1629T-17-17	1637
	2.375	3.5	14.25	1629T-17-23	1703
	1.375	3.5	13.75	1629T-23-13	1637
2.375	1.875	3.5	14.25	1629T-23-17	1703
	2.375	3.5	14.75	1629T-23-23	1770
	1.375	3.5	14.25	1629T-27-13	1703
2.875	1.875	3.5	14.75	1629T-27-17	1770
	2.375	3.5	15.25	1629T-27-23	1836
	1.875	4	15.75	1629T-33-17	1852
3.375	2.375	4	16.25	1629T-33-23	1918
	2.875	4.5	17.25	1629T-33-27	2000
	1.875	4	16.25	1629T-37-17	1918
3.875	2.375	4.5	17.25	1629T-37-23	2000
	2.875	4.5	17.75	1629T-37-27	2066
	2.375	4.5	18.25	1629T-47-23	2133
4.875	2.875	4.5	18.75	1629T-47-27	2199
	3.375	4.5	19.25	1629T-47-33	2266
	2.875	4.5	19.75	1629T-57-27	2332
5.875	3.875	4.5	20.75	1629T-57-37	2465
	4.875	4.5	21.75	1629T-57-47	2597

X-1 = 0.875				15.875 × 20"	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	12.25	1620T-17-13	1009
1.875	1.875	3.5	13.25	1620T-17-17	1065
	2.375	3.5	13.75	1620T-17-23	1110
	1.375	3.5	13.25	1620T-23-13	1065
2.375	1.875	3.5	13.75	1620T-23-17	1110
	2.375	3.5	14.25	1620T-23-23	1155
	1.375	3.5	13.75	1620T-27-13	1110
2.875	1.875	3.5	14.25	1620T-27-17	1155
	2.375	3.5	14.75	1620T-27-23	1200
	1.875	4	15.25	1620T-33-17	1211
3.375	2.375	4	15.75	1620T-33-23	1256
	2.875	4.5	16.75	1620T-33-27	1311
	1.875	4	15.75	1620T-37-17	1256
3.875	2.375	4.5	16.75	1620T-37-23	1311
	2.875	4.5	17.25	1620T-37-27	1356
	2.375	4.5	17.75	1620T-47-23	1401
4.875	2.875	4.5	18.25	1620T-47-27	1446
	3.375	4.5	18.75	1620T-47-33	1491
	2.875	4.5	19.25	1620T-57-27	1536
5.875	3.875	4.5	20.25	1620T-57-37	1626
	4.875	4.5	21.25	1620T-57-47	1716

X-1 = 1.375				15.875 × 26"	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	12.75	1626T-17-13	1371
1.875	1.875	3.5	13.75	1626T-17-17	1443
	2.375	3.5	14.25	1626T-17-23	1501
	1.375	3.5	13.75	1626T-23-13	1443
2.375	1.875	3.5	14.25	1626T-23-17	1501
	2.375	3.5	14.75	1626T-23-23	1560
	1.375	3.5	14.25	1626T-27-13	1501
2.875	1.875	3.5	14.75	1626T-27-17	1560
	2.375	3.5	15.25	1626T-27-23	1618
	1.875	4	15.75	1626T-33-17	1632
3.375	2.375	4	16.25	1626T-33-23	1691
	2.875	4.5	17.25	1626T-33-27	1763
	1.875	4	16.25	1626T-37-17	1691
3.875	2.375	4.5	17.25	1626T-37-23	1763
	2.875	4.5	17.75	1626T-37-27	1821
	2.375	4.5	18.25	1626T-47-23	1880
4.875	2.875	4.5	18.75	1626T-47-27	1938
	3.375	4.5	19.25	1626T-47-33	1997
	2.875	4.5	19.75	1626T-57-27	2055
5.875	3.875	4.5	20.75	1626T-57-37	2172
	4.875	4.5	21.75	1626T-57-47	2289

X-1 = 1.375				15.875 × 35.5	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	12.75	1635T-17-13	1871
1.875	1.875	3.5	13.75	1635T-17-17	1970
	2.375	3.5	14.25	1635T-17-23	2050
	1.375	3.5	13.75	1635T-23-13	1970
2.375	1.875	3.5	14.25	1635T-23-17	2050
	2.375	3.5	14.75	1635T-23-23	2130
	1.375	3.5	14.25	1635T-27-13	2050
2.875	1.875	3.5	14.75	1635T-27-17	2130
	2.375	3.5	15.25	1635T-27-23	2209
	1.875	4	15.75	1635T-33-17	2228
3.375	2.375	4	16.25	1635T-33-23	2308
	2.875	4.5	17.25	1635T-33-27	2407
	1.875	4	16.25	1635T-37-17	2308
3.875	2.375	4.5	17.25	1635T-37-23	2407
	2.875	4.5	17.75	1635T-37-27	2487
	2.375	4.5	18.25	1635T-47-23	2566
4.875	2.875	4.5	18.75	1635T-47-27	2646
	3.375	4.5	19.25	1635T-47-33	2726
	2.875	4.5	19.75	1635T-57-27	2806
5.875	3.875	4.5	20.75	1635T-57-37	2966
	4.875	4.5	21.75	1635T-57-47	3125

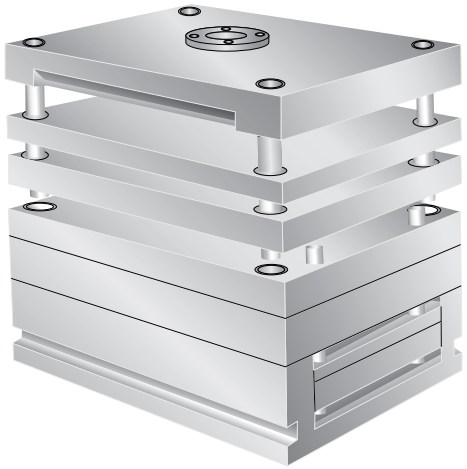
For detailed dimensions, see corresponding size "A" Series Mold Bases.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3, or No. 7 Steel
3. Locating Ring Item Number
4. E, O and R Dimensions
5. L Dimension (Leader Pin Length)
6. Method of Shipment

NOTE: For 3-Plate Extension Bushings, see page 195.

16½" T-Series Mold Bases



NO. 1 OR NO. 2 STEEL ASSEMBLIES

All plates above ejector housing are No. 1 or No. 2 Steel, respectively.

NO. 3 STEEL ASSEMBLIES

"X-1", "X-2" and "B" Plates are No. 3 Steel.

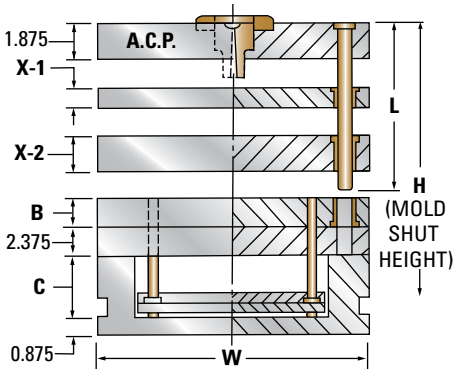
"A" -Clamping and Support Plates are No. 2 Steel.

NO. 7 STEEL ASSEMBLIES

Any or all plates available as requested.

X-1 = 1.375				16.5 × 23.75	
X-2	B	C	H	ITEM NUMBER	NET WT.
1.875	1.375	3	12.75	1724T-17-13	1300
	1.875	3.5	13.75	1724T-17-17	1369
	2.375	3.5	14.25	1724T-17-23	1424
2.375	1.375	3.5	13.75	1724T-23-13	1369
	1.875	3.5	14.25	1724T-23-17	1424
	2.375	3.5	14.75	1724T-23-23	1480
2.875	1.375	3.5	14.25	1724T-27-13	1424
	1.875	3.5	14.75	1724T-27-17	1480
	2.375	3.5	15.25	1724T-27-23	1535
3.375	1.875	4	15.75	1724T-33-17	1548
	2.375	4	16.25	1724T-33-23	1603
	2.875	4.5	17.25	1724T-33-27	1671
3.875	1.875	4	16.25	1724T-37-17	1603
	2.375	4.5	17.25	1724T-37-23	1671
	2.875	4.5	17.75	1724T-37-27	1727
4.875	2.375	4.5	18.25	1724T-47-23	1782
	2.875	4.5	18.75	1724T-47-27	1838
	3.375	4.5	19.25	1724T-47-33	1893
5.875	2.875	4.5	19.75	1724T-57-27	1949
	3.875	4.5	20.75	1724T-57-37	2060
	4.875	4.5	21.75	1724T-57-47	2171

X-1 = 1.375				16.5 × 29.5	
X-2	B	C	H	ITEM NUMBER	NET WT.
1.875	1.375	3	12.75	1729T-17-13	1615
	1.875	3.5	13.75	1729T-17-17	1700
	2.375	3.5	14.25	1729T-17-23	1769
2.375	1.375	3.5	13.75	1729T-23-13	1700
	1.875	3.5	14.25	1729T-23-17	1769
	2.375	3.5	14.75	1729T-23-23	1838
2.875	1.375	3.5	14.25	1729T-27-13	1769
	1.875	3.5	14.75	1729T-27-17	1838
	2.375	3.5	15.25	1729T-27-23	1907
3.375	1.875	4	15.75	1729T-33-17	1922
	2.375	4	16.25	1729T-33-23	1991
	2.875	4.5	17.25	1729T-33-27	2076
3.875	1.875	4	16.25	1729T-37-17	1991
	2.375	4.5	17.25	1729T-37-23	2076
	2.875	4.5	17.75	1729T-37-27	2145
4.875	2.375	4.5	18.25	1729T-47-23	2214
	2.875	4.5	18.75	1729T-47-27	2283
	3.375	4.5	19.25	1729T-47-33	2352
5.875	2.875	4.5	19.75	1729T-57-27	2421
	3.875	4.5	20.75	1729T-57-37	2559
	4.875	4.5	21.75	1729T-57-47	2696



For detailed dimensions, see corresponding size "A" Series Mold Bases.

NOTE: For 3-Plate Extension Bushings, see page 195.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3, or No. 7 Steel
3. Locating Ring Item Number
4. E, O and R Dimensions
5. L Dimension (Leader Pin Length)
6. Method of Shipment

17⅞" T-Series Mold Bases

NO. 1 OR NO. 2 STEEL ASSEMBLIES

All plates above ejector housing are No. 1 or No. 2 Steel, respectively.

NO. 3 STEEL ASSEMBLIES

"X-1", "X-2", and "B" Plates are No. 3 Steel.
"A" -Clamping and Support Plates are No. 2 Steel.

NO. 7 STEEL ASSEMBLIES

Any or all plates available as requested.

X-1 = 1.375				17.875 × 18"	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	12.75	1818T-17-13	1066
1.875	1.875	3	13.25	1818T-17-17	1112
	2.375	3.5	14.25	1818T-17-23	1167
	1.375	3.5	13.75	1818T-23-13	1122
2.375	1.875	3.5	14.25	1818T-23-17	1167
	2.375	3.5	14.75	1818T-23-23	1213
	1.375	3.5	14.25	1818T-27-13	1167
2.875	1.875	3.5	14.75	1818T-27-17	1213
	2.375	3.5	15.25	1818T-27-23	1258
	1.875	4	15.75	1818T-33-17	1268
3.375	2.375	4	16.25	1818T-33-23	1313
	2.875	4.5	17.25	1818T-33-27	1369
	1.875	4	16.25	1818T-37-17	1313
3.875	2.375	4.5	17.25	1818T-37-23	1369
	2.875	4.5	17.75	1818T-37-27	1414
	2.375	4.5	18.25	1818T-47-23	1460
4.875	2.875	4.5	18.75	1818T-47-27	1505
	3.375	4.5	19.25	1818T-47-33	1551
	2.875	4.5	19.75	1818T-57-27	1596
5.875	3.875	4.5	20.75	1818T-57-37	1688
	4.875	4.5	21.75	1818T-57-47	1779

X-1 = 1.375				17.875 × 23.5	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	12.75	1823T-17-13	1392
1.875	1.875	3	13.25	1823T-17-17	1452
	2.375	3.5	14.25	1823T-17-23	1524
	1.375	3.5	13.75	1823T-23-13	1464
2.375	1.875	3.5	14.25	1823T-23-17	1524
	2.375	3.5	14.75	1823T-23-23	1583
	1.375	3.5	14.25	1823T-27-13	1524
2.875	1.875	3.5	14.75	1823T-27-17	1583
	2.375	3.5	15.25	1823T-27-23	1643
	1.875	4	15.75	1823T-33-17	1655
3.375	2.375	4	16.25	1823T-33-23	1714
	2.875	4.5	17.25	1823T-33-27	1786
	1.875	4	16.25	1823T-37-17	1714
3.875	2.375	4.5	17.25	1823T-37-23	1786
	2.875	4.5	17.75	1823T-37-27	1846
	2.375	4.5	18.25	1823T-47-23	1905
4.875	2.875	4.5	18.75	1823T-47-27	1965
	3.375	4.5	19.25	1823T-47-33	2024
	2.875	4.5	19.75	1823T-57-27	2084
5.875	3.875	4.5	20.75	1823T-57-37	2203
	4.875	4.5	21.75	1823T-57-47	2322

X-1 = 1.375				17.875 × 29.5	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	12.75	1829T-17-13	1747
1.875	1.875	3	13.25	1829T-17-17	1822
	2.375	3.5	14.25	1829T-17-23	1912
	1.375	3.5	13.75	1829T-23-13	1838
2.375	1.875	3.5	14.25	1829T-23-17	1912
	2.375	3.5	14.75	1829T-23-23	1987
	1.375	3.5	14.25	1829T-27-13	1912
2.875	1.875	3.5	14.75	1829T-27-17	1987
	2.375	3.5	15.25	1829T-27-23	2062
	1.875	4	15.75	1829T-33-17	2077
3.375	2.375	4	16.25	1829T-33-23	2152
	2.875	4.5	17.25	1829T-33-27	2242
	1.875	4	16.25	1829T-37-17	2152
3.875	2.375	4.5	17.25	1829T-37-23	2242
	2.875	4.5	17.75	1829T-37-27	2317
	2.375	4.5	18.25	1829T-47-23	2392
4.875	2.875	4.5	18.75	1829T-47-27	2466
	3.375	4.5	19.25	1829T-47-33	2541
	2.875	4.5	19.75	1829T-57-27	2616
5.875	3.875	4.5	20.75	1829T-57-37	2765
	4.875	4.5	21.75	1829T-57-47	2915

X-1 = 1.375				17.875 × 20"	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	12.75	1820T-17-13	1185
1.875	1.875	3	13.25	1820T-17-17	1235
	2.375	3.5	14.25	1820T-17-23	1297
	1.375	3.5	13.75	1820T-23-13	1246
2.375	1.875	3.5	14.25	1820T-23-17	1297
	2.375	3.5	14.75	1820T-23-23	1347
	1.375	3.5	14.25	1820T-27-13	1297
2.875	1.875	3.5	14.75	1820T-27-17	1347
	2.375	3.5	15.25	1820T-27-23	1398
	1.875	4	15.75	1820T-33-17	1409
3.375	2.375	4	16.25	1820T-33-23	1459
	2.875	4.5	17.25	1820T-33-27	1521
	1.875	4	16.25	1820T-37-17	1459
3.875	2.375	4.5	17.25	1820T-37-23	1521
	2.875	4.5	17.75	1820T-37-27	1571
	2.375	4.5	18.25	1820T-47-23	1622
4.875	2.875	4.5	18.75	1820T-47 -27	1672
	3.375	4.5	19.25	1820T-47-33	1723
	2.875	4.5	19.75	1820T-57-27	1774
5.875	3.875	4.5	20.75	1820T-57-37	1875
	4.875	4.5	21.75	1820T-57-47	1976

X-1 = 1.375				17.875 × 26"	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	12.75	1826T-17-13	1540
1.875	1.875	3	13.25	1826T-17-17	1606
	2.375	3.5	14.25	1826T-17-23	1686
	1.375	3.5	13.75	1826T-23-13	1620
2.375	1.875	3.5	14.25	1826T-23-17	1686
	2.375	3.5	14.75	1826T-23-23	1751
	1.375	3.5	14.25	1826T-27-13	1686
2.875	1.875	3.5	14.75	1826T-27-17	1751
	2.375	3.5	15.25	1826T-27-23	1817
	1.875	4	15.75	1826T-33-17	1831
3.375	2.375	4	16.25	1826T-33-23	1897
	2.875	4.5	17.25	1826T-33-27	1976
	1.875	4	16.25	1826T-37-17	1897
3.875	2.375	4.5	17.25	1826T-37-23	1976
	2.875	4.5	17.75	1826T-37-27	2042
	2.375	4.5	18.25	1826T-47-23	2108
4.875	2.875	4.5	18.75	1826T-47-27	2174
	3.375	4.5	19.25	1826T-47-33	2240
	2.875	4.5	19.75	1826T-57-27	2306
5.875	3.875	4.5	20.75	1826T-57-37	2437
	4.875	4.5	21.75	1826T-57-47	2569

X-1 = 1.375				17.875 × 35.5	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	12.75	1835T-17-13	2103
1.875	1.875	3	13.25	1835T-17-17	2193
	2.375	3.5	14.25	1835T-17-23	2301
	1.375	3.5	13.75	1835T-23-13	2211
2.375	1.875	3.5	14.25	1835T-23-17	2301
	2.375	3.5	14.75	1835T-23-23	2391
	1.375	3.5	14.25	1835T-27-13	2301
2.875	1.875	3.5	14.75	1835T-27-17	2391
	2.375	3.5	15.25	1835T-27-23	2481
	1.875	4	15.75	1835T-33-17	2500
3.375	2.375	4	16.25	1835T-33-23	2590
	2.875	4.5	17.25	1835T-33-27	2699
	1.875	4	16.25	1835T-37-17	2590
3.875	2.375	4.5	17.25	1835T-37-23	2699
	2.875	4.5	17.75	1835T-37-27	2788
	2.375	4.5	18.25	1835T-47-23	2878
4.875	2.875	4.5	18.75	1835T-47-27	2968
	3.375	4.5	19.25	1835T-47-33	3058
	2.875	4.5	19.75	1835T-57-27	3148
5.875	3.875	4.5	20.75	1835T-57-37	3328
	4.875	4.5	21.75	1835T-57-47	3508

For detailed dimensions, see corresponding size "A" Series Mold Bases.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3, or No. 7 Steel
3. Locating Ring Item Number
4. E, O and R Dimensions
5. L Dimension (Leader Pin Length)
6. Method of Shipment

NOTE: For 3-Plate Extension Bushings, see page 195.

19½" T-Series Mold Bases

NO. 1 OR NO. 2 STEEL ASSEMBLIES

All plates above ejector housing are No. 1 or No. 2 Steel, respectively.

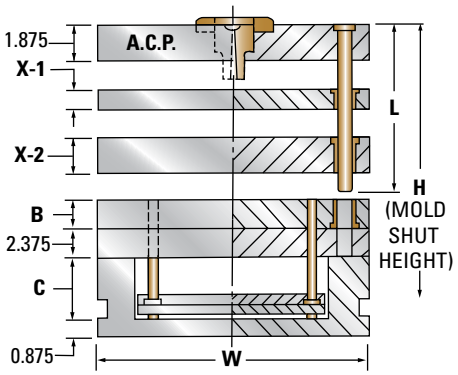
NO. 3 STEEL ASSEMBLIES

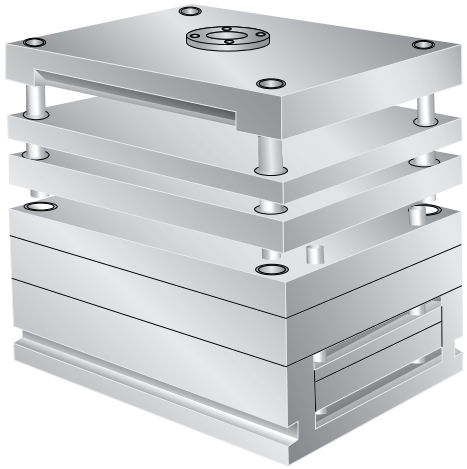
"X-1", "X-2" and "B" Plates are No. 3 Steel.

"A" -Clamping and Support Plates are No. 2 Steel.

NO. 7 STEEL ASSEMBLIES

Any or all plates available as requested.





For detailed dimensions, see corresponding size "A" Series Mold Bases.

X-1 = 1.375				19.5 x 23.75	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	12.75	1924T-17-13	1533
1.875	1.875	3	13.25	1924T-17-17	1598
	2.375	3.5	14.25	1924T-17-23	1676
	1.375	3.5	13.75	1924T-23-13	1611
2.375	1.875	3.5	14.25	1924T-23-17	1676
	2.375	3.5	14.75	1924T-23-23	1742
	1.375	3.5	14.25	1924T-27-13	1676
2.875	1.875	3.5	14.75	1924T-27-17	1742
	2.375	3.5	15.25	1924T-27-23	1808
	1.875	4	15.75	1924T-33-17	1820
3.375	2.375	4	16.25	1924T-33-23	1886
	2.875	4.5	17.25	1924T-33-27	1964
	1.875	4	16.25	1924T-37-17	1886
3.875	2.375	4.5	17.25	1924T-37-23	1964
	2.875	4.5	17.75	1924T-37-27	2030
	2.375	4.5	18.25	1924T-47-23	2095
4.875	2.875	4.5	18.75	1924T-47-27	2161
	3.375	4.5	19.25	1924T-47-33	2226
	2.875	4.5	19.75	1924T-57-27	2292
5.875	3.875	4.5	20.75	1924T-57-37	2423
	4.875	4.5	21.75	1924T-57-47	2554

X-1 = 1.375				19.5 x 29.5	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	12.75	1929T-17-13	1903
1.875	1.875	3	13.25	1929T-17-17	1985
	2.375	3.5	14.25	1929T-17-23	2082
	1.375	3.5	13.75	1929T-23-13	2001
2.375	1.875	3.5	14.25	1929T-23-17	2082
	2.375	3.5	14.75	1929T-23-23	2164
	1.375	3.5	14.25	1929T-27-13	2082
2.875	1.875	3.5	14.75	1929T-27-17	2164
	2.375	3.5	15.25	1929T-27-23	2245
	1.875	4	15.75	1929T-33-17	2261
3.375	2.375	4	16.25	1929T-33-23	2342
	2.875	4.5	17.25	1929T-33-27	2439
	1.875	4	16.25	1929T-37-17	2342
3.875	2.375	4.5	17.25	1929T-37-23	2439
	2.875	4.5	17.75	1929T-37-27	2521
	2.375	4.5	18.25	1929T-47-23	2602
4.875	2.875	4.5	18.75	1929T-47-27	2684
	3.375	4.5	19.25	1929T-47-33	2765
	2.875	4.5	19.75	1929T-57-27	2847
5.875	3.875	4.5	20.75	1929T-57-37	3010
	4.875	4.5	21.75	1929T-57-47	3173

X-1 = 1.375				19.5 x 35.5	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	12.75	1935T-17-13	2291
1.875	1.875	3	13.25	1935T-17-17	2389
	2.375	3.5	14.25	1935T-17-23	2506
	1.375	3.5	13.75	1935T-23-13	2408
2.375	1.875	3.5	14.25	1935T-23-17	2506
	2.375	3.5	14.75	1935T-23-23	2604
	1.375	3.5	14.25	1935T-27-13	2506
2.875	1.875	3.5	14.75	1935T-27-17	2604
	2.375	3.5	15.25	1935T-27-23	2702
	1.875	4	15.75	1935T-33-17	2721
3.375	2.375	4	16.25	1935T-33-23	2819
	2.875	4.5	17.25	1935T-33-27	2936
	1.875	4	16.25	1935T-37-17	2819
3.875	2.375	4.5	17.25	1935T-37-23	2936
	2.875	4.5	17.75	1935T-37-27	3034
	2.375	4.5	18.25	1935T-47-23	3132
4.875	2.875	4.5	18.75	1935T-47-27	3230
	3.375	4.5	19.25	1935T-47-33	3328
	2.875	4.5	19.75	1935T-57-27	3426
5.875	3.875	4.5	20.75	1935T-57-37	3622
	4.875	4.5	21.75	1935T-57-47	3818

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3, or No. 7 Steel
3. Locating Ring Item Number
4. E, O and R Dimensions
5. L Dimension (Leader Pin Length)
6. Method of Shipment

NOTE: For 3-Plate Extension Bushings, see page 195.

23¾" T-Series Mold Bases

NO. 1 OR NO. 2 STEEL ASSEMBLIES

All plates above ejector housing are No. 1 or No. 2 Steel, respectively.

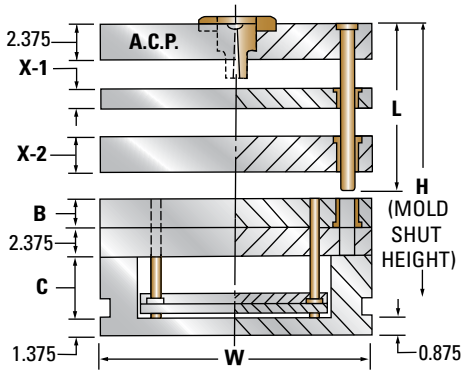
NO. 3 STEEL ASSEMBLIES

"X-1", "X-2" and "B" Plates are No. 3 Steel.

"A" -Clamping and Support Plates are No. 2 Steel

NO. 7 STEEL ASSEMBLIES

Any or all plates available as requested.





For detailed dimensions, see corresponding size "A" Series Mold Bases.

NOTE: Clamp slots for 23.75" wide bases will be type B, not type D as shown in photo.

X-1 = 1.375				23.75 x 23.75	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	13.75	2424T-17-13	2021
1.875	1.875	3	14.25	2424T-17-17	2101
	2.375	3.5	15.25	2424T-17-23	2194
	1.375	3.5	14.75	2424T-23-13	2114
2.375	1.875	3.5	15.25	2424T-23-17	2194
	2.375	3.5	15.75	2424T-23-23	2274
	1.375	3.5	15.25	2424T-27-13	2194
2.875	1.875	3.5	15.75	2424T-27-17	2274
	2.375	3.5	16.25	2424T-27-23	2353
	1.875	4	16.75	2424T-33-17	2366
3.375	2.375	4	17.25	2424T-33-23	2446
	2.875	4.5	18.25	2424T-33-27	2538
	1.875	4	17.25	2424T-37-17	2446
3.875	2.375	4.5	18.25	2424T-37-23	2538
	2.875	4.5	18.75	2424T-37-27	2618
	2.375	4.5	19.25	2424T-47-23	2698
4.875	2.875	4.5	19.75	2424T-47-27	2778
	3.375	4.5	20.25	2424T-47-33	2858
	2.875	4.5	20.75	2424T-57-27	2938
5.875	3.875	4.5	21.75	2424T-57-37	3098
	4.875	4.5	22.75	2424T-57-47	3258

X-1 = 1.375				23.75 x 29.5	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	13.75	2429T-17-13	2510
1.875	1.875	3	14.25	2429T-17-17	2610
	2.375	3.5	15.25	2429T-17-23	2725
	1.375	3.5	14.75	2429T-23-13	2625
2.375	1.875	3.5	15.25	2429T-23-17	2725
	2.375	3.5	15.75	2429T-23-23	2824
	1.375	3.5	15.25	2429T-27-13	2725
2.875	1.875	3.5	15.75	2429T-27-17	2824
	2.375	3.5	16.25	2429T-27-23	2923
	1.875	4	16.75	2429T-33-17	2939
3.375	2.375	4	17.25	2429T-33-23	3038
	2.875	4.5	18.25	2429T-33-27	3153
	1.875	4	17.25	2429T-37-17	3038
3.875	2.375	4.5	18.25	2429T-37-23	3153
	2.875	4.5	18.75	2429T-37-27	3252
	2.375	4.5	19.25	2429T-47-23	3351
4.875	2.875	4.5	19.75	2429T-47-27	3451
	3.375	4.5	20.25	2429T-47-33	3550
	2.875	4.5	20.75	2429T-57-27	3649
5.875	3.875	4.5	21.75	2429T-57-37	3848
	4.875	4.5	22.75	2429T-57-47	4046

X-1 = 1.375				23.75 x 35.5	
X-2	B	C	H	ITEM NUMBER	NET WT.
	1.375	3	13.75	2435T-17-13	3021
1.875	1.875	3	14.25	2435T-17-17	3140
	2.375	3.5	15.25	2435T-17-23	3279
	1.375	3.5	14.75	2435T-23-13	3159
2.375	1.875	3.5	15.25	2435T-23-17	3279
	2.375	3.5	15.75	2435T-23-23	3398
	1.375	3.5	15.25	2435T-27-13	3279
2.875	1.875	3.5	15.75	2435T-27-17	3398
	2.375	3.5	16.25	2435T-27-23	3518
	1.875	4	16.75	2435T-33-17	3536
3.375	2.375	4	17.25	2435T-33-23	3656
	2.875	4.5	18.25	2435T-33-27	3794
	1.875	4	17.25	2435T-37-17	3656
3.875	2.375	4.5	18.25	2435T-37-23	3794
	2.875	4.5	18.75	2435T-37-27	3914
	2.375	4.5	19.25	2435T-47-23	4033
4.875	2.875	4.5	19.75	2435T-47-27	4152
	3.375	4.5	20.25	2435T-47-33	4272
	2.875	4.5	20.75	2435T-57-27	4391
5.875	3.875	4.5	21.75	2435T-57-37	4630
	4.875	4.5	22.75	2435T-57-47	4869

WHEN ORDERING, PLEASE SPECIFY:

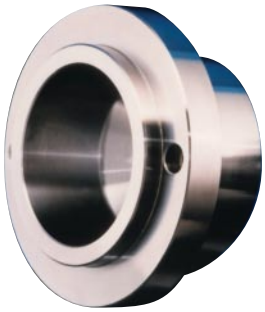
1. Quantity & Item Number
2. No. 1, No. 2, No. 3, or No. 7 Steel
3. Locating Ring Item Number
4. E, O and R Dimensions
5. L Dimension (Leader Pin Length)
6. Method of Shipment

NOTE: For 3-Plate Extension Bushings, see page 195.

3-Plate Extension Bushings

Three-plate extension bushings can save material, reduce cycle time and help prevent runner hang-ups in 3-plate molds.

7-DAY SHIPPING

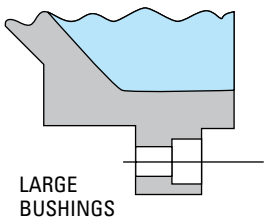


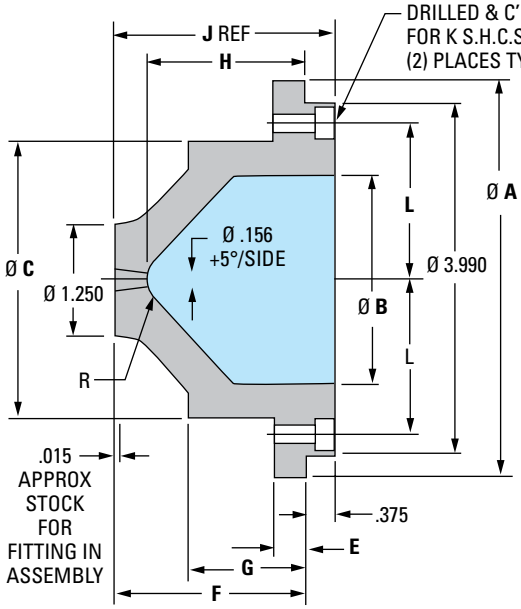


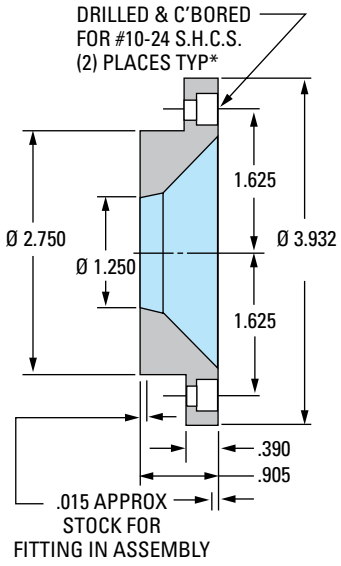


Runner Stripper Plate Bushing TEB-0001

NOTES:
1. Stripper plate bushing TEB-0001 is used with all small and large extension nozzle bushings.
2. Appropriate S.H.C.S. are included with all bushings (TEB-0001 thru TEB-0009).
3. Select small or large bushing based on "A" clamping plate (A.C.P.) thickness, X-1 stripper plate thickness, machine nozzle spherical radius and machine nozzle clearance requirements.





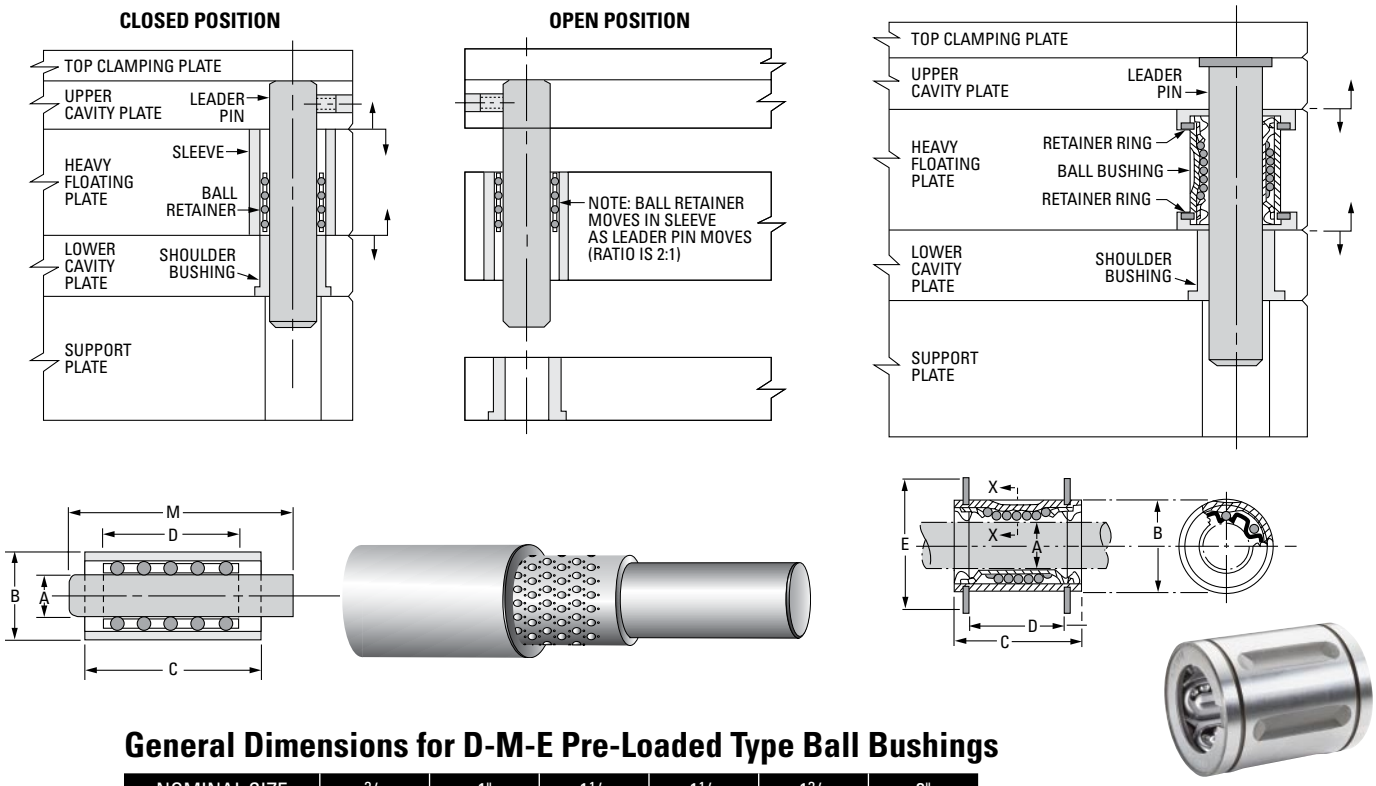


TEB-0001

ITEM NUMBER	R SPH. RAD	Ø A	Ø B	Ø C	E	F	G	H	J	K	L
TEB-0002	1/2	4.490	2.375	3.120	.375	2.265	1.377	1.875	2.640	#10-24 x 7/8 LONG (2) INCLUDED	1.781
TEB-0003	3/4							1.812			
TEB-0004	1/2					2.765	1.877	2.375	3.140		
TEB-0005	3/4							2.312			
TEB-0006	1/2	5.490	3.250	3.932	.750	2.765	1.877	2.375	3.140	5/16-18 x 7/8 LONG (2) INCLUDED	2.312
TEB-0007	3/4							2.312			
TEB-0008	1/2					3.265	2.377	2.875	3.640		
TEB-0009	3/4							2.812			

Ball Bushings for Floating Plates

Ball Bushings are a highly effective means of reducing frictional drag in floating plates within a mold. Multiple-opening molds, with heavy floating (X) plates, are the most frequent application for either Lineal type or Pre-Loaded type Ball Bushings.



General Dimensions for D-M-E Pre-Loaded Type Ball Bushings

NOMINAL SIZE	3/4	1"	1 1/4	1 1/2	1 3/4	2"
A (PIN DIA.)	.753	1.003	1.253	1.503	1.753	2.003
B (BUSHING DIA.)	1.387	1.717	2.107	2.437	2.747	3.162
C (BUSHING LENGTH)	1 3/4 TO 6"	2" TO 7"	2 1/2 TO 9"	3" TO 12"	3" TO 13"	3" TO 14"
D (1/4 INCREMENT RETAINER LENGTH)	1 1/2" TO 2"	1 1/2 TO 2 1/4	2" TO 3"	2 1/2 TO 3 1/2	2 3/4 TO 4"	3 1/4 TO 4 1/4
M (PIN LENGTH)	3" TO 6"	3 3/4 TO 9"	4 1/2 TO 12"	4 1/2 TO 14"	5" TO 17"	5 1/2 TO 18"

NOTES:
Specifications shown are for D-M-E precision grade.

Due to the larger O.D. of the bushing counterbore required, ball bushings cannot be installed in standard leader pin locations in the mold base assembly.

General Dimensions for Thomson Lineal Type Ball Bushings

BUSHING IT	A-122026	A-162536	A-203242	A-243848	A-324864
A (PIN DIA.)	.750	1.000	1.250	1.500	2.000
B (BUSHING DIA.)	1.250	1.5625	2.000	2.375	3.000
C (BUSHING LENGTH)	1.625	2.250	2.625	3.000	4.000
RETAINER RING **ITEM NUMBER**	W-750	W-1000	W-1250	W-1500	W-2000
D	1.062	1.625	1.875	2.250	3.000
E	1.620	2.040	2.500	2.910	3.600
COUNTERBORE DIA. (FOR RETAINER RING)	1.69	2.10	2.55	3.01	3.69

NOTES:
Specifications shown are for Thomson precision series A.

Two rings are required for each bushing.

Due to the larger O.D. of the bushing counterbore required, ball bushings usually cannot be installed in standard leader pin locations in the mold base assembly.

THIS IS A SPECIAL ORDER ITEM ONLY.

D-M-E Small and Shuttle Mold Bases

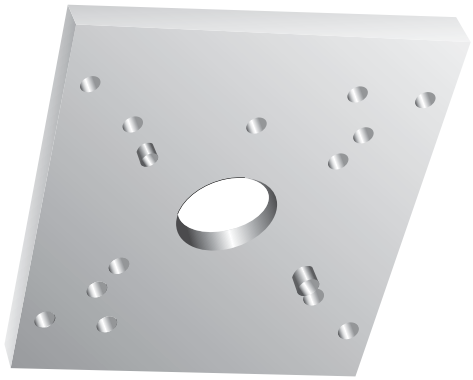
HIGH-QUALITY, ECONOMICAL
MOLD BASE ASSEMBLIES
FOR PROTOTYPE OR
PRODUCTION RUNS

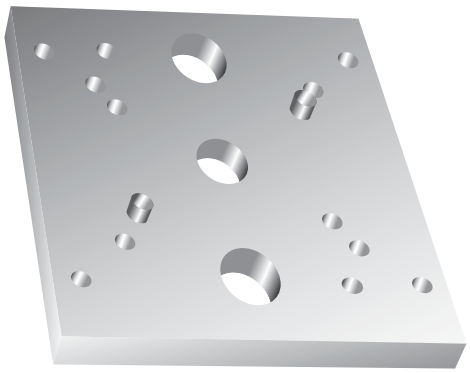


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810SH Shuttle Mold Base 206-207
Metric Equivalents & Conversions 208

Small Mold Base Adapter Plates





D-M-E No. 2 Steel

With D-M-E Small Mold Base Adapter Plates You Can.....

Lower your mold costs

Only one set of low cost Adapter Plates is required for each injection molding machine. The Adapter Plates can become a permanent part of your press platen...or can easily be removed to allow installation of larger mold bases. The Adapter Plates can also be moved to another press to meet your production requirements. D-M-E Small Mold Bases provide the highest quality, most economical mold base assemblies for either short runs or production runs. Cavity and support plates are made from D-M-E No. 3 cavity steel.

Change mold bases in minutes

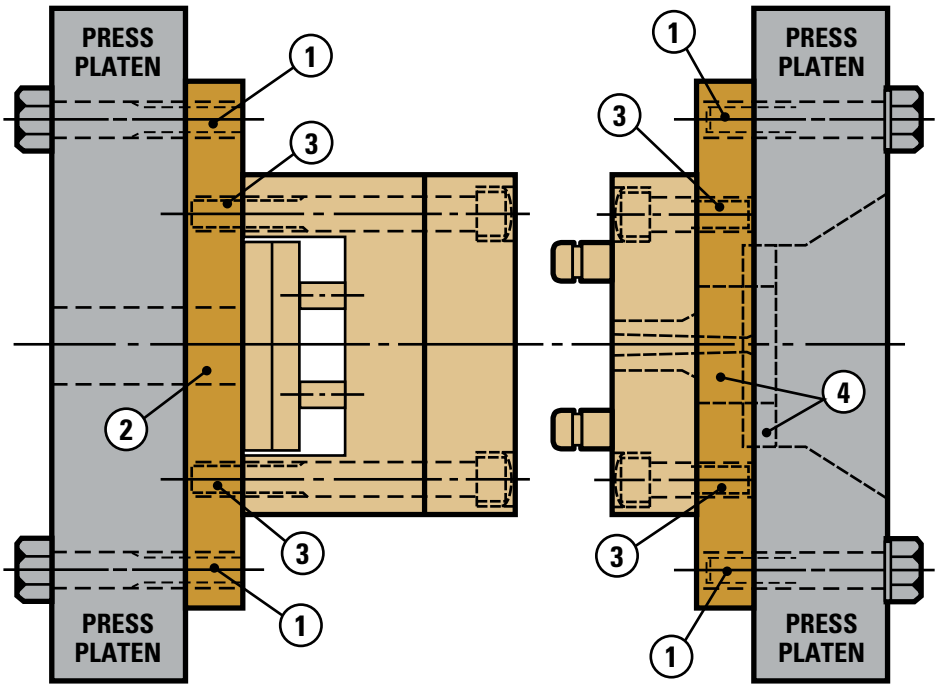
With D-M-E's exclusive Adapter Plate System, standard 5"x 6" U and 5"x 8" U Series Mold Bases can be easily changed in 10 minutes or less. Costly machine downtime is reduced to a minimum.

Increase your profits

The D-M-E's Adapter Plate System provides economic manufacturing for greater profitability. The unique system lends itself to minimum cavity, high-speed cycle operations. Fast interchangeability of mold bases makes short runs just as profitable as long runs... no costly fill-ins!

D-M-E Adapter Plates are:

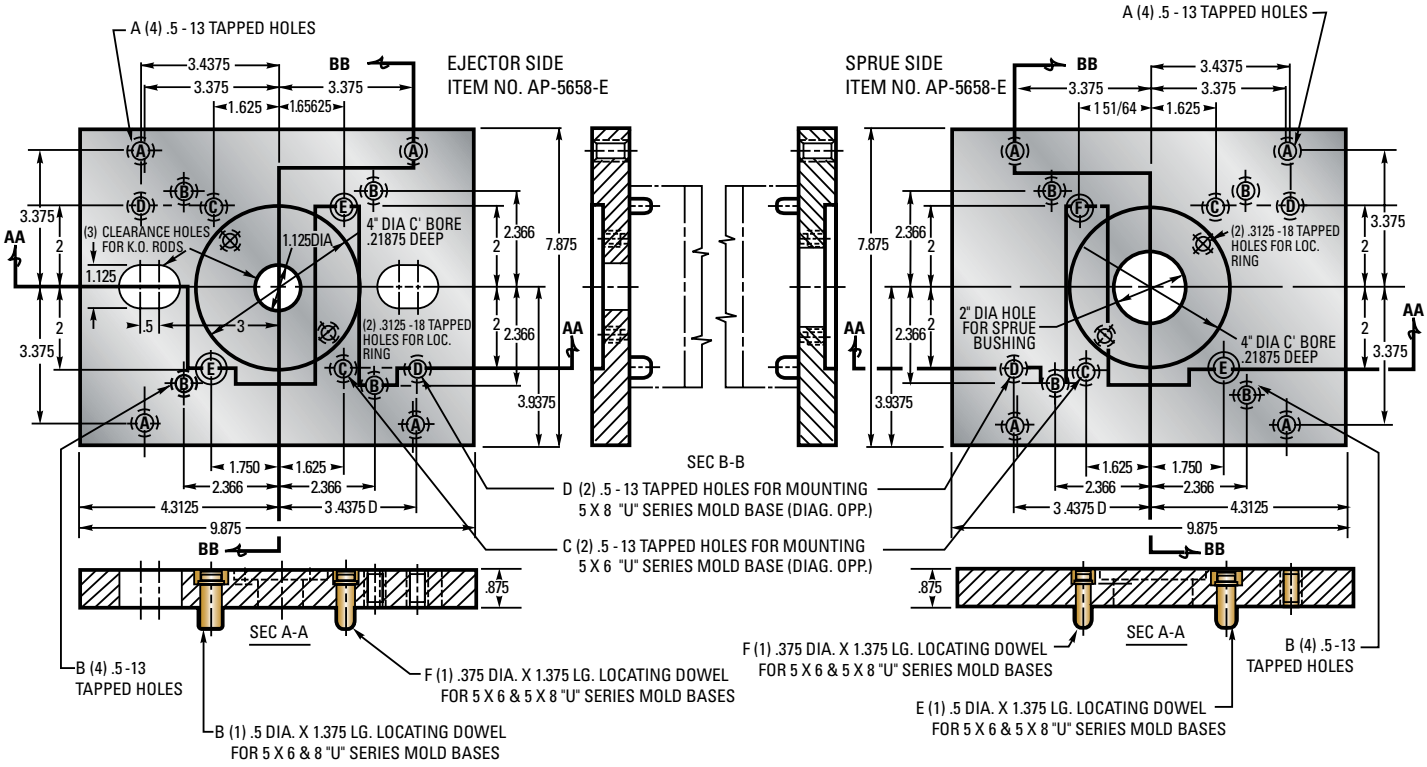
1. Pre-drilled and tapped to match platen holes
2. Pre-machined with clearance holes for knockout rods
3. Pre-drilled and tapped to match mounting holes on D-M-E 5"x 6" U series mold bases.... with precision dowels for fast, accurate alignment. (One dowel is off-set to prevent improper installation.)
4. Completely machined to accommodate your choice of sprue bushing and locating ring.



Custom Designed Standard Universal Adapter Plates – AP-5658-SET

D-M-E No. 2 Steel





Item Number: AP-5658-SET*

***Consists of:**

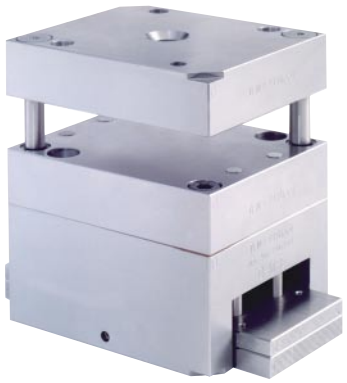
ITEM	LENGTH	WIDTH	THICKNESS	NET WT.
(1) 5658S-AP-2 (SPRUE SIDE)	9.875	7.875	.875	20
(1) 5658E-AP-2 (EJECTOR SIDE)	9.875	7.875	.875	20

NOTE: Sprue bushings are supplied with D-M-E Small mold bases. Plates MAY be ordered separately.

5" x 6" U 3-Plate Mold Bases – 56U3

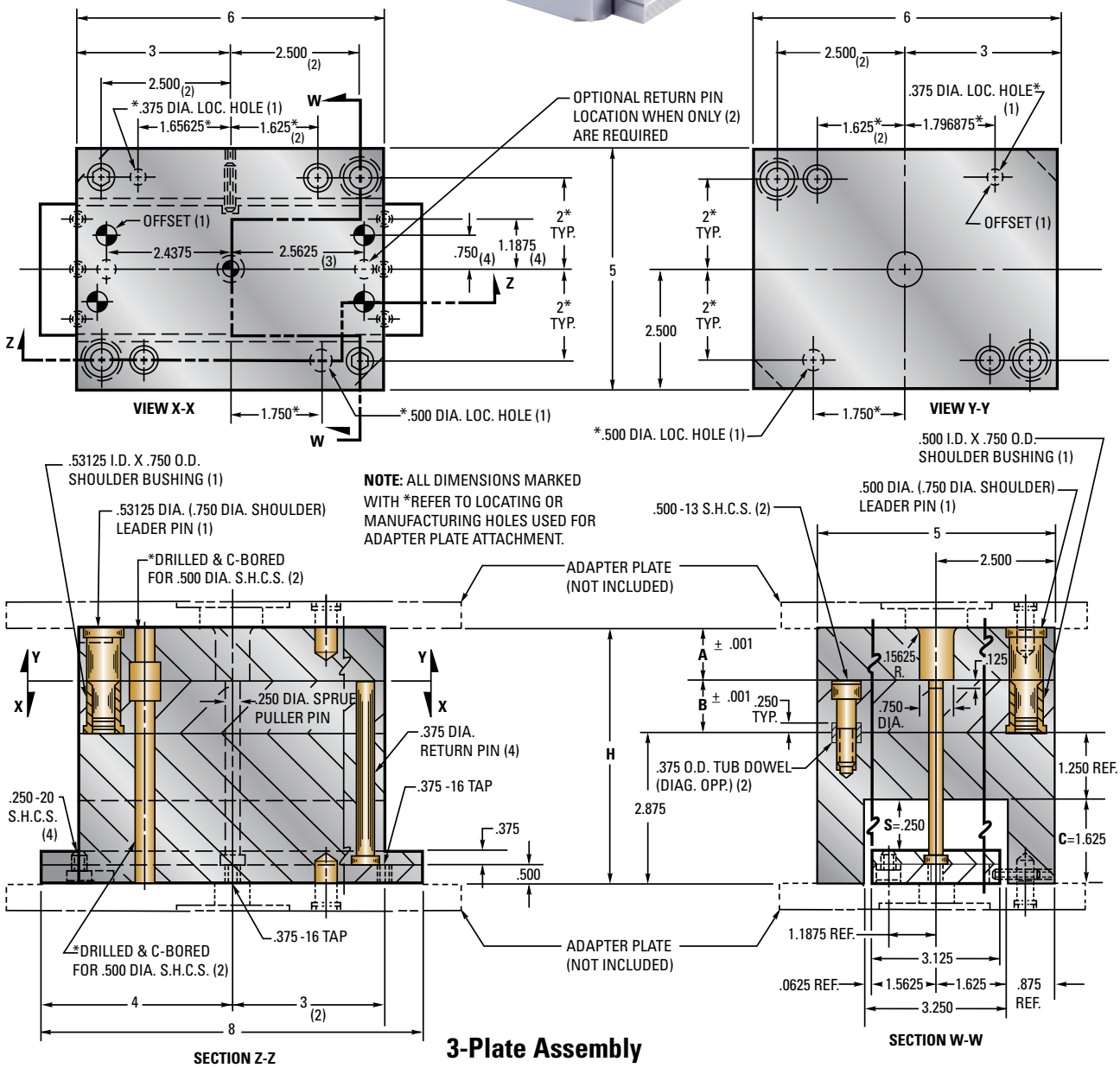
These 3-plate assemblies are designed for use with D-M-E Universal Adapter Plates.

Ejector stroke data
C = (height of riser) = 1.625
S = (max. stroke of ejector bar) = .750



WHEN ORDERING PLEASE SPECIFY:

1. Quantity & Item Number
2. Type of Sprue Bushing ("U", "UV" or "UR" Series) see D-M-E Sprue Bushings
3. O & R Dimensions
   O = .15625, .21875 or .28125
   R = .500 or .750 ("U" Series)
   500 ("UV" Series Standard)
   or .750 ("UV" Series Special)
   No spherical radius on "UR" Series
4. Method of Shipment



3-Plate Assembly

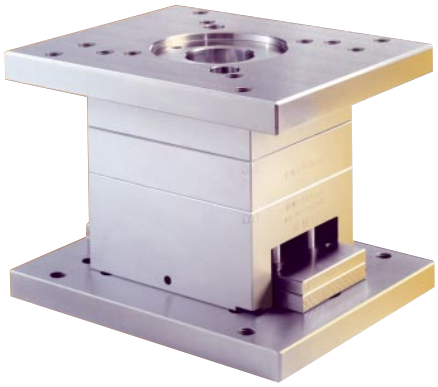
A	B	ITEM NUMBER	H	OVERALL ASSEMBLY HEIGHT INCLUDING ADAPTER PLATES	NET WT.
7/8	7/8	56U3-7-7	4 5/8	6 3/8	37
7/8	1 3/8	56U3-7-13	5 1/8	6 7/8	41
7/8	1 7/8	56U3-7-17	5 5/8	7 3/8	46
1 3/8	7/8	56U3-13-7	5 1/8	6 7/8	41
1 3/8	1 3/8	56U3-13-13	5 5/8	7 3/8	46

A	B	ITEM NUMBER	H	OVERALL ASSEMBLY HEIGHT INCLUDING ADAPTER PLATES	NET WT.
1 3/8	1 7/8	56U3-13-17	6 1/8	7 7/8	37
1 7/8	7/8	56U3-17-7	5 5/8	7 3/8	46
1 7/8	1 3/8	56U3-17-13	6 1/8	7 7/8	50
1 3/8	1 7/8	56U3-17-17	6 5/8	8 3/8	54

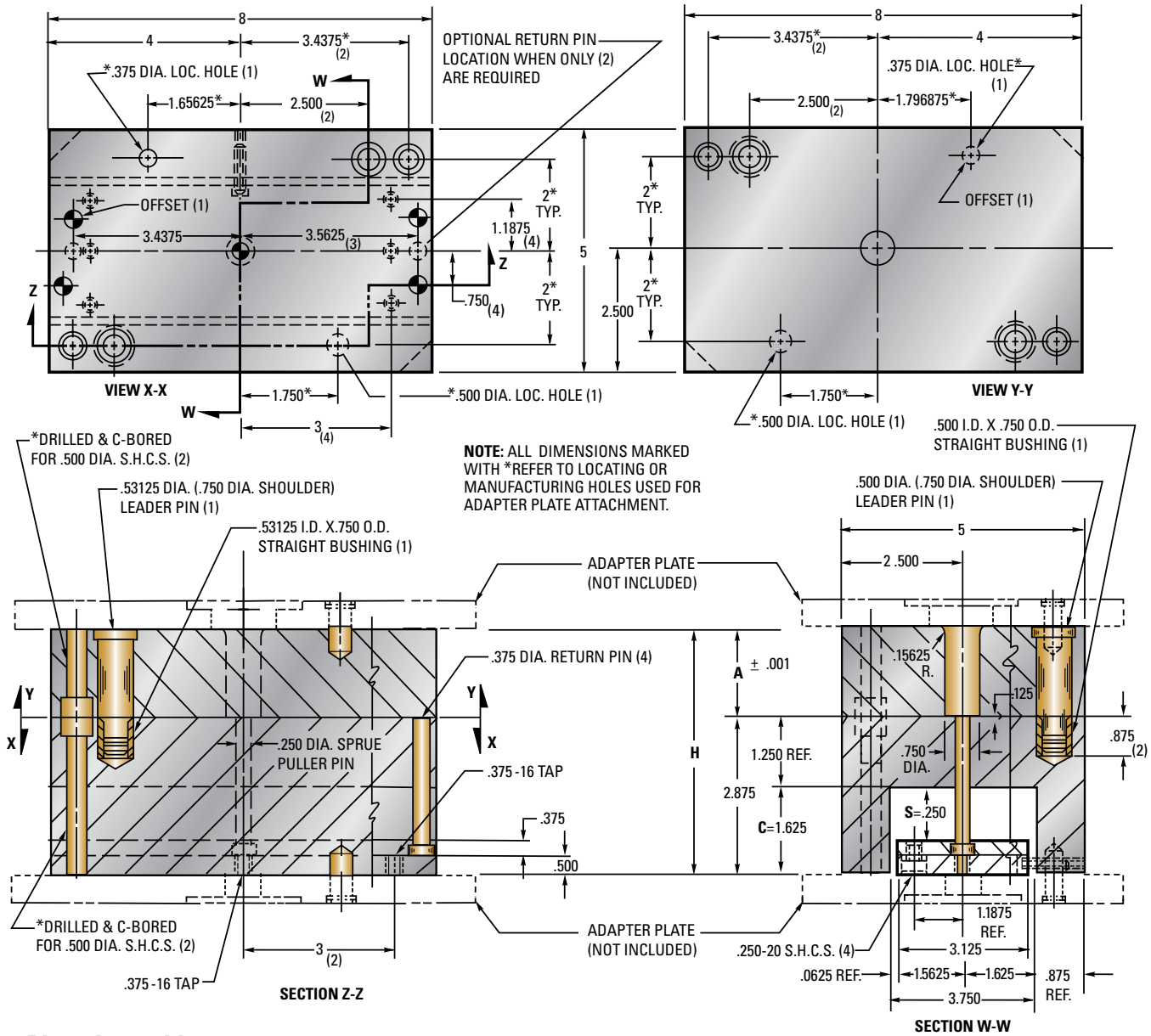
5" x 8" U 2-Plate Mold Bases – 58U2

These 2 & 3 Plate Assemblies are designed for use with D-M-E Universal Adapter Plates

General Dimensions
O = Small Dia. of Sprue Bushing Orifice .15625, .21875 or .28125
R = Spherical Radius of Sprue Bushing .500 or .750 (see item 3 to the right)



WHEN ORDERING PLEASE SPECIFY:
1. Quantity & Item Number
2. Type of Sprue Bushing ("U", "UV" or "UR" Series) see D-M-E Sprue Bushings
3. O & R Dimensions
   O = .15625, .21875 or .28125
   R = .500 or .750 ("U" Series)
   500 ("UV" Series Standard)
   or .750 ("UV" Series Special)
   No spherical radius on "UR" Series
4. Method of Shipment



2-Plate Assembly

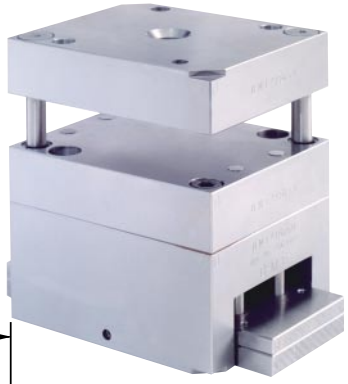
A	ITEM NUMBER	H	OVERALL ASSEMBLY HEIGHT INCLUDING ADAPTER PLATES	NET WT.
7/8	58U2-7	3 3/4	5 1/2	37
1 3/8	58U2-13	4 1/4	6	43
1 7/8	58U2-17	4 3/4	6 1/2	49

All 2 & 3-Plate assemblies listed are supplied complete with mounting and locating holes to match D-M-E Universal Adapter Plates, and Standard Sprue Bushing specified. Cavity plates are made from D-M-E No. 3 Steel.

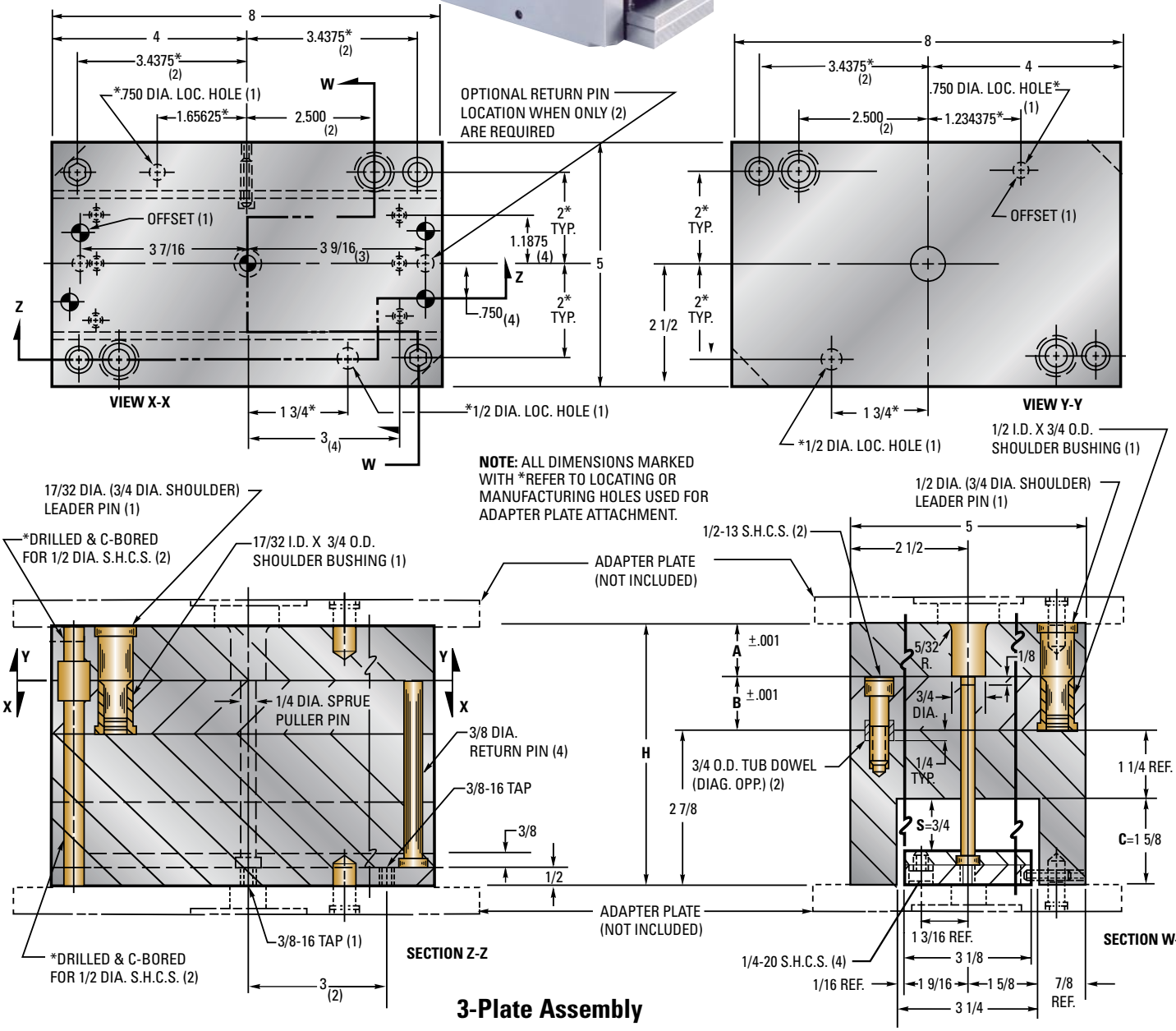
NOTE: For 58U Plates and housings, see Mold Plates section.

5" x 8" U 3-Plate Mold Bases – 58U3

Ejector stroke data
C = (height of riser) = 1.625
S = (max. stroke of ejector bar) = .750



These 3-plate assemblies are designed for use with D-M-E adapter plates.



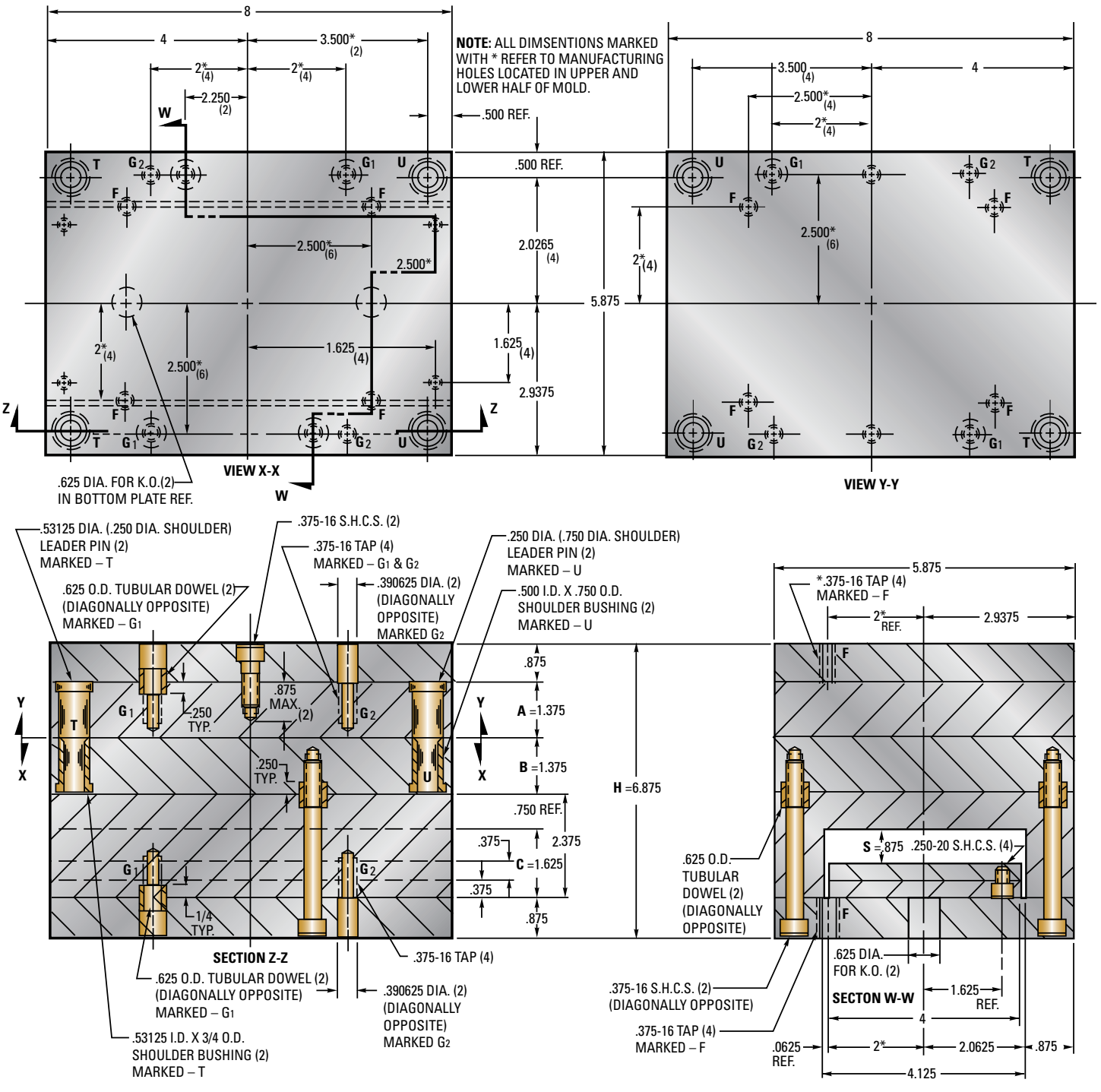
3-Plate Assembly

A	B	ITEM NUMBER	H	OVERALL ASSEMBLY HEIGHT INCLUDING ADAPTER PLATES	NET WT.
7/8	7/8	58U3-7-7	4 5/8	6 3/8	47
7/8	1 3/8	58U3-7-13	5 1/8	6 7/8	53
7/8	1 7/8	58U3-7-17	5 5/8	7 3/8	58
1 3/8	7/8	58U3-13-7	5 1/8	6 7/8	53
1 3/8	1 3/8	58U3-13-13	5 5/8	7 3/8	58

A	B	ITEM NUMBER	H	OVERALL ASSEMBLY HEIGHT INCLUDING ADAPTER PLATES	NET WT.
1 3/8	1 7/8	58U3-13-17	6 1/8	7 7/8	64
1 7/8	7/8	58U3-17-7	5 5/8	7 3/8	58
1 7/8	1 3/8	58U3-17-13	6 1/8	7 7/8	64
1 3/8	1 7/8	58U3-17-17	6 5/8	8 3/8	70

5 7/8" x 8" J Mold Bases – 68J

Ejector stroke data
C = (height of riser) = 1 5/8
S = (max stroke of ejector bar) = 7/8



ITEM NUMBER	A	B	C	NET WT.
68J-13-13	1 3/8	1 3/8	1 5/8	84

WHEN ORDERING, PLEASE SPECIFY:
1. Quantity
2. Item Number
3. Method of Shipment

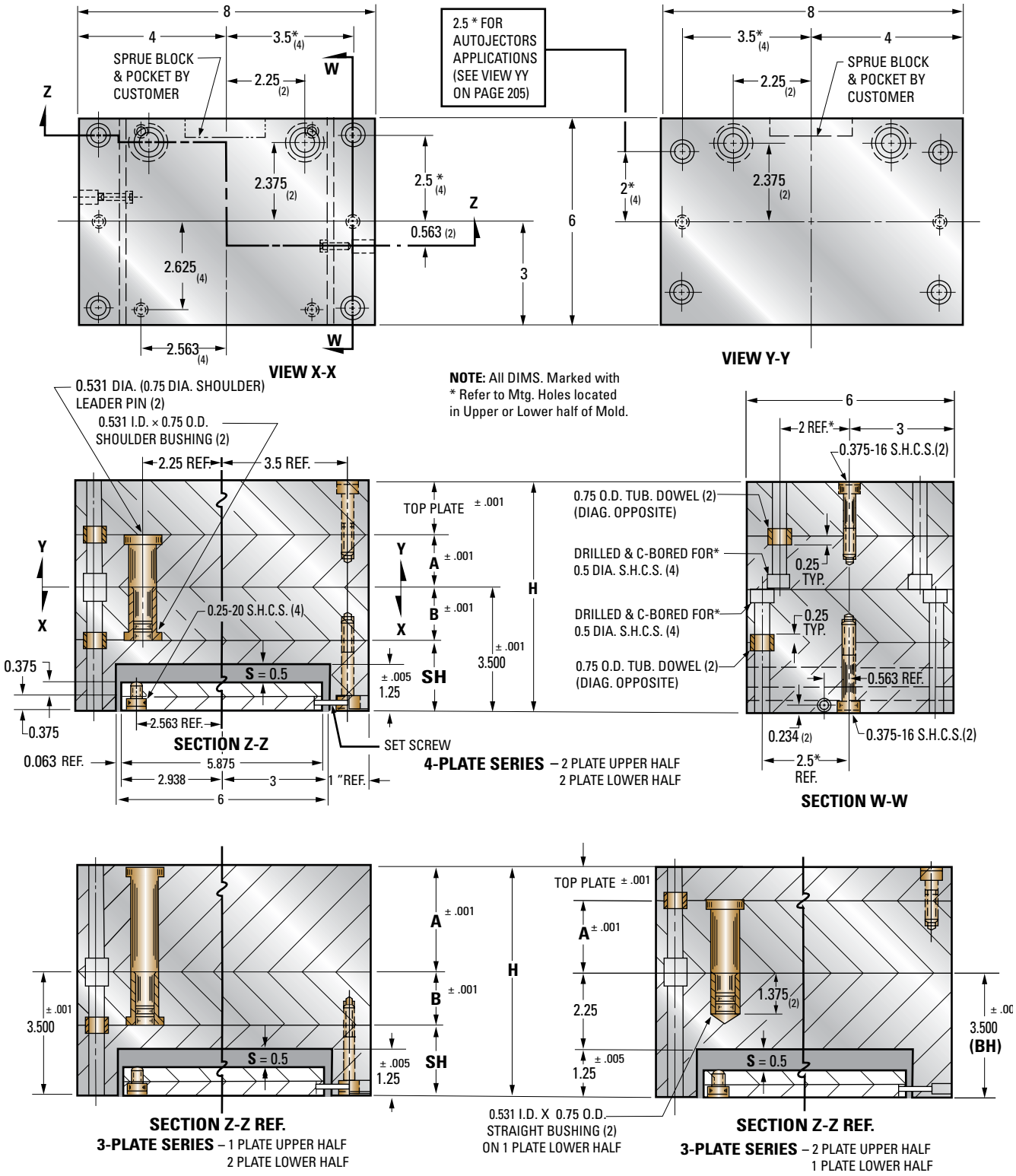
6" x 8" SH Shuttle Mold Bases – 68SH

Engineered and designed for various models of Autojectors, Moslo and Newbury vertical injection presses with shuttle tables.

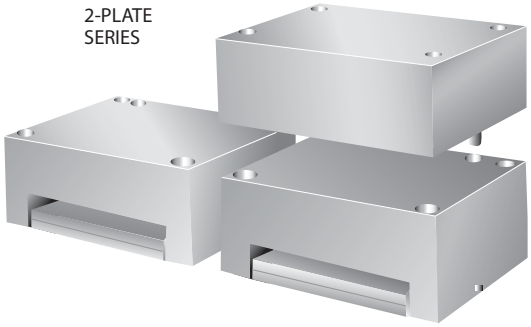
EJECTOR STROKE DATA

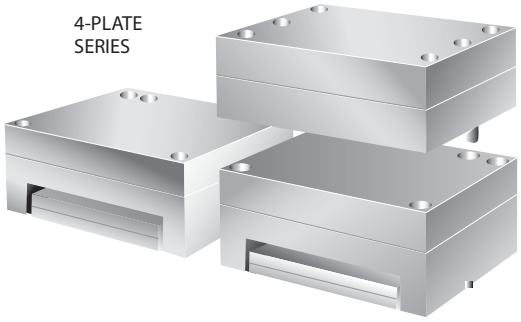
C = (Height of Riser) = 1.25

S = (Max. Stroke of Ejector Bar) = 0.5



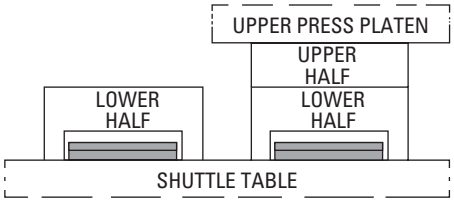
6" x 8" SH Shuttle Mold Bases – 68SH





Shuttle Mold Bases listed below are supplied complete with one upper and two lower sub-assemblies. Upper and lower sub-assemblies are pre-drilled to match platen holes of presses listed in chart. The one piece ejector housings include set screws to securely hold the ejector plates in place during installation or removal.

All plates and housings are made from D-M-E No. 3 Steel (see page 8), except for the ejector and ejector retainer plates.

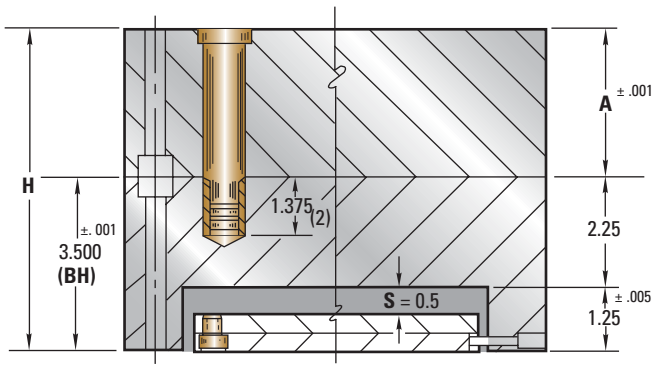


SERIES	TOP PLATE	A	B	BH	SH	H	S	FITS PRESS*	ITEM NUMBER	NET WT.
2 PLATE	–	2.875	–	3.5	–	6.375	0.5	**AJ-M-N	68SH2-0-27-22-0	124
3 PLATE	1	1.875	–	3.5	–	6.375	0.5	**AJ-M-N	68SH3-10-17-22-0	124
	–	2.875	1.375	–	2.125			**AJ-M-N	68SH3-0-27-13-7	124
4 PLATE	1.875	0.875	0.875	–	2.625	6.25	0.5	N	68SH4-17-7-7-13	123
	1.875	0.875	1.375	–	2.125			N	68SH4-17-7-13-7	123
	1.375	1.375	0.875	–	2.625			N	68SH4-13-13-7-13	123
	1.375	1.375	1.375	–	2.125			N	68SH4-13-13-13-7	123
	1	1.875	0.875	–	2.625	6.375	0.5	**AJ-M-N	68SH4-10-17-7-13	124
	1	1.875	1.375	–	2.125			**AJ-M-N	68SH4-10-17-13-7	124
	1	2	1.375	–	2.125	6.5	0.5	AJ-N	68SH4-10-20-13-7	126

***AJ** = Autojectors **M** = Moslo **N** = Newbury

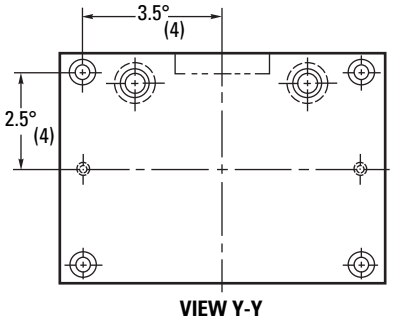
NOTE: For 68SH Components, see D-M-E's Mold Components catalog.

****NOTE:** Autojector applications with 6.375 H dimension require a 0.125" thick spacer for upper half (check with molder; machine may be equipped with required spacer).



SECTION Z-Z REF.

2-PLATE SERIES – 1 PLATE UPPER HALF
1 PLATE LOWER HALF



VIEW Y-Y

ALTERNATIVE UPPER HALF MOUNTING HOLES PROVIDED ONLY WHEN AUTOJECTORS APPLICATION IS SPECIFIED (SEE ITEM 3 BELOW).

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Item Number
3. Mounting Hole Requirement: Standard or Autojectors
4. Method of Shipment

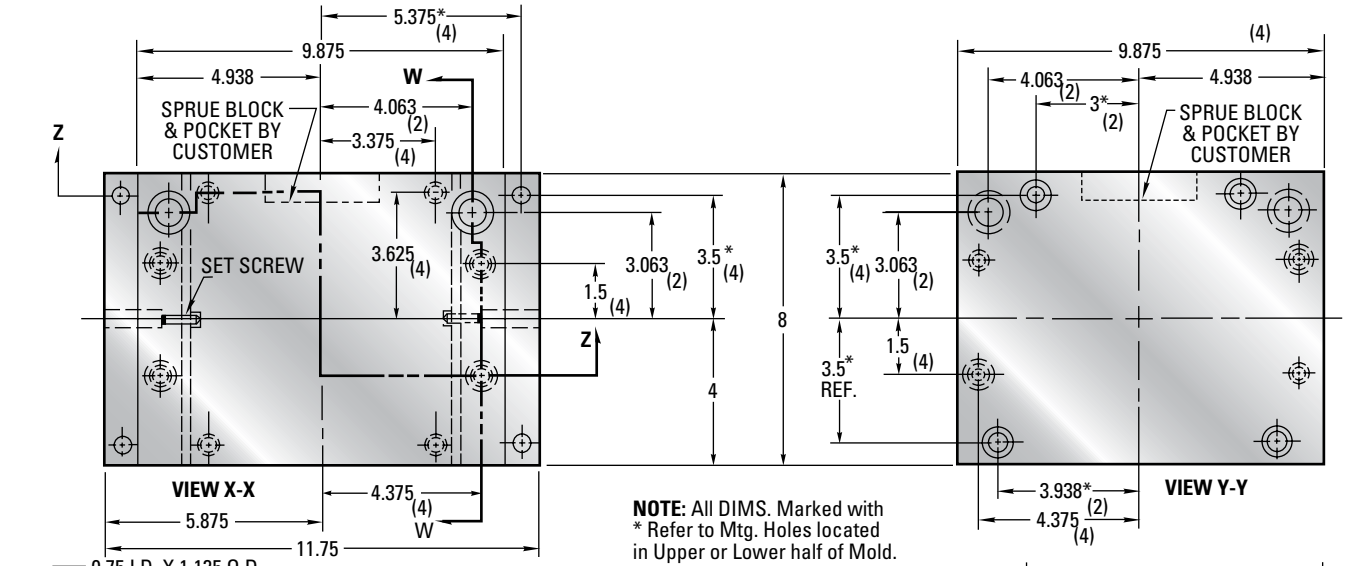
8" x 9⅞" SH Shuttle Mold Bases – 810SH

Engineered and designed for various models of Autojectors, Moslo, Newbury, Reed, and Van Dorn vertical injection presses with shuttle tables.

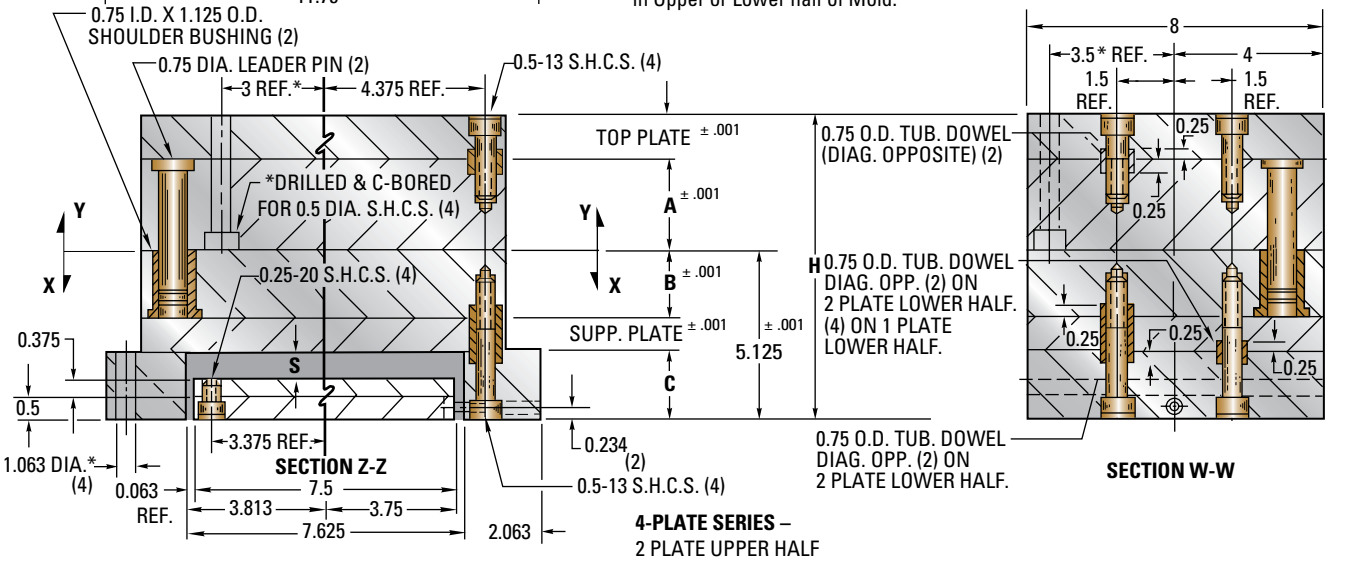
EJECTOR STROKE DATA

C	1.25	1.875
S	0.5	1"

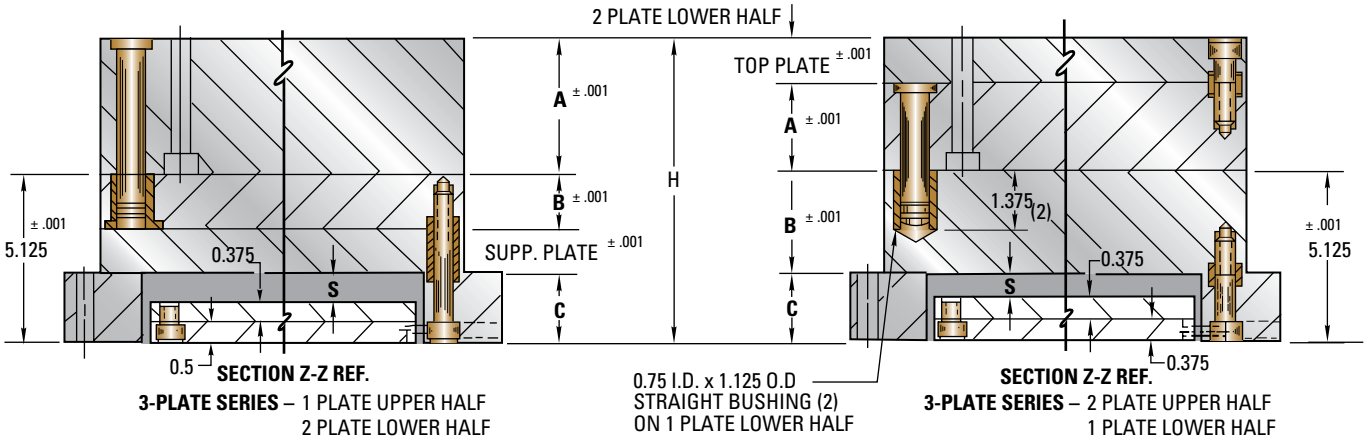
C = Height of Riser.
S = Max. Stroke of Ejector Bar.



NOTE: All DIMS. Marked with * Refer to Mtg. Holes located in Upper or Lower half of Mold.



4-PLATE SERIES –
2 PLATE UPPER HALF
2 PLATE LOWER HALF

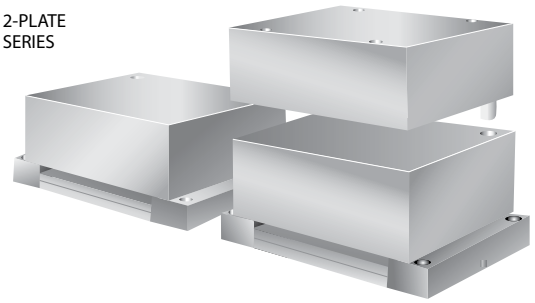


3-PLATE SERIES – 1 PLATE UPPER HALF
2 PLATE LOWER HALF

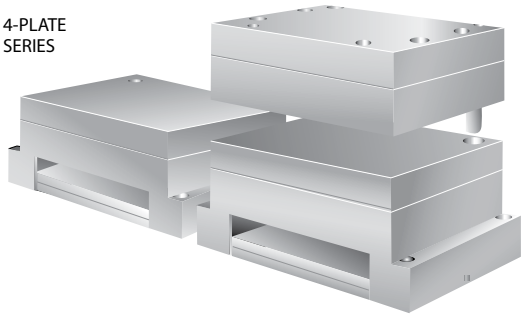
3-PLATE SERIES – 2 PLATE UPPER HALF
1 PLATE LOWER HALF

8" x 9⅞" SH Shuttle Mold Bases – 810SH

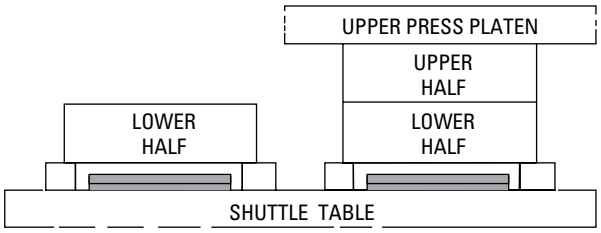
2-PLATE SERIES



4-PLATE SERIES



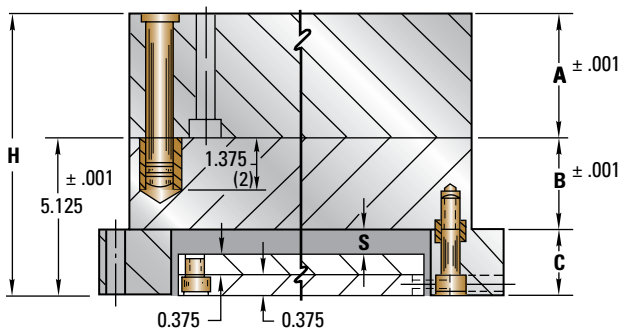
Shuttle Mold Bases listed below are supplied complete with one upper and two lower sub-assemblies. Upper and lower sub-assemblies are pre-drilled to match platen holes of presses listed in chart. Solid rails (spacer blocks) extend beyond support or cavity plate for ease of installation in press.



SERIES	TOP PLATE	A	B	SUPP. PLATE	C	H	S	FITS PRESS*	ITEM NUMBER	NET WT.
2 PLATE	–	3.375	3.875	–	1.25	8.5	0.5	* * AJ-M-N RD-V	810SH2-0-33-37-0	298
3 PLATE	1	2.375	3.875	–	1.25	8.5	0.5	* * AJ-M-N RD-V	810SH3-10-23-37-0	298
	–	3.375	1.375	1.875	1.875	8.5	1	* * AJ-M-N RD-V	810SH3-0-33-13-17	286
	–	3.375	1.875	1.375	1.875	8.5	1	* * AJ-M-N RD-V	810SH3-0-33-17-13	286
	–	3.375	2.375	0.875	1.875	8.5	1	* * AJ-M-N RD-V	810SH3-0-33-23-7	286
4 PLATE	2.375	0.875	0.875	2.375	1.875	8.375	1	N-RD-V	810SH4-23-7-7-23	284
	2.375	0.875	1.375	1.875	1.875	8.375	1	N-RD-V	810SH4-23-7-13-17	284
	1.875	1.375	1.375	1.875	1.875	8.375	1	N-RD-V	810SH4-17-13-13-17	284
	1.875	1.375	1.875	1.375	1.875	8.375	1	N-RD-V	810SH4-17-13-17-13	284
	1.875	1.375	2.375	0.875	1.875	8.375	1	N-RD-V	810SH4-17-13-23-7	284
	1.375	1.875	1.875	1.375	1.875	8.375	1	N-RD-V	810SH4-13-17-17-13	284
	1	2.375	1.375	1.875	1.875	8.5	1	* * AJ-M N-RD-V	810SH4-10-23-13-17	286
	1	2.375	1.875	1.375	1.875	8.5	1	* * AJ-M N-RD-V	810SH4-10-23-17-13	286
	1	2.375	2.375	0.875	1.875	8.5	1	* * AJ-M N-RD-V	810SH4-10-23-23-7	286

***AJ** = Autojectors **M** = Moslo **N** = Newbury **RD** = Reed **V** = Van Dorn

**** NOTE:** All Autojector applications require a 0.5" thick spacer for upper half (check with molder; machine may be equipped with required spacer).



SECTION Z-Z REF.
2-PLATE SERIES – 1 PLATE UPPER HALF
1 PLATE LOWER HALF

AVAILABLE IN:

- D-M-E No. 1 or No. 3 Steel

NO. 3 STEEL ASSEMBLY

- "A" and "B" Plate - No. 3 Steel
- Top & Support Plates - No. 2 Steel

WHEN ORDERING, PLEASE SPECIFY:
1. Quantity & Item Number
2. No. 1 or No. 3 Steel
3. Method of Shipment

Metric Equivalents and Conversions

Equivalents: Inch, fraction, decimal, millimeter

INCHES	MILLIMETERS	INCHES	MILLIMETERS
1	25.4	34	863.6
2	50.8	35	889.0
3	76.2	36	914.4
4	101.6	37	939.8
5	127.0	38	965.2
6	152.4	39	990.6
7	177.8	40	1016.0
8	203.2	41	1041.4
9	228.6	42	1066.8
10	254.0	43	1092.2
11	279.4	44	1117.6
12	304.8	45	1143.0
13	330.2	46	1168.4
14	355.6	47	1193.8
15	381.0	48	1219.2
16	406.4	49	1244.6
17	431.8	50	1270.0
18	457.2	51	1295.4
19	482.6	52	1320.8
20	508.0	53	1346.2
21	533.4	54	1371.6
22	558.8	55	1397.0
23	584.2	56	1422.4
24	609.6	57	1447.8
25	635.0	58	1473.2
26	660.4	59	1498.6
27	685.8	60	1524.0
28	711.2	61	1549.4
29	736.6	62	1574.8
30	762.0	63	1600.2
31	787.4	64	1625.6
32	812.8	65	1651.0
33	838.2	66	1676.4

INCHES		MILLIMETERS	INCHES		MILLIMETERS
1/64	0.015625	0.396875	33/64	0.515625	13.096875
1/32	0.031250	0.793750	17/32	0.531250	13.493750
3/64	0.046875	1.190625	35/64	0.546875	13.890625
1/16	0.062500	1.587500	9/16	0.562500	14.287500
5/64	0.078125	1.984375	37/64	0.578125	14.684375
3/32	0.093750	2.381250	19/32	0.593750	15.081250
7/64	0.109375	2.778125	39/64	0.609375	15.478125
1/8	0.125000	3.175000	5/8	0.625000	15.875000
9/64	0.140625	3.571875	41/64	0.640625	16.271875
5/32	0.156250	3.968750	21/32	0.656250	16.668750
11/64	0.171875	4.365625	43/64	0.671875	17.065625
3/16	0.187500	4.762500	11/16	0.687500	17.462500
13/64	0.203125	5.159375	45/64	0.703125	17.859375
7/32	0.218750	5.556250	23/32	0.718750	18.256250
15/64	0.234375	5.953125	47/64	0.734375	18.653125
1/4	0.250000	6.350000	3/4	0.750000	19.050000
17/64	0.265625	6.746875	49/64	0.765625	19.446875
9/32	0.281250	7.143750	25/32	0.781250	19.843750
19/64	0.296875	7.540625	51/64	0.796875	20.240625
5/16	0.312500	7.937500	13/16	0.812500	20.637500
21/64	0.328125	8.334375	53/64	0.828125	21.034375
11/32	0.343750	8.731250	27/32	0.843750	21.431250
23/64	0.359375	9.128125	55/64	0.859375	21.828125
3/8	0.375000	9.525000	7/8	0.875000	22.225000
25/64	0.390625	9.921875	57/64	0.890625	22.621875
13/32	0.406250	10.318750	29/32	0.906250	23.018750
27/64	0.421875	10.715625	59/64	0.921875	23.415625
7/16	0.437500	11.112500	15/16	0.937500	23.812500
29/64	0.453125	11.509375	61/64	0.953125	24.209375
15/32	0.468750	11.906250	31/32	0.968750	24.606250
31/64	0.484375	12.303125	63/64	0.984375	25.003125
1/2	0.500000	12.700000	1	1.000000	25.400000

Equivalents: Decimal, millimeter

INCHES	MILLIMETERS	INCHES	MILLIMETERS	INCHES	MILLIMETERS
0.001	0.0254	0.01	0.254	0.1	2.54
0.002	0.0508	0.02	0.508	0.2	5.08
0.003	0.0762	0.03	0.762	0.3	7.62
0.004	0.1016	0.04	1.016	0.4	10.16
0.005	0.1270	0.05	1.270	0.5	12.70
0.006	0.1524	0.06	1.524	0.6	15.24
0.007	0.1778	0.07	1.778	0.7	17.78
0.008	0.2032	0.08	2.032	0.8	20.32
0.009	0.2286	0.09	2.286	0.9	22.86

Measurement conversions

MULTIPLY BY	FROM → TO ←	FROM → TO ←	MULTIPLY BY
0.03937	inch	millimeter	25.4
0.0016	inch^2	millimeter^2	645.16
0.061	inch^3	centimeter^3	16.3871
0.2642	gallon (U.S.)	liter	3.7854
0.03527	oz. (avdp.)	gram	28.3495
2.2044	pound	kilogram	0.4536
62.43	lbs/ft^3	g/cm^3	0.0160
0.145	psi	kPa	6.8948
14.2247	psi	kg/cm^2	0.0703
1.8˚C + 32	˚F	˚C	(˚F-32)/1.8

D-M-E MoldBasics™ Mold Bases

ECONOMICAL MOLD BASES

STOCKED FOR

IMMEDIATE DELIVERY



ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Features and Applications

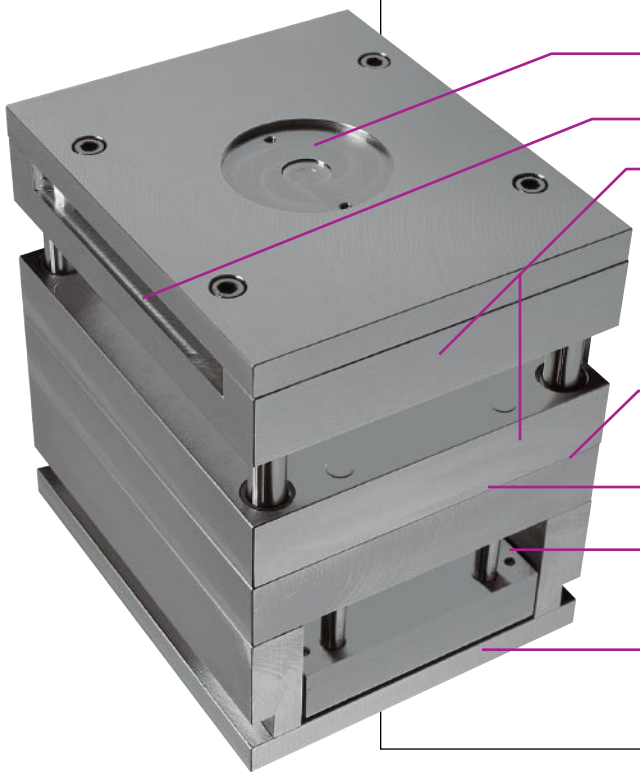
Low Cost
Simple Construction
Broad Range of Sizes
Immediate Availability

D-M-E's new MoldBasics™ line of mold bases is ideal for a variety of applications, including prototype molding and short-runs. Any project that requires a mold base with fewer standard features and a dramatically lower cost is perfect for the MoldBasics series. With MoldBasics, you'll have the flexibility to perform more value-added work and reduce the mold base cost significantly.

Because it's from D-M-E, you can count on the MoldBasics series to deliver reliable, trouble-free performance. And our knowledgeable customer service representatives can help you select the mold base that's just right for your application.

The MoldBasics series mold bases ship the day your order is received—to help you meet critical deadlines. Like all D-M-E products, your satisfaction is guaranteed with all MoldBasics series mold bases.

Features



Machining for locating ring and screws

Standard Type "A" Clamp Slot

A and B Plates
- **#1 or #2 Steel**
- **Square Milled**
- **Surface Ground Parting Line**

Offset corner clearly marked on all plates

Support Plate
- **Tubular Dowel Construction**

All Plates chamfered on edges

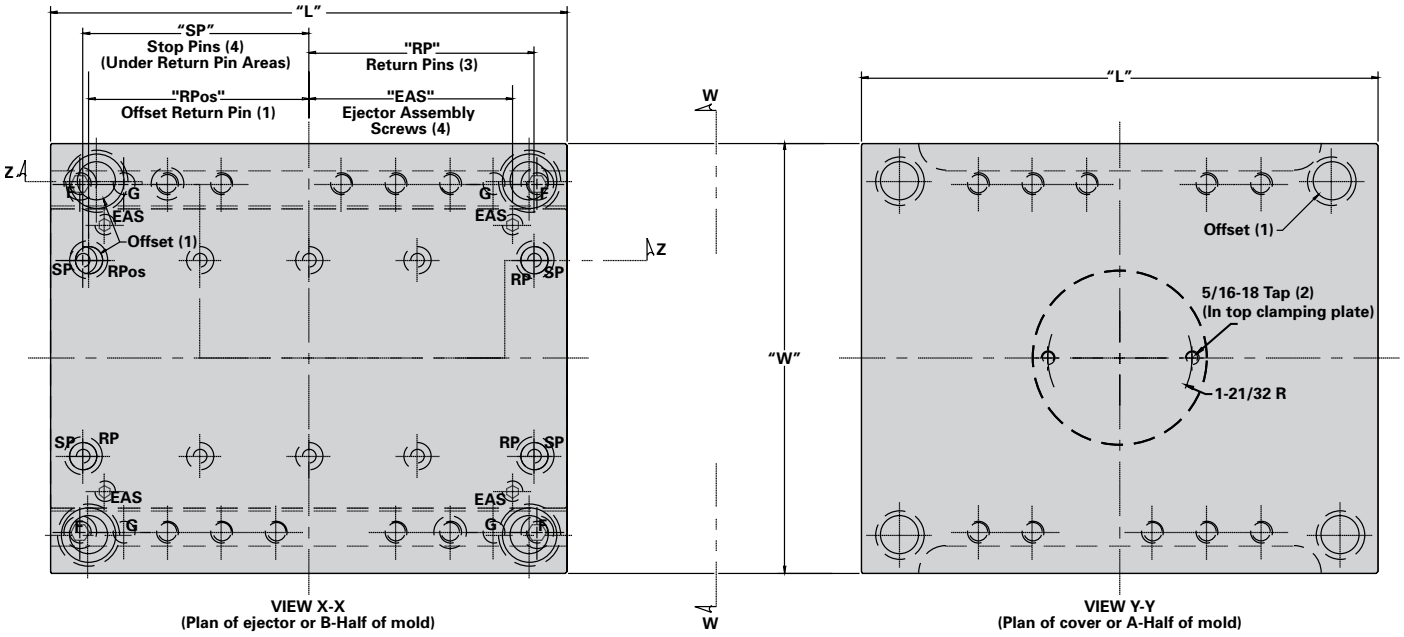
Return Pins
- **Positioned to prevent "spring breakout"**

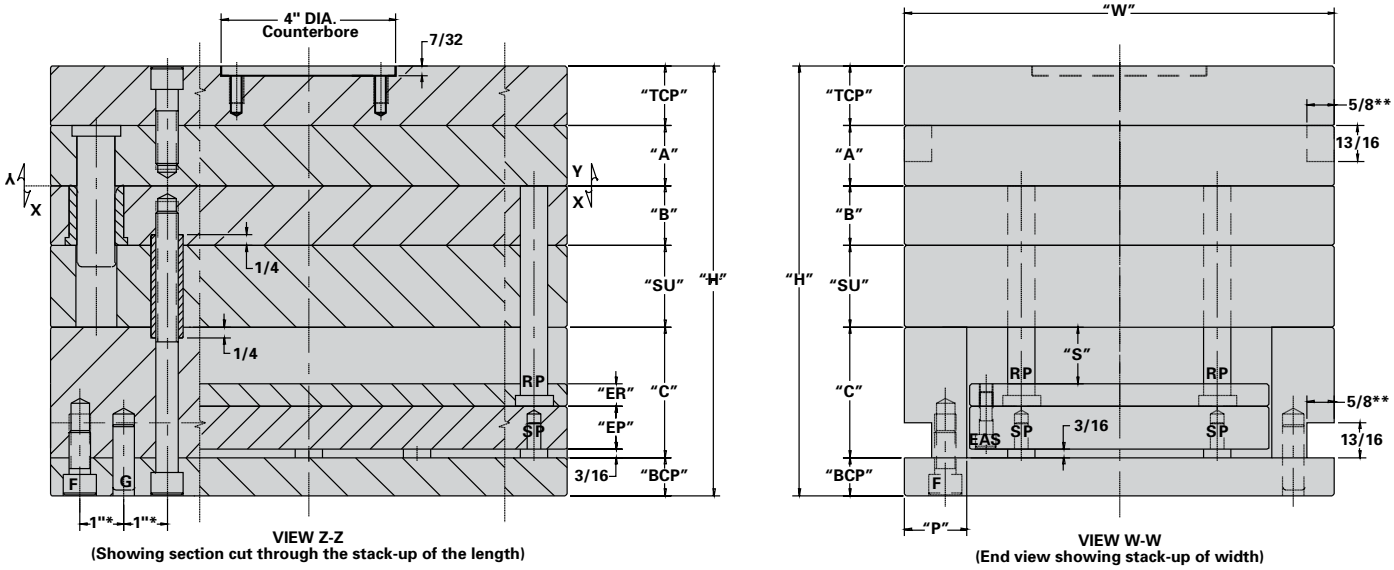
Ejector Housing
- **3-Piece Solid Dowel Construction**

Features

The D-M-E MoldBasics series is available in-stock in a range of popular sizes. This stocking program ensures rapid delivery.

To simplify ordering, this brochure provides key MoldBasics dimensions in nominal sizes from 7.875" x 7.875" up to 15.875" x 23.500". The drawings below provide specific definition of the variables referenced in the product dimension tables. Standard features of the MoldBasics series are also illustrated below.





* For all 9.875 x 8.000 mold bases, dimension is 3/4"
** For all 7.875 x 7.875 and 7.875 x 11.875 mold bases, dimension is 1/2"

Mold Base Product Line

D-M-E MoldBasics mold bases are available in a wide range of sizes. To meet the needs of a variety of applications, all sizes are available in both #1 and #2 steel.

Thickness of A Plate	07	13	17	23	27
B Plate	07	13	17	23	27
0808	◆	◆	◆	◆	
0812	◆	◆	◆	◆	
1008	◆	◆	◆	◆	
1012	◆	◆	◆	◆	
1016	◆	◆	◆	◆	
1020		◆	◆	◆	
1112		◆	◆	◆	
1114		◆	◆	◆	
1118		◆	◆	◆	
1212		◆	◆	◆	◆
1215		◆	◆	◆	◆
1220		◆	◆	◆	◆
1315		◆	◆	◆	◆
1318		◆	◆	◆	◆
1321			◆	◆	◆
1323			◆	◆	◆
1518			◆	◆	◆
1524			◆	◆	◆
1616				◆	◆
1620				◆	◆
1623				◆	◆

No.1 Steel

D-M-E MoldBasics #1 steel is a medium-carbon (AISI 1045), silicon-killed forging quality steel with approximately 25% greater tensile strength than typical low-carbon warehouse steels. It machines easily, but isn't "sticky," permitting a faster and smoother cut.

No.2 Steel

D-M-E MoldBasics #2 steel is an AISI 4140-type steel. It is supplied pre-heat-treated to 28-34 Rc (269-321 Bhn). A high-strength steel, it is ideal for cavity and core retainer plates, clamping plates, and support plates in molds and dies.



Item Numbering

MBA 9999 - 99 - 99 - 9

Prefix
MBA — "MB" for MoldBasics, "A" for A Series

Nominal Size
Four numbers for nominal size. No space after prefix. Note that single-digit nominal sizes begin with a zero (e.g. "0808" for 8" x 8")

"A" Plate Thickness
Two numbers for plate thickness. Note that single-digit thicknesses begin with a zero (e.g. "07" for 7/8")

"B" Plate Thickness
Two numbers for plate thickness. Note that single-digit thicknesses begin with a zero (e.g. "07" for 7/8")

Steel Type
"1" for D-M-E MoldBasics #1 Steel,
"2" for D-M-E MoldBasics #2 Steel

Examples

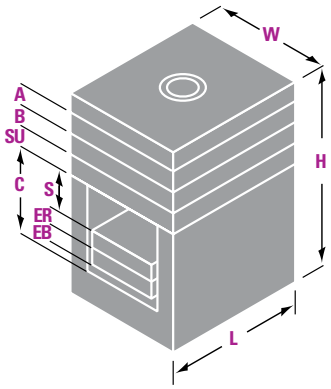
MBA1008-07-07-2 9.875" x 8.000" mold base with 0.875" A plate and 0.875" B plate of #2 steel.

MBA0808-17-17-1 7.875" x 7.875" mold base with 1.875" A plate and 1.875" B plate of #1 steel.

MBA1623-27-27-2 15.875" x 23.500" mold base with 2.875" A plate and 2.875" B plate of #2 steel.

MoldBasics™

Product Selection Tables



Variables

Below is a list of the variables for the MoldBasics series mold bases and their definitions

- **W** = Width
- **L** = Length
- **CP** = Top clamp plate thickness
- **A** = A plate thickness
- **B** = B plate thickness
- **SU** = Support plate thickness
- **C** = Height of the riser
- **S** = Maximum stroke of the ejector bar
- **H** = Mold base height
- **EB** = Ejector bar thickness
- **ER** = Ejector retainer thickness
- **P** = Housing riser thickness
- **RPx** = Return pin location on the X axis (3 places)
- **RPy** = Return pin location on the Y axis (4 places)
- **RPos** = Return pin offset on the X axis (1 place)
- **RPg** = Return pin diameter
- **LPg** = Leader pin diameter

7.875 x 7.875

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
MBA0808-07-07	7.875	7.875	0.875	0.875	2.500	0.813	7.375	111
MBA0808-13-13	7.875	7.875	1.375	1.375	2.500	0.813	8.375	129
MBA0808-17-17	7.875	7.875	1.875	1.875	2.500	0.813	9.375	147
MBA0808-23-23	7.875	7.875	2.375	2.375	3.000	1.313	10.875	167

ALL ITEMS										
	W	7.875	EB	1.000	P	1.250	TCP	0.875	RPx	3.313	RPg	0.500
	L	7.875	ER	0.500	SU	1.375	RPos	3.188	RPy	1.500	LPg	0.750

7.875 x 11.875

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
MBA0812-07-07	7.875	11.875	0.875	0.875	2.500	0.813	7.875	174
MBA0812-13-13	7.875	11.875	1.375	1.375	3.000	1.313	8.875	205
MBA0812-17-17	7.875	11.875	1.875	1.875	3.500	1.813	10.375	235
MBA0812-23-23	7.875	11.875	2.375	2.375	3.500	1.813	11.375	262

ALL ITEMS										
	W	7.875	EB	1.000	P	1.250	TCP	0.875	RPx	5.313	RPg	0.500
	L	11.875	ER	0.500	SU	1.375	RPos	5.188	RPy	1.500	LPg	0.750

9.875 x 8.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
MBA1008-07-07	9.875	8.000	0.875	0.875	2.500	0.813	7.875	158
MBA1008-13-13	9.875	8.000	1.375	1.375	2.500	0.813	8.875	181
MBA1008-17-17	9.875	8.000	1.875	1.875	3.500	1.813	10.875	209
MBA1008-23-23	9.875	8.000	2.375	2.375	3.500	1.813	11.875	232

ALL ITEMS										
	W	9.875	EB	1.000	P	1.438	TCP	0.875	RPx	3.250	RPg	0.625
	L	8.000	ER	0.500	SU	1.875	RPos	3.125	RPy	2.250	LPg	0.750

9.875 x 11.875

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
MBA1012-07-07	9.875	11.875	0.875	0.875	2.500	0.813	7.875	235
MBA1012-13-13	9.875	11.875	1.375	1.375	3.000	1.313	9.375	273
MBA1012-17-17	9.875	11.875	1.875	1.875	3.500	1.813	10.875	311
MBA1012-23-23	9.875	11.875	2.375	2.375	3.500	1.813	11.875	344

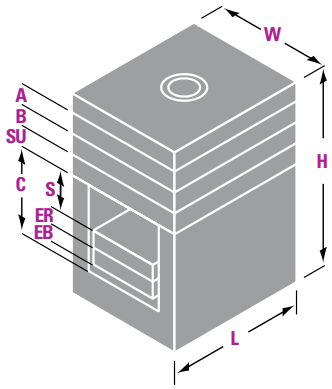
ALL ITEMS										
	W	9.875	EB	1.000	P	1.438	TCP	0.875	RPx	5.188	RPg	0.625
	L	11.875	ER	0.500	SU	1.875	RPos	5.063	RPy	2.250	LPg	0.875

9.875 x 16.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
MBA1016-07-07	9.875	16.000	0.875	0.875	2.500	0.813	7.875	316
MBA1016-13-13	9.875	16.000	1.375	1.375	3.000	1.313	9.375	367
MBA1016-17-17	9.875	16.000	1.875	1.875	3.500	1.813	10.875	418
MBA1016-23-23	9.875	16.000	2.375	2.375	3.500	1.813	11.875	463

ALL ITEMS										
	W	9.875	EB	1.000	P	1.438	TCP	0.875	RPx	7.250	RPg	0.625
	L	16.000	ER	0.500	SU	1.875	RPos	7.125	RPy	2.250	LPg	0.875

Product Selection Tables



9.875 x 20.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
MBA1020-13-13	9.875	20.000	1.375	1.375	3.000	1.313	9.375	459
MBA1020-17-17	9.875	20.000	1.875	1.875	3.500	1.813	10.875	523
MBA1020-23-23	9.875	20.000	2.375	2.375	3.500	1.813	11.875	579

ALL ITEMS										
	W	9.875	EB	1.000	P	1.438	TCP	0.875	RPx	9.250	RPg	0.625
	L	20.000	ER	0.500	SU	1.875	RPos	9.125	RPy	2.250	LPg	0.875

10.875 x 12.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
MBA1112-13-13	10.875	12.000	1.375	1.375	3.000	1.313	9.375	305
MBA1112-17-17	10.875	12.000	1.875	1.875	3.500	1.813	10.875	347
MBA1112-23-23	10.875	12.000	2.375	2.375	3.500	1.813	11.875	384

ALL ITEMS										
	W	10.875	EB	1.000	P	1.688	TCP	0.875	RPx	5.250	RPg	0.625
	L	12.000	ER	0.500	SU	1.875	RPos	5.125	RPy	2.813	LPg	0.875

10.875 x 14.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
MBA1114-13-13	10.875	14.000	1.375	1.375	3.000	1.313	9.375	355
MBA1114-17-17	10.875	14.000	1.875	1.875	3.500	1.813	10.875	405
MBA1114-23-23	10.875	14.000	2.375	2.375	3.500	1.813	11.875	448

ALL ITEMS										
	W	10.875	EB	1.000	P	1.688	TCP	0.875	RPx	6.250	RPg	0.625
	L	14.000	ER	0.500	SU	1.875	RPos	6.125	RPy	2.813	LPg	0.875

10.875 x 18.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
MBA1118-13-13	10.875	18.000	1.375	1.375	3.000	1.313	9.375	457
MBA1118-17-17	10.875	18.000	1.875	1.875	3.500	1.813	10.875	521
MBA1118-23-23	10.875	18.000	2.375	2.375	3.500	1.813	11.875	576

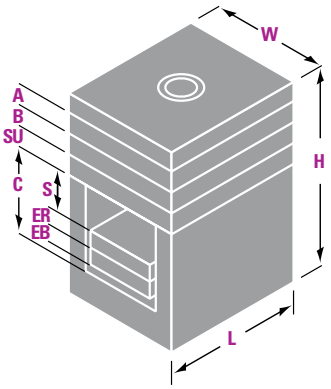
ALL ITEMS										
	W	10.875	EB	1.000	P	1.688	TCP	0.875	RPx	8.250	RPg	0.625
	L	18.000	ER	0.500	SU	1.875	RPos	8.125	RPy	2.813	LPg	0.875

11.875 x 12.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
MBA1212-13-13	11.875	12.000	1.375	1.375	3.000	1.188	9.375	335
MBA1212-17-17	11.875	12.000	1.875	1.875	3.000	1.188	10.375	375
MBA1212-23-23	11.875	12.000	2.375	2.375	3.500	1.688	11.875	422
MBA1212-27-27	11.875	12.000	2.875	2.875	4.000	2.188	13.375	468

ALL ITEMS										
	W	11.875	EB	1.125	P	1.688	TCP	0.875	RPx	5.125	RPg	0.750
	L	12.000	ER	0.500	SU	1.875	RPos	5.000	RPy	3.188	LPg	1.000

Product Selection Tables



Variables

Below is a list of the variables for the MoldBasics series mold bases and their definitions

- **W** = Width
- **L** = Length
- **CP** = Top clamp plate thickness
- **A** = A plate thickness
- **B** = B plate thickness
- **SU** = Support plate thickness
- **C** = Height of the riser
- **S** = Maximum stroke of the ejector bar
- **H** = Mold base height
- **EB** = Ejector bar thickness
- **ER** = Ejector retainer thickness
- **P** = Housing riser thickness
- **RPx** = Return pin location on the X axis (3 places)
- **RPy** = Return pin location on the Y axis (4 places)
- **RPos** = Return pin offset on the X axis (1 place)
- **RPg** = Return pin diameter
- **LPg** = Leader pin diameter

11.875 x 15.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
MBA1215-13-13	11.875	15.000	1.375	1.375	3.000	1.188	9.375	419
MBA1215-17-17	11.875	15.000	1.875	1.875	3.000	1.188	10.375	469
MBA1215-23-23	11.875	15.000	2.375	2.375	3.500	1.688	11.875	527
MBA1215-27-27	11.875	15.000	2.875	2.875	4.000	2.188	13.375	584

ALL ITEMS										
	W	11.875	EB	1.125	P	1.688	TCP	0.875	RPx	6.625	RPg	0.750
	L	15.000	ER	0.500	SU	1.875	RPos	6.500	RPy	3.188	LPg	1.000

11.875 x 20.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
MBA1220-13-13	11.875	20.000	1.375	1.375	3.000	1.188	9.375	558
MBA1220-17-17	11.875	20.000	1.875	1.875	3.000	1.188	10.375	625
MBA1220-23-23	11.875	20.000	2.375	2.375	3.500	1.688	11.875	702
MBA1220-27-27	11.875	20.000	2.875	2.875	4.000	2.188	13.375	779

ALL ITEMS										
	W	11.875	EB	1.125	P	1.688	TCP	0.875	RPx	9.125	RPg	0.750
	L	20.000	ER	0.500	SU	1.875	RPos	9.000	RPy	3.188	LPg	1.000

13.375 x 15.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
MBA1315-13-13	13.375	15.000	1.375	1.375	3.000	1.063	9.875	505
MBA1315-17-17	13.375	15.000	1.875	1.875	3.000	1.063	10.875	562
MBA1315-23-23	13.375	15.000	2.375	2.375	3.500	1.563	12.375	627
MBA1315-27-27	13.375	15.000	2.875	2.875	4.000	2.063	13.875	692

ALL ITEMS										
	W	13.375	EB	1.125	P	1.875	TCP	1.375	RPx	6.625	RPg	0.750
	L	15.000	ER	0.625	SU	1.875	RPos	6.500	RPy	3.813	LPg	1.000

13.375 x 18.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
MBA1318-13-13	13.375	18.000	1.375	1.375	3.000	1.063	9.875	606
MBA1318-17-17	13.375	18.000	1.875	1.875	3.000	1.063	10.875	675
MBA1318-23-23	13.375	18.000	2.375	2.375	3.500	1.563	12.375	752
MBA1318-27-27	13.375	18.000	2.875	2.875	4.000	2.063	13.875	830

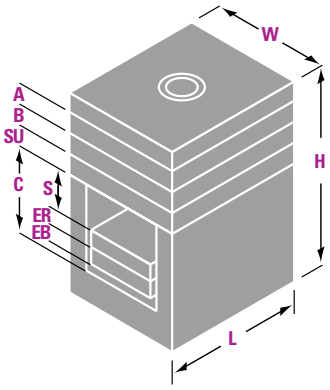
ALL ITEMS										
	W	13.375	EB	1.125	P	1.875	TCP	1.375	RPx	8.125	RPg	0.750
	L	18.000	ER	0.625	SU	1.875	RPos	8.000	RPy	3.813	LPg	1.000

13.375 x 20.750

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
MBA1321-17-17	13.375	20.750	1.875	1.875	3.000	1.063	10.875	777
MBA1321-23-23	13.375	20.750	2.375	2.375	3.500	1.563	12.375	867
MBA1321-27-27	13.375	20.750	2.875	2.875	4.000	2.063	13.875	957

ALL ITEMS										
	W	13.375	EB	1.125	P	1.875	TCP	1.375	RPx	9.500	RPg	0.750
	L	20.750	ER	0.625	SU	1.875	RPos	9.375	RPy	3.813	LPg	1.000

Product Selection Tables



13.375 x 23.500

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
MBA1323-17-17	13.375	23.500	1.875	1.875	3.000	1.063	10.875	881
MBA1323-23-23	13.375	23.500	2.375	2.375	3.500	1.563	12.375	982
MBA1323-27-27	13.375	23.500	2.875	2.875	4.000	2.063	13.875	1084

ALL ITEMS											
	W	13.375	EB	1.125	P	1.875	TCP	1.375	RPx	10.875	RPg	0.750
	L	23.500	ER	0.625	SU	1.875	RPos	10.750	RPy	3.813	LPg	1.000

14.875 x 17.875

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
MBA1518-17-17	14.875	17.875	1.875	1.875	3.500	1.563	11.875	790
MBA1518-23-23	14.875	17.875	2.375	2.375	3.500	1.563	12.875	865
MBA1518-27-27	14.875	17.875	2.875	2.875	4.000	2.063	14.375	950

ALL ITEMS											
	W	14.875	EB	1.125	P	1.875	TCP	1.375	RPx	8.063	RPg	0.750
	L	17.875	ER	0.625	SU	2.375	RPos	7.938	RPy	3.875	LPg	1.250

14.875 x 23.750

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
MBA1524-17-17	14.875	23.750	1.875	1.875	3.500	1.563	11.875	1050
MBA1524-23-23	14.875	23.750	2.375	2.375	3.500	1.563	12.875	1150
MBA1524-27-27	14.875	23.750	2.875	2.875	4.000	2.063	14.375	1262

ALL ITEMS											
	W	14.875	EB	1.125	P	1.875	TCP	1.375	RPx	11.000	RPg	0.750
	L	23.750	ER	0.625	SU	2.375	RPos	10.875	RPy	3.875	LPg	1.250

15.875 x 16.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
MBA1616-23-23	15.875	16.000	2.375	2.375	3.500	1.563	12.875	825
MBA1616-27-27	15.875	16.000	2.875	2.875	4.000	2.063	14.375	906

ALL ITEMS											
	W	15.875	EB	1.125	P	1.875	TCP	1.375	RPx	7.125	RPg	0.750
	L	16.000	ER	0.625	SU	2.375	RPos	7.000	RPy	4.375	LPg	1.250

15.875 x 20.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
MBA1620-23-23	15.875	20.000	2.375	2.375	3.500	1.563	12.875	1031
MBA1620-27-27	15.875	20.000	2.875	2.875	4.000	2.063	14.375	1132

ALL ITEMS											
	W	15.875	EB	1.125	P	1.875	TCP	1.375	RPx	9.125	RPg	0.750
	L	20.000	ER	0.625	SU	2.375	RPos	9.000	RPy	4.375	LPg	1.250

15.875 x 23.500

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
MBA1623-23-23	15.875	23.500	2.375	2.375	3.500	1.563	12.875	1212
MBA1623-27-27	15.875	23.500	2.875	2.875	4.000	2.063	14.375	1330

ALL ITEMS											
	W	15.875	EB	1.125	P	1.875	TCP	1.375	RPx	10.875	RPg	0.750
	L	23.500	ER	0.625	SU	2.375	RPos	10.750	RPy	4.375	LPg	1.250

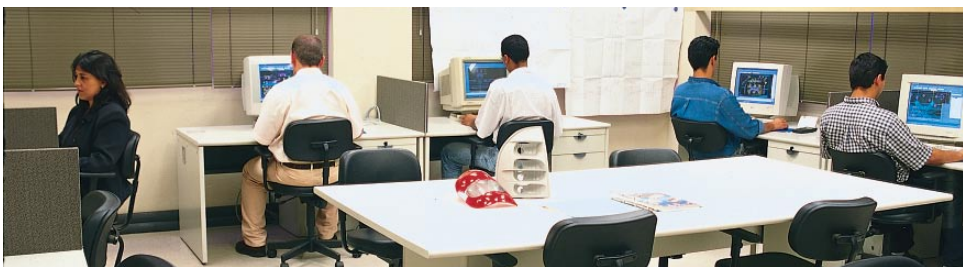
Polimold Industrial S.A.



Polimold, of São Bernardo do Campo, Brazil, has been a D-M-E partner since 1975. Founded in 1971, Polimold is Latin America's largest manufacturer of mold bases — they also produce and market other plastics and die-casting tooling components.

Utilizing the latest technology, Polimold manufactures to the highest standards for over 7,000 active customers throughout Latin America.









D-M-E Euro-Series Mold Bases

Completely interchangeable plates that support regional standards worldwide



FLUSH CLAMP PLATES

EURO-SERIES MOLD BASES

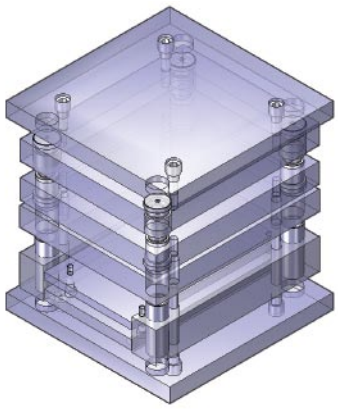
OVERHANG CLAMP PLATES

D-M-E

Every step of the way

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Features



Global solutions to regional standards

To meet the emerging need to support regional standards around the world, D-M-E introduces a new family of Euro standard mold bases, available worldwide. D-M-E Euro-Series mold bases offer many inherent benefits, but more importantly enable molders worldwide to employ Euro standard mold bases and components. And, since all D-M-E Euro-Series mold bases and components are in-stock, most are shipped the same day.

Precision fit

The common bore alignment design philosophy of the Euro-Series guarantees a perfect fit every time. Centering features ensure precise alignment of mating plates. All plates have clean chamfer, an extremely fine bore finish, and excellent surface finishes.

Modular

With its modular, flexible configuration and common bore alignment, Euro-Series plates are completely interchangeable. A single cavity plate can be used as either the A or B plate. The same clamp plate can be the Top Clamp Plate or Bottom Clamp Plate. The same Riser Plate can be used on either side of the housing.

Offset pin/bushing

The Euro-Series offset pin/bushing design means the offset hole is not out of position. Offset is achieved by the use of a differently-sized pin and bushing, combined with three uniformly sized pins.

Other key features

Euro-Series offers a wealth of other key features, including:

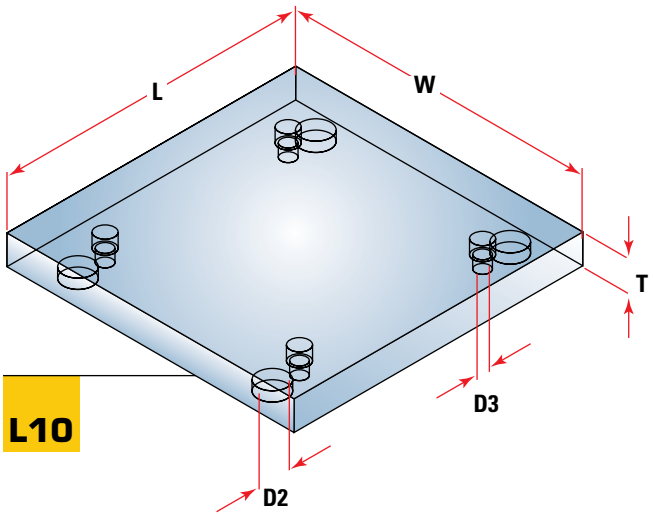
- Choice of flush or overhanging clamp plates
- Flexibility to use either a North American or European locating ring as there is no counterbore
- Wide range of European standard components available off-the-shelf
- Centering bushing aligns riser and offers easy threaded removal
- All plates clearly marked with steel type, plate code, and dimensions for easy identification

Features

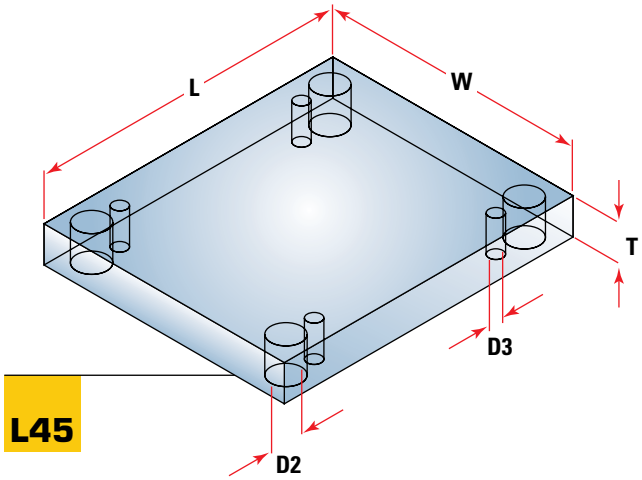


- **Globally available regional standard**
- **Precision fit**
- **Interchangeable design**
- **Common bore alignment**
- **Flexible locating ring styles**
- **Fine finishes**
- **Offset guide pin/bushing**
- **Wide range of Euro-Series components**
- **Same day shipment**
- **Choice of steel types**

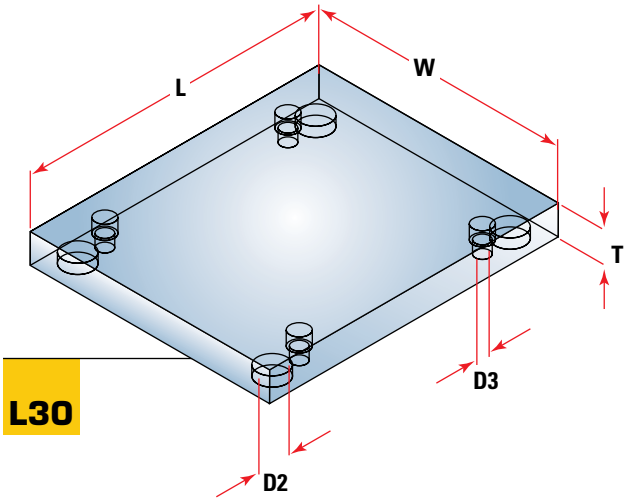
Plate Dimensions



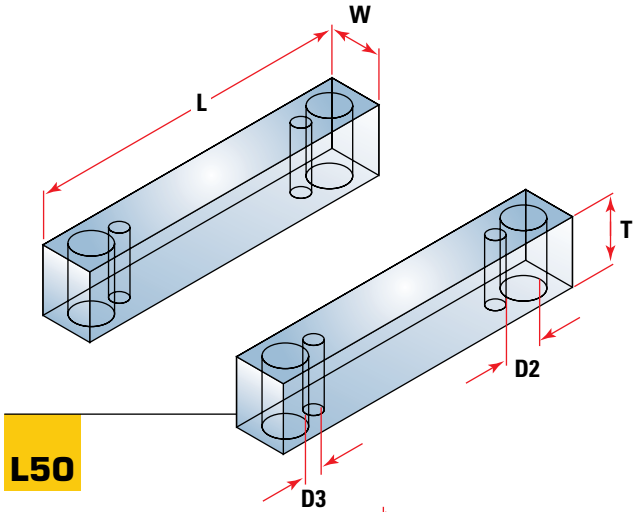
L10



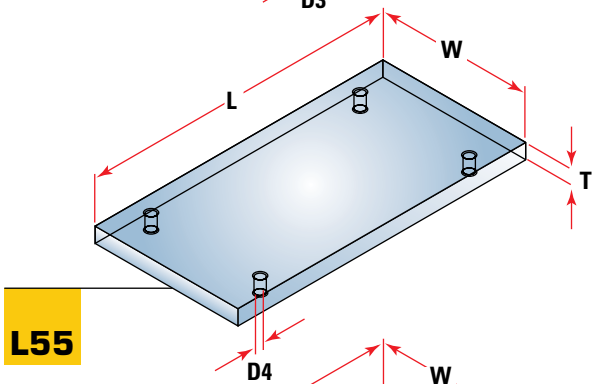
L45



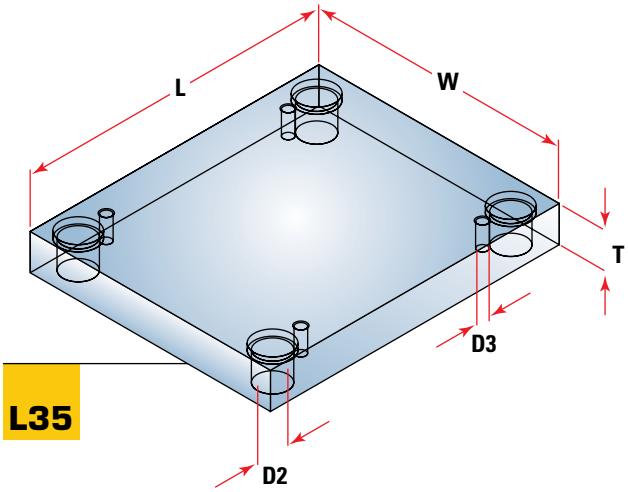
L30



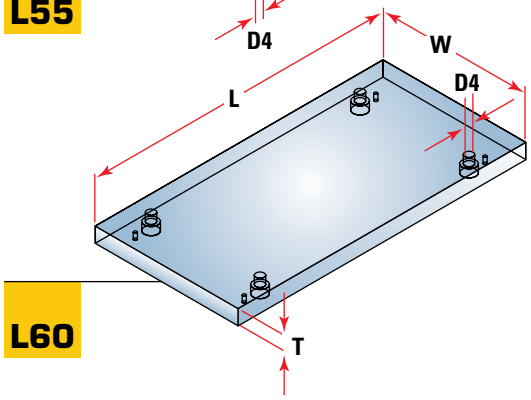
L50



L55

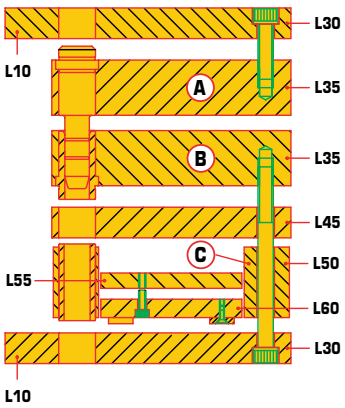


L35

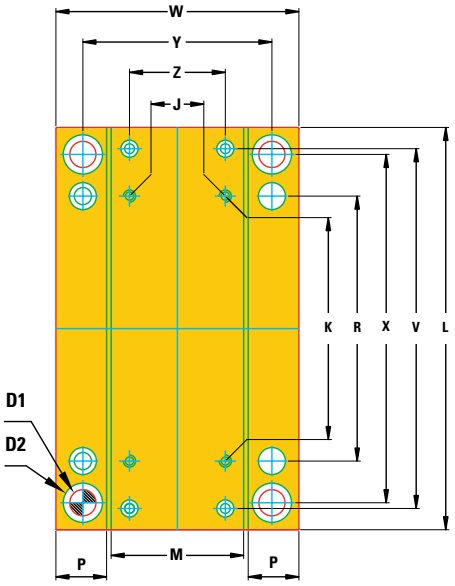


L60

Plate Dimensions



Size code		2020	1925	2030	2525	2530	2535	2540	3030	3035	3040
Nominal size		196 x 196	190 x 246	196 x 296	246 x 246	246 x 296	246 x 346	246 x 396	296 x 296	296 x 346	296 x 396
W	Width	196	190	196	246	246	246	246	296	296	296
	L10 width (with overhang)	246	254	246	296	296	296	296	346	346	346
L	Length	196	246	296	246	296	346	396	296	346	396
X	Length of bore centers	152	202	244	200	244	294	340	244	294	340
Y	Width of bore centers	154	148	150	200	200	194	198	250	244	248
K	Length of ER screw centers	132	182	230	180	230	286	330	230	286	330
R	Length of assy screw centers	100	150	186	130	186	224	284	186	224	284
J	Width of ER screw centers	96	90	90	130	130	136	122	180	186	176
V	Length of RP centers	166	216	266	214	264	324	364	266	324	364
Z	Width of RP centers	96	90	90	130	130	136	122	180	186	176
P	L50 riser width	38	38	43	43	43	43	47	43	43	47
ER	L55 ER thick	12	12	12	12	12	17	17	12	17	17
EB	L60 EB thick	17	17	17	17	17	22	22	17	22	22
M	L55, L60, ER, EB width	118	112	108	158	158	158	150	208	208	200
D1	Bush ID	26	26	30	30	30	30	30	30	30	30
D2	Bore ID	31	31	35	35	35	35	35	35	35	35
D3	Assy screws	M10	M10	M12	M12	M12	M12	M12	M12	M12	M12
D4	ER screws	M8	M8	M8	M8	M8	M8	M8	M8	M8	M8



Euro-Series Plate Tolerances

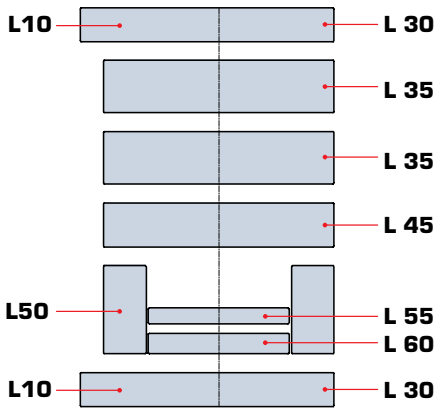
	mm	L10, L55, L60	L50	L30, L45	L35
W, L	up to 100	+/- 0.06	+/- 0.06	+/- 0.03	+/- 0.008
	> 100 - 180	+/- 0.08	+/- 0.08	+/- 0.04	+/- 0.010
	> 180 - 315	+/- 0.10	+/- 0.10	+/- 0.05	+/- 0.012
	> 315 - 500	+/- 0.12	+/- 0.12	+/- 0.05	+/- 0.014
	> 500 - 710	+/- 0.15	+/- 0.15	+/- 0.05	+/- 0.017
	> 710 - 1000	+/- 0.20	+/- 0.20	+/- 0.05	+/- 0.020
T		+0.2 / +0.3	0 / +0.02	+0.2 / +0.3	+0.2 / +0.3
X, Y	up to 100	+/- 0.008	+/- 0.008	+/- 0.008	+/- 0.008
	> 100 - 180	+/- 0.010	+/- 0.010	+/- 0.010	+/- 0.010
	> 180 - 315	+/- 0.012	+/- 0.012	+/- 0.012	+/- 0.012
	> 315 - 500	+/- 0.015	+/- 0.015	+/- 0.015	+/- 0.015
	> 500 - 710	+/- 0.018	+/- 0.018	+/- 0.018	+/- 0.018
	> 710 - 1000	+/- 0.020	+/- 0.020	+/- 0.020	+/- 0.020

Ordering Information

D-M-E Euro-Series Mold Bases are ordered and delivered as individual items. Any item can be ordered at any time and assembled with a new or existing Euro-Series Mold Base. Ordering is as simple as selecting the items you need and calling D-M-E Customer Service.

Steel Type Availability

DIN Type	1730	2738
D-M-E	#1	#3
L10, L30	✔	
L35	✔	✔
L45	✔	
L50, L55, L60	✔	



Euro-Series Mold Base Product Line Item Number Code Logic

L35 01 196 296 027

Plate Code — The letter L followed by two digits

Steel Code — "01" for 1730 Steel (D-M-E #1)
"17" for 2738 Steel (D-M-E #3)

Plate Width — Three-digit number with a leading zero, if necessary

Plate Length — Three-digit number with a leading zero, if necessary

Plate Thickness — Three-digit number with a leading zero, if necessary

Examples

L3501196296027 — L35 cavity plate from 1730 steel (#1) that is 196mm wide by 296mm long and 27mm thick

L4501190246036 — L45 cavity plate from 1730 steel (#1) that is 190mm wide by 246mm long and 36mm thick

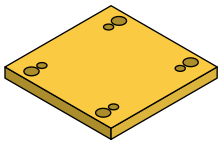
L3517246296056 — L35 cavity plate from 2738 steel (#3) that is 246mm wide by 296mm long and 56mm thick

Ordering Information

2020 196 x 196	1925 196 x 246	2030 196 x 296	2525 246 x 246	2530 246 x 296	2535 246 x 346	2540 246 x 396	3030 296 x 296	3035 296 x 346	3040 296 x 396

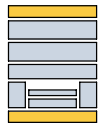
L10

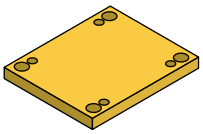




	2020	1925	2030	2525	2530	2535	2540	3030	3035	3040
1730 Steel (#1)	27	27	27	27	27	27	27	27	27	27

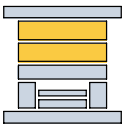
L30

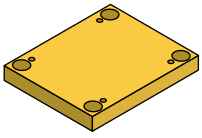




1730 Steel (#1)	NA	NA	27	27	27	27	27	27	27	27

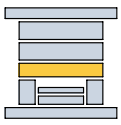
L35

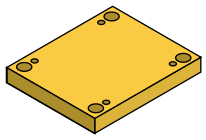




1730 Steel (#1)	36	36	36	36	36	36	36	36	36	36
	46	46	46	46	46	46	46	46	46	46
	66	66	66	66	66	66	66	66	66	66
2738 Steel (#3)	36	36	36	36	36	36	36	36	36	36
	46	46	46	46	46	46	46	46	46	46
	66	66	66	66	66	66	66	66	66	66

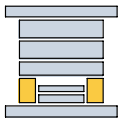
L45

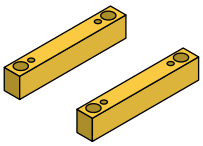




1730 Steel (#1)	27	27	36	36	36	36	36	36	36	36

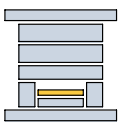
L50

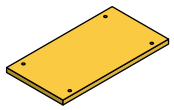




1730 Steel (#1)	56	56	56	56	56	56	56	56	56	56
	76	76	76	76	76	76	76	76	76	76
	96	96	96	96	96	96	96	96	96	96

L55

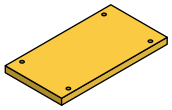




1730 Steel (#1)	12	12	12	12	12	17	17	12	17	17

L60



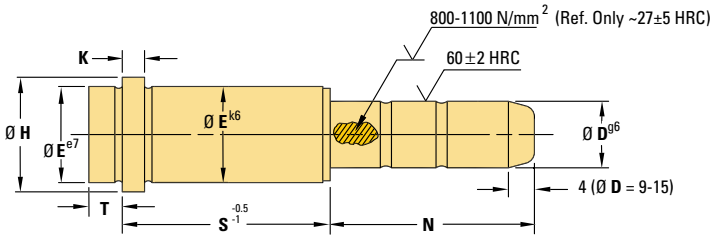


1730 Steel (#1)	17	17	17	17	17	22	22	17	22	22

Note: All dimensions provided are in millimeters and reflect plate thickness.

Euro-Series Components

Guide pins with collar



Information Key

D = Pin Body Diameter
E = Shoulder Diameter
H = Head Diameter
K = Head Thickness
N = Pin Body Length
S = Shoulder Length
T = Collar Length

ITEM PREFIX	D	E	H	K	T	S	N																			
							020	025	030	035	045	050	055	060	065	070	075	085	090	095	105	110	125	135	145	150	155	165
GDP-EC (R02)*	09 or 10	14	16	3	3	012																				
						017																				
						022																				
						027																				
						036																				
						046																				
						056																				
GDP-EC (R02)*	14 or 15	20	25	6	9	017																				
						022																				
						027																				
						036																				
						046																				
						056																				
						066																				
						076																				
						086																				
						096																				
						116																				

ITEM PREFIX	D	E	H	K	T	S	N																			
							035	045	055	065	075	085	095	105	115	120	125	130	135	145	155	165	205	225	245	255	285
GDP-EC (R02)*	18 or 20	26	31	6	9	017																				
						022																				
						027																				
						036																				
						046																				
						056																				
						066																				
						076																				
						086																				
						096																				
						116																				
						136																				
GDP-EC (R02)*	22 or 24	30	35	6	9	017																				
						022																				
						027																				
						036																				
						046																				
						056																				
						066																				
						076																				
						086																				
						096																				
						116																				
						136																				
						156																				

* "(R02)" is only a cross-reference to current D-M-E Europe Catalog item prefix numbers.

How to order: Specify Item Number with prefix, D diameter, S length and N length. Include zeros and dashes but omit decimals, as shown.

Prefix	D	S	N
GDP-EC			

Examples:

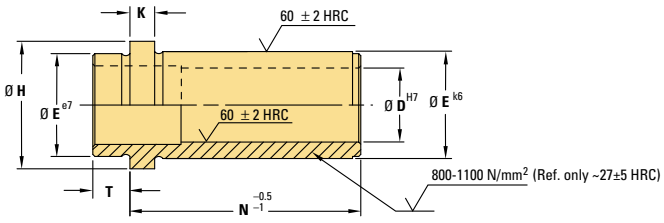
Prefix	D	S	N	Prefix	D	S	N
GDP-EC-	18	056	035	GDP-EC-	18	056	035

Availability

- Items in stock
- 2-3 week delivery
- Contact D-M-E for quote

Euro-Series Components

Guide pin bushing with collar



Information Key

D = Inner diameter
G = Outer diameter
H = Head diameter
K = Head height
N = Bushing Length from Head
T = Collar Length

ITEM PREFIX	D	E	H	K	T	N													
						017	022	027	036	046	056	066	076	086	096	116	136	156	196	246
GDB-ECS (R04)*	14 or 15	20	25	6	9		⚡	⚡	⚡	⚡	⚡									
	18 or 20	26	31	6	9			⚡	⚡	⚡	⚡	⚡		⚡						
	22 or 24	30	35	6	9			⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡					
	30 or 32	42	47	6	9							⚡		⚡	⚡	⚡	⚡			
	40 or 42	54	60	10	12															

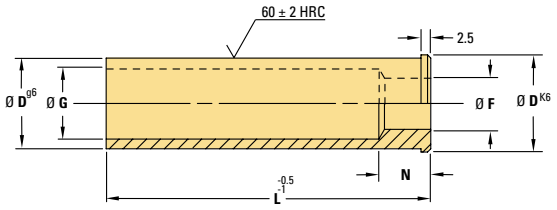
How to order: Specify Item Number with prefix, D diameter, and N length. Include zeros and dashes but omit decimals, as shown.

Prefix — D — N
GDP-ECS — — —

Examples:

Prefix	D	N	Prefix	D	N
GDP-ECS-	18-	033	GDP-ECS-	32-	116

Centering bushing



Information Key

D = Outside diameter
F = Inside Diameter
G = Inside Clearance Diameter
L = Length
N = Inside length

ITEM PREFIX	D	F	G	N	L														
					020	030	040	050	060	070	080	100	120	140	160	180	200	240	280	300
R05	14	6	11	8																
	20	8	16	13					⚡		⚡	⚡								
	26	10	21	13					⚡		⚡	⚡	⚡	⚡						
	30	12	25	13					⚡		⚡	⚡	⚡	⚡						
	42	16	33	13								⚡	⚡	⚡						
	54	20	43	13																

How to order: Specify Item Number with prefix, D diameter, and N length. Include zeros and dashes but omit decimals, as shown.

Prefix — D — N
R05 — — —

Examples:

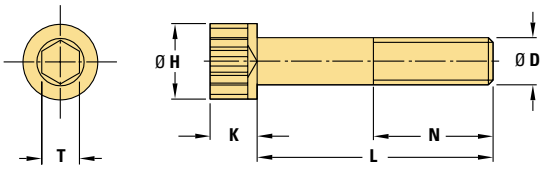
Prefix	D	N	Prefix	D	N
R05-	20-	040	R05-	42-	140

Availability

⚡ Items in stock
2-3 week delivery
Contact D-M-E for quote

Euro-Series Components

Socket head cap screws



D	N	H	K	T	L																							
					8	10	12	16	20	25	30	40	50	60	70	80	90	100	110	120	130	140	150	160	180	200	220	240	260
M4	12	7	4	3																									
M6	18	10	6	5																									
M8	22	13	8	6																									
M10	25	16	10	8																									
M12	28	18	12	10																									
M16	38	24	16	14																									
M16	44	24	16	14																									
M16	57	21	10	14																									
M20	52	30	20	17																									
M20	65	30	20	17																									

How to order:
Specify Item Number with prefix, D diameter, and N length. Include zeros and dashes but omit decimals, as shown.

D — L

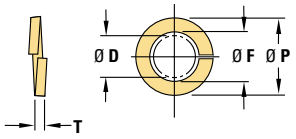
Examples:

D	L	D	L
20-	040	42-	140

Information Key

D = Thread Diameter
H = Head Diameter
K = Head Height
L = Length
N = Thread Length
T = Hex Socket Size (Across Flats)

R54 spring washers



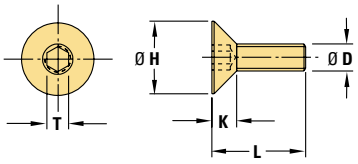
ITEM NUMBER	D	F	P	T	AVAILABILITY
R54 08 2	08	8.1	12.7	2.0	
R54 10 2,5	10	10.2	16	2.5	
R54 12 2,5	12	12.5	18	2.5	

How to order:
Specify Item Number. Include zeros and commas but omit decimals and all spaces (spaces are only shown here for easier reading).

Information Key

D = Screw Diameter
F = Inside Diameter
P = Outside Diameter
T = Thickness

Flat head screws

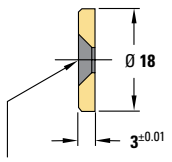


ITEM PREFIX	H	K	T	D	L										
					8	10	12	16	20	25	30	35	40	45	50
SM3	6	2.5	1.7	M3											
SM4	8	3	2.3	M4											
SM5	10	4	2.8	M5											
SM6	12	5	3.3	M6											
SM8	16	6	4.4	M8											
SM10	20	8	5.5	M10											
SM12	24	10	6.5	M12											

R18 Disks

ITEM NUMBER	AVAILABILITY
R18 18	

Use with SM4 8 Flat Head Screw (M4 thread x 8mm long) which must be purchased separately. See Flat Head Screws above.



Drilled & countersunk for **M4** thread flat head screw

How to order:
Specify Item Number with prefix and L length. Include zeros and dashes but omit all spaces.

Prefix — L

Examples:

Prefix	L	Prefix	L
20-	040	42-	140

Information Key

D = Thread Diameter
H = Head Diameter
K = Head Height
L = Length
T = Hex Socket Size (Across Flats)

Availability

- Items in stock
- 2-3 week delivery
- Contact D-M-E for quote

A Full Range of Euro-Series Components

As a global supplier of mold technology solutions, D-M-E is committed to supporting regional standards worldwide. That's why we offer over 4,000 different Euro-Series components to meet the European standards for mold systems. Key offerings include:

- Ejector pins, sleeves, and blades
- Guide pins and bushings
- Centering bushings and dowels
- Set screws, bolts, and washers
- Locating rings
- Sprue bushings
- See the D-M-E Mold Components catalog for our complete selection



Metric Equivalents and Conversions

Equivalents: Inch, fraction, decimal, millimeter

INCHES	MILLIMETERS	INCHES	MILLIMETERS
1	25.4	34	863.6
2	50.8	35	889.0
3	76.2	36	914.4
4	101.6	37	939.8
5	127.0	38	965.2
6	152.4	39	990.6
7	177.8	40	1016.0
8	203.2	41	1041.4
9	228.6	42	1066.8
10	254.0	43	1092.2
11	279.4	44	1117.6
12	304.8	45	1143.0
13	330.2	46	1168.4
14	355.6	47	1193.8
15	381.0	48	1219.2
16	406.4	49	1244.6
17	431.8	50	1270.0
18	457.2	51	1295.4
19	482.6	52	1320.8
20	508.0	53	1346.2
21	533.4	54	1371.6
22	558.8	55	1397.0
23	584.2	56	1422.4
24	609.6	57	1447.8
25	635.0	58	1473.2
26	660.4	59	1498.6
27	685.8	60	1524.0
28	711.2	61	1549.4
29	736.6	62	1574.8
30	762.0	63	1600.2
31	787.4	64	1625.6
32	812.8	65	1651.0
33	838.2	66	1676.4

INCHES		MILLIMETERS	INCHES		MILLIMETERS
1/64	0.015625	0.396875	33/64	0.515625	13.096875
1/32	0.031250	0.793750	17/32	0.531250	13.493750
3/64	0.046875	1.190625	35/64	0.546875	13.890625
1/16	0.062500	1.587500	9/16	0.562500	14.287500
5/64	0.078125	1.984375	37/64	0.578125	14.684375
3/32	0.093750	2.381250	19/32	0.593750	15.081250
7/64	0.109375	2.778125	39/64	0.609375	15.478125
1/8	0.125000	3.175000	5/8	0.625000	15.875000
9/64	0.140625	3.571875	41/64	0.640625	16.271875
5/32	0.156250	3.968750	21/32	0.656250	16.668750
11/64	0.171875	4.365625	43/64	0.671875	17.065625
3/16	0.187500	4.762500	11/16	0.687500	17.462500
13/64	0.203125	5.159375	45/64	0.703125	17.859375
7/32	0.218750	5.556250	23/32	0.718750	18.256250
15/64	0.234375	5.953125	47/64	0.734375	18.653125
1/4	0.250000	6.350000	3/4	0.750000	19.050000
17/64	0.265625	6.746875	49/64	0.765625	19.446875
9/32	0.281250	7.143750	25/32	0.781250	19.843750
19/64	0.296875	7.540625	51/64	0.796875	20.240625
5/16	0.312500	7.937500	13/16	0.812500	20.637500
21/64	0.328125	8.334375	53/64	0.828125	21.034375
11/32	0.343750	8.731250	27/32	0.843750	21.431250
23/64	0.359375	9.128125	55/64	0.859375	21.828125
3/8	0.375000	9.525000	7/8	0.875000	22.225000
25/64	0.390625	9.921875	57/64	0.890625	22.621875
13/32	0.406250	10.318750	29/32	0.906250	23.018750
27/64	0.421875	10.715625	59/64	0.921875	23.415625
7/16	0.437500	11.112500	15/16	0.937500	23.812500
29/64	0.453125	11.509375	61/64	0.953125	24.209375
15/32	0.468750	11.906250	31/32	0.968750	24.606250
31/64	0.484375	12.303125	63/64	0.984375	25.003125
1/2	0.500000	12.700000	1	1.000000	25.400000

Equivalents: Decimal, millimeter

INCHES	MILLIMETERS	INCHES	MILLIMETERS	INCHES	MILLIMETERS
0.001	0.0254	0.01	0.254	0.1	2.54
0.002	0.0508	0.02	0.508	0.2	5.08
0.003	0.0762	0.03	0.762	0.3	7.62
0.004	0.1016	0.04	1.016	0.4	10.16
0.005	0.1270	0.05	1.270	0.5	12.70
0.006	0.1524	0.06	1.524	0.6	15.24
0.007	0.1778	0.07	1.778	0.7	17.78
0.008	0.2032	0.08	2.032	0.8	20.32
0.009	0.2286	0.09	2.286	0.9	22.86

Measurement conversions

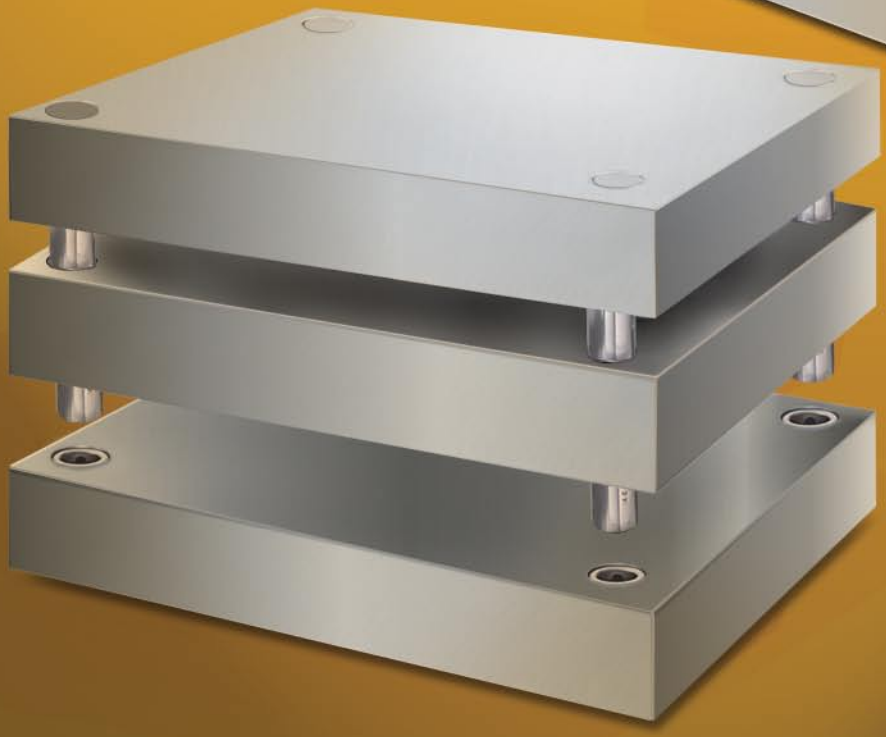
MULTIPLY BY	FROM → TO ←	TO → FROM ←	MULTIPLY BY
0.03937	inch	millimeter	25.4
0.0016	$inch^2$	$millimeter^2$	645.16
0.061	$inch^3$	$centimeter^3$	16.3871
0.2642	gallon (U.S.)	liter	3.7854
0.03527	oz. (avdp.)	gram	28.3495
2.2044	pound	kilogram	0.4536
62.43	lbs/ft^3	g/cm^3	0.0160
0.145	psi	kPa	6.8948
14.2247	psi	kg/cm^2	0.0703
1.8°C + 32	°F	°C	(°F-32)/1.8

D-M-E Cavity Retainer Sets

Cavity retainer sets that match your application requirements







TWO-PLATE
THREE-PLATE
CAVITY
RETAINER
SETS

D-M-E
Every step of the way

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Steel Information

Two- and Three-Plate Cavity Retainer Sets offer accurate alignment and complete interchangeability

D-M-E Standard Cavity Retainer Sets are available in 49 standard sizes from 6" × 10⅞" to 23¾" × 35½". Each size is offered in various cavity plate thickness combinations in your choice of D-M-E No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 available up to 2⅞ thick standard). D-M-E's precision-built interchangeable construction makes possible the wide variety of two-plate combinations as well as the three-plate construction.





D-M-E No. 1 Steel

D-M-E No. 1 Steel is a medium carbon (SAE 1030), silicon-killed forging quality steel with approximately 25% greater tensile strength than typical low-carbon warehouse steels. It machines easily, but is not "sticky," permitting a faster and smoother cut.

D-M-E No. 2 Steel

D-M-E No. 2 Steel is an AISI 4130 type steel. It is supplied pre-heat treated to 271-321 Bhn (28-34 HRC). A high strength steel, it is ideal for cavity and core retainer plates, clamping plates and support plates in molds and dies.

D-M-E No. 3 Steel

D-M-E No. 3 Steel is a P-20 AISI 4130 (modified) type cavity steel. Exceptionally clean, it is pre-heat treated to 271-321 Bhn (28-34 HRC). It provides high hardness, good machinability and exceptional polishability.

D-M-E No. 7 Steel

No. 7 Steel is a modified AISI 400 series stainless steel for holder block applications. It is supplied pre-hardened to 32-36 HRC (302-340 Bhn). This stainless steel offers corrosion resistance and exceptional machinability but cannot be further hardened (see D-M-E No. 6). For humid environments, corrosive plastics, "clean room" or "100% stainless" applications, it is an ideal choice for all structural (non-cavity/core) mold plates.

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Three-Plate Cavity Retainer Sets
Cavity Retainer Sets – 6" x 10⅞

Three-Plate Cavity Retainer Sets

When "Three-plate" Cavity Sets are ordered the following information should be specified:

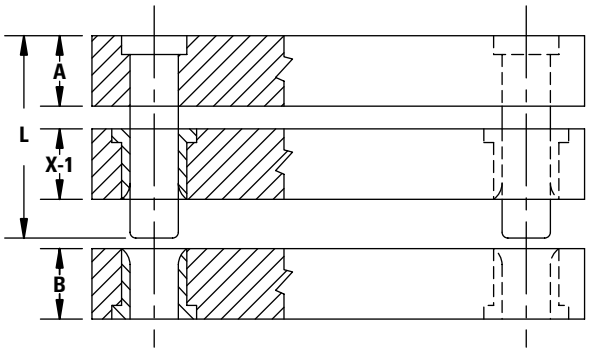
- Width and length of Cavity Set, thicknesses of "A", "X-1" and "B" plates, length of leader pins and type of steel required.

To determine the price:

- Take the price of the same size Standard Cavity Retainer Set having identical "A" and "B" Plate Thicknesses… PLUS… ½ the price of a Cavity Set with "A" and "B" plates each the same thickness as the "X-1" Plate.

For quotations on assemblies with more than one floating plate, contact D-M-E.



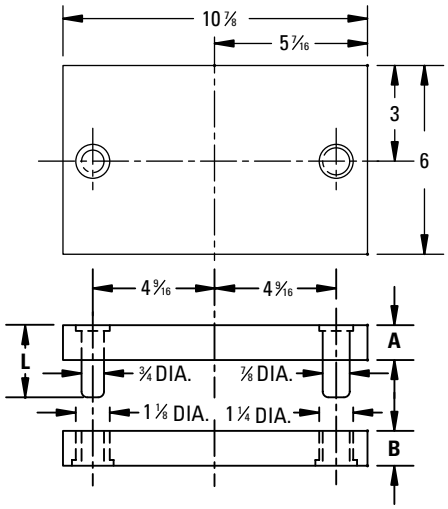


Cavity Retainer Sets – 6" × 10⅞

A	B	6" (W) × 10⅞ (L) ITEM NUMBER	NET WT.
7/8	⅞	611-7-7	33
	1⅜	611-7-13	42
	1⅞	611-7-17	51
	2⅜	611-7-23	61
	2⅞	611-7-27	70
	3⅜	611-7-33	79
1 3/8	⅞	611-13-7	42
	1⅜	611-13-13	51
	1⅞	611-13-17	61
	2⅜	611-13-23	70
	2⅞	611-13-27	79
	3⅜	611-13-33	88
1 7/8	⅞	611-17-7	51
	1⅜	611-17-13	61
	1⅞	611-17-17	70
	2⅜	611-17-23	79
	2⅞	611-17-27	88
	3⅜	611-17-33	98



This 6" x 10⅞ Cavity Set is designed for use in the Stokes Model 800 Compression Press.



WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 Steel available standard only for plates up to and including 2⅞ thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

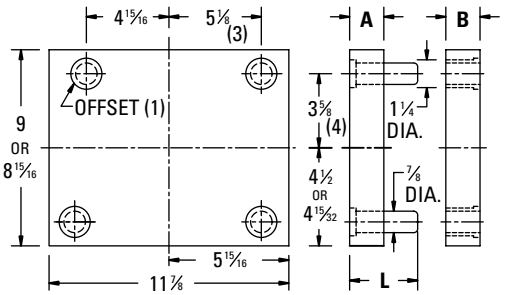
Cavity Retainer Sets
8 15/16 or 9" × 11 7/8, 9 7/8 × 7 7/8



A	B	8 15/16 OR 9" × 11 7/8		
		ITEM NUMBER 8 15/16	ITEM NUMBER 9"	NET WT.
7/8	7/8	912-7-7V	912-7-7M	53
	1 3/8	912-7-13V	912-7-13M	69
	1 7/8	912-7-17V	912-7-17M	84
	2 3/8	912-7-23V	912-7-23M	99
	2 7/8	–	912-7-27M	114
	3 3/8	–	912-7-33M	129
1 3/8	7/8	912-13-7V	912-13-7M	69
	1 3/8	912-13-13V	912-13-13M	84
	1 7/8	912-1317V	912-13-17M	99
	2 3/8	–	912-13-23M	114
	2 7/8	–	912-13-27M	129
	3 3/8	–	912-13-33M	144
1 7/8	7/8	912-17-7V	912-17-7M	84
	1 3/8	912-17-13V	912-17-13M	99
	1 7/8	–	912-17-17M	114
	2 3/8	–	912-17-23M	129
	2 7/8	–	912-17-27M	144
	3 3/8	–	912-17-33M	159

A	B	9" × 11 7/8	
		ITEM NUMBER	NET WT.
2 3/8	7/8	912-23-7M	99
	1 3/8	912-23-13M	114
	1 7/8	912-23-17M	129
	2 3/8	912-23-23M	144
	2 7/8	912-23-27M	159
	3 3/8	912-23-33M	175
2 7/8	7/8	912-27-7M	114
	1 3/8	912-27-13M	129
	1 7/8	912-27-17M	144
	2 3/8	912-27-23M	159
	2 7/8	912-27-27M	175
	3 3/8	912-27-33M	190
3 3/8	7/8	912-33-7M	129
	1 3/8	912-33-13M	144
	1 7/8	912-33-17M	159
	2 3/8	912-33-23M	175
	2 7/8	912-33-27M	190
	3 3/8	912-33-33M	205

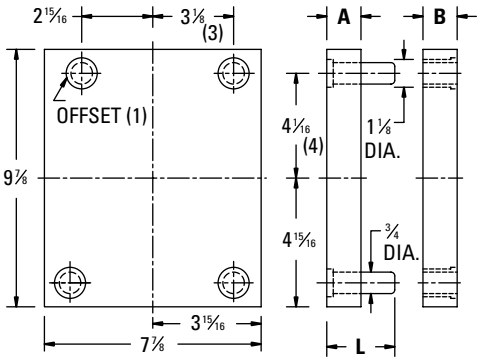
8 15/16 or 9"× 11 7/8



These 8 15/16 or 9" × 11 7/8 cavity retainer sets are designed for use with 912V and 912M Mold Bases.

A	B	9 7/8 × 7 7/8	
		ITEM NUMBER	NET WT.
7/8	7/8	108R-7-7	39
	1 3/8	108R-7-13	50
	1 7/8	108R-7-17	61
	2 3/8	108R-7-23	72
1 3/8	7/8	108R-13-7	50
	1 3/8	108R-13-13	61
	1 7/8	108R-13-17	72
1 7/8	7/8	108R-17-7	61
	1 3/8	108R-17-13	72

9 7/8 × 7 7/8



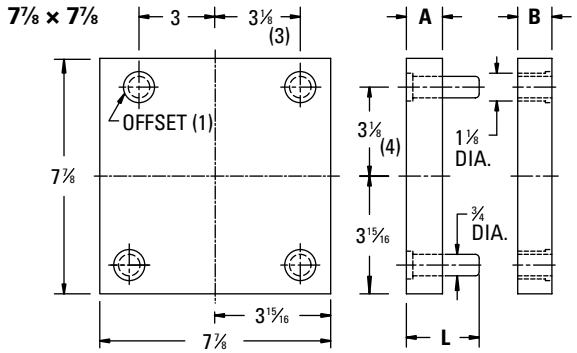
These 9 7/8 × 7 7/8 cavity retainer sets are designed for use with 108R Mold bases.

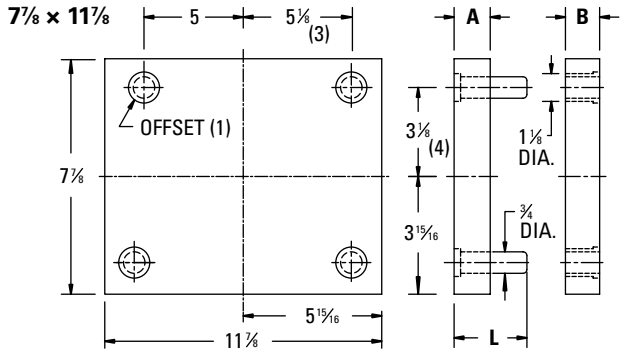
Thickness of each plate is finish ground ± .001". Width and length finished square and parallel.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 Steel available standard only for plates up to and including 2 7/8 thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

Cavity Retainer Sets
7⅞ × 7⅞ and 7⅞ × 11⅞





A	B	ITEM NUMBER	NET WT.
7/8	7/8	88-7-7	31
	1 3/8	88-7-13	40
	1 7/8	88-7-17	49
	2 3/8	88-7-23	58
	2 7/8	88-7-27	66
	3 3/8	88-7-33	75
	3 7/8	88-7-37	84
	4 7/8	88-7-47	102
	5 7/8	88-7-57	119
1 3/8	7/8	88-13-7	40
	1 3/8	88-13-13	49
	1 7/8	88-13-17	58
	2 3/8	88-13-23	66
	2 7/8	88-13-27	75
	3 3/8	88-13-33	84
	3 7/8	88-13-37	93
	4 7/8	88-13-47	110
	5 7/8	88-13-57	128
1 7/8	7/8	88-17-7	49
	1 3/8	88-17-13	58
	1 7/8	88-17-17	66
	2 3/8	88-17-23	75
	2 7/8	88-17-27	84
	3 3/8	88-17-33	93
	3 7/8	88-17-37	102
	4 7/8	88-17-47	119
	5 7/8	88-17-57	137
2 3/8	7/8	88-23-7	58
	1 3/8	88-23-13	66
	1 7/8	88-23-17	75
	2 3/8	88-23-23	84
	2 7/8	88-23-27	93
	3 3/8	88-23-33	102
	3 7/8	88-23-37	110
	4 7/8	88-23-47	128
	5 7/8	88-23-57	145
2 7/8	7/8	88-27-7	66
	1 3/8	88-27-13	75
	1 7/8	88-27-17	84
	2 3/8	88-27-23	93
	2 7/8	88-27-27	102
	3 3/8	88-27-33	110
	3 7/8	88-27-37	119
	4 7/8	88-27-47	137
	5 7/8	88-27-57	154

A	B	ITEM NUMBER	NET WT.
3 3/8	7/8	88-33-7	75
	1 3/8	88-33-13	84
	1 7/8	88-33-17	93
	2 3/8	88-33-23	102
	2 7/8	88-33-27	110
	3 3/8	88-33-33	119
	3 7/8	88-33-37	128
	4 7/8	88-33-47	145
	5 7/8	88-33-57	163
3 7/8	7/8	88-37-7	84
	1 3/8	88-37-13	93
	1 7/8	88-37-17	102
	2 3/8	88-37-23	110
	2 7/8	88-37-27	119
	3 3/8	88-37-33	128
	3 7/8	88-37-37	137
	4 7/8	88-37-47	154
	5 7/8	88-37-57	172
4 7/8	7/8	88-47-7	102
	1 3/8	88-47-13	110
	1 7/8	88-47-17	119
	2 3/8	88-47-23	128
	2 7/8	88-47-27	137
	3 3/8	88-47-33	145
	3 7/8	88-47-37	154
	4 7/8	88-47-47	172
	5 7/8	88-47-57	189
5 7/8	7/8	88-57-7	119
	1 3/8	88-57-13	128
	1 7/8	88-57-17	137
	2 3/8	88-57-23	145
	2 7/8	88-57-27	154
	3 3/8	88-57-33	163
	3 7/8	88-57-37	172
	4 7/8	88-57-47	189
	5 7/8	88-57-57	207

A	B	ITEM NUMBER	NET WT.
7/8	7/8	812-7-7	48
	1 3/8	812-7-13	61
	1 7/8	812-7-17	74
	2 3/8	812-7-23	87
	2 7/8	812-7-27	100
	3 3/8	812-7-33	113
	3 7/8	812-7-37	126
	4 7/8	812-7-47	153
	5 7/8	812-7-57	179
1 3/8	7/8	812-13-7	61
	1 3/8	812-13-13	74
	1 7/8	812-13-17	87
	2 3/8	812-13-23	100
	2 7/8	812-13-27	113
	3 3/8	812-13-33	126
	3 7/8	812-13-37	139
	4 7/8	812-13-47	166
	5 7/8	812-13-57	192
1 7/8	7/8	812-17-7	74
	1 3/8	812-17-13	87
	1 7/8	812-17-17	100
	2 3/8	812-17-23	113
	2 7/8	812-17-27	126
	3 3/8	812-17-33	139
	3 7/8	812-17-37	152
	4 7/8	812-17-47	179
	5 7/8	812-17-57	205
2 3/8	7/8	812-23-7	87
	1 3/8	812-23-13	100
	1 7/8	812-23-17	113
	2 3/8	812-23-23	126
	2 7/8	812-23-27	139
	3 3/8	812-23-33	152
	3 7/8	812-23-37	165
	4 7/8	812-23-47	192
	5 7/8	812-23-57	218

A	B	ITEM NUMBER	NET WT.
2 7/8	7/8	812-27-7	100
	1 3/8	812-27-13	113
	1 7/8	812-27-17	126
	2 3/8	812-27-23	139
	2 7/8	812-27-27	152
	3 3/8	812-27-33	165
	3 7/8	812-27-37	178
	4 7/8	812-27-47	205
	5 7/8	812-27-57	231
3 3/8	7/8	812-33-7	113
	1 3/8	812-33-13	126
	1 7/8	812-33-17	139
	2 3/8	812-33-23	152
	2 7/8	812-33-27	165
	3 3/8	812-33-33	178
	3 7/8	812-33-37	191
	4 7/8	812-33-47	218
	5 7/8	812-33-57	244
3 7/8	7/8	812-37-7	126
	1 3/8	812-37-13	139
	1 7/8	812-37-17	152
	2 3/8	812-37-23	165
	2 7/8	812-37-27	178
	3 3/8	812-37-33	191
	3 7/8	812-37-37	204
	4 7/8	812-37-47	231
	5 7/8	812-37-57	257
4 7/8	7/8	812-47-7	153
	1 3/8	812-47-13	166
	1 7/8	812-47-17	179
	2 3/8	812-47-23	192
	2 7/8	812-47-27	205
	3 3/8	812-47-33	218
	3 7/8	812-47-37	231
	4 7/8	812-47-47	258
	5 7/8	812-47-57	284
5 7/8	7/8	812-57-7	179
	1 3/8	812-57-13	192
	1 7/8	812-57-17	205
	2 3/8	812-57-23	218
	2 7/8	812-57-27	231
	3 3/8	812-57-33	244
	3 7/8	812-57-37	257
	4 7/8	812-57-47	284
	5 7/8	812-57-57	310

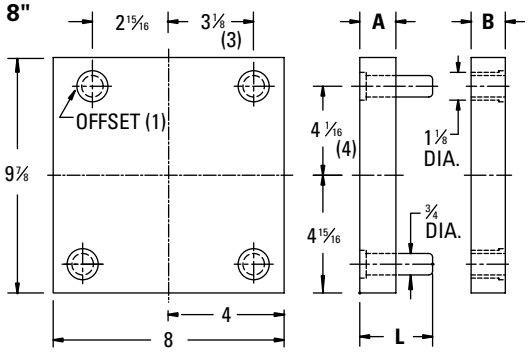
Thickness of each plate is finish ground ± .001". Width and length finished square and parallel.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 Steel available standard only for plates up to and including 2⅞ thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

Cavity Retainer Sets
9⅞ × 8" and 9⅞ × 11⅞

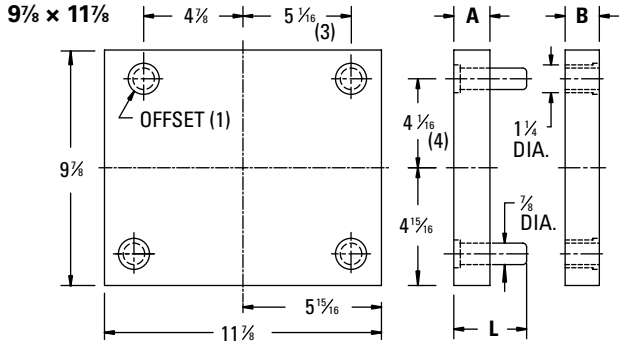
9⅞ × 8"



A	B	ITEM NUMBER	NET WT.
7/8	⅞	108-7-7	40
	1⅜	108-7-13	51
	1⅞	108-7-17	62
	2⅜	108-7-23	73
	2⅞	108-7-27	84
	3⅜	108-7-33	96
	3⅞	108-7-37	107
	4⅞	108-7-47	129
	5⅞	108-7-57	152
1 3/8	⅞	108-13-7	51
	1⅜	108-13-13	62
	1⅞	108-13-17	73
	2⅜	108-13-23	84
	2⅞	108-13-27	96
	3⅜	108-13-33	107
	3⅞	108-13-37	118
	4⅞	108-13-47	140
	5⅞	108-13-57	163
1 7/8	⅞	108-17-7	62
	1⅜	108-17-13	73
	1⅞	108-17-17	84
	2⅜	108-17-23	96
	2⅞	108-17-27	107
	3⅜	108-17-33	118
	3⅞	108-17-37	129
	4⅞	108-17-47	152
	5⅞	108-17-57	174
2 3/8	⅞	108-23-7	73
	1⅜	108-23-13	84
	1⅞	108-23-17	96
	2⅜	108-23-23	107
	2⅞	108-23-27	118
	3⅜	108-23-33	129
	3⅞	108-23-37	140
	4⅞	108-23-47	163
	5⅞	108-23-57	185
2 7/8	⅞	108-27-7	84
	1⅜	108-27-13	96
	1⅞	108-27-17	107
	2⅜	108-27-23	118
	2⅞	108-27-27	129
	3⅜	108-27-33	140
	3⅞	108-27-37	152
	4⅞	108-27-47	174
	5⅞	108-27-57	196

A	B	ITEM NUMBER	NET WT.
3 3/8	⅞	108-33-7	96
	1⅜	108-33-13	107
	1⅞	108-33-17	118
	2⅜	108-33-23	129
	2⅞	108-33-27	140
	3⅜	108-33-33	152
	3⅞	108-33-37	163
	4⅞	108-33-47	185
	5⅞	108-33-57	208
3 7/8	⅞	108-37-7	107
	1⅜	108-37-13	118
	1⅞	108-37-17	129
	2⅜	108-37-23	140
	2⅞	108-37-27	152
	3⅜	108-37-33	163
	3⅞	108-37-37	174
	4⅞	108-37-47	196
	5⅞	108-37-57	219
4 7/8	⅞	108-47-7	129
	1⅜	108-47-13	140
	1⅞	108-47-17	152
	2⅜	108-47-23	163
	2⅞	108-47-27	174
	3⅜	108-47-33	185
	3⅞	108-47-37	196
	4⅞	108-47-47	219
	5⅞	108-47-57	241
5 7/8	⅞	108-57-7	152
	1⅜	108-57-13	163
	1⅞	108-57-17	174
	2⅜	108-57-23	185
	2⅞	108-57-27	196
	3⅜	108-57-33	208
	3⅞	108-57-37	219
	4⅞	108-57-47	241
	5⅞	108-57-57	263

9⅞ × 11⅞



A	B	ITEM NUMBER	NET WT.
7/8	⅞	1012-7-7	59
	1⅜	1012-7-13	75
	1⅞	1012-7-17	92
	2⅜	1012-7-23	108
	2⅞	1012-7-27	125
	3⅜	1012-7-33	142
	3⅞	1012-7-37	158
	4⅞	1012-7-47	192
	5⅞	1012-7-57	225
1 3/8	⅞	1012-13-7	75
	1⅜	1012-13-13	92
	1⅞	1012-13-17	108
	2⅜	1012-13-23	125
	2⅞	1012-13-27	142
	3⅜	1012-13-33	158
	3⅞	1012-13-37	175
	4⅞	1012-13-47	208
	5⅞	1012-13-57	241
1 7/8	⅞	1012-17-7	92
	1⅜	1012-17-13	108
	1⅞	1012-17-17	125
	2⅜	1012-17-23	142
	2⅞	1012-17-27	158
	3⅜	1012-17-33	175
	3⅞	1012-17-37	192
	4⅞	1012-17-47	225
	5⅞	1012-17-57	258
2 3/8	⅞	1012-23-7	108
	1⅜	1012-23-13	125
	1⅞	1012-23-17	142
	2⅜	1012-23-23	158
	2⅞	1012-23-27	175
	3⅜	1012-23-33	192
	3⅞	1012-23-37	208
	4⅞	1012-23-47	241
	5⅞	1012-23-57	275

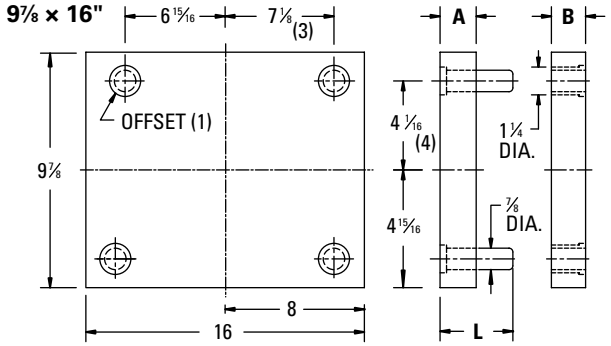
A	B	ITEM NUMBER	NET WT.
2 7/8	⅞	1012-27-7	125
	1⅜	1012-27-13	142
	1⅞	1012-27-17	158
	2⅜	1012-27-23	175
	2⅞	1012-27-27	192
	3⅜	1012-27-33	208
	3⅞	1012-27-37	225
	4⅞	1012-27-47	258
	5⅞	1012-27-57	291
3 3/8	⅞	1012-33-7	142
	1⅜	1012-33-13	158
	1⅞	1012-33-17	175
	2⅜	1012-33-23	192
	2⅞	1012-33-27	208
	3⅜	1012-33-33	225
	3⅞	1012-33-37	241
	4⅞	1012-33-47	275
	5⅞	1012-33-57	308
3 7/8	⅞	1012-37-7	158
	1⅜	1012-37-13	175
	1⅞	1012-37-17	192
	2⅜	1012-37-23	208
	2⅞	1012-37-27	225
	3⅜	1012-37-33	241
	3⅞	1012-37-37	258
	4⅞	1012-37-47	291
	5⅞	1012-37-57	324
4 7/8	⅞	1012-47-7	192
	1⅜	1012-47-13	208
	1⅞	1012-47-17	225
	2⅜	1012-47-23	241
	2⅞	1012-47-27	258
	3⅜	1012-47-33	275
	3⅞	1012-47-37	291
	4⅞	1012-47-47	324
	5⅞	1012-47-57	358
5 7/8	⅞	1012-57-7	225
	1⅜	1012-57-13	241
	1⅞	1012-57-17	258
	2⅜	1012-57-23	275
	2⅞	1012-57-27	291
	3⅜	1012-57-33	308
	3⅞	1012-57-37	324
	4⅞	1012-57-47	358
	5⅞	1012-57-57	391

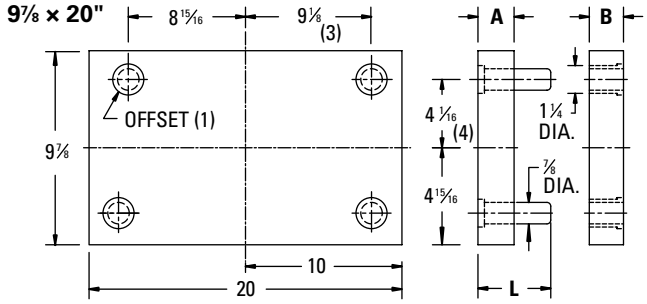
Thickness of each plate is finish ground ± .001". Width and length finished square and parallel.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 Steel available standard only for plates up to and including 2⅞ thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

Cavity Retainer Sets
9⅞ × 16" and 9⅞ × 20"





A	B	ITEM NUMBER	NET WT.
7/8	⅞	1016-7-7	79
	1⅜	1016-7-13	101
	1⅞	1016-7-17	124
	2⅜	1016-7-23	146
	2⅞	1016-7-27	168
	3⅜	1016-7-33	191
	3⅞	1016-7-37	213
	4⅞	1016-7-47	258
	5⅞	1016-7-57	303
1 3/8	⅞	1016-13-7	101
	1⅜	1016-13-13	124
	1⅞	1016-13-17	146
	2⅜	1016-13-23	168
	2⅞	1016-13-27	191
	3⅜	1016-13-33	213
	3⅞	1016-13-37	235
	4⅞	1016-13-47	280
	5⅞	1016-13-57	325
1 7/8	⅞	1016-17-7	124
	1⅜	1016-17-13	146
	1⅞	1016-17-17	168
	2⅜	1016-17-23	191
	2⅞	1016-17-27	213
	3⅜	1016-17-33	235
	3⅞	1016-17-37	258
	4⅞	1016-17-47	303
	5⅞	1016-17-57	347
2 3/8	⅞	1016-23-7	146
	1⅜	1016-23-13	168
	1⅞	1016-23-17	191
	2⅜	1016-23-23	213
	2⅞	1016-23-27	235
	3⅜	1016-23-33	258
	3⅞	1016-23-37	280
	4⅞	1016-23-47	325
	5⅞	1016-23-57	370
2 7/8	⅞	1016-27-7	168
	1⅜	1016-27-13	191
	1⅞	1016-27-17	213
	2⅜	1016-27-23	235
	2⅞	1016-27-27	258
	3⅜	1016-27-33	280
	3⅞	1016-27-37	303
	4⅞	1016-27-47	347
	5⅞	1016-27-57	392

A	B	ITEM NUMBER	NET WT.
3 3/8	⅞	1016-33-7	191
	1⅜	1016-33-13	213
	1⅞	1016-33-17	235
	2⅜	1016-33-23	258
	2⅞	1016-33-27	280
	3⅜	1016-33-33	303
	3⅞	1016-33-37	325
	4⅞	1016-33-47	370
	5⅞	1016-33-57	415
3 7/8	⅞	1016-37-7	213
	1⅜	1016-37-13	235
	1⅞	1016-37-17	258
	2⅜	1016-37-23	280
	2⅞	1016-37-27	303
	3⅜	1016-37-33	325
	3⅞	1016-37-37	347
	4⅞	1016-37-47	392
	5⅞	1016-37-57	437
4 7/8	⅞	1016-47-7	258
	1⅜	1016-47-13	280
	1⅞	1016-47-17	303
	2⅜	1016-47-23	325
	2⅞	1016-47-27	347
	3⅜	1016-47-33	370
	3⅞	1016-47-37	392
	4⅞	1016-47-47	437
	5⅞	1016-47-57	482
5 7/8	⅞	1016-57-7	303
	1⅜	1016-57-13	325
	1⅞	1016-57-17	347
	2⅜	1016-57-23	370
	2⅞	1016-57-27	392
	3⅜	1016-57-33	415
	3⅞	1016-57-37	437
	4⅞	1016-57-47	482
	5⅞	1016-57-57	526

A	B	ITEM NUMBER	NET WT.
7/8	⅞	1020-7-7	98
	1⅜	1020-7-13	126
	1⅞	1020-7-17	154
	2⅜	1020-7-23	182
	2⅞	1020-7-27	210
	3⅜	1020-7-33	238
	3⅞	1020-7-37	266
	4⅞	1020-7-47	322
	5⅞	1020-7-57	378
1 3/8	⅞	1020-13-7	126
	1⅜	1020-13-13	154
	1⅞	1020-13-17	182
	2⅜	1020-13-23	210
	2⅞	1020-13-27	238
	3⅜	1020-13-33	266
	3⅞	1020-13-37	294
	4⅞	1020-13-47	350
	5⅞	1020-13-57	406
1 7/8	⅞	1020-17-7	154
	1⅜	1020-17-13	182
	1⅞	1020-17-17	210
	2⅜	1020-17-23	238
	2⅞	1020-17-27	266
	3⅜	1020-17-33	294
	3⅞	1020-17-37	322
	4⅞	1020-17-47	378
	5⅞	1020-17-57	434
2 3/8	⅞	1020-23-7	182
	1⅜	1020-23-13	210
	1⅞	1020-23-17	238
	2⅜	1020-23-23	266
	2⅞	1020-23-27	294
	3⅜	1020-23-33	322
	3⅞	1020-23-37	350
	4⅞	1020-23-47	406
	5⅞	1020-23-57	462

A	B	ITEM NUMBER	NET WT.
2 7/8	⅞	1020-27-7	210
	1⅜	1020-27-13	238
	1⅞	1020-27-17	266
	2⅜	1020-27-23	294
	2⅞	1020-27-27	322
	3⅜	1020-27-33	350
	3⅞	1020-27-37	378
	4⅞	1020-27-47	434
	5⅞	1020-27-57	490
3 3/8	⅞	1020-33-7	238
	1⅜	1020-33-13	266
	1⅞	1020-33-17	294
	2⅜	1020-33-23	322
	2⅞	1020-33-27	350
	3⅜	1020-33-33	378
	3⅞	1020-33-37	406
	4⅞	1020-33-47	462
	5⅞	1020-33-57	518
3 7/8	⅞	1020-37-7	266
	1⅜	1020-37-13	294
	1⅞	1020-37-17	322
	2⅜	1020-37-23	350
	2⅞	1020-37-27	378
	3⅜	1020-37-33	406
	3⅞	1020-37-37	434
	4⅞	1020-37-47	490
	5⅞	1020-37-57	546
4 7/8	⅞	1020-47-7	322
	1⅜	1020-47-13	350
	1⅞	1020-47-17	378
	2⅜	1020-47-23	406
	2⅞	1020-47-27	434
	3⅜	1020-47-33	462
	3⅞	1020-47-37	490
	4⅞	1020-47-47	546
	5⅞	1020-47-57	602
5 7/8	⅞	1020-57-7	378
	1⅜	1020-57-13	406
	1⅞	1020-57-17	434
	2⅜	1020-57-23	462
	2⅞	1020-57-27	490
	3⅜	1020-57-33	518
	3⅞	1020-57-37	546
	4⅞	1020-57-47	602
	5⅞	1020-57-57	658

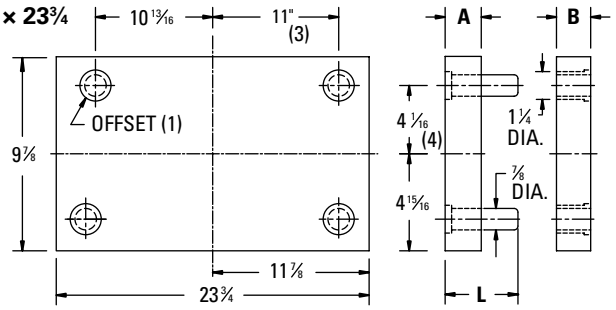
Thickness of each plate is finish ground ± .001". Width and length finished square and parallel.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 Steel available standard only for plates up to and including 2⅞ thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

Cavity Retainer Sets
9⅞ × 23¾ and 10⅞ × 12"

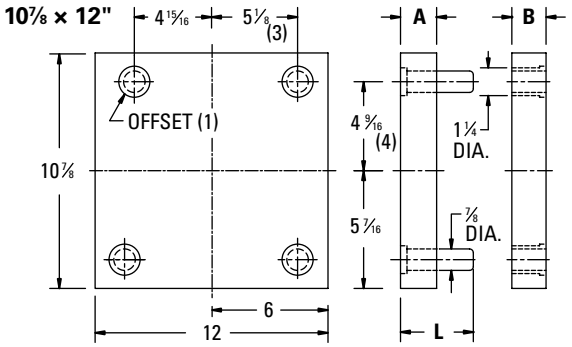
9⅞ × 23¾



A	B	ITEM NUMBER	NET WT.
1⅜	1⅜	1024-13-13	183
	1⅞	1024-13-17	216
	2⅜	1024-13-23	250
	2⅞	1024-13-27	283
	3⅜	1024-13-33	316
	3⅞	1024-13-37	349
	4⅞	1024-13-47	416
	5⅞	1024-13-57	482
1⅞	1⅜	1024-17-13	216
	1⅞	1024-17-17	250
	2⅜	1024-17-23	283
	2⅞	1024-17-27	316
	3⅜	1024-17-33	349
	3⅞	1024-17-37	383
	4⅞	1024-17-47	449
	5⅞	1024-17-57	515
2⅜	1⅜	1024-23-13	250
	1⅞	1024-23-17	283
	2⅜	1024-23-23	316
	2⅞	1024-23-27	349
	3⅜	1024-23-33	383
	3⅞	1024-23-37	416
	4⅞	1024-23-47	482
	5⅞	1024-23-57	549
2⅞	1⅜	1024-27-13	283
	1⅞	1024-27-17	316
	2⅜	1024-27-23	349
	2⅞	1024-27-27	383
	3⅜	1024-27-33	416
	3⅞	1024-27-37	449
	4⅞	1024-27-47	515
	5⅞	1024-27-57	582

A	B	ITEM NUMBER	NET WT.
3⅜	1⅜	1024-33-13	316
	1⅞	1024-33-17	349
	2⅜	1024-33-23	383
	2⅞	1024-33-27	416
	3⅜	1024-33-33	449
	3⅞	1024-33-37	482
	4⅞	1024-33-47	549
	5⅞	1024-33-57	615
3⅞	1⅜	1024-37-13	349
	1⅞	1024-37-17	383
	2⅜	1024-37-23	416
	2⅞	1024-37-27	449
	3⅜	1024-37-33	482
	3⅞	1024-37-37	515
	4⅞	1024-37-47	582
	5⅞	1024-37-57	648
4⅞	1⅜	1024-47-13	416
	1⅞	1024-47-17	449
	2⅜	1024-47-23	482
	2⅞	1024-47-27	515
	3⅜	1024-47-33	549
	3⅞	1024-47-37	582
	4⅞	1024-47-47	648
	5⅞	1024-47-57	715
5⅞	1⅜	1024-57-13	482
	1⅞	1024-57-17	515
	2⅜	1024-57-23	549
	2⅞	1024-57-27	582
	3⅜	1024-57-33	615
	3⅞	1024-57-37	648
	4⅞	1024-57-47	715
	5⅞	1024-57-57	781

10⅞ × 12"



A	B	ITEM NUMBER	NET WT.
⅞	⅞	1112-7-7	65
	1⅜	1112-7-13	84
	1⅞	1112-7-17	102
	2⅜	1112-7-23	121
	2⅞	1112-7-27	139
	3⅜	1112-7-33	158
	3⅞	1112-7-37	176
	4⅞	1112-7-47	213
	5⅞	1112-7-57	250
1⅜	⅞	1112-13-7	84
	1⅜	1112-13-13	102
	1⅞	1112-13-17	121
	2⅜	1112-13 23	139
	2⅞	1112-13-27	158
	3⅜	1112-13-33	176
	3⅞	1112-13-37	195
	4⅞	1112-13-47	232
	5⅞	1112-13-57	269
1⅞	⅞	1112-17-7	102
	1⅜	1112-17-13	121
	1⅞	1112-17-17	139
	2⅜	1112-17-23	158
	2⅞	1112-17-27	176
	3⅜	1112-17-33	195
	3⅞	1112-17-37	213
	4⅞	1112-17-47	250
	5⅞	1112-17-57	287
2⅜	⅞	1112-23-7	121
	1⅜	1112-23-13	139
	1⅞	1112-23-17	158
	2⅜	1112-23-23	176
	2⅞	1112-23-27	195
	3⅜	1112-23-33	213
	3⅞	1112-23-37	232
	4⅞	1112-23-47	269
	5⅞	1112-23-57	306

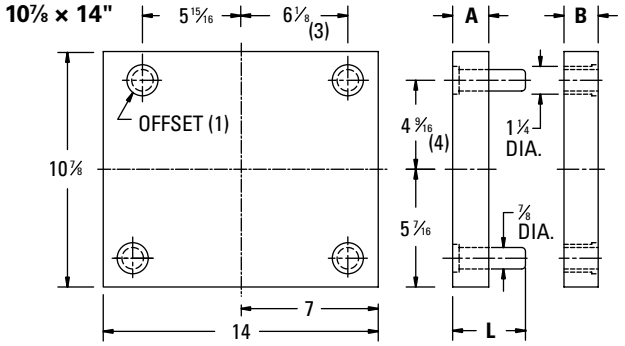
A	B	ITEM NUMBER	NET WT.
2⅞	⅞	1112-27-7	139
	1⅜	1112-27 13	158
	1⅞	1112-27-17	176
	2⅜	1112-27-23	195
	2⅞	1112-27-27	213
	3⅜	1112-27-33	232
	3⅞	1112-27-37	250
	4⅞	1112-27-47	287
	5⅞	1112-27-57	324
3⅜	⅞	1112-33-7	158
	1⅜	1112 33-13	176
	1⅞	1112-33-17	195
	2⅜	1112-33-23	213
	2⅞	1112-33-27	232
	3⅜	1112-33-33	250
	3⅞	1112-33-37	269
	4⅞	1112-33-47	306
	5⅞	1112-33-57	343
3⅞	⅞	1112-37-7	176
	1⅜	1112 37-13	195
	1⅞	1112-37-17	213
	2⅜	1112-37-23	232
	2⅞	1112-37-27	250
	3⅜	1112-37-33	269
	3⅞	1112-37-37	287
	4⅞	1112-37-47	324
	5⅞	1112-37-57	361
4⅞	⅞	1112-47-7	213
	1⅜	1112-47-13	232
	1⅞	1112-47-17	250
	2⅜	1112-47-23	269
	2⅞	1112-47-27	287
	3⅜	1112-47-33	306
	3⅞	1112-47-37	324
	4⅞	1112-47-47	361
	5⅞	1112-47-57	398
5⅞	⅞	1112-57-7	250
	1⅜	1112-57-13	269
	1⅞	1112-57-17	287
	2⅜	1112-57-23	306
	2⅞	1112-57-27	324
	3⅜	1112-57-33	343
	3⅞	1112-57-37	361
	4⅞	1112-57-47	398
	5⅞	1112-57-57	435

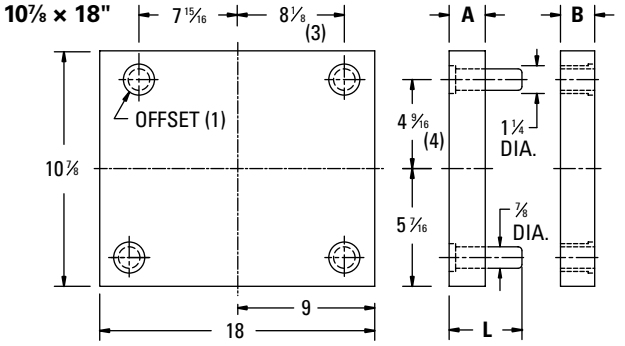
Thickness of each plate is finish ground ± .001". Width and length finished square and parallel.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 Steel available standard only for plates up to and including 2⅞ thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

Cavity Retainer Sets
10⅞ × 14" and 10⅞ × 18"





A	B	ITEM NUMBER	NET WT.
7/8	⅞	1114-7-7	76
	1⅜	1114-7-13	98
	1⅞	1114-7-17	119
	2⅜	1114-7-23	141
	2⅞	1114-7-27	162
	3⅜	1114-7-33	184
	3⅞	1114-7-37	205
	4⅞	1114-7-47	249
	5⅞	1114-7-57	292
1 3/8	⅞	1114-13-7	98
	1⅜	1114-13-13	119
	1⅞	1114-13-17	141
	2⅜	1114-13-23	162
	2⅞	1114-13-27	184
	3⅜	1114-13-33	205
	3⅞	1114-13-37	227
	4⅞	1114-13-47	270
	5⅞	1114-13-57	313
1 7/8	⅞	1114-17-7	119
	1⅜	1114-17-13	141
	1⅞	1114-17-17	162
	2⅜	1114-17-23	184
	2⅞	1114-17-27	205
	3⅜	1114-17-33	227
	3⅞	1114-17-37	249
	4⅞	1114-17-47	292
	5⅞	1114-17-57	335
2 3/8	⅞	1114-23-7	141
	1⅜	1114-23-13	162
	1⅞	1114-23-17	184
	2⅜	1114-23-23	205
	2⅞	1114-23-27	227
	3⅜	1114-23-33	249
	3⅞	1114-23-37	270
	4⅞	1114-23-47	313
	5⅞	1114-23-57	356
2 7/8	⅞	1114-27-7	162
	1⅜	1114-27-13	184
	1⅞	1114-27-17	205
	2⅜	1114-27-23	227
	2⅞	1114-27-27	249
	3⅜	1114-27-33	270
	3⅞	1114-27-37	292
	4⅞	1114-27-47	335
	5⅞	1114-27-57	378

A	B	ITEM NUMBER	NET WT.
3 3/8	⅞	1114-33-7	184
	1⅜	1114-33-13	205
	1⅞	1114-33-17	227
	2⅜	1114-33-23	249
	2⅞	1114-33-27	270
	3⅜	1114-33-33	292
	3⅞	1114-33-37	313
	4⅞	1114-33-47	356
	5⅞	1114-33-57	400
3 7/8	⅞	1114-37-7	205
	1⅜	1114-37-13	227
	1⅞	1114-37-17	249
	2⅜	1114-37-23	270
	2⅞	1114-37-27	292
	3⅜	1114-37-33	313
	3⅞	1114-37-37	335
	4⅞	1114-37-47	378
	5⅞	1114-37-57	421
4 7/8	⅞	1114-47-7	249
	1⅜	1114-47-13	270
	1⅞	1114-47-17	292
	2⅜	1114-47-23	313
	2⅞	1114-47-27	335
	3⅜	1114-47-33	356
	3⅞	1114-47-37	378
	4⅞	1114-47-47	421
	5⅞	1114-47-57	464
5 7/8	⅞	1114-57-7	292
	1⅜	1114-57-13	313
	1⅞	1114-57-17	335
	2⅜	1114-57-23	356
	2⅞	1114-57-27	378
	3⅜	1114-57-33	400
	3⅞	1114-57-37	421
	4⅞	1114-57-47	464
	5⅞	1114-57-57	507

A	B	ITEM NUMBER	NET WT.
7/8	⅞	1118-7-7	98
	1⅜	1118-7-13	125
	1⅞	1118-7-17	153
	2⅜	1118-7-23	181
	2⅞	1118-7-27	208
	3⅜	1118-7-33	236
	3⅞	1118-7-37	264
	4⅞	1118-7-47	319
	5⅞	1118-7-57	375
1 3/8	⅞	1118-13-7	125
	1⅜	1118-13-13	153
	1⅞	1118-13-17	181
	2⅜	1118-13-23	208
	2⅞	1118-13-27	236
	3⅜	1118-13-33	264
	3⅞	1118-13-37	292
	4⅞	1118-13-47	347
	5⅞	1118-13-57	403
1 7/8	⅞	1118-17-7	153
	1⅜	1118-17-13	181
	1⅞	1118-17-17	208
	2⅜	1118-17-23	236
	2⅞	1118-17-27	264
	3⅜	1118-17-33	292
	3⅞	1118-17-37	319
	4⅞	1118-17-47	375
	5⅞	1118-17-57	430
2 3/8	⅞	1118-23-7	181
	1⅜	1118-23-13	208
	1⅞	1118-23-17	236
	2⅜	1118-23-23	264
	2⅞	1118-23-27	292
	3⅜	1118-23-33	319
	3⅞	1118-23-37	347
	4⅞	1118-23-47	403
	5⅞	1118-23-57	458

A	B	ITEM NUMBER	NET WT.
2 7/8	⅞	1118-27-7	208
	1⅜	1118-27-13	236
	1⅞	1118-27-17	264
	2⅜	1118-27-23	292
	2⅞	1118-27-27	319
	3⅜	1118-27-33	347
	3⅞	1118-27-37	375
	4⅞	1118-27-47	430
	5⅞	1118-27-57	486
3 3/8	⅞	1118-33-7	236
	1⅜	1118-33-13	264
	1⅞	1118-33-17	292
	2⅜	1118-33-23	319
	2⅞	1118-33-27	347
	3⅜	1118-33-33	375
	3⅞	1118-33-37	403
	4⅞	1118-33-47	458
	5⅞	1118-33-57	513
3 7/8	⅞	1118-37-7	264
	1⅜	1118-37-13	292
	1⅞	1118-37-17	319
	2⅜	1118-37-23	347
	2⅞	1118-37-27	375
	3⅜	1118-37-33	403
	3⅞	1118-37-37	430
	4⅞	1118-37-47	486
	5⅞	1118-37-57	541
4 7/8	⅞	1118-47-7	319
	1⅜	1118-47-13	347
	1⅞	1118-47-17	375
	2⅜	1118-47-23	403
	2⅞	1118-47-27	430
	3⅜	1118-47-33	458
	3⅞	1118-47-37	486
	4⅞	1118-47-47	541
	5⅞	1118-47-57	597
5 7/8	⅞	1118-57-7	375
	1⅜	1118-57-13	403
	1⅞	1118-57-17	430
	2⅜	1118-57-23	458
	2⅞	1118-57-27	486
	3⅜	1118-57-33	513
	3⅞	1118-57-37	541
	4⅞	1118-57-47	597
	5⅞	1118-57-57	652

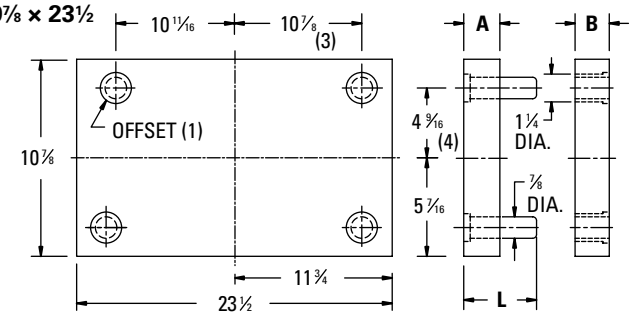
Thickness of each plate is finish ground ± .001". Width and length finished square and parallel.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 Steel available standard only for plates up to and including 2⅞ thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

Cavity Retainer Sets
10⅞ × 23½ and 11⅞ × 12"

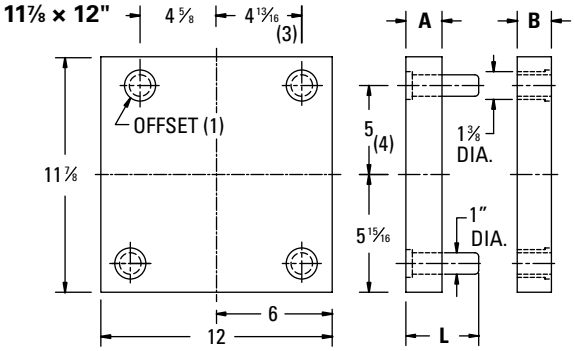
10⅞ × 23½



A	B	ITEM NUMBER	NET WT.
1⅜	1⅜	1123-13-13	200
	1⅞	1123-13-17	236
	2⅜	1123-13-23	272
	2⅞	1123-13-27	308
	3⅜	1123-13-33	344
	3⅞	1123-13-37	381
	4⅞	1123-13-47	453
	5⅞	1123-13-57	525
1⅞	1⅜	1123-17-13	236
	1⅞	1123-17-17	272
	2⅜	1123-17-23	308
	2⅞	1123-17-27	344
	3⅜	1123-17-33	381
	3⅞	1123-17-37	417
	4⅞	1123-17-47	489
	5⅞	1123-17-57	562
2⅜	1⅜	1123-23-13	272
	1⅞	1123-23-17	308
	2⅜	1123-23-23	344
	2⅞	1123-23-27	381
	3⅜	1123-23-33	417
	3⅞	1123-23-37	453
	4⅞	1123-23-47	525
	5⅞	1123-23-57	598
2⅞	1⅜	1123-27-13	308
	1⅞	1123-27-17	344
	2⅜	1123-27-23	381
	2⅞	1123-27-27	417
	3⅜	1123-27-33	453
	3⅞	1123-27-37	489
	4⅞	1123-27-47	562
	5⅞	1123-27-57	634

A	B	ITEM NUMBER	NET WT.
3⅜	1⅜	1123-33-13	344
	1⅞	1123-33-17	381
	2⅜	1123-33-23	417
	2⅞	1123-33-27	453
	3⅜	1123-33-33	489
	3⅞	1123-33-37	525
	4⅞	1123-33-47	598
	5⅞	1123-33-57	670
3⅞	1⅜	1123-37-13	381
	1⅞	1123-37-17	417
	2⅜	1123-37-23	453
	2⅞	1123-37-27	489
	3⅜	1123-37-33	525
	3⅞	1123-37-37	562
	4⅞	1123-37-47	634
	5⅞	1123-37-57	706
4⅞	1⅜	1123-47-13	453
	1⅞	1123-47-17	489
	2⅜	1123-47-23	525
	2⅞	1123-47-27	562
	3⅜	1123-47-33	598
	3⅞	1123-47-37	634
	4⅞	1123-47-47	706
	5⅞	1123-47-57	779
5⅞	1⅜	1123-57-13	525
	1⅞	1123-57-17	562
	2⅜	1123-57-23	598
	2⅞	1123-57-27	634
	3⅜	1123-57-33	670
	3⅞	1123-57-37	706
	4⅞	1123-57-47	779
	5⅞	1123-57-57	851

11⅞ × 12"



A	B	ITEM NUMBER	NET WT.
⅞	⅞	1212-7-7	71
	1⅜	1212-7-13	91
	1⅞	1212-7-17	112
	2⅜	1212-7-23	132
	2⅞	1212-7-27	152
	3⅜	1212-7-33	172
	3⅞	1212-7-37	192
	4⅞	1212-7-47	233
	5⅞	1212-7-57	273
1⅜	⅞	1212-13-7	91
	1⅜	1212-13-13	112
	1⅞	1212-13-17	132
	2⅜	1212-13-23	152
	2⅞	1212-13-27	172
	3⅜	1212-13-33	192
	3⅞	1212-13-37	212
	4⅞	1212-13-47	253
	5⅞	1212-13-57	293
1⅞	⅞	1212-17-7	112
	1⅜	1212-17-13	132
	1⅞	1212-17-17	152
	2⅜	1212-17-23	172
	2⅞	1212-17-27	192
	3⅜	1212-17-33	212
	3⅞	1212-17-37	233
	4⅞	1212-17-47	273
	5⅞	1212-17-57	313
2⅜	⅞	1212-23-7	132
	1⅜	1212-23-13	152
	1⅞	1212-23-17	172
	2⅜	1212-23-23	192
	2⅞	1212-23-27	212
	3⅜	1212-23-33	233
	3⅞	1212-23-37	253
	4⅞	1212-23-47	293
	5⅞	1212-23-57	334

A	B	ITEM NUMBER	NET WT.
2⅞	⅞	1212-27-7	152
	1⅜	1212-27-13	172
	1⅞	1212-27-17	192
	2⅜	1212-27-23	212
	2⅞	1212-27-27	233
	3⅜	1212-27-33	253
	3⅞	1212-27-37	273
	4⅞	1212-27-47	313
	5⅞	1212-27-57	354
3⅜	⅞	1212-33-7	172
	1⅜	1212-33-13	192
	1⅞	1212-33-17	212
	2⅜	1212-33-23	233
	2⅞	1212-33-27	253
	3⅜	1212-33-33	273
	3⅞	1212-33-37	293
	4⅞	1212-33-47	334
	5⅞	1212-33-57	374
3⅞	⅞	1212-37-7	192
	1⅜	1212-37-13	212
	1⅞	1212-37-17	233
	2⅜	1212-37-23	253
	2⅞	1212-37-27	273
	3⅜	1212-37-33	293
	3⅞	1212-37-37	313
	4⅞	1212-37-47	354
	5⅞	1212-37-57	394
4⅞	⅞	1212-47-7	233
	1⅜	1212-47-13	253
	1⅞	1212-47-17	273
	2⅜	1212-47-23	293
	2⅞	1212-47-27	313
	3⅜	1212-47-33	334
	3⅞	1212-47-37	354
	4⅞	1212-47-47	394
	5⅞	1212-47-57	435
5⅞	⅞	1212-57-7	273
	1⅜	1212-57-13	293
	1⅞	1212-57-17	313
	2⅜	1212-57-23	334
	2⅞	1212-57-27	354
	3⅜	1212-57-33	374
	3⅞	1212-57-37	394
	4⅞	1212-57-47	435
	5⅞	1212-57-57	475

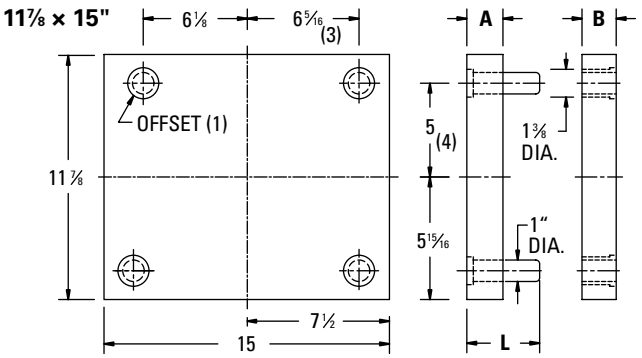
Thickness of each plate is finish ground ± .001". Width and length finished square and parallel.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 Steel available standard only for plates up to and including 2⅞ thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

Cavity Retainer Sets
11⅞ × 15" and 11⅞ × 17½

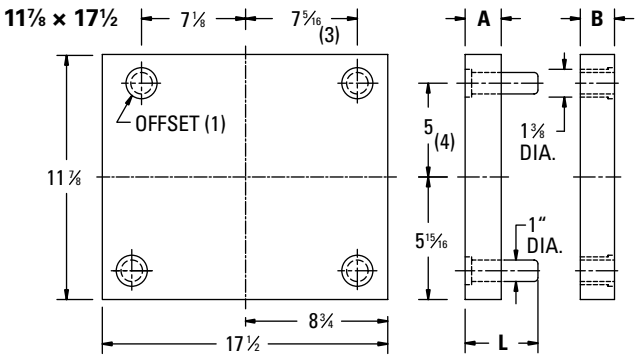
11⅞ × 15"



A	B	ITEM NUMBER	NET WT.
7/8	7/8	1215-7-7	89
	1 3/8	1215-7-13	114
	1 7/8	1215-7-17	139
	2 3/8	1215-7-23	164
	2 7/8	1215-7-27	190
	3 3/8	1215-7-33	215
	3 7/8	1215-7-37	240
	4 7/8	1215-7-47	291
	5 7/8	1215-7-57	341
1 3/8	7/8	1215-13-7	114
	1 3/8	1215-13-13	139
	1 7/8	1215-13-17	164
	2 3/8	1215-13-23	190
	2 7/8	1215-13-27	215
	3 3/8	1215-13-33	240
	3 7/8	1215-13-37	265
	4 7/8	1215-13-47	316
	5 7/8	1215-13-57	366
1 7/8	7/8	1215-17-7	139
	1 3/8	1215-17-13	164
	1 7/8	1215-17-17	190
	2 3/8	1215-17-23	215
	2 7/8	1215-17-27	240
	3 3/8	1215-17-33	265
	3 7/8	1215-17-37	291
	4 7/8	1215-17-47	341
	5 7/8	1215-17-57	392
2 3/8	7/8	1215-23-7	164
	1 3/8	1215-23-13	190
	1 7/8	1215-23-17	215
	2 3/8	1215-23-23	240
	2 7/8	1215-23-27	265
	3 3/8	1215-23-33	291
	3 7/8	1215-23-37	316
	4 7/8	1215-23-47	366
	5 7/8	1215-23-57	417
2 7/8	7/8	1215-27-7	190
	1 3/8	1215-27-13	215
	1 7/8	1215-27-17	240
	2 3/8	1215-27-23	265
	2 7/8	1215-27-27	291
	3 3/8	1215-27-33	316
	3 7/8	1215-27-37	341
	4 7/8	1215-27-47	392
	5 7/8	1215-27-57	442

A	B	ITEM NUMBER	NET WT.
3 3/8	7/8	1215-33-7	215
	1 3/8	1215-33-13	240
	1 7/8	1215-33-17	265
	2 3/8	1215-33-23	291
	2 7/8	1215-33-27	316
	3 3/8	1215-33-33	341
	3 7/8	1215-33-37	366
	4 7/8	1215-33-47	417
	5 7/8	1215-33-57	467
3 7/8	7/8	1215-37-7	240
	1 3/8	1215-37-13	265
	1 7/8	1215-37-17	291
	2 3/8	1215-37-23	316
	2 7/8	1215-37-27	341
	3 3/8	1215-37-33	366
	3 7/8	1215-37-37	392
	4 7/8	1215-37-47	442
	5 7/8	1215-37-57	492
4 7/8	7/8	1215-47-7	291
	1 3/8	1215-47-13	316
	1 7/8	1215-47-17	341
	2 3/8	1215-47-23	366
	2 7/8	1215-47-27	392
	3 3/8	1215-47-33	417
	3 7/8	1215-47-37	442
	4 7/8	1215-47-47	492
	5 7/8	1215-47-57	543
5 7/8	7/8	1215-57-7	341
	1 3/8	1215-57-13	366
	1 7/8	1215-57-17	392
	2 3/8	1215-57-23	417
	2 7/8	1215-57-27	442
	3 3/8	1215-57-33	467
	3 7/8	1215-57-37	492
	4 7/8	1215-57-47	543
	5 7/8	1215-57-57	593

11⅞ × 17½



A	B	ITEM NUMBER	NET WT.
7/8	7/8	1217-7-7	104
	1 3/8	1217-7-13	133
	1 7/8	1217-7-17	162
	2 3/8	1217-7-23	192
	2 7/8	1217-7-27	221
	3 3/8	1217-7-33	251
	3 7/8	1217-7-37	280
	4 7/8	1217-7-47	339
	5 7/8	1217-7-57	398
1 3/8	7/8	1217-13-7	133
	1 3/8	1217-13-13	162
	1 7/8	1217-13-17	192
	2 3/8	1217-13-23	221
	2 7/8	1217-13-27	251
	3 3/8	1217-13-33	280
	3 7/8	1217-13-37	310
	4 7/8	1217-13-47	368
	5 7/8	1217-13-57	427
1 7/8	7/8	1217-17-7	162
	1 3/8	1217-17-13	192
	1 7/8	1217-17-17	221
	2 3/8	1217-17-23	251
	2 7/8	1217-17-27	280
	3 3/8	1217-17-33	310
	3 7/8	1217-17-37	339
	4 7/8	1217-17-47	398
	5 7/8	1217-17-57	457
2 3/8	7/8	1217-23-7	192
	1 3/8	1217-23-13	221
	1 7/8	1217-23-17	251
	2 3/8	1217-23-23	280
	2 7/8	1217-23-27	310
	3 3/8	1217-23-33	339
	3 7/8	1217-23-37	368
	4 7/8	1217-23-47	427
	5 7/8	1217-23-57	486

A	B	ITEM NUMBER	NET WT.
2 7/8	7/8	1217-27-7	221
	1 3/8	1217-27-13	251
	1 7/8	1217-27-17	280
	2 3/8	1217-27-23	310
	2 7/8	1217-27-27	339
	3 3/8	1217-27-33	368
	3 7/8	1217-27-37	398
	4 7/8	1217-27-47	457
	5 7/8	1217-27-57	516
3 3/8	7/8	1217-33-7	251
	1 3/8	1217-33-13	280
	1 7/8	1217-33-17	310
	2 3/8	1217-33-23	339
	2 7/8	1217-33-27	368
	3 3/8	1217-33-33	398
	3 7/8	1217-33-37	427
	4 7/8	1217-33-47	486
	5 7/8	1217-33-57	545
3 7/8	7/8	1217-37-7	280
	1 3/8	1217-37-13	310
	1 7/8	1217-37-17	339
	2 3/8	1217-37-23	368
	2 7/8	1217-37-27	398
	3 3/8	1217-37-33	427
	3 7/8	1217-37-37	457
	4 7/8	1217-37-47	516
	5 7/8	1217-37-57	575
4 7/8	7/8	1217-47-7	339
	1 3/8	1217-47-13	368
	1 7/8	1217-47-17	398
	2 3/8	1217-47-23	427
	2 7/8	1217-47-27	457
	3 3/8	1217-47-33	486
	3 7/8	1217-47-37	516
	4 7/8	1217-47-47	575
	5 7/8	1217-47-57	633
5 7/8	7/8	1217-57-7	398
	1 3/8	1217-57-13	427
	1 7/8	1217-57-17	457
	2 3/8	1217-57-23	486
	2 7/8	1217-57-27	516
	3 3/8	1217-57-33	545
	3 7/8	1217-57-37	575
	4 7/8	1217-57-47	633
	5 7/8	1217-57-57	692

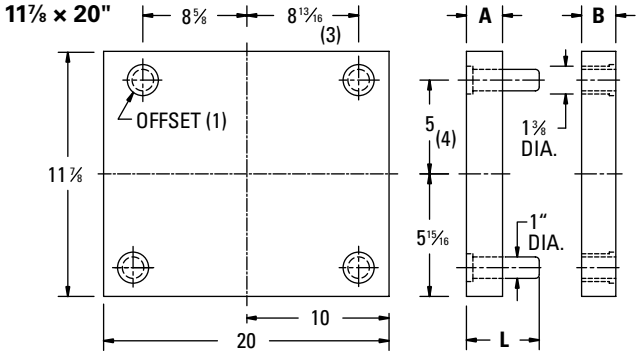
Thickness of each plate is finish ground ± .001". Width and length finished square and parallel.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 Steel available standard only for plates up to and including 2⅞ thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

Cavity Retainer Sets
11⅞ × 20" and 11⅞ × 23½

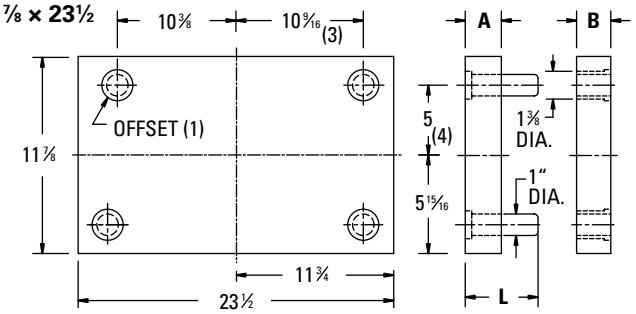
11⅞ × 20"



A	B	ITEM NUMBER	NET WT.
7/8	7/8	1220-7-7	118
	1 3/8	1220-7-13	152
	1 7/8	1220-7-17	186
	2 3/8	1220-7-23	219
	2 7/8	1220-7-27	253
	3 3/8	1220-7-33	286
	3 7/8	1220-7-37	320
	4 7/8	1220-7-47	387
	5 7/8	1220-7-57	455
1 3/8	7/8	1220-13-7	152
	1 3/8	1220-13-13	186
	1 7/8	1220-13-17	219
	2 3/8	1220-13-23	253
	2 7/8	1220-13-27	286
	3 3/8	1220-13-33	320
	3 7/8	1220-13-37	354
	4 7/8	1220-13-47	421
	5 7/8	1220-13-57	488
1 7/8	7/8	1220-17-7	186
	1 3/8	1220-17-13	219
	1 7/8	1220-17-17	253
	2 3/8	1220-17-23	286
	2 7/8	1220-17-27	320
	3 3/8	1220-17-33	354
	3 7/8	1220-17-37	387
	4 7/8	1220-17-47	455
	5 7/8	1220-17-57	522
2 3/8	7/8	1220-23-7	219
	1 3/8	1220-23-13	253
	1 7/8	1220-23-17	286
	2 3/8	1220-23-23	320
	2 7/8	1220-23-27	354
	3 3/8	1220-23-33	387
	3 7/8	1220-23-37	421
	4 7/8	1220-23-47	488
	5 7/8	1220-23-57	556
2 7/8	7/8	1220-27-7	253
	1 3/8	1220-27-13	286
	1 7/8	1220-27-17	320
	2 3/8	1220-27-23	354
	2 7/8	1220-27-27	387
	3 3/8	1220-27-33	421
	3 7/8	1220-27-37	455
	4 7/8	1220-27-47	522
	5 7/8	1220-27-57	589

A	B	ITEM NUMBER	NET WT.
3 3/8	7/8	1220-33-7	286
	1 3/8	1220-33-13	320
	1 7/8	1220-33-17	354
	2 3/8	1220-33-23	387
	2 7/8	1220-33-27	421
	3 3/8	1220-33-33	455
	3 7/8	1220-33-37	488
	4 7/8	1220-33-47	556
	5 7/8	1220-33-57	623
3 7/8	7/8	1220-37-7	320
	1 3/8	1220-37-13	354
	1 7/8	1220-37-17	387
	2 3/8	1220-37-23	421
	2 7/8	1220-37-27	455
	3 3/8	1220-37-33	488
	3 7/8	1220-37-37	522
	4 7/8	1220-37-47	589
	5 7/8	1220-37-57	656
4 7/8	7/8	1220-47-7	387
	1 3/8	1220-47-13	421
	1 7/8	1220-47-17	455
	2 3/8	1220-47-23	488
	2 7/8	1220-47-27	522
	3 3/8	1220-47-33	556
	3 7/8	1220-47-37	589
	4 7/8	1220-47-47	656
	5 7/8	1220-47-57	724
5 7/8	7/8	1220-57-7	455
	1 3/8	1220-57-13	488
	1 7/8	1220-57-17	522
	2 3/8	1220-57-23	556
	2 7/8	1220-57-27	589
	3 3/8	1220-57-33	623
	3 7/8	1220-57-37	656
	4 7/8	1220-57-47	724
	5 7/8	1220-57-57	791

11⅞ × 23½



A	B	ITEM NUMBER	NET WT.
1 3/8	1 3/8	1223-13-13	218
	1 7/8	1223-13-17	257
	2 3/8	1223-13-23	297
	2 7/8	1223-13-27	336
	3 3/8	1223-13-33	376
	3 7/8	1223-13-37	416
	4 7/8	1223-13-47	495
	5 7/8	1223-13-57	574
1 7/8	1 3/8	1223-17-13	257
	1 7/8	1223-17-17	297
	2 3/8	1223-17-23	336
	2 7/8	1223-17-27	376
	3 3/8	1223-17-33	416
	3 7/8	1223-17-37	455
	4 7/8	1223-17-47	534
	5 7/8	1223-17-57	613
2 3/8	1 3/8	1223-23-13	297
	1 7/8	1223-23-17	336
	2 3/8	1223-23-23	376
	2 7/8	1223-23-27	416
	3 3/8	1223-23-33	455
	3 7/8	1223-23-37	495
	4 7/8	1223-23-47	574
	5 7/8	1223-23-57	653
2 7/8	1 3/8	1223-27-13	336
	1 7/8	1223-27-17	376
	2 3/8	1223-27-23	416
	2 7/8	1223-27-27	455
	3 3/8	1223-27-33	495
	3 7/8	1223-27-37	534
	4 7/8	1223-27-47	613
	5 7/8	1223-27-57	692

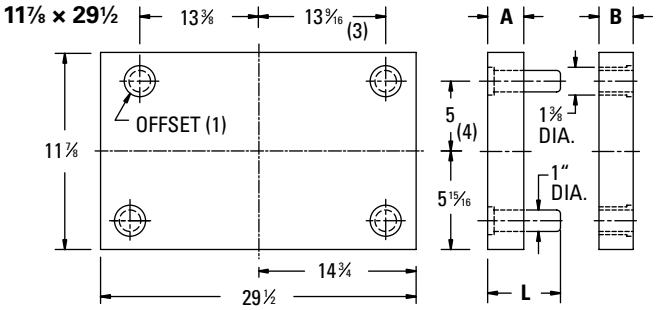
A	B	ITEM NUMBER	NET WT.
3 3/8	1 3/8	1223-33-13	376
	1 7/8	1223-33-17	416
	2 3/8	1223-33-23	455
	2 7/8	1223-33-27	495
	3 3/8	1223-33-33	534
	3 7/8	1223-33-37	574
	4 7/8	1223-33-47	653
	5 7/8	1223-33-57	732
3 7/8	1 3/8	1223-37-13	416
	1 7/8	1223-37-17	455
	2 3/8	1223-37-23	495
	2 7/8	1223-37-27	534
	3 3/8	1223-37-33	574
	3 7/8	1223-37-37	613
	4 7/8	1223-37-47	692
	5 7/8	1223-37-57	771
4 7/8	1 3/8	1223-47-13	495
	1 7/8	1223-47-17	534
	2 3/8	1223-47-23	574
	2 7/8	1223-47-27	613
	3 3/8	1223-47-33	653
	3 7/8	1223-47-37	692
	4 7/8	1223-47-47	771
	5 7/8	1223-47-57	850
5 7/8	1 3/8	1223-57-13	574
	1 7/8	1223-57-17	613
	2 3/8	1223-57-23	653
	2 7/8	1223-57-27	692
	3 3/8	1223-57-33	732
	3 7/8	1223-57-37	771
	4 7/8	1223-57-47	850
	5 7/8	1223-57-57	929

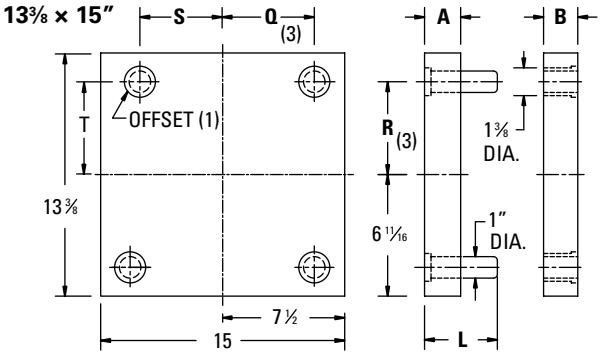
Thickness of each plate is finish ground ± .001". Width and length finished square and parallel.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 Steel available standard only for plates up to and including 2⅞ thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

Cavity Retainer Sets
11⅞ × 29½ and 13⅜ × 15"





A	B	ITEM NUMBER	NET WT.
1⅜	1⅜	1229-13-13	273
	1⅞	1229-13-17	323
	2⅜	1229-13-23	373
	2⅞	1229-13-27	422
	3⅜	1229-13-33	472
	3⅞	1229-13-37	522
	4⅞	1229-13-47	621
	5⅞	1229-13-57	720
1⅞	1⅜	1229-17-13	323
	1⅞	1229-17-17	373
	2⅜	1229-17-23	422
	2⅞	1229-17-27	472
	3⅜	1229-17-33	522
	3⅞	1229-17-37	571
	4⅞	1229-17-47	670
	5⅞	1229-17-57	770
2⅜	1⅜	1229-23-13	373
	1⅞	1229-23-17	422
	2⅜	1229-23-23	472
	2⅞	1229-23-27	522
	3⅜	1229-23-33	571
	3⅞	1229-23-37	621
	4⅞	1229-23-47	720
	5⅞	1229-23-57	819
2⅞	1⅜	1229-27-13	422
	1⅞	1229-27-17	472
	2⅜	1229-27-23	522
	2⅞	1229-27-27	571
	3⅜	1229-27-33	621
	3⅞	1229-27-37	670
	4⅞	1229-27-47	770
	5⅞	1229-27-57	869

A	B	ITEM NUMBER	NET WT.
3⅜	1⅜	1229-33-13	472
	1⅞	1229-33-17	522
	2⅜	1229-33-23	571
	2⅞	1229-33-27	621
	3⅜	1229-33-33	670
	3⅞	1229-33-37	720
	4⅞	1229-33-47	819
	5⅞	1229-33-57	918
3⅞	1⅜	1229-37-13	522
	1⅞	1229-37-17	571
	2⅜	1229-37-23	621
	2⅞	1229-37-27	670
	3⅜	1229-37-33	720
	3⅞	1229-37-37	770
	4⅞	1229-37-47	869
	5⅞	1229-37-57	968
4⅞	1⅜	1229-47-13	621
	1⅞	1229-47-17	670
	2⅜	1229-47-23	720
	2⅞	1229-47-27	770
	3⅜	1229-47-33	819
	3⅞	1229-47-37	869
	4⅞	1229-47-47	968
	5⅞	1229-47-57	1067
5⅞	1⅜	1229-57-13	720
	1⅞	1229-57-17	770
	2⅜	1229-57-23	819
	2⅞	1229-57-27	869
	3⅜	1229-57-33	918
	3⅞	1229-57-37	968
	4⅞	1229-57-47	1067
	5⅞	1229-57-57	1167

AVAILABLE WITH CHOICE OF LEADER PIN LOCATION:

TYPE A
For injection molds or die cast dies

TYPE C
For compression molds

DIM	TYPE A	TYPE C
Q	6 5/16	6½
R	5 11/16	4¼
S	6⅛	6½
T	5 11/16	4 1/16

A	B	ITEM NUMBER	NET WT.
⅞	⅞	1315-7-7	100
	1⅜	1315-7-13	128
	1⅞	1315-7-17	157
	2⅜	1315-7-23	185
	2⅞	1315-7-27	214
	3⅜	1315-7-33	242
	3⅞	1315-7-37	270
	4⅞	1315-7-47	327
	5⅞	1315-7-57	384
1⅜	⅞	1315-13-7	128
	1⅜	1315-13-13	157
	1⅞	1315-13-17	185
	2⅜	1315-13-23	214
	2⅞	1315-13-27	242
	3⅜	1315-13-33	270
	3⅞	1315-13-37	299
	4⅞	1315-13-47	356
	5⅞	1315-13-57	413
1⅞	⅞	1315-17-7	157
	1⅜	1315-17-13	185
	1⅞	1315-17-17	214
	2⅜	1315-17-23	242
	2⅞	1315-17-27	270
	3⅜	1315-17-33	299
	3⅞	1315-17-37	327
	4⅞	1315-17-47	384
	5⅞	1315-17-57	441
2⅜	⅞	1315-23-7	185
	1⅜	1315-23-13	214
	1⅞	1315-23-17	242
	2⅜	1315-23-23	270
	2⅞	1315-23-27	299
	3⅜	1315-23-33	327
	3⅞	1315-23-37	356
	4⅞	1315-23-47	413
	5⅞	1315-23-57	469

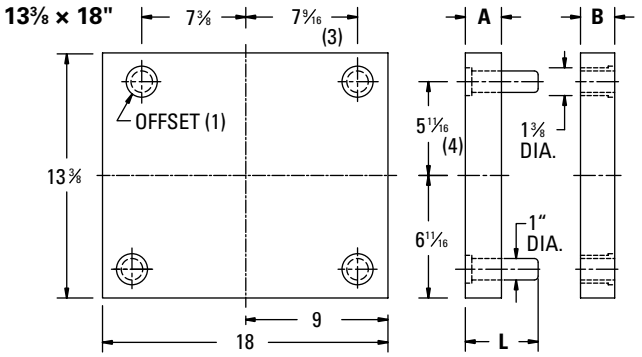
A	B	ITEM NUMBER	NET WT.
2⅞	⅞	1315-27-7	214
	1⅜	1315-27-13	242
	1⅞	1315-27-17	270
	2⅜	1315-27-23	299
	2⅞	1315-27-27	327
	3⅜	1315-27-33	356
	3⅞	1315-27-37	384
	4⅞	1315-27-47	441
	5⅞	1315-27-57	498
3⅜	⅞	1315-33-7	242
	1⅜	1315-33-13	270
	1⅞	1315-33-17	299
	2⅜	1315-33-23	327
	2⅞	1315-33-27	356
	3⅜	1315-33-33	384
	3⅞	1315-33-37	413
	4⅞	1315-33-47	469
	5⅞	1315-33-57	526
3⅞	⅞	1315-37-7	270
	1⅜	1315-37-13	299
	1⅞	1315-37-17	327
	2⅜	1315-37-23	356
	2⅞	1315-37-27	384
	3⅜	1315-37-33	413
	3⅞	1315-37-37	441
	4⅞	1315-37-47	498
	5⅞	1315-37-57	555
4⅞	⅞	1315-47-7	327
	1⅜	1315-47-13	356
	1⅞	1315-47-17	384
	2⅜	1315-47-23	413
	2⅞	1315-47-27	441
	3⅜	1315-47-33	469
	3⅞	1315-47-37	498
	4⅞	1315-47-47	555
	5⅞	1315-47-57	612
5⅞	⅞	1315-57-7	384
	1⅜	1315-57-13	413
	1⅞	1315-57-17	441
	2⅜	1315-57-23	469
	2⅞	1315-57-27	498
	3⅜	1315-57-33	526
	3⅞	1315-57-37	555
	4⅞	1315-57-47	612
	5⅞	1315-57-57	668

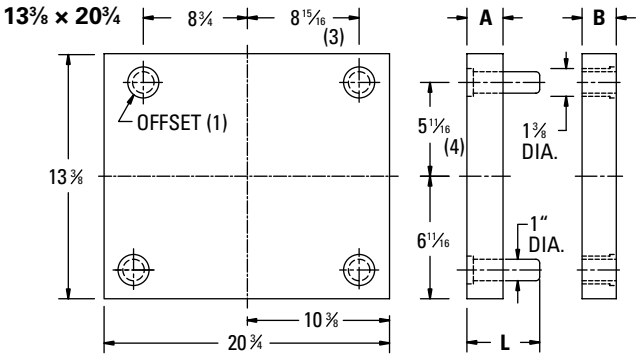
Thickness of each plate is finish ground ± .001".
Width and length finished square and parallel.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
1a. (1315 only) Type A or C Pin Locations
2. No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 Steel available standard only for plates up to and including 2⅞ thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

Cavity Retainer Sets
13⅜ × 18" and 13⅜ × 20¾





A	B	ITEM NUMBER	NET WT.
7/8	7/8	1318-7-7	120
	1 3/8	1318-7-13	154
	1 7/8	1318-7-17	188
	2 3/8	1318-7-23	222
	2 7/8	1318-7-27	256
	3 3/8	1318-7-33	290
	3 7/8	1318-7-37	324
	4 7/8	1318-7-47	393
	5 7/8	1318-7-57	461
1 3/8	7/8	1318-13-7	154
	1 3/8	1318-13-13	188
	1 7/8	1318-13-17	222
	2 3/8	1318-13-23	256
	2 7/8	1318-13-27	290
	3 3/8	1318-13-33	324
	3 7/8	1318-13-37	359
	4 7/8	1318-13-47	427
	5 7/8	1318-13-57	495
1 7/8	7/8	1318-17-7	188
	1 3/8	1318-17-13	222
	1 7/8	1318-17-17	256
	2 3/8	1318-17-23	290
	2 7/8	1318-17-27	324
	3 3/8	1318-17-33	359
	3 7/8	1318-17-37	393
	4 7/8	1318-17-47	461
	5 7/8	1318-17-57	529
2 3/8	7/8	1318-23-7	222
	1 3/8	1318-23-13	256
	1 7/8	1318-23-17	290
	2 3/8	1318-23-23	324
	2 7/8	1318-23-27	359
	3 3/8	1318-23-33	393
	3 7/8	1318-23-37	427
	4 7/8	1318-23-47	495
	5 7/8	1318-23-57	563
2 7/8	7/8	1318-27-7	256
	1 3/8	1318-27-13	290
	1 7/8	1318-27-17	324
	2 3/8	1318-27-23	359
	2 7/8	1318-27-27	393
	3 3/8	1318-27-33	427
	3 7/8	1318-27-37	461
	4 7/8	1318-27-47	529
	5 7/8	1318-27-57	597

A	B	ITEM NUMBER	NET WT.
3 3/8	7/8	1318-33-7	290
	1 3/8	1318-33-13	324
	1 7/8	1318-33-17	359
	2 3/8	1318-33-23	393
	2 7/8	1318-33-27	427
	3 3/8	1318-33-33	461
	3 7/8	1318-33-37	495
	4 7/8	1318-33-47	563
	5 7/8	1318-33-57	631
3 7/8	7/8	1318-37-7	324
	1 3/8	1318-37-13	359
	1 7/8	1318-37-17	393
	2 3/8	1318-37-23	427
	2 7/8	1318-37-27	461
	3 3/8	1318-37-33	495
	3 7/8	1318-37-37	529
	4 7/8	1318-37-47	597
	5 7/8	1318-37-57	665
4 7/8	7/8	1318-47-7	393
	1 3/8	1318-47-13	427
	1 7/8	1318-47-17	461
	2 3/8	1318-47-23	495
	2 7/8	1318-47-27	529
	3 3/8	1318-47-33	563
	3 7/8	1318-47-37	597
	4 7/8	1318-47-47	665
	5 7/8	1318-47-57	734
5 7/8	7/8	1318-57-7	461
	1 3/8	1318-57-13	495
	1 7/8	1318-57-17	529
	2 3/8	1318-57-23	563
	2 7/8	1318-57-27	597
	3 3/8	1318-57-33	631
	3 7/8	1318-57-37	665
	4 7/8	1318-57-47	734
	5 7/8	1318-57-57	802

A	B	ITEM NUMBER	NET WT.
7/8	7/8	1321-7-7	138
	1 3/8	1321-7-13	177
	1 7/8	1321-7-17	217
	2 3/8	1321-7-23	256
	2 7/8	1321-7-27	295
	3 3/8	1321-7-33	335
	3 7/8	1321-7-37	374
	4 7/8	1321-7-47	453
	5 7/8	1321-7-57	531
1 3/8	7/8	1321-13-7	177
	1 3/8	1321-13-13	217
	1 7/8	1321-13-17	256
	2 3/8	1321-13-23	295
	2 7/8	1321-13-27	335
	3 3/8	1321-13-33	374
	3 7/8	1321-13-37	413
	4 7/8	1321-13-47	492
	5 7/8	1321-13-57	570
1 7/8	7/8	1321-17-7	217
	1 3/8	1321-17-13	256
	1 7/8	1321-17-17	295
	2 3/8	1321-17-23	335
	2 7/8	1321-17-27	374
	3 3/8	1321-17-33	413
	3 7/8	1321-17-37	453
	4 7/8	1321-17-47	531
	5 7/8	1321-17-57	610
2 3/8	7/8	1321-23-7	256
	1 3/8	1321-23-13	295
	1 7/8	1321-23-17	335
	2 3/8	1321-23-23	374
	2 7/8	1321-23-27	413
	3 3/8	1321-23-33	453
	3 7/8	1321-23-37	492
	4 7/8	1321-23-47	570
	5 7/8	1321-23-57	649

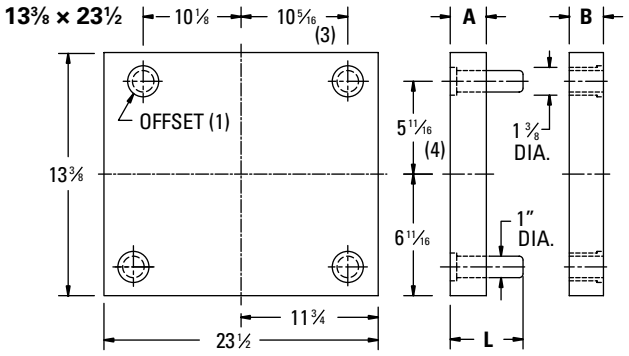
A	B	ITEM NUMBER	NET WT.
2 7/8	7/8	1321-27-7	295
	1 3/8	1321-27-13	335
	1 7/8	1321-27-17	374
	2 3/8	1321-27-23	413
	2 7/8	1321-27-27	453
	3 3/8	1321-27-33	492
	3 7/8	1321-27-37	531
	4 7/8	1321-27-47	610
	5 7/8	1321-27-57	688
3 3/8	7/8	1321-33-7	335
	1 3/8	1321-33-13	374
	1 7/8	1321-33-17	413
	2 3/8	1321-33-23	453
	2 7/8	1321-33-27	492
	3 3/8	1321-33-33	531
	3 7/8	1321-33-37	570
	4 7/8	1321-33-47	649
	5 7/8	1321-33-57	728
3 7/8	7/8	1321-37-7	374
	1 3/8	1321-37-13	413
	1 7/8	1321-37-17	453
	2 3/8	1321-37-23	492
	2 7/8	1321-37-27	531
	3 3/8	1321-37-33	570
	3 7/8	1321-37-37	610
	4 7/8	1321-37-47	688
	5 7/8	1321-37-57	767
4 7/8	7/8	1321-47-7	453
	1 3/8	1321-47-13	492
	1 7/8	1321-47-17	531
	2 3/8	1321-47-23	570
	2 7/8	1321-47-27	610
	3 3/8	1321-47-33	649
	3 7/8	1321-47-37	688
	4 7/8	1321-47-47	767
	5 7/8	1321-47-57	846
5 7/8	7/8	1321-57-7	531
	1 3/8	1321-57-13	570
	1 7/8	1321-57-17	610
	2 3/8	1321-57-23	649
	2 7/8	1321-57-27	688
	3 3/8	1321-57-33	728
	3 7/8	1321-57-37	767
	4 7/8	1321-57-47	846
	5 7/8	1321-57-57	924

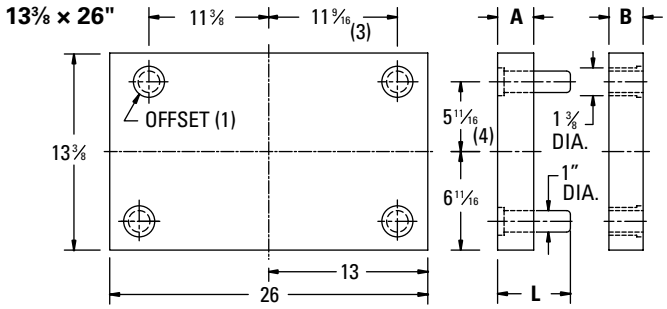
Thickness of each plate is finish ground ± .001". Width and length finished square and parallel.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 Steel available standard only for plates up to and including 2⅞ thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

Cavity Retainer Sets
13⅜ × 23½ and 13⅜ × 26"





A	B	ITEM NUMBER	NET WT.
1⅜	1⅜	1323-13-13	245
	1⅞	1323-13-17	290
	2⅜	1323-13-23	334
	2⅞	1323-13-27	379
	3⅜	1323-13-33	423
	3⅞	1323-13-37	468
	4⅞	1323-13-47	557
	5⅞	1323-13-57	646
1⅞	1⅜	1323-17-13	290
	1⅞	1323-17-17	334
	2⅜	1323-17-23	379
	2⅞	1323-17-27	423
	3⅜	1323-17-33	468
	3⅞	1323-17-37	512
	4⅞	1323-17-47	602
	5⅞	1323-17-57	691
2⅜	1⅜	1323-23-13	334
	1⅞	1323-23-17	379
	2⅜	1323-23-23	423
	2⅞	1323-23-27	468
	3⅜	1323-23-33	512
	3⅞	1323-23-37	557
	4⅞	1323-23-47	646
	5⅞	1323-23-57	735
2⅞	1⅜	1323-27-13	379
	1⅞	1323-27-17	423
	2⅜	1323-27-23	468
	2⅞	1323-27-27	512
	3⅜	1323-27-33	557
	3⅞	1323-27-37	602
	4⅞	1323-27-47	691
	5⅞	1323-27-57	780

A	B	ITEM NUMBER	NET WT.
3⅜	1⅜	1323-33-13	423
	1⅞	1323-33-17	468
	2⅜	1323-33-23	512
	2⅞	1323-33-27	557
	3⅜	1323-33-33	602
	3⅞	1323-33-37	646
	4⅞	1323-33-47	735
	5⅞	1323-33-57	824
3⅞	1⅜	1323-37-13	468
	1⅞	1323-37-17	512
	2⅜	1323-37-23	557
	2⅞	1323-37-27	602
	3⅜	1323-37-33	646
	3⅞	1323-37-37	691
	4⅞	1323-37-47	780
	5⅞	1323-37-57	869
4⅞	1⅜	1323-47-13	557
	1⅞	1323-47-17	602
	2⅜	1323-47-23	646
	2⅞	1323-47-27	691
	3⅜	1323-47-33	735
	3⅞	1323-47-37	780
	4⅞	1323-47-47	869
	5⅞	1323-47-57	958
5⅞	1⅜	1323-57-13	646
	1⅞	1323-57-17	691
	2⅜	1323-57-23	735
	2⅞	1323-57-27	780
	3⅜	1323-57-33	824
	3⅞	1323-57-37	869
	4⅞	1323-57-47	958
	5⅞	1323-57-57	1047

A	B	ITEM NUMBER	NET WT.
1⅜	1⅜	1326-13-13	271
	1⅞	1326-13-17	321
	2⅜	1326-13-23	370
	2⅞	1326-13-27	419
	3⅜	1326-13-33	468
	3⅞	1326-13-37	518
	4⅞	1326-13-47	616
	5⅞	1326-13-57	715
1⅞	1⅜	1326-17-13	321
	1⅞	1326-17-17	370
	2⅜	1326-17-23	419
	2⅞	1326-17-27	468
	3⅜	1326-17-33	518
	3⅞	1326-17-37	567
	4⅞	1326-17-47	666
	5⅞	1326-17-57	764
2⅜	1⅜	1326-23-13	370
	1⅞	1326-23-17	419
	2⅜	1326-23-23	468
	2⅞	1326-23-27	518
	3⅜	1326-23-33	567
	3⅞	1326-23-37	616
	4⅞	1326-23-47	715
	5⅞	1326-23-57	813
2⅞	1⅜	1326-27-13	419
	1⅞	1326-27-17	468
	2⅜	1326-27-23	518
	2⅞	1326-27-27	567
	3⅜	1326-27-33	616
	3⅞	1326-27-37	666
	4⅞	1326-27-47	764
	5⅞	1326-27-57	863

A	B	ITEM NUMBER	NET WT.
3⅜	1⅜	1326-33-13	468
	1⅞	1326-33-17	518
	2⅜	1326-33-23	567
	2⅞	1326-33-27	616
	3⅜	1326-33-33	666
	3⅞	1326-33-37	715
	4⅞	1326-33-47	813
	5⅞	1326-33-57	912
3⅞	1⅜	1326-37-13	518
	1⅞	1326-37-17	567
	2⅜	1326-37-23	616
	2⅞	1326-37-27	666
	3⅜	1326-37-33	715
	3⅞	1326-37-37	764
	4⅞	1326-37-47	863
	5⅞	1326-37-57	961
4⅞	1⅜	1326-47-13	616
	1⅞	1326-47-17	666
	2⅜	1326-47-23	715
	2⅞	1326-47-27	764
	3⅜	1326-47-33	813
	3⅞	1326-47-37	863
	4⅞	1326-47-47	961
	5⅞	1326-47-57	1060
5⅞	1⅜	1326-57-13	715
	1⅞	1326-57-17	764
	2⅜	1326-57-23	813
	2⅞	1326-57-27	863
	3⅜	1326-57-33	912
	3⅞	1326-57-37	961
	4⅞	1326-57-47	1060
	5⅞	1326-57-57	1158

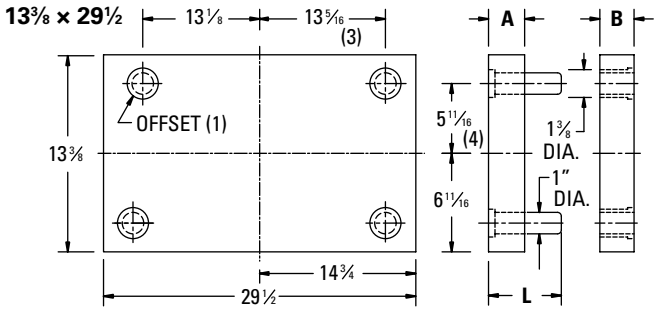
Thickness of each plate is finish ground ± .001". Width and length finished square and parallel.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 Steel available standard only for plates up to and including 2⅞ thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

Cavity Retainer Sets
13⅜ × 29½ and 14⅞ × 17⅞

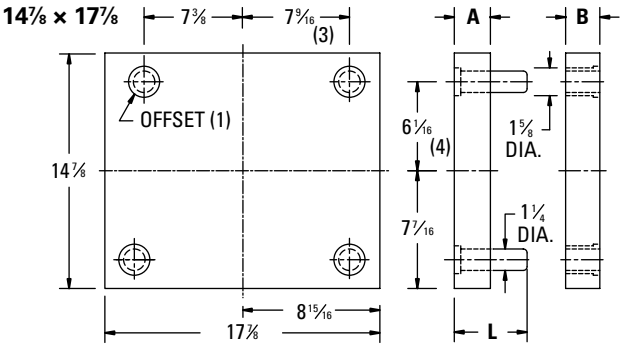
13⅜ × 29½



A	B	ITEM NUMBER	NET WT.
1⅜	1⅜	1329-13-13	308
	1⅞	1329-13-17	364
	2⅜	1329-13-23	420
	2⅞	1329-13-27	476
	3⅜	1329-13-33	531
	3⅞	1329-13-37	587
	4⅞	1329-13-47	699
	5⅞	1329-13-57	811
1⅞	1⅜	1329-17-13	364
	1⅞	1329-17-17	420
	2⅜	1329-17-23	476
	2⅞	1329-17-27	531
	3⅜	1329-17-33	587
	3⅞	1329-17-37	643
	4⅞	1329-17-47	755
	5⅞	1329-17-57	867
2⅜	1⅜	1329-23-13	420
	1⅞	1329-23-17	476
	2⅜	1329-23-23	531
	2⅞	1329-23-27	587
	3⅜	1329-23-33	643
	3⅞	1329-23-37	699
	4⅞	1329-23-47	811
	5⅞	1329-23-57	923
2⅞	1⅜	1329-27-13	476
	1⅞	1329-27-17	531
	2⅜	1329-27-23	587
	2⅞	1329-27-27	643
	3⅜	1329-27-33	699
	3⅞	1329-27-37	755
	4⅞	1329-27-47	867
	5⅞	1329-27-57	979

A	B	ITEM NUMBER	NET WT.
3⅜	1⅜	1329-33-13	531
	1⅞	1329-33-17	587
	2⅜	1329-33-23	643
	2⅞	1329-33-27	699
	3⅜	1329-33-33	755
	3⅞	1329-33-37	811
	4⅞	1329-33-47	923
	5⅞	1329-33-57	1034
3⅞	1⅜	1329-37-13	587
	1⅞	1329-37-17	643
	2⅜	1329-37-23	699
	2⅞	1329-37-27	755
	3⅜	1329-37-33	811
	3⅞	1329-37-37	867
	4⅞	1329-37-47	979
	5⅞	1329-37-57	1090
4⅞	1⅜	1329-47-13	699
	1⅞	1329-47-17	755
	2⅜	1329-47-23	811
	2⅞	1329-47-27	867
	3⅜	1329-47-33	923
	3⅞	1329-47-37	979
	4⅞	1329-47-47	1090
	5⅞	1329-47-57	1202
5⅞	1⅜	1329-57-13	811
	1⅞	1329-57-17	867
	2⅜	1329-57-23	923
	2⅞	1329-57-27	979
	3⅜	1329-57-33	1034
	3⅞	1329-57-37	1090
	4⅞	1329-57-47	1202
	5⅞	1329-57-57	1314

14⅞ × 17⅞



A	B	ITEM NUMBER	NET WT.
⅞	⅞	1518-7-7	132
	1⅜	1518-7-13	170
	1⅞	1518-7-17	208
	2⅜	1518-7-23	245
	2⅞	1518-7-27	283
	3⅜	1518-7-33	321
	3⅞	1518-7-37	358
	4⅞	1518-7-47	434
	5⅞	1518-7-57	509
1⅜	⅞	1518-13-7	170
	1⅜	1518-13-13	208
	1⅞	1518-13-17	245
	2⅜	1518-13-23	283
	2⅞	1518-13-27	321
	3⅜	1518-13-33	358
	3⅞	1518-13-37	396
	4⅞	1518-13-47	471
	5⅞	1518-13-57	547
1⅞	⅞	1518-17-7	208
	1⅜	1518-17-13	245
	1⅞	1518-17-17	283
	2⅜	1518-17-23	321
	2⅞	1518-17-27	358
	3⅜	1518-17-33	396
	3⅞	1518-17-37	434
	4⅞	1518-17-47	509
	5⅞	1518-17-57	584
2⅜	⅞	1518-23-7	245
	1⅜	1518-23-13	283
	1⅞	1518-23-17	321
	2⅜	1518-23-23	358
	2⅞	1518-23-27	396
	3⅜	1518-23-33	434
	3⅞	1518-23-37	471
	4⅞	1518-23-47	547
	5⅞	1518-23-57	622

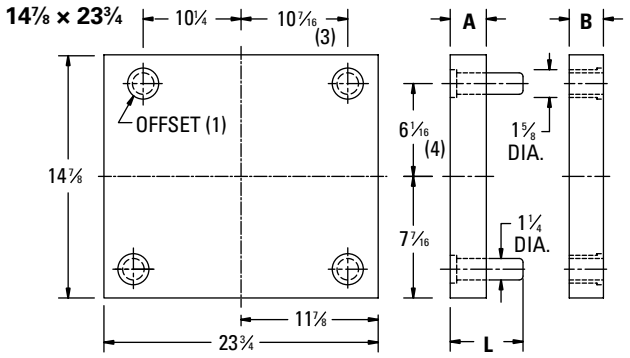
A	B	ITEM NUMBER	NET WT.
2⅞	⅞	1518-27-7	283
	1⅜	1518-27-13	321
	1⅞	1518-27-17	358
	2⅜	1518-27-23	396
	2⅞	1518-27-27	434
	3⅜	1518-27-33	471
	3⅞	1518-27-37	509
	4⅞	1518-27-47	584
	5⅞	1518-27-57	660
3⅜	⅞	1518-33-7	321
	1⅜	1518-33-13	358
	1⅞	1518-33-17	396
	2⅜	1518-33-23	434
	2⅞	1518-33-27	471
	3⅜	1518-33-33	509
	3⅞	1518-33-37	547
	4⅞	1518-33-47	622
	5⅞	1518-33-57	697
3⅞	⅞	1518-37-7	358
	1⅜	1518-37-13	396
	1⅞	1518-37-17	434
	2⅜	1518-37-23	471
	2⅞	1518-37-27	509
	3⅜	1518-37-33	547
	3⅞	1518-37-37	584
	4⅞	1518-37-47	660
	5⅞	1518-37-57	735
4⅞	⅞	1518-47-7	434
	1⅜	1518-47-13	471
	1⅞	1518-47-17	509
	2⅜	1518-47-23	547
	2⅞	1518-47-27	584
	3⅜	1518-47-33	622
	3⅞	1518-47-37	660
	4⅞	1518-47-47	735
	5⅞	1518-47-57	810
5⅞	⅞	1518-57-7	509
	1⅜	1518-57-13	547
	1⅞	1518-57-17	584
	2⅜	1518-57-23	622
	2⅞	1518-57-27	660
	3⅜	1518-57-33	697
	3⅞	1518-57-37	735
	4⅞	1518-57-47	810
	5⅞	1518-57-57	886

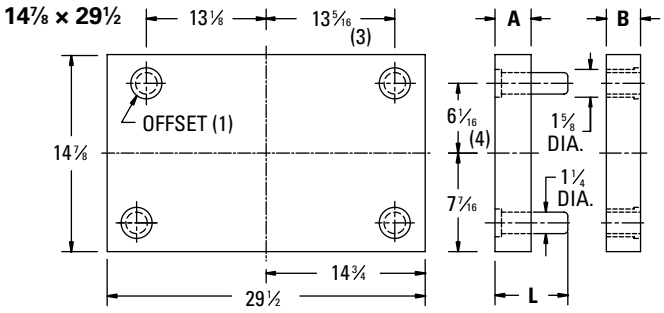
Thickness of each plate is finish ground ± .001". Width and length finished square and parallel.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 Steel available standard only for plates up to and including 2⅞ thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

Cavity Retainer Sets
14⅞ × 23¾ and 14⅞ × 29½





A	B	ITEM NUMBER	NET WT.
1⅜	1⅜	1524-13-13	276
	1⅞	1524-13-17	326
	2⅜	1524-13-23	376
	2⅞	1524-13-27	426
	3⅜	1524-13-33	476
	3⅞	1524-13-37	526
	4⅞	1524-13-47	626
	5⅞	1524-13-57	726
1⅞	1⅜	1524-17-13	326
	1⅞	1524-17-17	376
	2⅜	1524-17-23	426
	2⅞	1524-17-27	476
	3⅜	1524-17-33	526
	3⅞	1524-17-37	576
	4⅞	1524-17-47	676
	5⅞	1524-17-57	776
2⅜	1⅜	1524-23-13	376
	1⅞	1524-23-17	426
	2⅜	1524-23-23	476
	2⅞	1524-23-27	526
	3⅜	1524-23-33	576
	3⅞	1524-23-37	626
	4⅞	1524-23-47	726
	5⅞	1524-23-57	826
2⅞	1⅜	1524-27-13	426
	1⅞	1524-27-17	476
	2⅜	1524-27-23	526
	2⅞	1524-27-27	576
	3⅜	1524-27-33	626
	3⅞	1524-27-37	676
	4⅞	1524-27-47	776
	5⅞	1524-27-57	876

A	B	ITEM NUMBER	NET WT.
3⅜	1⅜	1524-33-13	476
	1⅞	1524-33-17	526
	2⅜	1524-33-23	576
	2⅞	1524-33-27	626
	3⅜	1524-33-33	676
	3⅞	1524-33-37	726
	4⅞	1524-33-47	826
	5⅞	1524-33-57	926
3⅞	1⅜	1524-37-13	526
	1⅞	1524-37-17	576
	2⅜	1524-37-23	626
	2⅞	1524-37-27	676
	3⅜	1524-37-33	726
	3⅞	1524-37-37	776
	4⅞	1524-37-47	876
	5⅞	1524-37-57	976
4⅞	1⅜	1524-47-13	626
	1⅞	1524-47-17	676
	2⅜	1524-47-23	726
	2⅞	1524-47-27	776
	3⅜	1524-47-33	826
	3⅞	1524-47-37	876
	4⅞	1524-47-47	976
	5⅞	1524-47-57	1076
5⅞	1⅜	1524-57-13	726
	1⅞	1524-57-17	776
	2⅜	1524-57-23	826
	2⅞	1524-57-27	876
	3⅜	1524-57-33	926
	3⅞	1524-57-37	976
	4⅞	1524-57-47	1076
	5⅞	1524-57-57	1176

A	B	ITEM NUMBER	NET WT.
1⅜	1⅜	1529-13-13	342
	1⅞	1529-13-17	405
	2⅜	1529-13-23	467
	2⅞	1529-13-27	529
	3⅜	1529-13-33	591
	3⅞	1529-13-37	653
	4⅞	1529-13-47	777
	5⅞	1529-13-57	902
1⅞	1⅜	1529-17-13	405
	1⅞	1529-17-17	467
	2⅜	1529-17-23	529
	2⅞	1529-17-27	591
	3⅜	1529-17-33	653
	3⅞	1529-17-37	715
	4⅞	1529-17-47	840
	5⅞	1529-17-57	964
2⅜	1⅜	1529-23-13	467
	1⅞	1529-23-17	529
	2⅜	1529-23-23	591
	2⅞	1529-23-27	653
	3⅜	1529-23-33	715
	3⅞	1529-23-37	777
	4⅞	1529-23-47	902
	5⅞	1529-23-57	1026
2⅞	1⅜	1529-27-13	529
	1⅞	1529-27-17	591
	2⅜	1529-27-23	653
	2⅞	1529-27-27	715
	3⅜	1529-27-33	777
	3⅞	1529-27-37	840
	4⅞	1529-27-47	964
	5⅞	1529-27-57	1088

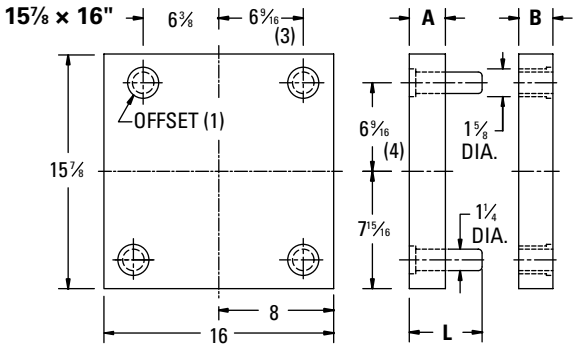
A	B	ITEM NUMBER	NET WT.
3⅜	1⅜	1529-33-13	591
	1⅞	1529-33-17	653
	2⅜	1529-33-23	715
	2⅞	1529-33-27	777
	3⅜	1529-33-33	840
	3⅞	1529-33-37	902
	4⅞	1529-33-47	1026
	5⅞	1529-33-57	1150
3⅞	1⅜	1529-37-13	653
	1⅞	1529-37-17	715
	2⅜	1529-37-23	777
	2⅞	1529-37-27	840
	3⅜	1529-37-33	902
	3⅞	1529-37-37	964
	4⅞	1529-37-47	1088
	5⅞	1529-37-57	1213
4⅞	1⅜	1529-47-13	777
	1⅞	1529-47-17	840
	2⅜	1529-47-23	902
	2⅞	1529-47-27	964
	3⅜	1529-47-33	1026
	3⅞	1529-47-37	1088
	4⅞	1529-47-47	1213
	5⅞	1529-47-57	1337
5⅞	1⅜	1529-57-13	902
	1⅞	1529-57-17	964
	2⅜	1529-57-23	1026
	2⅞	1529-57-27	1088
	3⅜	1529-57-33	1150
	3⅞	1529-57-37	1213
	4⅞	1529-57-47	1337
	5⅞	1529-57-57	1461

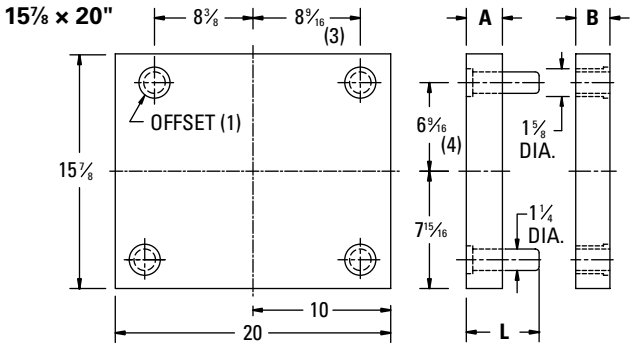
Thickness of each plate is finish ground ± .001". Width and length finished square and parallel.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 Steel available standard only for plates up to and including 2⅞ thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

Cavity Retainer Sets
15⅞ × 16" and 15⅞ × 20"





A	B	ITEM NUMBER	NET WT.
7/8	7/8	1616-7-7	126
	1 3/8	1616-7-13	162
	1 7/8	1616-7-17	198
	2 3/8	1616-7-23	234
	2 7/8	1616-7-27	270
	3 3/8	1616-7-33	306
	3 7/8	1616-7-37	342
	4 7/8	1616-7-47	414
	5 7/8	1616-7-57	486
1 3/8	7/8	1616-13-7	162
	1 3/8	1616-13-13	198
	1 7/8	1616-13-17	234
	2 3/8	1616-13-23	270
	2 7/8	1616-13-27	306
	3 3/8	1616-13-33	342
	3 7/8	1616-13-37	378
	4 7/8	1616-13-47	450
	5 7/8	1616-13-57	522
1 7/8	7/8	1616-17-7	198
	1 3/8	1616-17-13	234
	1 7/8	1616-17-17	270
	2 3/8	1616-17-23	306
	2 7/8	1616-17-27	342
	3 3/8	1616-17-33	378
	3 7/8	1616-17-37	414
	4 7/8	1616-17-47	486
	5 7/8	1616-17-57	558
2 3/8	7/8	1616-23-7	234
	1 3/8	1616-23-13	270
	1 7/8	1616-23-17	306
	2 3/8	1616-23-23	342
	2 7/8	1616-23-27	378
	3 3/8	1616-23-33	414
	3 7/8	1616-23-37	450
	4 7/8	1616-23-47	522
	5 7/8	1616-23-57	594
2 7/8	7/8	1616-27-7	270
	1 3/8	1616-27-13	306
	1 7/8	1616-27-17	342
	2 3/8	1616-27-23	378
	2 7/8	1616-27-27	414
	3 3/8	1616-27-33	450
	3 7/8	1616-27-37	486
	4 7/8	1616-27-47	558
	5 7/8	1616-27-57	630

A	B	ITEM NUMBER	NET WT.
3 3/8	7/8	1616-33-7	306
	1 3/8	1616-33-13	342
	1 7/8	1616-33-17	378
	2 3/8	1616-33-23	414
	2 7/8	1616-33-27	450
	3 3/8	1616-33-33	486
	3 7/8	1616-33-37	522
	4 7/8	1616-33-47	594
	5 7/8	1616-33-57	666
3 7/8	7/8	1616-37-7	342
	1 3/8	1616-37-13	378
	1 7/8	1616-37-17	414
	2 3/8	1616-37-23	450
	2 7/8	1616-37-27	486
	3 3/8	1616-37-33	522
	3 7/8	1616-37-37	558
	4 7/8	1616-37-47	630
	5 7/8	1616-37-57	702
4 7/8	7/8	1616-47-7	414
	1 3/8	1616-47-13	450
	1 7/8	1616-47-17	486
	2 3/8	1616-47-23	522
	2 7/8	1616-47-27	558
	3 3/8	1616-47-33	594
	3 7/8	1616-47-37	630
	4 7/8	1616-47-47	702
	5 7/8	1616-47-57	774
5 7/8	7/8	1616-57-7	486
	1 3/8	1616-57-13	522
	1 7/8	1616-57-17	558
	2 3/8	1616-57-23	594
	2 7/8	1616-57-27	630
	3 3/8	1616-57-33	666
	3 7/8	1616-57-37	702
	4 7/8	1616-57-47	774
	5 7/8	1616-57-57	846

A	B	ITEM NUMBER	NET WT.
7/8	7/8	1620-7-7	158
	1 3/8	1620-7-13	203
	1 7/8	1620-7-17	248
	2 3/8	1620-7-23	293
	2 7/8	1620-7-27	338
	3 3/8	1620-7-33	383
	3 7/8	1620-7-37	428
	4 7/8	1620-7-47	518
	5 7/8	1620-7-57	608
1 3/8	7/8	1620-13-7	203
	1 3/8	1620-13-13	248
	1 7/8	1620-13-17	293
	2 3/8	1620-13-23	338
	2 7/8	1620-13-27	383
	3 3/8	1620-13-33	428
	3 7/8	1620-13-37	473
	4 7/8	1620-13-47	563
	5 7/8	1620-13-57	653
1 7/8	7/8	1620-17-7	248
	1 3/8	1620-17-13	293
	1 7/8	1620-17-17	338
	2 3/8	1620-17-23	383
	2 7/8	1620-17-27	428
	3 3/8	1620-17-33	473
	3 7/8	1620-17-37	518
	4 7/8	1620-17-47	608
	5 7/8	1620-17-57	698
2 3/8	7/8	1620-23-7	293
	1 3/8	1620-23-13	338
	1 7/8	1620-23-17	383
	2 3/8	1620-23-23	428
	2 7/8	1620-23-27	473
	3 3/8	1620-23-33	518
	3 7/8	1620-23-37	563
	4 7/8	1620-23-47	653
	5 7/8	1620-23-57	743

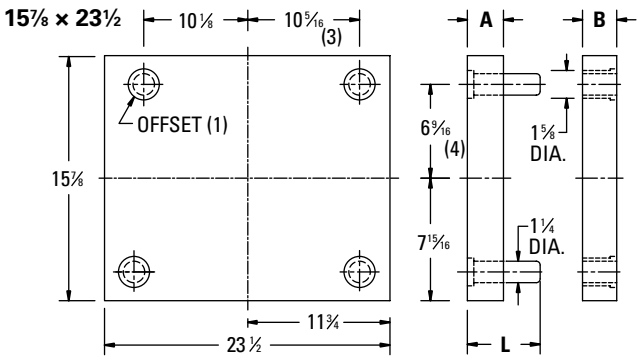
A	B	ITEM NUMBER	NET WT.
2 7/8	7/8	1620-27-7	338
	1 3/8	1620-27-13	383
	1 7/8	1620-27-17	428
	2 3/8	1620-27-23	473
	2 7/8	1620-27-27	518
	3 3/8	1620-27-33	563
	3 7/8	1620-27-37	608
	4 7/8	1620-27-47	698
	5 7/8	1620-27-57	787
3 3/8	7/8	1620-33-7	383
	1 3/8	1620-33-13	428
	1 7/8	1620-33-17	473
	2 3/8	1620-33-23	518
	2 7/8	1620-33-27	563
	3 3/8	1620-33-33	608
	3 7/8	1620-33-37	653
	4 7/8	1620-33-47	743
	5 7/8	1620-33-57	832
3 7/8	7/8	1620-37-7	428
	1 3/8	1620-37-13	473
	1 7/8	1620-37-17	518
	2 3/8	1620-37-23	563
	2 7/8	1620-37-27	608
	3 3/8	1620-37-33	653
	3 7/8	1620-37-37	698
	4 7/8	1620-37-47	787
	5 7/8	1620-37-57	877
4 7/8	7/8	1620-47-7	518
	1 3/8	1620-47-13	563
	1 7/8	1620-47-17	608
	2 3/8	1620-47-23	653
	2 7/8	1620-47-27	698
	3 3/8	1620-47-33	743
	3 7/8	1620-47-37	787
	4 7/8	1620-47-47	877
	5 7/8	1620-47-57	967
5 7/8	7/8	1620-57-7	608
	1 3/8	1620-57-13	653
	1 7/8	1620-57-17	698
	2 3/8	1620-57-23	743
	2 7/8	1620-57-27	787
	3 3/8	1620-57-33	832
	3 7/8	1620-57-37	877
	4 7/8	1620-57-47	967
	5 7/8	1620-57-57	1057

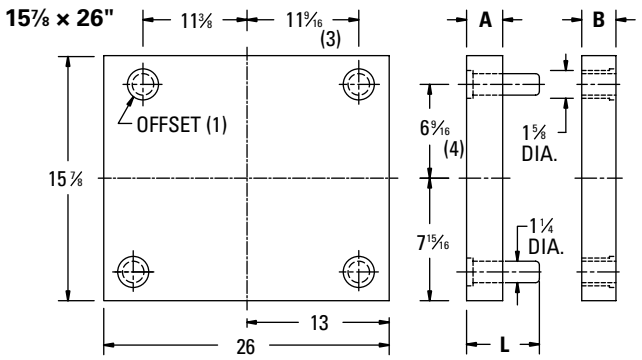
Thickness of each plate is finish ground ± .001". Width and length finished square and parallel.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 Steel available standard only for plates up to and including 2⅞ thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

Cavity Retainer Sets
15⅞ × 23½ and 15⅞ × 26"





A	B	ITEM NUMBER	NET WT.
1⅜	1⅜	1623-13-13	291
	1⅞	1623-13-17	344
	2⅜	1623-13-23	397
	2⅞	1623-13-27	450
	3⅜	1623-13-33	503
	3⅞	1623-13-37	555
	4⅞	1623-13-47	661
	5⅞	1623-13-57	767
1⅞	1⅜	1623-17-13	344
	1⅞	1623-17-17	397
	2⅜	1623-17-23	450
	2⅞	1623-17-27	502
	3⅜	1623-17-33	555
	3⅞	1623-17-37	608
	4⅞	1623-17-47	714
	5⅞	1623-17-57	820
2⅜	1⅜	1623-23-13	397
	1⅞	1623-23-17	450
	2⅜	1623-23-23	502
	2⅞	1623-23-27	555
	3⅜	1623-23-33	608
	3⅞	1623-23-37	661
	4⅞	1623-23-47	767
	5⅞	1623-23-57	872
2⅞	1⅜	1623-27-13	450
	1⅞	1623-27-17	502
	2⅜	1623-27-23	555
	2⅞	1623-27-27	608
	3⅜	1623-27-33	661
	3⅞	1623-27-37	714
	4⅞	1623-27-47	820
	5⅞	1623-27-57	925

A	B	ITEM NUMBER	NET WT.
3⅜	1⅜	1623-33-13	502
	1⅞	1623-33-17	555
	2⅜	1623-33-23	608
	2⅞	1623-33-27	661
	3⅜	1623-33-33	714
	3⅞	1623-33-37	767
	4⅞	1623-33-47	872
	5⅞	1623-33-57	978
3⅞	1⅜	1623-37-13	555
	1⅞	1623-37-17	608
	2⅜	1623-37-23	661
	2⅞	1623-37-27	714
	3⅜	1623-37-33	767
	3⅞	1623-37-37	820
	4⅞	1623-37-47	925
	5⅞	1623-37-57	1031
4⅞	1⅜	1623-47-13	661
	1⅞	1623-47-17	714
	2⅜	1623-47-23	767
	2⅞	1623-47-27	820
	3⅜	1623-47-33	872
	3⅞	1623-47-37	925
	4⅞	1623-47-47	1031
	5⅞	1623-47-57	1137
5⅞	1⅜	1623-57-13	767
	1⅞	1623-57-17	820
	2⅜	1623-57-23	872
	2⅞	1623-57-27	925
	3⅜	1623-57-33	978
	3⅞	1623-57-37	1031
	4⅞	1623-57-47	1137
	5⅞	1623-57-57	1242

A	B	ITEM NUMBER	NET WT.
1⅜	1⅜	1626-13-13	322
	1⅞	1626-13-17	381
	2⅜	1626-13-23	439
	2⅞	1626-13-27	497
	3⅜	1626-13-33	556
	3⅞	1626-13-37	614
	4⅞	1626-13-47	731
	5⅞	1626-13-57	848
1⅞	1⅜	1626-17-13	381
	1⅞	1626-17-17	439
	2⅜	1626-17-23	497
	2⅞	1626-17-27	556
	3⅜	1626-17-33	614
	3⅞	1626-17-37	673
	4⅞	1626-17-47	790
	5⅞	1626-17-57	907
2⅜	1⅜	1626-23-13	439
	1⅞	1626-23-17	497
	2⅜	1626-23-23	556
	2⅞	1626-23-27	614
	3⅜	1626-23-33	673
	3⅞	1626-23-37	731
	4⅞	1626-23-47	848
	5⅞	1626-23-57	965
2⅞	1⅜	1626-27-13	497
	1⅞	1626-27-17	556
	2⅜	1626-27-23	614
	2⅞	1626-27-27	673
	3⅜	1626-27-33	731
	3⅞	1626-27-37	790
	4⅞	1626-27-47	907
	5⅞	1626-27-57	1024

A	B	ITEM NUMBER	NET WT.
3⅜	1⅜	1626-33-13	556
	1⅞	1626-33-17	614
	2⅜	1626-33-23	673
	2⅞	1626-33-27	731
	3⅜	1626-33-33	790
	3⅞	1626-33-37	848
	4⅞	1626-33-47	965
	5⅞	1626-33-57	1082
3⅞	1⅜	1626-37-13	614
	1⅞	1626-37-17	673
	2⅜	1626-37-23	731
	2⅞	1626-37-27	790
	3⅜	1626-37-33	848
	3⅞	1626-37-37	907
	4⅞	1626-37-47	1024
	5⅞	1626-37-57	1141
4⅞	1⅜	1626-47-13	731
	1⅞	1626-47-17	790
	2⅜	1626-47-23	848
	2⅞	1626-47-27	907
	3⅜	1626-47-33	965
	3⅞	1626-47-37	1024
	4⅞	1626-47-47	1141
	5⅞	1626-47-57	1258
5⅞	1⅜	1626-57-13	848
	1⅞	1626-57-17	907
	2⅜	1626-57-23	965
	2⅞	1626-57-27	1024
	3⅜	1626-57-33	1082
	3⅞	1626-57-37	1141
	4⅞	1626-57-47	1258
	5⅞	1626-57-57	1375

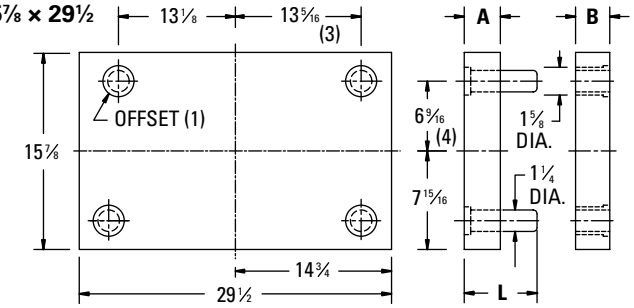
Thickness of each plate is finish ground ± .001". Width and length finished square and parallel.

WHEN ORDERING, PLEASE SPECIFY:

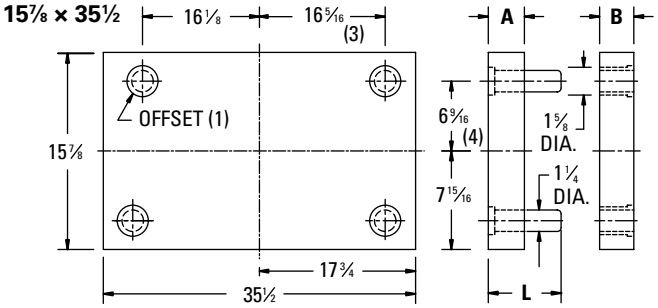
1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 Steel available standard only for plates up to and including 2⅞ thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

Cavity Retainer Sets
15⅞ × 29½ and 15⅞ × 35½

15⅞ × 29½



15⅞ × 35½



A	B	ITEM NUMBER	NET WT.
1⅜	1⅜	1629-13-13	365
	1⅞	1629-13-17	432
	2⅜	1629-13-23	498
	2⅞	1629-13-27	564
	3⅜	1629-13-33	631
	3⅞	1629-13-37	697
	4⅞	1629-13-47	830
	5⅞	1629-13-57	962
1⅞	1⅜	1629-17-13	432
	1⅞	1629-17-17	498
	2⅜	1629-17-23	564
	2⅞	1629-17-27	631
	3⅜	1629-17-33	697
	3⅞	1629-17-37	763
	4⅞	1629-17-47	896
	5⅞	1629-17-57	1029
2⅜	1⅜	1629-23-13	498
	1⅞	1629-23-17	564
	2⅜	1629-23-23	631
	2⅞	1629-23-27	697
	3⅜	1629-23-33	763
	3⅞	1629-23-37	830
	4⅞	1629-23-47	962
	5⅞	1629-23-57	1095
2⅞	1⅜	1629-27-13	564
	1⅞	1629-27-17	631
	2⅜	1629-27-23	697
	2⅞	1629-27-27	763
	3⅜	1629-27-33	830
	3⅞	1629-27-37	896
	4⅞	1629-27-47	1029
	5⅞	1629-27-57	1161

A	B	ITEM NUMBER	NET WT.
3⅜	1⅜	1629-33-13	631
	1⅞	1629-33-17	697
	2⅜	1629-33-23	763
	2⅞	1629-33-27	830
	3⅜	1629-33-33	896
	3⅞	1629-33-37	962
	4⅞	1629-33-47	1095
	5⅞	1629-33-57	1228
3⅞	1⅜	1629-37-13	697
	1⅞	1629-37-17	763
	2⅜	1629-37-23	830
	2⅞	1629-37-27	896
	3⅜	1629-37-33	962
	3⅞	1629-37-37	1029
	4⅞	1629-37-47	1161
	5⅞	1629-37-57	1294
4⅞	1⅜	1629-47-13	830
	1⅞	1629-47-17	896
	2⅜	1629-47-23	962
	2⅞	1629-47-27	1029
	3⅜	1629-47-33	1095
	3⅞	1629-47-37	1161
	4⅞	1629-47-47	1294
	5⅞	1629-47-57	1427
5⅞	1⅜	1629-57-13	962
	1⅞	1629-57-17	1029
	2⅜	1629-57-23	1095
	2⅞	1629-57-27	1161
	3⅜	1629-57-33	1228
	3⅞	1629-57-37	1294
	4⅞	1629-57-47	1427
	5⅞	1629-57-57	1559

A	B	ITEM NUMBER	NET WT.
1⅜	1⅜	1635-13-13	440
	1⅞	1635-13-17	519
	2⅜	1635-13-23	599
	2⅞	1635-13-27	679
	3⅜	1635-13-33	759
	3⅞	1635-13-37	839
	4⅞	1635-13-47	998
	5⅞	1635-13-57	1158
1⅞	1⅜	1635-17-13	519
	1⅞	1635-17-17	599
	2⅜	1635-17-23	679
	2⅞	1635-17-27	759
	3⅜	1635-17-33	839
	3⅞	1635-17-37	919
	4⅞	1635-17-47	1078
	5⅞	1635-17-57	1238
2⅜	1⅜	1635-23-13	599
	1⅞	1635-23-17	679
	2⅜	1635-23-23	759
	2⅞	1635-23-27	839
	3⅜	1635-23-33	919
	3⅞	1635-23-37	998
	4⅞	1635-23-47	1158
	5⅞	1635-23-57	1318
2⅞	1⅜	1635-27-13	679
	1⅞	1635-27-17	759
	2⅜	1635-27-23	839
	2⅞	1635-27-27	919
	3⅜	1635-27-33	998
	3⅞	1635-27-37	1078
	4⅞	1635-27-47	1238
	5⅞	1635-27-57	1398

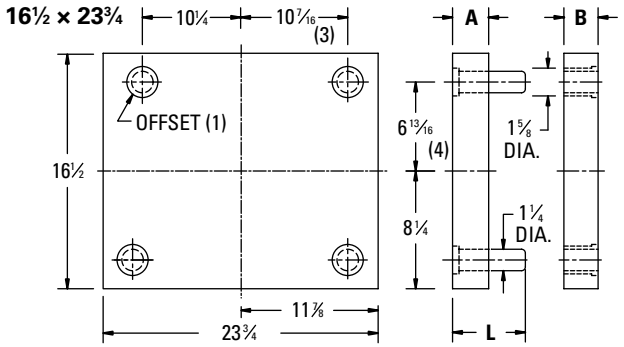
A	B	ITEM NUMBER	NET WT.
3⅜	1⅜	1635-33-13	759
	1⅞	1635-33-17	839
	2⅜	1635-33-23	919
	2⅞	1635-33-27	998
	3⅜	1635-33-33	1078
	3⅞	1635-33-37	1158
	4⅞	1635-33-47	1318
	5⅞	1635-33-57	1477
3⅞	1⅜	1635-37-13	839
	1⅞	1635-37-17	919
	2⅜	1635-37-23	998
	2⅞	1635-37-27	1078
	3⅜	1635-37-33	1158
	3⅞	1635-37-37	1238
	4⅞	1635-37-47	1398
	5⅞	1635-37-57	1557
4⅞	1⅜	1635-47-13	998
	1⅞	1635-47-17	1078
	2⅜	1635-47-23	1158
	2⅞	1635-47-27	1238
	3⅜	1635-47-33	1318
	3⅞	1635-47-37	1398
	4⅞	1635-47-47	1557
	5⅞	1635-47-57	1717
5⅞	1⅜	1635-57-13	1158
	1⅞	1635-57-17	1238
	2⅜	1635-57-23	1318
	2⅞	1635-57-27	1398
	3⅜	1635-57-33	1477
	3⅞	1635-57-37	1557
	4⅞	1635-57-47	1717
	5⅞	1635-57-57	1877

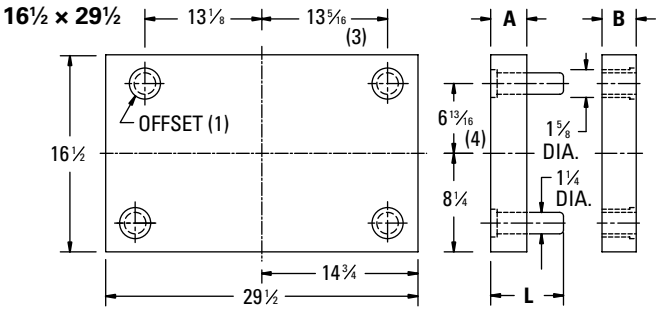
Thickness of each plate is finish ground ± .001". Width and length finished square and parallel.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 Steel available standard only for plates up to and including 2⅞ thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

Cavity Retainer Sets
16½ × 23¾ and 16½ × 29½





A	B	ITEM NUMBER	NET WT.
1⅜	1⅜	1724-13-13	306
	1⅞	1724-13-17	361
	2⅜	1724-13-23	417
	2⅞	1724-13-27	472
	3⅜	1724-13-33	528
	3⅞	1724-13-37	583
	4⅞	1724-13-47	694
	5⅞	1724-13-57	805
1⅞	1⅜	1724-17-13	361
	1⅞	1724-17-17	417
	2⅜	1724-17-23	472
	2⅞	1724-17-27	528
	3⅜	1724-17-33	583
	3⅞	1724-17-37	639
	4⅞	1724-17-47	750
	5⅞	1724-17-57	861
2⅜	1⅜	1724-23-13	417
	1⅞	1724-23-17	472
	2⅜	1724-23-23	528
	2⅞	1724-23-27	583
	3⅜	1724-23-33	639
	3⅞	1724-23-37	694
	4⅞	1724-23-47	805
	5⅞	1724-23-57	916
2⅞	1⅜	1724-27-13	472
	1⅞	1724-27-17	528
	2⅜	1724-27-23	583
	2⅞	1724-27-27	639
	3⅜	1724-27-33	694
	3⅞	1724-27-37	750
	4⅞	1724-27-47	861
	5⅞	1724-27-57	972

A	B	ITEM NUMBER	NET WT.
3⅜	1⅜	1724-33-13	528
	1⅞	1724-33-17	583
	2⅜	1724-33-23	639
	2⅞	1724-33-27	694
	3⅜	1724-33-33	750
	3⅞	1724-33-37	805
	4⅞	1724-33-47	916
	5⅞	1724-33-57	1027
3⅞	1⅜	1724-37-13	583
	1⅞	1724-37-17	639
	2⅜	1724-37-23	694
	2⅞	1724-37-27	750
	3⅜	1724-37-33	805
	3⅞	1724-37-37	861
	4⅞	1724-37-47	972
	5⅞	1724-37-57	1083
4⅞	1⅜	1724-47-13	694
	1⅞	1724-47-17	750
	2⅜	1724-47-23	805
	2⅞	1724-47-27	861
	3⅜	1724-47-33	916
	3⅞	1724-47-37	972
	4⅞	1724-47-47	1083
	5⅞	1724-47-57	1194
5⅞	1⅜	1724-57-13	805
	1⅞	1724-57-17	861
	2⅜	1724-57-23	916
	2⅞	1724-57-27	972
	3⅜	1724-57-33	1027
	3⅞	1724-57-37	1083
	4⅞	1724-57-47	1194
	5⅞	1724-57-57	1305

A	B	ITEM NUMBER	NET WT.
1⅜	1⅜	1729-13-13	380
	1⅞	1729-13-17	449
	2⅜	1729-13-23	518
	2⅞	1729-13-27	587
	3⅜	1729-13-33	656
	3⅞	1729-13-37	724
	4⅞	1729-13-47	862
	5⅞	1729-13-57	1000
1⅞	1⅜	1729-17-13	449
	1⅞	1729-17-17	518
	2⅜	1729-17-23	587
	2⅞	1729-17-27	656
	3⅜	1729-17-33	724
	3⅞	1729-17-37	793
	4⅞	1729-17-47	931
	5⅞	1729-17-57	1069
2⅜	1⅜	1729-23-13	518
	1⅞	1729-23-17	587
	2⅜	1729-23-23	656
	2⅞	1729-23-27	724
	3⅜	1729-23-33	793
	3⅞	1729-23-37	862
	4⅞	1729-23-47	1000
	5⅞	1729-23-57	1138
2⅞	1⅜	1729-27-13	587
	1⅞	1729-27-17	656
	2⅜	1729-27-23	724
	2⅞	1729-27-27	793
	3⅜	1729-27-33	862
	3⅞	1729-27-37	931
	4⅞	1729-27-47	1069
	5⅞	1729-27-57	1207

A	B	ITEM NUMBER	NET WT.
3⅜	1⅜	1729-33-13	656
	1⅞	1729-33-17	724
	2⅜	1729-33-23	793
	2⅞	1729-33-27	862
	3⅜	1729-33-33	931
	3⅞	1729-33-37	1000
	4⅞	1729-33-47	1138
	5⅞	1729-33-57	1276
3⅞	1⅜	1729-37-13	724
	1⅞	1729-37-17	793
	2⅜	1729-37-23	862
	2⅞	1729-37-27	931
	3⅜	1729-37-33	1000
	3⅞	1729-37-37	1069
	4⅞	1729-37-47	1207
	5⅞	1729-37-57	1345
4⅞	1⅜	1729-47-13	862
	1⅞	1729-47-17	931
	2⅜	1729-47-23	1000
	2⅞	1729-47-27	1069
	3⅜	1729-47-33	1138
	3⅞	1729-47-37	1207
	4⅞	1729-47-47	1345
	5⅞	1729-47-57	1483
5⅞	1⅜	1729-57-13	1000
	1⅞	1729-57-17	1069
	2⅜	1729-57-23	1138
	2⅞	1729-57-27	1207
	3⅜	1729-57-33	1276
	3⅞	1729-57-37	1345
	4⅞	1729-57-47	1483
	5⅞	1729-57-57	1621

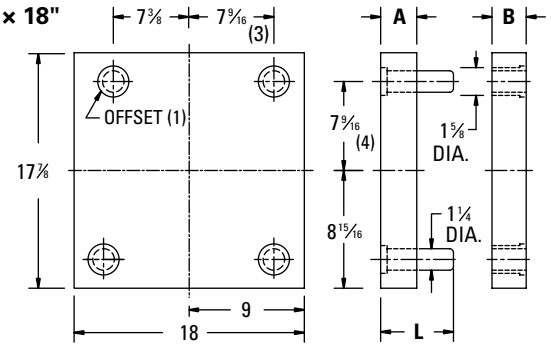
Thickness of each plate is finish ground ± .001". Width and length finished square and parallel.

WHEN ORDERING, PLEASE SPECIFY:

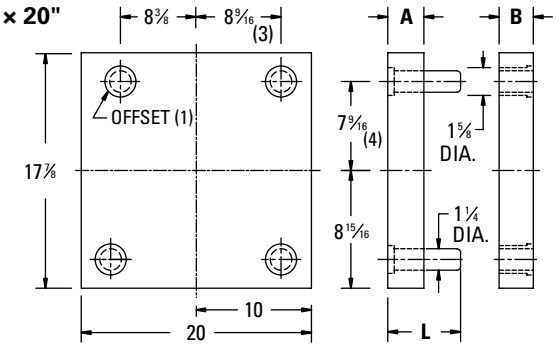
1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 Steel available standard only for plates up to and including 2⅞ thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

Cavity Retainer Sets
17⅞ × 18" and 17⅞ × 20"

17⅞ × 18"



17⅞ × 20"



A	B	ITEM NUMBER	NET WT.
1⅜	1⅜	1818-13-13	251
	1⅞	1818-13-17	297
	2⅜	1818-13-23	342
	2⅞	1818-13-27	388
	3⅜	1818-13-33	434
	3⅞	1818-13-37	479
	4⅞	1818-13-47	570
	5⅞	1818-13-57	661
1⅞	1⅜	1818-17-13	297
	1⅞	1818-17-17	342
	2⅜	1818-17-23	388
	2⅞	1818-17-27	434
	3⅜	1818-17-33	479
	3⅞	1818-17-37	525
	4⅞	1818-17-47	616
	5⅞	1818-17-57	707
2⅜	1⅜	1818-23-13	342
	1⅞	1818-23-17	388
	2⅜	1818-23-23	434
	2⅞	1818-23-27	479
	3⅜	1818-23-33	525
	3⅞	1818-23-37	570
	4⅞	1818-23-47	661
	5⅞	1818-23-57	753
2⅞	1⅜	1818-27-13	388
	1⅞	1818-27-17	434
	2⅜	1818-27-23	479
	2⅞	1818-27-27	525
	3⅜	1818-27-33	570
	3⅞	1818-27-37	616
	4⅞	1818-27-47	707
	5⅞	1818-27-57	798

A	B	ITEM NUMBER	NET WT.
3⅜	1⅜	1818-33-13	434
	1⅞	1818-33-17	479
	2⅜	1818-33-23	525
	2⅞	1818-33-27	570
	3⅜	1818-33-33	616
	3⅞	1818-33-37	661
	4⅞	1818-33-47	753
	5⅞	1818-33-57	844
3⅞	1⅜	1818-37-13	479
	1⅞	1818-37-17	525
	2⅜	1818-37-23	570
	2⅞	1818-37-27	616
	3⅜	1818-37-33	661
	3⅞	1818-37-37	707
	4⅞	1818-37-47	798
	5⅞	1818-37-57	889
4⅞	1⅜	1818-47-13	570
	1⅞	1818-47-17	616
	2⅜	1818-47-23	661
	2⅞	1818-47-27	707
	3⅜	1818-47-33	753
	3⅞	1818-47-37	798
	4⅞	1818-47-47	889
	5⅞	1818-47-57	980
5⅞	1⅜	1818-57-13	661
	1⅞	1818-57-17	707
	2⅜	1818-57-23	753
	2⅞	1818-57-27	798
	3⅜	1818-57-33	844
	3⅞	1818-57-37	889
	4⅞	1818-57-47	980
	5⅞	1818-57-57	1072

A	B	ITEM NUMBER	NET WT.
1⅜	1⅜	1820-13-13	279
	1⅞	1820-13-17	330
	2⅜	1820-13-23	380
	2⅞	1820-13-27	431
	3⅜	1820-13-33	482
	3⅞	1820-13-37	532
	4⅞	1820-13-47	633
	5⅞	1820-13-57	735
1⅞	1⅜	1820-17-13	330
	1⅞	1820-17-17	380
	2⅜	1820-17-23	431
	2⅞	1820-17-27	482
	3⅜	1820-17-33	532
	3⅞	1820-17-37	583
	4⅞	1820-17-47	684
	5⅞	1820-17-57	785
2⅜	1⅜	1820-23-13	380
	1⅞	1820-23-17	431
	2⅜	1820-23-23	482
	2⅞	1820-23-27	532
	3⅜	1820-23-33	583
	3⅞	1820-23-37	633
	4⅞	1820-23-47	735
	5⅞	1820-23-57	836
2⅞	1⅜	1820-27-13	431
	1⅞	1820-27-17	482
	2⅜	1820-27-23	532
	2⅞	1820-27-27	583
	3⅜	1820-27-33	633
	3⅞	1820-27-37	684
	4⅞	1820-27-47	785
	5⅞	1820-27-57	887

A	B	ITEM NUMBER	NET WT.
3⅜	1⅜	1820-33-13	482
	1⅞	1820-33-17	532
	2⅜	1820-33-23	583
	2⅞	1820-33-27	633
	3⅜	1820-33-33	684
	3⅞	1820-33-37	735
	4⅞	1820-33-47	836
	5⅞	1820-33-57	937
3⅞	1⅜	1820-37-13	532
	1⅞	1820-37-17	583
	2⅜	1820-37-23	633
	2⅞	1820-37-27	684
	3⅜	1820-37-33	735
	3⅞	1820-37-37	785
	4⅞	1820-37-47	887
	5⅞	1820-37-57	988
4⅞	1⅜	1820-47-13	633
	1⅞	1820-47-17	684
	2⅜	1820-47-23	735
	2⅞	1820-47-27	785
	3⅜	1820-47-33	836
	3⅞	1820-47-37	887
	4⅞	1820-47-47	988
	5⅞	1820-47-57	1089
5⅞	1⅜	1820-57-13	735
	1⅞	1820-57-17	785
	2⅜	1820-57-23	836
	2⅞	1820-57-27	887
	3⅜	1820-57-33	937
	3⅞	1820-57-37	988
	4⅞	1820-57-47	1089
	5⅞	1820-57-57	1191

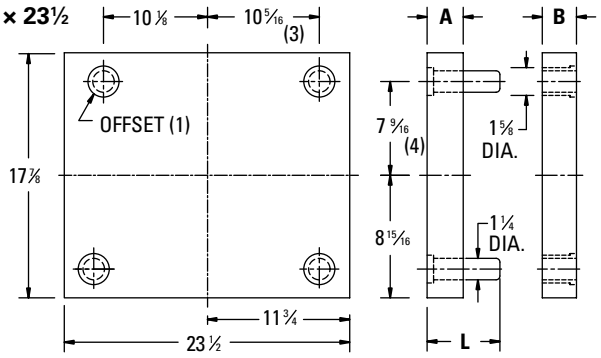
Thickness of each plate is finish ground ± .001". Width and length finished square and parallel.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 Steel available standard only for plates up to and including 2⅞ thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

Cavity Retainer Sets
17⅞ × 23½ and 17⅞ × 26"

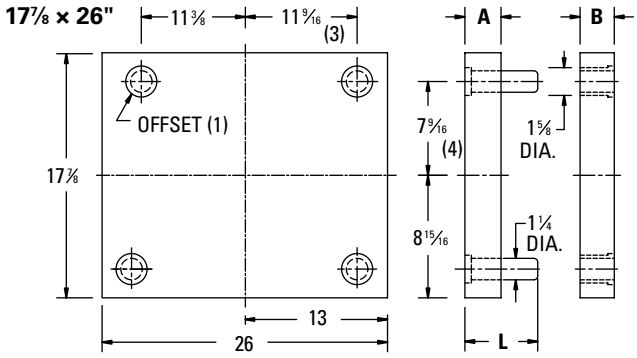
17⅞ × 23½



A	B	ITEM NUMBER	NET WT.
1⅜	1⅜	1823-13-13	328
	1⅞	1823-13-17	387
	2⅜	1823-13-23	447
	2⅞	1823-13-27	506
	3⅜	1823-13-33	566
	3⅞	1823-13-37	625
	4⅞	1823-13-47	744
	5⅞	1823-13-57	863
1⅞	1⅜	1823-17-13	387
	1⅞	1823-17-17	447
	2⅜	1823-17-23	506
	2⅞	1823-17-27	566
	3⅜	1823-17-33	625
	3⅞	1823-17-37	685
	4⅞	1823-17-47	804
	5⅞	1823-17-57	923
2⅜	1⅜	1823-23-13	447
	1⅞	1823-23-17	506
	2⅜	1823-23-23	566
	2⅞	1823-23-27	625
	3⅜	1823-23-33	685
	3⅞	1823-23-37	744
	4⅞	1823-23-47	863
	5⅞	1823-23-57	982
2⅞	1⅜	1823-27-13	506
	1⅞	1823-27-17	566
	2⅜	1823-27-23	625
	2⅞	1823-27-27	685
	3⅜	1823-27-33	744
	3⅞	1823-27-37	804
	4⅞	1823-27-47	923
	5⅞	1823-27-57	1042

A	B	ITEM NUMBER	NET WT.
3⅜	1⅜	1823-33-13	566
	1⅞	1823-33-17	625
	2⅜	1823-33-23	685
	2⅞	1823-33-27	744
	3⅜	1823-33-33	804
	3⅞	1823-33-37	863
	4⅞	1823-33-47	982
	5⅞	1823-33-57	1101
3⅞	1⅜	1823-37-13	625
	1⅞	1823-37-17	685
	2⅜	1823-37-23	744
	2⅞	1823-37-27	804
	3⅜	1823-37-33	863
	3⅞	1823-37-37	923
	4⅞	1823-37-47	1042
	5⅞	1823-37-57	1161
4⅞	1⅜	1823-47-13	744
	1⅞	1823-47-17	804
	2⅜	1823-47-23	863
	2⅞	1823-47-27	923
	3⅜	1823-47-33	982
	3⅞	1823-47-37	1042
	4⅞	1823-47-47	1161
	5⅞	1823-47-57	1280
5⅞	1⅜	1823-57-13	863
	1⅞	1823-57-17	923
	2⅜	1823-57-23	982
	2⅞	1823-57-27	1042
	3⅜	1823-57-33	1101
	3⅞	1823-57-37	1161
	4⅞	1823-57-47	1280
	5⅞	1823-57-57	1399

17⅞ × 26"



A	B	ITEM NUMBER	NET WT.
1⅜	1⅜	1826-13-13	363
	1⅞	1826-13-17	428
	2⅜	1826-13-23	494
	2⅞	1826-13-27	560
	3⅜	1826-13-33	626
	3⅞	1826-13-37	692
	4⅞	1826-13-47	823
	5⅞	1826-13-57	955
1⅞	1⅜	1826-17-13	428
	1⅞	1826-17-17	494
	2⅜	1826-17-23	560
	2⅞	1826-17-27	626
	3⅜	1826-17-33	692
	3⅞	1826-17-37	758
	4⅞	1826-17-47	889
	5⅞	1826-17-57	1021
2⅜	1⅜	1826-23-13	494
	1⅞	1826-23-17	560
	2⅜	1826-23-23	626
	2⅞	1826-23-27	692
	3⅜	1826-23-33	758
	3⅞	1826-23-37	823
	4⅞	1826-23-47	955
	5⅞	1826-23-57	1087
2⅞	1⅜	1826-27-13	560
	1⅞	1826-27-17	626
	2⅜	1826-27-23	692
	2⅞	1826-27-27	758
	3⅜	1826-27-33	823
	3⅞	1826-27-37	889
	4⅞	1826-27-47	1021
	5⅞	1826-27-57	1153

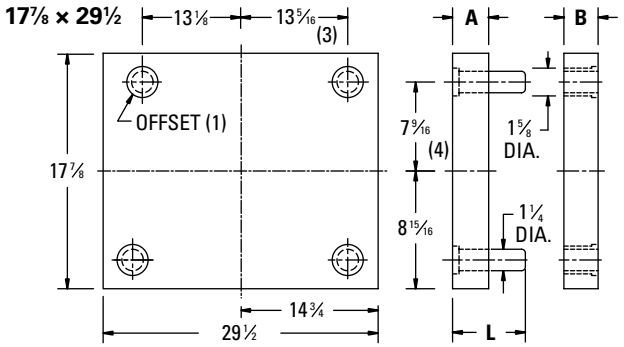
A	B	ITEM NUMBER	NET WT.
3⅜	1⅜	1826-33-13	626
	1⅞	1826-33-17	692
	2⅜	1826-33-23	758
	2⅞	1826-33-27	823
	3⅜	1826-33-33	889
	3⅞	1826-33-37	955
	4⅞	1826-33-47	1087
	5⅞	1826-33-57	1218
3⅞	1⅜	1826-37-13	692
	1⅞	1826-37-17	758
	2⅜	1826-37-23	823
	2⅞	1826-37-27	889
	3⅜	1826-37-33	955
	3⅞	1826-37-37	1021
	4⅞	1826-37-47	1153
	5⅞	1826-37-57	1284
4⅞	1⅜	1826-47-13	823
	1⅞	1826-47-17	889
	2⅜	1826-47-23	955
	2⅞	1826-47-27	1021
	3⅜	1826-47-33	1087
	3⅞	1826-47-37	1153
	4⅞	1826-47-47	1284
	5⅞	1826-47-57	1416
5⅞	1⅜	1826-57-13	955
	1⅞	1826-57-17	1021
	2⅜	1826-57-23	1087
	2⅞	1826-57-27	1153
	3⅜	1826-57-33	1218
	3⅞	1826-57-37	1284
	4⅞	1826-57-47	1416
	5⅞	1826-57-57	1548

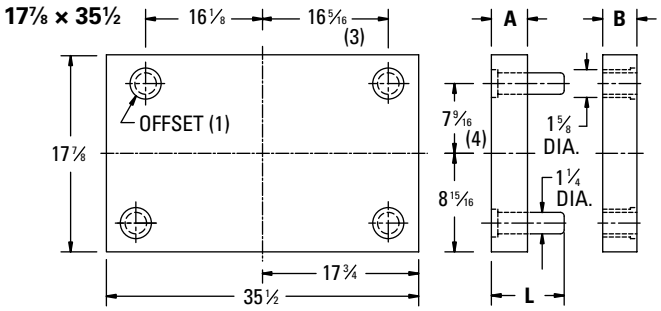
Thickness of each plate is finish ground ± .001". Width and length finished square and parallel.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 Steel available standard only for plates up to and including 2⅞ thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

Cavity Retainer Sets
17⅞ × 29½ and 17⅞ × 35½





A	B	ITEM NUMBER	NET WT.
1⅜	1⅜	1829-13-13	411
	1⅞	1829-13-17	486
	2⅜	1829-13-23	561
	2⅞	1829-13-27	635
	3⅜	1829-13-33	710
	3⅞	1829-13-37	785
	4⅞	1829-13-47	934
	5⅞	1829-13-57	1084
1⅞	1⅜	1829-17-13	486
	1⅞	1829-17-17	561
	2⅜	1829-17-23	635
	2⅞	1829-17-27	710
	3⅜	1829-17-33	785
	3⅞	1829-17-37	859
	4⅞	1829-17-47	1009
	5⅞	1829-17-57	1158
2⅜	1⅜	1829-23-13	561
	1⅞	1829-23-17	635
	2⅜	1829-23-23	710
	2⅞	1829-23-27	785
	3⅜	1829-23-33	859
	3⅞	1829-23-37	934
	4⅞	1829-23-47	1084
	5⅞	1829-23-57	1233
2⅞	1⅜	1829-27-13	635
	1⅞	1829-27-17	710
	2⅜	1829-27-23	785
	2⅞	1829-27-27	859
	3⅜	1829-27-33	934
	3⅞	1829-27-37	1009
	4⅞	1829-27-47	1158
	5⅞	1829-27-57	1308

A	B	ITEM NUMBER	NET WT.
3⅜	1⅜	1829-33-13	710
	1⅞	1829-33-17	785
	2⅜	1829-33-23	859
	2⅞	1829-33-27	934
	3⅜	1829-33-33	1009
	3⅞	1829-33-37	1084
	4⅞	1829-33-47	1233
	5⅞	1829-33-57	1382
3⅞	1⅜	1829-37-13	785
	1⅞	1829-37-17	859
	2⅜	1829-37-23	934
	2⅞	1829-37-27	1009
	3⅜	1829-37-33	1084
	3⅞	1829-37-37	1158
	4⅞	1829-37-47	1308
	5⅞	1829-37-57	1457
4⅞	1⅜	1829-47-13	934
	1⅞	1829-47-17	1009
	2⅜	1829-47-23	1084
	2⅞	1829-47-27	1158
	3⅜	1829-47-33	1233
	3⅞	1829-47-37	1308
	4⅞	1829-47-47	1457
	5⅞	1829-47-57	1606
5⅞	1⅜	1829-57-13	1084
	1⅞	1829-57-17	1158
	2⅜	1829-57-23	1233
	2⅞	1829-57-27	1308
	3⅜	1829-57-33	1382
	3⅞	1829-57-37	1457
	4⅞	1829-57-47	1606
	5⅞	1829-57-57	1756

A	B	ITEM NUMBER	NET WT.
1⅜	1⅜	1835-13-13	495
	1⅞	1835-13-17	585
	2⅜	1835-13-23	675
	2⅞	1835-13-27	765
	3⅜	1835-13-33	854
	3⅞	1835-13-37	944
	4⅞	1835-13-47	1124
	5⅞	1835-13-57	1304
1⅞	1⅜	1835-17-13	585
	1⅞	1835-17-17	675
	2⅜	1835-17-23	765
	2⅞	1835-17-27	854
	3⅜	1835-17-33	944
	3⅞	1835-17-37	1034
	4⅞	1835-17-47	1214
	5⅞	1835-17-57	1394
2⅜	1⅜	1835-23-13	675
	1⅞	1835-23-17	765
	2⅜	1835-23-23	854
	2⅞	1835-23-27	944
	3⅜	1835-23-33	1034
	3⅞	1835-23-37	1124
	4⅞	1835-23-47	1304
	5⅞	1835-23-57	1484
2⅞	1⅜	1835-27-13	765
	1⅞	1835-27-17	854
	2⅜	1835-27-23	944
	2⅞	1835-27-27	1034
	3⅜	1835-27-33	1124
	3⅞	1835-27-37	1214
	4⅞	1835-27-47	1394
	5⅞	1835-27-57	1574

A	B	ITEM NUMBER	NET WT.
3⅜	1⅜	1835-33-13	854
	1⅞	1835-33-17	944
	2⅜	1835-33-23	1034
	2⅞	1835-33-27	1124
	3⅜	1835-33-33	1214
	3⅞	1835-33-37	1304
	4⅞	1835-33-47	1484
	5⅞	1835-33-57	1663
3⅞	1⅜	1835-37-13	944
	1⅞	1835-37-17	1034
	2⅜	1835-37-23	1124
	2⅞	1835-37-27	1214
	3⅜	1835-37-33	1304
	3⅞	1835-37-37	1394
	4⅞	1835-37-47	1574
	5⅞	1835-37-57	1753
4⅞	1⅜	1835-47-13	1124
	1⅞	1835-47-17	1214
	2⅜	1835-47-23	1304
	2⅞	1835-47-27	1394
	3⅜	1835-47-33	1484
	3⅞	1835-47-37	1574
	4⅞	1835-47-47	1753
	5⅞	1835-47-57	1933
5⅞	1⅜	1835-57-13	1304
	1⅞	1835-57-17	1394
	2⅜	1835-57-23	1484
	2⅞	1835-57-27	1574
	3⅜	1835-57-33	1663
	3⅞	1835-57-37	1753
	4⅞	1835-57-47	1933
	5⅞	1835-57-57	2113

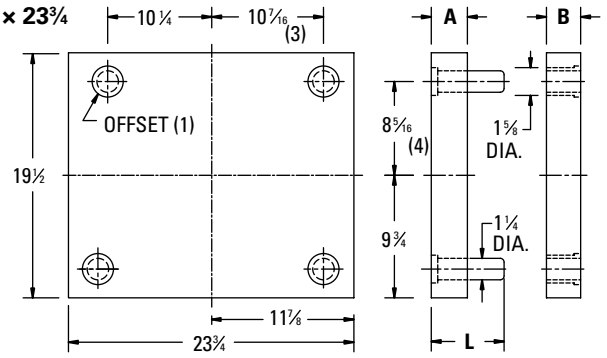
Thickness of each plate is finish ground ± .001". Width and length finished square and parallel.

WHEN ORDERING, PLEASE SPECIFY:

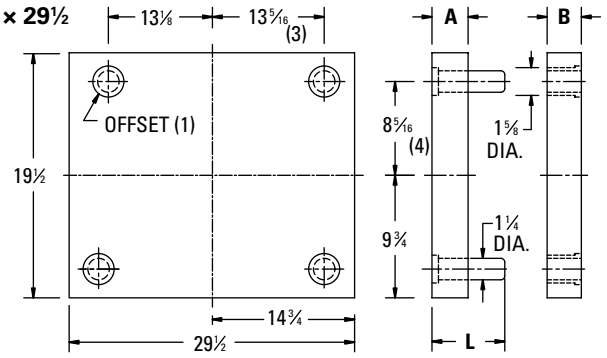
1. Quantity & Item Number
2. No 1, No. 2, No. 3 or No 7 Steel (No. 7 Steel available standard only for plates up to and including 2⅞ thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

Cavity Retainer Sets
19½ × 23¾ and 19½ × 29½

19½ × 23¾



19½ × 29½



A	B	ITEM NUMBER	NET WT.
1⅜	1⅜	1924-13-13	361
	1⅞	1924-13-17	427
	2⅜	1924-13-23	493
	2⅞	1924-13-27	558
	3⅜	1924-13-33	624
	3⅞	1924-13-37	689
	4⅞	1924-13-47	821
	5⅞	1924-13-57	952
1⅞	1⅜	1924-17-13	427
	1⅞	1924-17-17	493
	2⅜	1924-17-23	558
	2⅞	1924-17-27	624
	3⅜	1924-17-33	689
	3⅞	1924-17-37	755
	4⅞	1924-17-47	886
	5⅞	1924-17-57	1017
2⅜	1⅜	1924-23-13	493
	1⅞	1924-23-17	558
	2⅜	1924-23-23	624
	2⅞	1924-23-27	689
	3⅜	1924-23-33	755
	3⅞	1924-23-37	821
	4⅞	1924-23-47	952
	5⅞	1924-23-57	1083
2⅞	1⅜	1924-27-13	558
	1⅞	1924-27-17	624
	2⅜	1924-27-23	689
	2⅞	1924-27-27	755
	3⅜	1924-27-33	821
	3⅞	1924-27-37	886
	4⅞	1924-27-47	1017
	5⅞	1924-27-57	1149

A	B	ITEM NUMBER	NET WT.
3⅜	1⅜	1924-33-13	624
	1⅞	1924-33-17	689
	2⅜	1924-33-23	755
	2⅞	1924-33-27	821
	3⅜	1924-33-33	886
	3⅞	1924-33-37	952
	4⅞	1924-33-47	1083
	5⅞	1924-33-57	1214
3⅞	1⅜	1924-37-13	689
	1⅞	1924-37-17	755
	2⅜	1924-37-23	821
	2⅞	1924-37-27	886
	3⅜	1924-37-33	952
	3⅞	1924-37-37	1017
	4⅞	1924-37-47	1149
	5⅞	1924-37-57	1280
4⅞	1⅜	1924-47-13	821
	1⅞	1924-47-17	886
	2⅜	1924-47-23	952
	2⅞	1924-47-27	1017
	3⅜	1924-47-33	1083
	3⅞	1924-47-37	1149
	4⅞	1924-47-47	1280
	5⅞	1924-47-57	1411
5⅞	1⅜	1924-57-13	952
	1⅞	1924-57-17	1017
	2⅜	1924-57-23	1083
	2⅞	1924-57-27	1149
	3⅜	1924-57-33	1214
	3⅞	1924-57-37	1280
	4⅞	1924-57-47	1411
	5⅞	1924-57-57	1542

A	B	ITEM NUMBER	NET WT.
1⅜	1⅜	1929-13-13	449
	1⅞	1929-13-17	530
	2⅜	1929-13-23	612
	2⅞	1929-13-27	693
	3⅜	1929-13-33	775
	3⅞	1929-13-37	856
	4⅞	1929-13-47	1019
	5⅞	1929-13-57	1182
1⅞	1⅜	1929-17-13	530
	1⅞	1929-17-17	612
	2⅜	1929-17-23	693
	2⅞	1929-17-27	775
	3⅜	1929-17-33	856
	3⅞	1929-17-37	938
	4⅞	1929-17-47	1100
	5⅞	1929-17-57	1263
2⅜	1⅜	1929-23-13	612
	1⅞	1929-23-17	693
	2⅜	1929-23-23	775
	2⅞	1929-23-27	856
	3⅜	1929-23-33	938
	3⅞	1929-23-37	1019
	4⅞	1929-23-47	1182
	5⅞	1929-23-57	1345
2⅞	1⅜	1929-27-13	693
	1⅞	1929-27-17	775
	2⅜	1929-27-23	856
	2⅞	1929-27-27	938
	3⅜	1929-27-33	1019
	3⅞	1929-27-37	1100
	4⅞	1929-27-47	1263
	5⅞	1929-27-57	1426

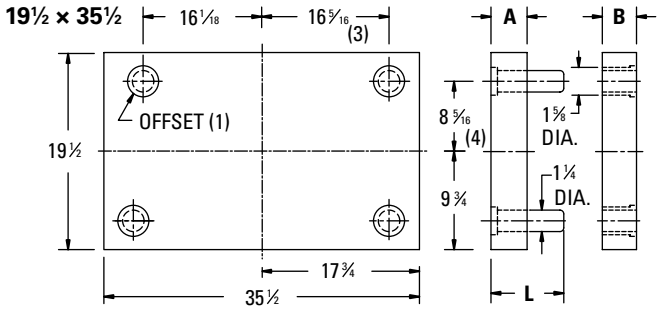
A	B	ITEM NUMBER	NET WT.
3⅜	1⅜	1929-33-13	775
	1⅞	1929-33-17	856
	2⅜	1929-33-23	938
	2⅞	1929-33-27	1019
	3⅜	1929-33-33	1100
	3⅞	1929-33-37	1182
	4⅞	1929-33-47	1345
	5⅞	1929-33-57	1508
3⅞	1⅜	1929-37-13	856
	1⅞	1929-37-17	938
	2⅜	1929-37-23	1019
	2⅞	1929-37-27	1100
	3⅜	1929-37-33	1182
	3⅞	1929-37-37	1263
	4⅞	1929-37-47	1426
	5⅞	1929-37-57	1589
4⅞	1⅜	1929-47-13	1019
	1⅞	1929-47-17	1100
	2⅜	1929-47-23	1182
	2⅞	1929-47-27	1263
	3⅜	1929-47-33	1345
	3⅞	1929-47-37	1426
	4⅞	1929-47-47	1589
	5⅞	1929-47-57	1752
5⅞	1⅜	1929-57-13	1182
	1⅞	1929-57-17	1263
	2⅜	1929-57-23	1345
	2⅞	1929-57-27	1426
	3⅜	1929-57-33	1508
	3⅞	1929-57-37	1589
	4⅞	1929-57-47	1752
	5⅞	1929-57-57	1915

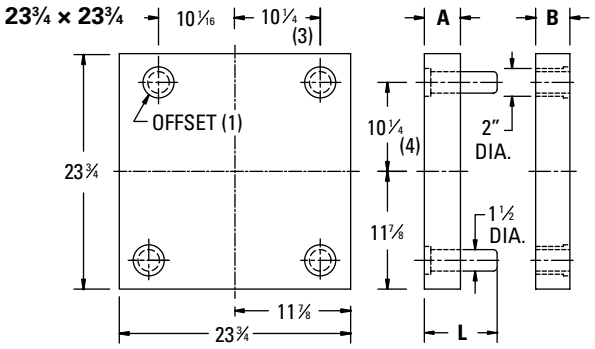
Thickness of each plate is finish ground ± .001". Width and length finished square and parallel.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 Steel available standard only for plates up to and including 2⅞ thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

Cavity Retainer Sets
19½ × 35½ and 23¾ × 23¾





A	B	ITEM NUMBER	NET WT.
1⅜	1⅜	1935-13-13	540
	1⅞	1935-13-17	638
	2⅜	1935-13-23	736
	2⅞	1935-13-27	834
	3⅜	1935-13-33	932
	3⅞	1935-13-37	1030
	4⅞	1935-13-47	1226
	5⅞	1935-13-57	1422
1⅞	1⅜	1935-17-13	638
	1⅞	1935-17-17	736
	2⅜	1935-17-23	834
	2⅞	1935-17-27	932
	3⅜	1935-17-33	1030
	3⅞	1935-17-37	1128
	4⅞	1935-17-47	1324
	5⅞	1935-17-57	1520
2⅜	1⅜	1935-23-13	736
	1⅞	1935-23-17	834
	2⅜	1935-23-23	932
	2⅞	1935-23-27	1030
	3⅜	1935-23-33	1128
	3⅞	1935-23-37	1226
	4⅞	1935-23-47	1422
	5⅞	1935-23-57	1618
2⅞	1⅜	1935-27-13	834
	1⅞	1935-27-17	932
	2⅜	1935-27-23	1030
	2⅞	1935-27-27	1128
	3⅜	1935-27-33	1226
	3⅞	1935-27-37	1324
	4⅞	1935-27-47	1520
	5⅞	1935-27-57	1717

A	B	ITEM NUMBER	NET WT.
3⅜	1⅜	1935-33-13	932
	1⅞	1935-33-17	1030
	2⅜	1935-33-23	1128
	2⅞	1935-33-27	1226
	3⅜	1935-33-33	1324
	3⅞	1935-33-37	1422
	4⅞	1935-33-47	1618
	5⅞	1935-33-57	1815
3⅞	1⅜	1935-37-13	1030
	1⅞	1935-37-17	1128
	2⅜	1935-37-23	1226
	2⅞	1935-37-27	1324
	3⅜	1935-37-33	1422
	3⅞	1935-37-37	1520
	4⅞	1935-37-47	1717
	5⅞	1935-37-57	1913
4⅞	1⅜	1935-47-13	1226
	1⅞	1935-47-17	1324
	2⅜	1935-47-23	1422
	2⅞	1935-47-27	1520
	3⅜	1935-47-33	1618
	3⅞	1935-47-37	1717
	4⅞	1935-47-47	1913
	5⅞	1935-47-57	2109
5⅞	1⅜	1935-57-13	1422
	1⅞	1935-57-17	1520
	2⅜	1935-57-23	1618
	2⅞	1935-57-27	1717
	3⅜	1935-57-33	1815
	3⅞	1935-57-37	1913
	4⅞	1935-57-47	2109
	5⅞	1935-57-57	2305

A	B	ITEM NUMBER	NET WT.
1⅜	1⅜	2424-13-13	440
	1⅞	2424-13-17	520
	2⅜	2424-13-23	600
	2⅞	2424-13-27	680
	3⅜	2424-13-33	760
	3⅞	2424-13-37	839
	4⅞	2424-13-47	999
	5⅞	2424-13-57	1159
1⅞	1⅜	2424-17-13	520
	1⅞	2424-17-17	600
	2⅜	2424-17-23	680
	2⅞	2424-17-27	760
	3⅜	2424-17-33	839
	3⅞	2424-17-37	919
	4⅞	2424-17-47	1079
	5⅞	2424-17-57	1239
2⅜	1⅜	2424-23-13	600
	1⅞	2424-23-17	680
	2⅜	2424-23-23	760
	2⅞	2424-23-27	839
	3⅜	2424-23-33	919
	3⅞	2424-23-37	999
	4⅞	2424-23-47	1159
	5⅞	2424-23-57	1319
2⅞	1⅜	2424-27-13	680
	1⅞	2424-27-17	760
	2⅜	2424-27-23	839
	2⅞	2424-27-27	919
	3⅜	2424-27-33	999
	3⅞	2424-27-37	1079
	4⅞	2424-27-47	1239
	5⅞	2424-27-57	1399

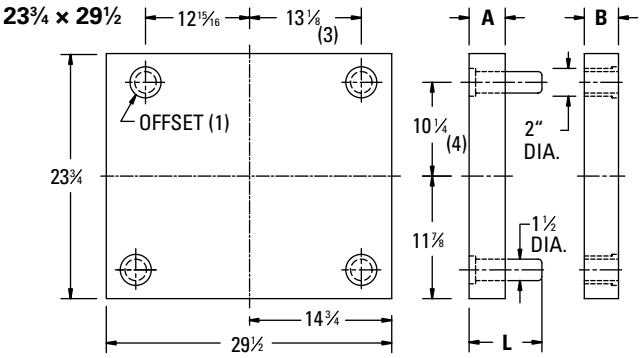
A	B	ITEM NUMBER	NET WT.
3⅜	1⅜	2424-33-13	760
	1⅞	2424-33-17	839
	2⅜	2424-33-23	919
	2⅞	2424-33-27	999
	3⅜	2424-33-33	1079
	3⅞	2424-33-37	1159
	4⅞	2424-33-47	1319
	5⅞	2424-33-57	1479
3⅞	1⅜	2424-37-13	839
	1⅞	2424-37-17	919
	2⅜	2424-37-23	999
	2⅞	2424-37-27	1079
	3⅜	2424-37-33	1159
	3⅞	2424-37-37	1239
	4⅞	2424-37-47	1399
	5⅞	2424-37-57	1559
4⅞	1⅜	2424-47-13	999
	1⅞	2424-47-17	1079
	2⅜	2424-47-23	1159
	2⅞	2424-47-27	1239
	3⅜	2424-47-33	1319
	3⅞	2424-47-37	1399
	4⅞	2424-47-47	1559
	5⅞	2424-47-57	1718
5⅞	1⅜	2424-57-13	1159
	1⅞	2424-57-17	1239
	2⅜	2424-57-23	1319
	2⅞	2424-57-27	1399
	3⅜	2424-57-33	1479
	3⅞	2424-57-37	1559
	4⅞	2424-57-47	1718
	5⅞	2424-57-57	1878

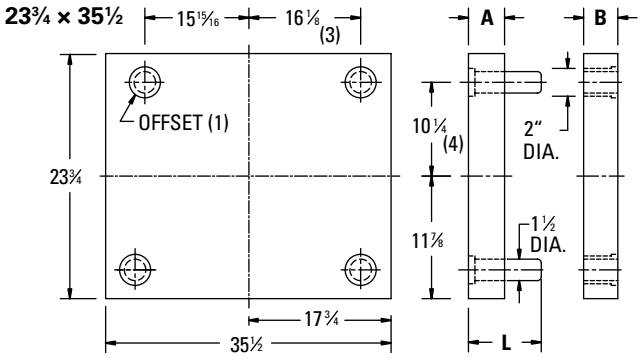
Thickness of each plate is finish ground ± .001". Width and length finished square and parallel.

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 Steel available standard only for plates up to and including 2⅞ thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

Cavity Retainer Sets
23¾ × 29½ and 23¾ × 35½





A	B	ITEM NUMBER	NET WT.
1 3/8	1 3/8	2429-13-13	546
	1 7/8	2429-13-17	646
	2 3/8	2429-13-23	745
	2 7/8	2429-13-27	844
	3 3/8	2429-13-33	943
	3 7/8	2429-13-37	1043
	4 7/8	2429-13-47	1241
	5 7/8	2429-13-57	1439
1 7/8	1 3/8	2429-17-13	646
	1 7/8	2429-17-17	745
	2 3/8	2429-17-23	844
	2 7/8	2429-17-27	943
	3 3/8	2429-17-33	1043
	3 7/8	2429-17-37	1142
	4 7/8	2429-17-47	1340
	5 7/8	2429-17-57	1539
2 3/8	1 3/8	2429-23-13	745
	1 7/8	2429-23-17	844
	2 3/8	2429-23-23	943
	2 7/8	2429-23-27	1043
	3 3/8	2429-23-33	1142
	3 7/8	2429-23-37	1241
	4 7/8	2429-23-47	1439
	5 7/8	2429-23-57	1638
2 7/8	1 3/8	2429-27-13	844
	1 7/8	2429-27-17	943
	2 3/8	2429-27-23	1043
	2 7/8	2429-27-27	1142
	3 3/8	2429-27-33	1241
	3 7/8	2429-27-37	1340
	4 7/8	2429-27-47	1539
	5 7/8	2429-27-57	1737

A	B	ITEM NUMBER	NET WT.
3 3/8	1 3/8	2429-33-13	943
	1 7/8	2429-33-17	1043
	2 3/8	2429-33-23	1142
	2 7/8	2429-33-27	1241
	3 3/8	2429-33-33	1340
	3 7/8	2429-33-37	1439
	4 7/8	2429-33-47	1638
	5 7/8	2429-33-57	1836
3 7/8	1 3/8	2429-37-13	1043
	1 7/8	2429-37-17	1142
	2 3/8	2429-37-23	1241
	2 7/8	2429-37-27	1340
	3 3/8	2429-37-33	1439
	3 7/8	2429-37-37	1539
	4 7/8	2429-37-47	1737
	5 7/8	2429-37-57	1936
4 7/8	1 3/8	2429-47-13	1241
	1 7/8	2429-47-17	1340
	2 3/8	2429-47-23	1439
	2 7/8	2429-47-27	1539
	3 3/8	2429-47-33	1638
	3 7/8	2429-47-37	1737
	4 7/8	2429-47-47	1936
	5 7/8	2429-47-57	2134
5 7/8	1 3/8	2429-57-13	1439
	1 7/8	2429-57-17	1539
	2 3/8	2429-57-23	1638
	2 7/8	2429-57-27	1737
	3 3/8	2429-57-33	1836
	3 7/8	2429-57-37	1936
	4 7/8	2429-57-47	2134
	5 7/8	2429-57-57	2333

A	B	ITEM NUMBER	NET WT.
1 3/8	1 3/8	2435-13-13	657
	1 7/8	2435-13-17	777
	2 3/8	2435-13-23	896
	2 7/8	2435-13-27	1016
	3 3/8	2435-13-33	1135
	3 7/8	2435-13-37	1255
	4 7/8	2435-13-47	1493
	5 7/8	2435-13-57	1732
1 7/8	1 3/8	2435-17-13	777
	1 7/8	2435-17-17	896
	2 3/8	2435-17-23	1016
	2 7/8	2435-17-27	1135
	3 3/8	2435-17-33	1255
	3 7/8	2435-17-37	1374
	4 7/8	2435-17-47	1613
	5 7/8	2435-17-57	1852
2 3/8	1 3/8	2435-23-13	896
	1 7/8	2435-23-17	1016
	2 3/8	2435-23-23	1135
	2 7/8	2435-23-27	1255
	3 3/8	2435-23-33	1374
	3 7/8	2435-23-37	1493
	4 7/8	2435-23-47	1732
	5 7/8	2435-23-57	1971
2 7/8	1 3/8	2435-27-13	1016
	1 7/8	2435-27-17	1135
	2 3/8	2435-27-23	1255
	2 7/8	2435-27-27	1374
	3 3/8	2435-27-33	1493
	3 7/8	2435-27-37	1613
	4 7/8	2435-27-47	1852
	5 7/8	2435-27-57	2091

A	B	ITEM NUMBER	NET WT.
3 3/8	1 3/8	2435-33-13	1135
	1 7/8	2435-33-17	1255
	2 3/8	2435-33-23	1374
	2 7/8	2435-33-27	1493
	3 3/8	2435-33-33	1613
	3 7/8	2435-33-37	1732
	4 7/8	2435-33-47	1971
	5 7/8	2435-33-57	2210
3 7/8	1 3/8	2435-37-13	1255
	1 7/8	2435-37-17	1374
	2 3/8	2435-37-23	1493
	2 7/8	2435-37-27	1613
	3 3/8	2435-37-33	1732
	3 7/8	2435-37-37	1852
	4 7/8	2435-37-47	2091
	5 7/8	2435-37-57	2329
4 7/8	1 3/8	2435-47-13	1493
	1 7/8	2435-47-17	1613
	2 3/8	2435-47-23	1732
	2 7/8	2435-47-27	1852
	3 3/8	2435-47-33	1971
	3 7/8	2435-47-37	2091
	4 7/8	2435-47-47	2329
	5 7/8	2435-47-57	2568
5 7/8	1 3/8	2435-57-13	1732
	1 7/8	2435-57-17	1852
	2 3/8	2435-57-23	1971
	2 7/8	2435-57-27	2091
	3 3/8	2435-57-33	2210
	3 7/8	2435-57-37	2329
	4 7/8	2435-57-47	2568
	5 7/8	2435-57-57	2807

Thickness of each plate is finish ground ± .001". Width and length finished square and parallel.

WHEN ORDERING, PLEASE SPECIFY:

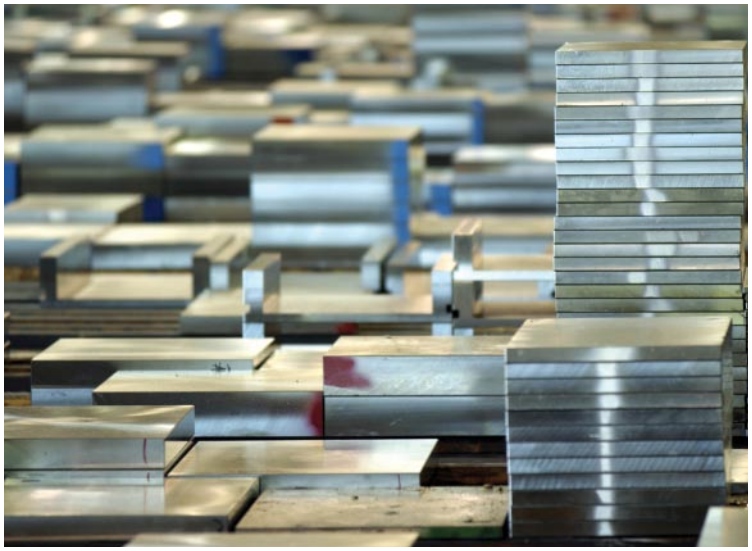
1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel (No. 7 Steel available standard only for plates up to and including 2⅞ thick)
3. L Dimension (Guide Pin Length)
4. Method of Shipment

STEEL DESCRIPTIONS

Three Steels for Structural Sections

D-M-E NO. 1 STEEL

No. 1 Steel is a medium carbon (SAE 1030) or equivalent, silicon-killed forging quality steel with approximately 25% greater tensile strength than typical low-carbon warehouse steels. It machines easily, but is not "sticky," permitting a faster and smoother cut.



D-M-E NO. 2 STEEL

No. 2 Steel is an AISI 4130 or equivalent type steel. It is supplied pre-heat treated to 28-34 HRC (271-321 Bhn). A high strength steel, it is ideal for cavity and core retainer plates, clamping plates and support plates in molds and dies.

D-M-E NO. 7 STEEL

No. 7 Steel is a modified AISI 400 or equivalent series stainless steel for holder block applications. It is supplied pre-heat treated to 32-36 HRC (302-340 Bhn). This stainless steel offers corrosion-resistance and exceptional machinability but cannot be further hardened (see D-M-E No. 6). For humid environments, corrosive plastics, "clean room" or "100% stainless" applications, it is an ideal choice for all structural (non-cavity/core) mold plates.

Three Steels for Cavities and Cores

D-M-E NO. 3 STEEL

No. 3 Steel is a P-20 AISI 4130 (modified) type cavity steel. Exceptionally clean, it is pre-heat treated to 28-34 HRC (271-321 Bhn). It provides high hardness, good machinability and exceptional polishability for both plastics molds and die cast dies.

D-M-E NO. 5 STEEL

No. 5 Steel is a thermal shock resistant, hotwork die steel (AISI-SAE H-13 type) or equivalent. Supplied fully annealed 13-20 HRC (approx. 200 Bhn) for easy machinability, it can be subsequently heat treated to the desired hardness with a minimum of deformation.

Mainly used for die cast dies, it is also suitable for plastics molds with exceptional hardness or polishability requirements.

D-M-E NO. 5 Steel meets or exceeds the acceptance criteria established by the NADCA as detailed in Technical Digest Number 01-80-01D

D-M-E NO. 6 STEEL

No. 6 Steel is T-420 type or equivalent stainless steel. It is supplied fully annealed to 8-23 HRC (179-241 Bhn), making it readily machinable. It can be used for injection, compression or transfer molds where the properties of the plastics materials or excessive condensation require a highly corrosion resistant cavity steel.

OTHER TYPES OF STEEL AVAILABLE ON SPECIAL ORDER. CONTACT D-M-E.

D-M-E Mold Plates

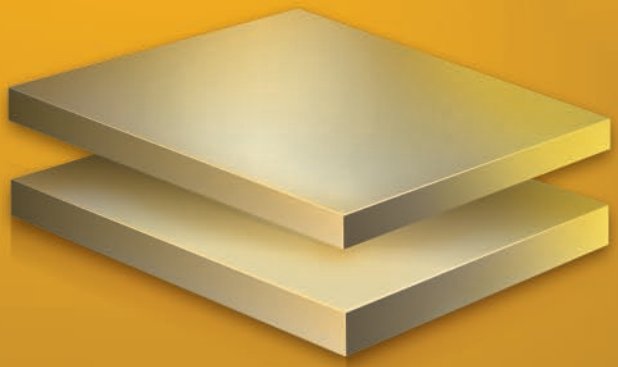
Over 400 standard sizes in four steel types



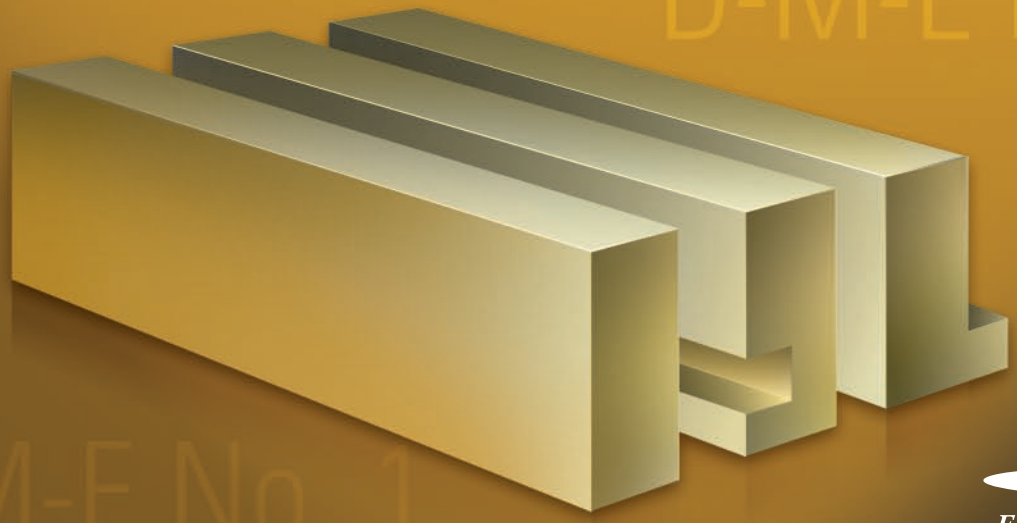
D-M-E No. 7



D-M-E No. 5



D-M-E No. 3



D-M-E No. 1

D-M-E
Every step of the way

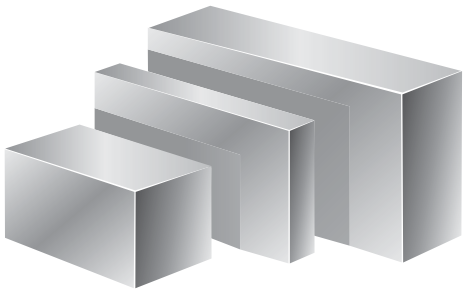
ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

D-M-E Standard

Die Blocks and Plates — No. 5 Steel

Available in over 300 standard sizes from 7⅞ × 7⅞ to 23¾ × 35½; 1⅜ to 11⅞ thick (depending on length and width). They are supplied in milled condition, with approximately .060" stock allowance.

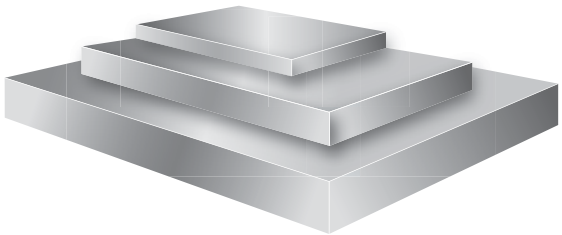
D-M-E No. 5 Steel meets or exceeds the acceptance criteria established by the NADCA as detailed in Technical Digest Number 01-80-01D.



Mold Plates and Plate Items

Mold Plates are available in over 400 standard sizes, from 6" × 7" to 23¾ × 35½ in D-M-E No. 1, No. 2, or No. 3 Steel. Plates from 7⅞ × 7⅞ to 23¾ × 35½ are also available in D-M-E No. 7 Steel (up to 2⅞ thick).

In addition, they are offered in the following two conditions:



FINISH GROUND PLATES

Thickness is finish ground top and bottom to a tolerance of ± .001" with all edges finished square and parallel.

ROTARY GROUND PLATES

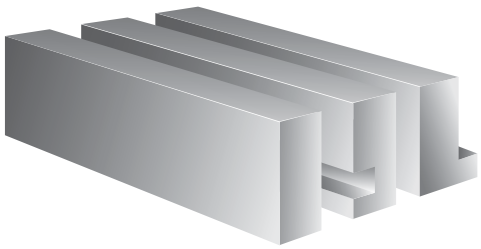
Thickness is rotary ground to a tolerance of +.015/+.020 or +.025/+.030 depending on plate width. Length and width are milled (+.005/+.011).

Additional standard plate items include:

EJECTOR AND EJECTOR RETAINER PLATES
PLATE ITEMS FOR SMALL MOLD BASES

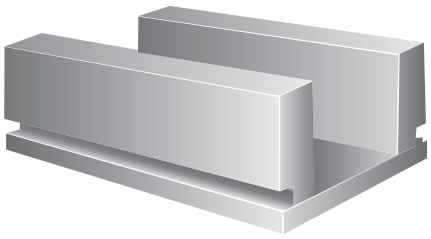
Spacer Blocks

Plain, Slotted and Angle Spacers are all made from D-M-E No. 1 Steel. Riser height (C dimension) is finish ground to plus or minus .001".



Ejector Housings

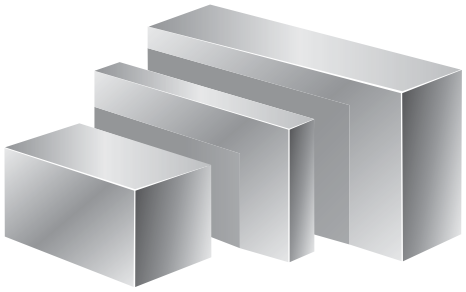
Rigid one-piece construction is made from D-M-E No. 1 Steel. Available in over 150 standard sizes, corresponding to D-M-E Standard "A" Series Mold Bases. The riser height (C dimension) is finish ground to plus or minus .001".



Die Blocks and Plates
7⅞ through 13⅜ wide – No. 5 Steel

D-M-E No. 5 steel is a thermal shock resistant, hotwork die steel (AISI-SAE H-13 type). Supplied fully annealed (approx. 200 Bhn.) for easy machinability, it can be subsequently heat treated to the desired hardness with a minimum of deformation.

Mainly used for die cast dies, it is also suitable for plastics molds with exceptional hardness or polishability requirements.



D-M-E No. 5 Steel meets or exceeds the acceptance criteria established by the NADCA as detailed in Technical Digest Number 01-80-01D.

Thickness, width and length are milled to approximately .060" oversized (.030" per side).

A	7⅞ × 7⅞	
	ITEM NUMBER	NET WT.
1⅜	88-13	25
1⅞	88-17	33
2⅜	88-23	42
2⅞	88-27	51
3⅜	88-33	60
3⅞	88-37	69
4⅞	88-47	86

A	9⅞ × 8"		9⅞ × 11⅞		9⅞ × 16"		9⅞ × 20"		A
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	
1⅜	108-13	31	1012-13	46	1016-13	62	1020-13	77	1⅜
1⅞	108-17	42	1012-17	63	1016-17	84	1020-17	105	1⅞
2⅜	108-23	54	1012-23	79	1016-23	107	1020-23	133	2⅜
2⅞	108-27	65	1012-27	96	1016-27	129	1020-27	161	2⅞
3⅜	108-33	76	1012-33	113	1016-33	152	1020-33	189	3⅜
3⅞	108-37	87	1012-37	129	1016-37	174	1020-37	217	3⅞
4⅞	108-47	110	1012-47	162	1016-47	219	1020-47	273	4⅞
5⅞	108-57	132	1012-57	196	1016-57	263	1020-57	329	5⅞

A	10⅞ × 12"		10⅞ × 14"		10⅞ × 18"		10⅞ × 23½	
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.
1⅜	1112-13	51	1114-13	60	1118-13	77	1123-13	100
1⅞	1112-17	70	1114-17	81	1118-17	104	1123-17	136
2⅜	1112-23	88	1114-23	103	1118-23	132	1123-23	172
2⅞	1112-27	107	1114-27	125	1118-27	160	1123-27	209
3⅜	1112-33	125	1114-33	146	1118-33	188	1123-33	245
3⅞	1112-37	144	1114-37	168	1118-37	215	1123-37	281
4⅞	1112-47	181	1114-47	211	1118-47	271	1123-47	353
5⅞	1112-57	218	1114-57	254	1118-57	326	1123-57	426

A	11⅞ × 12"		11⅞ × 15"	
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.
1⅜	1212-13	56	1215-13	70
1⅞	1212-17	76	1215-17	95
2⅜	1212-23	96	1215-23	120
2⅞	1212-27	117	1215-27	146
3⅜	1212-33	137	1215-33	171
3⅞	1212-37	157	1215-37	196
4⅞	1212-47	197	1215-47	247
5⅞	1212-57	238	1215-57	297
7⅞	1212-77	318	1215-77	398

A	11⅞ × 20"		11⅞ × 23½	
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.
1⅜	1220-13	93	1223-13	109
1⅞	1220-17	127	1223-17	149
2⅜	1220-23	160	1223-23	188
2⅞	1220-27	194	1223-27	228
3⅜	1220-33	228	1223-33	267
3⅞	1220-37	261	1223-37	307
4⅞	1220-47	329	1223-47	386
5⅞	1220-57	396	1223-57	465
7⅞	1220-77	530	1223-77	623

A	13⅜ × 15"		13⅜ × 18"		13⅜ × 20¾		13⅜ × 23½	
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.
1⅜	1315-13	79	1318-13	94	1321-13	109	1323-13	123
1⅞	1315-17	107	1318-17	128	1321-17	148	1323-17	167
2⅜	1315-23	135	1318-23	162	1321-23	187	1323-23	212
2⅞	1315-27	164	1318-27	197	1321-27	227	1323-27	257
3⅜	1315-33	192	1318-33	231	1321-33	266	1323-33	301
3⅞	1315-37	221	1318-37	265	1321-37	305	1323-37	346
4⅞	1315-47	278	1318-47	333	1321-47	384	1323-47	435
5⅞	1315-57	334	1318-57	401	1321-57	462	1323-57	524
7⅞	1315-77	448	1318-77	538	1321-77	620	1323-77	702

WHEN ORDERING, PLEASE SPECIFY:

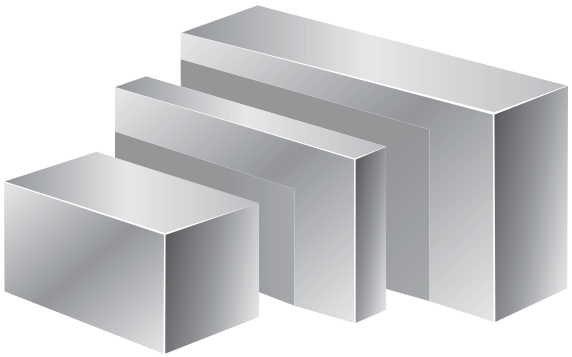
1. Quantity & Item Number
2. No. 5 Steel
3. Method of Shipment

ALSO AVAILABLE:

1. Rotary ground thickness
2. Finish ground thickness and/or edges
3. Standard width and thickness up to 12 feet long. For prices, contact D-M-E.

Die Blocks and Plates
15⅞ through 23¾ wide – No. 5 Steel

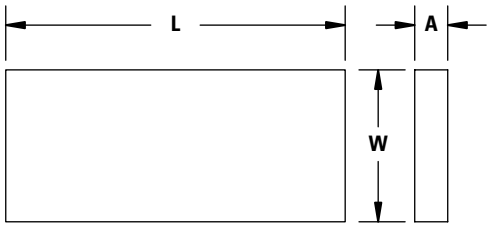
A	15⅞ × 16"		15⅞ × 20"		15⅞ × 23½		15⅞ × 26"	
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.
1⅜	1616-13	99	1620-13	124	1623-13	146	1626-13	161
1⅞	1616-17	135	1620-17	169	1623-17	199	1626-17	220
2⅜	1616-23	171	1620-23	214	1623-23	252	1626-23	278
2⅞	1616-27	207	1620-27	259	1623-27	304	1626-27	337
3⅜	1616-33	243	1620-33	304	1623-33	357	1626-33	395
3⅞	1616-37	279	1620-37	349	1623-37	410	1626-37	454
4⅞	1616-47	351	1620-47	439	1623-47	516	1626-47	571
5⅞	1616-57	423	1620-57	529	1623-57	621	1626-57	687
7⅞	1616-77	567	1620-77	709	1623-77	833	1626-77	921
8⅞	1616-87	639	1620-87	799	1623-87	938	1626-87	1038
9⅞	1616-97	711	1620-97	889	1623-97	1044	1626-97	1155
11⅞	1616-117	855	1620-117	1069	1623-117	1256	1626-117	1389



A	17⅞ × 18"		17⅞ × 20"		17⅞ × 23½		17⅞ × 26"		17⅞ × 29½		17⅞ × 35½		A
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	
1⅞	1818-17	171	1820-17	190	1823-17	224	1826-17	247	1829-17	281	1835-17	338	1⅞
2⅜	1818-23	217	1820-23	241	1823-23	283	1826-23	313	1829-23	355	1835-23	427	2⅜
2⅞	1818-27	263	1820-27	292	1823-27	343	1826-27	379	1829-27	430	1835-27	517	2⅞
3⅜	1818-33	308	1820-33	342	1823-33	402	1826-33	445	1829-33	505	1835-33	607	3⅜
3⅞	1818-37	354	1820-37	393	1823-37	462	1826-37	511	1829-37	579	1835-37	697	3⅞
4⅞	1818-47	445	1820-47	494	1823-47	581	1826-47	642	1829-47	729	1835-47	877	4⅞
5⅞	1818-57	536	1820-57	596	1823-57	700	1826-57	774	1829-57	878	1835-57	1057	5⅞
7⅞	1818-77	718	1820-77	798	1823-77	938	1826-77	1037	1829-77	1177	1835-77	1416	7⅞
8⅞	1818-87	809	1820-87	899	1823-87	1057	1826-87	1169	1829-87	1326	1835-87	1596	8⅞
9⅞	1818-97	901	1820-97	1001	1823-97	1176	1826-97	1301	1829-97	1476	1835-97	1776	9⅞
11⅞	1818-117	1083	1820-117	1203	1823-117	1414	1826-117	1564	1829-117	1774	1835-117	2135	11⅞

A	19½ × 23¾	
	ITEM NUMBER	NET WT.
2⅜	1924-23	312
2⅞	1924-27	378
3⅜	1924-33	443
3⅞	1924-37	509
4⅞	1924-47	640
5⅞	1924-57	771
7⅞	1924-77	1034
8⅞	1924-87	1165
9⅞	1924-97	1296
11⅞	1924-117	1559

A	23¾ × 23¾		23¾ × 29½		23¾ × 35½	
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.
2⅜	2424-23	380	2429-23	472	2435-23	568
2⅞	2424-27	460	2429-27	571	2435-27	687
3⅜	2424-33	540	2429-33	670	2435-33	807
3⅞	2424-37	620	2429-37	770	2435-37	926
4⅞	2424-47	780	2429-47	968	2435-47	1165
5⅞	2424-57	939	2429-57	1167	2435-57	1404
7⅞	2424-77	1259	2429-77	1564	2435-77	1882
8⅞	2424-87	1419	2429-87	1762	2435-87	2120
9⅞	2424-97	1579	2429-97	1961	2435-97	2359
11⅞	2424-117	1898	2429-117	2358	2435-117	2837



Thickness, width and length are milled to approximately .060" oversized (.030" per side).

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 5 Steel
3. Method of Shipment

ALSO AVAILABLE:

1. Rotary ground thickness
2. Finish ground thickness and/or edges
3. Standard width and thickness up to 12 feet long. For prices, contact D-M-E.

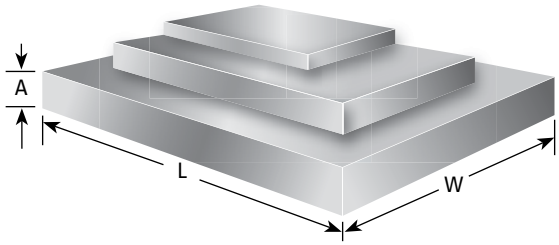
ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Finish Ground Mold Plates • Rotary Ground Mold Plates 6", 8 15/16, 9" and 9 7/8 wide

Finish Ground Mold Plates

AVAILABLE IN:

D-M-E No.1, No. 2 or No. 3 Steel



Thickness (A) of plate is finish ground ±.001 Width and length are finished square and parallel.

A	6" × 7"	
	ITEM NUMBER	NET WT.
1/8	67-7	11
1 3/8	67-13	17
1 7/8	67-17	23
2 3/8	67-23	29

A	6" × 9"*	
	ITEM NUMBER	NET WT.
1/8	69-7	14
1 3/8	69-13	22
1 7/8	69-17	29

*No. 2 or No. 3 Steel only.

A	6" × 10 7/8		9" × 9"*	
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.
1/8	611-7	17	99-7	21
1 3/8	611-13	26	99-13	32
1 7/8	611-17	35	99-17	44
2 3/8	611-23	44		
2 7/8	611-27	54		
3 3/8	611-33	63		
3 7/8	611-37	72		
4 7/8	611-47	91		
5 7/8	611-57	109		

*No. 2 or No. 3 Steel only.

A	8 15/16 × 11 7/8		9" × 11 7/8		9 7/8 × 7 7/8	
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.
1/8	912V-7	27	912M-7	27	108R-7	20
1 3/8	912V-13	42	912M-13	42	108R-13	31
1 7/8	912V-17	57	912M-17	57	108R-17	42
2 3/8	912V-23	72	912M-23	72	108R-23	53
2 7/8	912V-27	88	912M-27	88		
3 3/8	912V-33	103	912M-33	103		
3 7/8	912V-37	118	912M-37	118		
4 7/8	912V-47	148	912M-47	148		
5 7/8	912V-57	178	912M-57	178		

Rotary Ground Mold Plates

ALL "A" THICKNESSES AVAILABLE IN:

D-M-E No. 1, No. 2 or No. 3 Steel

Thickness (A) of plate is rotary ground. Width and length are milled.

TOLERANCES	
Thickness (A)	+.015 to +.020
Width (W) Nominal +.008	+.005/+.011
Length (L) Nominal +.008	+.005/+.011

A	6" × 7"	
	ITEM NUMBER	NET WT.
1/8	67-7RGM	11
1 3/8	67-13RGM	17
1 7/8	67-17RGM	23
2 3/8	67-23RGM	29

A	6" × 9"*	
	ITEM NUMBER	NET WT.
1/8	69-7RGM	14
1 3/8	69-13RGM	22
1 7/8	69-17RGM	29

*No. 2 or No. 3 Steel only.

A	6" × 10 7/8		9" × 9"*	
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.
1/8	611-7RGM	17	99-7RGM	21
1 3/8	611-13RGM	26	99-13RGM	32
1 7/8	611-17RGM	35	99-17RGM	44
2 3/8	611-23RGM	44		
2 7/8	611-27RGM	54		
3 3/8	611-33RGM	63		
3 7/8	611-37RGM	72		
4 7/8	611-47RGM	91		
5 7/8	611-57RGM	109		

*No. 2 or No. 3 Steel only.

A	9" × 11 7/8**		9 7/8 × 7 7/8	
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.
1/8	912-7RGM	27	108R-7RGM	20
1 3/8	912-13RGM	42	108R-13RGM	31
1 7/8	912-17RGM	57	108R-17RGM	42
2 3/8	912-23RGM	72	108R-23RGM	53
2 7/8	912-27RGM	88		
3 3/8	912-33RGM	103		
3 7/8	912-37RGM	118		
4 7/8	912-47RGM	148		
5 7/8	912-57RGM	178		

**Suitable for both Van Dorn or Moslo applications.

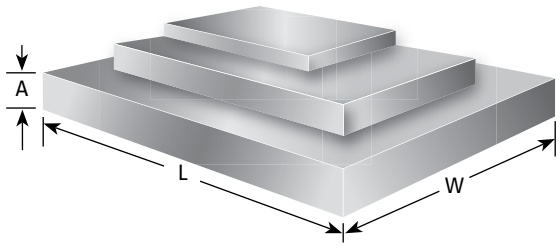
WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2 or No. 3 Steel
3. Method of Shipment

NOTE:

Standard width and thickness available in lengths up to 12 feet. For prices, contact D-M-E.

Finish Ground Mold Plates 7⅞ through 11⅞ wide



Thickness (A) of plate is finish ground ±.001 Width and length are finished square and parallel.

ALL "A" THICKNESSES AVAILABLE IN:

- D-M-E No. 1 Steel — SAE 1030 type
- D-M-E No. 2 Steel — AISI 4130 type, pre-heat treated (271-321 Bhn; 28-34 HRC)
- D-M-E No. 3 Steel — P-20 type, pre-heat treated (271-321 Bhn; 28-34 HRC)

PLATES WITH "A" THICKNESSES FROM ⅞ TO 2⅞ ALSO AVAILABLE IN:

- D-M-E No. 7 Steel – Modified AISI 400 series stainless steel pre-heat treated (302-340 Bhn; 32-36 HRC)

THICKER PLATES IN D-M-E NO. 7 STEEL ARE AVAILABLE ON SPECIAL ORDER

A	7⅞ × 7⅞		7⅞ × 11⅞		A	9⅞ × 8"		9⅞ × 11⅞	
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.		ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.
⅞	88-7	16	812-7	24	⅞	108-7	20	1012-7	30
1⅜	88-13	25	812-13	37	1⅜	108-13	31	1012-13	46
1⅞	88-17	33	812-17	50	1⅞	108-17	42	1012-17	63
2⅜	88-23	42	812-23	63	2⅜	108-23	54	1012-23	79
2⅞	88-27	51	812-27	76	2⅞	108-27	65	1012-27	96
3⅜	88-33	60	812-33	89	3⅜	108-33	76	1012-33	113
3⅞	88-37	69	812-37	102	3⅞	108-37	87	1012-37	129
4⅞	88-47	86	812-47	129	4⅞	108-47	110	1012-47	162
5⅞	88-57	104	812-57	155	5⅞	108-57	132	1012-57	196

A	9⅞ 16"		9⅞ 20"		9⅞ 23¾		10⅞ 12"		10⅞ 14"		10⅞ 18"		10⅞ 23½		A
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	
⅞	1016-7	40	1020-7	49	1024-7	59	1112-7	33	1114-7	38	1118-7	49	1123-7	64	⅞
1⅜	1016-13	62	1020-13	77	1024-13	92	1112-13	51	1114-13	60	1118-13	77	1123-13	100	1⅜
1⅞	1016-17	84	1020-17	105	1024-17	125	1112-17	70	1114-17	81	1118-17	104	1123-17	136	1⅞
2⅜	1016-23	107	1020-23	133	1024-23	158	1112-23	88	1114-23	103	1118-23	132	1123-23	172	2⅜
2⅞	1016-27	129	1020-27	161	1024-27	192	1112-27	107	1114-27	125	1118-27	160	1123-27	209	2⅞
3⅜	1016-33	152	1020-33	189	1024-33	225	1112-33	125	1114-33	146	1118-33	188	1123-33	245	3⅜
3⅞	1016-37	174	1020-37	217	1024-37	258	1112-37	144	1114-37	168	1118-37	215	1123-37	281	3⅞
4⅞	1016-47	219	1020-47	273	1024-47	324	1112-47	181	1114-47	211	1118-47	271	1123-47	353	4⅞
5⅞	1016-57	263	1020-57	329	1024-57	391	1112-57	218	1114-57	254	1118-57	326	1123-57	426	5⅞

A	11⅞ 12"		11⅞ 15"		11⅞ 17½		11⅞ 20"		11⅞ 23½		11⅞ 29½		A
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	
⅞	1212-7	36	1215-7	45	1217-7	52	1220-7	59	1223-7	70	1229-7	87	⅞
1⅜	1212-13	56	1215-13	70	1217-13	81	1220-13	93	1223-13	109	1229-13	137	1⅜
1⅞	1212-17	76	1215-17	95	1217-17	111	1220-17	127	1223-17	149	1229-17	187	1⅞
2⅜	1212-23	96	1215-23	120	1217-23	140	1220-23	160	1223-23	188	1229-23	236	2⅜
2⅞	1212-27	117	1215-27	146	1217-27	170	1220-27	194	1223-27	228	1229-27	286	2⅞
3⅜	1212-33	137	1215-33	171	1217-33	199	1220-33	228	1223-33	267	1229-33	335	3⅜
3⅞	1212-37	157	1215-37	196	1217-37	229	1220-37	261	1223-37	307	1229-37	385	3⅞
4⅞	1212-47	197	1215-47	247	1217-47	287	1220-47	329	1223-47	386	1229-47	484	4⅞
5⅞	1212-57	238	1215-57	297	1217-57	346	1220-57	396	1223-57	465	1229-57	584	5⅞

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel
3. Method of Shipment

NOTE:

Standard width and thickness available in lengths up to 12 feet. For prices, contact D-M-E.

Rotary Ground Mold Plates 7⅞ through 11⅞ wide

TOLERANCES	88, 812, 108, 1012, 1016, 1112, 1114, 1118, 1212, 1215	1020, 1024, 1123, 1217, 1220, 1223, 1229
Thickness (A)	+.015 to +.020	+.025 to +.030
Width (W) Nominal +.008	+.005/+.011	
Length (L) Nominal +.008	+.005/+.011	

A	7⅞ × 7⅞		7⅞ × 11⅞		9⅞ × 8"		9⅞ × 11⅞	
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.
⅛	88-7RGM	16	812-7RGM	24	108-7RGM	20	1012-7RGM	30
1⅛	88-13RGM	25	812-13RGM	37	108-13RGM	31	1012-13RGM	46
1⅛	88-17RGM	33	812-17RGM	50	108-17RGM	42	1012-17RGM	63
2⅜	88-23RGM	42	812-23RGM	63	108-23RGM	54	1012-23RGM	79
2⅛	88-27RGM	51	812-27RGM	76	108-27RGM	65	1012-27RGM	96
3⅜	88-33RGM	60	812-33RGM	89	108-33RGM	76	1012-33RGM	113
3⅛	88-37RGM	69	812-37RGM	102	108-37RGM	87	1012-37RGM	129
4⅛	88-47RGM	86	812-47RGM	129	108-47RGM	110	1012-47RGM	162
5⅛	88-57RGM	104	812-57RGM	155	108-57RGM	132	1012-57RGM	196

Thickness (A) of plate is rotary ground. Width and length are milled.

ALL "A" THICKNESSES AVAILABLE IN:

- D-M-E No. 1 Steel — SAE 1030 type
- D-M-E No. 2 Steel — AISI 4130 type, pre-heat treated (271-321 Bhn; 28-34 HRC)
- D-M-E No. 3 Steel — P-20 type, pre-heat treated (271-321 Bhn; 28-34 HRC)

PLATES WITH "A" THICKNESSES FROM ⅞ TO 2⅞ ALSO AVAILABLE IN:

- D-M-E No. 7 Steel – Modified AISI 400 series stainless steel pre-heat treated (302-340 Bhn; 32-36 HRC)

THICKER PLATES IN D-M-E NO. 7 STEEL ARE AVAILABLE ON SPECIAL ORDER

A	9⅞ × 16"		9⅞ × 20"		9⅞ × 23¾		10⅞ × 12"		10⅞ × 14"		10⅞ × 18"		10⅞ × 23½		A
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	
⅛	1016-7RGM	40	1020-7RGM	49	1024-7RGM	59	1112-7RGM	33	1114-7RGM	38	1118-7RGM	49	1123-7RGM	64	⅛
1⅛	1016-13RGM	62	1020-13RGM	77	1024-13RGM	92	1112-13RGM	51	1114-13RGM	60	1118-13RGM	77	1123-13RGM	100	1⅛
1⅛	1016-17RGM	84	1020-17RGM	105	1024-17RGM	125	1112-17RGM	70	1114-17RGM	81	1118-17RGM	104	1123-17RGM	136	1⅛
2⅜	1016-23RGM	107	1020-23RGM	133	1024-23RGM	158	1112-23RGM	88	1114-23RGM	103	1118-23RGM	132	1123-23RGM	172	2⅜
2⅛	1016-27RGM	129	1020-27RGM	161	1024-27RGM	192	1112-27RGM	107	1114-27RGM	124	1118-27RGM	160	1123-27RGM	209	2⅛
3⅜	1016-33RGM	152	1020-33RGM	189	1024-33RGM	225	1112-33RGM	125	1114-33RGM	146	1118-33RGM	188	1123-33RGM	245	3⅜
3⅛	1016-37RGM	174	1020-37RGM	217	1024-37RGM	258	1112-37RGM	144	1114-37RGM	168	1118-37RGM	215	1123-37RGM	281	3⅛
4⅛	1016-47RGM	219	1020-47RGM	273	1024-47RGM	324	1112-47RGM	181	1114-47RGM	211	1118-47RGM	271	1123-47RGM	353	4⅛
5⅛	1016-57RGM	263	1020-57RGM	329	1024-57RGM	391	1112-57RGM	218	1114-57RGM	254	1118-57RGM	326	1123-57RGM	426	5⅛

A	11⅞ × 12"		11⅞ × 15"		11⅞ × 17½		11⅞ × 20"		11⅞ × 23½		11⅞ × 29½		A
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	
⅛	1212-7RGM	36	1215-7RGM	45	1217-7RGM	52	1220-7RGM	59	1223-7RGM	70	1229-7RGM	87	⅛
1⅛	1212-13RGM	56	1215-13RGM	70	1217-13RGM	81	1220-13RGM	93	1223-13RGM	109	1229-13RGM	137	1⅛
1⅛	1212-17RGM	76	1215-17RGM	95	1217-17RGM	111	1220-17RGM	127	1223-17RGM	149	1229-17RGM	187	1⅛
2⅜	1212-23RGM	96	1215-23RGM	120	1217-23RGM	140	1220-23RGM	160	1223-23RGM	188	1229-23RGM	236	2⅜
2⅛	1212-27RGM	117	1215-27RGM	146	1217-27RGM	170	1220-27RGM	194	1223-27RGM	228	1229-27RGM	286	2⅛
3⅜	1212-33RGM	137	1215-33RGM	171	1217-33RGM	199	1220-33RGM	228	1223-33RGM	267	1229-33RGM	335	3⅜
3⅛	1212-37RGM	157	1215-37RGM	196	1217-37RGM	229	1220-37RGM	261	1223-37RGM	307	1229-37RGM	385	3⅛
4⅛	1212-47RGM	197	1215-47RGM	247	1217-47RGM	287	1220-47RGM	329	1223-47RGM	386	1229-47RGM	484	4⅛
5⅛	1212-57RGM	238	1215-57RGM	297	1217-57RGM	346	1220-57RGM	396	1223-57RGM	465	1229-57RGM	584	5⅛

WHEN ORDERING, PLEASE SPECIFY:

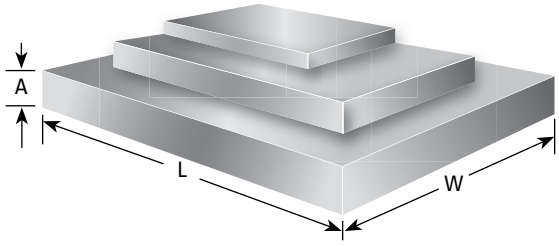
1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel
3. Method of Shipment

NOTE:

Standard width and thickness available in lengths up to 12 feet. For prices, contact D-M-E.

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Finish Ground Mold Plates 13⅜ through 15⅞ wide



Thickness (A) of plate is finish ground ±.001. Width and length are finished square and parallel.

ALL "A" THICKNESSES AVAILABLE IN:

- D-M-E No. 1 Steel — SAE 1030 type
- D-M-E No. 2 Steel — AISI 4130 type, pre-heat treated (271-321 Bhn; 28-34 HRC)
- D-M-E No. 3 Steel — P-20 type, pre-heat treated (271-321 Bhn; 28-34 HRC)

PLATES WITH "A" THICKNESSES FROM ⅞ TO 2⅞ ALSO AVAILABLE IN:

- D-M-E No. 7 Steel – Modified AISI 400 series stainless steel pre-heat treated (302-340 Bhn; 32-36 HRC)

THICKER PLATES IN D-M-E NO. 7 STEEL ARE AVAILABLE ON SPECIAL ORDER

A	13⅜ × 15"		13⅜ × 18"		13⅜ × 20¾	
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.
⅞	1315-7	50	1318-7	60	1321-7	69
1⅜	1315-13	79	1318-13	94	1321-13	109
1⅞	1315-17	107	1318-17	128	1321-17	148
2⅜	1315-23	135	1318-23	162	1321-23	187
2⅞	1315-27	164	1318-27	197	1321-27	227
3⅜	1315-33	192	1318-33	231	1321-33	266
3⅞	1315-37	221	1318-37	265	1321-37	305
4⅞	1315-47	278	1318-47	333	1321-47	384
5⅞	1315-57	334	1318-57	401	1321-57	462

A	13⅜ × 23½		13⅜ × 26"		13⅜ × 29½		A
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	
⅞	1323-7	78	1326-7	87	1329-7	98	⅞
1⅜	1323-13	123	1326-13	136	1329-13	154	1⅜
1⅞	1323-17	167	1326-17	185	1329-17	210	1⅞
2⅜	1323-23	212	1326-23	234	1329-23	266	2⅜
2⅞	1323-27	256	1326-27	284	1329-27	322	2⅞
3⅜	1323-33	301	1326-33	333	1329-33	378	3⅜
3⅞	1323-37	346	1326-37	382	1329-37	434	3⅞
4⅞	1323-47	435	1326-47	481	1329-47	545	4⅞
5⅞	1323-57	524	1326-57	579	1329-57	657	5⅞

A	14⅞ × 17⅞		14⅞ × 23¾		14⅞ × 29½		A
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	
⅞	1518-7	66	1524-7	88	1529-7	109	⅞
1⅜	1518-13	104	1524-13	138	1529-13	171	1⅜
1⅞	1518-17	142	1524-17	188	1529-17	233	1⅞
2⅜	1518-23	179	1524-23	238	1529-23	296	2⅜
2⅞	1518-27	217	1524-27	288	1529-27	358	2⅞
3⅜	1518-33	255	1524-33	338	1529-33	420	3⅜
3⅞	1518-37	292	1524-37	388	1529-37	482	3⅞
4⅞	1518-47	368	1524-47	488	1529-47	606	4⅞
5⅞	1518-57	443	1524-57	588	1529-57	731	5⅞

A	15⅞ × 16"		15⅞ × 20"		15⅞ × 23½		15⅞ × 26"		15⅞ × 29½		15⅞ × 35½		A
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	
⅞	1616-7	63	1620-7	79	1623-7	93	1626-7	103	1629-7	116	1635-7	140	⅞
1⅜	1616-13	99	1620-13	124	1623-13	146	1626-13	161	1629-13	183	1635-13	220	1⅜
1⅞	1616-17	135	1620-17	169	1623-17	199	1626-17	220	1629-17	249	1635-17	300	1⅞
2⅜	1616-23	171	1620-23	214	1623-23	252	1626-23	278	1629-23	315	1635-23	380	2⅜
2⅞	1616-27	207	1620-27	259	1623-27	304	1626-27	337	1629-27	382	1635-27	459	2⅞
3⅜	1616-33	243	1620-33	304	1623-33	357	1626-33	395	1629-33	448	1635-33	539	3⅜
3⅞	1616-37	279	1620-37	349	1623-37	410	1626-37	454	1629-37	515	1635-37	619	3⅞
4⅞	1616-47	351	1620-47	439	1623-47	516	1626-47	570	1629-47	647	1635-47	779	4⅞
5⅞	1616-57	423	1620-57	529	1623-57	621	1626-57	687	1629-57	780	1635-57	938	5⅞

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel
3. Method of Shipment

NOTE:

Standard width and thickness available in lengths up to 12 feet. For prices, contact D-M-E.

Rotary Ground Mold Plates 13⅜ through 15⅞ wide

Mold Plate Size	TOLERANCES	
	1315, 1318, 1518	1321, 1323, 1326, 1329, 1524, 1529, 1616, 1620, 1623, 1626, 1629, 1635
Thickness (A)	+.015 to +.020	+.025 to+.030
Width (W)	+.005/+.011	
Length (L)	+.005/+.011	

Thickness (A) of plate is rotary ground. Width and length are milled.

ALL "A" THICKNESSES AVAILABLE IN:

- D-M-E No. 1 Steel — SAE 1030 type
- D-M-E No. 2 Steel — AISI 4130 type, pre-heat treated (271-321 Bhn; 28-34 HRC)
- D-M-E No. 3 Steel — P-20 type, pre-heat treated (271-321 Bhn; 28-34 HRC)

PLATES WITH "A" THICKNESSES FROM ⅞ TO 2⅞ ALSO AVAILABLE IN:

- D-M-E No. 7 Steel – Modified AISI 400 series stainless steel pre-heat treated (302-340 Bhn; 32-36 HRC)

THICKER PLATES IN D-M-E NO. 7 STEEL ARE AVAILABLE ON SPECIAL ORDER

A	13⅜ × 15"		13⅜ × 18"		13⅜ × 20¾	
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.
⅞	1315-7RGM	50	1318-7RGM	60	1321-7RGM	69
1⅜	1315-13RGM	79	1318-13RGM	94	1321-13RGM	109
1⅞	1315-17RGM	107	1318-17RGM	128	1321-17RGM	148
2⅜	1315-23RGM	135	1318-23RGM	162	1321-23RGM	187
2⅞	1315-27RGM	164	1318-27RGM	197	1321-27RGM	227
3⅜	1315-33RGM	192	1318-33RGM	231	1321-33RGM	266
3⅞	1315-37RGM	221	1318-37RGM	265	1321-37RGM	305
4⅞	1315-47RGM	278	1318-47RGM	333	1321-47RGM	384
5⅞	1315-57RGM	334	1318-57RGM	401	1321-57RGM	462

A	13⅜ × 23½		13⅜ × 26"		13⅜ × 29½		A
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	
⅞	1323-7RGM	78	1326-7RGM	87	1329-7RGM	98	⅞
1⅜	1323-13RGM	123	1326-13RGM	136	1329-13RGM	154	1⅜
1⅞	1323-17RGM	167	1326-17RGM	185	1329-17RGM	210	1⅞
2⅜	1323-23RGM	212	1326-23RGM	234	1329-23RGM	266	2⅜
2⅞	1323-27RGM	256	1326-27RGM	284	1329-27RGM	322	2⅞
3⅜	1323-33RGM	301	1326-33RGM	333	1329-33RGM	378	3⅜
3⅞	1323-37RGM	346	1326-37RGM	382	1329-37RGM	434	3⅞
4⅞	1323-47RGM	435	1326-47RGM	481	1329-47RGM	545	4⅞
5⅞	1323-57RGM	524	1326-57RGM	579	1329-57RGM	657	5⅞

A	14⅞ × 17⅞		14⅞ × 23¾		14⅞ × 29		A
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	
⅞	1518-7RGM	66	1524-7RGM	88	1529-7RGM	109	⅞
1⅜	1518-13RGM	104	1524-13RGM	138	1529-13RGM	171	1⅜
1⅞	1518-17RGM	142	1524-17RGM	188	1529-17RGM	233	1⅞
2⅜	1518-23RGM	179	1524-23RGM	238	1529-23RGM	296	2⅜
2⅞	1518-27RGM	217	1524-27RGM	288	1529-27RGM	358	2⅞
3⅜	1518-33RGM	255	1524-33RGM	338	1529-33RGM	420	3⅜
3⅞	1518-37RGM	292	1524-37RGM	388	1529-37RGM	482	3⅞
4⅞	1518-47RGM	368	1524-47RGM	488	1529-47RGM	606	4⅞
5⅞	1518-57RGM	443	1524-57RGM	588	1529-57RGM	731	5⅞

A	15⅞ × 16"		15⅞ × 20"		15⅞ × 23½		15⅞ × 26"		15⅞ × 29½		15⅞ × 35½		A
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	
⅞	1616-7RGM	63	1620-7RGM	79	1623-7RGM	93	1626-7RGM	103	1629-7RGM	116	1635-7RGM	140	⅞
1⅜	1616-13RGM	99	1620-13RGM	124	1623-13RGM	146	1626-13RGM	161	1629-13RGM	183	1635-13RGM	220	1⅜
1⅞	1616-17RGM	135	1620-17RGM	169	1623-17RGM	199	1626-17RGM	220	1629-17RGM	249	1635-17RGM	300	1⅞
2⅜	1616-23RGM	171	1620-23RGM	214	1623-23RGM	252	1626-23RGM	278	1629-23RGM	315	1635-23RGM	380	2⅜
2⅞	1616-27RGM	207	1620-27RGM	259	1623-27RGM	304	1626-27RGM	337	1629-27RGM	382	1635-27RGM	459	2⅞
3⅜	1616-33RGM	243	1620-33RGM	304	1623-33RGM	357	1626-33RGM	395	1629-33RGM	448	1635-33RGM	539	3⅜
3⅞	1616-37RGM	279	1620-37RGM	349	1623-37RGM	410	1626-37RGM	454	1629-37RGM	515	1635-37RGM	619	3⅞
4⅞	1616-47RGM	351	1620-47RGM	439	1623-47RGM	516	1626-47RGM	570	1629-47RGM	647	1635-47RGM	779	4⅞
5⅞	1616-57RGM	423	1620-57RGM	529	1623-57RGM	621	1626-57RGM	687	1629-57RGM	780	1635-57RGM	938	5⅞

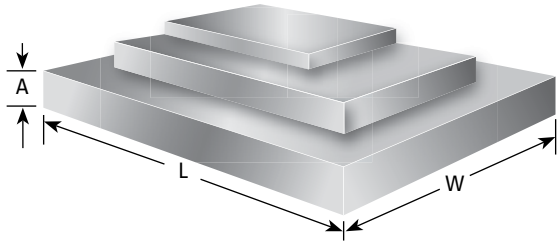
WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel
3. Method of Shipment

NOTE:

Standard width and thickness available in lengths up to 12 feet. For prices, contact D-M-E.

Finish Ground Mold Plates 16½ through 23¾ wide



Thickness (A) of plate is finish ground ±.001. Width and length are finished square and parallel.

ALL "A" THICKNESSES AVAILABLE IN:

- D-M-E No. 1 Steel — SAE 1030 type
- D-M-E No. 2 Steel — AISI 4130 type, pre-heat treated (271-321 Bhn; 28-34 HRC)
- D-M-E No. 3 Steel — P-20 type, pre-heat treated (271-321 Bhn; 28-34 HRC)

PLATES WITH "A" THICKNESSES FROM ⅞ TO 2⅞ ALSO AVAILABLE IN:

- D-M-E No. 7 Steel – Modified AISI 400 series stainless steel pre-heat treated (302-340 Bhn; 32-36 HRC)

THICKER PLATES IN D-M-E NO. 7 STEEL ARE AVAILABLE ON SPECIAL ORDER

A	16½ × 23¾		16½ × 29½		A
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	
⅞	1724-7	98	1729-7	121	⅞
1⅜	1724-13	153	1729-13	190	1⅜
1⅞	1724-17	209	1729-17	259	1⅞
2⅜	1724-23	264	1729-23	328	2⅜
2⅞	1724-27	320	1729-27	397	2⅞
3⅜	1724-33	375	1729-33	466	3⅜
3⅞	1724-37	431	1729-37	535	3⅞
4⅞	1724-47	542	1729-47	673	4⅞
5⅞	1724-57	653	1729-57	811	5⅞

A	17⅞ × 18"		17⅞ × 20"		17⅞ × 23½		17⅞ × 26"		17⅞ × 29½		17⅞ × 35½		A
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	
⅞	1818-7	80	1820-7	89	1823-7	105	1826-7	116	1829-7	131	1835-7	158	⅞
1⅜	1818-13	126	1820-13	140	1823-13	164	1826-13	182	1829-13	206	1835-13	248	1⅜
1⅞	1818-17	171	1820-17	190	1823-17	224	1826-17	247	1829-17	281	1835-17	338	1⅞
2⅜	1818-23	217	1820-23	241	1823-23	283	1826-23	313	1829-23	355	1835-23	427	2⅜
2⅞	1818-27	263	1820-27	292	1823-27	343	1826-27	379	1829-27	430	1835-27	517	2⅞
3⅜	1818-33	308	1820-33	342	1823-33	402	1826-33	445	1829-33	505	1835-33	607	3⅜
3⅞	1818-37	354	1820-37	393	1823-37	462	1826-37	511	1829-37	579	1835-37	697	3⅞
4⅞	1818-47	445	1820-47	494	1823-47	581	1826-47	642	1829-47	729	1835-47	877	4⅞
5⅞	1818-57	536	1820-57	596	1823-57	700	1826-57	774	1829-57	878	1835-57	1057	5⅞

A	19½ × 23¾		19½ × 29½		19½ × 35½		A
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	
⅞	1924-7	115	1929-7	143	1935-7	172	⅞
1⅜	1924-13	181	1929-13	224	1935-13	270	1⅜
1⅞	1924-17	246	1929-17	306	1935-17	368	1⅞
2⅜	1924-23	312	1929-23	387	1935-23	466	2⅜
2⅞	1924-27	378	1929-27	469	1935-27	564	2⅞
3⅜	1924-33	443	1929-33	550	1935-33	662	3⅜
3⅞	1924-37	509	1929-37	632	1935-37	760	3⅞
4⅞	1924-47	640	1929-47	795	1935-47	956	4⅞
5⅞	1924-57	771	1929-57	958	1935-57	1153	5⅞

A	23¾ × 23¾		23¾ × 29½		23¾ × 35½		A
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	
⅞	2424-7	140	2429-7	174	2435-7	209	⅞
1⅜	2424-13	220	2429-13	273	2435-13	329	1⅜
1⅞	2424-17	300	2429-17	373	2435-17	448	1⅞
2⅜	2424-23	380	2429-23	472	2435-23	568	2⅜
2⅞	2424-27	460	2429-27	571	2435-27	687	2⅞
3⅜	2424-33	540	2429-33	670	2435-33	807	3⅜
3⅞	2424-37	620	2429-37	770	2435-37	926	3⅞
4⅞	2424-47	779	2429-47	968	2435-47	1165	4⅞
5⅞	2424-57	939	2429-57	1167	2435-57	1404	5⅞

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel
3. Method of Shipment

NOTE:

Standard width and thickness available in lengths up to 12 feet. For prices, contact D-M-E.

Rotary Ground Mold Plates 16½ through 23¾ wide

Mold Plate Size	TOLERANCES	
	1315, 1318, 1518	1321, 1323, 1326, 1329, 1524, 1529, 1616, 1620, 1623, 1626, 1629, 1635
Thickness (A)	+.015 to +.020	+.025 to+.030
Width (W)	+.005/+.011	
Length (L)	+.005/+.011	

Thickness (A) of plate is rotary ground. Width and length are milled.

ALL "A" THICKNESSES AVAILABLE IN:

- D-M-E No. 1 Steel — SAE 1030 type
- D-M-E No. 2 Steel — AISI 4130 type, pre-heat treated (271-321 Bhn; 28-34 HRC)
- D-M-E No. 3 Steel — P-20 type, pre-heat treated (271-321 Bhn; 28-34 HRC)

PLATES WITH "A" THICKNESSES FROM ⅞ TO 2⅞ ALSO AVAILABLE IN:

- D-M-E No. 7 Steel – Modified AISI 400 series stainless steel pre-heat treated (302-340 Bhn; 32-36 HRC)

THICKER PLATES IN D-M-E NO. 7 STEEL ARE AVAILABLE ON SPECIAL ORDER

A	16½ × 23¾		16½ × 29½		A
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	
⅞	1724-7RGM	98	1729-7RGM	121	⅞
1⅜	1724-13RGM	153	1729-13RGM	190	1⅜
1⅞	1724-17RGM	209	1729-17RGM	259	1⅞
2⅜	1724-23RGM	264	1729-23RGM	328	2⅜
2⅞	1724-27RGM	320	1729-27RGM	397	2⅞
3⅜	1724-33RGM	375	1729-33RGM	466	3⅜
3⅞	1724-37RGM	431	1729-37RGM	535	3⅞
4⅞	1724-47RGM	542	1729-47RGM	673	4⅞
5⅞	1724-57RGM	653	1729-57RGM	811	5⅞

A	17⅞ × 18"		17⅞ × 20"		17⅞ × 23½		17⅞ × 26"		17⅞ × 29½		17⅞ × 35½		A
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	
⅞	1818-7RGM	80	1820-7RGM	89	1823-7RGM	105	1826-7RGM	116	1829-7RGM	131	1835-7RGM	158	⅞
1⅜	1818-13RGM	126	1820-13RGM	140	1823-13RGM	164	1826-13RGM	182	1829-13RGM	206	1835-13RGM	248	1⅜
1⅞	1818-17RGM	171	1820-17RGM	190	1823-17RGM	224	1826-17RGM	247	1829-17RGM	281	1835-17RGM	338	1⅞
2⅜	1818-23RGM	217	1820-23RGM	241	1823-23RGM	283	1826-23RGM	313	1829-23RGM	355	1835-23RGM	427	2⅜
2⅞	1818-27RGM	263	1820-27RGM	292	1823-27RGM	343	1826-27RGM	379	1829-27RGM	430	1835-27RGM	517	2⅞
3⅜	1818-33RGM	308	1820-33RGM	342	1823-33RGM	402	1826-33RGM	445	1829-33RGM	505	1835-33RGM	607	3⅜
3⅞	1818-37RGM	354	1820-37RGM	393	1823-37RGM	462	1826-37RGM	511	1829-37RGM	579	1835-37RGM	697	3⅞
4⅞	1818-47RGM	445	1820-47RGM	494	1823-47RGM	581	1826-47RGM	642	1829-47RGM	729	1835-47RGM	877	4⅞
5⅞	1818-57RGM	536	1820-57RGM	596	1823-57RGM	700	1826-57RGM	774	1829-57RGM	878	1835-57RGM	1057	5⅞

A	19½ × 23¾		19½ × 29½		19½ × 35½		A
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	
⅞	1924-7RGM	115	1929-7RGM	143	1935-7RGM	172	⅞
1⅜	1924-13RGM	181	1929-13RGM	224	1935-13RGM	270	1⅜
1⅞	1924-17RGM	246	1929-17RGM	306	1935-17RGM	368	1⅞
2⅜	1924-23RGM	312	1929-23RGM	387	1935-23RGM	466	2⅜
2⅞	1924-27RGM	378	1929-27RGM	469	1935-27RGM	564	2⅞
3⅜	1924-33RGM	443	1929-33RGM	550	1935-33RGM	662	3⅜
3⅞	1924-37RGM	509	1929-37RGM	632	1935-37RGM	760	3⅞
4⅞	1924-47RGM	640	1929-47RGM	795	1935-47RGM	956	4⅞
5⅞	1924-57RGM	771	1929-57RGM	958	1935-57RGM	1153	5⅞

A	23¾ × 23¾		23¾ × 29½		23¾ × 35½		A
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	
⅞	2424-7RGM	140	2429-7RGM	174	2435-7RGM	209	⅞
1⅜	2424-13RGM	220	2429-13RGM	273	2435-13RGM	329	1⅜
1⅞	2424-17RGM	300	2429-17RGM	373	2435-17RGM	448	1⅞
2⅜	2424-23RGM	380	2429-23RGM	472	2435-23RGM	568	2⅜
2⅞	2424-27RGM	460	2429-27RGM	571	2435-27RGM	687	2⅞
3⅜	2424-33RGM	540	2429-33RGM	670	2435-33RGM	807	3⅜
3⅞	2424-37RGM	620	2429-37RGM	770	2435-37RGM	926	3⅞
4⅞	2424-47RGM	779	2429-47RGM	968	2435-47RGM	1165	4⅞
5⅞	2424-57RGM	939	2429-57RGM	1167	2435-57RGM	1404	5⅞

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2, No. 3 or No. 7 Steel
3. Method of Shipment

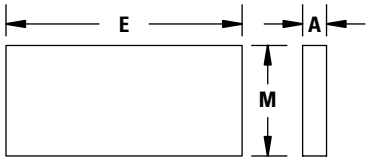
NOTE:

Standard width and thickness available in lengths up to 12 feet. For prices, contact D-M-E.

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Ejector Plates
D-M-E No. 1 Steel





Thickness of plate is finish ground to a tolerance of plus or minus .001".

WIDTH OF MOLD BASE	A THICK	M WIDTH	E LENGTH	ITEM NUMBER	NET WT.
6	1	4	14	6-614C	16
7	½	5	6	6-67R	5
7⅞	1	5¼	7⅞	6-88	8
			11⅞	6-812	12
			16	6-816	15
			20	6-820	19
8 15/16	½	6*	11⅞	6-912V	11
9	1	6	11⅞	6-912M	21
	1	6	16	6-916M	28
	1	6	23½	6-923M	40
9⅞	½	6	8	6-108V	7
		6⅞	7⅞	6-108R	8
	1	6⅞	8	6-108	16
			11⅞	6-1012	24
			16	6-1016	32
			20	6-1020	39
			23½	6-1023	46
			29½	6-1029	58
10⅞	1	7⅜	12	6-1112	26
			14	6-1114	30
			18	6-1118	38
			23½	6-1123	50
			29½	6-1129	62
11⅞	1⅛	8⅜	12	6-1212	33
			15	6-1215	41
			20	6-1220	54
			23½	6-1223	63
			29½	6-1229	79

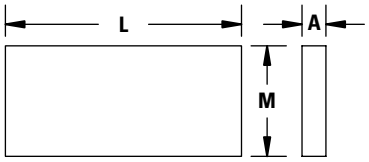
WIDTH OF MOLD BASE	A THICK	M WIDTH	E LENGTH	ITEM NUMBER	NET WT.
13⅜	1⅛	9½	15	6-1315	46
			18	6-1318	55
			18½	6-1319	57
			20¾	6-1321	63
			23½	6-1323	72
			26	6-1326	79
			29½	6-1329	90
			35½	6-1335	108
14⅞	1⅛	11	17⅞	6-1518	63
			23¾	6-1524	84
			29½	6-1529	104
			35½	6-1535	125
15⅞	1⅛	12	16	6-1616	62
			20	6-1620	77
			23½	6-1623	90
			26	6-1626	100
			29½	6-1629	113
			35½	6-1635	136
16½	1⅛	12⅝	23¾	6-1724	96
			29½	6-1729	119
			35½	6-1735	143
17⅞	1⅛	14	18	6-1818	81
			20	6-1820	90
			23½	6-1823	105
			26	6-1826	117
			29½	6-1829	132
			35½	6-1835	159
19½	1⅛	15⅝	23¾	6-1924	119
			29½	6-1929	147
			35½	6-1935	177
23¾	1⅛	19⅞	23¾	6-2424	151
			29½	6-2429	187
			35½	6-2435	225

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Item Number
3. Method of Shipment

Ejector Retainer Plates
D-M-E No. 1 Steel





Thickness of plate is rotary ground to a tolerance of plus .015", minus .000".

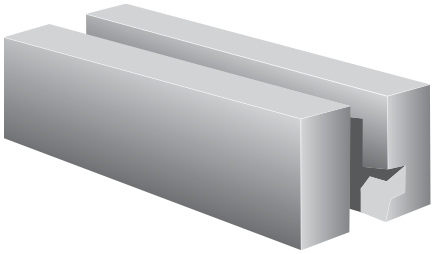
A THICK	M WIDTH	L LENGTH	USED WITH MOLD BASES LISTED BELOW	ITEM NUMBER	NET WT.
3/8	5	6	6 × 7R	7-67R	4
1/2	4	10 7/8	6 × 10 7/8	7-611C	7
	5 1/4	7 7/8	7 7/8 × 7 7/8	7-88	6
	5 1/4	11 7/8	7 7/8 × 11 7/8	7-812	9
	6	8	9 7/8 × 8V	7-108V	7
	6	11 7/8	8 15/16 × 11 7/8V or 9 × 11 7/8M	7-912VM	11
	6 7/8	7 7/8	108R	7-108R	8
		8	9 7/8 × 8	7-108	8
		11 7/8	9 7/8 × 11 7/8	7-1012	12
		16	9 7/8 × 16	7-1016	16
		20	9 7/8 × 20	7-1020	20
	7 7/8	12	10 7/8 × 12	7-1112	13
		14	10 7/8 × 14	7-1114	15
		18	10 7/8 × 18	7-1118	19
		23 1/2	10 7/8 × 23 1/2	7-1123	25
	8 3/8	12	11 7/8 × 12	7-1212	15
		15	11 7/8 × 15	7-1215	18
		20	11 7/8 × 20	7-1220	24
		23 1/2	11 7/8 × 23 1/2	7-1223	28
5/8	9 1/2	15	13 3/8 × 15	7-1315	26
		18	13 3/8 × 18	7-1318	31
		20 3/4	13 3/8 × 20 3/4	7-1321	35
		23 1/2	13 3/8 × 23 1/2	7-1323	40
		26	13 3/8 × 26	7-1326	44
		29 1/2	13 3/8 × 29 1/2	7-1329	50
	11	17 7/8	14 7/8 × 17 7/8	7-1518	35
		23 3/4	14 7/8 × 23 3/4	7-1524	47
		29 1/2	14 7/8 × 29 1/2	7-1529	58

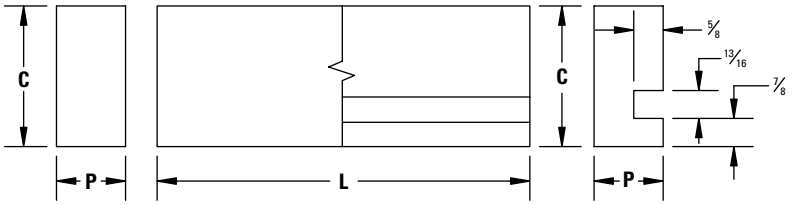
A THICK	M WIDTH	L LENGTH	USED WITH MOLD BASES LISTED BELOW	ITEM NUMBER	NET WT.
5/8 (cont.)	12	16	15 7/8 × 16	7-1616	34
		20	15 7/8 × 20	7-1620	43
		23 1/2	15 7/8 × 23 1/2	7-1623	50
		26	15 7/8 × 26	7-1626	58
		29 1/2	15 7/8 × 29 1/2	7-1629	63
		35 1/2	15 7/8 × 35 1/2	7-1635	76
	12 5/8	23 3/4	16 1/2 × 23 3/4	7-1724	54
		29 1/2	16 1/2 × 29 1/2	7-1729	66
	14	18	17 7/8 × 18	7-1818	45
		20	17 7/8 × 20	7-1820	50
		23 1/2	17 7/8 × 23 1/2	7-1823	59
		26	17 7/8 × 26	7-1826	65
		29 1/2	17 7/8 × 29 1/2	7-1829	74
		35 1/2	17 7/8 × 35 1/2	7-1835	89
	15 5/8	23 3/4	19 1/2 × 23 3/4	7-1924	66
		29 1/2	19 1/2 × 29 1/2	7-1929	82
		35 1/2	19 1/2 × 35 1/2	7-1935	99
	19 7/8	23 3/4	23 3/4 × 23 3/4	7-2424	84
		29 1/2	23 3/4 × 29 1/2	7-2429	104
		35 1/2	23 3/4 × 35 1/2	7-2435	125

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Item Number
3. Method of Shipment

Spacer Blocks
Plain and Slotted – D-M-E No. 1 Steel





Machined all over. Riser height ("C" dimension) is finish ground to a tolerance of plus or minus .001". Width ("P" dimension) is rough ground to a tolerance of – .000, + .015. Finish ground width available on special order.

P	L	C	PLAIN	SLOTTED	
			ITEM NUMBER	NET WT.	ITEM NUMBER
15/16	11⅞	2½	25-912V	8	—
1¼	7⅞	2½	25-408	7	25-508
		3	30-408	9	30-508
1 7/16	8	2½	25-608	9	25-708
		3	30-608	10	30-708
		4	40-608	14	40-708
		5	50-608	17	50-708
	11⅞	2½	25-612	13	25-712
		3	30-612	15	30-712
		3½	—	17	35-712M
		4	40-612	20	40-712
		5	50-612	25	50-712
	16	2½	25-616	17	25-716
		3	30-616	20	30-716
		4	40-616	27	40-716
		5	50-616	33	50-716
	20	2½	25-620	21	25-720
		3	30-620	25	30-720
		4	40-620	33	40-720
		5	50-620	41	50-720
1 11/16	12	3	30-112	18	30-212
		4	40-112	23	40-212
		5	50-112	29	50-212
		6	60-112	35	60-212
	15	3	30-115	22	30-215
		4	40-115	29	40-215
		5	50-115	36	50-215
		6	60-115	44	60-215
	18	3	30-118	26	30-218
		4	40-118	35	40-218
		5	50-118	44	50-218
		6	60-118	52	60-218
	20	3	30-120	29	30-220
		4	40-120	39	40-220
		5	50-120	48	50-220
		6	60-120	58	60-220
	23½	3	30-123	34	30-223
		4	40-123	45	40-223
		5	50-123	57	50-223
		6	60-123	68	60-223

P	L	C	PLAIN	SLOTTED	
			ITEM NUMBER	NET WT.	ITEM NUMBER
1 11/16 (cont.)	26	3	30-126	38	30-226
		4	40-126	50	40-226
		5	50-126	63	50-226
		6	60-126	75	60-226
	29½	3	30-129	43	30-229
		4	40-129	57	40-229
		5	50-129	71	50-229
		6	60-129	85	60-229
	35½	3	30-135	51	30-235
		4	40-135	68	40-235
		5	50-135	85	50-235
		6	60-135	102	60-235
1⅞	8	2½	25-108V	11	—
	18	3	30-418	29	30-518
		4	40-418	39	40-518
		5	50-418	48	50-518
		6	60-418	58	60-518
	20	3	30-420	32	30-520
		4	40-420	43	40-520
		5	50-420	54	50-520
		6	60-420	64	60-520
	23¾	3	30-424	38	30-524
		4	40-424	51	40-524
		5	50-424	64	50-524
		6	60-424	76	60-524
	26	3	30-426	42	30-526
		4	40-426	56	40-526
		5	50-426	70	50-526
		6	60-426	83	60-526
	29½	3	30-429	48	30-529
		4	40-429	63	40-529
		5	50-429	79	50-529
		6	60-429	95	60-529
	35½	3	30-435	57	30-535
		4	40-435	76	40-535
		5	50-435	95	50-535
		6	60-435	114	60-535

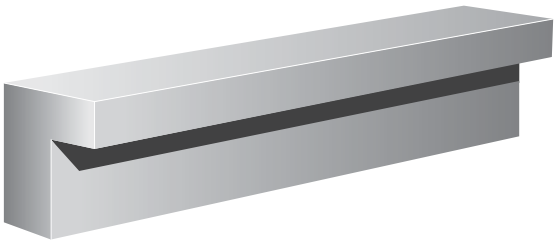
WHEN ORDERING, PLEASE SPECIFY:

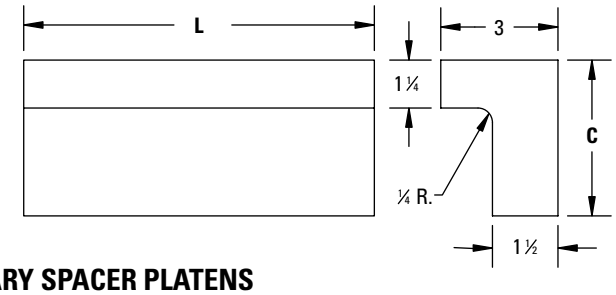
1. Quantity
2. Item Number
3. Method of Shipment

Spacer Blocks
Angle Spacers – D-M-E No. 1 Steel

Riser height ("C" dimension) is finish ground to a tolerance of plus or minus .001".

These Angle Spacers are useful for the buildup of Compression Mold Assemblies.





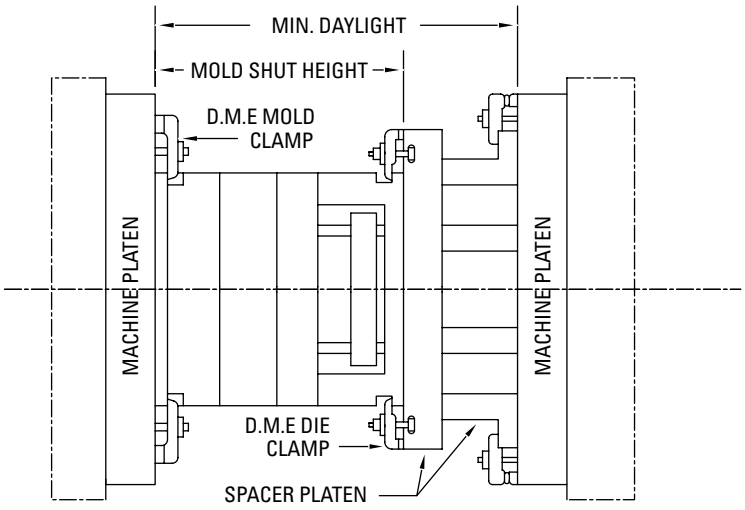
L	C	ITEM NUMBER	NET WT.
12	3	30-312	22
	4	40-312	27
	5	50-312	32
	6	60-312	37
15	3	30-315	28
	4	40-315	34
	5	50-315	40
	6	60-315	47
18	3	30-318	33
	4	40-318	41
	5	50-318	48
	6	60-318	56
20	3	30-320	37
	4	40-320	45
	5	50-320	54
	6	60-320	62
23¾	3	30-324	43
	4	40-324	53
	5	50-324	64
	6	60-324	74
26	3	30-326	47
	4	40-326	59
	5	50-326	70
	6	60-326	81
29½	3	30-329	54
	4	40-329	66
	5	50-329	79
	6	60-329	91
35½	3	30-335	65
	4	40-335	80
	5	50-335	95
	6	60-335	110

WHEN ORDERING, PLEASE SPECIFY:

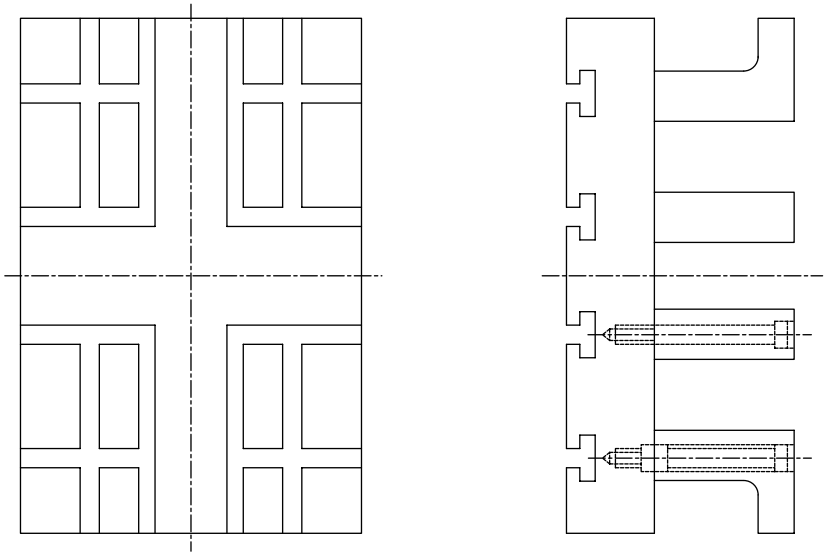
1. Quantity
2. Item Number
3. Method of Shipment

AUXILIARY SPACER PLATENS

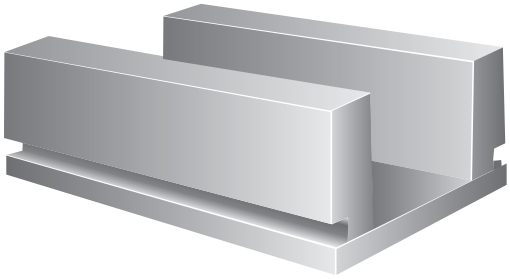
When the use of Auxiliary Spacer Platens becomes necessary to reduce the minimum daylight of the press, the importance of proper rigidity cannot be over-emphasized. The drawing shown here illustrates a typical installation that meets good rigidity requirements. The distance between the parallel spacer blocks is dependent on the location of the knock-out rods on the press.



The drawing shown below illustrates a recommended design that is available from D-M-E on special order. The use of standard D-M-E mold plates and spacer blocks can help keep the cost at a minimum. A detailed drawing should accompany your request for a quotation.

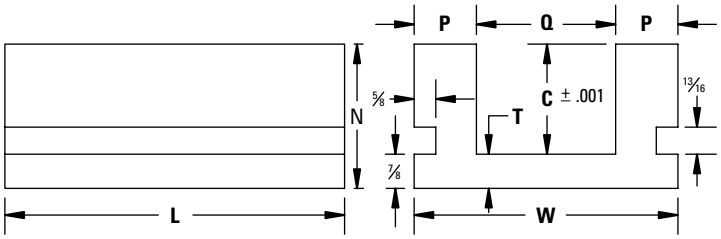


Ejector Housings
7⅞ to 13⅜ Wide – D-M-E No. 1 Steel



One piece construction provides more rigid support for plastics molds or die cast dies.

Riser height ("C" dimension) is finish ground to a tolerance of plus or minus .001". Outer surfaces are finished square and parallel.



NOTE: Thickness of the base plate (T) is ⅞" for all sizes from 7⅞" to 19½" wide. The base plate for the 23¾" wide series is 1⅜" thick.

* ½ on 88A and 812A Series Mold Bases

DETAIL DIMENSIONS

W	7⅞	9⅞	10⅞	11⅞	13⅜	14⅞	15⅞	16½	17⅞	19½	23¾
P	1¼	1 1/16	1 1/16	1 1/16	1⅞	1⅞	1⅞	1⅞	1⅞	1⅞	1⅞
Q	5⅜	7"	7½	8½	9⅝	11⅛	12⅛	12¾	14⅛	15¾	20"

C	Height of Riser	2½	3"	3½	4"	4½
N	7⅞ to 19½ Wide Housings	3⅜	3⅞	4⅜	4⅞	5⅜
	23¾ Wide Housings	3⅞	4⅜	4⅞	5⅜	5⅞

W	L	C	ITEM NUMBER	NET WT.
7⅞	7⅞	2½	25-88	28
		3	30-88	30
		3½	35-88	33
		4	40-88	36
		4½	45-88	39
	11⅞	2½	25-812	42
		3	30-812	45
		3½	35-812	50
		4	40-812	54
		4½	45-812	59
9⅞	7⅞	2½	25-108R	34
	8	2½	25-108	34
		3	30-108	37
		3½	35-108	41
		4	40-108	44
		4½	45-108	47
	11⅞	2½	25-1012	50
		3	30-1012	55
		3½	35-1012	60
		4	40-1012	65
		4½	45-1012	70
	16	2½	25-1016	68
		3	30-1016	74
		3½	35-1016	81
		4	40-1016	87
		4½	45-1016	94
	20	2½	25-1020	84
		3	30-1020	93
		3½	35-1020	101
		4	40-1020	109
		4½	45-1020	117

W	L	C	ITEM NUMBER	NET WT.
10⅞	12	2½	25-1112	58
		3	30-1112	64
		3½	35-1112	70
		4	40-1112	75
		4½	45-1112	81
	14	2½	25-1114	68
		3	30-1114	74
		3½	35-1114	81
		4	40-1114	88
		4½	45-1114	94
	18	2½	25-1118	87
		3	30-1118	95
		3½	35-1118	104
		4	40-1118	113
		4½	45-1118	121
	23½	2½	25-1123	113
		3	30-1123	124
		3½	35-1123	136
		4	40-1123	147
		4½	45-1123	158
11⅞	12	3	30-1212	67
		3½	35-1212	73
		4	40-1212	78
		4½	45-1212	84
	15	3	30-1215	83
		3½	35-1215	91
		4	40-1215	98
		4½	45-1215	105

W	L	C	ITEM NUMBER	NET WT.
11⅞ (cont.)	20	3	30-1220	111
		3½	35-1220	121
		4	40-1220	130
		4½	45-1220	140
	23½	3	30-1223	130
		3½	35-1223	142
		4	40-1223	153
		4½	45-1223	164
13⅜	15	3	30-1315	94
		3½	35-1315	102
		4	40-1315	110
		4½	45-1315	118
	18	3	30-1318	112
		3½	35-1318	122
		4	40-1318	131
		4½	45-1318	141
	20¾	3	30-1321	129
		3½	35-1321	140
		4	40-1321	152
		4½	45-1321	163
	23½	3	30-1323	147
		3½	35-1323	159
		4	40-1323	172
		4½	45-1323	184
	26	3	30-1326	162
		3½	35-1326	176
		4	40-1326	190
		4½	45-1326	204

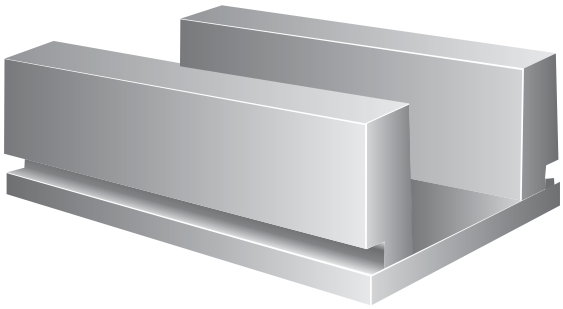
WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Item Number
3. Method of Shipment

Ejector Housings
13⅜ to 23¾ wide – D-M-E No. 1 Steel

One piece construction provides more rigid support for plastics molds or die-cast dies.

Riser height ("C" dimension) is finish ground to a tolerance of plus or minus .001". Outer surfaces are finished square and parallel.



W	L	C	ITEM NUMBER	NET WT.
13⅜ (cont.)	29½	3	30-1329	184
		3½	35-1329	200
		4	40-1329	215
		4½	45-1329	231
14⅞	17⅞	3	30-1518	118
		3½	35-1518	128
		4	40-1518	137
		4½	45-1518	147
	23¾	3	30-1524	157
		3½	35-1524	170
		4	40-1524	182
		4½	45-1524	195
	29½	3	30-1529	195
		3½	35-1529	210
		4	40-1529	226
		4½	45-1529	242
15⅞	16	3	30-1616	110
		3½	35-1616	118
		4	40-1616	127
		4½	45-1616	135
	20	3	30-1620	137
		3½	35-1620	148
		4	40-1620	158
		4½	45-1620	169
	23½	3	30-1623	161
		3½	35-1623	174
		4	40-1623	186
		4½	45-1623	199
	26	3	30-1626	178
		3½	35-1626	192
		4	40-1626	206
		4½	45-1626	220

W	L	C	ITEM NUMBER	NET WT.
15⅞ (cont.)	29½	3	30-1629	202
		3½	35-1629	218
		4	40-1629	233
		4½	45-1629	249
	35½	3	30-1635	243
		3½	35-1635	262
		4	40-1635	281
		4½	45-1635	300
16½	23¾	3	30-1724	166
		3½	35-1724	179
		4	40-1724	192
		4½	45-1724	204
	29½	3	30-1729	207
		3½	35-1729	222
		4	40-1729	238
		4½	45-1729	254
17⅞	18	3	30-1818	132
		3½	35-1818	142
		4	40-1818	152
		4½	45-1818	161
	20	3	30-1820	147
		3½	35-1820	158
		4	40-1820	168
		4½	45-1820	179
	23½	3	30-1823	173
		3½	35-1823	185
		4	40-1823	198
		4½	45-1823	210
	26	3	30-1826	191
		3½	35-1826	205
		4	40-1826	219
		4½	45-1826	233

W	L	C	ITEM NUMBER	NET WT.
17⅞ (cont.)	29½	3	30-1829	217
		3½	35-1829	232
		4	40-1829	248
		4½	45-1829	264
	35½	3	30-1835	261
		3½	35-1835	280
		4	40-1835	298
		4½	45-1835	317
19½	23¾	3	30-1924	184
		3½	35-1924	197
		4	40-1924	209
		4½	45-1924	222
	29½	3	30-1929	229
		3½	35-1929	244
		4	40-1929	260
		4½	45-1929	276
23¾	35½	3	30-1935	275
		3½	35-1935	294
		4	40-1935	313
		4½	45-1935	332
	23¾	3	30-2424	289
		3½	35-2424	302
		4	40-2424	314
		4½	45-2424	327
	29½	3	30-2429	359
		3½	35-2429	375
		4	40-2429	390
		4½	45-2429	406
	35½	3	30-2435	432
		3½	35-2435	451
		4	40-2435	470
		4½	45-2435	488

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Item Number
3. Method of Shipment

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

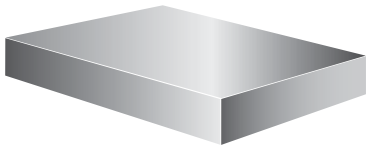
Mold Plates, Ejector and Ejector Retainer Plates and Ejector Housings

Mold Plates

For 34 & 45R, 56 & 58N, 56 & 58U Mold Assemblies

(For cavity, support and top clamping plates).

TYPE OF SEAL	A (THICKNESS)	3½ × 3¾		4" × 5"		5" × 6"		5" × 8"	
		ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.
No. 2	⅜	34-3	1.4	—	—	—	—	—	—
	½	34-4	1.9	—	—	—	—	—	—
	⅝	—	—	45-5	3.5	—	—	—	—
No. 3	⅞	34-7 *	3.3	45-7 *	4.9	56-7 *	7.5	58-7 *	10.0
No. 2	1	—	—	—	—	56-8	8.5	58-8	11.4
No. 3	1⅛	34-11	4.2	—	—	—	—	—	—
	1⅜	34-13 *	5.2	45-13 *	7.8	56-13 *	11.7	58-13 *	15.6
	1⅞	—	—	45-17 *	10.6	56-17 *	16.0	58-17 *	21.3



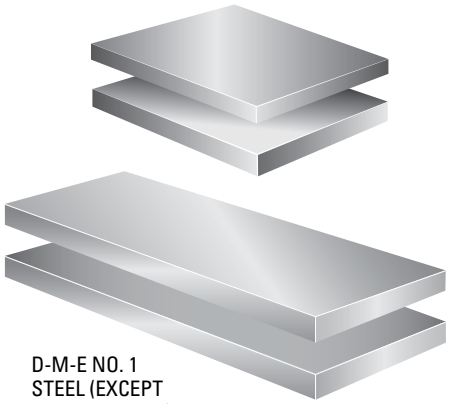
Thickness of plate is finish ground to a tolerance of plus or minus .001". Width and length are finished square and parallel.

NOTE: Plates marked with a * are also available as cavity insert blocks with additional stock allowance. Please specify **mold plate** when ordering these sizes from this page.

Ejector and Ejector Retainer Plates

For 34 & 45R, 56 & 58N, 56 & 58U Mold Assemblies

A	2½ × 3½		3⅛ × 4"		3⅛ × 8"	
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.
3/16	6-34	.5	—	—	—	—
⅜	—	—	7-45	1.3	7-58	2.7
½	—	—	6-45	1.8	6-58	3.6



D-M-E NO. 1 STEEL (EXCEPT 6-34 = SAE 1020)

EJECTOR PLATES

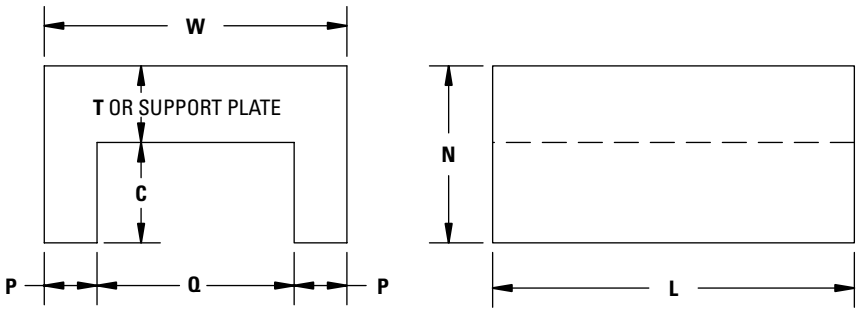
Thickness of plate is finish ground to a tolerance of plus or minus .001".

EJECTOR RETAINER PLATES

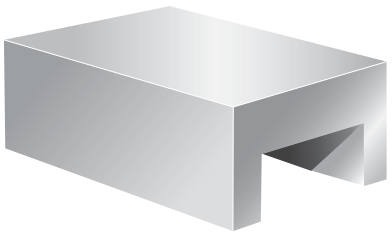
Thickness of plate is rotary ground to a tolerance of plus .015", minus .000".

Ejector Housings

For 34 & 45R, 56 & 58N, 56 & 58U Mold Assemblies



W	L	C	T OR SUPPORT PLATE	N	P	Q	ITEM NUMBER	No. 1 STEEL	No. 3 STEEL	NET WT.
3¾	3½	1.080	½	1.580	9/16	2⅝	10-34	•	—	3.1
5	4	2	½	2½	⅞	3¼	20-45	•	—	6.8
	6	1⅝	1¼	2⅞	⅞	3¼	15-56	•	•	15.5
	8	1⅝	1¼	2⅞	⅞	3¼	15-58	•	•	20.7
7	6	2	½	2½	15/16	5⅛	20-67	•	—	12.4



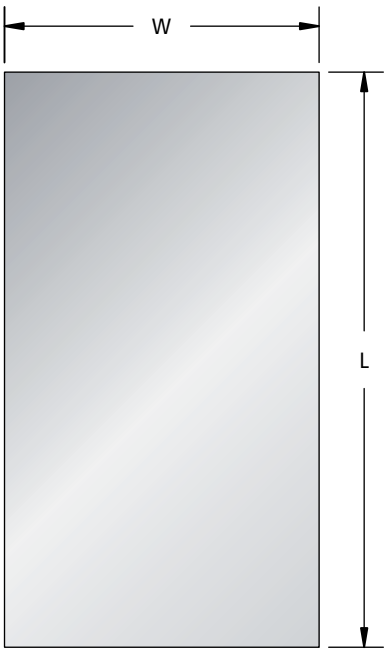
D-M-E NO. 1 STEEL

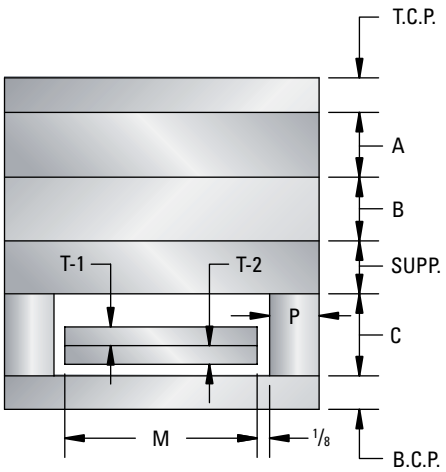
Ejector Housings for small-size Mold Bases are one-piece construction which provides more rigid support with fewer parts. All surfaces are machined square and parallel. The riser height is finish ground parallel to the surface of the base plate.

Large Mold Plate Selection Chart

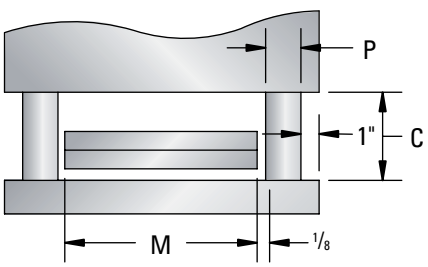
MOLD WIDTH & LENGTH PLATE THICKNESS (A, B & SUPP.)			Top Clamping (T.C.P.) or Bottom Clamping (B.C.P.) Plate Thk.	EJECTOR & EJECTOR RETAINER PLATES			SPACER BLOCKS (RISERS)		
Mold Plate Width W	Mold Plate Length L	Plate Thk. A, B & Supp.		Width M	Ej. Plt. Thk. T-2	Ret. Plt. Thk. T-1	Width P FLUSH Type	Width P RECESSED Type	
26¾	30 36 42 48 54	1⅜ 1⅞ 2⅞ 3⅞ 4⅞ 5⅞	1⅜ or 1⅞	20¾	1⅜ 1⅞	⅞	2⅞	1⅞	5 6 8
				22¾	1⅜ 1⅞	⅞	1⅞	—	5 6 8
29¾	30 36 42 48 54	1⅜ 1⅞ 2⅞ 3⅞ 4⅞ 5⅞	1⅜ or 1⅞	23¾	1⅜ 1⅞	⅞	2⅞	1⅞	5 6 8
				25¾	1⅜ 1⅞	⅞	1⅞	—	5 6 8
33¾	36 42 48 54 60	1⅜ 1⅞ 2⅞ 3⅞ 4⅞ 5⅞	1⅜ or 1⅞	25¾	1⅜ 1⅞	⅞	3⅞	2⅞	5 6 8
				27¾	1⅜ 1⅞	⅞	2⅞	1⅞	5 6 8
				29¾	1⅜ 1⅞	⅞	1⅞	—	5 6 8
37¾	42 48 54 60 66	1⅜ 1⅞ 2⅞ 3⅞ 4⅞ 5⅞	1⅜ or 1⅞	27¾	1⅜ 1⅞	⅞	—	3⅞	5 6 8
				29¾	1⅜ 1⅞	⅞	3⅞	2⅞	5 6 8
				31¾	1⅜ 1⅞	⅞	2⅞	1⅞	5 6 8
				33¾	1⅜ 1⅞	⅞	1⅞	—	5 6 8
41¾	42 48 54 60 66	1⅜ 1⅞ 2⅞ 3⅞ 4⅞ 5⅞	1⅜ or 1⅞	31¾	1⅜ 1⅞	⅞	—	3⅞	5 6 8
				33¾	1⅜ 1⅞	⅞	3⅞	2⅞	5 6 8
				35¾	1⅜ 1⅞	⅞	2⅞	1⅞	5 6 8
				37¾	1⅜ 1⅞	⅞	1⅞	—	5 6 8
45¾	48 54 60 66	1⅜ 1⅞ 2⅞ 3⅞ 4⅞ 5⅞	1⅜ or 1⅞	35¾	1⅜ 1⅞	⅞	—	3⅞	5 6 8
				37¾	1⅜ 1⅞	⅞	3⅞	2⅞	5 6 8
				39¾	1⅜ 1⅞	⅞	2⅞	1⅞	5 6 8

See the following pages for complete specifications.





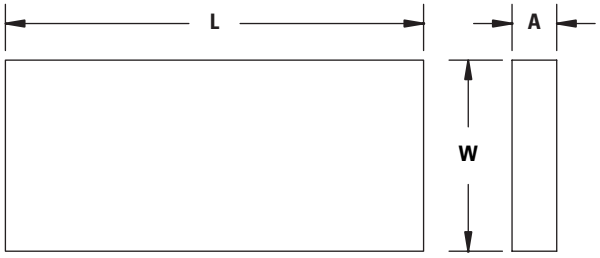
FLUSH TYPE SPACER BLOCK ARRANGEMENT

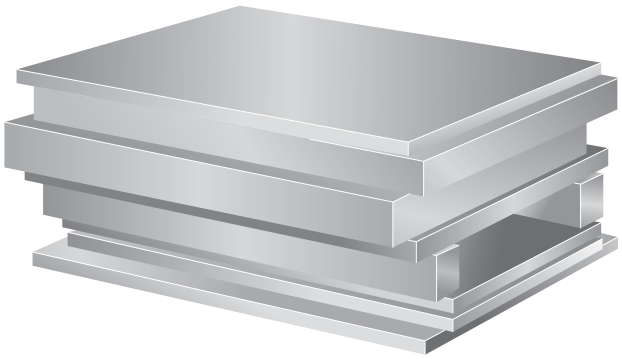


RECESSED TYPE SPACER BLOCK ARRANGEMENT

NOTE: ALL SPACER BLOCKS ARE PLAIN (NO SLOTS)

Large Mold Plates
26¾ through 33¾ wide





A	26¾ × 30″		26¾ × 36″		26¾ × 42″		26¾ × 48″		26¾ × 54″		29¾ × 30″		29¾ × 36″		29¾ × 42″		A
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	
1⅜	2730-13	313	2736-13	376	2742-13	438	2748-13	501	2754-13	563	3030-13	348	3036-13	418	3042-13	487	1⅜
1⅞	2730-17	427	2736-17	512	2742-17	597	2748-17	683	2754-17	768	3030-17	475	3036-17	569	3042-17	664	1⅞
2⅞	2730-27	654	2736-27	785	2742-27	916	2748-27	1046	2754-27	1177	3030-27	727	3036-27	873	3042-27	1018	2⅞
3⅞	2730-37	881	2736-37	1058	2742-37	1234	2748-37	1410	2754-37	1586	3030-37	980	3036-37	1176	3042-37	1372	3⅞
4⅞	2730-47	1109	2736-47	1330	2742-47	1552	2748-47	1774	2754-47	1995	3030-47	1233	3036-47	1480	3042-47	1726	4⅞
5⅞	2730-57	1336	2736-57	1603	2742-57	1870	2748-57	2138	2754-57	2405	3030-57	1486	3036-57	1783	3042-57	2080	5⅞

A	29¾ × 48″		29¾ × 54″		33¾ × 36″		33¾ × 42″		33¾ × 48″		33¾ × 54″		33¾ × 60″		A
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	
1⅜	3048-13	557	3054-13	626	3436-13	474	3442-13	553	3448-13	632	3454-13	710	3460-13	789	1⅜
1⅞	3048-17	759	3054-17	854	3436-17	646	3442-17	753	3448-17	861	3454-17	969	3460-17	1076	1⅞
2⅞	3048-27	1164	3054-27	1309	3436-27	990	3442-27	1155	3448-27	1320	3454-27	1485	3460-27	1650	2⅞
3⅞	3048-37	1568	3054-37	1764	3436-37	1334	3442-37	1557	3448-37	1779	3454-37	2001	3460-37	2224	3⅞
4⅞	3048-47	1973	3054-47	2219	3436-47	1679	3442-47	1958	3448-47	2238	3454-47	2518	3460-47	2797	4⅞
5⅞	3048-57	2377	3054-57	2674	3436-57	2023	3442-57	2360	3448-57	2697	3454-57	3034	3460-57	3371	5⅞

Thickness of plate is rotary ground to a tolerance of plus .010", minus .000". Width and length are machined square and parallel to a tolerance of +.015/+.020.

D-M-E No. 1 Steel

D-M-E No. 1 steel is a medium carbon (SAE 1030), silicon-killed forging quality steel with approximately 25% greater tensile strength than typical low-carbon warehouse steels.

D-M-E No. 2 Steel

D-M-E No. 2 steel is an AISI 4130 type steel. It is supplied pre-heat treated to 28-34 HRC (271-321 Bhn). A high-strength steel, D-M-E No. 2 is ideal for cavity and core retainer plates, clamping plates, and support plates in molds and dies.

D-M-E No. 3 Steel

D-M-E No. 3 steel is a P-20 AISI 4130 (modified) type cavity steel, pre-heat treated to 28-34 HRC (271-321 Bhn). It provides high hardness, good machinability and exceptional polishability for both plastics molds and die cast dies.

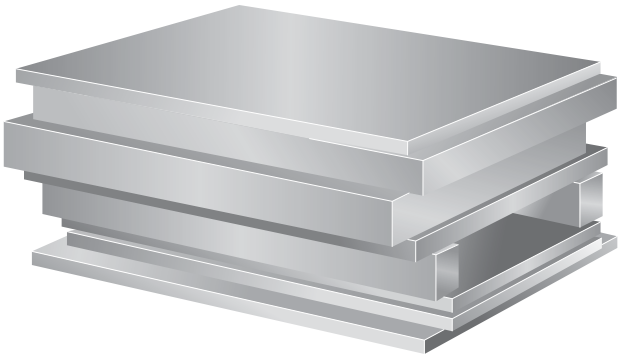
WHEN ORDERING, PLEASE SPECIFY:

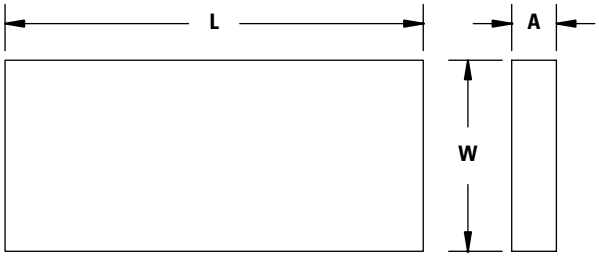
1. Quantity & Item Number
2. No. 1, No. 2 or No. 3 Steel
3. Method of Shipment

NOTE:

Other sizes and materials are available by special order.

Large Mold Plates
37¾ Through 45¾ Wide





A	37¾ × 42"		37¾ × 48"		37¾ × 54"		37¾ × 60"		37¾ × 66"		41¾ × 42"		41¾ × 48"		41¾ × 54"		A
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	
1⅜	3842-13	618	3848-13	706	3854-13	795	3860-13	883	3866-13	971	4242-13	684	4248-13	781	4254-13	879	1⅜
1⅞	3842-17	843	3848-17	963	3854-17	1083	3860-17	1204	3866-17	1324	4242-17	932	4248-17	1065	4254-17	1198	1⅞
2⅞	3842-27	1292	3848-27	1476	3854-27	1661	3860-27	1845	3866-27	2030	4242-27	1429	4248-27	1633	4254-27	1837	2⅞
3⅞	3842-37	1741	3848-37	1990	3854-37	2238	3860-37	2487	3866-37	2736	4242-37	1925	4248-37	2200	4254-37	2475	3⅞
4⅞	3842-47	2190	3848-47	2503	3854-47	2816	3860-47	3129	3866-47	3441	4242-47	2422	4248-47	2768	4254-47	3114	4⅞
5⅞	3842-57	2639	3848-57	3016	3854-57	3393	3860-57	3770	3866-57	4147	4242-57	2919	4248-57	3336	4254-57	3753	5⅞

A	41¾ × 60"		41¾ × 66"		45¾ × 48"		45¾ × 54"		45¾ × 60"		45¾ × 66"		A
	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	ITEM NUMBER	NET WT.	
1⅜	4260-13	976	4266-13	1074	4648-13	856	4654-13	963	4660-13	1070	4666-13	1177	1⅜
1⅞	4260-17	1331	4266-17	1464	4648-17	1167	4654-17	1313	4660-17	1459	4666-17	1604	1⅞
2⅞	4260-27	2041	4266-27	2245	4648-27	1789	4654-27	2013	4660-27	2236	4666-27	2460	2⅞
3⅞	4260-37	2750	4266-37	3025	4648-37	2411	4654-37	2713	4660-37	3014	4666-37	3315	3⅞
4⅞	4260-47	3806	4266-47	3460	4648-47	3033	4654-47	3412	4660-47	3792	4666-47	4171	4⅞
5⅞	4260-57	4170	4266-57	4587	4648-57	3655	4654-57	4112	4660-57	4569	4666-57	5026	5⅞

Thickness of plate is rotary ground to a tolerance of plus .010", minus .000". Width and length are machined square and parallel to a tolerance of plus +.015/+.020.

D-M-E No. 1 Steel

D-M-E No. 1 steel is a medium carbon (SAE 1030), silicon-killed forging quality steel with approximately 25% greater tensile strength than typical low-carbon warehouse steels.

D-M-E No. 2 Steel

D-M-E No. 2 steel is an AISI 4130 type steel. It is supplied pre-heat treated to 28-34 HRC (271-321 Bhn). A high strength steel, D-M-E No. 2 is ideal for cavity and core retainer plates, clamping plates, and support plates in molds and dies.

D-M-E No. 3 Steel

D-M-E No. 3 steel is a P-20 AISI 4130 (modified) type cavity steel, pre-heat treated to 28-34 HRC (271-321 Bhn). It provides high hardness, good machinability and exceptional polishability for both plastics molds and die cast dies.

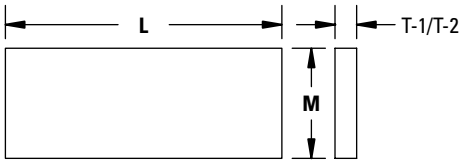
WHEN ORDERING, PLEASE SPECIFY:

1. Quantity & Item Number
2. No. 1, No. 2 or No. 3 Steel
3. Method of Shipment

NOTE:

Other sizes and materials are available by special order.

Ejector Plates and Ejector Retainer Plates for Large Mold Assemblies – D-M-E No. 1 Steel



Thickness of plate is rotary ground to a tolerance of plus .010", minus .000". Width and length are machined square and parallel to a tolerance of plus .020", minus .000".

T-1/T-2	M	L	ITEM NUMBER	NET WT.
7/8	20¾	30	7-2130-7	155
		36	7-2136-7	186
		42	7-2142-7	217
		48	7-2148-7	247
		54	7-2154-7	278
	22¾	30	7-2330-7	170
		36	7-2336-7	204
		42	7-2342-7	237
		48	7-2348-7	271
		54	7-2354-7	305
	23¾	30	7-2430-7	177
		36	7-2436-7	212
		42	7-2442-7	248
		48	7-2448-7	283
		54	7-2454-7	318
		60	7-2460-7	354
	25¾	30	7-2630-7	192
		36	7-2636-7	230
		42	7-2642-7	269
		48	7-2648-7	307
		54	7-2654-7	345
		60	7-2660-7	383
	27¾	36	7-2836-7	248
		42	7-2842-7	289
		48	7-2848-7	331
		54	7-2854-7	372
		60	7-2860-7	413
		66	7-2866-7	454
	29¾	36	7-3036-7	266
		42	7-3042-7	310
		48	7-3048-7	354
		54	7-3054-7	399
		60	7-3060-7	443
		66	7-3066-7	487
	31¾	42	7-3242-7	331
		48	7-3248-7	378
		54	7-3254-7	425
		60	7-3260-7	473
		66	7-3266-7	520
	33¾	42	7-3442-7	352
		48	7-3448-7	402
		54	7-3454-7	452
		60	7-3460-7	502
		66	7-3466-7	553
	35¾	42	7-3642-7	373
		48	7-3648-7	426
		54	7-3654-7	479
		60	7-3660-7	532
		66	7-3666-7	585
	37¾	42	7-3842-7	394
		48	7-3848-7	450
		54	7-3854-7	506
		60	7-3860-7	562
		66	7-3866-7	618
	39¾	48	7-4048-7	473
		54	7-4054-7	533
		66	7-4060-7	592
		66	7-4066-7	651

T-1/T-2	M	L	ITEM NUMBER	NET WT.
1 3/8	20¾	30	6-2130-13	243
		36	6-2136-13	291
		42	6-2142-13	340
		48	6-2148-13	388
		54	6-2154-13	437
	22¾	30	6-2330-13	266
		36	6-2336-13	320
		42	6-2342-13	373
		48	6-2348-13	426
		54	6-2354-13	479
	23¾	30	6-2430-13	278
		36	6-2436-13	334
		42	6-2442-13	389
		48	6-2448-13	445
		54	6-2454-13	500
		60	6-2460-13	556
	25¾	30	6-2630-13	301
		36	6-2636-13	362
		42	6-2642-13	422
		48	6-2648-13	482
		54	6-2654-13	542
		60	6-2660-13	602
	27¾	36	6-2836-13	390
		42	6-2842-13	454
		48	6-2848-13	519
		54	6-2854-13	584
		60	6-2860-13	649
		66	6-2866-13	714
	29¾	36	6-3036-13	478
		42	6-3042-13	487
		48	6-3048-13	557
		54	6-3054-13	626
		60	6-3060-13	696
		66	6-3066-13	765
	31¾	42	6-3242-13	520
		48	6-3248-13	594
		54	6-3254-13	668
		60	6-3260-13	743
		66	6-3266-13	817
	33¾	42	6-3442-13	553
		48	6-3448-13	632
		54	6-3454-13	710
		60	6-3460-13	789
		66	6-3466-13	868
	35¾	42	6-3642-13	585
		48	6-3648-13	669
		54	6-3654-13	752
		60	6-3660-13	836
		66	6-3666-13	920
	37¾	42	6-3842-13	618
		48	6-3848-13	706
		54	6-3854-13	795
		60	6-3860-13	883
		66	6-3866-13	971
	39¾	48	6-4048-13	744
		54	6-4054-13	837
		66	6-4060-13	930
		66	6-4066-13	1022

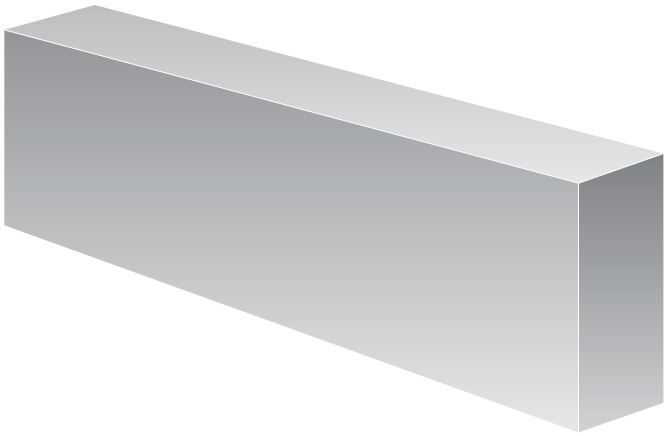
T-1/T-2	M	L	ITEM NUMBER	NET WT.
1 7/8	20¾	30	6-2130-17	331
		36	6-2136-17	397
		42	6-2142-17	463
		48	6-2148-17	530
		54	6-2154-17	596
	22¾	30	6-2330-17	363
		36	6-2336-17	436
		42	6-2342-17	508
		48	6-2348-17	581
		54	6-2354-17	653
	23¾	30	6-2430-17	379
		36	6-2436-17	455
		42	6-2442-17	530
		48	6-2448-17	606
		54	6-2454-17	682
		60	6-2460-17	757
	25¾	30	6-2630-17	411
		36	6-2636-17	493
		42	6-2642-17	575
		48	6-2648-17	657
		54	6-2654-17	739
		60	6-2660-17	821
	27¾	36	6-2836-17	531
		42	6-2842-17	620
		48	6-2848-17	708
		54	6-2854-17	796
		60	6-2860-17	885
		66	6-2866-17	973
	29¾	36	6-3036-17	569
		42	6-3042-17	664
		48	6-3048-17	759
		54	6-3054-17	854
		60	6-3060-17	949
		66	6-3066-17	1043
	31¾	42	6-3242-17	709
		48	6-3248-17	810
		54	6-3254-17	911
		60	6-3260-17	1012
		66	6-3266-17	1114
	33¾	42	6-3442-17	753
		48	6-3448-17	861
		54	6-3454-17	969
		60	6-3460-17	1076
		66	6-3466-17	1184
	35¾	42	6-3642-17	798
		48	6-3648-17	912
		54	6-3654-17	1026
		60	6-3660-17	1140
		66	6-3666-17	1254
	37¾	42	6-3842-17	843
		48	6-3848-17	963
		54	6-3854-17	1083
		60	6-3860-17	1204
		66	6-3866-17	1324
	39¾	48	6-4048-17	1014
		54	6-4054-17	1141
		66	6-4060-17	1267
		66	6-4066-17	1394

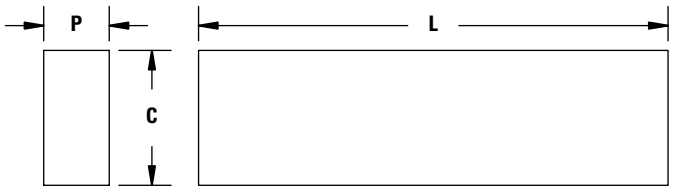
WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Item Number
3. Method of Shipment

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Spacer Blocks for Large Mold Assemblies
D-M-E No. 1 Steel





Machined all over. Riser heights ("C" dimension) are finish ground to a tolerance of plus or minus .001".

P	C	L	ITEM NUMBER	NET WT.
1⅞	5	30	50-1730	80
		36	50-1736	96
		42	50-1742	112
		48	50-1748	128
		54	50-1754	144
		60	50-1760	160
		66	50-1766	176
	6	30	60-1730	96
		36	60-1736	115
		42	60-1742	134
		48	60-1748	153
		54	60-1754	173
		60	60-1760	192
		66	60-1766	211
	8	30	80-1730	128
		36	80-1736	153
		42	80-1742	179
		48	80-1748	204
		54	80-1754	230
		60	80-1760	255
		66	80-1766	281

P	C	L	ITEM NUMBER	NET WT.
2⅞	5	30	50-2730	123
		36	50-2736	147
		42	50-2742	172
		48	50-2748	196
		54	50-2754	220
		60	50-2760	245
		66	50-2766	269
	6	30	60-2730	147
		36	60-2736	176
		42	60-2742	206
		48	60-2748	235
		54	60-2754	264
		60	60-2760	294
		66	60-2766	323
	8	30	80-2730	196
		36	80-2736	235
		42	80-2742	274
		48	80-2748	313
		54	80-2754	352
		60	80-2760	391
		66	80-2766	431

P	C	L	ITEM NUMBER	NET WT.
3⅞	5	–	–	–
		36	50-3736	198
		42	50-3742	231
		48	50-3748	264
		54	50-3754	297
		60	50-3760	330
		66	50-3766	363
	6	–	–	–
		36	60-3736	238
		42	60-3742	277
		48	60-3748	317
		54	60-3754	356
		60	60-3760	396
		66	60-3766	435
	8	–	–	–
		36	80-3736	317
		42	80-3742	369
		48	80-3748	422
		54	80-3754	475
		60	80-3760	527
		66	80-3766	580

WHEN ORDERING, PLEASE SPECIFY:

1. Quantity
2. Item Number
3. Method of Shipment

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Steel Processing Services to meet your Special Requirements



D-M-E Company has been buying, cutting, machining and finishing high-quality steel for seven decades. We understand that our customers face unprecedented demands for speed, cost reduction and performance. To assist you in meeting your challenges, we've developed an industry-leading steel processing infrastructure, including the specialized equipment and technical expertise to handle the most demanding steel requirements. It's a unique capability that's just one way D-M-E strives to be an essential resource to the customers we serve.

D-M-E's North American manufacturing locations have some of the largest, most modern sawing, straightening, milling and grinding equipment in the industry. As one of the world's largest users of alloy steel plate, D-M-E has a close working relationship with the leading steel mills. This provides you with the ability to meet whatever special steel requirements you may have by working with us. Steel plates and blocks of any size and grade of steel are available from D-M-E.

Any specified steel condition – rough, semi-finished or finished (milled or ground) is available to order. Even specially machined large blocks and plates are available.

Steel Plate

Let D-M-E quote your machining requirements for steel plate. As a convenient, one-stop solution, D-M-E can reduce your overall costs whether your needs only require plate machining, or drilling, tapping, boring, and milling, as well. D-M-E prides itself on providing highly competent technical support and highly responsive customer service. We specialize in supplying the steel product that meets your exact specification.

Steel Processing Services

D-M-E's steel processing services for moldmakers and die casters provide a full array of steel machining capabilities to customers worldwide. D-M-E can supply plates, strips and blocks from our inventory or accept your material for the machining services we offer.

Available Services

D-M-E can execute CNC machining to your exact specifications whether we're provided hand drawings or CAD files. The list below includes just some of the services that we handle every day:

- Steel plates, strips and blocks up to 6⅛" thick available in 1030, 4130, P-20 and 420F
- Plate sawing up to 150" long and 20" thick
- Flame cut strips up to 6⅛" thick
- Horizontal and vertical band sawing
- Flattening with 2,000-ton press or roller leveling
- Milling up to 150" long, 46" wide and 20" thick
- Edge milling up to 70" square; beveled edge machining
- Rotary grinding on 84" or 42" Blanchard or double-disc grinding
- Finish grinding up to 40" wide

Quality You Can Count On!

Quality has been and continues to be a part of our fabric at D-M-E, and our undying commitment to quality extends throughout all facets of our business. To maintain customer focus, all D-M-E Quality Management Systems are ISO 9001:2000 certified. We undergo continuous testing for quality including consistently measuring tooling, calibrating our machinery, and inspecting finished work to ensure our customers receive quality they can count on. The D-M-E high standard for quality has been a hallmark of D-M-E since its inception and is just another aspect of how we partner with you every step of the way.

D-M-E Molding Supplies

CLEAN AND PROTECT YOUR MOLDS WITH D-M-E MOLD CLEANER AND MOLD SAVER



Mold Cleaner and Mold Saver

D-M-E MOLD CLEANER

D-M-E Mold Cleaner is used to remove corrosion forming substances such as lactic acid, urea and sodium chloride, which are common in perspiration residues left by ordinary handling of polished cavities. In addition to cleaning the polished cavity it also provides up to 20 days rust protection at temperatures to 120°F at 100% humidity.

Use D-M-E Mold Cleaner to clean polished mold surfaces and protect them for up to 20 days. Use D-M-E Mold Saver for long lasting protection from corrosion.



ITEM NUMBER	MOLD CLEANER DESCRIPTION
CLE 0001	(1) 12 oz. aerosol can
CLE 0012	Case of (12) 12 oz. aerosol cans
CLE 0004	(1) one gallon can
CLE 0016	Case of (4) one gallon cans

See the D-M-E Equipment and Supplies catalog for moldmaker supplies. For a complete line of Molding Supplies, contact D-M-E to receive a catalog.

Available in 12 oz. aerosol or 1 gallon non-aerosol... individually or by the case.

D-M-E MOLD SAVER

D-M-E Mold Saver is an ideal protective coating for molds to be stored over a long period of time. It protects polished cavities and all metal parts from costly corrosion damage. Its thin, transparent film averages about .0003" thick. It is soft, dry and waxy and can be easily wiped off without solvents. One can of Mold Saver covers about 80 square feet.



ITEM NUMBER	MOLD SAVER DESCRIPTION
SAV 0001	(1) 12 oz. aerosol can
SAV 0012	Case of (12) 12 oz. aerosol cans
SAV 0004	(1) one gallon can
SAV 0016	Case of (4) one gallon cans

QUANTITY DISCOUNT:

2 to 5 cases ..... Less 3%
6 to 19 cases ..... Less 5%
20 to 50 cases ..... Less 8%
51 or more cases ..... Less 12%

BLANKET ORDER DISCOUNT:

Money-saving blanket orders reduce your inventory costs and permit maximum savings over a twelve month period. They are accepted provided the combined annual order totals 20 cases or more. Split shipments against blanket orders must be in quantities of 10 cases or more.

ACCESSORIES FOR MOLD CLEANER AND MOLD SAVER



TRIGGER PUMPS
for 15 oz. cans

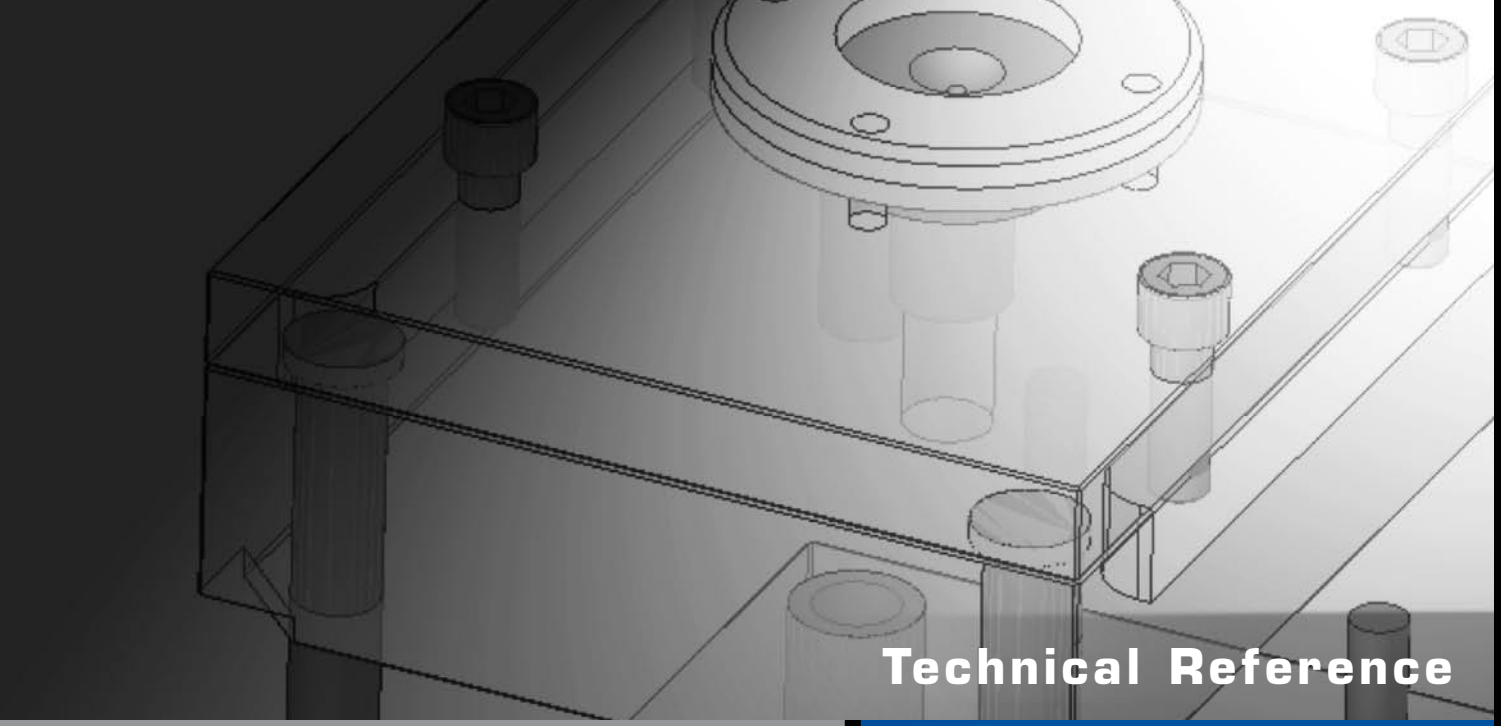
ITEM NUMBER	DESCRIPTION
SAV 0003	Package of (6) trigger pumps



"SURE SHOT" COMPRESSED-AIR SPRAY CANISTER

Holds one quart of Mold Cleaner or Mold Saver. Metal can is refillable and reusable. Includes stemmed air valve and safety valve.

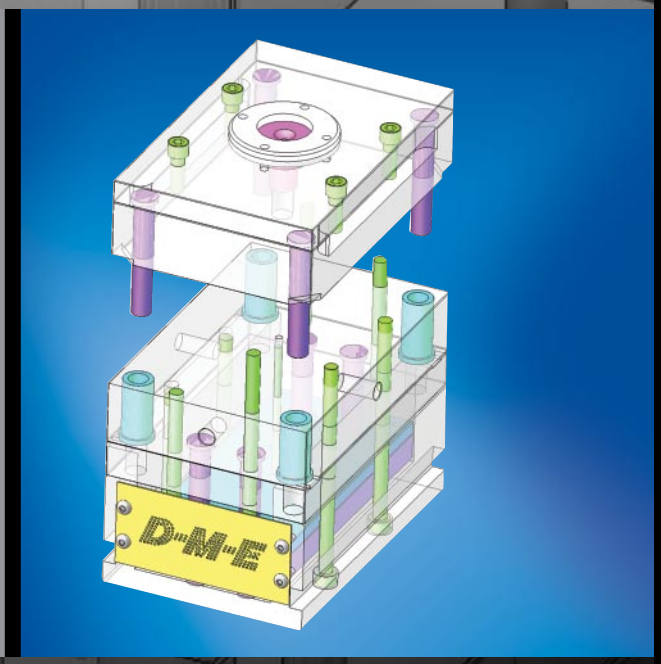
ITEM NUMBER
SAV 0002

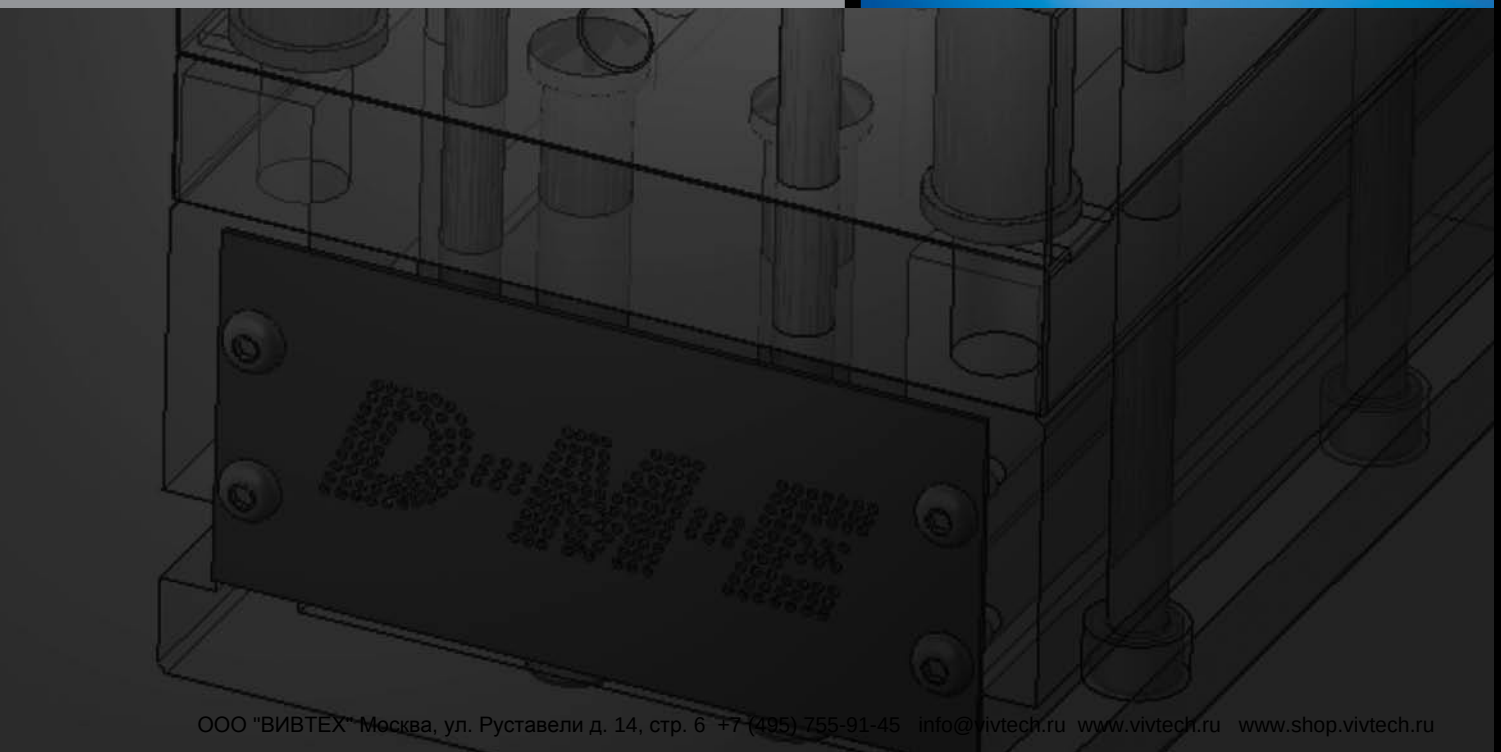


Technical Reference

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Metric Equivalents and Conversions

Equivalents: Inch, fraction, decimal, millimeter

INCHES	MILLIMETERS	INCHES	MILLIMETERS
1	25.4	34	863.6
2	50.8	35	889.0
3	76.2	36	914.4
4	101.6	37	939.8
5	127.0	38	965.2
6	152.4	39	990.6
7	177.8	40	1016.0
8	203.2	41	1041.4
9	228.6	42	1066.8
10	254.0	43	1092.2
11	279.4	44	1117.6
12	304.8	45	1143.0
13	330.2	46	1168.4
14	355.6	47	1193.8
15	381.0	48	1219.2
16	406.4	49	1244.6
17	431.8	50	1270.0
18	457.2	51	1295.4
19	482.6	52	1320.8
20	508.0	53	1346.2
21	533.4	54	1371.6
22	558.8	55	1397.0
23	584.2	56	1422.4
24	609.6	57	1447.8
25	635.0	58	1473.2
26	660.4	59	1498.6
27	685.8	60	1524.0
28	711.2	61	1549.4
29	736.6	62	1574.8
30	762.0	63	1600.2
31	787.4	64	1625.6
32	812.8	65	1651.0
33	838.2	66	1676.4

INCHES		MILLIMETERS	INCHES		MILLIMETERS
1/64	0.015625	0.396875	33/64	0.515625	13.096875
1/32	0.031250	0.793750	17/32	0.531250	13.493750
3/64	0.046875	1.190625	35/64	0.546875	13.890625
1/16	0.062500	1.587500	9/16	0.562500	14.287500
5/64	0.078125	1.984375	37/64	0.578125	14.684375
3/32	0.093750	2.381250	19/32	0.593750	15.081250
7/64	0.109375	2.778125	39/64	0.609375	15.478125
1/8	0.125000	3.175000	5/8	0.625000	15.875000
9/64	0.140625	3.571875	41/64	0.640625	16.271875
5/32	0.156250	3.968750	21/32	0.656250	16.668750
11/64	0.171875	4.365625	43/64	0.671875	17.065625
3/16	0.187500	4.762500	11/16	0.687500	17.462500
13/64	0.203125	5.159375	45/64	0.703125	17.859375
7/32	0.218750	5.556250	23/32	0.718750	18.256250
15/64	0.234375	5.953125	47/64	0.734375	18.653125
1/4	0.250000	6.350000	3/4	0.750000	19.050000
17/64	0.265625	6.746875	49/64	0.765625	19.446875
9/32	0.281250	7.143750	25/32	0.781250	19.843750
19/64	0.296875	7.540625	51/64	0.796875	20.240625
5/16	0.312500	7.937500	13/16	0.812500	20.637500
21/64	0.328125	8.334375	53/64	0.828125	21.034375
11/32	0.343750	8.731250	27/32	0.843750	21.431250
23/64	0.359375	9.128125	55/64	0.859375	21.828125
3/8	0.375000	9.525000	7/8	0.875000	22.225000
25/64	0.390625	9.921875	57/64	0.890625	22.621875
13/32	0.406250	10.318750	29/32	0.906250	23.018750
27/64	0.421875	10.715625	59/64	0.921875	23.415625
7/16	0.437500	11.112500	15/16	0.937500	23.812500
29/64	0.453125	11.509375	61/64	0.953125	24.209375
15/32	0.468750	11.906250	31/32	0.968750	24.606250
31/64	0.484375	12.303125	63/64	0.984375	25.003125
1/2	0.500000	12.700000	1	1.000000	25.400000

Equivalents: Decimal, millimeter

INCHES	MILLIMETERS	INCHES	MILLIMETERS	INCHES	MILLIMETERS
0.001	0.0254	0.01	0.254	0.1	2.54
0.002	0.0508	0.02	0.508	0.2	5.08
0.003	0.0762	0.03	0.762	0.3	7.62
0.004	0.1016	0.04	1.016	0.4	10.16
0.005	0.1270	0.05	1.270	0.5	12.70
0.006	0.1524	0.06	1.524	0.6	15.24
0.007	0.1778	0.07	1.778	0.7	17.78
0.008	0.2032	0.08	2.032	0.8	20.32
0.009	0.2286	0.09	2.286	0.9	22.86

Measurement conversions

MULTIPLY BY	FROM → TO	TO ← FROM	MULTIPLY BY
0.03937	inch	millimeter	25.4
0.0016	inch^2	millimeter^2	645.16
0.061	inch^3	centimeter^3	16.3871
0.2642	gallon (U.S.)	liter	3.7854
0.03527	oz. (avdp.)	gram	28.3495
2.2044	pound	kilogram	0.4536
62.43	lbs/ft^3	g/cm^3	0.0160
0.145	psi	kPa	6.8948
14.2247	psi	kg/cm^2	0.0703
1.8°C + 32	°F	°C	(°F-32)/1.8

Steel Hardness Chart

CROSS-REFERENCE BETWEEN DIFFERENT HARDNESS MEASUREMENTS					
BRINELL HARDNESS BHN*	VICKERS HARDNESS HV	ROCKWELL HARDNESS HRA	ROCKWELL HARDNESS HRB	ROCKWELL HARDNESS HRC	SHORE HARDNESS HS
10mm BALL, 3000kgf LOAD	136° DIAMOND PYRAMID, 10kgf LOAD	BRALE PENETRATOR, 60kgf LOAD	1/16 INCH BALL, 100kgf LOAD	BRALE PENETRATOR, 150kgf LOAD	
86	90		48		
95	100		56.2		
105	110		62.3		
114	120		66.7		
124	130		71.2		20
133	140		75		21
143	150		78.7		22
152	160		81.7	(0)	24
162	170		85	(3)	25
171	180		87.1	(6)	26
181	190		89.5	(8.5)	28
190	200		91.5	(11)	29
200	210		93.4	(13.4)	30
209	220		95	(15.7)	32
219	230		96.7	(18)	33
228	240	60.7	98.1	20.3	34
238	250	61.6	99.5	22.2	36
247	260	62.4	(101)	24	37
256	270	63.1	(102)	25.6	38
265	280	63.8	(103.5)	27.1	40
275	290	64.5	(104.5)	28.5	41
284	300	65.2	(105.5)	29.8	42
303	320	66.4	(107)	32.2	45
322	340	67.6	(108)	34.4	47
341	360	68.7	(109)	36.6	50
360	380	69.8	(110)	38.8	52
379	400	70.8		40.8	55
397	420	71.8		42.7	57
415	440	72.8		44.5	59
433	460	73.6		46.1	62
452	480	74.5		47.7	64
471	500	75.3		49.1	66
488	520	76.1		50.5	67
507	540	76.7		51.7	69
525	560	77.4		53	71
545	580	78		54.1	72
564	600	78.6		55.2	74
582	620	79.2		56.3	75
601	640	79.8		57.3	77
620	660	80.3		58.3	79
638	680	80.8		59.2	80
656	700	81.3		60.1	81
670	720	81.8		61	83
684	740	82.2		61.8	84
698	760	82.6		62.5	86
710	780	83		63.3	87
722	800	83.4		64	88
745	840	84.1		65.3	91
767	880	84.7		66.4	93

*A 10mm steel ball is used for 450 BHN and below. A 10mm carbide ball is used above 450 BHN.

Also known as Firth Diamond Hardness Number.

Values in parentheses are not contained in the normal definition range for hardness checking, but are often used in comparable measure.

Tensile Strength

GENERAL STEEL GROUP THROUGH HARDNESS VERSUS APPROXIMATE TENSILE STRENGTH									
HARDNESS		TENSILE STRENGTH							
BRINELL HARDNESS BHN*	ROCKWELL HARDNESS HRC	PLAIN CARBON STEEL AND LOW ALLOY STEEL		STAINLESS STEEL AUSTENITIC TYPE			STAINLESS STEEL CHROMIUM TYPE		
10mm BALL, 3000kgf LOAD	BRALE PENETRATOR, 60kgf LOAD	N/mm² (APPROX.)	PSI (APPROX.)	kgf/mm² (APPROX.)	N/mm² (APPROX.)	PSI (APPROX.)	kgf/mm² (APPROX.)	N/mm² (APPROX.)	PSI (APPROX.)
86		285	41,334						
95		320	46,410						
105		350	50,761						
114		385	55,837						
124		415	60,188						
133		450	65,264						
143		480	69,615	50	490	71,115	50	490	71,115
152	(0)	510	73,966	56	549	79,649	53	520	75,382
162	(3)	545	79,042	62	608	88,183	59	579	83,916
171	(6)	575	83,393	62	608	88,183	59	579	83,916
181	(8.5)	610	88,470	68	667	96,716	65	637	92,450
190	(11)	640	92,820	68	667	96,716	65	637	92,450
200	(13.4)	675	97,897	75	736	106,673	71	696	100,983
209	(15.7)	705	102,248	75	736	106,673	71	696	100,983
219	(18)	740	107,324	80	785	113,784	78	765	110,939
228	20.3	770	111,675	80	785	113,784	78	765	110,939
238	22.2	800	116,026	85	834	120,896	81	794	115,206
247	24	835	121,102	88	863	125,162			
256	25.6	865	125,453	91	892	129,429	88	863	125,162
265	27.1	900	130,529	94	922	133,696			
275	28.5	930	134,880	97	951	137,963	96	941	136,541
284	29.8	965	139,856	100	981	142,230			
303	32.2	1,030	149,383	109	1,069	155,031	106	1,040	150,764
322	34.4	1,095	158,810	118	1,157	167,831	113	1,108	160,720
341	36.6	1,155	167,512	127	1,245	180,632	120	1,177	170,676
360	38.8	1,220	176,939	136	1,334	193,433	127	1,245	180,,632
379	40.8	1,290	187,091	145	1,422	206,234	134	1,314	190588
397	42.7	1,350	195,793	156	1,530	221,879			
415	44.5	1,420	205,945	167	1,638	237,,524			
433	46.1	1,485	215,372	178	1,746	253169			
452	47.7	1,555	225,525	189	1,853	268,815			
471	49.1	1,630	236,402	200	1,961	284,460			
488	50.5	1,700	246,554	209	2,050	297,261			
507	51.7	1,775	257,432	218	2,138	310,061			
525	53	1,845	267,584	227	2,226	322,862			
545	54.1	1,920	278,461	236	2,314	335,663			
564	55.2	1,995	289,339	245	2,403	348,464			

*A 10mm steel ball is used for 450 BHN and below. A 10mm carbide ball is used above 450 BHN.

Values in parentheses are not contained in the normal definition range for hardness checking, but are often used in a comparable measure.

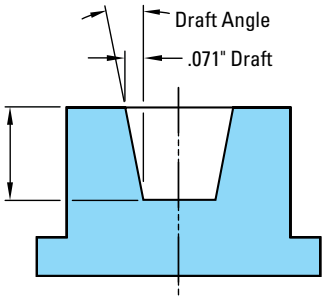
The Tensile Strength relationship to hardness is inexact, even for the steel, unless it is determined for a specific material. Therefore, this chart provides only very general approximate Tensile Strength values.

Draft Angles

DEPTH	1/2°	1°	2°	3°	4°	5°	6°	7°	8°°	9	10°	11°	12°	15°	20°	25°	30°	DEPTH
1/32	.0003	.0005	.001	.0016	.002	.0027	.003	.0038	.004	.005	.0055	.006	.0066	.008	.011	.014	.018	1/32
1/16	.0005	.0011	.002	.0033	.004	.0055	.007	.0077	.009	.010	.011	.012	.013	.017	.023	.029	.036	1/16
3/32	.0008	.0017	.003	.0049	.006	.008	.010	.0115	.013	.015	.0165	.018	.020	.025	.034	.044	.054	3/32
1/8	.0011	.0022	.004	.0066	.009	.0109	.013	.015	.018	.020	.022	.024	.027	.033	.045	.058	.072	1/8
5/32	.0014	.0028	.005	.008	.011	.014	.016	.019	.022	.025	.027	.030	.033	.042	.057	.073	.089	5/32
3/16	.0016	.0033	.006	.0098	.013	.016	.019	.023	.027	.030	.033	.036	.040	.050	.068	.087	.108	3/16
7/32	.0019	.0039	.008	.011	.015	.019	.023	.027	.031	.035	.039	.042	.047	.059	.080	.102	.126	7/32
1/4	.0022	.0043	.009	.013	.018	.022	.026	.031	.035	.040	.044	.049	.053	.067	.091	.117	.144	1/4
9/32	.0025	.005	.010	.014	.020	.024	.030	.034	.040	.045	.049	.055	.060	.075	.102	.131	.162	9/32
5/16	.0027	.0055	.011	.016	.022	.027	.033	.038	.044	.050	.055	.061	.066	.084	.114	.146	.180	5/16
11/32	.003	.006	.012	.018	.024	.030	.036	.042	.049	.055	.061	.067	.073	.092	.125	.160	.197	11/32
3/8	.0032	.0066	.013	.020	.026	.033	.039	.046	.053	.060	.066	.073	.080	.100	.136	.175	.217	3/8
13/32	.0035	.007	.014	.021	.028	.035	.043	.050	.057	.064	.071	.079	.086	.108	.148	.189	.234	13/32
7/16	.0038	.0077	.015	.023	.031	.038	.046	.054	.062	.069	.077	.085	.093	.117	.159	.204	.253	7/16
15/32	.0041	.008	.016	.024	.033	.041	.049	.058	.066	.074	.083	.091	.100	.126	.171	.219	.270	15/32
1/2	.0044	.0088	.018	.026	.035	.044	.053	.061	.071	.079	.088	.097	.106	.134	.182	.233	.289	1/2
17/32	.0046	.009	.019	.028	.037	.046	.056	.065	.075	.084	.093	.103	.113	.142	.193	.247	.306	17/32
9/16	.0049	.0099	.020	.030	.039	.049	.059	.069	.079	.088	.099	.109	.120	.151	.205	.262	.325	9/16
19/32	.0052	.010	.021	.031	.042	.052	.062	.073	.084	.094	.105	.115	.127	.159	.216	.277	.343	19/32
5/8	.0055	.011	.022	.033	.044	.055	.066	.077	.088	.100	.110	.120	.133	.167	.227	.291	.361	5/8
21/32	.0057	.011	.023	.035	.046	.057	.069	.082	.092	.104	.115	.127	.140	.176	.239	.306	.379	21/32
11/16	.006	.012	.024	.036	.048	.060	.072	.085	.096	.109	.121	.133	.147	.183	.250	.321	.397	11/16
23/32	.0063	.013	.025	.038	.050	.063	.075	.088	.101	.114	.126	.139	.153	.193	.261	.335	.415	23/32
3/4	.0065	.013	.027	.039	.053	.066	.079	.092	.106	.119	.132	.146	.159	.201	.273	.350	.433	3/4
25/32	.0068	.014	.028	.040	.055	.068	.081	.096	.110	.124	.137	.152	.166	.209	.284	.364	.451	25/32
13/16	.0071	.014	.029	.043	.057	.071	.085	.100	.115	.129	.143	.158	.173	.218	.296	.379	.469	13/16
27/32	.0074	.015	.030	.045	.059	.074	.089	.104	.119	.134	.149	.163	.180	.226	.307	.393	.487	27/32
7/8	.0076	.015	.031	.046	.061	.077	.092	.107	.123	.139	.154	.171	.186	.234	.318	.408	.505	7/8
29/32	.0079	.016	.032	.048	.063	.079	.095	.111	.128	.144	.159	.176	.193	.243	.329	.422	.523	29/32
15/16	.0082	.017	.033	.050	.066	.082	.098	.115	.132	.149	.165	.182	.200	.251	.341	.437	.541	15/16
31/32	.0085	.017	.034	.051	.068	.084	.101	.119	.137	.153	.170	.188	.206	.260	.353	.452	.559	31/32
1	.0087	.0175	.035	.052	.070	.087	.105	.123	.141	.158	.176	.194	.213	.268	.364	.466	.577	1
DEPTH	1/2°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	15°	20°	25°	30°	DEPTH

The depth columns represent cavities from 1/32" to 1" in increments of 1/32". The most commonly used draft angles are noted in degrees at the top and bottom of the table. The measurement listed in any block represents the amount of draft obtained with the corresponding angle and cavity depth.

EXAMPLE: The difference between the diameter of the top and the diameter of the bottom of a 1/2" inch cavity with a draft angle of 8° is found by noting the figure in the table opposite the 1/2" depth and corresponding to the 8° draft angle (.071°) and multiplying by two (1.420").



The length and necessary angle for cam pins used in actuating core pulls can also be calculated with this table.

EXAMPLE: The length of a pin set at a 15° angle required to pull a core 1". Since 20° and 1" of length allow .364" travel, a 4" pin permits four times the travel (1.456").

Steel Designations

GENERAL STEEL GROUP DESIGNATIONS					
PLAIN CARBON STEEL	LOW ALLOY CARBON STEEL	COLD WORK TOOL STEEL	HOT WORK TOOL STEEL	STAINLESS STEEL AUSTENITIC TYPE	STAINLESS STEEL CHROMIUM TYPE (MARTENSITIC & FERRITIC)
AISI	AISI	AISI	AISI	AISI	AISI
1000 SERIES	4000 SERIES	A2	H10	201	410
	5000 SERIES	A3A	H11	203	416
	6000 SERIES	4	H12	205	420
	8000 SERIES	A5	H13	301	429
	9000 SERIES	A6	H14	302	430
		A7	H19	303	431
		A8	H21	304	434
		A9	H22	305	436
		A10	H23	307	439
		D2	H24	308	440
		D3	H25	309	442
		D4	H26	310	444
		D5	H40	314	446
		D7	H41	316	
			H42	317	
			H43	318	
				321	
				329	
				330	
				332	
				334	
				347	
				348	
				384	
				385	

GENERAL STEEL CROSS-REFERENCE INFORMATION*	
GERMAN WERKSTOFF STANDARD NUMBER FOR STEEL	U.S. STEEL NUMBER AISI
1.0716	NO CROSS-REFERENCE
1.0718	12 L 13 TYPE*
1.1191	1045 TYPE*
1.1730	NO CROSS-REFERENCE
1.2210	L-2 TYPE*
1.2344	H-13 TYPE*
1.2826	NO CROSS-REFERENCE
1.4305	303 TYPE STAINLESS*
1.5710 (AFNOR 35 NC 6)	3135 TYPE*
1.7131	5115 TYPE (SIMILAR TO 1018 & 8620)*
1.8159 (DIN 50 CrV 4)	6150 TYPE*

*Exchangeability should only be considered after thorough examination of individual case.

Determining Metric Tolerances

Table 1: Description of Preferred Fits

Table 1 is pulled from the ANSI metric tolerances section of thee machinists' handbook, which conforms to the ISO and DIN tolerances for hole basis and shaft basis fits. Table 1 provides an overview of the hole basis and shaft basis fits that make up clearance fit, transition fit and interference fit combinations.

	ISO SYMBOL			
	HOLE BASIS	SHAFT BASIS		
CLEARANCE FITS	H11/c11	C11/h11	LOOSE RUNNING FIT	FOR WIDE COMMERCIAL TOLERANCES OR ALLOWANCES ON EXTERNAL MEMBERS.
	H9/d9	D9/h9	FREE RUNNING FIT	NOT FOR USE WHERE ACCURACY IS ESSENTIAL, BUT GOOD FOR LARGE TEMPERATURE VARIATIONS, HIGH RUNNING SPEEDS, OR HEAVY JOURNAL PRESSURES.
	H8/f7	F8/h7	CLOSE RUNNING FIT	FOR RUNNING ON ACCURATE MACHINES AND FOR ACCURATE LOCATION AT MODERATE SPEEDS AND JOURNAL PRESSURES.
	H7/g6	G7/h6	SLIDING FIT	NOT INTENDED TO RUN FREELY, BUT TO MOVE AND TURN FREELY AND LOCATE ACCURATELY.
	H7/h6	H7/h6	LOCATIONAL CLEARANCE FIT	PROVIDES SNUG FIT FOR LOCATING STATIONARY PARTS; BUT CAN BE FREELY ASSEMBLED AND DISASSEMBLED.
TRANSITION FITS	H7/k6	K7/h6	LOCATIONAL TRANSITION FIT	FOR ACCURATE LOCATION, A COMPROMISE BETWEEN CLEARANCE AND INTERFERENCE.
	H7/n6	N7/h6	LOCATIONAL TRANSITION FIT	FOR MORE ACCURATE LOCATION WHERE GREATER INTERFERENCE IS PERMISSIBLE.
INTERFERENCE FITS	H7/p6*	P7/h6	LOCATIONAL INTERFERENCE FIT	FOR PARTS REQUIRING RIGIDITY AND ALIGNMENT WITH PRIME ACCURACY OF LOCATION BUT WITHOUT SPECIAL BORE PRESSURE REQUIREMENTS.
	H7/s6	S7/h6	MEDIUM DRIVE FIT	FOR ORDINARY STEEL PARTS OR SHRINK FITS ON LIGHT SECTIONS, THE TIGHTEST FIT USABLE WITH CAST IRON.
	H7/u6	U7/h6	FORCE FIT	SUITABLE FOR PARTS WHICH CAN BE HIGHLY STRESSED OR FOR SHRINK FITS WHERE THE HEAVY PRESSING FORCES REQUIRED ARE IMPRACTICAL.

Excerpt from *Machinists' Handbook*, pg. 661, 25 Ed., Industrial Press.
*The H7/p6 Hole Basis fit is a transition fit for basic sizes in ranges from 0 through 3mm.

Determining Metric Tolerances

Table 2: Commonly used Hole-Basis System of fits

Table 2 shows closer detail on the hole-basis system of fits than Table 1. When using the hole-basis system of fits, the smallest diameter in the hole tolerance range is fixed to the zero line (basic nominal hole size or diameter), and the clearance between the shaft and hole extends below the zero line, or negative relative to the basic nominal hole size.

BASIC HOLES	LETTER SYMBOLS AND GRADE NUMBERS OF SHAFTS																
	CLEARANCE FITS						TRANSITION FITS				INTERFERENCE FITS						
	b	c	d	e	f	g	h	js	k	m	n	p	f	s	t	u	x
H5						4	4	4	4	4							
H6						5	5	5	5	5							
					6	6	6	6	6	6	6*	6*					
H7				6	6	6	6	6	6	6	6	6*	6*	6	6	6	6
				7	7	7	7	7	7	7	7	7*	7*	7	7	7	7
					7		7										
H8				8	8		8										
			9	9													
H9			8	8			8										
		9	9	9			9										
H10	9	9	9														

*Exceptions occur in some steps of dimensions.

Table 3: Commonly used Shaft-Basis System of fits

Table 3 shows closer detail on the shaft-basis system of fits than Table 1. When using the shaft-basis system of fits, the largest diameter in the shaft tolerance range is fixed to the zero line (basic nominal shaft size or diameter), and the clearance between the shaft and hole extends above the zero line, or positive relative to the basic shaft size.

BASIC SHAFTS	LETTER SYMBOLS AND GRADE NUMBERS OF HOLES																
	CLEARANCE FITS						TRANSITION FITS				INTERFERENCE FITS						
	B	C	D	E	F	G	H	Js	K	M	N	P	F	S	T	U	X
h5							5	5	5	5							
h6							6	6	6	6	6*	6					
					6	6	6	6	6	6	6	6*					
h7				7	7	7	7	7	7	7	7	7*	7	7	7	7	7
				7	7	7	7	7	7	7	7	7	7*	7			
					8		8										
h8			8	8	8		8										
			9	9			9										
h9			8	8			8										
		9	9	9			9										
h10	10	10	10														

*Exceptions occur in some steps of dimensions.

Determining Metric Tolerances

Table 4: IT Standard Tolerances

Table 4 details the ISO-basic tolerances (International Tolerance Grades, or, "IT") which apply to all linear sizes (external and internal sizes, diameters, lengths, widths and thicknesses). An IT-grade number establishes the magnitude of the tolerance zone, while the tolerance position letter determines where the tolerance zone is in relation to the zero line. The combination of tolerance position letter (A-X, a-x) and IT-grade number (01-8) creates the overall tolerance symbol (i.e., F8/h7 when using the shaft-basis system of fits).

For nominal size range up to 500mm according to DIN 7151/ISO 286, and for nominal size range over 500mm, according to DIN 7172/ISO 286.

	ITEMS IN MM		IT STANDARD TOLERANCES (UNITS IN 0.001MM)																			
	OVER	TO	IT01	IT0	IT1	IT2	IT3	IT4	IT5	IT6	IT7	IT8	IT9	IT10	IT11	IT12	IT13	IT14	IT15	IT16	IT17	IT18
NOMINAL SIZE RANGE	0	3	0.3	0.5	0.8	1.2	2	3	4	6	10	14	25	40	60	100	140	250	400	600	—	—
	3	6	0.4	0.6	1	1.5	2.5	4	5	8	12	18	30	48	75	120	180	300	480	750	—	—
	6	10	0.4	0.6	1	1.5	2.5	4	6	9	15	22	36	58	90	150	220	360	580	900	1500	—
	10	18	0.5	0.8	1.2	2	3	5	8	11	18	27	43	70	110	180	270	430	700	1100	1800	2700
	18	30	0.6	1	1.5	2.5	4	6	9	13	21	33	52	84	130	210	330	520	840	1300	2100	3300
	30	50	0.6	1	1.5	2.5	4	7	11	16	25	39	62	100	160	250	390	620	1000	1600	2500	3900
	50	80	0.8	1.2	2	3	5	8	13	19	30	46	74	120	190	300	460	740	1200	1900	3000	4600
	80	120	1	1.5	2.5	4	6	10	15	22	35	54	87	140	220	350	540	870	1400	2200	3500	5400
	120	180	1.2	2	3.5	5	8	12	18	25	40	63	100	160	250	400	630	1000	1600	2500	4000	6300
	180	250	2	3	4.5	7	10	14	20	29	46	72	115	185	290	460	720	1150	1850	2900	4600	7200
	250	315	2.5	4	6	8	12	16	23	32	52	81	130	210	320	520	810	1300	2100	3200	5200	8100
	315	400	3	5	7	9	13	18	25	36	57	89	140	230	360	570	890	1400	2300	3600	5700	8900
	400	500	4	6	8	10	15	20	27	40	63	97	155	250	400	630	970	1550	2500	4000	6300	9700
	500	630	4.5	6	9	11	16	22	30	44	70	110	175	280	440	700	1100	1750	2800	4400	—	—
	630	800	5	7	10	13	18	25	35	50	80	125	200	320	500	800	1250	2000	3200	5000	—	—
	800	1000	5.5	8	11	15	21	29	40	56	90	140	230	360	560	900	1400	2300	3600	5600	—	—

Determining Metric Tolerances

Table 5: Fundamental deviations of holes and shafts

Table 5 details fundamental deviations between holes and shafts, and is provided for reference.

HOLES	GRADE		IT6 TO IT16													
	DIVISIONS		FUNDAMENTAL DEVIATIONS (LOWER DEVIATIONS)						FUNDAMENTAL DEVIATIONS (UPPER DEVIATIONS)							
	LETTER SYMBOLS		D	E	F	G	H	Js	K	M	N	P	R	S	T	U
	SIGNS		+	+	+	+				–	–	–	–	–	–	–
	ABOVE	UP TO														
	500	560	260	145	76	22	0	DEVIATIONS (+/–) IT/2	0	26	44	78	150	280	400	600
	560	630											155	310	450	660
	630	710	290	160	80	24	0		0	30	50	88	175	340	500	740
	710	800											185	380	560	840
	800	900	320	170	86	26	0		0	34	56	100	210	430	620	940
	900	1000											220	470	680	1050
	1000	1120	350	195	98	28	0		0	40	66	120	250	520	780	1150
	1120	1250											260	580	840	1300
	1250	1400	390	220	110	30	0		0	48	78	140	300	640	960	1450
	1400	1600											330	720	1050	1600
	1600	1800	430	240	120	32	0		0	58	92	170	370	820	1200	1850
	1800	2000											400	920	1350	2000
	2000	2240	480	260	130	34	0		0	68	110	195	440	1000	1500	2300
	2240	2500											460	1100	1650	2500
	2500	2800	520	290	145	38	0		0	76	135	240	550	1250	1900	2900
	2800	3150											580	1400	2100	3200
	ABOVE	UP TO														
SHAFTS	SIGNS		–	–	–	–				+	+	+	+	+	+	+
	LETTER SYMBOLS		d	e	f	g	h	js	k	m	n	p	r	s	t	u
	DIVISIONS		FUNDAMENTAL DEVIATIONS (UPPER DEVIATIONS)						FUNDAMENTAL DEVIATIONS (LOWER DEVIATIONS)							
	GRADE		IT6 TO IT16													

Determining Metric Tolerances

Table 6: Tolerances for inside dimensions (holes)

Table 6 details tolerances for inside dimensions (holes) based relative to the tolerance symbol. Upper and lower values are provided as either positive or negative (or zero) values relative to the nominal size chosen. Pick the range in which the desired nominal value falls into, and then either add or subtract the tolerances to find the upper and lower tolerance range for the desired nominal size.

	UNITS IN MM		TOLERANCES FOR INSIDE DIMENSIONS (HOLES) (UNITS IN 0.001MM)																		
	OVER	TO	A11	B8	B11	C11	D9	D10	D11	E8	E9	F6	F7	F8	G6	G7	H5	H6	H7	H8	H9	H10
NOMINAL SIZE RANGE	0	1	—	—	—	+120	+45	+60	+80	+28	+39	+12	+16	+20	+8	+12	+4	+6	+10	+14	+25	+40
			—	—	—	+60	+20	+20	+20	+14	+14	+6	+6	+6	+2	+2	0	0	0	0	0	0
	1	3	+330 +270	+154 +140	+200 +140																	
	3	6	+345 +270	+158 +140	+215 +140	+145 +70	+60 +30	+78 +30	+105 30	+38 +20	+50 +20	+18 +10	+22 +10	+28 +10	+12 +4	+16 +4	+5 0	+8 0	+12 0	+18 0	+30 0	+48 0
	6	10	+370 +280	+172 +150	+240 +150	+170 +80	+76 +40	+98 +40	+130 +40	+47 +25	+61 +25	+22 +13	+28 +13	+35 +13	+14 +5	+20 +5	+6 0	+9 0	+15 0	+22 0	+36 0	+58 0
	10	14	+400 +290	+177 +150	+260 +150	+205 +95	+93 +50	+120 +50	+160 +50	+59 +32	+75 +32	+27 +16	+34 +16	+43 +16	+17 +6	+24 +6	+8 0	+11 0	+18 0	+27 0	+43 0	+70 0
	14	18																				
	18	24	+430 +300	+193 +160	+290 +160	+240 +110	+117 +65	+149 +65	+195 +65	+73 +40	+92 +40	+33 +20	+41 +20	+53 +20	+20 +7	+28 +7	+9 0	+13 0	+21 0	+33 0	+52 0	+84 0
	24	30																				
	30	40	+470 +310	+209 +170	+330 +170	+280 +120	+142 +80	+180 +80	+240 +80	+89 +50	+112 +50	+41 +25	+50 +25	+64 +25	+25 +9	+34 +9	+11 0	+16 0	+25 0	+39 0	+62 0	+100 0
	40	50	+480 +320	+219 +180	+340 +180	+290 +130																
	50	65	+530 +340	+236 +190	+380 +190	+330 +140	+174 +100	+220 +100	+290 +100	+106 +60	+134 +60	+49 +30	+60 +30	+76 +30	+29 +10	+40 +10	+13 0	+19 0	+30 0	+46 0	+74 0	+120 0
	65	80	+550 +360	+246 +200	+390 +200	+340 +150																
	80	100	+600 +380	+274 +220	+440 +220	+390 +170	+207 +120	+260 +120	+340 +120	+126 +72	+159 +72	+58 +36	+71 +36	+90 +36	+34 +12	+47 +12	+15 0	+22 0	+35 0	+54 0	+87 0	+140 0
	100	120	+630 +410	+294 +240	+460 +240	+400 +180																
	120	140	+710 +460	+323 +260	+510 +260	+450 +200	+245 +145	+305 +145	+395 +145	+148 +85	+185 +85	+68 +43	+83 +43	+106 +43	+39 +14	+54 +14	+18 0	+25 0	+40 0	+63 0	+100 0	+160 0
	140	160	+770 +520	+343 +280	+530 +280	+460 +210																
	160	180	+830 +580	+373 +310	+560 +310	+480 +230																
	180	200	+950 +660	+412 +340	+630 +340	+530 +240	+285 +170	+355 +170	+460 +170	+172 +100	+215 +100	+79 +50	+96 +50	+122 +50	+44 +15	+61 +15	+20 0	+29 0	+46 0	+72 0	+115 0	+185 0
	200	225	+1030 +740	+452 +380	+670 +380	+550 +260																
	225	250	+1110 +820	+492 +420	+710 +420	+570 +280																
	250	280	+1240 +920	+561 +480	+800 +480	+620 +300	+320 +190	+400 +190	+510 +190	+191 +110	+240 +110	+88 +56	+108 +56	+137 +56	+49 +17	+69 +17	+23 0	+32 0	+52 0	+81 0	+130 0	+210 0
	280	315	+1370 +1050	+621 +540	+860 +540	+650 +330																
	315	355	+1560 +1200	+689 +600	+960 +600	+720 +360	+350 +210	+440 +210	+570 +210	+214 +125	+265 +125	+98 +62	+119 +62	+151 +62	+54 +18	+75 +18	+25 0	+36 0	+57 0	+89 0	+140 0	+230 0
	355	400	+1710 +1350	+769 +680	+1040 +680	+760 +400																
	400	450	+1900 +1500	+857 +760	+1160 +760	+840 +440	+385 +230	+480 +230	+630 +230	+232 +135	+290 +135	+108 +68	+131 +68	+165 +68	+60 +20	+83 +20	+27 0	+40 0	+63 0	+97 0	+155 0	+250 0
	450	500	+2050 +1650	+937 +840	+1240 +840	+880 +480																

Determining Metric Tolerances

Table 6: Tolerances for inside dimensions (holes) — continued

UNITS IN MM		TOLERANCES FOR INSIDE DIMENSIONS (HOLES) (UNITS IN 0.001MM)																			
OVER	TO	H11	H12	H13	J6	J7	J8	K6	K7	K8	M6	M7	M8	N6	N7	N8	R7	JS6	JS7	JS8	JS9
0	1	+60 0	+100 0	+140 0	+2 -4	+4 -6	+6 -8	0 -6	0 -10	0 -14	-2 -8	-2 -12	-2 -16	-4 -10	-4 -14	-4 -18	-10 -20	+3 -3	+5 -5	+7 -7	+12.5 -12.5
1	3																				
3	6	+75 0	+120 0	+180 0	+5 -3	+6 -6	+10 -8	+2 -6	+3 -9	+5 -13	-1 -9	0 -12	+2 -16	-5 -13	-4 -16	-2 -20	-11 -23	+4 -4	+6 -6	+9 -9	+15 -15
6	10	+90 0	+150 0	+220 0	+5 -4	+8 -7	+12 -10	+2 -7	+5 -10	+6 -16	-3 -12	0 -15	+1 -21	-7 -16	-4 -19	-3 -25	-13 -28	+4.5 -4.5	+7.5 -7.5	+11 -11	+18 -18
10	14	+110 0	+180 0	+270 0	+6 -5	+10 -8	+15 -12	+2 -9	+6 -12	+8 -19	-4 -15	0 -18	+2 -25	-9 -20	-5 -23	-3 -30	-16 -34	+5.5 -5.5	+9 -9	+13.5 -13.5	+21.5 -21.5
14	18																				
18	24	+130 0	+210 0	+330 0	+8 -5	+12 -9	+20 -13	+2 -11	+6 -15	+10 -23	-4 -17	0 -21	+4 -29	-11 -24	-7 -28	-3 -36	-20 -41	+6.5 -6.5	+10.5 -10.5	+16.5 -16.5	+26 -26
24	30																				
30	40	+160 0	+250 0	+390 0	+10 -6	+14 -11	+24 -15	+3 -13	+7 -18	+12 -27	-4 -20	0 -25	+5 -34	-12 -28	-8 -33	-3 -42	-25 -50	+8 -8	+12.5 -12.5	+19.5 -19.5	+31 -31
40	50																				
50	65	+190 0	+300 0	+460 0	+13 -6	+18 -12	+28 -18	+4 -15	+9 -21	+14 -32	-5 -24	0 -30	+5 -41	-14 -33	-9 -39	-4 -50	-30 -60	+9.5 -9.5	+15 -15	+23 -23	+37 -37
65	80																-32 -62				
80	100	+220 0	+350 0	+540 0	+16 -6	+22 -13	+34 -20	+4 -18	+10 -25	+16 -38	-6 -28	0 -35	+6 -48	-16 -38	-10 -45	-4 -58	-38 -73	+11 -11	+17.5 -17.5	+27 -27	+43.5 -43.5
100	120																-41 -76				
120	140	+250 0	+400 0	+630 0	+18 -7	+26 -14	+41 -22	+4 -21	+12 -28	+20 -43	-8 -33	0 -40	+8 -55	-20 -45	-12 -52	-4 -67	-48 -88	+12.5 -12.5	+20 -20	+31.5 -31.5	+50 -50
140	160																-50 -90				
160	180																-53 -93				
180	200	+290 0	+460 0	+720 0	+22 -7	+30 -16	+47 -25	+5 -24	+13 -33	+22 -50	-8 -37	0 -46	+9 -63	-22 -51	-14 -60	-5 -77	-60 -106	+14.5 -14.5	+23 -23	+36 -36	+57.5 -57.5
200	225																-63 -109				
225	250																-67 -113				
250	280	+320 0	+520 0	+810 0	+25 -7	+36 -16	+55 -26	+5 -27	+16 -36	+25 -56	-9 -41	0 -52	+9 -72	-25 -57	-14 -66	-5 -86	-74 -126	+16 -16	+26 -26	+40.5 -40.5	+65 -65
280	315																-78 -130				
315	355	+360 0	+570 0	+890 0	+29 -7	+39 -18	+60 -29	+7 -29	+17 -40	+28 -61	-10 -46	0 -57	+11 -78	-26 -62	-16 -73	-5 -94	-87 -144	+18 -18	+28.5 -28.5	+44.5 -44.5	+70 -70
355	400																-93 -150				
400	450	+400 0	+630 0	+970 0	+33 -7	+43 -20	+66 -31	+8 -32	+18 -45	+29 -68	-10 -50	0 -63	+11 -86	-27 -67	-17 -80	-6 -103	-103 -166	+20 -20	+31.5 -31.5	+48.5 -48.5	+77.5 -77.5
450	500																-109 -172				

NOMINAL SIZE RANGE

Determining Metric Tolerances

Table 6: Tolerances for inside dimensions (holes) — continued

NOMINAL SIZE RANGE			TOLERANCES FOR INSIDE DIMENSIONS (HOLES) (UNITS IN 0.001MM)								
	UNITS IN MM										
	OVER	TO	JS10	JS11	JS12	JS13	JS14	JS15	JS16	JS17	JS18
	0	1	+20 -20	+30 -30	+50 -50	+70 -70	+125 -125	+200 -200	+300 -300	— —	— —
	1	3									
	3	6	+24 -24	+37.5 -37.5	+60 -60	+90 -90	+150 -150	+240 -240	+375 -375	— —	— —
	6	10	+29 -29	+45 -45	+75 -75	+110 -110	+180 -180	+290 -290	+450 -450	+750 -750	— —
	10	14	+35 -35	+55 -55	+90 -90	+135 -135	+215 -215	+350 -350	+550 -550	+900 -900	+1350 -1350
	14	18									
	18	24	+42 -42	+65 -65	+105 -105	+165 -165	+260 -260	+420 -420	+650 -650	+1050 -1050	+1650 -1650
	24	30									
	30	40	+50 -50	+80 -80	+125 -125	+195 -195	+310 -310	+500 -500	+800 -800	+1250 -1250	+1950 -1950
	40	50									
	50	65	+60 -60	+95 -95	+150 -150	+230 -230	+370 -370	+600 -600	+950 -950	+1500 -1500	+2300 -2300
	65	80									
	80	100	+70 -70	+110 -110	+175 -175	+270 -270	+435 -435	+700 -700	+1100 -1100	+1750 -1750	+2700 -2700
	100	120									
	120	140	+80 -80	+125 -125	+200 -200	+315 -315	+500 -500	+800 -800	+1250 -1250	+2000 -2000	+3150 -3150
	140	160									
	160	180									
	180	200	+92.5 -92.5	+145 -145	+230 -230	+360 -360	+575 -575	+925 -925	+1450 -1450	+2300 -2300	+3600 -3600
	200	225									
	225	250									
	250	280	+105 -105	+160 -160	+260 -260	+405 -405	+650 -650	+1050 -1050	+1600 -1600	+2600 -2600	+4050 -4050
	280	315									
	315	355	+115 -115	+180 -180	+285 -285	+445 -445	+700 -700	+1150 -1150	+1800 -1800	+2850 -2850	+4450 -4450
	355	400									
	400	450	+125 -125	+200 -200	+315 -315	+485 -485	+775 -775	+1250 -1250	+2000 -2000	+3150 -3150	+4850 -4850
	450	500									

Determining Metric Tolerances

Table 7: Tolerances for outside dimensions (shafts)

Table 7 details tolerances for outside dimensions (shafts) based relative to the tolerance symbol. Upper and lower values are provided as either positive or negative (or zero) values relative to the nominal size chosen. Pick the range in which the desired nominal value fall into, and then either add or subtract the tolerances to find the upper and lower tolerance range for the desired nominal size.

	UNITS IN MM		TOLERANCES FOR OUTSIDE DIMENSIONS (SHAFTS) (UNITS IN 0.001MM)																			
	OVER	TO	a11	b8	b11	c11	d9	d10	d11	e7	e8	e9	f6	f7	f8	f9	g5	g6	g7	h4	h5	h6	h7
NOMINAL SIZE RANGE	0	1	—	—	—	-60	-20	-20	-20	-14	-14	-14	-6	-6	-6	-6	-2	-2	-2	0	0	0	0
	1	3	-270 -330	-140 -154	-140 -200	-120	-45	-60	-80	-24	-28	-39	-12	-16	-20	-31	-6	-8	-12	-3	-4	-6	-10
	3	6	-270 -345	-140 -158	-140 -215	-70 -145	-30 -60	-30 -78	-30 -105	-20 -32	-20 -38	-20 -50	-10 -18	-10 -22	-10 -28	-10 -40	-4 -9	-4 -12	-4 -16	0 -4	0 -5	0 -8	0 -12
	6	10	-280 -370	-150 -172	-150 -240	-80 -170	-40 -76	-40 -98	-40 -130	-25 -40	-25 -47	-25 -61	-13 -22	-13 -28	-13 -35	-13 -49	-5 -11	-5 -14	-5 -20	0 -4	0 -6	0 -9	0 -15
	10	14	-290 -400	-150 -177	-150 -260	-95 -205	-50 -93	-50 -120	-50 -160	-32 -50	-32 -59	-32 -75	-16 -27	-16 -34	-16 -43	-16 -59	-6 -14	-6 -17	-6 -24	0 -5	0 -8	0 -11	0 -18
	14	18																					
	18	24	-300 -430	-160 -193	-160 -290	-110 -240	-65 -117	-65 -149	-65 -195	-40 -61	-40 -73	-40 -92	-20 -33	-20 -41	-20 -53	-20 -72	-7 -16	-7 -20	-7 -28	0 -6	0 -9	0 -13	0 -21
	24	30																					
	30	40	-310 -470	-170 -209	-170 -330	-120 -280	-80 -142	-80 -180	-80 -240	-50 -75	-50 -89	-50 -112	-25 -41	-25 -50	-25 -64	-25 -87	-9 -20	-9 -25	-9 -34	0 -7	0 -11	0 -16	0 -25
	40	50	-320 -480	-180 -219	-180 -340	-130 -290																	
	50	65	-340 -530	-190 -236	-190 -380	-140 -330	-100 -174	-100 -220	-100 -290	-60 -90	-60 -106	-60 -134	-30 -49	-30 -60	-30 -76	-30 -104	-10 -23	-10 -29	-10 -40	0 -8	0 -13	0 -19	0 -30
	65	80	-360 -550	-200 -246	-200 -390	-150 -340																	
	80	100	-380 -600	-220 -274	-220 -440	-170 -390	-120 -207	-120 -260	-120 -340	-72 -107	-72 -126	-72 -159	-36 -58	-36 -71	-36 -90	-36 -123	-12 -27	-12 -34	-12 -47	0 -10	0 -15	0 -22	0 -35
	100	120	-410 -630	-240 -294	-240 -460	-180 -400																	
	120	140	-460 -710	-260 -323	-260 -510	-200 -450	-145 -245	-145 -305	-145 -395	-85 -125	-85 -148	-85 -185	-43 -68	-43 -83	-43 -106	-43 -143	-14 -32	-14 -39	-14 -54	0 -12	0 -18	0 -25	0 -40
	140	160	-520 -770	-280 -343	-280 -530	-210 -460																	
	160	180	-580 -830	-310 -373	-310 -560	-230 -480																	
	180	200	-660 -950	-340 -412	-340 -630	-240 -530	-170 -285	-170 -355	-170 -460	-100 -146	-100 -172	-100 -215	-50 -79	-50 -96	-50 -122	-50 -165	-15 -35	-15 -44	-15 -61	0 -14	0 -20	0 -29	0 -46
	200	225	-740 -1030	-380 -452	-380 -670	-260 -550																	
	225	250	-820 -1110	-420 -492	-420 -710	-280 -570																	
	250	280	-920 -1240	-480 -561	-480 -800	-300 -620	-190 -320	-190 -400	-190 -510	-110 -162	-110 -191	-110 -240	-56 -88	-56 -108	-56 -137	-56 -186	-17 -40	-17 -49	-17 -69	0 -16	0 -23	0 -32	0 -52
	280	315	-1050 -1370	-540 -621	-540 -860	-330 -650																	
	315	355	-1200 -1560	-600 -689	-600 -960	-360 -720	-210 -350	-210 -440	-210 -570	-125 -182	-125 -214	-125 -265	-62 -98	-62 -119	-62 -151	-62 -202	-18 -43	-18 -54	-18 -75	0 -18	0 -25	0 -36	0 -57
	355	400	-1350 -1710	-680 -769	-680 -1040	-400 -760																	
	400	450	-1500 -1900	-760 -857	-760 -160	-440 -840	-230 -385	-230 -480	-230 -630	-135 -198	-135 -232	-135 -290	-68 -108	-68 -131	-68 -165	-68 -223	-20 -47	-20 -60	-20 -83	0 -20	0 -27	0 -40	0 -63
	450	500	-1650 -2050	-840 -937	-840 -1240	-480 -880																	

Determining Metric Tolerances

Table 7: Tolerances for outside dimensions (shafts) — continued

NOMINAL SIZE RANGE			TOLERANCES FOR OUTSIDE DIMENSIONS (SHAFTS) (UNITS IN 0.001MM)																		
UNITS IN MM			h8	h9	h10	h11	j5	j6	j7	k5	k6	k7	k8	m5	m6	m7	n5	n6	n7	r6	js6	js7
OVER	TO																					
0	1		0 -14	0 -25	0 -40	0 -60	+2 -2	+4 -2	+6 -4	+4 0	+6 0	+10 0	+14 0	+6 +2	+8 +2	+12 +2	+8 +4	+10 +4	+14 +4	+16 +10	+3 -3	+5 -5
1	3																					
3	6		0 -18	0 -30	0 -48	0 -75	+3 -2	+6 -2	+8 -4	+6 +1	+9 +1	+13 +1	+18 0	+9 +4	+12 +4	+16 +4	+13 +8	+16 +8	+20 +8	+23 +15	+4 -4	+6 -6
6	10		0 -22	0 -36	0 -58	0 -90	+4 -2	+7 -2	+10 -5	+7 +1	+10 +1	+16 +1	+22 0	+12 +6	+15 +6	+21 +6	+16 +10	+19 +10	+25 +10	+28 +19	+4.5 -4.5	+7.5 -7.5
10	14		0 -27	0 -43	0 -70	0 -110	+5 -3	+8 -3	+12 -6	+9 +1	+12 +1	+19 +1	+27 0	+15 +7	+18 +7	+25 +7	+20 +12	+23 +12	+30 +12	+34 +23	+5.5 -5.5	+9 -9
14	18																					
18	24		0 -33	0 -52	0 -84	0 -130	+5 -4	+9 -4	+13 -8	+11 +2	+15 +2	+23 +2	+33 0	+17 +8	+21 +8	+29 +8	+24 +15	+28 +15	+36 +15	+41 +28	+6.5 -6.5	+10.5 -10.5
24	30																					
30	40		0 -39	0 -62	0 -100	0 -160	+6 -5	+11 -5	+15 -10	+13 +2	+18 +2	+27 +2	+39 0	+20 +9	+25 +9	+34 +9	+28 +17	+33 +17	+42 +17	+50 +34	+8 -8	+12.5 -12.5
40	50																					
50	65		0 -46	0 -74	0 -120	0 -190	+6 -7	+12 -7	+18 -12	+15 +2	+21 +2	+32 +2	+46 0	+24 +11	+30 +11	+41 +11	+33 +20	+39 +20	+50 +20	+60 +41	+9.5 -9.5	+15 -15
65	80																			+62 +43		
80	100		0 -54	0 -87	0 -140	0 -220	+6 -9	+13 -9	+20 -15	+18 +3	+25 +3	+38 +3	+54 0	+28 +13	+35 +13	+48 +13	+38 +23	+45 +23	+58 +23	+73 +51	+11 -11	+17.5 -17.5
100	120																			+76 +54		
120	140		0 -63	0 -100	0 -160	0 -250	+7 -11	+14 -11	+22 -18	+21 +3	+28 +3	+43 +3	+63 0	+33 +15	+40 +15	+55 +15	+45 +27	+52 +27	+67 +27	+88 +63	+12.5 -12.5	+20 -20
140	160																			+90 +65		
160	180																			+113 +84		
180	200		0 -72	0 -115	0 -185	0 -290	+7 -13	+16 -13	+25 -21	+24 +4	+33 +4	+50 +4	+72 0	+37 +17	+46 +17	+63 +17	+51 +31	+60 +31	+77 +31	+106 +77	+14.5 -14.5	+23 -23
200	225																			+109 +80		
225	250																			+113 +84		
250	280		0 -81	0 -130	0 -210	0 -320	+7 -16	+16 -16	+26 -26	+27 +4	+36 +4	+56 +4	+81 0	+43 +20	+52 +20	+72 +20	+57 +34	+66 +34	+86 +34	+126 +94	+16 -16	+26 -26
280	315																			+130 +98		
315	355		0 -89	0 -140	0 -230	0 -360	+7 -18	+18 -18	+29 -28	+29 +4	+40 +4	+61 +4	+89 0	+46 +21	+57 +21	+78 +21	+62 +37	+73 +37	+94 +37	+144 +108	+18 -18	+28.5 -28.5
355	400																			+150 +114		
400	450		0 -97	0 -155	0 -250	0 -400	+7 -20	+20 -20	+31 -32	+32 +5	+45 +5	+68 +5	+97 0	+50 +23	+63 +23	+86 +23	+67 +40	+80 +40	+103 +40	+166 +126	+20 -20	+31.5 -31.5
450	500																			+172 +132		

Determining Metric Tolerances

Table 7: Tolerances for outside dimensions (shafts) — continued

	UNITS IN MM		TOLERANCES FOR OUTSIDE DIMENSIONS (SHAFTS) (UNITS IN 0.001MM)										
	OVER	TO	js8	js9	js10	js11	js12	js13	js14	js15	js16	js17	js18
NOMINAL SIZE RANGE	0	1	+7 -7	+12.5 -12.5	+20 -20	+30 -30	+50 -50	+70 -70	+125 -125	+200 -200	+300 -300	— —	— —
	1	3											
	3	6	+9 -9	+15 -15	+24 -24	+37.5 -37.5	+60 -60	+90 -90	+150 -150	+240 -240	+375 -375	— —	— —
	6	10	+11 -11	+18 -18	+29 -29	+45 -45	+75 -75	+110 -110	+180 -180	+290 -290	+450 -450	+750 -750	— —
	10	14	+13.5 -13.5	+21.5 -21.5	+35 -35	+55 -55	+90 -90	+135 -135	+215 -215	+350 -350	+550 -550	+900 -900	+1350 -1350
	14	18											
	18	24	+16.5 -16.5	+26 -26	+42 -42	+65 -65	+105 -105	+165 -165	+260 -260	+420 -420	+650 -650	+1050 -1050	+1650 -1650
	24	30											
	30	40	+19.5 -19.5	+31 -31	+50 -50	+80 -80	+125 -125	+195 -195	+310 -310	+500 -500	+800 -800	+1250 -1250	+1950 -1950
	40	50											
	50	65	+23 -23	+37 -37	+60 -60	+95 -95	+150 -150	+230 -230	+370 -370	+600 -600	+950 -950	+1500 -1500	+2300 -2300
	65	80											
	80	100	+27 -27	+43.5 -43.5	+70 -70	+110 -110	+175 -175	+270 -270	+435 -435	+700 -700	+1100 -1100	+1750 -1750	+2700 -2700
	100	120											
	120	140	+31.5 -31.5	+50 -50	+80 -80	+125 -125	+200 -200	+315 -315	+500 -500	+800 -800	+1250 -1250	+2000 -2000	+3150 -3150
	140	160											
	160	180											
	180	200	+36 -36	+57.5 -57.5	+92.5 -92.5	+145 -145	+230 -230	+360 -360	+575 -575	+925 -925	+1450 -1450	+2300 -2300	+3600 -3600
	200	225											
	225	250											
	250	280	+40.5 -40.5	+65 -65	+105 -105	+160 -160	+260 -260	+405 -405	+650 -650	+1050 -1050	+1600 -1600	+2600 -2600	+4050 -4050
	280	315											
	315	355	+44.5 -44.5	+70 -70	+115 -115	+180 -180	+285 -285	+445 -445	+700 -700	+1150 -1150	+1800 -1800	+2850 -2850	+4450 -4450
	355	400											
	400	450	+48.5 -48.5	+77.5 -77.5	+125 -125	+200 -200	+315 -315	+485 -485	+775 -775	+1250 -1250	+2000 -2000	+3150 -3150	+4850 -4850
	450	500											

Determining Metric Tolerances

Table 8: Tolerances for inside dimensions (holes)

Table 8 details tolerances for inside dimensions (holes) based relative to the tolerance symbol. This table works the same way as Table 6, but is pulled from a different source (ANSI standards) and details S7 and U7 fits. Pick the nominal size value that is closest to the desired nominal size to determine the required tolerance range relative to the chosen tolerance symbol.

HOLE BASIS FIT		[mm]	Hole:		
Example:	Nominal size:	60	[mm]		
	Size range to be used:	50 to 65		H7 +0.030	(0.030mm range)
	ISO-Grade No.:	IT7 (hole), IT6 (shaft)	60	-0	
	Tolerance Symbol:	H7/k6	Shaft:		
	Desired Fit:	Locational Transition Fit	[mm]		
This Gives:	Allowance for hole:	0.030mm		k6 +0.021	(0.019mm range)
	Allowance for shaft:	0.019mm	60	+0.002	

	TOLERANCES FOR INSIDE DIMENSIONS (HOLES) (UNITS IN 0.001MM)					
	PICK CLOSEST VALUE TO DESIRED DIMENSION (UNITS IN MM)	S7	U7	PICK CLOSEST VALUE TO DESIRED DIMENSION (UNITS IN MM)	S7	U7
NOMINAL SIZE RANGE	1	-14 -24	-18 -28	25	-27 -48	-40 -61
	1.2	-14 -24	-18 -28	30	-27 -48	-40 -61
	1.6	-14 -24	-18 -28	40	-34 -59	-51 -76
	2	-14 -24	-18 -28	50	-34 -59	-61 -86
	2.5	-14 -24	-18 -28	60	-42 -72	-76 -106
	3	-14 -24	-18 -28	80	-48 -78	-91 -121
	4	-15 -27	-19 -31	100	-58 -93	-111 -146
	5	-15 -27	-19 -31	120	-66 -101	-131 -166
	6	-15 -27	-19 -31	160	-85 -125	-175 -215
	8	-17 -32	-22 -37	200	-105 -151	-219 -265
	10	-17 -32	-22 -37	250	-123 -169	-267 -313
	12	-21 -39	-26 -44	300	-150 -202	-330 -382
	16	-21 -39	-26 -44	400	-187 -244	-414 -471
	20	-27 -48	-33 -54	500	-229 -292	-517 -580

Determining Metric Tolerances

Table 9: Tolerances for outside dimensions (shafts)

Table 9 details tolerances for outside dimensions (shafts) based relative to the tolerance symbol. This table works the same way as Table 7, but is pulled from a different source (ANSI standards) and details s6 and u6 fits. Pick the nominal size value that is closest to the desired nominal size to determine the required tolerance range relative to the chosen tolerance symbol.

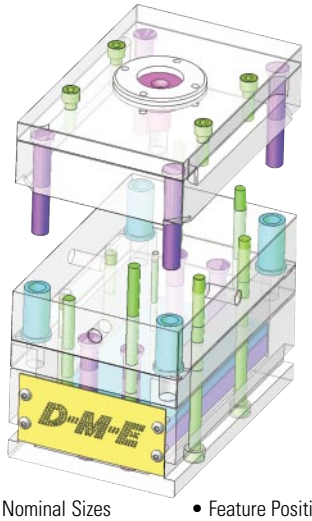
HOLE BASIS FIT		[mm]	Hole:		
Example:	Nominal size:	24	[mm]		
	Size range to be used:	18 to 30		F6	+0.033
	ISO-Grade No.:	IT6	24		-0
	Tolerance Symbol:	F6/h6	Shaft:		
	Desired Fit:	Clearance Fit	[mm]		
This Gives:	Allowance for hole:	0.013mm		h6	0
	Allowance for shaft:	0.013mm	24		-0.013

(0.013mm range)

(0.013mm range)

NOMINAL SIZE RANGE	TOLERANCES FOR OUTSIDE DIMENSIONS (SHAFTS) (UNITS IN 0.001MM)					
	PICK CLOSEST VALUE TO DESIRED DIMENSION (UNITS IN MM)	s6	u6	PICK CLOSEST VALUE TO DESIRED DIMENSION (UNITS IN MM)	s6	u6
	1	+20 +14	+24 +18	25	+48 +35	+61 +48
	1.2	+20 +14	+24 +18	30	+48 +35	+61 +48
	1.6	+20 +14	+24 +18	40	+59 +43	+76 +60
	2	+20 +14	+24 +18	50	+59 +43	+86 +70
	2.5	+20 +14	+24 +18	60	+72 +53	+106 +87
	3	+20 +14	+24 +18	80	+78 +59	+121 +102
	4	+27 +19	+31 +23	100	+93 +71	+146 +124
	5	+27 +19	+31 +23	120	+101 +79	+166 +144
	6	+27 +19	+31 +23	160	+125 +100	+215 +190
	8	+32 +23	+37 +28	200	+151 +122	+265 +236
	10	+32 +23	+37 +28	250	+169 +140	+313 +284
	12	+39 +28	+44 +33	300	+202 +170	+382 +350
	16	+39 +28	+44 +33	400	+244 +208	+471 +435
	20	+48 +35	+54 +41	500	+292 +252	+580 +540

American Standard Mold Base Features

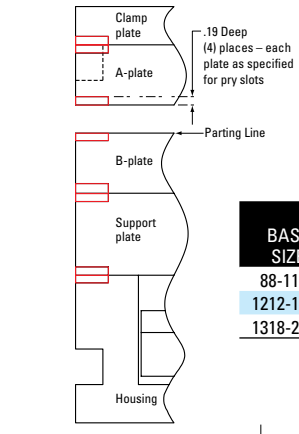


- 43 Nominal Sizes
- 9 Plate Thicknesses
- 4 Steel Types
- Guided Ejection
- Pry Slots
- Lifting Holes
- Leader Pin Vents
- Ejector Housing Cover
- Feature Positions
- Feature Omissions
- Three-Piece or Welded Housing Type
- Clamp Slot Type
- Mixed Steel
- Sprue Puller Pin Diameter
- Stop Pin Location

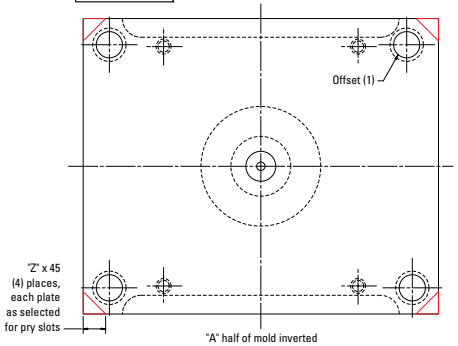
Pry Slots



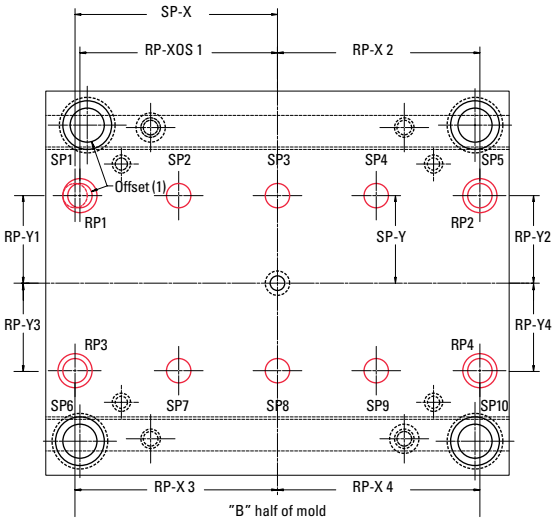
Mold base features Pry Slots, installed in any plate specified, on the parting and/or non-parting line side. This provides handling ease when opening and/or disassembling a mold.



BASE SIZE	SLOT LENGTH Z
88-1123	.56 X 45°
1212-1315	.88 X 45°
1318-2435	1.00 X 45°



Return Pins and Stop Pins

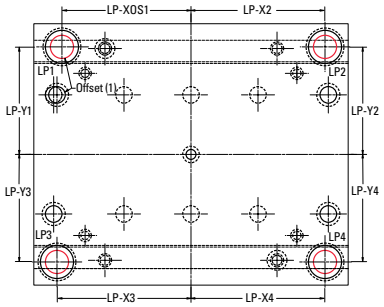


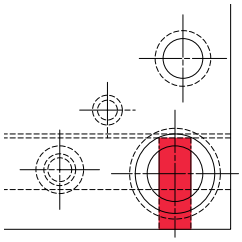
BASE SIZE	RP DIAMETER (RECOM'D)	RP-y SP-y	POSITION 1 RP-xos	POSITION 1 RP-x	POSITION 2 RP-xos	POSITION 2 RP-x	SP-x1 SP-x6	SP-x2 SP-x7	SP-x3 SP-x8	SP-x4 SP-x9	SP-x5 SP-x10
88	0.500	1.500	3.250	3.375	3.188	3.312	3.375				3.375
812	0.500	1.500	5.250	5.375	5.188	5.312	5.375		On Center		5.375
108	0.625	2.250	3.250	3.375	3.125	3.250	3.375				3.375
1012	0.625	2.250	5.188	5.312	5.063	5.188	5.312		On Center		5.312
1016	0.625	2.250	7.250	7.375	7.125	7.250	7.375	2.500		2.500	7.375
1020	0.625	2.250	9.250	9.375	9.125	9.250	9.375	3.125		3.125	9.375
1112	0.625	2.812	5.250	5.375	5.125	5.250	5.375		On Center		5.375
1114	0.625	2.812	6.250	6.375	6.125	6.250	6.375		On Center		6.375
1118	0.625	2.812	8.250	8.375	8.125	8.250	8.375		On Center		8.375
1123	0.625	2.812	11.000	11.125	10.875	11.000	11.125	3.750		3.750	11.125
1212	0.750	3.188	5.250	5.375	5.000	5.125	5.375		On Center		5.375
1215	0.750	3.188	6.750	6.875	6.500	6.625	6.875	2.250		2.250	6.875
1220	0.750	3.188	9.250	9.375	9.000	9.125	9.375	3.094		3.094	9.375
1223	0.750	3.188	11.000	11.125	10.750	10.875	11.125	3.750		3.750	11.125
1315	0.750	3.812	6.750	6.875	6.500	6.625	6.875	2.250		2.250	6.875
1318	0.750	3.812	8.250	8.375	8.000	8.125	8.375	2.750		2.750	8.375
1321	0.750	3.812	9.500	9.625	9.375	9.500	9.625	4.000		4.000	9.625
1323	0.750	3.812	10.875	11.000	10.750	10.875	11.000	4.000		4.000	11.000
1326	0.750	3.812	12.125	12.250	12.000	12.125	12.250	4.000		4.000	12.250
1329	0.750	3.812	13.875	14.000	13.750	13.875	14.000	5.000		5.000	14.000
1518	0.750	3.875	8.125	8.250	7.938	8.062	8.250	2.750		2.750	8.250
1524	0.750	3.875	11.000	11.125	10.875	11.000	11.125	3.750		3.750	11.125
1529	0.750	3.875	13.875	14.000	13.750	13.875	14.000	4.688		4.688	14.000
1616	0.750	4.375	7.125	7.250	7.000	7.125	7.250	2.375		2.375	7.250
1620	0.750	4.375	9.125	9.250	9.000	9.125	9.250	3.062		3.062	9.250
1623	0.750	4.375	10.875	11.000	10.750	10.875	11.000	4.000		4.000	11.000
1626	0.750	4.375	12.125	12.250	12.000	12.125	12.250	4.000		4.000	12.250
1629	0.750	4.375	13.875	14.000	13.750	13.875	14.000	4.688		4.688	14.000
1635	0.750	4.375	16.875	17.000	16.750	16.875	17.000	8.500	On Center	8.500	17.000
1724	0.750	4.625	11.000	11.125	10.875	11.000	11.125	3.750		3.750	11.125
1729	0.750	4.625	13.875	14.000	13.750	13.875	14.000	4.688		4.688	14.000
1818	0.750	5.375	8.125	8.250	8.000	8.125	8.250	2.750		2.750	8.250
1820	0.750	5.375	9.125	9.250	9.000	9.125	9.250	3.062		3.062	9.250
1823	0.750	5.375	10.875	11.000	10.750	10.875	11.000	4.000		4.000	11.000
1826	0.750	5.375	12.125	12.250	12.000	12.125	12.250	4.000		4.000	12.250
1829	0.750	5.375	13.875	14.000	13.750	13.875	14.000	4.688		4.688	14.000
1835	0.750	5.375	16.875	17.000	16.750	16.875	17.000	8.500	On Center	8.500	17.000
1924	0.750	6.125	11.000	11.125	10.875	11.000	11.125	3.750		3.750	11.125
1929	0.750	6.125	13.875	14.000	13.750	13.875	14.000	4.688		4.688	14.000
1935	0.750	6.125	16.875	17.000	16.750	16.875	17.000	8.500	On Center	8.500	17.000
2424	0.750	7.750	11.000	11.125	10.875	11.000	11.125	3.750		3.750	11.125
2429	0.750	7.750	13.875	14.000	13.750	13.875	14.000	4.688		4.688	14.000
2435	0.750	7.750	16.875	17.000	16.750	16.875	17.000	8.500	On Center	8.500	17.000

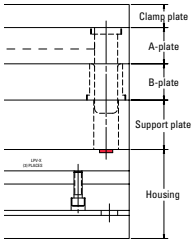
American Standard Mold Base Features

Leader Pins, Vents & Bushings

Leader Pins and Bushings align both halves of the mold at the parting line. Leader Pin Vents, which allow trapped air to escape from the mold, are designed into all 15-inch-and-wider series molds. When desired, they can be specified on smaller molds.







SIZE	DIA	LPxos	LPx	LPy
88	0.750	3.000	3.125	3.125
812	0.750	5.000	5.125	3.125
108	0.750	2.938	3.125	4.062
1012	0.875	4.875	5.062	4.062
1016	0.875	6.938	7.125	4.062
1020	0.875	8.938	9.125	4.062
1112	0.875	4.938	5.125	4.562
1114	0.875	5.938	6.125	4.562
1118	0.875	7.938	8.125	4.562
1123	0.875	10.688	10.875	4.562
1212	1.000	4.625	4.812	5.000
1215	1.000	6.125	6.312	5.000
1220	1.000	8.625	8.812	5.000
1223	1.000	10.375	10.562	5.000
1315	1.000	6.125	6.312	5.688
1318	1.000	7.375	7.562	5.688
1321	1.000	8.750	8.938	5.688
1323	1.000	10.125	10.312	5.688
1326	1.000	11.375	11.562	5.688
1329	1.000	13.125	13.312	5.688
1518	1.250	7.375	7.562	6.062
1524	1.250	10.250	10.438	6.062
1529	1.250	13.125	13.312	6.062
1616	1.250	6.375	6.562	6.562
1620	1.250	8.375	8.562	6.562
1623	1.250	10.125	10.312	6.562
1626	1.250	11.375	11.562	6.562
1629	1.250	13.125	13.312	6.562
1635	1.250	16.125	16.312	6.562
1724	1.250	10.250	10.438	6.812
1729	1.250	13.125	13.312	6.812
1818	1.250	7.375	7.562	7.562
1820	1.250	8.375	8.562	7.562
1823	1.250	10.125	10.312	7.562
1826	1.250	11.375	11.562	7.562
1829	1.250	13.125	13.312	7.562
1835	1.250	16.125	16.312	7.562
1924	1.250	10.250	10.438	8.312
1929	1.250	13.125	13.312	8.312
1935	1.250	16.125	16.312	8.312
2424	1.500	10.062	10.250	10.250
2429	1.500	12.938	13.125	10.250
2435	1.500	15.938	16.125	10.250

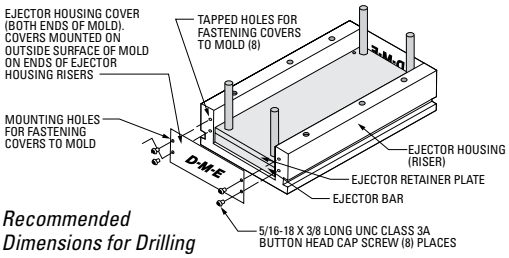
Ejector Housing & Cover

Ejector Housing Cover

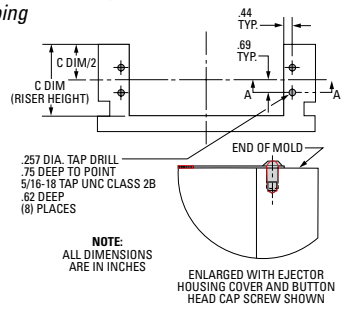
For additional operator safety, SelectBase molds include an ejector housing cover, except when a longer length ejector bar is selected. The perforated D-M-E logo helps the operator to visually determine if the ejector plate and ejector retainer plate are in the returned position. The cover is fastened on both sides with 5/16-18 button-head cap screws. Once again, D-M-E is leading the industry into a safer work environment.

Ejector Housing

D-M-E offers a selection of housing types to fit application demands. A one-piece welded housing is available for customers requiring maximum rigidity and robust durability. For maximum flexibility of configuration options, a three-piece housing is also available.

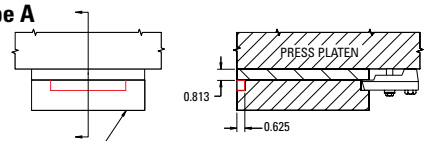


Recommended Dimensions for Drilling and Tapping



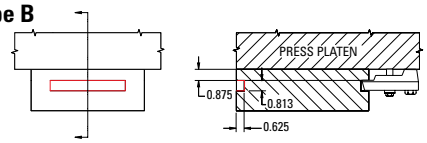
Clamp Slots

Type A

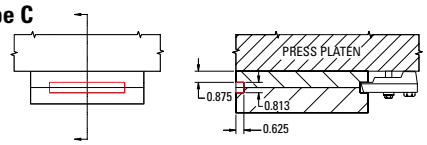


NOTE:
When this plate is 0.875 thick, the slots will be machined through the thickness.

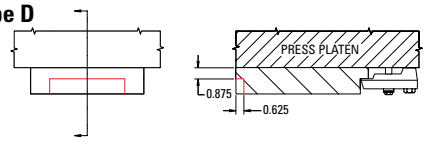
Type B



Type C



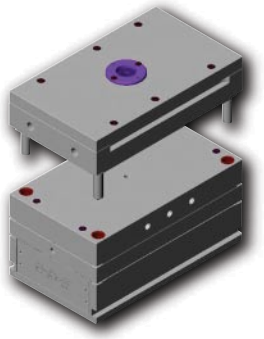
Type D



Lifting Holes

Lifting Hole Diameters

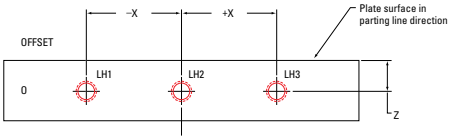
BASE SIZE	PLATE THICKNESS	
	0.875	1.375
88-1118	1/2-13 UNC	1/2-13 UNC
1123-1524	5/8-11 UNC	5/8-11 UNC
1529-1829	5/8-11 UNC	3/4-10 UNC
1835-2429	5/8-11 UNC	1"-8 UNC
2435	N/A	1"-8 UNC

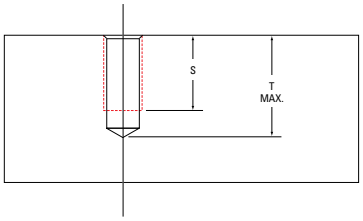


Lifting Holes

THREAD SIZE	S	T MAX.
1/2-13	1.00	1.38
5/8-11	1.25	1.75
3/4-10	1.50	2.00
1"-8	2.00	2.62

Lifting Holes can be used to install hoist rings for ease of handling. Mold base can be configured only with Lifting Holes which are appropriate for the specific mold base size. Refer to the D-M-E catalog for a comprehensive selection of Hoist Rings.

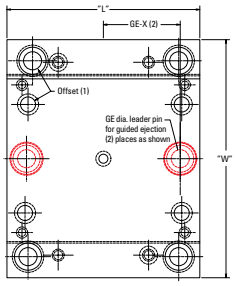




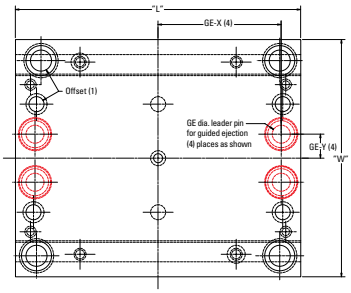
American Standard Mold Base Features

Guided Ejection Systems

Guided Ejection Systems hold the ejector assembly in alignment and support the weight of the ejector assembly throughout the molding cycle – greatly reducing wear on ejection components and preventing cocking of the ejector assembly.



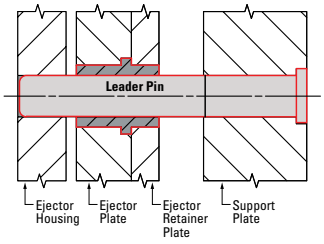
"B" HALF OF MOLD FOR 88, 812 & 108 MOLD BASE SIZE ONLY



"B" HALF OF MOLD FOR 1012 – 2435 BASES

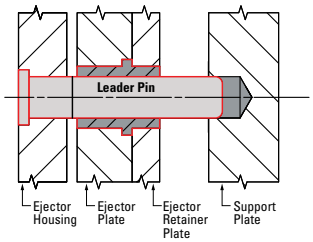
Guided Ejection Positions

PIN DIAMETER (RECOM'D)	BASE SIZE	GE X	GE Y
0.750	88	3.000	Center
	812	5.000	Center
	108	3.062	Center
	1012	5.000	1.000
	1016	7.062	1.000
	1020	9.062	1.000
	1112	5.062	1.625
	1114	6.062	1.625
	1118	8.062	1.625
	1123	10.812	1.625
0.875	212	5.000	1.750
	1215	6.500	1.750
	1220	9.000	1.750
	1223	10.750	1.750
	1315	6.500	2.375
	1318	8.000	2.375
	1321	9.375	2.375
	1323	10.750	2.375
	1326	12.000	2.375
	1329	13.750	2.375
1.000	1518	7.875	2.375
	1524	10.812	2.375
	1529	13.688	2.375
	1616	6.938	2.875
	1620	8.938	2.875
	1623	10.688	2.875
	1626	11.938	2.875
	1629	13.688	2.875
	1635	16.688	2.875
	1724	10.812	3.125
	1729	13.688	3.125
	1818	7.938	3.875
	1820	8.938	3.875
	1823	10.688	3.875
	1826	11.038	3.875
	1829	13.688	3.875
	1835	16.688	3.875
	1924	10.812	4.625
	1929	13.688	4.625
	1935	16.688	4.625
1.250	2424	10.688	6.125
	2429	13.562	6.125
	2435	16.562	6.125



System 1

When pins are installed in the support plate, the ejector housing can be removed from the mold without removing ejector plates. This permits easy access to service the ejector system.



System 2

Pins installed in the ejector housing permit fast installation. When the ejector housing is removed from the mold base, the complete ejector assembly is removed.

Sizes & Thicknesses

43 Nominal Sizes

- The American Standard Mold Base is available in 43 nominal sizes to match the mold space requirements for your application.
- As the creator of the American mold base standard, D-M-E has the largest selection of mold base sizes and most are available in less than five business days.

CODE	THICKNESS
7	0.875
13	1.375
17	1.875
23	2.375
27	2.875
33	3.375
37	3.875
47	4.875
57	5.875

9 Plate Thicknesses

- D-M-E offers mold plates for all nominal sizes up to 5-7/8".
- Our own steel processing facility manufactures our mold plate directly from raw steel slabs.

NOMINAL SIZE	WIDTH (IN)	LENGTH (IN)	WEIGHT RANGE (LBS) MIN	MAX
88	7.875	7.875	116	305
812	7.875	11.875	175	460
108	9.875	8.000	156	393
1012	9.875	11.875	235	592
1016	9.875	16.000	316	798
1020	9.875	20.000	395	997
1112	10.875	12.000	261	659
1114	10.875	14.000	305	769
1118	10.875	18.000	392	988
1123	10.875	23.500	511	1290
1212	11.875	12.000	285	719
1215	11.875	15.000	379	899
1220	11.875	20.000	505	1199
1223	11.875	23.500	594	1409
1315	13.375	15.000	427	1038
1318	13.375	18.000	512	1246
1321	13.375	20.750	590	1436
1323	13.375	23.500	669	1627
1326	13.375	26.000	740	1800
1329	13.375	29.500	839	2042
1518	14.875	17.875	599	1410
1524	14.875	23.750	796	1873

NOMINAL SIZE	WIDTH (IN)	LENGTH (IN)	WEIGHT RANGE (LBS) MIN	MAX
1529	14.875	29.500	989	2327
1616	15.875	16.000	573	1347
1620	15.875	20.000	716	1683
1623	15.875	23.500	841	1978
1626	15.875	26.000	930	2189
1629	15.875	29.500	1056	2483
1635	15.875	35.500	1270	2988
1724	16.500	23.750	883	2078
1729	16.500	29.500	1097	2581
1818	17.875	18.000	725	1706
1820	17.875	20.000	806	1896
1823	17.875	23.500	947	2227
1826	17.875	26.000	1048	2464
1829	17.875	29.500	1189	2796
1835	17.875	35.500	1430	3365
1924	19.500	23.750	1044	2456
1929	19.500	29.500	1297	3050
1935	19.500	35.500	1648	3758
2424	23.750	23.750	1343	3062
2429	23.750	29.500	1668	3804
2435	23.750	35.500	2008	4578

Steels for Structural and Holder Block Applications

D-M-E #1 Steel is a medium carbon quality steel with greater tensile strength than typical plain carbon warehouse steels. It machines easily, but is not "sticky", permitting a faster and smoother cut. International comparisons: DIN 1.1178 (CK 30) and 1.1730 (C 45 W); JIS S 30 CM, S50C, S55C; ISO 683-1 C30E4.

D-M-E #2 Steel is a medium alloy steel specified for durability in structural applications. It is supplied pre-heat treated to 28-34 HRC (271-321 Bhn). A high strength steel, it is ideal for cavity and core retainer plates, clamping plates and support plates in molds. International comparisons: DIN 1.2312 (40CrMnMoS 8 6), 1.7218 (25CrMo4) and 1.2331 (41CrMoS4); JIS SCM 430; ISO 683-2 Type 1.

D-M-E #7 Steel is a modified AISI 400 series stainless steel for holder block applications. It is supplied pre-heat treated to 32-36 HRC (302-340 Bhn). This stainless steel offers corrosion-resistance and exceptional machinability but cannot be further hardened (see D-M-E #6). For humid environments, corrosive plastics, "clean room" or "100% stainless" applications, it is an ideal choice for all structural mold plates. International comparisons: none.

Steels for Cavity & Core Applications

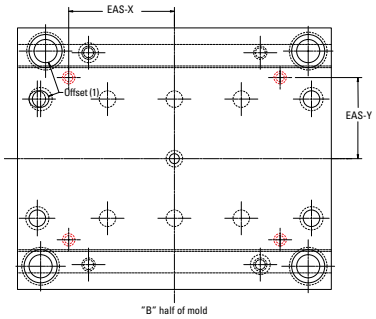
D-M-E #3 Steel is a P-20 AISI 4130 type cavity steel. Exceptionally clean, it is pre-heat treated to 28-34 HRC (271-321 Bhn). It provides good machinability, the ability to heat treat to higher hardness, and exceptional polishability. International comparisons: DIN 1.2311 G40CrMnMo7; JIS none; ISO none.

D-M-E #5 Steel is an AISI/SAE H-13 type thermal shock resistant, hotwork die steel. Supplied fully annealed (approximately 200 Bhn; 13-20 HRC) for easy machinability, it can be subsequently heat treated to the desired hardness with a minimum of deformation. Mainly used for die cast dies, it is also suitable for plastic molds with exceptional hardness or polishability requirements. D-M-E #5 Steel meets or exceeds the acceptance criteria established by the NADCA as detailed in Technical Digest Number 01-80-01D. International comparisons: DIN 1.2344 (X40CrMoV5-1); JIS SKD 61; ISO 4955 H13.

D-M-E #6 Steel is a modified AISI 420 type stainless steel. It is supplied fully annealed to 179-241 Bhn (8-23 HRC), making it readily machinable. Unlike D-M-E #7 steel, D-M-E #6 steel is a cavity-grade material that can be subsequently heat treated to the desired hardness and has excellent polishability. International comparisons: DIN 1.4028 (X30Cr13); JIS SUS 420 J 2; ISO none.

American Standard Mold Base Features

Ejector Assembly Screws

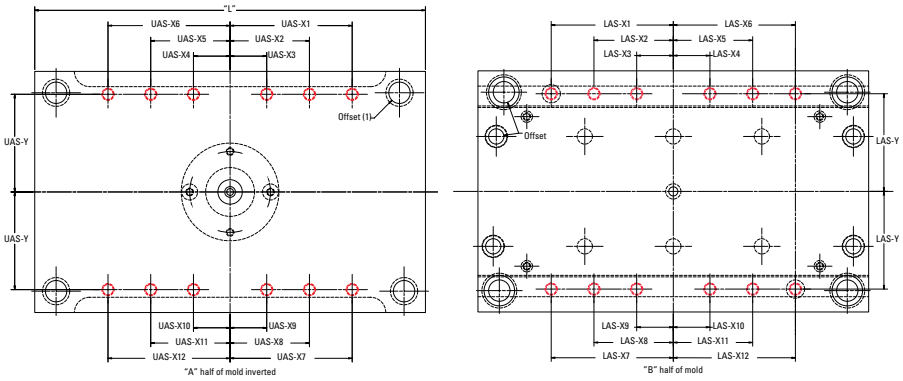


Ejector Assembly Screw Positions

BASE SIZE	SCREW SIZE	EAS X	EAS Y
88	5/16-18	3.375	2.250
812	5/16-18	5.375	2.250
108	5/16-18	3.375	3.062
1012	5/16-18	5.312	3.062
1016	5/16-18	7.375	3.062
1020	5/16-18	9.375	3.062
1112	5/16-18	4.562	3.312
1114	5/16-18	5.562	3.312
1118	5/16-18	7.562	3.312
1123	5/16-18	10.312	3.312
1212	5/16-18	4.500	3.812
1215	5/16-18	6.000	3.812
1220	5/16-18	8.500	3.812
1223	5/16-18	10.250	3.812
*1315	3/8-16	5.812	4.250
*1318	3/8-16	7.312	4.250
1321	3/8-16	8.688	4.250
1323	3/8-16	10.062	4.250
1326	3/8-16	11.312	4.250
1329	3/8-16	13.062	4.250
1518	3/8-16	8.312	5.000
1524	3/8-16	11.250	5.000
1529	3/8-16	14.125	5.000
1616	3/8-16	7.375	5.438
1620	3/8-16	9.375	5.438
1623	3/8-16	11.125	5.438
1626	3/8-16	12.375	5.438
1629	3/8-16	14.125	5.438
1635	3/8-16	17.125	5.438
1724	3/8-16	11.250	5.750
1729	3/8-16	14.125	5.750
1818	3/8-16	8.375	6.438
1820	3/8-16	9.375	6.438
1823	3/8-16	11.125	6.438
1826	3/8-16	12.375	6.438
1829	3/8-16	14.125	6.438
1835	3/8-16	17.125	6.438
1924	1/2-13	11.250	7.250
1929	1/2-13	14.125	7.250
1935	1/2-13	17.125	7.250
2424	1/2-13	11.250	8.875
2429	1/2-13	14.125	8.875
2435	1/2-13	17.125	8.875

*New dimensions 10/02

Upper & Lower Assembly Screws



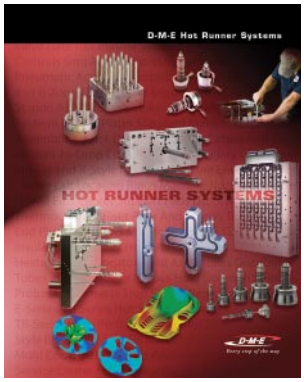
Upper and Lower Assembly Screw Positions

BASE SIZE	SCREW SIZE	UASy LASy	UASx1 LASx1	UASx2 LASx2	UASx3 LASx3	UASx4 LASx4	UASx5 LASx5	UASx6 LASx6	UASx7 LASx7	UASx8 LASx8	UASx9 LASx9	UASx10 LASx10	UASx11 LASx11	UASx12 LASx12
88	1/2-13	3.125	1.375	—	—	—	—	1.375	1.375	—	—	—	—	1.375
812	1/2-13	3.125	2.250	—	—	—	—	2.250	2.250	—	—	—	—	2.250
108	1/2-13	4.000	1.875	—	—	—	—	1.875	1.875	—	—	—	—	1.875
1012	1/2-13	4.000	3.250	—	—	—	—	3.250	3.250	—	—	—	—	3.250
1016	1/2-13	4.000	5.000	—	—	—	—	5.000	5.000	—	—	—	—	5.000
1020	1/2-13	4.000	6.500	—	—	1.000	—	6.500	6.500	—	1.000	—	—	6.500
1112	1/2-13	4.469	3.188	—	—	—	—	3.188	3.188	—	—	—	—	3.188
1114	1/2-13	4.469	3.188	—	—	—	—	3.188	3.188	—	—	—	—	3.188
1118	1/2-13	4.469	5.875	—	—	1.000	—	5.875	5.875	—	1.000	—	—	5.875
1123	1/2-13	4.469	8.625	—	3.188	3.188	—	8.625	8.625	—	3.188	3.188	—	8.625
1212	1/2-13	4.469	2.812	—	—	—	—	2.812	2.812	—	—	—	—	2.812
1215	1/2-13	4.469	4.500	—	—	1.000	—	4.500	4.500	—	1.000	—	—	4.500
1220	1/2-13	4.469	6.625	—	—	1.000	—	6.625	6.625	—	1.000	—	—	6.625
1223	1/2-13	4.469	8.625	—	2.812	2.812	—	8.625	8.625	—	2.812	2.812	—	8.625
1315	1/2-13	5.719	4.500	—	—	1.000	—	4.500	4.500	—	1.000	—	—	4.500
1318	1/2-13	5.719	5.438	—	—	1.000	—	5.438	5.438	—	1.000	—	—	5.438
1321	1/2-13	5.719	6.750	—	—	1.000	—	6.750	6.750	—	1.000	—	—	6.750
1323	1/2-13	5.719	8.125	—	2.750	2.750	—	8.125	8.125	—	2.750	2.750	—	8.125
1326	1/2-13	5.719	9.375	—	3.250	3.250	—	9.375	9.375	—	3.250	3.250	—	9.375
1329	1/2-13	5.719	11.125	—	3.250	3.250	—	11.125	11.125	—	3.250	3.250	—	11.125
1518	1/2-13	6.469	5.438	—	—	1.000	—	5.438	5.438	—	1.000	—	—	5.438
1524	1/2-13	6.469	7.750	—	2.750	2.750	—	7.750	7.750	—	2.750	2.750	—	7.750
1529	1/2-13	6.469	10.625	—	3.688	3.688	—	10.625	10.625	—	3.688	3.688	—	10.625
1616	1/2-13	6.969	4.250	—	—	1.000	—	4.250	4.250	—	1.000	—	—	4.250
1620	1/2-13	6.969	6.250	—	—	1.000	—	6.250	6.250	—	1.000	—	—	6.250
1623	1/2-13	6.969	8.000	—	2.750	2.750	—	8.000	8.000	—	2.750	2.750	—	8.000
1626	1/2-13	6.969	9.250	—	3.125	3.125	—	9.250	9.250	—	3.125	3.125	—	9.250
1629	1/2-13	6.969	11.000	—	3.688	3.688	—	11.000	11.000	—	3.688	3.688	—	11.000
1635	1/2-13	6.969	14.000	8.500	2.875	2.875	8.500	14.000	14.000	8.500	2.875	2.875	8.500	14.000
1724	1/2-13	7.281	7.750	—	2.750	2.750	—	7.750	7.750	—	2.750	2.750	—	7.750
1729	1/2-13	7.281	10.625	—	3.688	3.688	—	10.625	10.625	—	3.688	3.688	—	10.625
1818	1/2-13	7.969	5.438	—	—	1.000	—	5.438	5.438	—	1.000	—	—	5.438
1820	1/2-13	7.969	6.438	—	—	1.000	—	6.438	6.438	—	1.000	—	—	6.438
1823	1/2-13	7.969	8.125	—	2.750	2.750	—	8.125	8.125	—	2.750	2.750	—	8.125
1826	1/2-13	7.969	9.375	—	3.125	3.125	—	9.375	9.375	—	3.125	3.125	—	9.375
1829	1/2-13	7.969	11.125	—	3.688	3.688	—	11.125	11.125	—	3.688	3.688	—	11.125
1835	1/2-13	7.969	14.125	8.500	2.875	2.875	8.500	14.125	14.125	8.500	2.875	2.875	8.500	14.125
1924	1/2-13	8.781	7.750	—	2.750	2.750	—	7.750	7.750	—	2.750	2.750	—	7.750
1929	1/2-13	8.781	11.125	—	3.688	3.688	—	11.125	11.125	—	3.688	3.688	—	11.125
1935	1/2-13	8.781	14.125	8.500	2.875	2.875	8.500	14.125	14.125	8.500	2.875	2.875	8.500	14.125
2424	5/8-11	10.844	7.750	—	2.750	2.750	—	7.750	7.750	—	2.750	2.750	—	7.750
2429	5/8-11	10.844	10.625	—	3.688	3.688	—	10.625	10.625	—	3.688	3.688	—	10.625
2435	5/8-11	10.844	13.625	8.500	2.750	2.750	8.500	13.625	13.625	8.500	2.750	2.750	8.500	13.625

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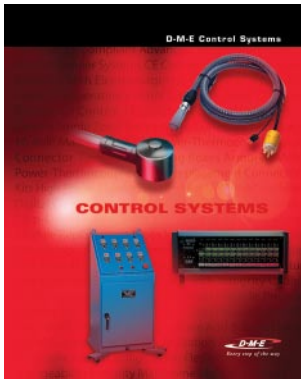
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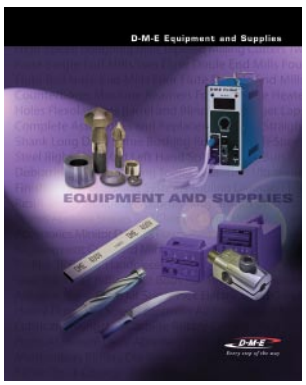
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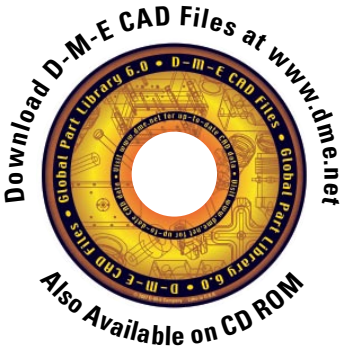
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Every step of the way

World Headquarters
D-M-E Company
29111 Stephenson Highway
Madison Heights, MI 48071
800-626-6653 *toll-free tel*
248-398-6000 *tel*
888-808-4363 *toll-free fax*
www.dme.net *web*
info@dme.net *e-mail*

D-M-E of Canada, Ltd.
6210 Northwest Drive
Mississauga, Ontario
Canada L4V 1J6
800-387-6600 *toll-free tel*
905-677-6370 *tel*
800-461-9965 *toll-free fax*
dme_canada@dme.net *e-mail*

D-M-E Europe C.V.B.A.
Industriepark Noord
B-2800 Mechelen Belgium
32-15-215011 *tel*
32-15-218235 *fax*
sales@dmeeu.com *e-mail*

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ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

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HOME

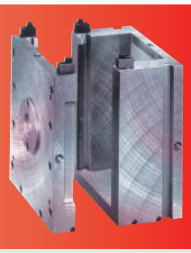
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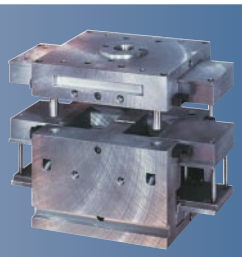
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ADAPTER FRAME



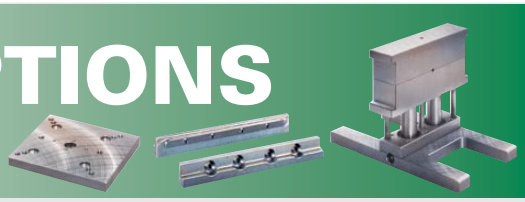
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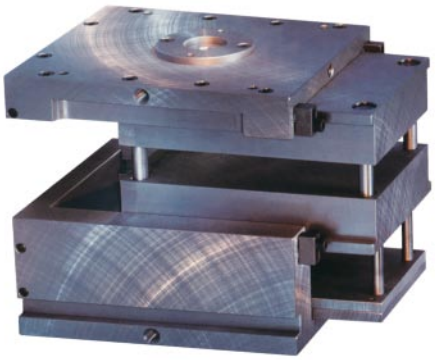
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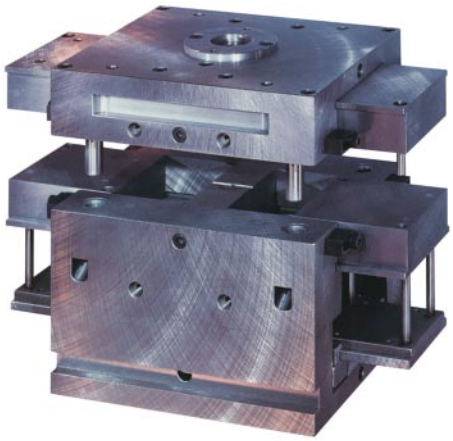


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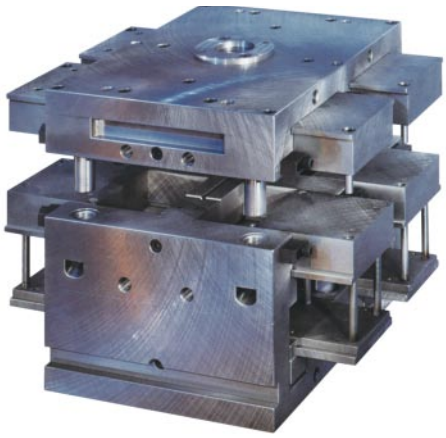
The MUD Quick-Change™ Concept



Quick-Change U Frame



Quick-Change H Frame



Quick-Change Double H Frame

A cost-effective approach to injection molding

This Master Unit Die Quick-Change Concept was developed to meet the parallel challenges of increasing productivity and decreasing costs.

The tooling approach to injection molding presented in this catalog offers mold makers and plastics manufacturers a number of competitive advantages. These include lower tooling costs and faster production changeovers. The remarkable flexibility this approach offers makes it ideal for just-in-time scheduling.

Faster production changeovers and lower tooling costs

The Master Unit Die Quick-Change system approach is based on an unlimited number of companion insert molds easily interchanged within a single MUD Quick-Change frame. The frame remains in the molding machine during these mold changeovers.

Most changeovers take less than five minutes, require no special equipment and can be made by one person. Simply loosen four clamps, disconnect any heating or cooling lines and slide the insert mold from the Quick-Change frame. Then slide in the replacement, reconnect the lines and reclamp. The new insert mold is now ready for production.

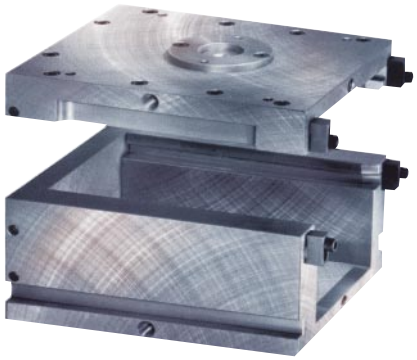
This approach to tooling reduces down time as much as 75 percent. Related labor costs are reduced even more since the need for a second person to assist in the mold change is also eliminated.

The initial cost for new tooling is also reduced as much as 66 percent. This is because only the companion insert mold is replaced to produce a new part. It is not necessary to replace an entire standard mold base. Associated labor costs are lowered because insert molds are much easier to handle than larger, heavier standard mold bases.

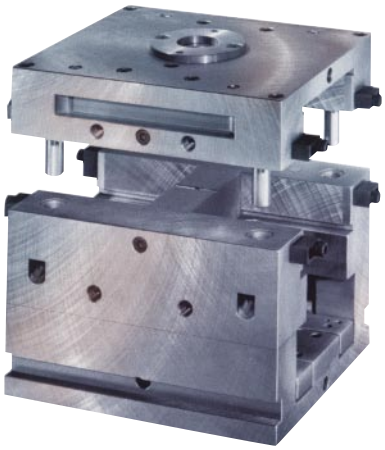
This combination of reduced production down time, reduced labor cost and reduced tooling expense can result in a significant improvement in profit margins.

Reduces down time as much as **75 percent.**
Reduces initial cost as much as **66 percent.**

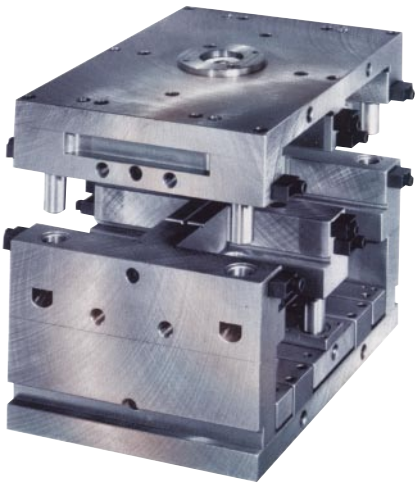
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Quick-Change U Frame



Quick-Change H Frame



Quick-Change Double H Frame

Quick-Change frames and companion insert molds

Three Quick-Change frame series

The MUD Quick-Change Concept is available in three frame series and in sizes for the smallest air-operated machines to models for 500-ton machines.

The MUD **U frame** series offers the most design flexibility and accepts both standard and T-style companion insert molds. **H frame** and **Double H frame** models offer simultaneous molding with two and four standard style companion insert molds. The benefits of both Quick-Change tooling and hot runner molding can be combined with the addition of a manifold to MUD H and Double H frame models.

All Quick-Change frames are precision made to exacting tolerances and are easily matched to the specifications of individual machines. Each is engineered for extra strength and rigidity and is designed for maximum molding flexibility.

Two companion insert mold series

Master Unit Die companion insert molds for Quick-Change frames offer designers and mold makers exceptional application flexibility. Each is available in a variety of steels and is interchangeable within matching frames. The insert mold includes the cavity and core plates with leader pins and bushings installed and the ejector plates. Since this insert assembly is all that's needed to produce new parts, tooling costs are reduced significantly.

Standard Style Insert Molds offer maximum economy and are available in solid or laminated construction including three- and four-plate designs. Options and features include stripper plate, sleeve ejection and other special applications designed to meet virtually all injection molding needs. See U frame, H frame and Double H frame sections for details.



Standard Laminated Insert Mold

T-Style Insert Molds offer the maximum projected mold area and are available in laminated construction including three- and four-plate designs. Smaller models are also available in solid construction. Options and features include stripper plates, sleeve ejection and other special applications. See U frame section for details.



T-Style Laminated Insert Mold

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Advantages of the MUD Concept

Maximize your **production** volume and **minimize** your **downtime** with our Quick-Change™ insert molds.

Quick-Change tooling offers you advantages at every step in the manufacturing process — from tooling lead time and cost to production and inventory control.

Quicker Delivery
New tooling orders require less lead time because only a companion insert mold is required, not an entire standard mold base. This results in less time required for machining. Also, standard insert molds are usually shipped immediately from stock, seldom require more than seven to ten working days.

Lower Tooling Costs
Since only an insert mold is needed for new, standby or replacement tooling, the cost is less for both material and fabrication. Costs are reduced as much as 66 percent. Another cost reduction feature is the use of spacer bars in larger frames. These permit the use of smaller, less expensive insert molds.

Faster Initial Mold Setup
The MUD Quick-Change frame stays in the molding machine. Initial setup is simply a matter of sliding the insert mold in, then clamping it and connecting the heating or cooling lines.

Maximum High Volume Production
H frames and Double H frames offer special advantages for high volume production. Multiple insert molds permit doubling (H frame) or quadrupling (Double H frame) quantities each cycle. Production is virtually uninterrupted during maintenance or repair by using quickly installed backup insert molds.

Quicker Production Changeovers
Just loosen four clamps, disconnect heating or cooling lines and slide the insert mold from the Quick-Change frame. Then slide in the replacement, reclamp, and reconnect the lines. Most changeovers require less than five minutes.

Minimum Purging
Because MUD insert molds can be interchanged in moments, the machine cylinder is not likely to require purging due to overheating. Both raw material and production time are saved.

Easier Maintenance and Repair
MUD insert molds are faster to remove and reinstall than standard mold bases. They are also much lighter and smaller. This means scheduled preventative maintenance is much easier to perform. There is also less down time if the insert mold is ever removed for modification or repair. If the insert mold must be out for a long period, a replacement can be easily installed and the machine back in production within five minutes.

Convenient Storage
Since the MUD Quick-Change frame stays in the machine, only the companion insert mold needs to be stored. Their lighter weight and smaller size means easier handling. Most models can be stored on bookcase-type shelves.

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Production Flexibility
MUD Quick-Change H and Double H frames are designed for simultaneous molding with two or more companion insert molds. These insert molds can be interchanged independently. When single insert mold production is scheduled, blank insert molds are easily installed. Duplicate insert molds can be installed when greater volume of a part is required.

Design Versatility
MUD companion insert molds are available in T-style and standard style and in solid and laminated construction. Design latitude is unlimited. Insert molds can be engineered for parts requiring stripper plates, sleeve ejection, single or double cam action, hydraulic, mechanical or pneumatic cylinders — virtually any feature desired including three- and four-plate designs.

Applications

Prototypes and Samples
Faster setup and start up means the Master Unit Die Concept is ideal for this type of application. Even more important, engineering changes involve only the companion insert mold, not an entire standard mold base. This keeps sample and experimental tooling time and cost to an absolute minimum.

Aluminum Insert Molds
The thermal conductivity of available aluminum insert molds approaches four times that of steel for even faster cycling times. These light weight insert molds are also easy to handle and can be machined at high speeds. See pages UF 20 and UF 21.

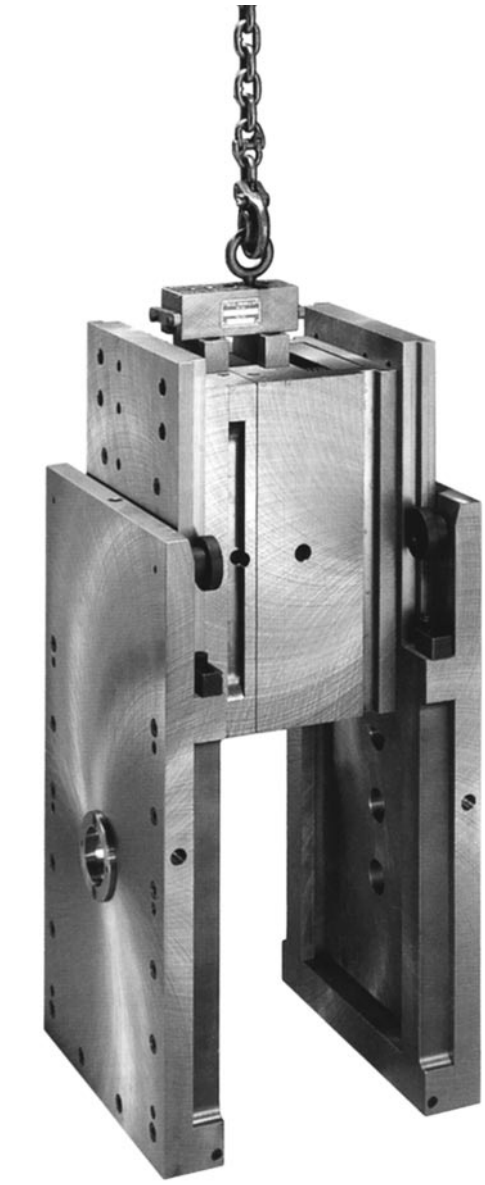
Short Production Runs
MUD insert molds offer unparalleled advantages when a variety of parts must be produced in a short time period, a major plus for just-in-time scheduling. Literally hours of production time are gained by these fast changeovers, often eliminating the need for overtime. The lower cost of these insert molds also makes duplicate tooling attractive insurance for meeting critical deadlines.

High Volume Production
The simultaneous molding of parts in multi-section frames is one of the major Quick-Change advantages in increasing productivity. So is the lower cost of backup insert molds. Another advantage is the ease and speed of installing insert molds since this almost eliminates production down time. And since all molds require some maintenance, this time gained in removing and installing insert molds has added significance. MUD Quick-Change frames and companion insert molds are also constructed with the precision, the strength and the reliability to meet the demands of high volume production.

Customized and **versatile**, MUD insert molds meet your specific production needs.

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The MUD Quick-Change™ Concept
Standard Mold Bases



MUD Adapter Frame System permits production changeovers in less than ten minutes

Standard mold bases can now be interchanged in less than ten minutes with MUD's Quick-Change adapter system. It's an approach that works with any standard mold base in any molding machine up to 500-ton capacity. It's also the most economical Quick-Change available.

The system is based on a Master Unit Die adapter frame that remains in the molding machine during production changeovers. The frame is installed without modifying the machine. Standard mold bases equipped with companion ear plates are interchanged within this adapter frame.

Just one adapter frame accommodates an unlimited number of standard mold bases. These frames are easily transferred to other machines since no other special mounting hardware is required. The system is based on the unique slide and clamp approach to mold changeovers developed by Master Unit Die. Standard mold bases equipped with MUD ear plate sets simply slide in and out of the Quick-Change adapter frame. See Adapter Frames section.

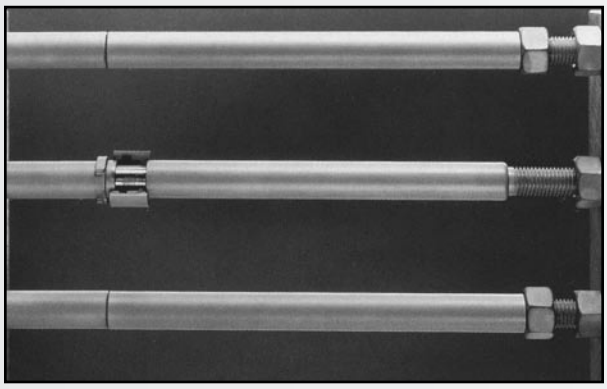
Adapter Frame System Options

MUD Balancing Lift Bar

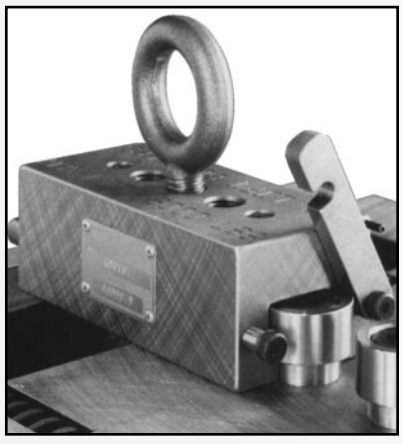
These slide and lock bars allow standard mold bases to be easily lowered in and raised out of the molding machine. See page AF 103.

Quick Coupler Locking KO Rod System

This optional knockout assembly permits locking the mold ejector system to the machine's hydraulic KO system with a simple push and turn action. See page AF 102.



MUD Balancing Lift Bars



Quick Coupler Locking KO Rod Systems
U.S. PATENT #5,033,784

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- Marry your system to the mold base, plates and components required
- Provide quotations for and perform all of the special machining required
- Assemble and wire the system
- Check mechanical fit of all components and perform electrical load testing
- Assist with system start-up and maintenance

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D-M-E
Every step of the way

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11. **ACCEPTANCE OF ORDERS:** Buyer agrees that all orders, including any arising from our Proposal, shall include these terms and conditions only, notwithstanding any different or additional terms that may be embodied in Buyer's order. All orders are subject to our acceptance and we reserve the right to reject orders as, in our sole judgement, mandated by business conditions. We reserve the right to not proceed with any order until all necessary information is received from Buyer.
12. **MERGER CLAUSE:** This Agreement entirely supersedes any prior oral representations, correspondence, proposal, quotation, or agreement. This writing constitutes the final and total expression of such agreement between the parties, and it is a complete and exclusive statement of the terms of that agreement.
13. **ASSIGNMENT:** Neither party may assign this Agreement without the written consent of the other party, except that we may assign this Agreement to a third party that acquires substantially all of our assets or we may assign the flow of funds arising out of this Agreement.
14. **GOVERNING LAW:** This Agreement shall be governed by and construed in accordance with the laws of the State of Michigan.

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Sales and Ordering Information

U.S.A.

TERMS AND CONDITIONS OF SALE: See previous page.

PHONE ORDERS – TOLL FREE: 800-626-6653. D-M-E's Customer Service Dept. operates Monday through Friday from 8 a.m. to 8 p.m. E.S.T. Calls can be made from anywhere in the continental U.S. and Puerto Rico (Puerto Rico: use "137" prefix instead of "1"). Our Customer Service Representatives will be happy to answer your questions on D-M-E products or services, provide on-the-spot feedback on product availability and shipping details, or take any messages you wish relayed to your local D-M-E sales, manufacturing or technical service representatives.

MAIL ORDERS: If you prefer to order by mail, please address your order to:

- D-M-E Company, 29111 Stephenson Highway, Madison Heights, Michigan 48071
  ATTN: Customer Service Dept.

FAX: You may fax your order to:

- D-M-E Customer Service
  248-398-6174 • 888-808-4363

CHECKS OR MONEY ORDERS: When paying invoices by check or money order, please make payable to *D-M-E Company.* Include remittance copy of invoice and mail to:

- D-M-E Company, Department Lock Box 78242, P.O. Box 78000, Detroit, Michigan 48278-0242

WALK-IN ORDERS, PICK-UPS AND RETURNS: If desired, ordered products in stock at your nearest D-M-E Service Center can be picked up rather than shipped. Walk-in orders at Service Center locations can also be processed while you wait. Products being returned for repair or exchange should be processed through Customer Service prior to being returned.

SPECIAL MACHINING SERVICES: Prints for quotation on special machining work can be sent by EDI to dme_cad@dme.net or mailed to the Estimating Department of the D-M-E manufacturing location nearest you. Call our toll-free number if desired to clarify location which serves your area.

Estimating locations are:

- 70 East Hillis Street, Youngwood, Pa 15697, FAX: 724-925-2424
- 1117 Fairplains Street, Greenville, MI 48338, Tel. 616-754-4601, FAX: 616-225-3924
- 3275 Deziel Drive, Windsor, Ont N8W 5A5, Tel. 519-948-5001, FAX: 519-948-4652
- 464-466 Windy Point Drive, Glendale Heights, IL 60139, Tel. 630-469-4280, FAX: 630-469-4740 (estimating only)

Please add "D-M-E Company" and "Attn: Estimating Dept." to above addresses when mailing prints. To obtain prices and delivery on special mold base orders or to check status of special work in progress please contact Customer Service.

CANADA

TERMS AND CONDITIONS OF SALE: See previous page.

PHONE ORDERS: Contact our Mississauga, Ontario office at 800-387-6600, FAX: 800-461-9965.

MAIL ORDERS: Send to: D-M-E of Canada, Ltd., 6210 Northwest Drive, Mississauga, Ontario L4V 1J6.

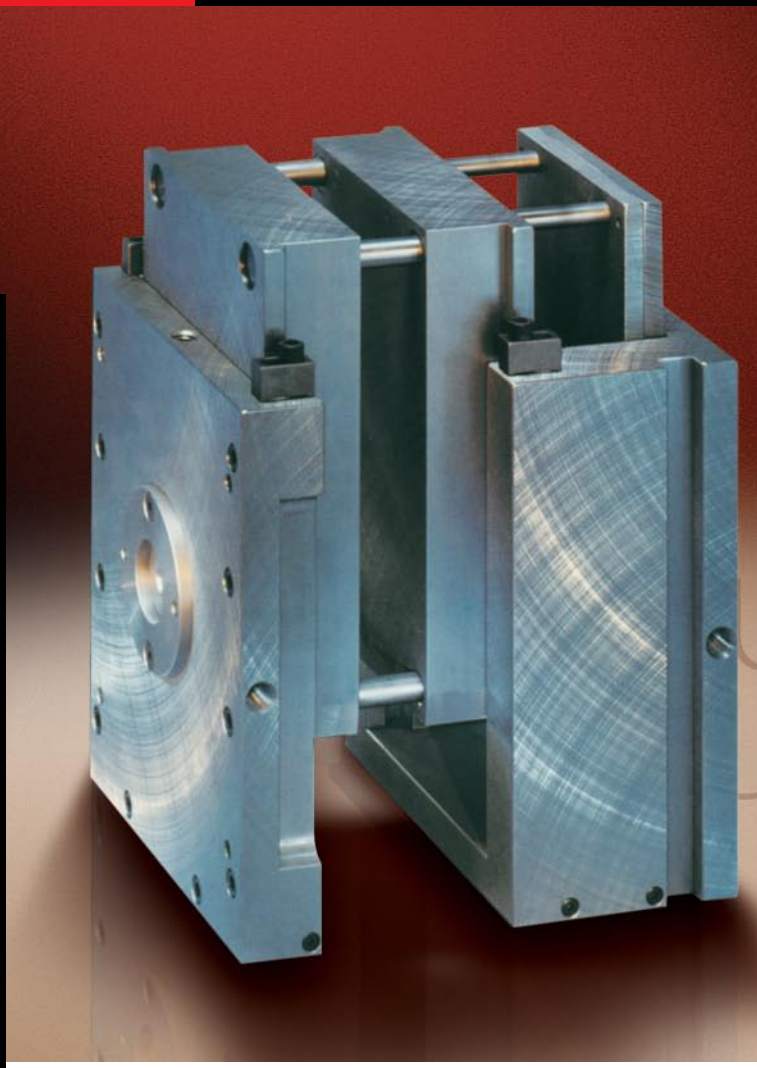
CHECK OR MONEY ORDERS: Make payable to *D-M-E of Canada, Ltd.* Include remittance copy of invoice and mail to Mississauga address above.

WALK-IN ORDERS, PICK-UPS, RETURNS, AND SPECIAL MACHINING: Contact our Mississauga office.

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.mup.vivtech.ru

TOC

MUD Quick-Change Systems from D-M-E



MUD

Quick-Change™ Mold Frames & Inserts for U-Style

Frame Ordering Information

- Item number and description (see tables on respective page)
- "S" diameter of locating ring supplied standard (see drawings on respective page)
- Sprue bushing (if required) "R" spherical radius of sprue bushing furnished 1/2" or 3/4" unless otherwise shown
- "O" small diameter of sprue bushing orifice furnished 5/32", 7/32", 9/32" or 11/32" unless otherwise shown
- Optional locating rings and sprue bushings available on request
- Knockout hole locations standard as shown (others optional)
- Clamp slots standard unless otherwise shown on respective page
- Mounting holes optional unless shown on respective page
- Adapter plates optional
- Additional height of ejection available (quotation on request)
- Frames standard in prehard #2 steel. Prehard stainless and other steel grades available (quotation on request)
- Other frame options are available on request

Insert Mold Ordering Information

- Item number and description (see tables on respective page)
- Steel grades – 1020, 4130 prehard, P-20 prehard and H-13: 420 stainless and other grades on request
- T-style laminated insert molds supplied with 4130 prehard ear plates **except** tool steel insert molds have tool steel ear plates
- H-13 and other tool steel insert molds supplied .010 oversize on outside dimension, .010 – .013 oversize on thickness, and .025 – .035 undersize in pin and bushing holes for machining after required heat treating
- "A" and "B" dimensions supplied .004 – .007 oversize unless otherwise specified
- Other "A" and "B" thicknesses available on request

Quick-Change U frame features and applications

This MUD Quick-Change frame and companion insert mold series combines the cost saving benefits and time saving advantages of the Master Unit Die Concept with exceptional design flexibility.

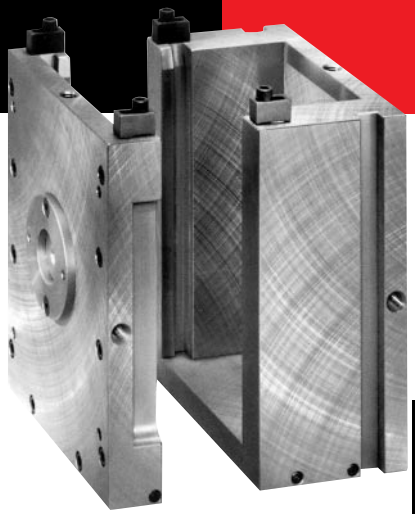
U frames accept two types of companion insert molds — the standard style (inside frame width) and T-style (outside frame width) companion insert molds. These can be ordered in any thickness in which the frame and insert stack height do not exceed the minimum or maximum shut height of the machine. The frame's open design permits installation of water lines or hydraulic cylinders on any side of the insert mold. Options include insulation boards, master ejector plates and master ejector plates with interlocking rails.

MUD Quick-Change U frames can be adapted to multiple insert mold applications with the addition of an optional removable center runner bar and master ejector plate. This allows simultaneous production with two smaller insert molds in either the T-style or standard style.

Other U frame series cost reduction options include frame spacer bars and adapter rails. Spacer bars permit the use of shorter and lower cost companion insert molds in frames designed for longer sizes. Adapter rails permit the use of narrower and lower cost insert molds in frames designed for wider sizes.

Steel Specifications: Standard U frames are produced in prehard steel (285-325 Brinell). Prehard stainless, 420 stainless, H-13 and other grades are available on request. Armorclad* Number One can be specified. Guide rails on larger frames are treated for enhanced wear resistance.

* "Armorclad" is the registered trademark of Armorclad, Inc.

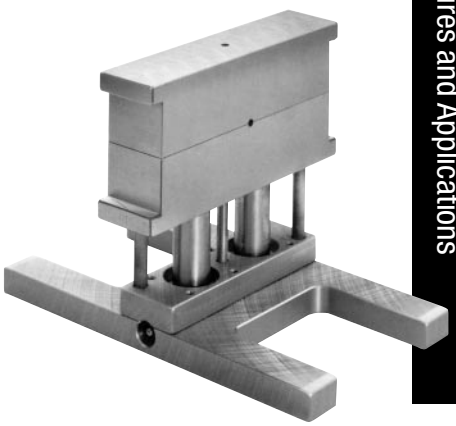


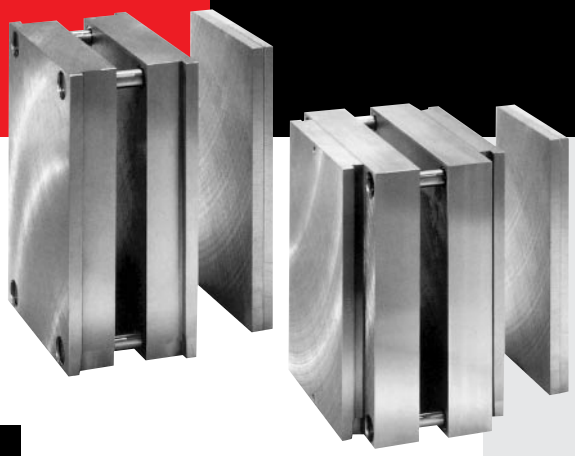
Quick-Change U frame options

- Removable center runner bars for two-insert mold applications
- Master ejector plates
- Master ejector plates with interlocking rails
- Frame spacer bars
- Adapter rails
- Hot sprue bushings
- Insulation boards
- Additional height on ejector rails
- Armorclad plating*
- Electroless nickel plating

* "Armorclad" is a registered trademark of Armorclad, Inc.

NOTE: Specifications subject to change without prior notice.





Companion insert mold options

- T-style insert molds in laminated construction
- Standard insert molds in solid or laminated construction
- Three-plate design for pinpoint gating
- Stripper plates
- Sleeve ejection
- Return pins and pillar posts
- Machining for taper locks
- Heater cartridge holes
- Machining for water lines
- Rough cut pockets
- Finished custom pockets
- Hot runner molding
- Machining for special applications
- Armorclad plating*

* "Armorclad" is a registered trademark of Armorclad, Inc.

NOTE: Specifications subject to change without prior notice.



Companion insert mold features and applications

The two companion insert mold styles available with the Quick-Change U frame increase the exceptional design flexibility of this series. A wide range of options adds to this versatility. The result is the most versatile injection molding tooling offered to the industry.

T-style insert molds offer the maximum projected mold area and are available in laminated construction including three- and four-plate designs. Smaller sizes are available in either solid or laminated construction.

Standard insert molds are the most economical style and are recommended when the additional width of the T-style is not required. Standard insert molds are available in solid or laminated construction including three- and four-plate designs.

Both style insert molds can be ordered with a complete ejector system including return pins and pillar posts. Other options include stripper plates, sleeve ejection and three-plate construction for a pinpoint gating system. Machining for heater cartridge holes, water lines, rough or finished pockets, taper locks and other special applications is also available. As noted, the open design of the U frame permits installation of water lines or hydraulic cylinders on any side of the insert molds.

Design options for insert molds include spring loading, early return, unscrewing mechanisms, hot sprue bushings, hot runner molding and machining for cam slides. Insert molds can be ordered with interlocking ejector plates for positive return and stroking action when used with frames having an interlocking ejector system.

Steel Specifications: Companion insert molds are available in 1020, 4130 prehard, P-20 prehard and H-13. 420 stainless and other grades are available on request. Ear plates for T-style laminated insert molds are supplied 4130 steel with the exception of tool steel insert molds which are supplied with tool steel ear plates. Armorclad* Number One can be specified.

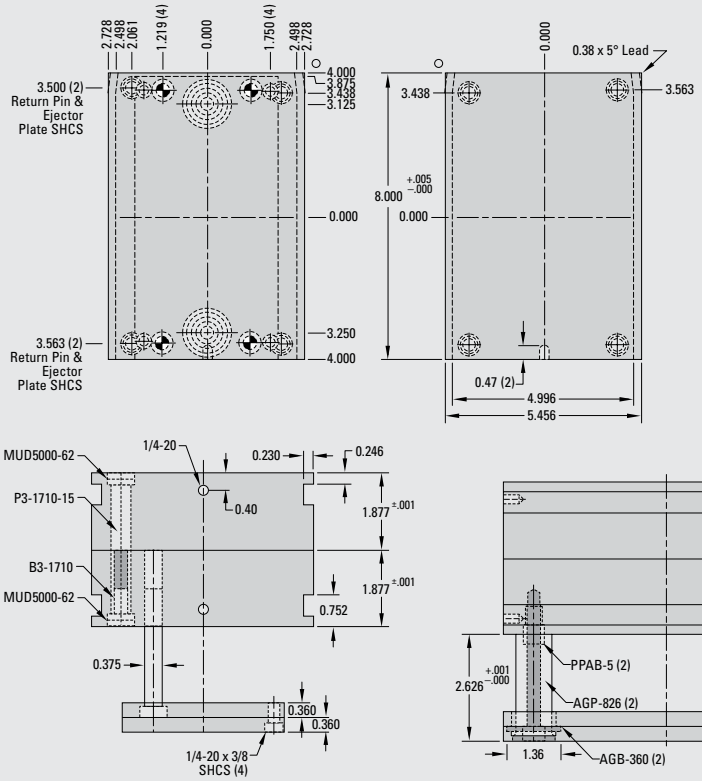
* "Armorclad" is the registered trademark of Armorclad, Inc.

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

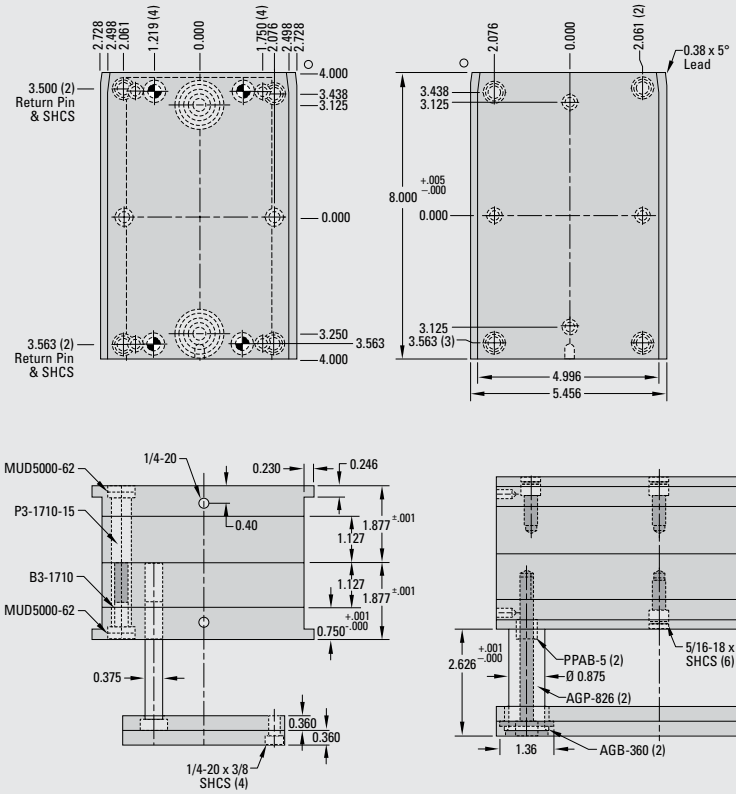
Enhanced Series Mold Inserts
Solid & Laminated



SOLID

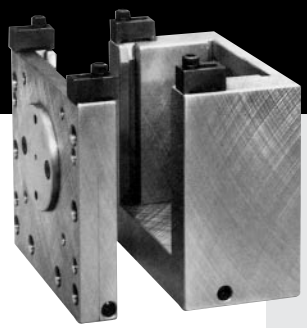


LAMINATED



- Provides room for thicker pocket walls
- Reduces machine setup time by providing more surface area for clamping
- Ejector plates are bolted together for maximum convenience
- Compatible with the MUD Quick-Change U Frame
- Installed with four leader pins and bushings, four return pins, and eyebolt holes
- All-in-one post guides ejection, retains the ejection system and provides support without the use of additional support pillars
- Tapped hole for insert removal
- Finish-ground parting line plates
- Optional .480 thick ejector plates
- 08/09 Series mold inserts available in D-M-E #2 and #3 type steels
- Parting line plates bolt to the ear plates (Laminated only)
- Other sizes available on request
- All enhanced inserts are quotation upon request

UF Quick-Change U-Style
Frame & Companion Insert Molds

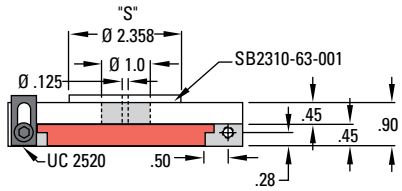


Frame

ITEM NO.
05/05 UF 321

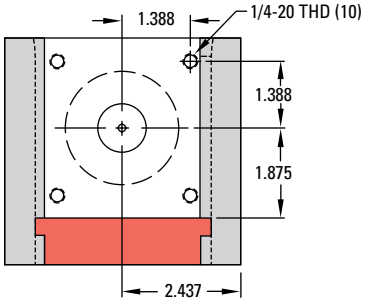
NOTE: Use of spacers allows this frame to accept MUD 3.25 x 3.15 insert molds (see page OP 146).

UF 321 Frame Upper – Side View

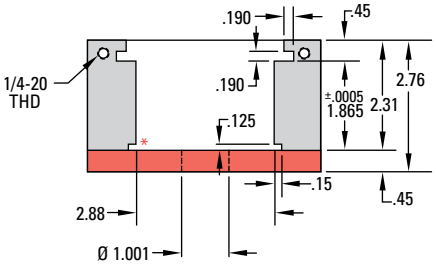


NOTE: Sprue bushing supplied flat with .125 small diameter orifice standard.

UF 321 Frame Upper – Top View

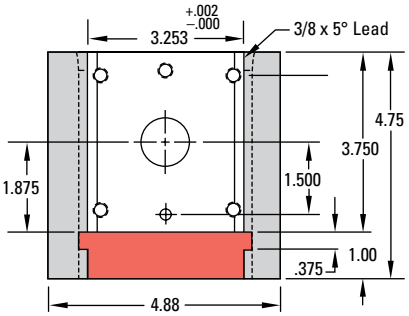


UF 321 Frame Lower – Side View



*0 degree - 15 minute taper slot to accommodate sleeve ejection retainer plate. Slot tapers from .125 to .109 in 3.750 length.

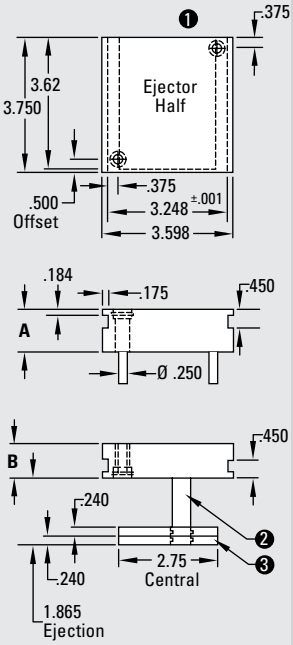
UF 321 Frame Lower – Top View



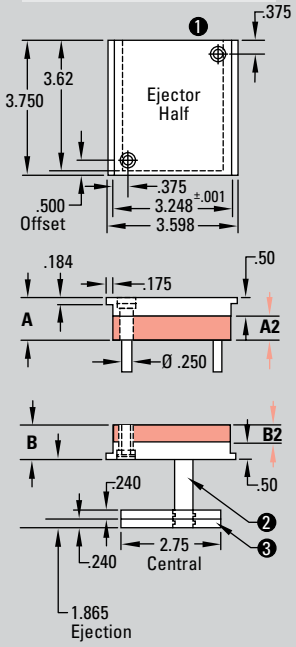
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional.

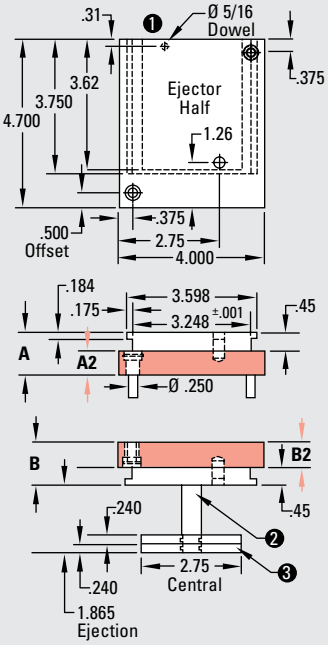
Standard Solid: 3.25 x 3.75



Standard Laminated: 3.25 x 3.75



T-Style Laminated: 4.0 x 4.7



Standard Solid Construction

ITEM NO.	A	B
05/05 SSU 221	1.377	1.377
05/05 SSU 222	1.877	1.877

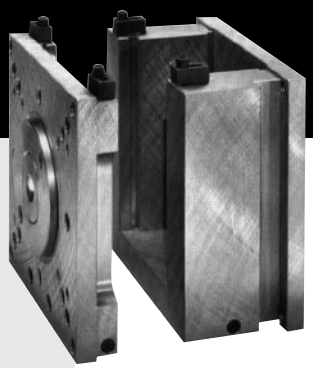
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
05/05 SLU 281	1.377	0.877	0.877	1.377
05/05 SLU 282	1.877	1.377	1.377	1.877

T-Style Laminated Construction

ITEM NO.	A	A2	B2	B
05/05 TLU 201	1.450	1.000	1.000	1.450
05/05 TLU 202	1.950	1.500	1.500	1.950

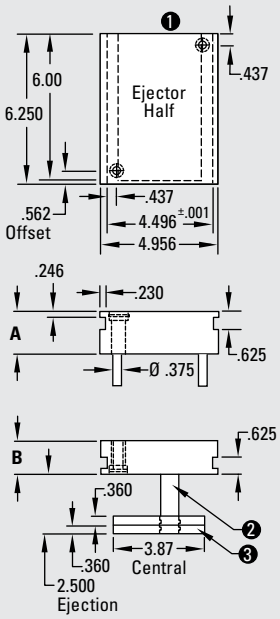
Ordering information for frame and companion insert molds can be found in the front of this section.



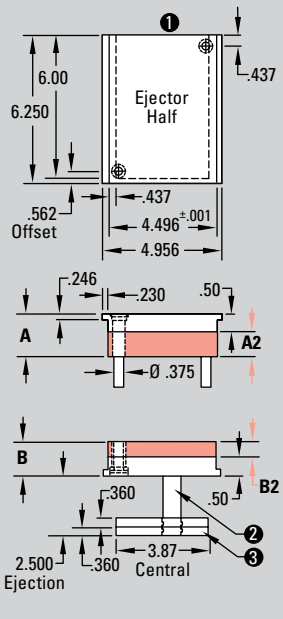
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional.

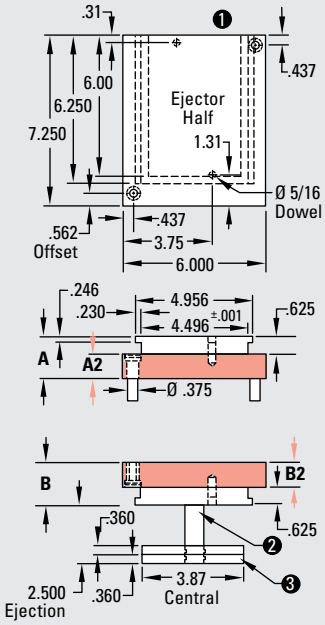
Standard Solid: 4.5 x 6.25



Standard Laminated: 4.5 x 6.25



T-Style Solid or Laminated: 6.0 x 7.25



Standard Solid Construction

ITEM NO.	A	B
07/07 SSU 221	1.377	1.377
07/07 SSU 222	1.377	1.877
07/07 SSU 223	1.877	1.377
07/07 SSU 224	1.877	1.877

Standard Laminated Construction

ITEM NO.	A	A2	B2	B
07/07 SLU 281	1.377	0.877	0.877	1.377
07/07 SLU 282	1.377	0.877	1.377	1.877
07/07 SLU 283	1.877	1.377	0.877	1.377
07/07 SLU 284	1.877	1.377	1.377	1.877

T-Style Solid Construction

ITEM NO.	A	A2	B2	B
07/07 TSU 241	1.625	1.000	1.000	1.625
07/07 TSU 242	1.875	1.250	1.250	1.875

T-Style Laminated Construction

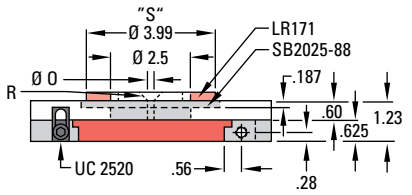
ITEM NO.	A	A2	B2	B
07/07 TLU 201	1.625	1.000	1.000	1.625
07/07 TLU 202	1.875	1.250	1.250	1.875

Ordering information for frame and companion insert molds can be found in the front of this section.

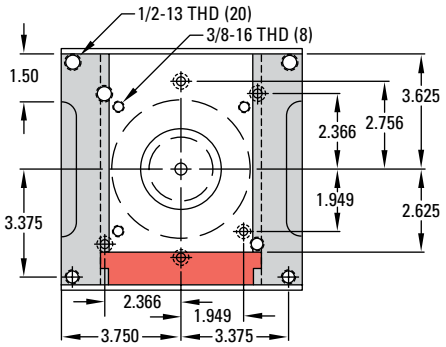
Frame

ITEM NO.
07/07 UF 321

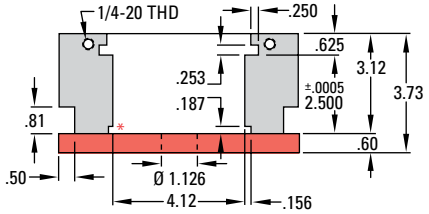
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

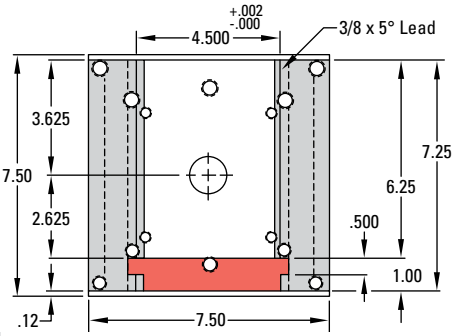


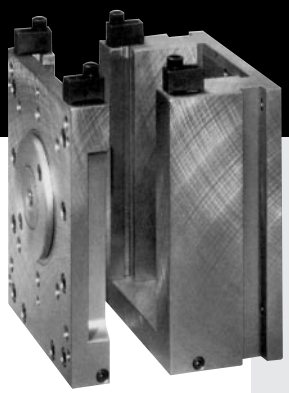
UF 321 Frame Lower – Side View



* 0 degree - 15 minute taper slot to accommodate sleeve ejection retainer plate. Slot tapers from .187 to .160 in 6.250 length.

UF 321 Frame Lower – Top View



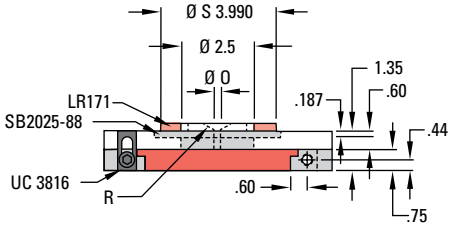


UF Quick-Change U-Style
Frame & Companion Insert Molds

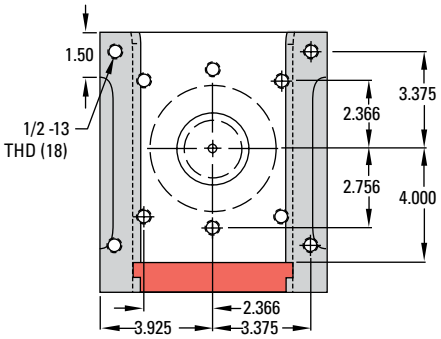
Frame

ITEM NO.
08/09 UF 321

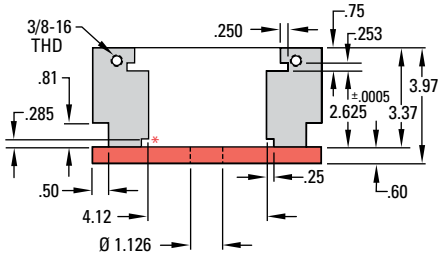
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

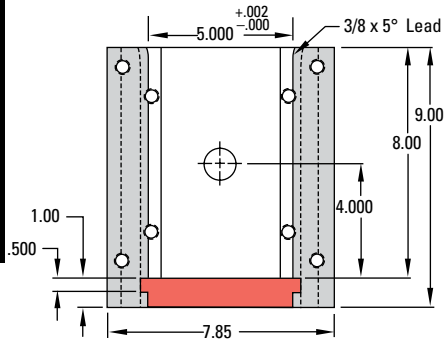


UF 321 Frame Lower – Side View



*0 degree - 15 minute taper slot to accommodate sleeve ejection retainer plate. Slot tapers from .285 to .250 in 8.000 length.

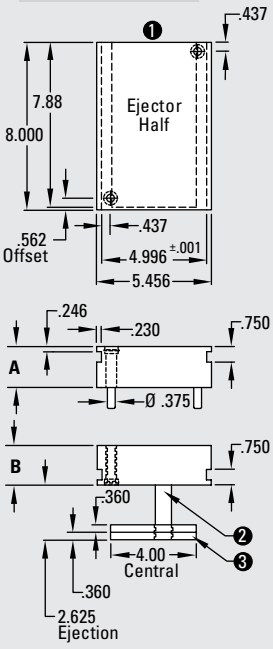
UF 321 Frame Lower – Top View



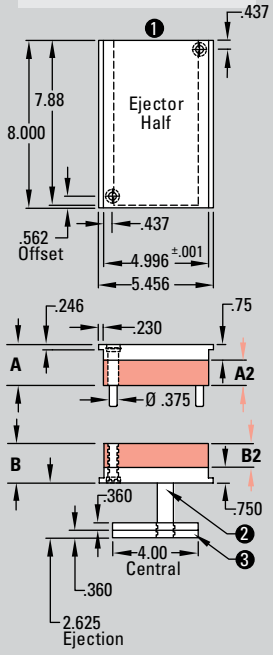
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional.

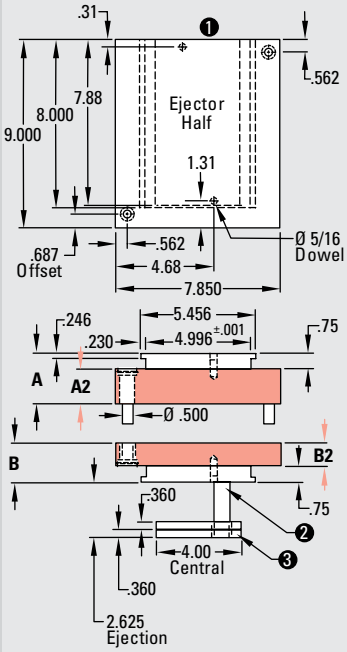
Standard Solid: 5.0 x 8.0



Standard Laminated: 5.0 x 8.0



T-Style Solid or Laminated: 7.85 x 9.0



Standard Solid Construction

ITEM NO.	A	B
08/09 SSU 221	1.377	1.377
08/09 SSU 222	1.377	1.877
08/09 SSU 223	1.877	1.377
08/09 SSU 224	1.877	1.877
08/09 SSU 225	1.877	2.377
08/09 SSU 226	2.377	1.877
08/09 SSU 227	2.377	2.377
08/09 SSU 228	2.377	2.877
08/09 SSU 229	2.877	2.377
08/09 SSU 230	2.877	2.877

Standard Laminated Construction

ITEM NO.	A	A2	B2	B
08/09 SLU 281	1.377	0.627	0.627	1.377
08/09 SLU 282	1.377	0.627	1.127	1.877
08/09 SLU 283	1.877	1.127	0.627	1.377
08/09 SLU 284	1.877	1.127	1.127	1.877
08/09 SLU 285	1.877	1.127	1.627	2.377
08/09 SLU 286	2.377	1.627	1.127	1.877
08/09 SLU 287	2.377	1.627	1.627	2.377
08/09 SLU 288	2.377	1.627	2.127	2.877
08/09 SLU 289	2.877	2.127	1.627	2.377
08/09 SLU 290	2.877	2.127	2.127	2.877

Ordering information for frame and companion insert molds can be found in the front of this section.

T-Style Solid Construction

ITEM NO.	A	A2	B2	B
08/09 TSU 241	1.750	1.000	1.000	1.750
08/09 TSU 242	1.750	1.000	1.500	2.250
08/09 TSU 243	2.000	1.250	1.250	2.000
08/09 TSU 244	2.250	1.500	1.000	1.750
08/09 TSU 245	2.250	1.500	1.500	2.250
08/09 TSU 246	2.625	1.875	1.875	2.625

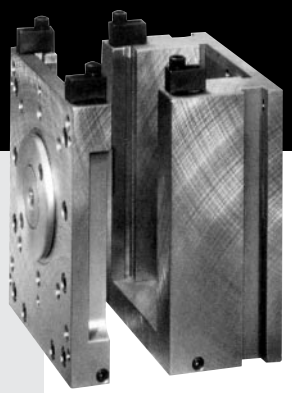
T-Style Laminated Construction

ITEM NO.	A	A2	B2	B
08/09 TLU 201	1.750	1.000	1.000	1.750
08/09 TLU 202	1.750	1.000	1.500	2.250
08/09 TLU 203	2.000	1.250	1.250	2.000
08/09 TLU 204	2.250	1.500	1.000	1.750
08/09 TLU 205	2.250	1.500	1.500	2.250
08/09 TLU 206	2.625	1.875	1.875	2.625

Solid Construction Aluminum Companion Insert Molds

ITEM NO.	A	B
08/09 ALU 208	1.875	1.875
08/09 ALU 210	2.375	1.875

NOTE: "A" & "B" dimensions are supplied ±.001 on all aluminum companion insert molds.



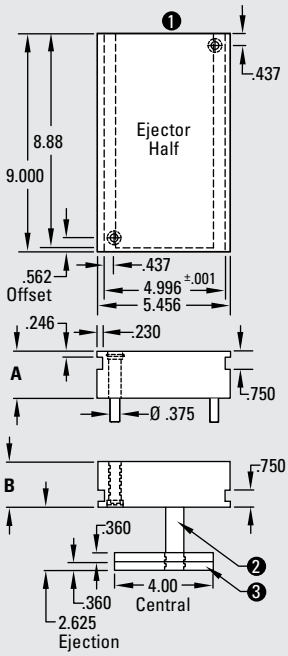
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional.

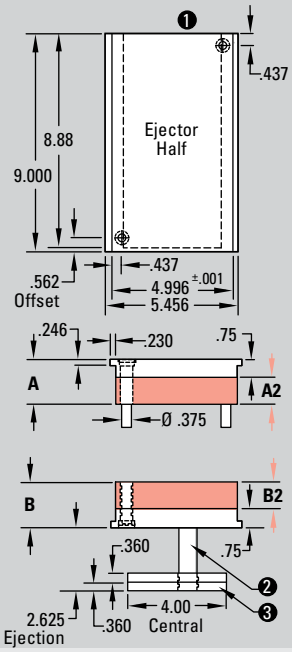
Frame

ITEM NO.
08/10 UF 321

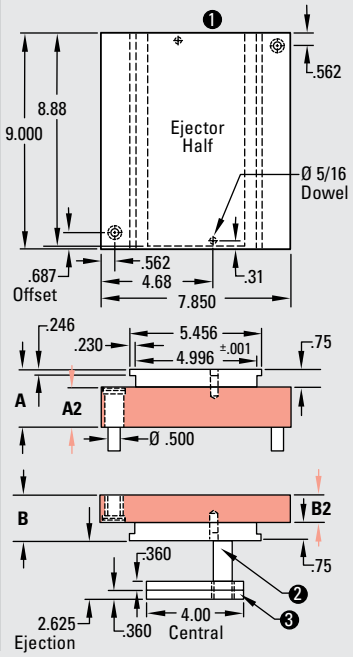
Standard Solid: 5.0 x 9.0



Standard Laminated: 5.0 x 9.0



T-Style Solid or Laminated: 7.85 x 9.0



Standard Solid Construction

ITEM NO.	A	B
08/10 SSU 221	1.377	1.377
08/10 SSU 222	1.377	1.877
08/10 SSU 223	1.877	1.377
08/10 SSU 224	1.877	1.877
08/10 SSU 225	1.877	2.377
08/10 SSU 226	2.377	1.877
08/10 SSU 227	2.377	2.377
08/10 SSU 228	2.377	2.877
08/10 SSU 229	2.877	2.377
08/10 SSU 230	2.877	2.877

T-Style Solid Construction

ITEM NO.	A	A2	B2	B
08/10 TSU 241	1.750	1.000	1.000	1.750
08/10 TSU 242	1.750	1.000	1.500	2.250
08/10 TSU 243	2.000	1.250	1.250	2.000
08/10 TSU 244	2.250	1.500	1.000	1.750
08/10 TSU 245	2.250	1.500	1.500	2.250
08/10 TSU 246	2.625	1.875	1.875	2.625

Standard Laminated Construction

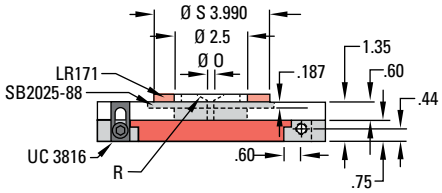
ITEM NO.	A	A2	B2	B
08/10 SLU 281	1.377	0.627	0.627	1.377
08/10 SLU 282	1.377	0.627	1.127	1.877
08/10 SLU 283	1.877	1.127	0.627	1.377
08/10 SLU 284	1.877	1.127	1.127	1.877
08/10 SLU 285	1.877	1.127	1.627	2.377
08/10 SLU 286	2.377	1.627	1.127	1.877
08/10 SLU 287	2.377	1.627	1.627	2.377
08/10 SLU 288	2.377	1.627	2.127	2.877
08/10 SLU 289	2.877	2.127	1.627	2.377
08/10 SLU 290	2.877	2.127	2.127	2.877

T-Style Laminated Construction

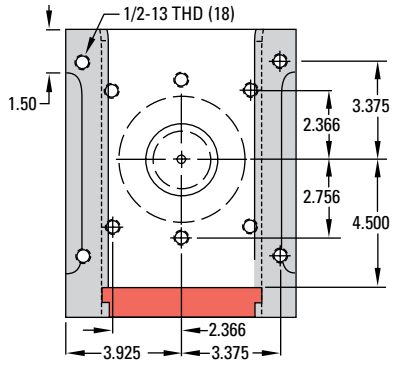
ITEM NO.	A	A2	B2	B
08/10 TLU 201	1.750	1.000	1.000	1.750
08/10 TLU 202	1.750	1.000	1.500	2.250
08/10 TLU 203	2.000	1.250	1.250	2.000
08/10 TLU 204	2.250	1.500	1.000	1.750
08/10 TLU 205	2.250	1.500	1.500	2.250
08/10 TLU 206	2.625	1.875	1.875	2.625

Ordering information for frame and companion insert molds can be found in the front of this section.

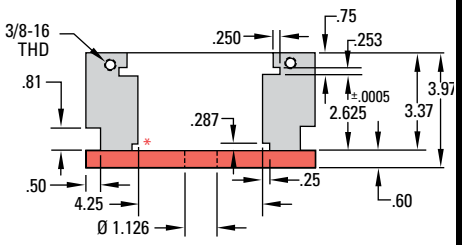
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

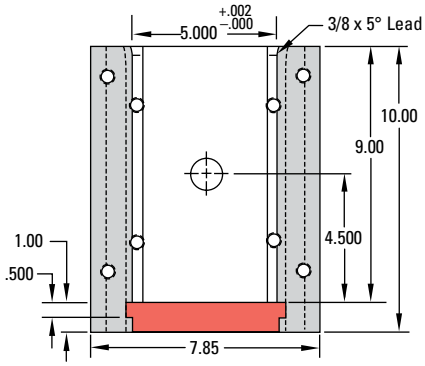


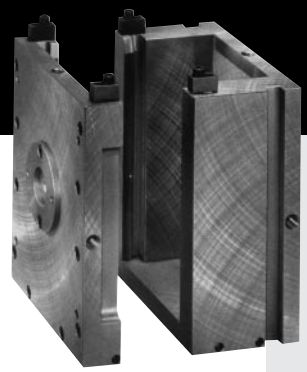
UF 321 Frame Lower – Side View



*O degree - 15 minute taper slot to accommodate sleeve ejection retainer plate. Slot tapers from .287 to .248 in 9.000 length.

UF 321 Frame Lower – Top View





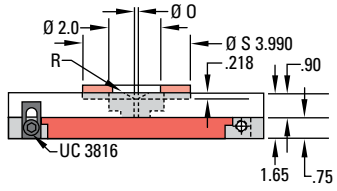
UF Quick-Change U-Style
Frame & Companion Insert Molds

Frame

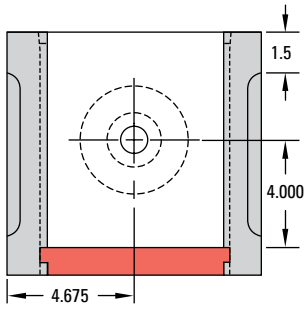
ITEM NO.
94/90 UF 321

NOTE: For extended clamp bar option, see page OP 144.

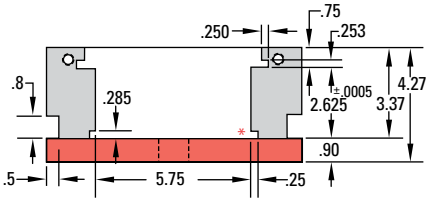
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

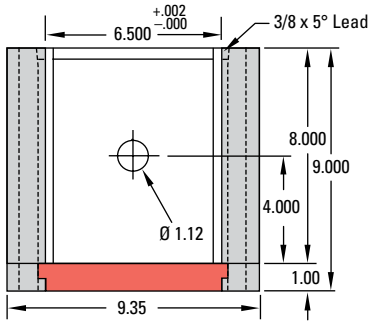


UF 321 Frame Lower – Side View



*0 degree - 15 minute taper slot to accommodate sleeve ejection retainer plate. Slot tapers from .285 to .250 in 8.000 length.

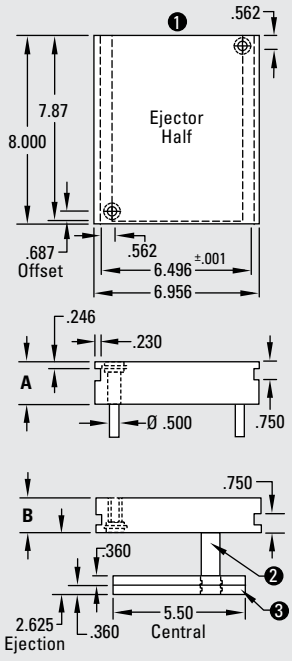
UF 321 Frame Lower – Top View



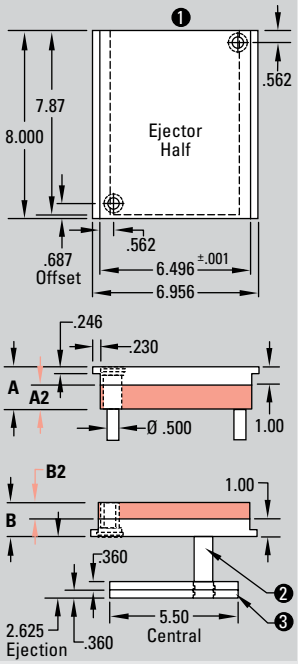
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional.

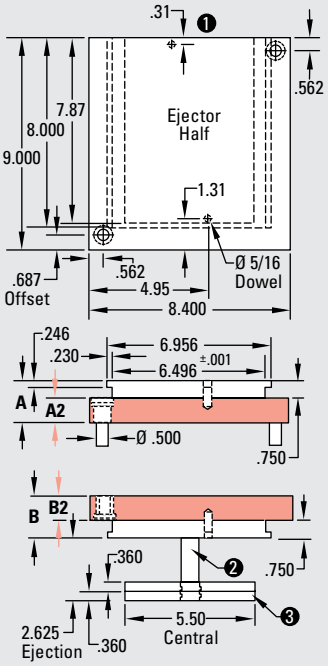
Standard Solid: 6.5 x 8.0



Standard Laminated: 6.5 x 8.0



T-Style Solid or Laminated: 8.4 x 9.0



Standard Solid Construction

ITEM NO.	A	B
84/90 SSU 221	1.377	1.377
84/90 SSU 222	1.377	1.877
84/90 SSU 223	1.877	1.377
84/90 SSU 224	1.877	1.877
84/90 SSU 225	1.877	2.377
84/90 SSU 226	2.377	1.877
84/90 SSU 227	2.377	2.377
84/90 SSU 228	2.377	2.877
84/90 SSU 229	2.877	2.377
84/90 SSU 230	2.877	2.877

Standard Laminated Construction

ITEM NO.	A	A2	B2	B
84/90 SLU 281	1.877	0.877	0.877	1.877
84/90 SLU 282	1.877	0.877	1.377	2.377
84/90 SLU 283	2.377	1.377	0.877	1.877
84/90 SLU 284	2.377	1.377	1.377	2.377
84/90 SLU 285	2.377	1.377	1.877	2.877
84/90 SLU 286	2.877	1.877	1.377	2.377
84/90 SLU 287	2.877	1.877	1.877	2.877

Ordering information for frame and companion insert molds can be found in the front of this section.

T-Style Solid Construction

ITEM NO.	A	A2	B2	B
84/90 TSU 241	1.500	0.750	1.250	2.000
84/90 TSU 242	1.750	1.000	1.000	1.750
84/90 TSU 243	1.750	1.000	1.500	2.250
84/90 TSU 244	2.000	1.250	1.250	2.000
84/90 TSU 245	2.250	1.500	1.000	1.750
84/90 TSU 246	2.250	1.500	1.500	2.250
84/90 TSU 247	2.625	1.875	1.875	2.625

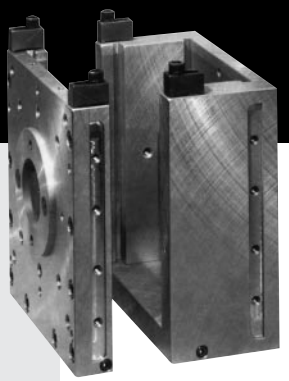
T-Style Laminated Construction

ITEM NO.	A	A2	B2	B
84/90 TLU 201	1.500	0.750	1.250	2.000
84/90 TLU 202	1.750	1.000	1.000	1.750
84/90 TLU 203	1.750	1.000	1.500	2.250
84/90 TLU 204	2.000	1.250	1.250	2.000
84/90 TLU 205	2.250	1.500	1.000	1.750
84/90 TLU 206	2.250	1.500	1.500	2.250
84/90 TLU 207	2.625	1.875	1.875	2.625

Solid Construction Aluminum Companion Insert Molds

ITEM NO.	A	B
84/90 ALU 210	2.375	1.875

NOTE: "A" & "B" dimensions are supplied ±.001 on all aluminum companion insert molds.



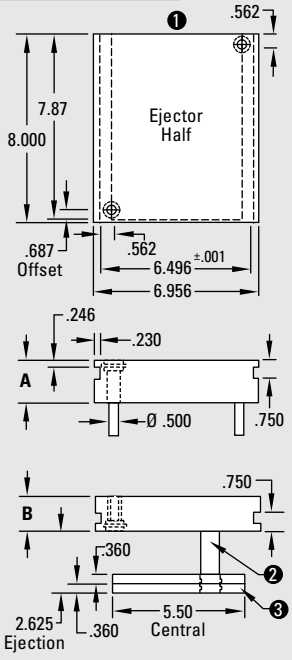
Frame

ITEM NO.
84/90 UF 321

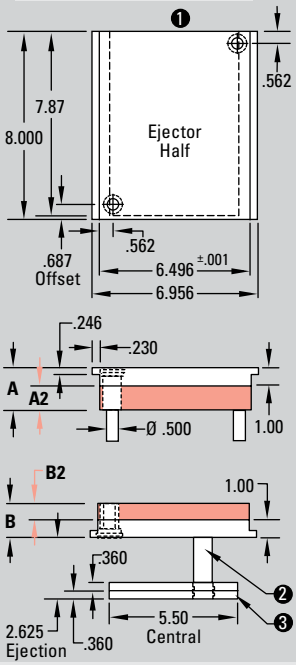
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional.

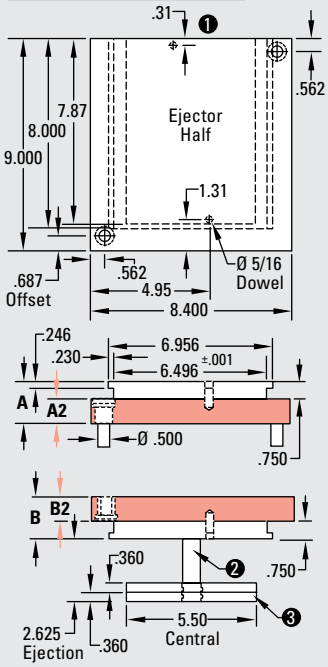
Standard Solid: 6.5 x 8.0



Standard Laminated: 6.5 x 8.0



T-Style Solid or Laminated: 8.4 x 9.0



Standard Solid Construction

ITEM NO.	A	B
84/90 SSU 221	1.377	1.377
84/90 SSU 222	1.377	1.877
84/90 SSU 223	1.877	1.377
84/90 SSU 224	1.877	1.877
84/90 SSU 225	1.877	2.377
84/90 SSU 226	2.377	1.877
84/90 SSU 227	2.377	2.377
84/90 SSU 228	2.377	2.877
84/90 SSU 229	2.877	2.377
84/90 SSU 230	2.877	2.877

Standard Laminated Construction

ITEM NO.	A	A2	B2	B
84/90 SLU 281	1.877	0.877	0.877	1.877
84/90 SLU 282	1.877	0.877	1.377	2.377
84/90 SLU 283	2.377	1.377	0.877	1.877
84/90 SLU 284	2.377	1.377	1.377	2.377
84/90 SLU 285	2.377	1.377	1.877	2.877
84/90 SLU 286	2.877	1.877	1.377	2.377
84/90 SLU 287	2.877	1.877	1.877	2.877

Ordering information for frame and companion insert molds can be found in the front of this section.

T-Style Solid Construction

ITEM NO.	A	A2	B2	B
84/90 TSU 241	1.500	0.750	1.250	2.000
84/90 TSU 242	1.750	1.000	1.000	1.750
84/90 TSU 243	1.750	1.000	1.500	2.250
84/90 TSU 244	2.000	1.250	1.250	2.000
84/90 TSU 245	2.250	1.500	1.000	1.750
84/90 TSU 246	2.250	1.500	1.500	2.250
84/90 TSU 247	2.625	1.875	1.875	2.625

T-Style Laminated Construction

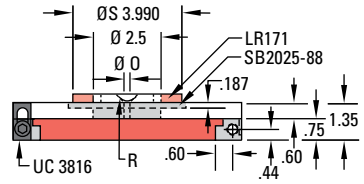
ITEM NO.	A	A2	B2	B
84/90 TLU 201	1.500	0.750	1.250	2.000
84/90 TLU 202	1.750	1.000	1.000	1.750
84/90 TLU 203	1.750	1.000	1.500	2.250
84/90 TLU 204	2.000	1.250	1.250	2.000
84/90 TLU 205	2.250	1.500	1.000	1.750
84/90 TLU 206	2.250	1.500	1.500	2.250
84/90 TLU 207	2.625	1.875	1.875	2.625

Solid Construction Aluminum Companion Insert Molds

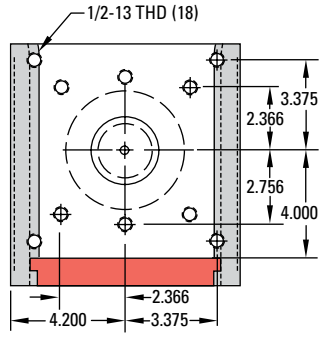
ITEM NO.	A	B
84/90 ALU 210	2.375	1.875

NOTE: "A" & "B" dimensions are supplied ±.001 on all aluminum companion insert molds.

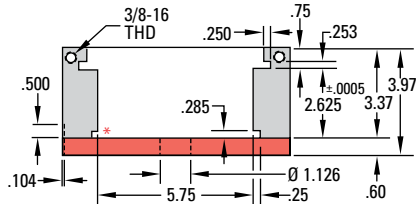
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

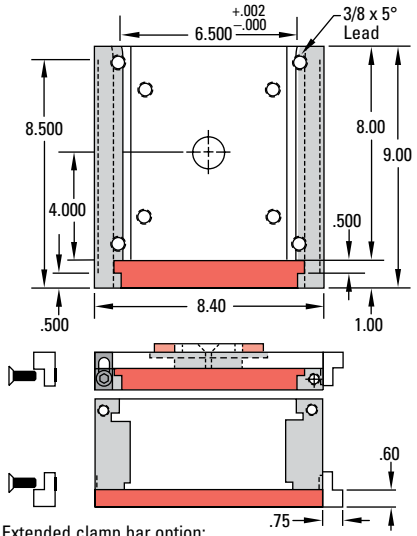


UF 321 Frame Lower – Side View

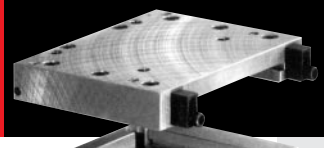


*O degree - 15 minute taper slot to accommodate sleeve ejection retainer plate. Slot tapers from .285 to .250 in 8.000 length.

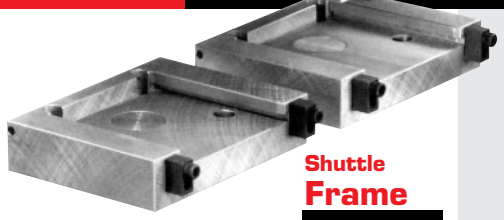
UF 321 Frame Lower – Top View



Extended clamp bar option:
Set of four (4) bars required.
See page OP 144.



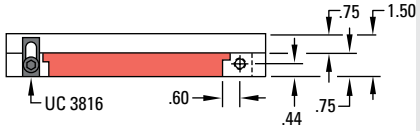
UF Quick-Change U-Style Shuttle
Frame & Companion Insert Molds



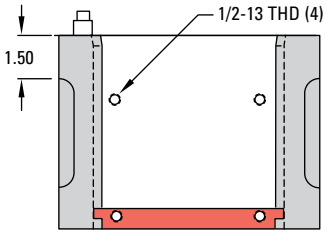
Shuttle Frame

ITEM NO.
09/07 UF 321

UF 321 Frame Upper – Side View

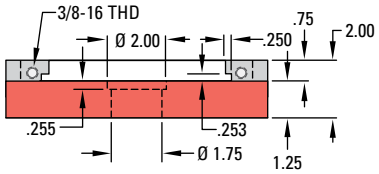


UF 321 Frame Upper – Top View

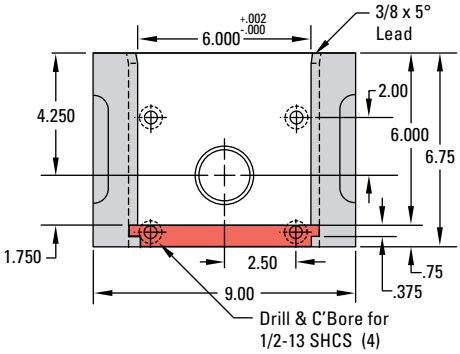


Cavity half, one (1) required.

UF 321 Frame Lower – Side View

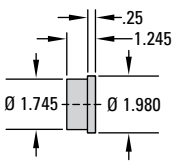


UF 321 Frame Lower – Top View



Ejector half, two (2) required.

KO Rod Spacer



Two (2) required.

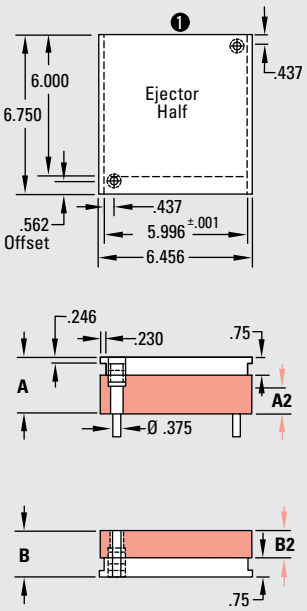
Knockout rod spacer standard as shown.

NOTE: Insert molds can be ordered with two (2) "B" halves by noting "S" after catalog code number.

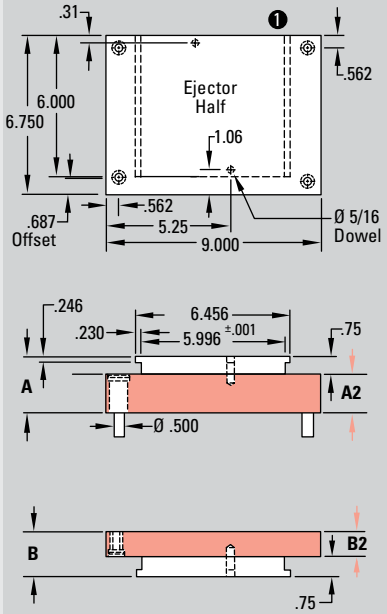
Companion Interchangeable Insert Molds

❶ Frame clamps at this end of insert mold.

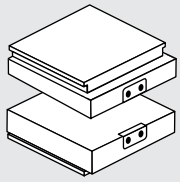
Standard Solid: 6.0 x 6.75



T-Style Solid or Laminated: 9.0 x 6.75



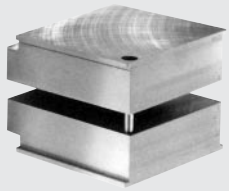
Optional



Hardened runner pads available (quotation on request).

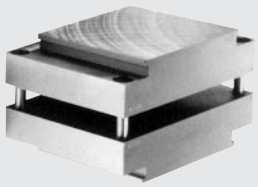
Standard Solid Construction

ITEM NO.	A	A2	B2	B
09/07 SSU 221	2.250	1.500	1.500	2.250



T-Style Solid Construction

ITEM NO.	A	A2	B2	B
09/07 TSU 241	2.250	1.500	1.500	2.250



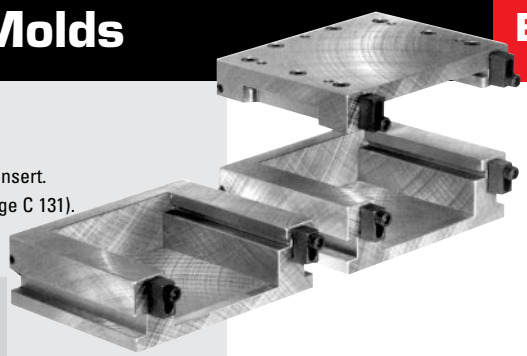
T-Style Laminated Construction

ITEM NO.	A	A2	B2	B
09/07 TLU 201	2.250	1.500	1.500	2.250

Ordering information for frame and companion insert molds can be found in the front of this section.

NOTE: When ejection is required, pockets can be machined in ejector half of insert mold and ejector plates installed.

EB Quick-Change U-Style Shuttle
Frame & Companion Insert Molds



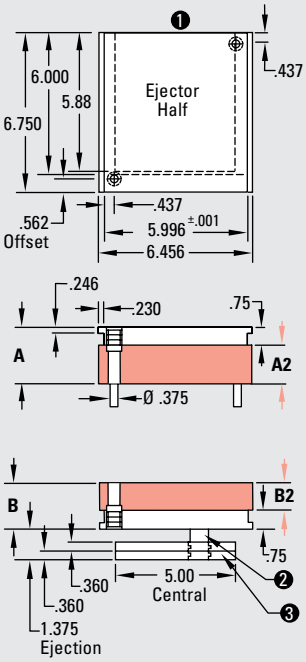
Shuttle
Frame

ITEM NO.
09/07 EB 321

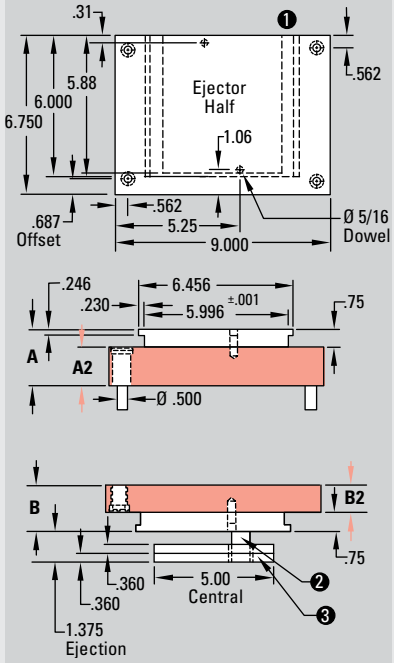
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional.

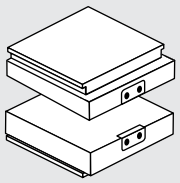
Standard Solid: 6.0 x 6.75



T-Style Solid or Laminated: 9.0 x 6.75

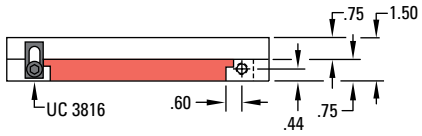


Optional

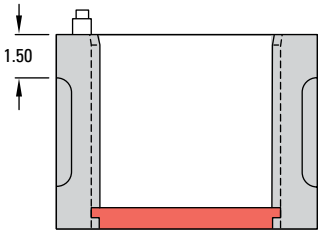


Hardened runner pads available (quotation on request).

EB 321 Frame Upper – Side View

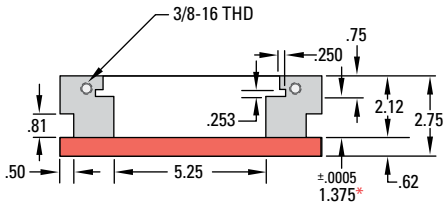


EB 321 Frame Upper – Top View



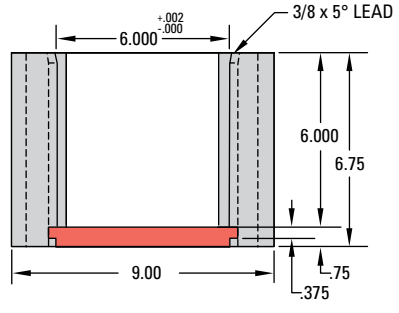
Cavity half, one (1) required.

EB 321 Frame Lower – Side View



* Height of ejection can be modified to suit nozzle height of machine (quotation on request).

EB 321 Frame Lower – Top View



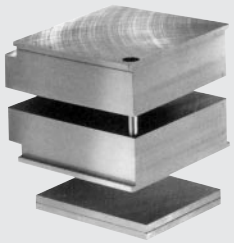
Ejector half, two (2) required.

NOTE: Insert molds can be ordered with two (2) "B" halves by noting "S" after catalog code number.

NOTE: Knockout hole locations per customer specifications (if required).

Standard Solid Construction

ITEM NO.	A	A2	B2	B
09/07 SSE 221	2.250	1.500	1.500	2.250

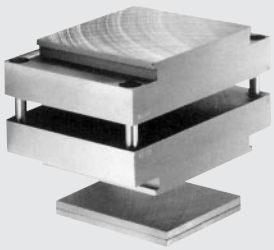


T-Style Solid Construction

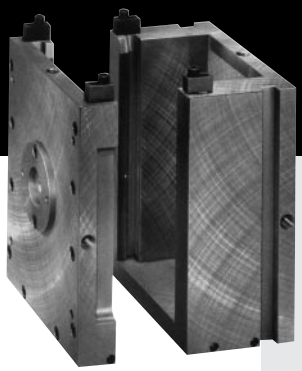
ITEM NO.	A	A2	B2	B
09/07 TSE 241	2.250	1.500	1.500	2.250

T-Style Laminated Construction

ITEM NO.	A	A2	B2	B
09/07 TLE 201	2.250	1.500	1.500	2.250



Ordering information for frame and companion insert molds can be found in the front of this section.

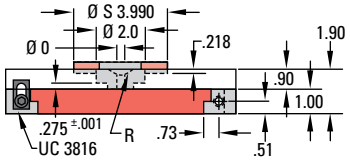


UF Quick-Change U-Style
Frame & Companion Insert Molds

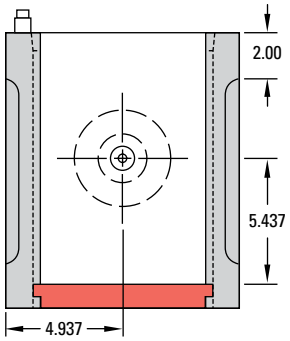
Frame

ITEM NO.
10/12 UF 321

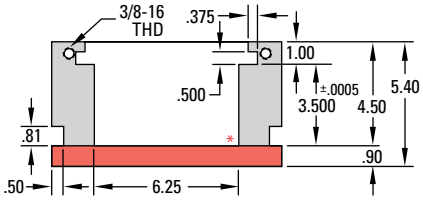
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

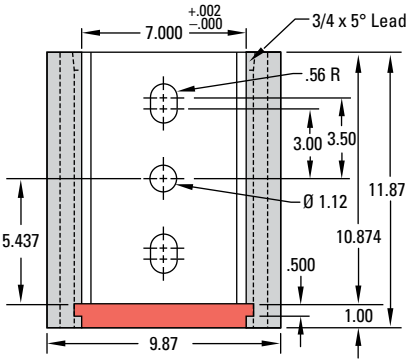


UF 321 Frame Lower – Side View

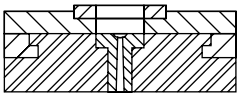


*Taper slot to accommodate sleeve ejection optional (quotation on request).

UF 321 Frame Lower – Top View



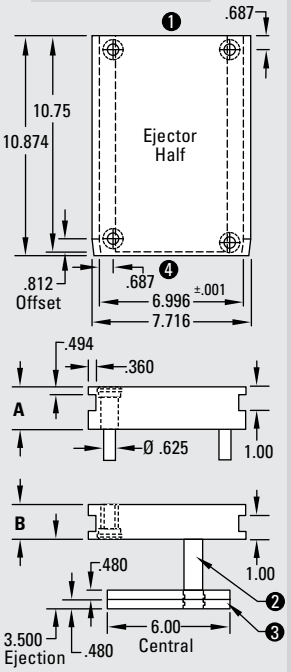
Frame supplied with or without sprue bushing



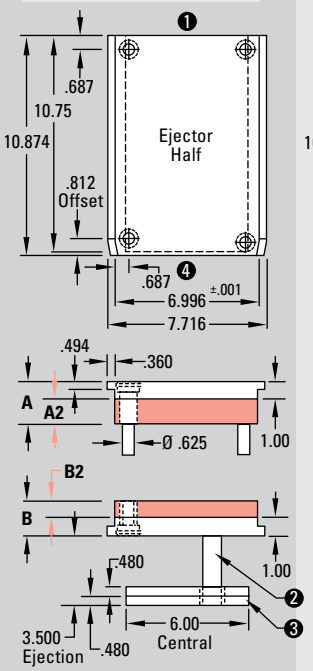
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

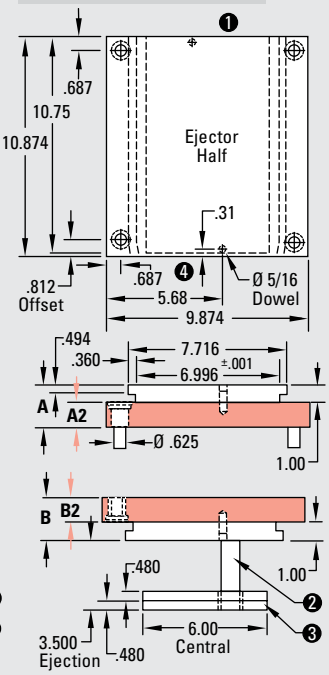
Standard Solid: 7.0 x 10.9



Standard Laminated: 7.0 x 10.9



T-Style Laminated: 9.9 x 10.9



Standard Solid Construction

ITEM NO.	A	B
10/12 SSU 221	1.377	1.377
10/12 SSU 222	1.377	1.877
10/12 SSU 223	1.877	1.377
10/12 SSU 224	1.877	1.877
10/12 SSU 225	1.877	2.377
10/12 SSU 226	2.377	1.877
10/12 SSU 227	2.377	2.377
10/12 SSU 228	2.377	2.877
10/12 SSU 229	2.877	2.377
10/12 SSU 230	2.877	2.877

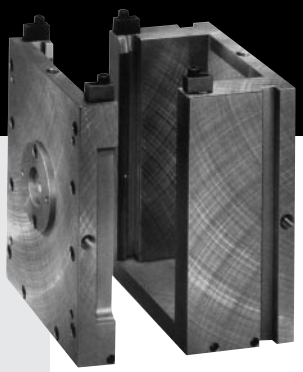
T-Style Laminated Construction

ITEM NO.	A	A2	B2	B
10/12 TLU 201	1.877	0.877	0.877	1.877
10/12 TLU 202	1.877	0.877	1.377	2.377
10/12 TLU 203	2.377	1.377	0.877	1.877
10/12 TLU 204	2.377	1.377	1.377	2.377
10/12 TLU 205	2.377	1.377	1.877	2.877
10/12 TLU 206	2.877	1.877	1.377	2.377
10/12 TLU 207	2.877	1.877	1.877	2.877
10/12 TLU 208	2.877	1.877	2.377	3.377
10/12 TLU 209	3.377	2.377	1.877	2.877
10/12 TLU 210	3.377	2.377	2.377	3.377

Standard Laminated Construction

ITEM NO.	A	A2	B2	B
10/12 SLU 281	1.877	0.877	0.877	1.877
10/12 SLU 282	1.877	0.877	1.377	2.377
10/12 SLU 283	1.877	0.877	1.877	2.877
10/12 SLU 284	2.377	1.377	0.877	1.877
10/12 SLU 285	2.377	1.377	1.377	2.377
10/12 SLU 286	2.377	1.377	1.877	2.877
10/12 SLU 287	2.877	1.877	0.877	1.877
10/12 SLU 288	2.877	1.877	1.377	2.377
10/12 SLU 289	2.877	1.877	1.877	2.877

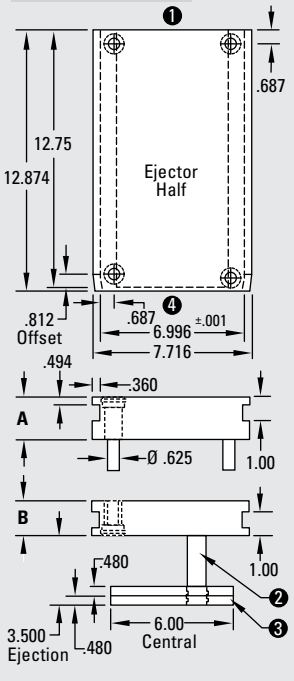
Ordering information for frame and companion insert molds can be found in the front of this section.



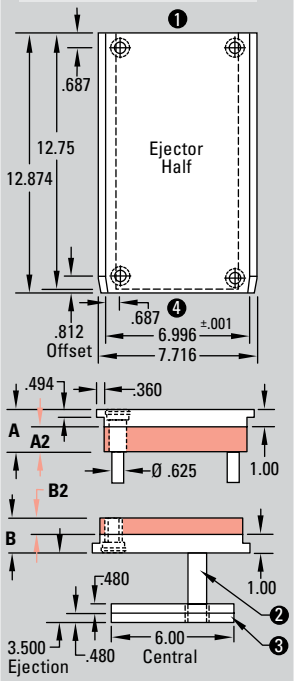
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

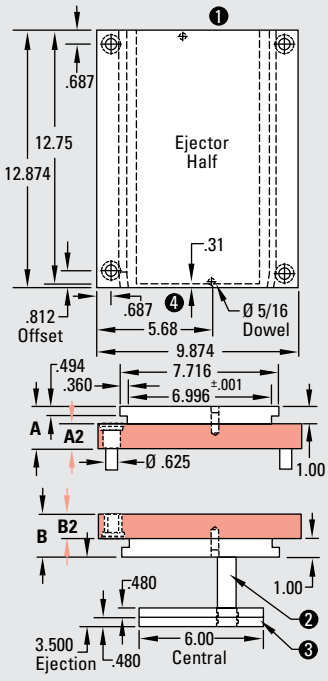
Standard Solid: 7.0 x 12.9



Standard Laminated: 7.0 x 12.9



T-Style Laminated: 9.9 x 12.9



Standard Solid Construction

ITEM NO.	A	B
10/14 SSU 221	1.377	1.377
10/14 SSU 222	1.377	1.877
10/14 SSU 223	1.877	1.377
10/14 SSU 224	1.877	1.877
10/14 SSU 225	1.877	2.377
10/14 SSU 226	2.377	1.877
10/14 SSU 227	2.377	2.377
10/14 SSU 228	2.377	2.877
10/14 SSU 229	2.877	2.377
10/14 SSU 230	2.877	2.877

T-Style Laminated Construction

ITEM NO.	A	A2	B2	B
10/14 TLU 201	1.877	0.877	0.877	1.877
10/14 TLU 202	1.877	0.877	1.377	2.377
10/14 TLU 203	2.377	1.377	0.877	1.877
10/14 TLU 204	2.377	1.377	1.377	2.377
10/14 TLU 205	2.377	1.377	1.877	2.877
10/14 TLU 206	2.877	1.877	1.377	2.377
10/14 TLU 207	2.877	1.877	1.877	2.877
10/14 TLU 208	2.877	1.877	2.377	3.377
10/14 TLU 209	3.377	2.377	1.877	2.877
10/14 TLU 210	3.377	2.377	2.377	3.377

Standard Laminated Construction

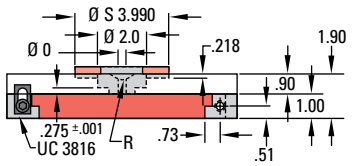
ITEM NO.	A	A2	B2	B
10/14 SLU 281	1.877	0.877	0.877	1.877
10/14 SLU 282	1.877	0.877	1.377	2.377
10/14 SLU 283	1.877	0.877	1.877	2.877
10/14 SLU 284	2.377	1.377	0.877	1.877
10/14 SLU 285	2.377	1.377	1.377	2.377
10/14 SLU 286	2.377	1.377	1.877	2.877
10/14 SLU 287	2.877	1.877	0.877	1.877
10/14 SLU 288	2.877	1.877	1.377	2.377
10/14 SLU 289	2.877	1.877	1.877	2.877

Ordering information for frame and companion insert molds can be found in the front of this section.

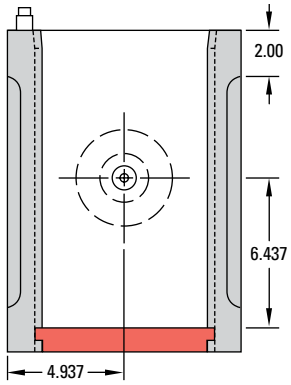
Frame

ITEM NO.
10/14 UF 321

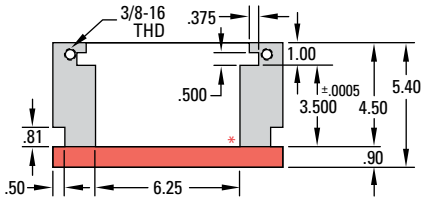
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

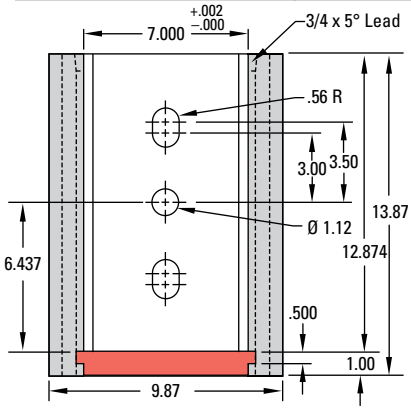


UF 321 Frame Lower – Side View

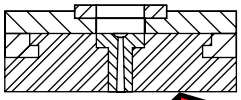


* Taper slot to accommodate sleeve ejection optional (quotation on request).

UF 321 Frame Lower – Top View

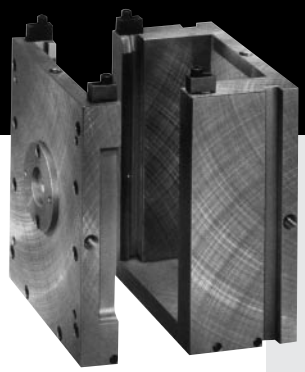


Frame supplied with or without sprue bushing



MUD Quick-Change Mold Frames & Inserts for U-Style | 10/14 UF 321

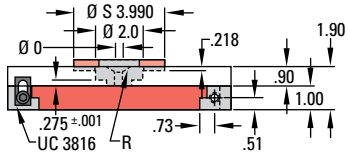
UF Quick-Change U-Style
Frame & Companion Insert Molds



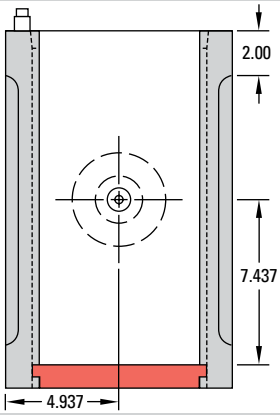
Frame

ITEM NO.
10/16 UF 321

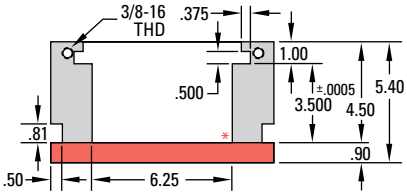
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

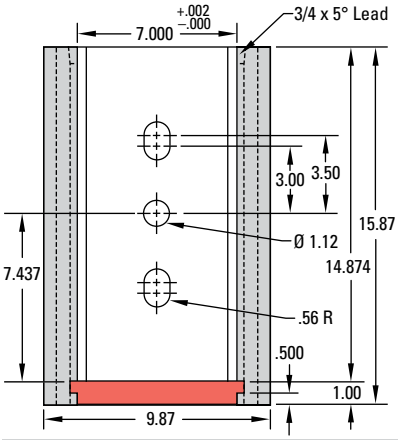


UF 321 Frame Lower – Side View

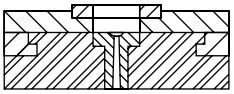


*Taper slot to accommodate sleeve ejection optional (quotation on request).

UF 321 Frame Lower – Top View



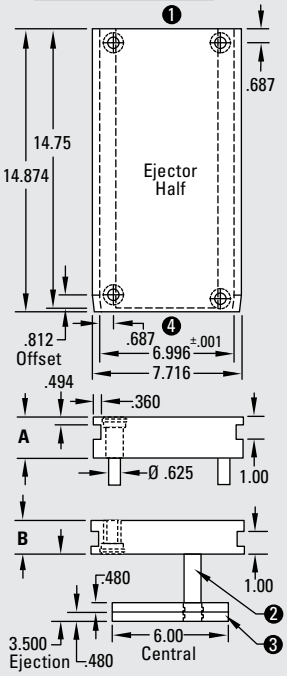
Frame supplied with or without sprue bushing



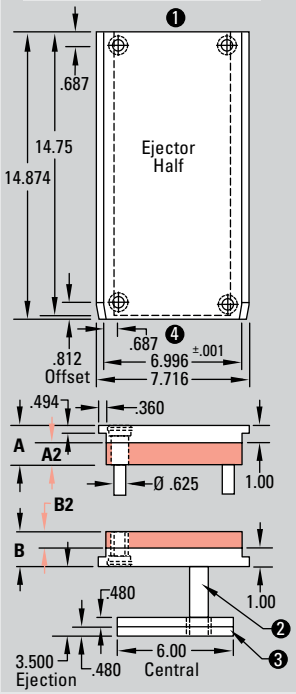
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

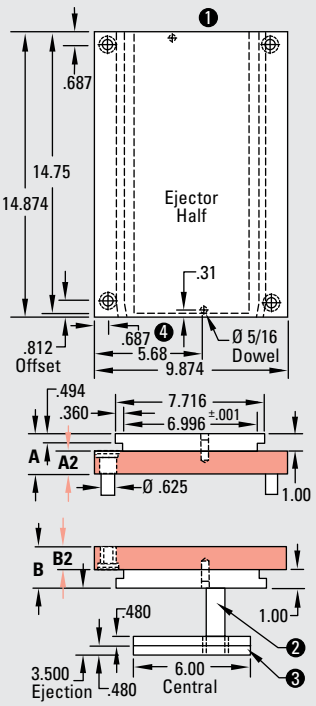
Standard Solid: 7.0 x 14.9



Standard Laminated: 7.0 x 14.9



T-Style Laminated: 9.9 x 14.9



Standard Solid Construction

ITEM NO.	A	B
10/16 SSU 221	1.377	1.377
10/16 SSU 222	1.377	1.877
10/16 SSU 223	1.877	1.377
10/16 SSU 224	1.877	1.877
10/16 SSU 225	1.877	2.377
10/16 SSU 226	2.377	1.877
10/16 SSU 227	2.377	2.377
10/16 SSU 228	2.377	2.877
10/16 SSU 229	2.877	2.377
10/16 SSU 230	2.877	2.877

T-Style Laminated Construction

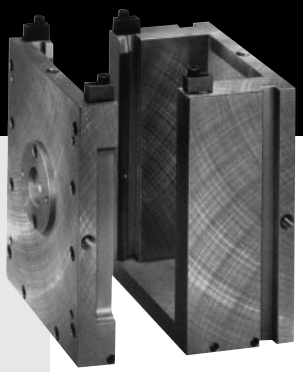
ITEM NO.	A	A2	B2	B
10/16 TLU 201	1.877	0.877	0.877	1.877
10/16 TLU 202	1.877	0.877	1.377	2.377
10/16 TLU 203	2.377	1.377	0.877	1.877
10/16 TLU 204	2.377	1.377	1.377	2.377
10/16 TLU 205	2.377	1.377	1.877	2.877
10/16 TLU 206	2.877	1.877	1.377	2.377
10/16 TLU 207	2.877	1.877	1.877	2.877
10/16 TLU 208	2.877	1.877	2.377	3.377
10/16 TLU 209	3.377	2.377	1.877	2.877
10/16 TLU 210	3.377	2.377	2.377	3.377

Standard Laminated Construction

ITEM NO.	A	A2	B2	B
10/16 SLU 281	1.877	0.877	0.877	1.877
10/16 SLU 282	1.877	0.877	1.377	2.377
10/16 SLU 283	1.877	0.877	1.877	2.877
10/16 SLU 284	2.377	1.377	0.877	1.877
10/16 SLU 285	2.377	1.377	1.377	2.377
10/16 SLU 286	2.377	1.377	1.877	2.877
10/16 SLU 287	2.877	1.877	0.877	1.877
10/16 SLU 288	2.877	1.877	1.377	2.377
10/16 SLU 289	2.877	1.877	1.877	2.877

Ordering information for frame and companion insert molds can be found in the front of this section.

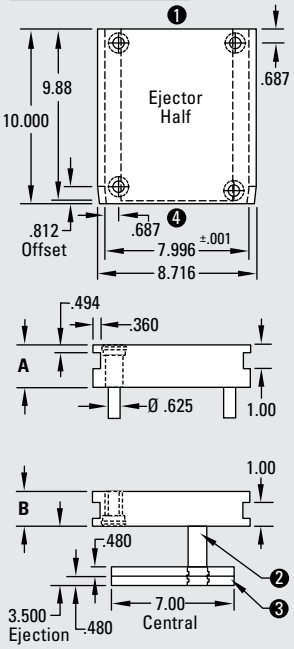
ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru



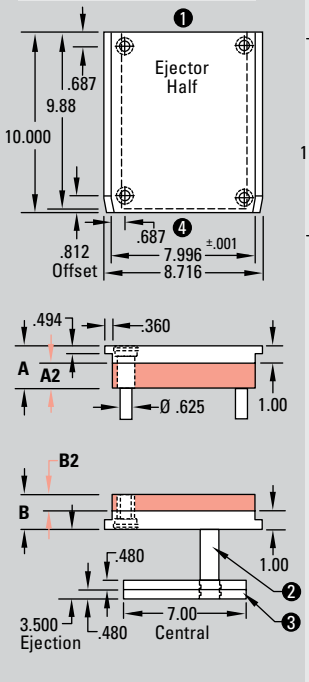
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

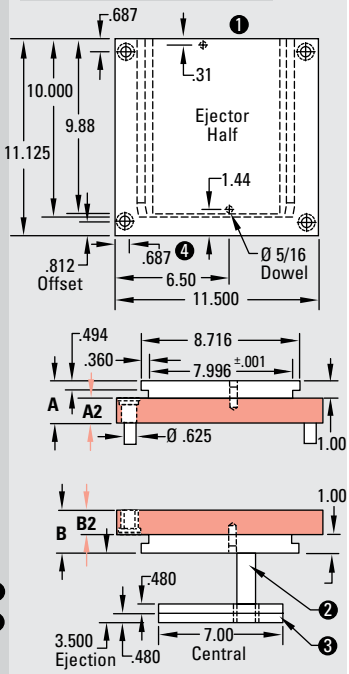
Standard Solid: 8.0 x 10.0



Standard Laminated: 8.0 x 10.0



T-Style Laminated: 11.5 x 11.0



Standard Solid Construction

ITEM NO.	A	B
11/11 SSU 221	1.377	1.377
11/11 SSU 222	1.377	1.877
11/11 SSU 223	1.877	1.377
11/11 SSU 224	1.877	1.877
11/11 SSU 225	1.877	2.377
11/11 SSU 226	2.377	1.877
11/11 SSU 227	2.377	2.377
11/11 SSU 228	2.377	2.877
11/11 SSU 229	2.877	2.377
11/11 SSU 230	2.877	2.877

Standard Laminated Construction

ITEM NO.	A	A2	B2	B
11/11 SLU 281	1.877	0.877	0.877	1.877
11/11 SLU 282	1.877	0.877	1.377	2.377
11/11 SLU 283	1.877	0.877	1.877	2.877
11/11 SLU 284	2.377	1.377	0.877	1.877
11/11 SLU 285	2.377	1.377	1.377	2.377
11/11 SLU 286	2.377	1.377	1.877	2.877
11/11 SLU 287	2.877	1.877	0.877	1.877
11/11 SLU 288	2.877	1.877	1.377	2.377
11/11 SLU 289	2.877	1.877	1.877	2.877

T-Style Laminated Construction

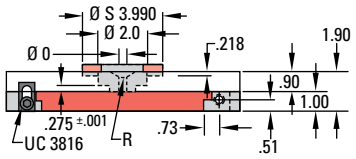
ITEM NO.	A	A2	B2	B
11/11 TLU 201	1.877	0.877	0.877	1.877
11/11 TLU 202	1.877	0.877	1.377	2.377
11/11 TLU 203	2.377	1.377	0.877	1.877
11/11 TLU 204	2.377	1.377	1.377	2.377
11/11 TLU 205	2.377	1.377	1.877	2.877
11/11 TLU 206	2.877	1.877	1.377	2.377
11/11 TLU 207	2.877	1.877	1.877	2.877
11/11 TLU 208	2.877	1.877	2.377	3.377
11/11 TLU 209	3.377	2.377	1.877	2.877
11/11 TLU 210	3.377	2.377	2.377	3.377

Ordering information for frame and companion insert molds can be found in the front of this section.

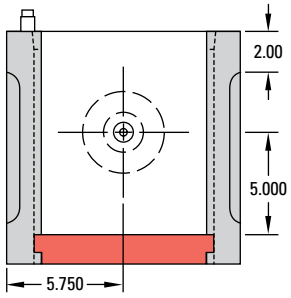
Frame

ITEM NO.
11/11 UF 321

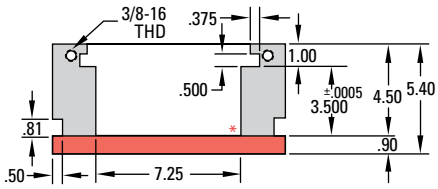
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

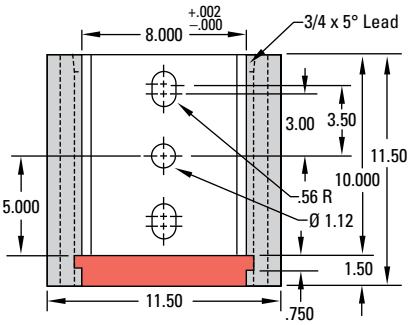


UF 321 Frame Lower – Side View

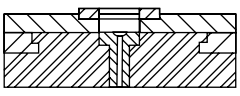


*Taper slot to accommodate sleeve ejection optional (quotation on request).

UF 321 Frame Lower – Top View

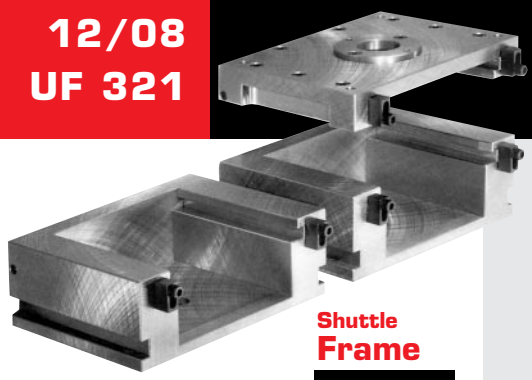


Frame supplied with or without sprue bushing



MUD Quick-Change Mold Frames & Inserts for U-Style | 11/11 UF 321

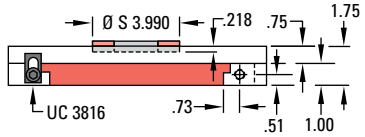
UF Quick-Change U-Style Shuttle Frame & Companion Insert Molds



Shuttle
Frame

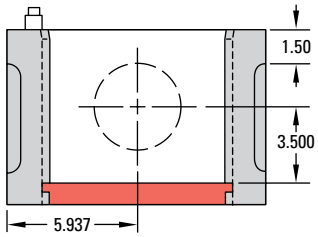
ITEM NO.
12/08 UF 321

UF 321 Frame Upper – Side View



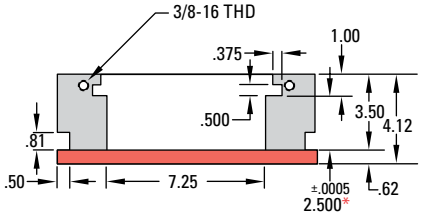
"S" diameter of locating ring supplied standard 3.990 (other sizes available on request).

UF 321 Frame Upper – Top View



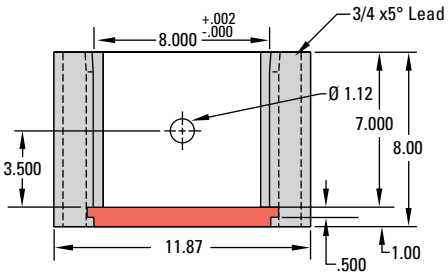
Cavity half, one (1) required.

UF 321 Frame Lower – Side View



* Height of ejection can be modified to suit nozzle height of machine (quotation on request).

UF 321 Frame Lower – Top View



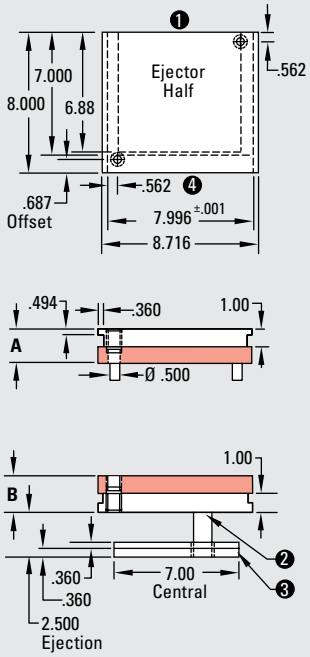
Ejector half, two (2) required.

NOTE: Insert molds can be ordered with two (2) "B" halves by noting "S" after catalog code number.

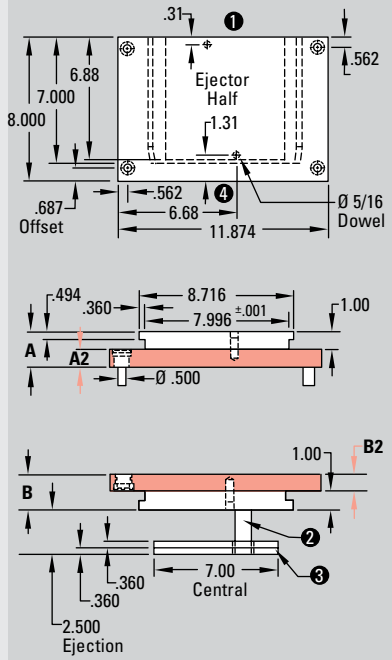
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

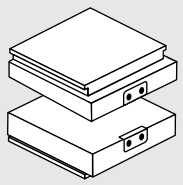
Standard Solid: 8.0 x 8.0



T-Style Laminated: 11.9 x 8.0



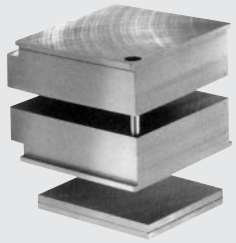
Optional



Hardened runner pads available (quotation on request).

Standard Solid Construction

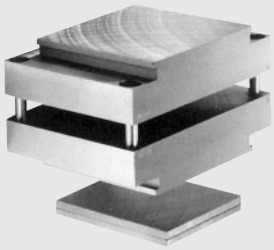
ITEM NO.	A	A2	B2	B
12/08 SSU 221	2.877	1.877	1.877	2.877



T-Style Laminated Construction

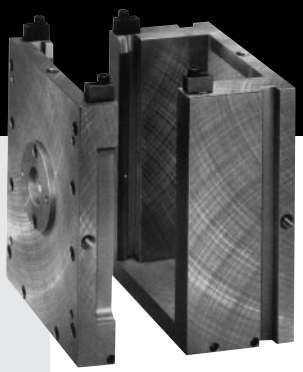
ITEM NO.	A	A2	B2	B
12/08 TLU 201	2.877	1.877	1.877	2.877

Ordering information for frame and companion insert molds can be found in the front of this section.



ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

UF Quick-Change U-Style
Frame & Companion Insert Molds

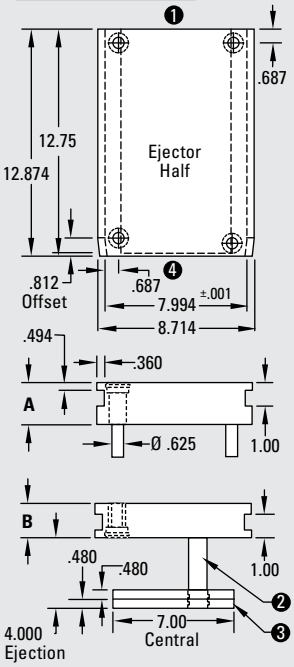


12/14
UF 321

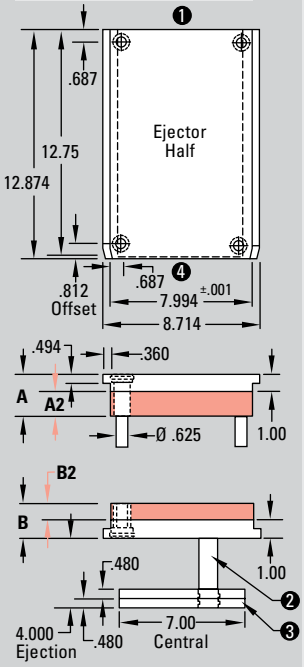
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

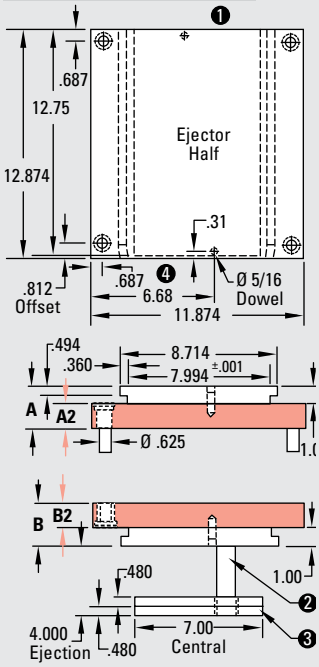
Standard Solid: 8.0 x 12.9



Standard Laminated: 8.0 x 12.9



T-Style Laminated: 11.9 x 12.9



Standard Solid Construction

ITEM NO.	A	B
12/14 SSU 221	1.377	1.377
12/14 SSU 222	1.377	1.877
12/14 SSU 223	1.377	2.377
12/14 SSU 224	1.877	1.377
12/14 SSU 225	1.877	1.877
12/14 SSU 226	1.877	2.377
12/14 SSU 227	1.877	2.877
12/14 SSU 228	2.377	1.377
12/14 SSU 229	2.377	1.877
12/14 SSU 230	2.377	2.377
12/14 SSU 231	2.377	2.877
12/14 SSU 232	2.877	1.877
12/14 SSU 233	2.877	2.377
12/14 SSU 234	2.877	2.877

T-Style Laminated Construction

ITEM NO.	A	A2	B2	B
12/14 TLU 201	2.377	1.377	1.377	2.377
12/14 TLU 202	2.377	1.377	1.877	2.877
12/14 TLU 203	2.377	1.377	2.377	3.377
12/14 TLU 204	2.877	1.877	1.377	2.377
12/14 TLU 205	2.877	1.877	1.877	2.877
12/14 TLU 206	2.877	1.877	2.377	3.377
12/14 TLU 207	2.877	1.877	2.877	3.877
12/14 TLU 208	3.377	2.377	1.377	2.377
12/14 TLU 209	3.377	2.377	1.877	2.877
12/14 TLU 210	3.377	2.377	2.377	3.377
12/14 TLU 211	3.377	2.377	2.877	3.877
12/14 TLU 212	3.877	2.877	1.877	2.877
12/14 TLU 213	3.877	2.877	2.377	3.377
12/14 TLU 214	3.877	2.877	2.877	3.877

Standard Laminated Construction

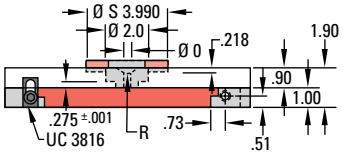
ITEM NO.	A	A2	B2	B
12/14 SLU 281	1.877	0.877	0.877	1.877
12/14 SLU 282	1.877	0.877	1.377	2.377
12/14 SLU 283	1.877	0.877	1.877	2.877
12/14 SLU 284	2.377	1.377	0.877	1.877
12/14 SLU 285	2.377	1.377	1.377	2.377
12/14 SLU 286	2.377	1.377	1.877	2.877
12/14 SLU 287	2.377	1.377	2.377	3.377
12/14 SLU 288	2.877	1.877	0.877	1.877
12/14 SLU 289	2.877	1.877	1.377	2.377
12/14 SLU 290	2.877	1.877	1.877	2.877
12/14 SLU 291	2.877	1.877	2.377	3.377
12/14 SLU 292	3.377	2.377	1.377	2.377
12/14 SLU 293	3.377	2.377	1.877	2.877
12/14 SLU 294	3.377	2.377	2.377	3.377

Ordering information for frame and companion insert molds can be found in the front of this section.

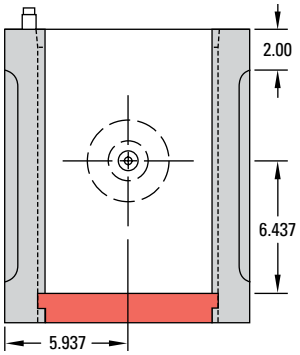
Frame

ITEM NO.
12/14 UF 321

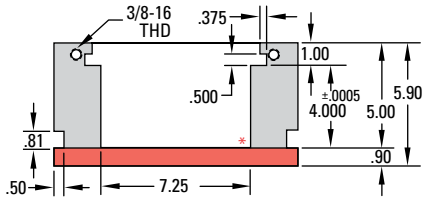
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

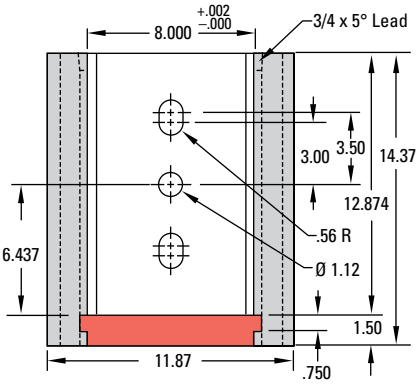


UF 321 Frame Lower – Side View

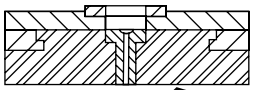


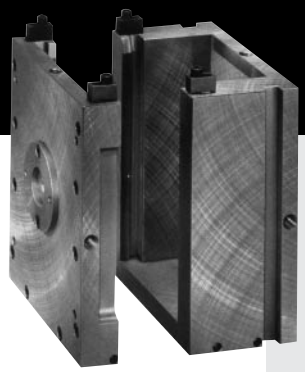
*Taper slot to accommodate sleeve ejection optional (quotation on request).

UF 321 Frame Lower – Top View



Frame supplied with or without sprue bushing



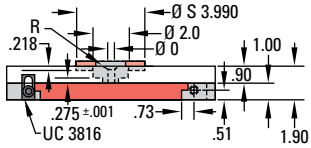


UF Quick-Change U-Style
Frame & Companion Insert Molds

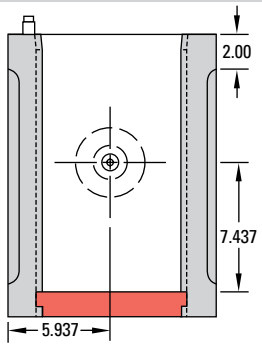
Frame

ITEM NO.
12/16 UF 321

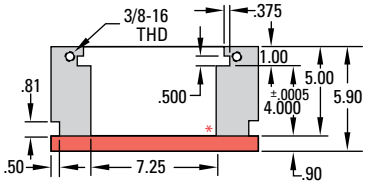
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

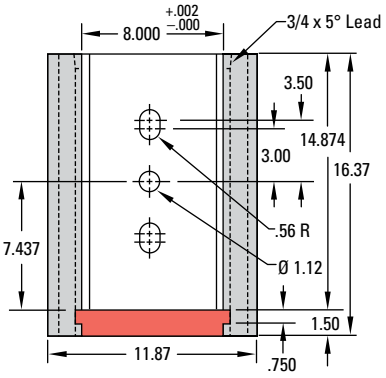


UF 321 Frame Lower – Side View

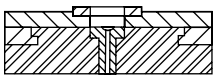


*Taper slot to accommodate sleeve ejection optional (quotation on request).

UF 321 Frame Lower – Top View



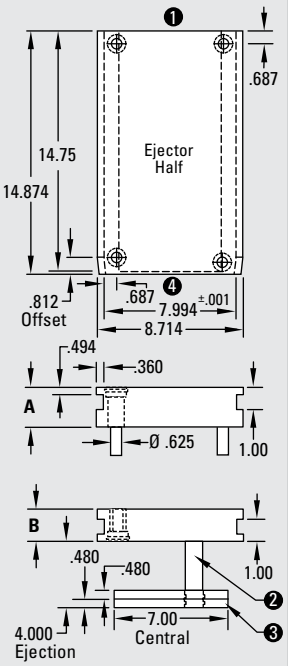
Frame supplied with or without sprue bushing



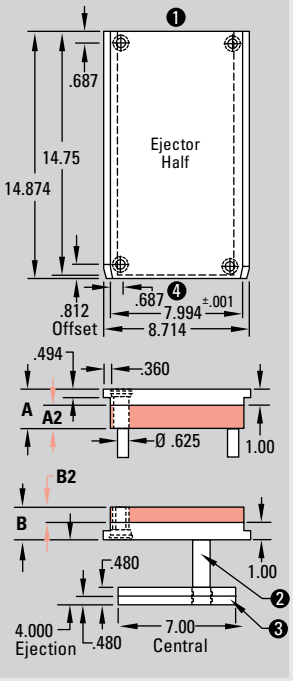
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

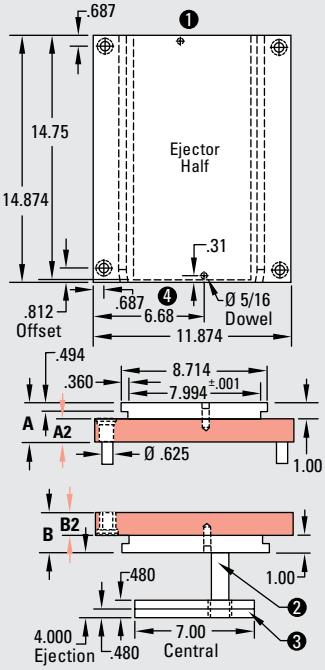
Standard Solid: 8.0 x 14.9



Standard Laminated: 8.0 x 14.9



T-Style Laminated: 11.9 x 14.9



Standard Solid Construction

ITEM NO.	A	B
12/16 SSU 221	1.377	1.377
12/16 SSU 222	1.377	1.877
12/16 SSU 223	1.377	2.377
12/16 SSU 224	1.877	1.377
12/16 SSU 225	1.877	1.877
12/16 SSU 226	1.877	2.377
12/16 SSU 227	1.877	2.877
12/16 SSU 228	2.377	1.377
12/16 SSU 229	2.377	1.877
12/16 SSU 230	2.377	2.377
12/16 SSU 231	2.377	2.877
12/16 SSU 232	2.877	1.877
12/16 SSU 233	2.877	2.377
12/16 SSU 234	2.877	2.877

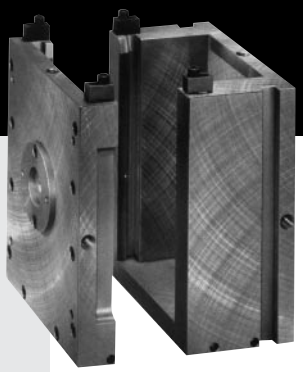
T-Style Laminated Construction

ITEM NO.	A	A2	B2	B
12/16 TLU 201	2.377	1.377	1.377	2.377
12/16 TLU 202	2.377	1.377	1.877	2.877
12/16 TLU 203	2.377	1.377	2.377	3.377
12/16 TLU 204	2.877	1.877	1.377	2.377
12/16 TLU 205	2.877	1.877	1.877	2.877
12/16 TLU 206	2.877	1.877	2.377	3.377
12/16 TLU 207	2.877	1.877	2.877	3.877
12/16 TLU 208	3.377	2.377	1.377	2.377
12/16 TLU 209	3.377	2.377	1.877	2.877
12/16 TLU 210	3.377	2.377	2.377	3.377
12/16 TLU 211	3.377	2.377	2.877	3.877
12/16 TLU 212	3.877	2.877	1.877	2.877
12/16 TLU 213	3.877	2.877	2.377	3.377
12/16 TLU 214	3.877	2.877	2.877	3.877

Standard Laminated Construction

ITEM NO.	A	A2	B2	B
12/16 SLU 281	1.877	0.877	0.877	1.877
12/16 SLU 282	1.877	0.877	1.377	2.377
12/16 SLU 283	1.877	0.877	1.877	2.877
12/16 SLU 284	2.377	1.377	0.877	1.877
12/16 SLU 285	2.377	1.377	1.377	2.377
12/16 SLU 286	2.377	1.377	1.877	2.877
12/16 SLU 287	2.377	1.377	2.377	3.377
12/16 SLU 288	2.877	1.877	0.877	1.877
12/16 SLU 289	2.877	1.877	1.377	2.377
12/16 SLU 290	2.877	1.877	1.877	2.877
12/16 SLU 291	2.877	1.877	2.377	3.377
12/16 SLU 292	3.377	2.377	1.377	2.377
12/16 SLU 293	3.377	2.377	1.877	2.877
12/16 SLU 294	3.377	2.377	2.377	3.377

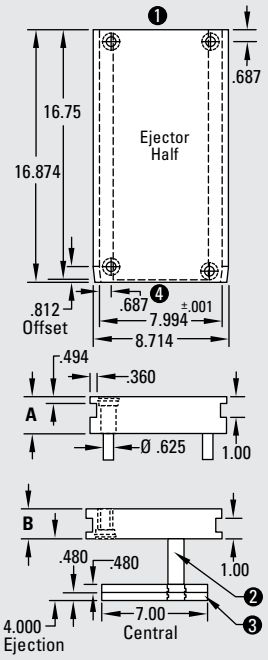
Ordering information for frame and companion insert molds can be found in the front of this section.



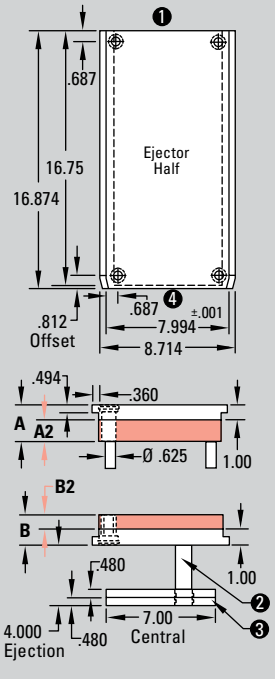
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

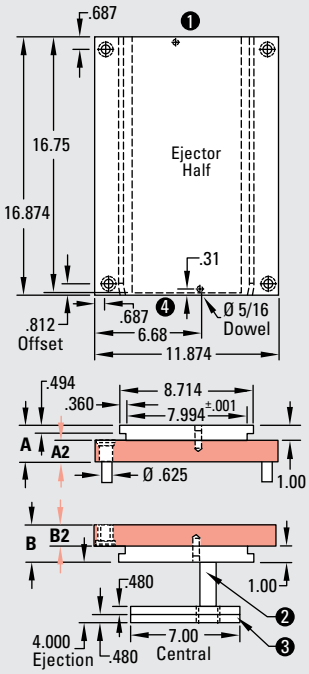
Standard Solid: 8.0 x 16.9



Standard Laminated: 8.0 x 16.9



T-Style Laminated: 11.9 x 16.9



Standard Solid Construction

ITEM NO.	A	B
12/18 SSU 221	1.377	1.377
12/18 SSU 222	1.377	1.877
12/18 SSU 223	1.377	2.377
12/18 SSU 224	1.877	1.377
12/18 SSU 225	1.877	1.877
12/18 SSU 226	1.877	2.377
12/18 SSU 227	1.877	2.877
12/18 SSU 228	2.377	1.377
12/18 SSU 229	2.377	1.877
12/18 SSU 230	2.377	2.377
12/18 SSU 231	2.377	2.877
12/18 SSU 232	2.877	1.877
12/18 SSU 233	2.877	2.377
12/18 SSU 234	2.877	2.877

T-Style Laminated Construction

ITEM NO.	A	A2	B2	B
12/18 TLU 201	2.377	1.377	1.377	2.377
12/18 TLU 202	2.377	1.377	1.877	2.877
12/18 TLU 203	2.377	1.377	2.377	3.377
12/18 TLU 204	2.877	1.877	1.377	2.377
12/18 TLU 205	2.877	1.877	1.877	2.877
12/18 TLU 206	2.877	1.877	2.377	3.377
12/18 TLU 207	2.877	1.877	2.877	3.877
12/18 TLU 208	3.377	2.377	1.377	2.377
12/18 TLU 209	3.377	2.377	1.877	2.877
12/18 TLU 210	3.377	2.377	2.377	3.377
12/18 TLU 211	3.377	2.377	2.877	3.877
12/18 TLU 212	3.877	2.877	1.877	2.877
12/18 TLU 213	3.877	2.877	2.377	3.377
12/18 TLU 214	3.877	2.877	2.877	3.877

Standard Laminated Construction

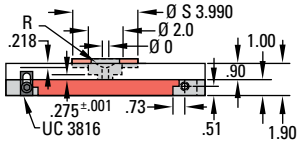
ITEM NO.	A	A2	B2	B
12/18 SLU 281	1.877	0.877	0.877	1.877
12/18 SLU 282	1.877	0.877	1.377	2.377
12/18 SLU 283	1.877	0.877	1.877	2.877
12/18 SLU 284	2.377	1.377	0.877	1.877
12/18 SLU 285	2.377	1.377	1.377	2.377
12/18 SLU 286	2.377	1.377	1.877	2.877
12/18 SLU 287	2.377	1.377	2.377	3.377
12/18 SLU 288	2.877	1.877	0.877	1.877
12/18 SLU 289	2.877	1.877	1.377	2.377
12/18 SLU 290	2.877	1.877	1.877	2.877
12/18 SLU 291	2.877	1.877	2.377	3.377
12/18 SLU 292	3.377	2.377	1.377	2.377
12/18 SLU 293	3.377	2.377	1.877	2.877
12/18 SLU 294	3.377	2.377	2.377	3.377

Ordering information for frame and companion insert molds can be found in the front of this section.

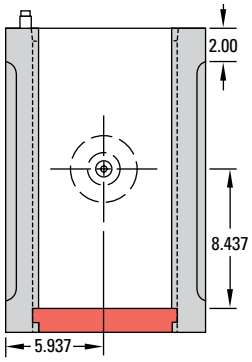
Frame

ITEM NO.
12/18 UF 321

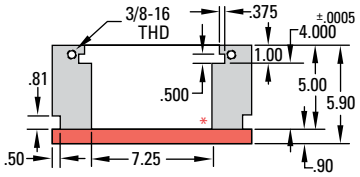
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

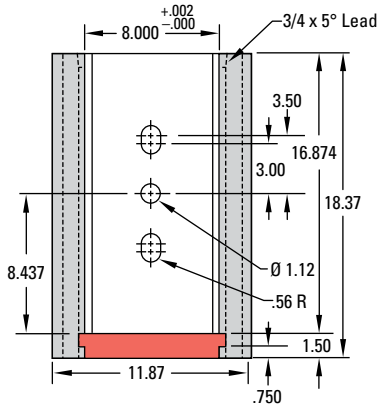


UF 321 Frame Lower – Side View

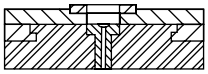


*Taper slot to accommodate sleeve ejection optional (quotation on request).

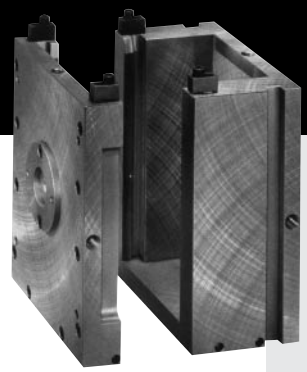
UF 321 Frame Lower – Top View



Frame supplied with or without sprue bushing



MUD Quick-Change Mold Frames & Inserts for U-Style | 12/18 UF 321

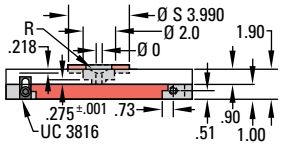


UF Quick-Change U-Style
Frame & Companion Insert Molds

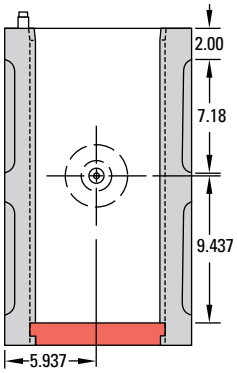
Frame

ITEM NO.
12/20 UF 321

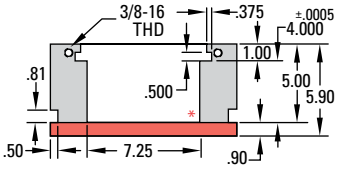
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

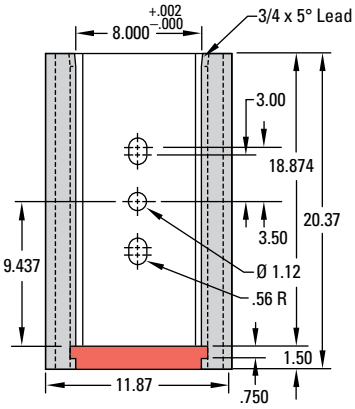


UF 321 Frame Lower – Side View

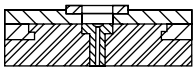


*Taper slot to accommodate sleeve ejection optional (quotation on request).

UF 321 Frame Lower – Top View



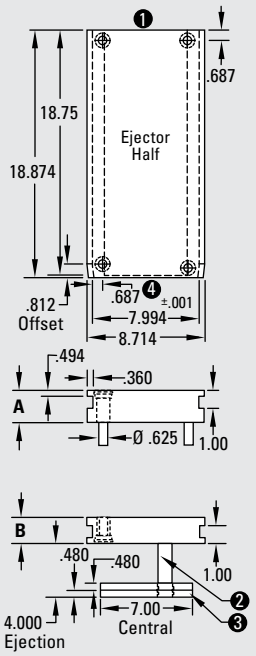
Frame supplied with or without sprue bushing



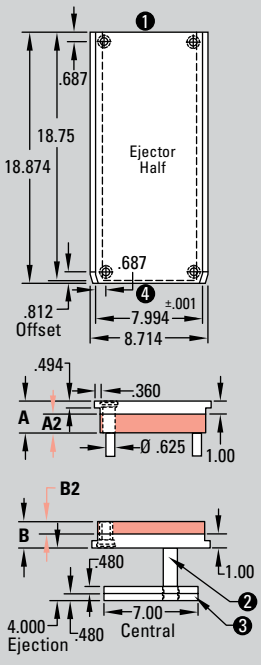
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

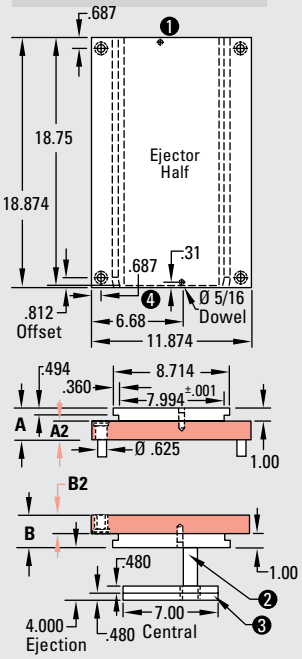
Standard Solid: 8.0 x 18.9



Standard Laminated: 8.0 x 18.9



T-Style Laminated: 11.9 x 18.9



Standard Solid Construction

ITEM NO.	A	B
12/20 SSU 221	1.377	1.377
12/20 SSU 222	1.377	1.877
12/20 SSU 223	1.377	2.377
12/20 SSU 224	1.877	1.377
12/20 SSU 225	1.877	1.877
12/20 SSU 226	1.877	2.377
12/20 SSU 227	1.877	2.877
12/20 SSU 228	2.377	1.377
12/20 SSU 229	2.377	1.877
12/20 SSU 230	2.377	2.377
12/20 SSU 231	2.377	2.877
12/20 SSU 232	2.877	1.877
12/20 SSU 233	2.877	2.377
12/20 SSU 234	2.877	2.877

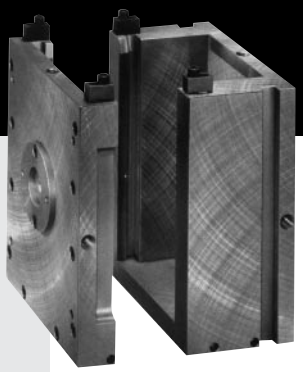
T-Style Laminated Construction

ITEM NO.	A	A2	B2	B
12/20 TLU 201	2.377	1.377	1.377	2.377
12/20 TLU 202	2.377	1.377	1.877	2.877
12/20 TLU 203	2.377	1.377	2.377	3.377
12/20 TLU 204	2.877	1.877	1.377	2.377
12/20 TLU 205	2.877	1.877	1.877	2.877
12/20 TLU 206	2.877	1.877	2.377	3.377
12/20 TLU 207	2.877	1.877	2.877	3.877
12/20 TLU 208	3.377	2.377	1.377	2.377
12/20 TLU 209	3.377	2.377	1.877	2.877
12/20 TLU 210	3.377	2.377	2.377	3.377
12/20 TLU 211	3.377	2.377	2.877	3.877
12/20 TLU 212	3.877	2.877	1.877	2.877
12/20 TLU 213	3.877	2.877	2.377	3.377
12/20 TLU 214	3.877	2.877	2.877	3.877

Standard Laminated Construction

ITEM NO.	A	A2	B2	B
12/20 SLU 281	1.877	0.877	0.877	1.877
12/20 SLU 282	1.877	0.877	1.377	2.377
12/20 SLU 283	1.877	0.877	1.877	2.877
12/20 SLU 284	2.377	1.377	0.877	1.877
12/20 SLU 285	2.377	1.377	1.377	2.377
12/20 SLU 286	2.377	1.377	1.877	2.877
12/20 SLU 287	2.377	1.377	2.377	3.377
12/20 SLU 288	2.877	1.877	0.877	1.877
12/20 SLU 289	2.877	1.877	1.377	2.377
12/20 SLU 290	2.877	1.877	1.877	2.877
12/20 SLU 291	2.877	1.877	2.377	3.377
12/20 SLU 292	3.377	2.377	1.377	2.377
12/20 SLU 293	3.377	2.377	1.877	2.877
12/20 SLU 294	3.377	2.377	2.377	3.377

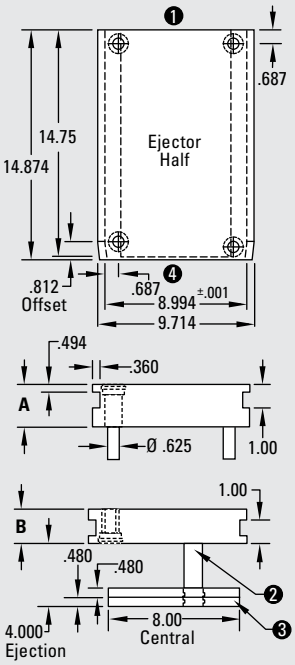
Ordering information for frame and companion insert molds can be found in the front of this section.



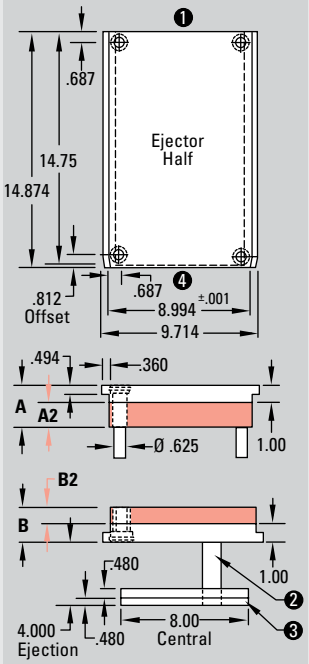
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

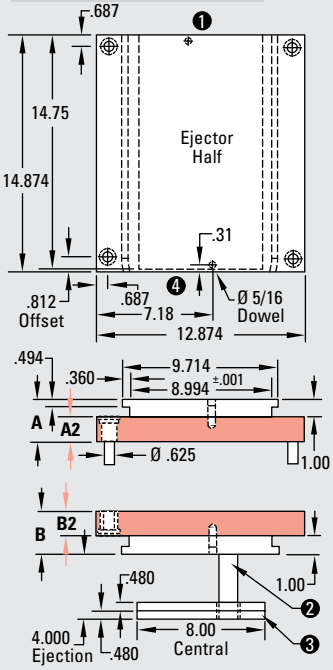
Standard Solid: 9.0 x 14.9



Standard Laminated: 9.0 x 14.9



T-Style Laminated: 12.9 x 14.9



Standard Solid Construction

ITEM NO.	A	B
13/16 SSU 221	1.377	1.377
13/16 SSU 222	1.377	1.877
13/16 SSU 223	1.377	2.377
13/16 SSU 224	1.877	1.377
13/16 SSU 225	1.877	1.877
13/16 SSU 226	1.877	2.377
13/16 SSU 227	1.877	2.877
13/16 SSU 228	2.377	1.377
13/16 SSU 229	2.377	1.877
13/16 SSU 230	2.377	2.377
13/16 SSU 231	2.377	2.877
13/16 SSU 232	2.877	1.877
13/16 SSU 233	2.877	2.377
13/16 SSU 234	2.877	2.877

Standard Laminated Construction

ITEM NO.	A	A2	B2	B
13/16 SLU 281	1.877	0.877	0.877	1.877
13/16 SLU 282	1.877	0.877	1.377	2.377
13/16 SLU 283	1.877	0.877	1.877	2.877
13/16 SLU 284	2.377	1.377	0.877	1.877
13/16 SLU 285	2.377	1.377	1.377	2.377
13/16 SLU 286	2.377	1.377	1.877	2.877
13/16 SLU 287	2.377	1.377	2.377	3.377
13/16 SLU 288	2.877	1.877	0.877	1.877
13/16 SLU 289	2.877	1.877	1.377	2.377
13/16 SLU 290	2.877	1.877	1.877	2.877
13/16 SLU 291	2.877	1.877	2.377	3.377
13/16 SLU 292	3.377	2.377	1.377	2.377
13/16 SLU 293	3.377	2.377	1.877	2.877
13/16 SLU 294	3.377	2.377	2.377	3.377

T-Style Laminated Construction

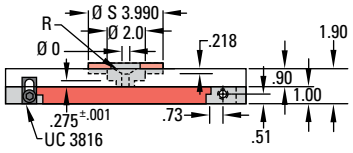
ITEM NO.	A	A2	B2	B
13/16 TLU 201	2.377	1.377	1.377	2.377
13/16 TLU 202	2.377	1.377	1.877	2.877
13/16 TLU 203	2.377	1.377	2.377	3.377
13/16 TLU 204	2.877	1.877	1.377	2.377
13/16 TLU 205	2.877	1.877	1.877	2.877
13/16 TLU 206	2.877	1.877	2.377	3.377
13/16 TLU 207	2.877	1.877	2.877	3.877
13/16 TLU 208	3.377	2.377	1.377	2.377
13/16 TLU 209	3.377	2.377	1.877	2.877
13/16 TLU 210	3.377	2.377	2.377	3.377
13/16 TLU 211	3.377	2.377	2.877	3.877
13/16 TLU 212	3.877	2.877	1.877	2.877
13/16 TLU 213	3.877	2.877	2.377	3.377
13/16 TLU 214	3.877	2.877	2.877	3.877

Ordering information for frame and companion insert molds can be found in the front of this section.

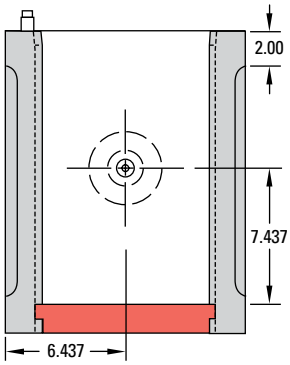
Frame

ITEM NO.
13/16 UF 321

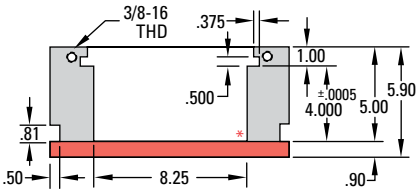
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

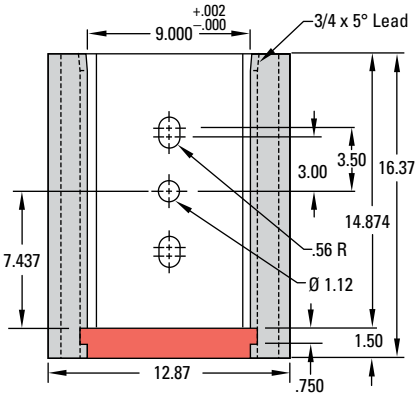


UF 321 Frame Lower – Side View

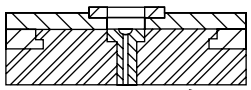


* Taper slot to accommodate sleeve ejection optional (quotation on request).

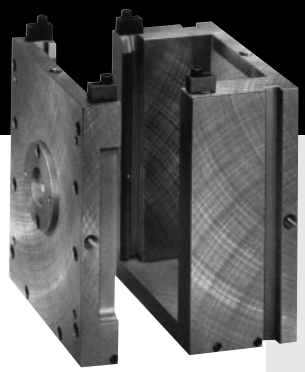
UF 321 Frame Lower – Top View



Frame supplied with or without sprue bushing



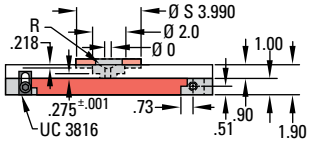
UF Quick-Change U-Style
Frame & Companion Insert Molds



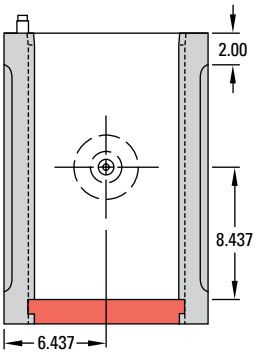
Frame

ITEM NO.
13/18 UF 321

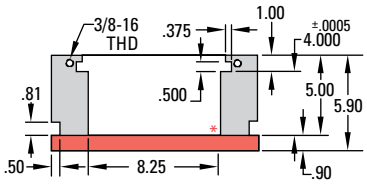
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

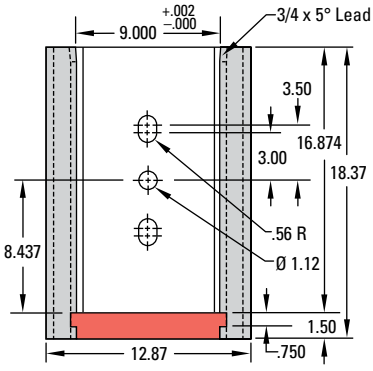


UF 321 Frame Lower – Side View

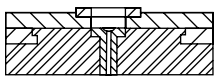


*Taper slot to accommodate sleeve ejection optional (quotation on request).

UF 321 Frame Lower – Top View



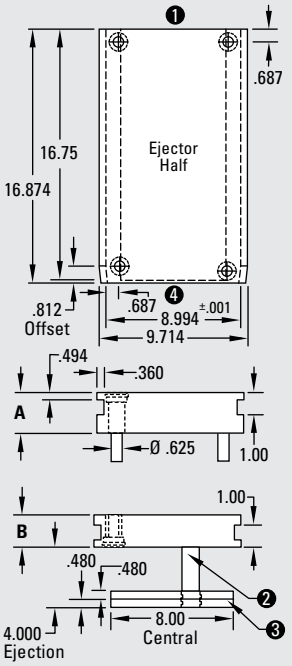
Frame supplied with or without sprue bushing



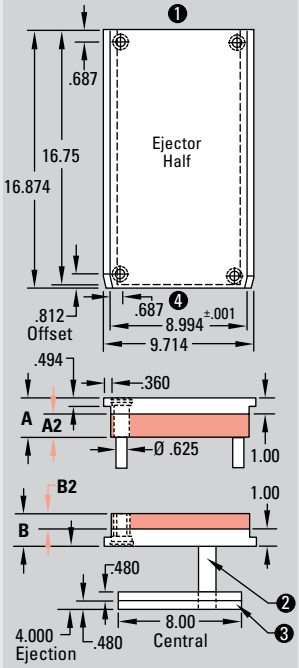
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

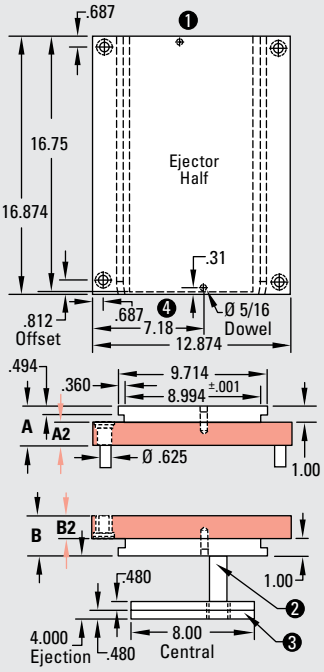
Standard Solid: 9.0 x 16.9



Standard Laminated: 9.0 x 16.9



T-Style Laminated: 12.9 x 16.9



Standard Solid Construction

ITEM NO.	A	B
13/18 SSU 221	1.377	1.377
13/18 SSU 222	1.377	1.877
13/18 SSU 223	1.377	2.377
13/18 SSU 224	1.877	1.377
13/18 SSU 225	1.877	1.877
13/18 SSU 226	1.877	2.377
13/18 SSU 227	1.877	2.877
13/18 SSU 228	2.377	1.377
13/18 SSU 229	2.377	1.877
13/18 SSU 230	2.377	2.377
13/18 SSU 231	2.377	2.877
13/18 SSU 232	2.877	1.877
13/18 SSU 233	2.877	2.377
13/18 SSU 234	2.877	2.877

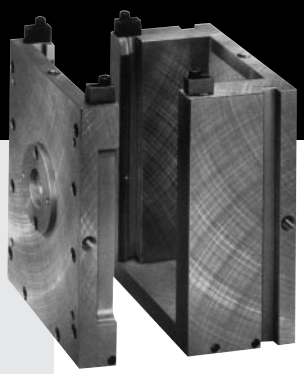
T-Style Laminated Construction

ITEM NO.	A	A2	B2	B
13/18 TLU 201	2.377	1.377	1.377	2.377
13/18 TLU 202	2.377	1.377	1.877	2.877
13/18 TLU 203	2.377	1.377	2.377	3.377
13/18 TLU 204	2.877	1.877	1.377	2.377
13/18 TLU 205	2.877	1.877	1.877	2.877
13/18 TLU 206	2.877	1.877	2.377	3.377
13/18 TLU 207	2.877	1.877	2.877	3.877
13/18 TLU 208	3.377	2.377	1.377	2.377
13/18 TLU 209	3.377	2.377	1.877	2.877
13/18 TLU 210	3.377	2.377	2.377	3.377
13/18 TLU 211	3.377	2.377	2.877	3.877
13/18 TLU 212	3.877	2.877	1.877	2.877
13/18 TLU 213	3.877	2.877	2.377	3.377
13/18 TLU 214	3.877	2.877	2.877	3.877

Standard Laminated Construction

ITEM NO.	A	A2	B2	B
13/18 SLU 281	1.877	0.877	0.877	1.877
13/18 SLU 282	1.877	0.877	1.377	2.377
13/18 SLU 283	1.877	0.877	1.877	2.877
13/18 SLU 284	2.377	1.377	0.877	1.877
13/18 SLU 285	2.377	1.377	1.377	2.377
13/18 SLU 286	2.377	1.377	1.877	2.877
13/18 SLU 287	2.377	1.377	2.377	3.377
13/18 SLU 288	2.877	1.877	0.877	1.877
13/18 SLU 289	2.877	1.877	1.377	2.377
13/18 SLU 290	2.877	1.877	1.877	2.877
13/18 SLU 291	2.877	1.877	2.377	3.377
13/18 SLU 292	3.377	2.377	1.377	2.377
13/18 SLU 293	3.377	2.377	1.877	2.877
13/18 SLU 294	3.377	2.377	2.377	3.377

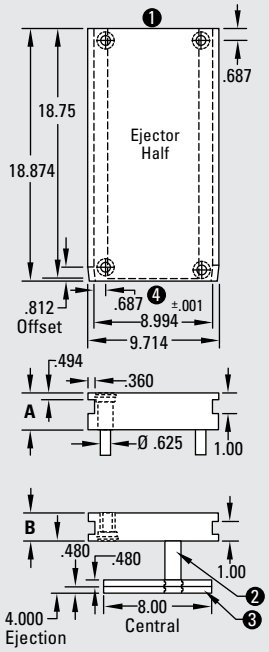
Ordering information for frame and companion insert molds can be found in the front of this section.



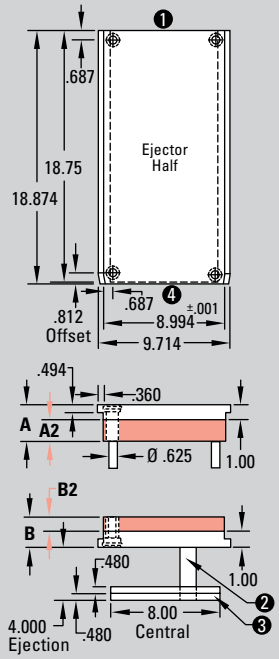
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

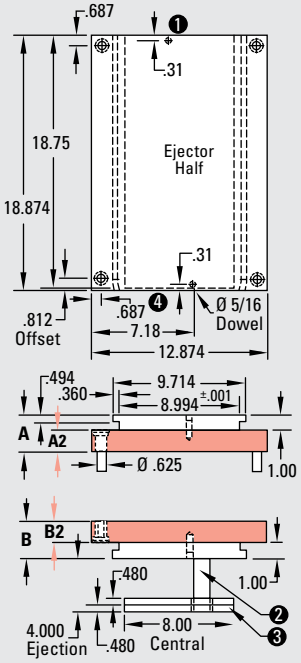
Standard Solid: 9.0 x 18.9



Standard Laminated: 9.0 x 18.9



T-Style Laminated: 12.9 x 18.9



Standard Solid Construction

ITEM NO.	A	B
13/20 SSU 221	1.377	1.377
13/20 SSU 222	1.377	1.877
13/20 SSU 223	1.377	2.377
13/20 SSU 224	1.877	1.377
13/20 SSU 225	1.877	1.877
13/20 SSU 226	1.877	2.377
13/20 SSU 227	1.877	2.877
13/20 SSU 228	2.377	1.377
13/20 SSU 229	2.377	1.877
13/20 SSU 230	2.377	2.377
13/20 SSU 231	2.377	2.877
13/20 SSU 232	2.877	1.877
13/20 SSU 233	2.877	2.377
13/20 SSU 234	2.877	2.877

Standard Laminated Construction

ITEM NO.	A	A2	B2	B
13/20 SLU 281	1.877	0.877	0.877	1.877
13/20 SLU 282	1.877	0.877	1.377	2.377
13/20 SLU 283	1.877	0.877	1.877	2.877
13/20 SLU 284	2.377	1.377	0.877	1.877
13/20 SLU 285	2.377	1.377	1.377	2.377
13/20 SLU 286	2.377	1.377	1.877	2.877
13/20 SLU 287	2.377	1.377	2.377	3.377
13/20 SLU 288	2.877	1.877	0.877	1.877
13/20 SLU 289	2.877	1.877	1.377	2.377
13/20 SLU 290	2.877	1.877	1.877	2.877
13/20 SLU 291	2.877	1.877	2.377	3.377
13/20 SLU 292	3.377	2.377	1.377	2.377
13/20 SLU 293	3.377	2.377	1.877	2.877
13/20 SLU 294	3.377	2.377	2.377	3.377

T-Style Laminated Construction

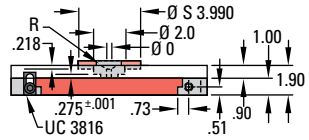
ITEM NO.	A	A2	B2	B
13/20 TLU 201	2.377	1.377	1.377	2.377
13/20 TLU 202	2.377	1.377	1.877	2.877
13/20 TLU 203	2.377	1.377	2.377	3.377
13/20 TLU 204	2.877	1.877	1.377	2.377
13/20 TLU 205	2.877	1.877	1.877	2.877
13/20 TLU 206	2.877	1.877	2.377	3.377
13/20 TLU 207	2.877	1.877	2.877	3.877
13/20 TLU 208	3.377	2.377	1.377	2.377
13/20 TLU 209	3.377	2.377	1.877	2.877
13/20 TLU 210	3.377	2.377	2.377	3.377
13/20 TLU 211	3.377	2.377	2.877	3.877
13/20 TLU 212	3.877	2.877	1.877	2.877
13/20 TLU 213	3.877	2.877	2.377	3.377
13/20 TLU 214	3.877	2.877	2.877	3.877

Ordering information for frame and companion insert molds can be found in the front of this section.

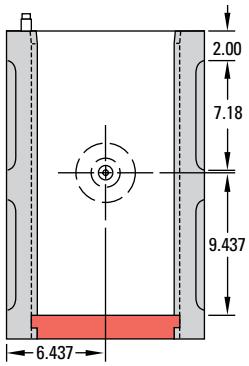
Frame

ITEM NO.
13/20 UF 321

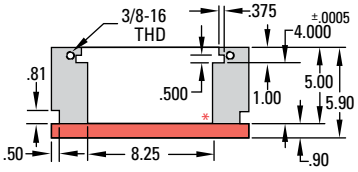
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

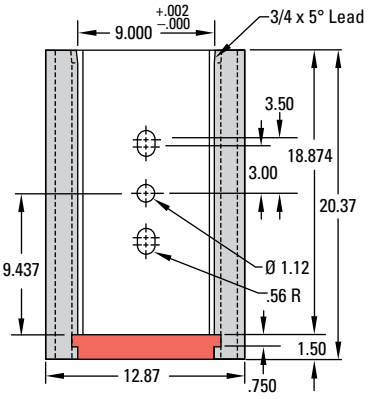


UF 321 Frame Lower – Side View

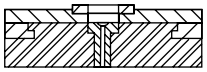


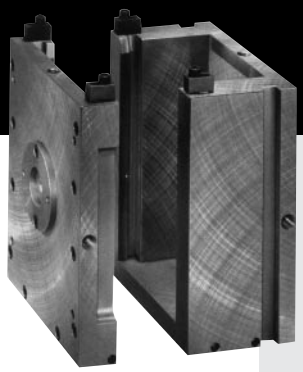
*Taper slot to accommodate sleeve ejection optional (quotation on request).

UF 321 Frame Lower – Top View



Frame supplied with or without sprue bushing



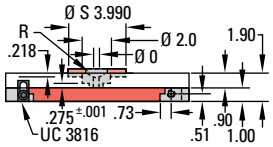


UF Quick-Change U-Style
Frame & Companion Insert Molds

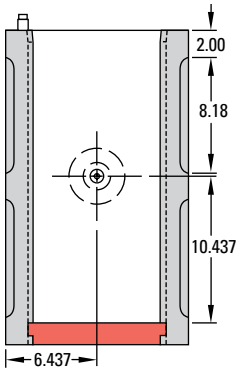
Frame

ITEM NO.
13/22 UF 321

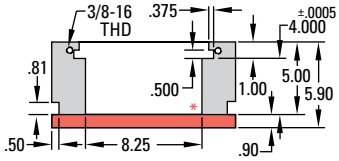
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

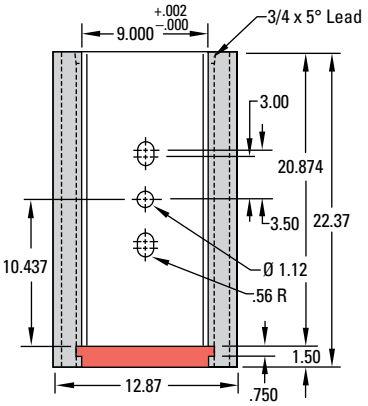


UF 321 Frame Lower – Side View

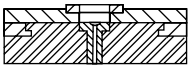


*Taper slot to accommodate sleeve ejection optional (quotation on request).

UF 321 Frame Lower – Top View



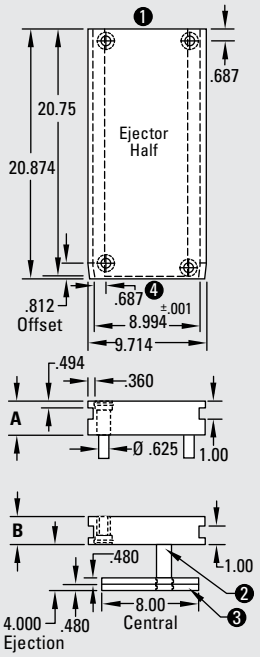
Frame supplied with or without sprue bushing



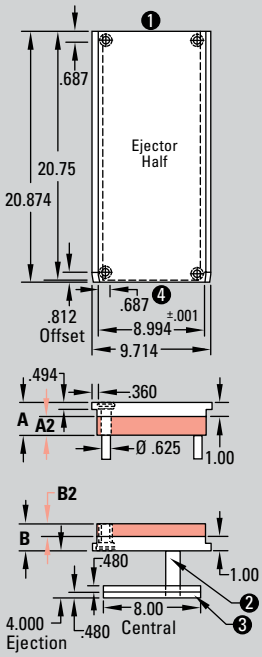
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

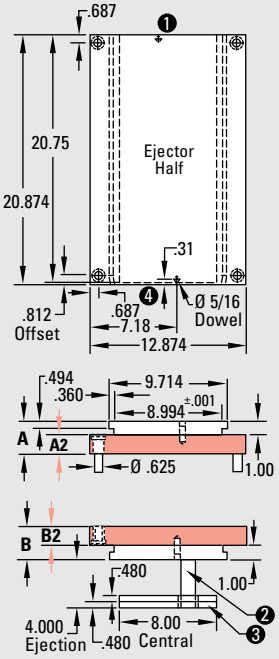
Standard Solid: 9.0 x 20.9



Standard Laminated: 9.0 x 20.9



T-Style Laminated: 12.9 x 20.9



Standard Solid Construction

ITEM NO.	A	B
13/22 SSU 221	1.377	1.377
13/22 SSU 222	1.377	1.877
13/22 SSU 223	1.377	2.377
13/22 SSU 224	1.877	1.377
13/22 SSU 225	1.877	1.877
13/22 SSU 226	1.877	2.377
13/22 SSU 227	1.877	2.877
13/22 SSU 228	2.377	1.377
13/22 SSU 229	2.377	1.877
13/22 SSU 230	2.377	2.377
13/22 SSU 231	2.377	2.877
13/22 SSU 232	2.877	1.877
13/22 SSU 233	2.877	2.377
13/22 SSU 234	2.877	2.877

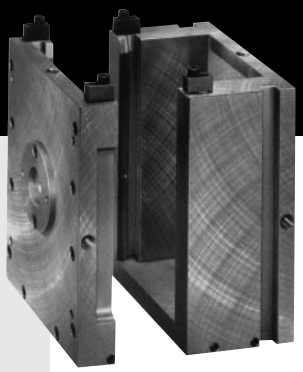
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
13/22 SLU 281	1.877	0.877	0.877	1.877
13/22 SLU 282	1.877	0.877	1.377	2.377
13/22 SLU 283	1.877	0.877	1.877	2.877
13/22 SLU 284	2.377	1.377	0.877	1.877
13/22 SLU 285	2.377	1.377	1.377	2.377
13/22 SLU 286	2.377	1.377	1.877	2.877
13/22 SLU 287	2.377	1.377	2.377	3.377
13/22 SLU 288	2.877	1.877	0.877	1.877
13/22 SLU 289	2.877	1.877	1.377	2.377
13/22 SLU 290	2.877	1.877	1.877	2.877
13/22 SLU 291	2.877	1.877	2.377	3.377
13/22 SLU 292	3.377	2.377	1.377	2.377
13/22 SLU 293	3.377	2.377	1.877	2.877
13/22 SLU 294	3.377	2.377	2.377	3.377

T-Style Laminated Construction

ITEM NO.	A	A2	B2	B
13/22 TLU 201	2.377	1.377	1.377	2.377
13/22 TLU 202	2.377	1.377	1.877	2.877
13/22 TLU 203	2.377	1.377	2.377	3.377
13/22 TLU 204	2.877	1.877	1.377	2.377
13/22 TLU 205	2.877	1.877	1.877	2.877
13/22 TLU 206	2.877	1.877	2.377	3.377
13/22 TLU 207	2.877	1.877	2.877	3.877
13/22 TLU 208	3.377	2.377	1.377	2.377
13/22 TLU 209	3.377	2.377	1.877	2.877
13/22 TLU 210	3.377	2.377	2.377	3.377
13/22 TLU 211	3.377	2.377	2.877	3.877
13/22 TLU 212	3.877	2.877	1.877	2.877
13/22 TLU 213	3.877	2.877	2.377	3.377
13/22 TLU 214	3.877	2.877	2.877	3.877

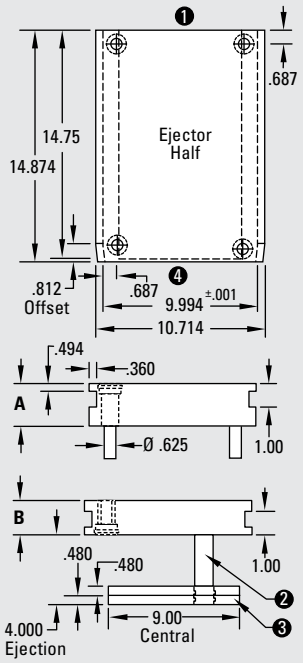
Ordering information for frame and companion insert molds can be found in the front of this section.



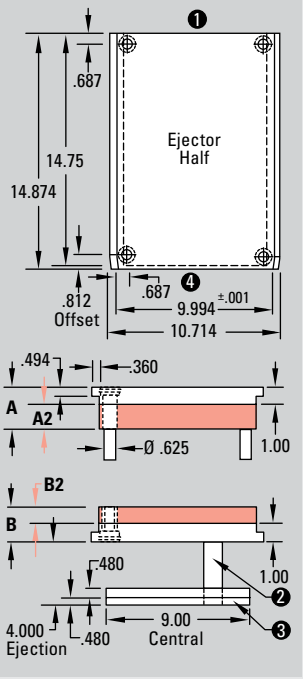
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

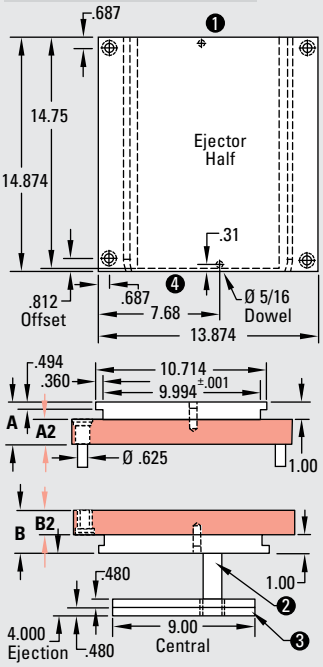
Standard Solid: 10.0 x 14.9



Standard Laminated: 10.0 x 14.9



T-Style Laminated: 13.9 x 14.9



Standard Solid Construction

ITEM NO.	A	B
14/16 SSU 221	1.377	1.377
14/16 SSU 222	1.377	1.877
14/16 SSU 223	1.377	2.377
14/16 SSU 224	1.877	1.377
14/16 SSU 225	1.877	1.877
14/16 SSU 226	1.877	2.377
14/16 SSU 227	1.877	2.877
14/16 SSU 228	2.377	1.377
14/16 SSU 229	2.377	1.877
14/16 SSU 230	2.377	2.377
14/16 SSU 231	2.377	2.877
14/16 SSU 232	2.877	1.877
14/16 SSU 233	2.877	2.377
14/16 SSU 234	2.877	2.877

T-Style Laminated Construction

ITEM NO.	A	A2	B2	B
14/16 TLU 201	2.377	1.377	1.377	2.377
14/16 TLU 202	2.377	1.377	1.877	2.877
14/16 TLU 203	2.377	1.377	2.377	3.377
14/16 TLU 204	2.877	1.877	1.377	2.377
14/16 TLU 205	2.877	1.877	1.877	2.877
14/16 TLU 206	2.877	1.877	2.377	3.377
14/16 TLU 207	2.877	1.877	2.877	3.877
14/16 TLU 208	3.377	2.377	1.377	2.377
14/16 TLU 209	3.377	2.377	1.877	2.877
14/16 TLU 210	3.377	2.377	2.377	3.377
14/16 TLU 211	3.377	2.377	2.877	3.877
14/16 TLU 212	3.877	2.877	1.877	2.877
14/16 TLU 213	3.877	2.877	2.377	3.377
14/16 TLU 214	3.877	2.877	2.877	3.877

Standard Laminated Construction

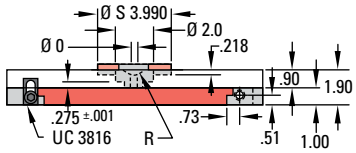
ITEM NO.	A	A2	B2	B
14/16 SLU 281	1.877	0.877	0.877	1.877
14/16 SLU 282	1.877	0.877	1.377	2.377
14/16 SLU 283	1.877	0.877	1.877	2.877
14/16 SLU 284	2.377	1.377	0.877	1.877
14/16 SLU 285	2.377	1.377	1.377	2.377
14/16 SLU 286	2.377	1.377	1.877	2.877
14/16 SLU 287	2.377	1.377	2.377	3.377
14/16 SLU 288	2.877	1.877	0.877	1.877
14/16 SLU 289	2.877	1.877	1.377	2.377
14/16 SLU 290	2.877	1.877	1.877	2.877
14/16 SLU 291	2.877	1.877	2.377	3.377
14/16 SLU 292	3.377	2.377	1.377	2.377
14/16 SLU 293	3.377	2.377	1.877	2.877
14/16 SLU 294	3.377	2.377	2.377	3.377

Ordering information for frame and companion insert molds can be found in the front of this section.

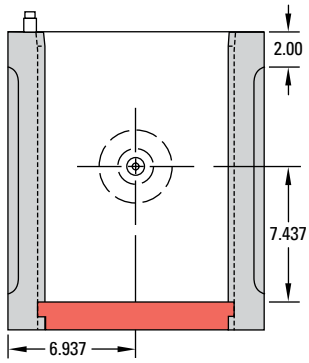
Frame

ITEM NO.
14/16 UF 321

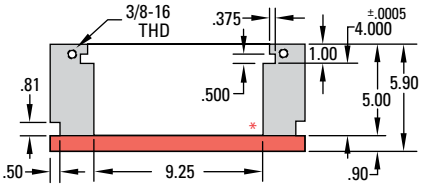
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

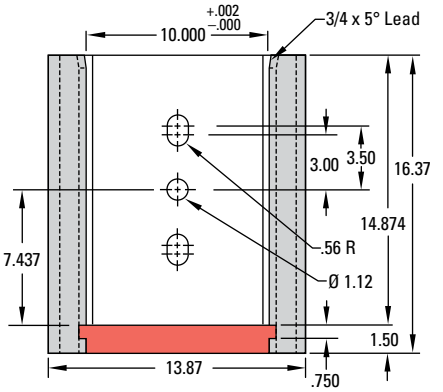


UF 321 Frame Lower – Side View

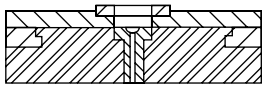


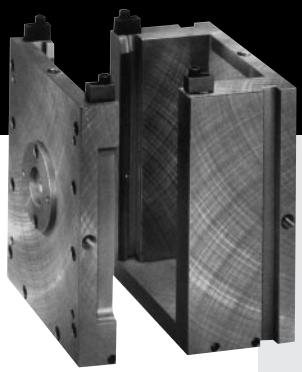
*Taper slot to accommodate sleeve ejection optional (quotation on request).

UF 321 Frame Lower – Top View



Frame supplied with or without sprue bushing



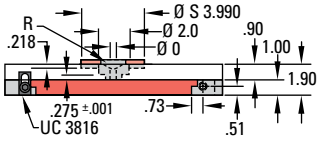


UF Quick-Change U-Style
Frame & Companion Insert Molds

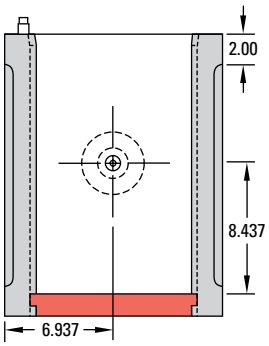
Frame

ITEM NO.
14/18 UF 321

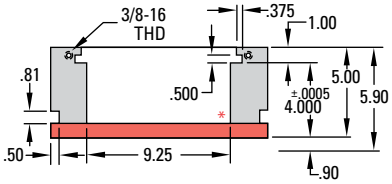
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

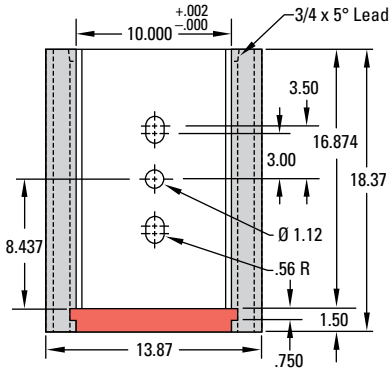


UF 321 Frame Lower – Side View

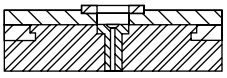


*Taper slot to accommodate sleeve ejection optional (quotation on request).

UF 321 Frame Lower – Top View



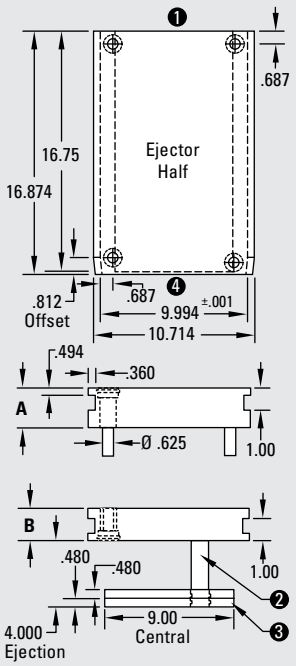
Frame supplied with or without sprue bushing



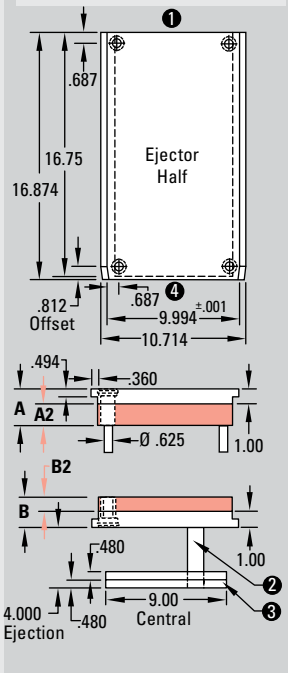
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

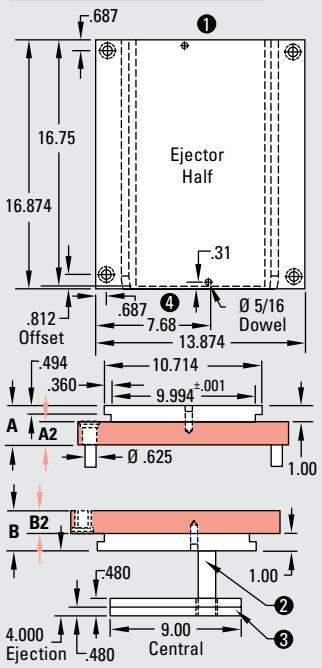
Standard Solid: 10.0 x 16.9



Standard Laminated: 10.0 x 16.9



T-Style Laminated: 13.9 x 16.9



Standard Solid Construction

ITEM NO.	A	B
14/18 SSU 221	1.377	1.377
14/18 SSU 222	1.377	1.877
14/18 SSU 223	1.377	2.377
14/18 SSU 224	1.877	1.377
14/18 SSU 225	1.877	1.877
14/18 SSU 226	1.877	2.377
14/18 SSU 227	1.877	2.877
14/18 SSU 228	2.377	1.377
14/18 SSU 229	2.377	1.877
14/18 SSU 230	2.377	2.377
14/18 SSU 231	2.377	2.877
14/18 SSU 232	2.877	1.877
14/18 SSU 233	2.877	2.377
14/18 SSU 234	2.877	2.877

T-Style Laminated Construction

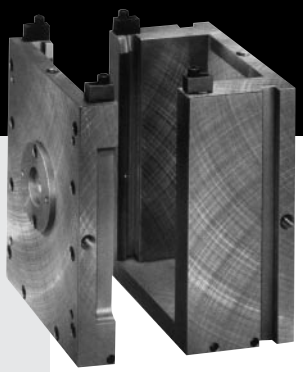
ITEM NO.	A	A2	B2	B
14/18 TLU 201	2.377	1.377	1.377	2.377
14/18 TLU 202	2.377	1.377	1.877	2.877
14/18 TLU 203	2.377	1.377	2.377	3.377
14/18 TLU 204	2.877	1.877	1.377	2.377
14/18 TLU 205	2.877	1.877	1.877	2.877
14/18 TLU 206	2.877	1.877	2.377	3.377
14/18 TLU 207	2.877	1.877	2.877	3.877
14/18 TLU 208	3.377	2.377	1.377	2.377
14/18 TLU 209	3.377	2.377	1.877	2.877
14/18 TLU 210	3.377	2.377	2.377	3.377
14/18 TLU 211	3.377	2.377	2.877	3.877
14/18 TLU 212	3.877	2.877	1.877	2.877
14/18 TLU 213	3.877	2.877	2.377	3.377
14/18 TLU 214	3.877	2.877	2.877	3.877

Standard Laminated Construction

ITEM NO.	A	A2	B2	B
14/18 SLU 281	1.877	0.877	0.877	1.877
14/18 SLU 282	1.877	0.877	1.377	2.377
14/18 SLU 283	1.877	0.877	1.877	2.877
14/18 SLU 284	2.377	1.377	0.877	1.877
14/18 SLU 285	2.377	1.377	1.377	2.377
14/18 SLU 286	2.377	1.377	1.877	2.877
14/18 SLU 287	2.377	1.377	2.377	3.377
14/18 SLU 288	2.877	1.877	0.877	1.877
14/18 SLU 289	2.877	1.877	1.377	2.377
14/18 SLU 290	2.877	1.877	1.877	2.877
14/18 SLU 291	2.877	1.877	2.377	3.377
14/18 SLU 292	3.377	2.377	1.377	2.377
14/18 SLU 293	3.377	2.377	1.877	2.877
14/18 SLU 294	3.377	2.377	2.377	3.377

Ordering information for frame and companion insert molds can be found in the front of this section.

Companion Interchangeable Insert Molds

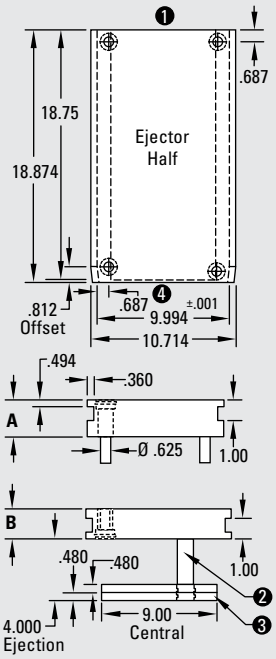


1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

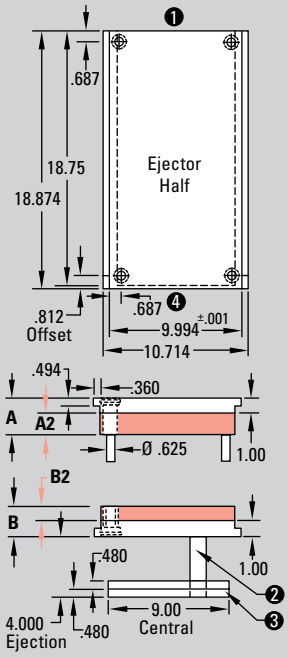
Frame

ITEM NO.
14/20 UF 321

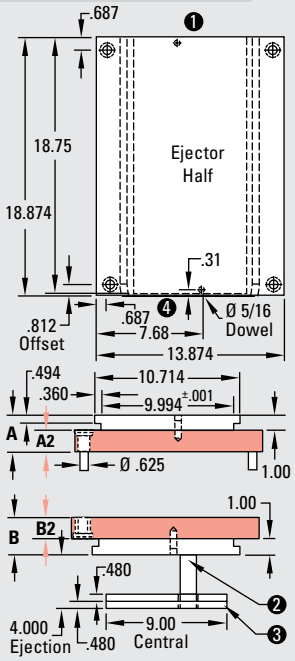
Standard Solid: 10.0 x 18.9



Standard Laminated: 10.0 x 18.9



T-Style Laminated: 13.9 x 18.9



Standard Solid Construction

ITEM NO.	A	B
14/20 SSU 221	1.377	1.377
14/20 SSU 222	1.377	1.877
14/20 SSU 223	1.377	2.377
14/20 SSU 224	1.877	1.377
14/20 SSU 225	1.877	1.877
14/20 SSU 226	1.877	2.377
14/20 SSU 227	1.877	2.877
14/20 SSU 228	2.377	1.377
14/20 SSU 229	2.377	1.877
14/20 SSU 230	2.377	2.377
14/20 SSU 231	2.377	2.877
14/20 SSU 232	2.877	1.877
14/20 SSU 233	2.877	2.377
14/20 SSU 234	2.877	2.877

T-Style Laminated Construction

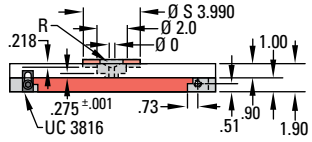
ITEM NO.	A	A2	B2	B
14/20 TLU 201	2.377	1.377	1.377	2.377
14/20 TLU 202	2.377	1.377	1.877	2.877
14/20 TLU 203	2.377	1.377	2.377	3.377
14/20 TLU 204	2.877	1.877	1.377	2.377
14/20 TLU 205	2.877	1.877	1.877	2.877
14/20 TLU 206	2.877	1.877	2.377	3.377
14/20 TLU 207	2.877	1.877	2.877	3.877
14/20 TLU 208	3.377	2.377	1.377	2.377
14/20 TLU 209	3.377	2.377	1.877	2.877
14/20 TLU 210	3.377	2.377	2.377	3.377
14/20 TLU 211	3.377	2.377	2.877	3.877
14/20 TLU 212	3.877	2.877	1.877	2.877
14/20 TLU 213	3.877	2.877	2.377	3.377
14/20 TLU 214	3.877	2.877	2.877	3.877

Standard Laminated Construction

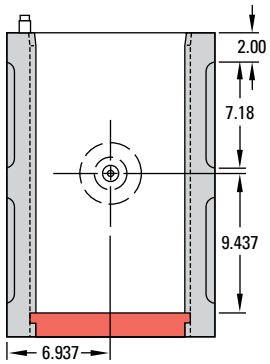
ITEM NO.	A	A2	B2	B
14/20 SLU 281	1.877	0.877	0.877	1.877
14/20 SLU 282	1.877	0.877	1.377	2.377
14/20 SLU 283	1.877	0.877	1.877	2.877
14/20 SLU 284	2.377	1.377	0.877	1.877
14/20 SLU 285	2.377	1.377	1.377	2.377
14/20 SLU 286	2.377	1.377	1.877	2.877
14/20 SLU 287	2.377	1.377	2.377	3.377
14/20 SLU 288	2.877	1.877	0.877	1.877
14/20 SLU 289	2.877	1.877	1.377	2.377
14/20 SLU 290	2.877	1.877	1.877	2.877
14/20 SLU 291	2.877	1.877	2.377	3.377
14/20 SLU 292	3.377	2.377	1.377	2.377
14/20 SLU 293	3.377	2.377	1.877	2.877
14/20 SLU 294	3.377	2.377	2.377	3.377

Ordering information for frame and companion insert molds can be found in the front of this section.

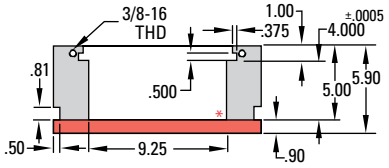
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

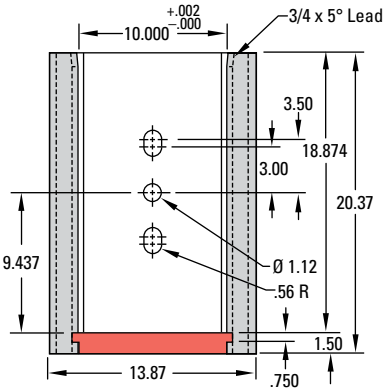


UF 321 Frame Lower – Side View

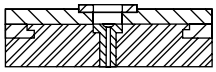


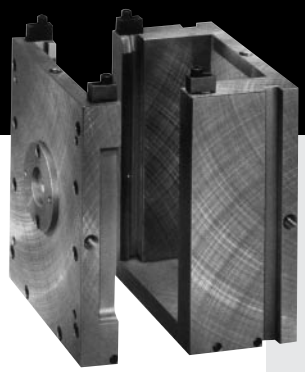
*Taper slot to accommodate sleeve ejection optional (quotation on request).

UF 321 Frame Lower – Top View



Frame supplied with or without sprue bushing



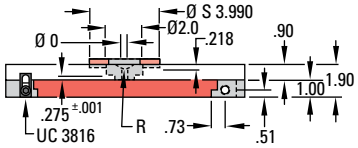


UF Quick-Change U-Style
Frame & Companion Insert Molds

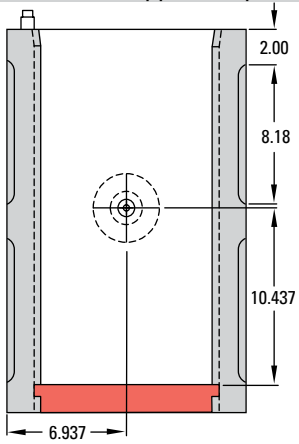
Frame

ITEM NO.
14/22 UF 321

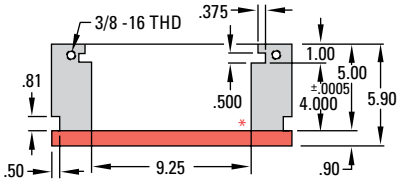
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

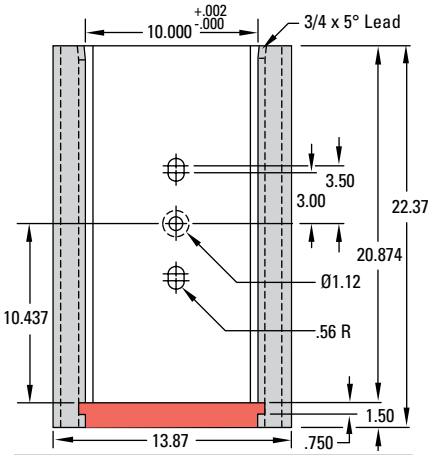


UF 321 Frame Lower – Side View

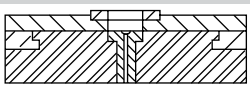


*Taper slot to accommodate sleeve ejection optional (quotation on request).

UF 321 Frame Lower – Top View



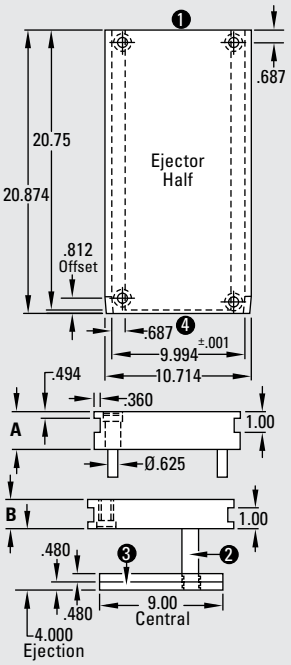
Frame supplied with or without sprue bushing



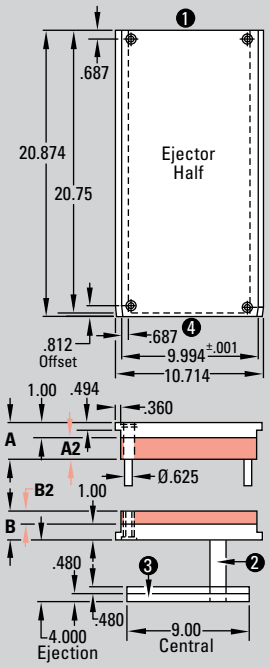
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

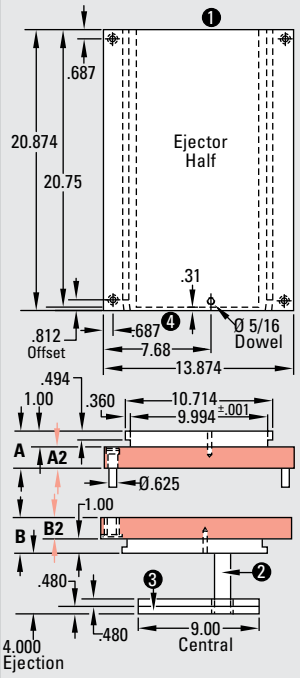
Standard Solid: 10.0 x 20.9



Standard Laminated: 10.0 x 20.9



T-Style Laminated: 13.9 x 20.9



Standard Solid Construction

ITEM NO.	A	B
14/22 SSU 221	1.377	1.377
14/22 SSU 222	1.377	1.877
14/22 SSU 223	1.377	2.377
14/22 SSU 224	1.877	1.377
14/22 SSU 225	1.877	1.877
14/22 SSU 226	1.877	2.377
14/22 SSU 227	1.877	2.877
14/22 SSU 228	2.377	1.377
14/22 SSU 229	2.377	1.877
14/22 SSU 230	2.377	2.377
14/22 SSU 231	2.377	2.877
14/22 SSU 232	2.877	1.877
14/22 SSU 233	2.877	2.377
14/22 SSU 234	2.877	2.877

T-Style Laminated Construction

ITEM NO.	A	A2	B2	B
14/22 TLU 201	2.377	1.377	1.377	2.377
14/22 TLU 202	2.377	1.377	1.877	2.877
14/22 TLU 203	2.377	1.377	2.377	3.377
14/22 TLU 204	2.877	1.877	1.377	2.377
14/22 TLU 205	2.877	1.877	1.877	2.877
14/22 TLU 206	2.877	1.877	2.377	3.377
14/22 TLU 207	2.877	1.877	2.877	3.877
14/22 TLU 208	3.377	2.377	1.377	2.377
14/22 TLU 209	3.377	2.377	1.877	2.877
14/22 TLU 210	3.377	2.377	2.377	3.377
14/22 TLU 211	3.377	2.377	2.877	3.877
14/22 TLU 212	3.877	2.877	1.877	2.877
14/22 TLU 213	3.877	2.877	2.377	3.377
14/22 TLU 214	3.877	2.877	2.877	3.877

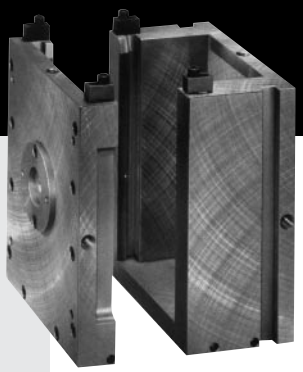
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
14/22 SLU 281	1.877	0.877	0.877	1.877
14/22 SLU 282	1.877	0.877	1.377	2.377
14/22 SLU 283	1.877	0.877	1.877	2.877
14/22 SLU 284	2.377	1.377	0.877	1.877
14/22 SLU 285	2.377	1.377	1.377	2.377
14/22 SLU 286	2.377	1.377	1.877	2.877
14/22 SLU 287	2.377	1.377	2.377	3.377
14/22 SLU 288	2.877	1.877	0.877	1.877
14/22 SLU 289	2.877	1.877	1.377	2.377
14/22 SLU 290	2.877	1.877	1.877	2.877
14/22 SLU 291	2.877	1.877	2.377	3.377
14/22 SLU 292	3.377	2.377	1.377	2.377
14/22 SLU 293	3.377	2.377	1.877	2.877
14/22 SLU 294	3.377	2.377	2.377	3.377

Ordering information for frame and companion insert molds can be found in the front of this section.

Companion Interchangeable Insert Molds

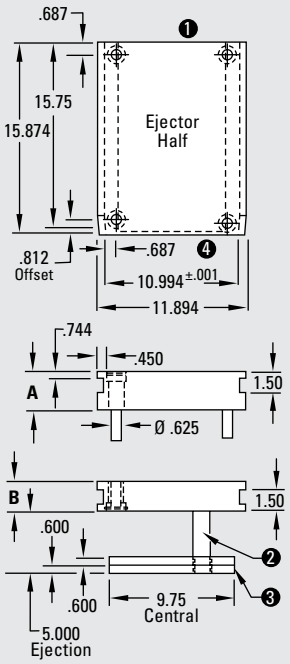
1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.



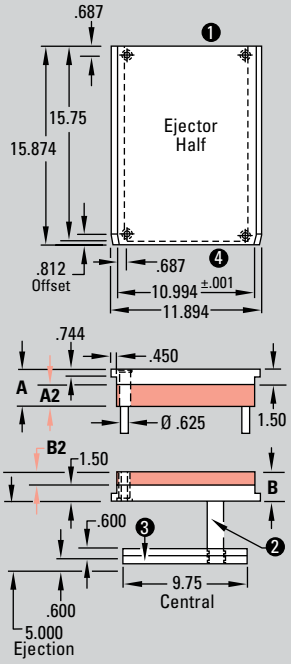
Frame

ITEM NO.
16/18 UF 321

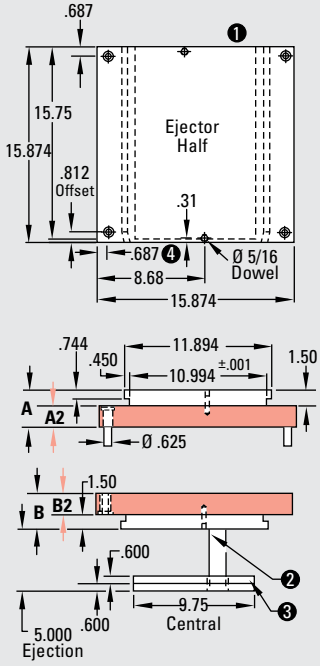
Standard Solid: 11.0 x 15.9



Standard Laminated: 11.0 x 15.9



T-Style Laminated: 15.9 x 15.9



Standard Solid Construction

ITEM NO.	A	B
16/18 SSU 221	1.877	1.877
16/18 SSU 222	1.877	2.377
16/18 SSU 223	1.877	2.877
16/18 SSU 224	1.877	3.377
16/18 SSU 225	2.377	1.877
16/18 SSU 226	2.377	2.377
16/18 SSU 227	2.377	2.877
16/18 SSU 228	2.377	3.377
16/18 SSU 229	2.877	1.877
16/18 SSU 230	2.877	2.377
16/18 SSU 231	2.877	2.877
16/18 SSU 232	2.877	3.377
16/18 SSU 233	3.377	1.877
16/18 SSU 234	3.377	2.377
16/18 SSU 235	3.377	2.877
16/18 SSU 236	3.377	3.377

Standard Laminated Construction

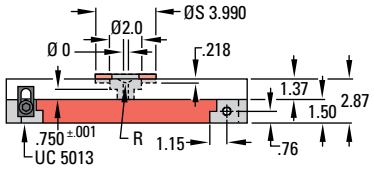
ITEM NO.	A	A2	B2	B
16/18 SLU 281	2.877	1.377	1.377	2.877
16/18 SLU 282	2.877	1.377	1.877	3.377
16/18 SLU 283	2.877	1.377	2.377	3.877
16/18 SLU 284	3.377	1.877	1.377	2.877
16/18 SLU 285	3.377	1.877	1.877	3.377
16/18 SLU 286	3.377	1.877	2.377	3.877
16/18 SLU 287	3.377	1.877	2.877	4.377
16/18 SLU 288	3.877	2.377	1.377	2.877
16/18 SLU 289	3.877	2.377	1.877	3.377
16/18 SLU 290	3.877	2.377	2.377	3.877
16/18 SLU 291	3.877	2.377	2.877	4.377
16/18 SLU 292	4.377	2.877	1.877	3.377
16/18 SLU 293	4.377	2.877	2.377	3.877
16/18 SLU 294	4.377	2.877	2.877	4.377
16/18 SLU 295	4.877	3.377	3.377	4.877

T-Style Laminated Construction

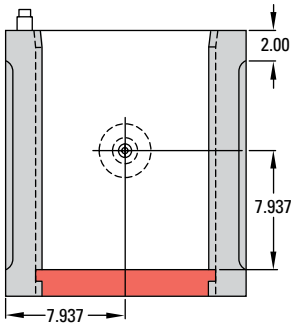
ITEM NO.	A	A2	B2	B
16/18 TLU 201	2.877	1.377	1.377	2.877
16/18 TLU 202	2.877	1.377	1.877	3.377
16/18 TLU 203	2.877	1.377	2.377	3.877
16/18 TLU 204	3.377	1.877	1.377	2.877
16/18 TLU 205	3.377	1.877	1.877	3.377
16/18 TLU 206	3.377	1.877	2.377	3.877
16/18 TLU 207	3.377	1.877	2.877	4.377
16/18 TLU 208	3.877	2.377	1.377	2.877
16/18 TLU 209	3.877	2.377	1.877	3.377
16/18 TLU 210	3.877	2.377	2.377	3.877
16/18 TLU 211	3.877	2.377	2.877	4.377
16/18 TLU 212	4.377	2.877	1.877	3.377
16/18 TLU 213	4.377	2.877	2.377	3.877
16/18 TLU 214	4.377	2.877	2.877	4.377
16/18 TLU 215	4.877	3.377	3.377	4.877

Ordering information for frame and companion insert molds can be found in the front of this section.

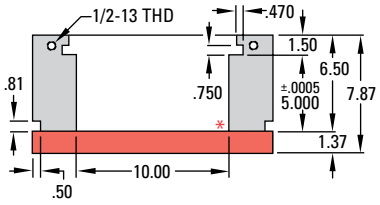
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

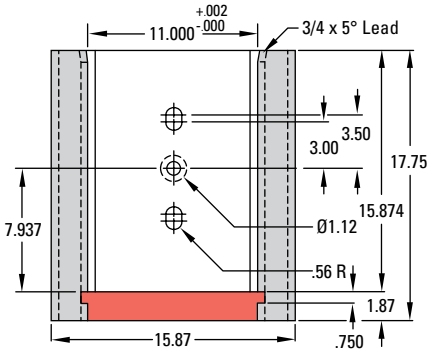


UF 321 Frame Lower – Side View

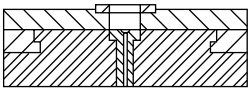


*Taper slot to accommodate sleeve ejection optional (quotation on request).

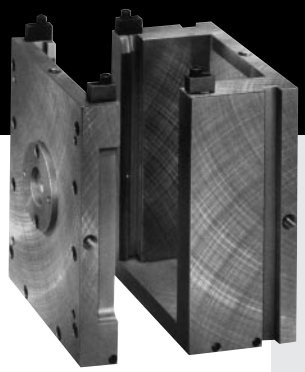
UF 321 Frame Lower – Top View



Frame supplied with or without sprue bushing



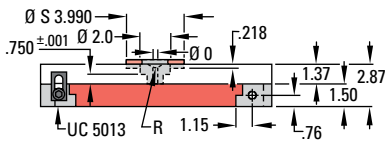
UF Quick-Change U-Style
Frame & Companion Insert Molds



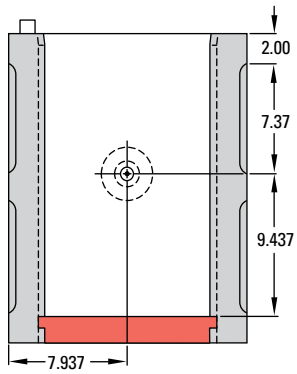
Frame

ITEM NO.
16/21 UF 321

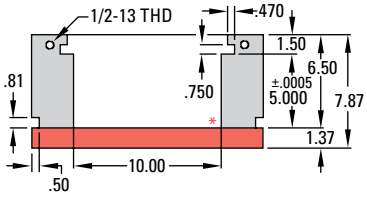
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

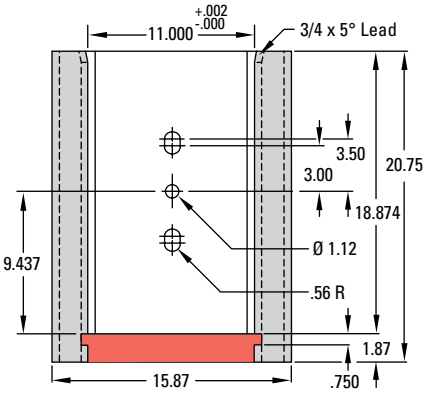


UF 321 Frame Lower – Side View

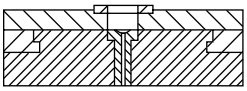


*Taper slot to accommodate sleeve ejection optional (quotation on request).

UF 321 Frame Lower – Top View



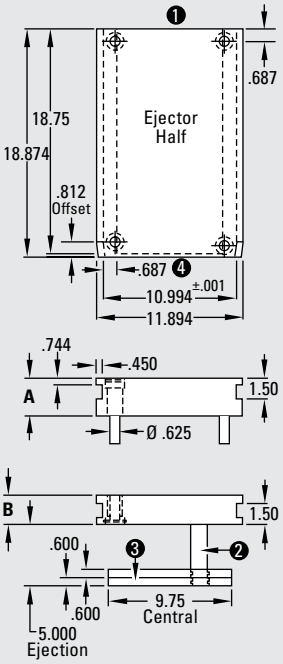
Frame supplied with or without sprue bushing



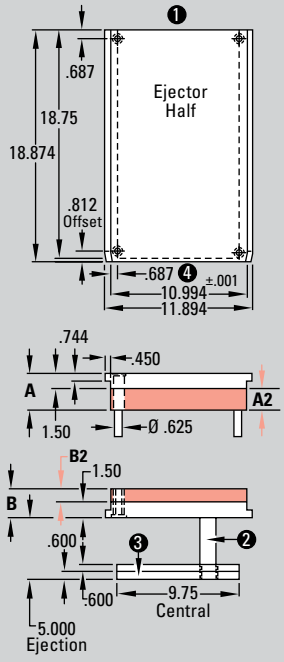
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

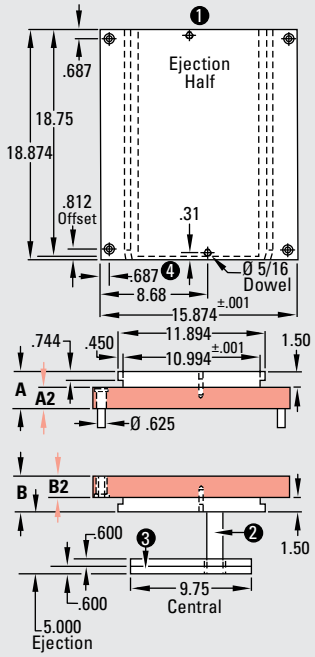
Standard Solid: 11.0 x 18.9



Standard Laminated: 11.0 x 18.9



T-Style Laminated: 15.9 x 18.9



Standard Solid Construction

ITEM NO.	A	B
16/21 SSU 221	1.877	1.877
16/21 SSU 222	1.877	2.377
16/21 SSU 223	1.877	2.877
16/21 SSU 224	1.877	3.377
16/21 SSU 225	2.377	1.877
16/21 SSU 226	2.377	2.377
16/21 SSU 227	2.377	2.877
16/21 SSU 228	2.377	3.377
16/21 SSU 229	2.877	1.877
16/21 SSU 230	2.877	2.377
16/21 SSU 231	2.877	2.877
16/21 SSU 232	2.877	3.377
16/21 SSU 233	3.377	1.877
16/21 SSU 234	3.377	2.377
16/21 SSU 235	3.377	2.877
16/21 SSU 236	3.377	3.377

Standard Laminated Construction

ITEM NO.	A	A2	B2	B
16/21 SLU 281	2.877	1.377	1.377	2.877
16/21 SLU 282	2.877	1.377	1.877	3.377
16/21 SLU 283	2.877	1.377	2.377	3.877
16/21 SLU 284	3.377	1.877	1.377	2.877
16/21 SLU 285	3.377	1.877	1.877	3.377
16/21 SLU 286	3.377	1.877	2.377	3.877
16/21 SLU 287	3.377	1.877	2.877	4.377
16/21 SLU 288	3.877	2.377	1.377	2.877
16/21 SLU 289	3.877	2.377	1.877	3.377
16/21 SLU 290	3.877	2.377	2.377	3.877
16/21 SLU 291	3.877	2.377	2.877	4.377
16/21 SLU 292	4.377	2.877	1.877	3.377
16/21 SLU 293	4.377	2.877	2.377	3.877
16/21 SLU 294	4.377	2.877	2.877	4.377
16/21 SLU 295	4.877	3.377	3.377	4.877

T-Style Laminated Construction

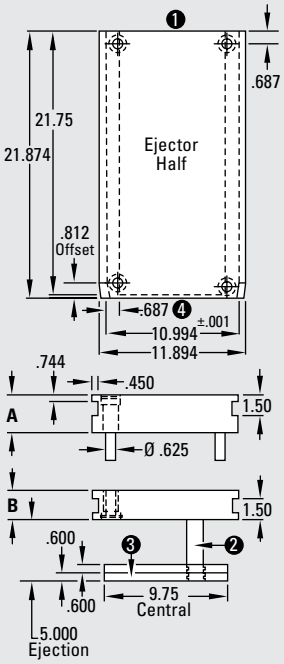
ITEM NO.	A	A2	B2	B
16/21 TLU 201	2.877	1.377	1.377	2.877
16/21 TLU 202	2.877	1.377	1.877	3.377
16/21 TLU 203	2.877	1.377	2.377	3.877
16/21 TLU 204	3.377	1.877	1.377	2.877
16/21 TLU 205	3.377	1.877	1.877	3.377
16/21 TLU 206	3.377	1.877	2.377	3.877
16/21 TLU 207	3.377	1.877	2.877	4.377
16/21 TLU 208	3.877	2.377	1.377	2.877
16/21 TLU 209	3.877	2.377	1.877	3.377
16/21 TLU 210	3.877	2.377	2.377	3.877
16/21 TLU 211	3.877	2.377	2.877	4.377
16/21 TLU 212	4.377	2.877	1.877	3.377
16/21 TLU 213	4.377	2.877	2.377	3.877
16/21 TLU 214	4.377	2.877	2.877	4.377
16/21 TLU 215	4.877	3.377	3.377	4.877

Ordering information for frame and companion insert molds can be found in the front of this section.

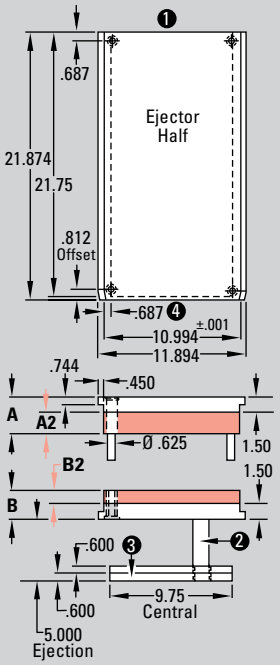
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

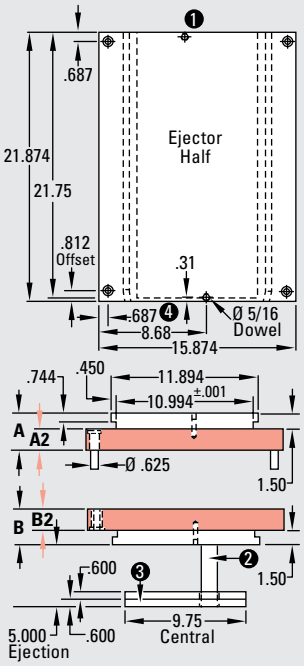
Standard Solid: 11.0 x 21.9



Standard Laminated: 11.0 x 21.9



T-Style Laminated: 15.9 x 21.9



Standard Solid Construction

ITEM NO.	A	B
16/24 SSU 221	1.877	1.877
16/24 SSU 222	1.877	2.377
16/24 SSU 223	1.877	2.877
16/24 SSU 224	1.877	3.377
16/24 SSU 225	2.377	1.877
16/24 SSU 226	2.377	2.377
16/24 SSU 227	2.377	2.877
16/24 SSU 228	2.377	3.377
16/24 SSU 229	2.877	1.877
16/24 SSU 230	2.877	2.377
16/24 SSU 231	2.877	2.877
16/24 SSU 232	2.877	3.377
16/24 SSU 233	3.377	1.877
16/24 SSU 234	3.377	2.377
16/24 SSU 235	3.377	2.877
16/24 SSU 236	3.377	3.377

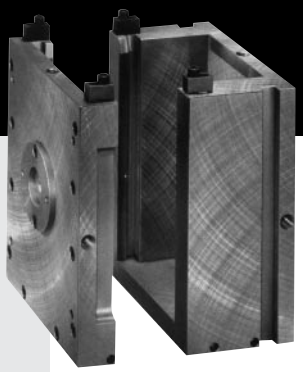
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
16/24 SLU 281	2.877	1.377	1.377	2.877
16/24 SLU 282	2.877	1.377	1.877	3.377
16/24 SLU 283	2.877	1.377	2.377	3.877
16/24 SLU 284	3.377	1.877	1.377	2.877
16/24 SLU 285	3.377	1.877	1.877	3.377
16/24 SLU 286	3.377	1.877	2.377	3.877
16/24 SLU 287	3.377	1.877	2.877	4.377
16/24 SLU 288	3.877	2.377	1.377	2.877
16/24 SLU 289	3.877	2.377	1.877	3.377
16/24 SLU 290	3.877	2.377	2.377	3.877
16/24 SLU 291	3.877	2.377	2.877	4.377
16/24 SLU 292	4.377	2.877	1.877	3.377
16/24 SLU 293	4.377	2.877	2.377	3.877
16/24 SLU 294	4.377	2.877	2.877	4.377
16/24 SLU 295	4.877	3.377	3.377	4.877

T-Style Laminated Construction

ITEM NO.	A	A2	B2	B
16/24 TLU 201	2.877	1.377	1.377	2.877
16/24 TLU 202	2.877	1.377	1.877	3.377
16/24 TLU 203	2.877	1.377	2.377	3.877
16/24 TLU 204	3.377	1.877	1.377	2.877
16/24 TLU 205	3.377	1.877	1.877	3.377
16/24 TLU 206	3.377	1.877	2.377	3.877
16/24 TLU 207	3.377	1.877	2.877	4.377
16/24 TLU 208	3.877	2.377	1.377	2.877
16/24 TLU 209	3.877	2.377	1.877	3.377
16/24 TLU 210	3.877	2.377	2.377	3.877
16/24 TLU 211	3.877	2.377	2.877	4.377
16/24 TLU 212	4.377	2.877	1.877	3.377
16/24 TLU 213	4.377	2.877	2.377	3.877
16/24 TLU 214	4.377	2.877	2.877	4.377
16/24 TLU 215	4.877	3.377	3.377	4.877

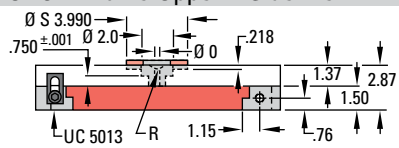
Ordering information for frame and companion insert molds can be found in the front of this section.



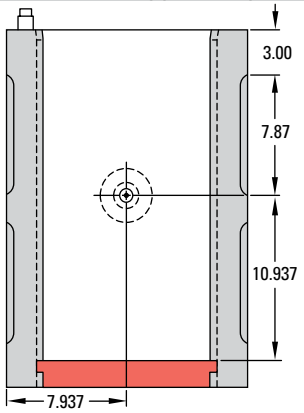
Frame

ITEM NO.
16/24 UF 321

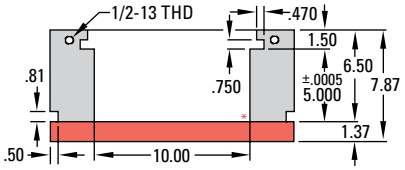
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

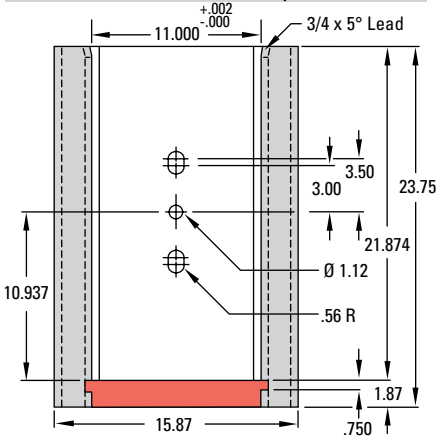


UF 321 Frame Lower – Side View

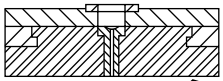


*Taper slot to accommodate sleeve ejection optional (quotation on request).

UF 321 Frame Lower – Top View

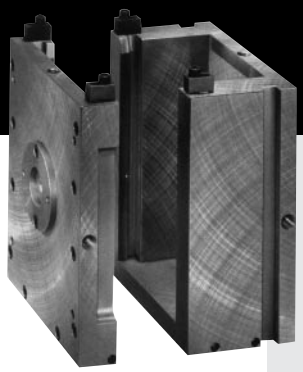


Frame supplied with or without sprue bushing



MUD Quick-Change Mold Frames & Inserts for U-Style | 16/24 UF 321

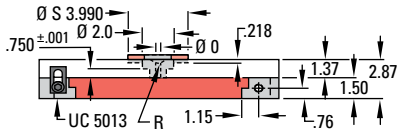
UF Quick-Change U-Style
Frame & Companion Insert Molds



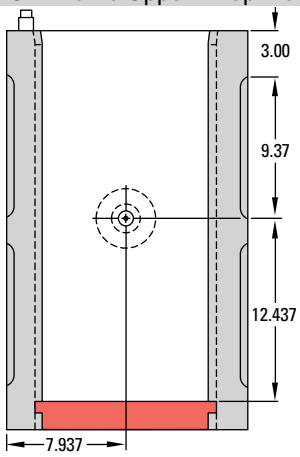
Frame

ITEM NO.
16/27 UF 321

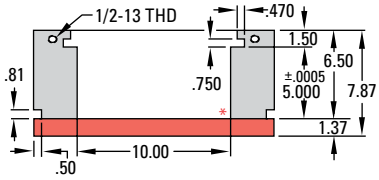
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

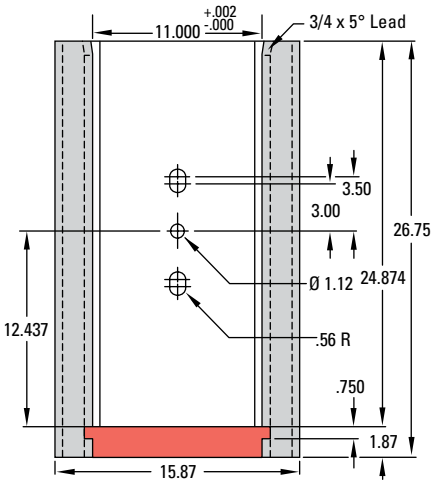


UF 321 Frame Lower – Side View

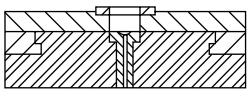


*Taper slot to accommodate sleeve ejection optional (quotation on request).

UF 321 Frame Lower – Top View



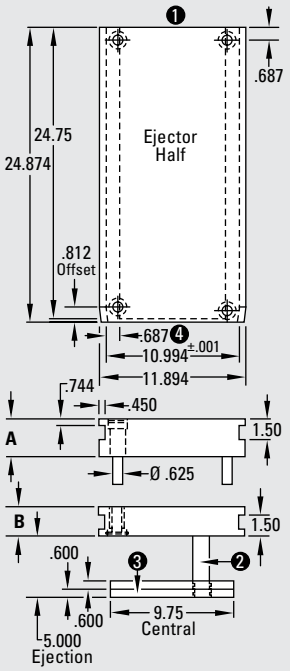
Frame supplied with or without sprue bushing



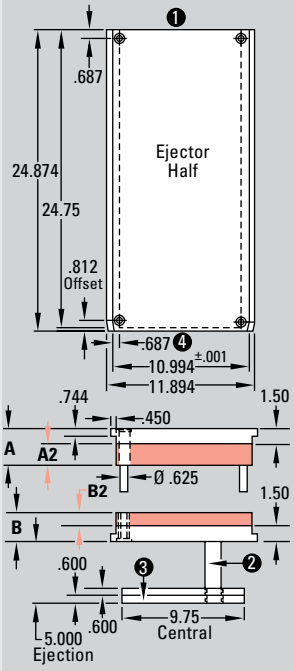
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

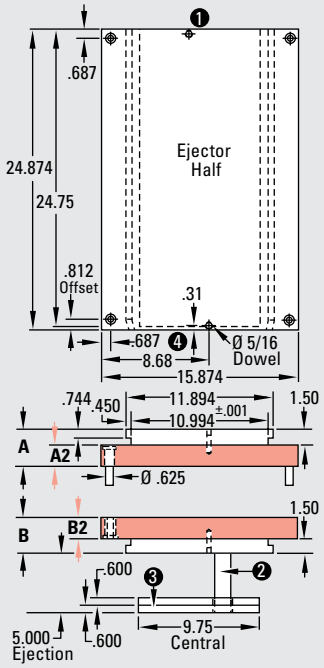
Standard Solid: 11.0 x 24.9



Standard Laminated: 11.0 x 24.9



T-Style Laminated: 15.9 x 24.9



Standard Solid Construction

ITEM NO.	A	B
16/27 SSU 221	1.877	1.877
16/27 SSU 222	1.877	2.377
16/27 SSU 223	1.877	2.877
16/27 SSU 224	1.877	3.377
16/27 SSU 225	2.377	1.877
16/27 SSU 226	2.377	2.377
16/27 SSU 227	2.377	2.877
16/27 SSU 228	2.377	3.377
16/27 SSU 229	2.877	1.877
16/27 SSU 230	2.877	2.377
16/27 SSU 231	2.877	2.877
16/27 SSU 232	2.877	3.377
16/27 SSU 233	3.377	1.877
16/27 SSU 234	3.377	2.377
16/27 SSU 235	3.377	2.877
16/27 SSU 236	3.377	3.377

Standard Laminated Construction

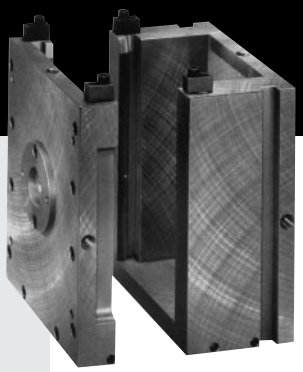
ITEM NO.	A	A2	B2	B
16/27 SLU 281	2.877	1.377	1.377	2.877
16/27 SLU 282	2.877	1.377	1.877	3.377
16/27 SLU 283	2.877	1.377	2.377	3.877
16/27 SLU 284	3.377	1.877	1.377	2.877
16/27 SLU 285	3.377	1.877	1.877	3.377
16/27 SLU 286	3.377	1.877	2.377	3.877
16/27 SLU 287	3.377	1.877	2.877	4.377
16/27 SLU 288	3.877	2.377	1.377	2.877
16/27 SLU 289	3.877	2.377	1.877	3.377
16/27 SLU 290	3.877	2.377	2.377	3.877
16/27 SLU 291	3.877	2.377	2.877	4.377
16/27 SLU 292	4.377	2.877	1.877	3.377
16/27 SLU 293	4.377	2.877	2.377	3.877
16/27 SLU 294	4.377	2.877	2.877	4.377
16/27 SLU 295	4.877	3.377	3.377	4.877

T-Style Laminated Construction

ITEM NO.	A	A2	B2	B
16/27 TLU 201	2.877	1.377	1.377	2.877
16/27 TLU 202	2.877	1.377	1.877	3.377
16/27 TLU 203	2.877	1.377	2.377	3.877
16/27 TLU 204	3.377	1.877	1.377	2.877
16/27 TLU 205	3.377	1.877	1.877	3.377
16/27 TLU 206	3.377	1.877	2.377	3.877
16/27 TLU 207	3.377	1.877	2.877	4.377
16/27 TLU 208	3.877	2.377	1.377	2.877
16/27 TLU 209	3.877	2.377	1.877	3.377
16/27 TLU 210	3.877	2.377	2.377	3.877
16/27 TLU 211	3.877	2.377	2.877	4.377
16/27 TLU 212	4.377	2.877	1.877	3.377
16/27 TLU 213	4.377	2.877	2.377	3.877
16/27 TLU 214	4.377	2.877	2.877	4.377
16/27 TLU 215	4.877	3.377	3.377	4.877

Ordering information for frame and companion insert molds can be found in the front of this section.

Companion Interchangeable Insert Molds

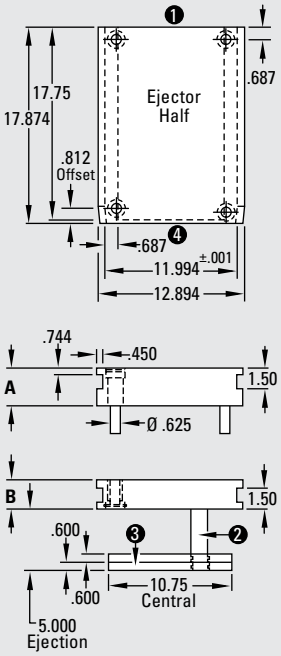


Frame

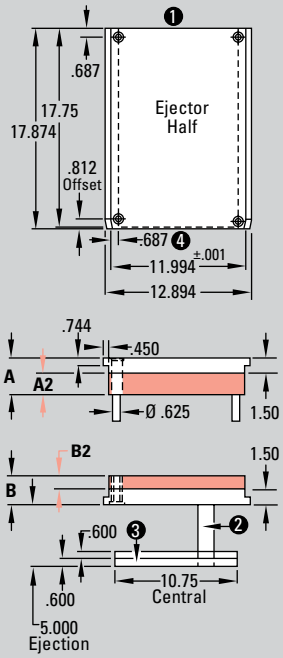
ITEM NO.
18/20 UF 321

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

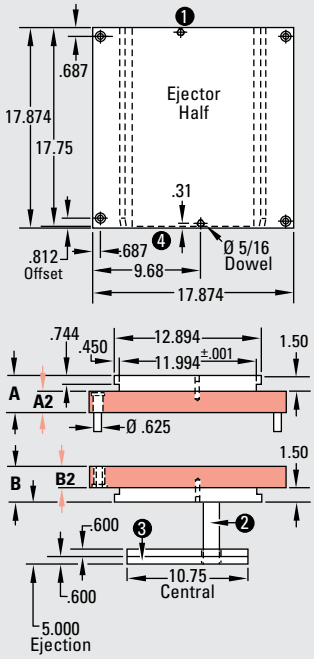
Standard Solid: 12.0 x 17.9



Standard Laminated: 12.0 x 17.9



T-Style Laminated: 17.9 x 17.9



Standard Solid Construction

ITEM NO.	A	B
18/20 SSU 221	1.877	1.877
18/20 SSU 222	1.877	2.377
18/20 SSU 223	1.877	2.877
18/20 SSU 224	1.877	3.377
18/20 SSU 225	2.377	1.877
18/20 SSU 226	2.377	2.377
18/20 SSU 227	2.377	2.877
18/20 SSU 228	2.377	3.377
18/20 SSU 229	2.877	1.877
18/20 SSU 230	2.877	2.377
18/20 SSU 231	2.877	2.877
18/20 SSU 232	2.877	3.377
18/20 SSU 233	3.377	1.877
18/20 SSU 234	3.377	2.377
18/20 SSU 235	3.377	2.877
18/20 SSU 236	3.377	3.377

Standard Laminated Construction

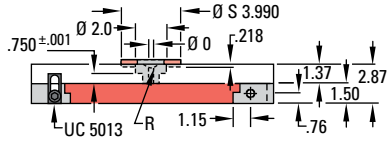
ITEM NO.	A	A2	B2	B
18/20 SLU 281	2.877	1.377	1.377	2.877
18/20 SLU 282	2.877	1.377	1.877	3.377
18/20 SLU 283	2.877	1.377	2.377	3.877
18/20 SLU 284	3.377	1.877	1.377	2.877
18/20 SLU 285	3.377	1.877	1.877	3.377
18/20 SLU 286	3.377	1.877	2.377	3.877
18/20 SLU 287	3.377	1.877	2.877	4.377
18/20 SLU 288	3.877	2.377	1.377	2.877
18/20 SLU 289	3.877	2.377	1.877	3.377
18/20 SLU 290	3.877	2.377	2.377	3.877
18/20 SLU 291	3.877	2.377	2.877	4.377
18/20 SLU 292	4.377	2.877	1.877	3.377
18/20 SLU 293	4.377	2.877	2.377	3.877
18/20 SLU 294	4.377	2.877	2.877	4.377
18/20 SLU 295	4.877	3.377	3.377	4.877

T-Style Laminated Construction

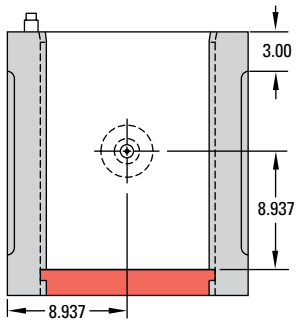
ITEM NO.	A	A2	B2	B
18/20 TLU 201	2.877	1.377	1.377	2.877
18/20 TLU 202	2.877	1.377	1.877	3.377
18/20 TLU 203	2.877	1.377	2.377	3.877
18/20 TLU 204	3.377	1.877	1.377	2.877
18/20 TLU 205	3.377	1.877	1.877	3.377
18/20 TLU 206	3.377	1.877	2.377	3.877
18/20 TLU 207	3.377	1.877	2.877	4.377
18/20 TLU 208	3.877	2.377	1.377	2.877
18/20 TLU 209	3.877	2.377	1.877	3.377
18/20 TLU 210	3.877	2.377	2.377	3.877
18/20 TLU 211	3.877	2.377	2.877	4.377
18/20 TLU 212	4.377	2.877	1.877	3.377
18/20 TLU 213	4.377	2.877	2.377	3.877
18/20 TLU 214	4.377	2.877	2.877	4.377
18/20 TLU 215	4.877	3.377	3.377	4.877

Ordering information for frame and companion insert molds can be found in the front of this section.

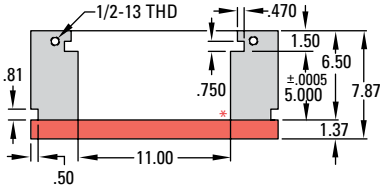
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

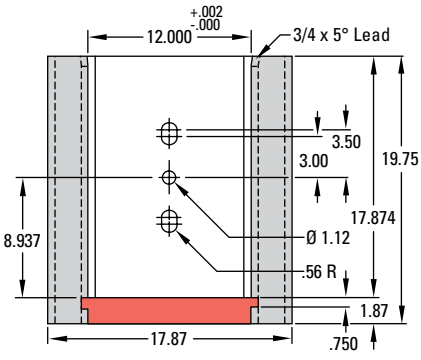


UF 321 Frame Lower – Side View

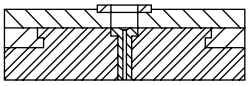


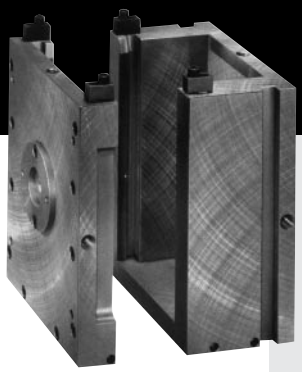
*Taper slot to accommodate sleeve ejection optional (quotation on request).

UF 321 Frame Lower – Top View



Frame supplied with or without sprue bushing



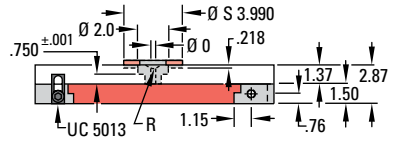


UF Quick-Change U-Style
Frame & Companion Insert Molds

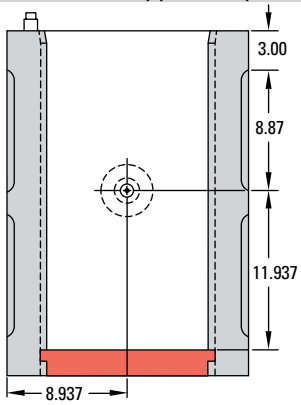
Frame

ITEM NO.
18/26 UF 321

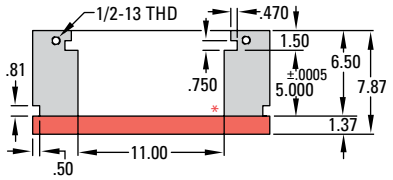
UF 321 Frame Upper – Side View



UF 321 Frame Upper – Top View

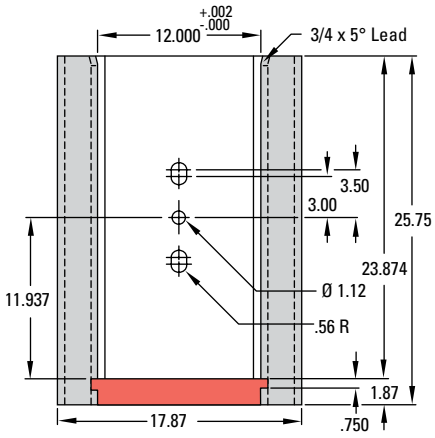


UF 321 Frame Lower – Side View

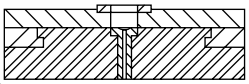


*Taper slot to accommodate sleeve ejection optional (quotation on request).

UF 321 Frame Lower – Top View



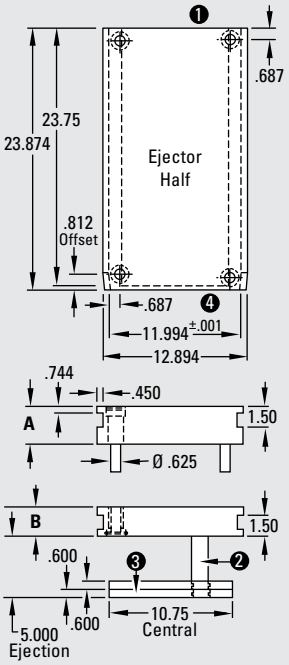
Frame supplied with or without sprue bushing



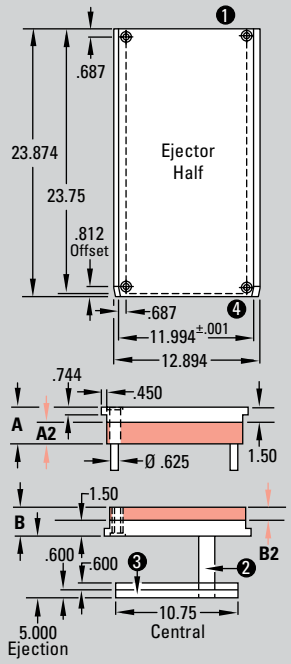
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

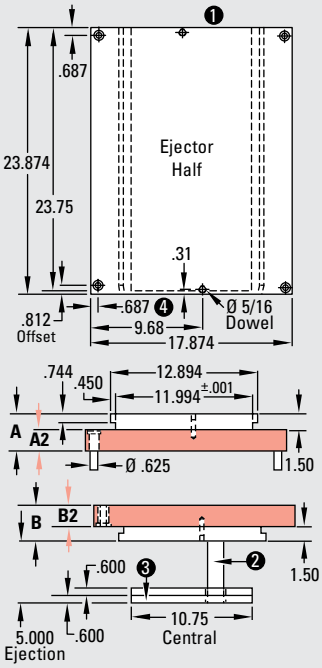
Standard Solid: 12.0 x 23.9



Standard Laminated: 12.0 x 23.9



T-Style Laminated: 17.9 x 23.9



Standard Solid Construction

ITEM NO.	A	B
18/26 SSU 221	1.877	1.877
18/26 SSU 222	1.877	2.377
18/26 SSU 223	1.877	2.877
18/26 SSU 224	1.877	3.377
18/26 SSU 225	2.377	1.877
18/26 SSU 226	2.377	2.377
18/26 SSU 227	2.377	2.877
18/26 SSU 228	2.377	3.377
18/26 SSU 229	2.877	1.877
18/26 SSU 230	2.877	2.377
18/26 SSU 231	2.877	2.877
18/26 SSU 232	2.877	3.377
18/26 SSU 233	3.377	1.877
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18/26 SSU 235	3.377	2.877
18/26 SSU 236	3.377	3.377

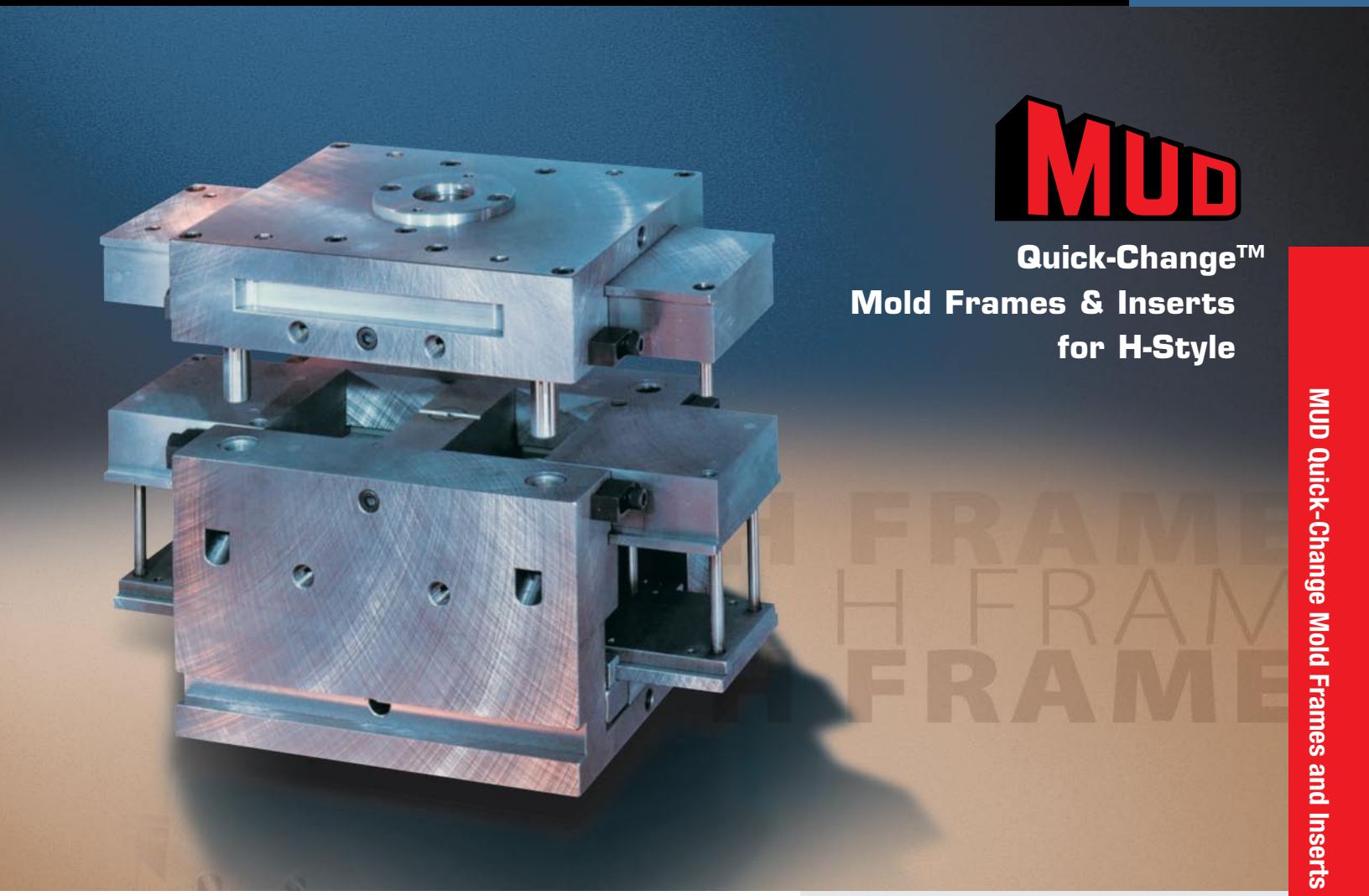
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
18/26 SLU 281	2.877	1.377	1.377	2.877
18/26 SLU 282	2.877	1.377	1.877	3.377
18/26 SLU 283	2.877	1.377	2.377	3.877
18/26 SLU 284	3.377	1.877	1.377	2.877
18/26 SLU 285	3.377	1.877	1.877	3.377
18/26 SLU 286	3.377	1.877	2.377	3.877
18/26 SLU 287	3.377	1.877	2.877	4.377
18/26 SLU 288	3.877	2.377	1.377	2.877
18/26 SLU 289	3.877	2.377	1.877	3.377
18/26 SLU 290	3.877	2.377	2.377	3.877
18/26 SLU 291	3.877	2.377	2.877	4.377
18/26 SLU 292	4.377	2.877	1.877	3.377
18/26 SLU 293	4.377	2.877	2.377	3.877
18/26 SLU 294	4.377	2.877	2.877	4.377
18/26 SLU 295	4.877	3.377	3.377	4.877

T-Style Laminated Construction

ITEM NO.	A	A2	B2	B
18/26 TLU 201	2.877	1.377	1.377	2.877
18/26 TLU 202	2.877	1.377	1.877	3.377
18/26 TLU 203	2.877	1.377	2.377	3.877
18/26 TLU 204	3.377	1.877	1.377	2.877
18/26 TLU 205	3.377	1.877	1.877	3.377
18/26 TLU 206	3.377	1.877	2.377	3.877
18/26 TLU 207	3.377	1.877	2.877	4.377
18/26 TLU 208	3.877	2.377	1.377	2.877
18/26 TLU 209	3.877	2.377	1.877	3.377
18/26 TLU 210	3.877	2.377	2.377	3.877
18/26 TLU 211	3.877	2.377	2.877	4.377
18/26 TLU 212	4.377	2.877	1.877	3.377
18/26 TLU 213	4.377	2.877	2.377	3.877
18/26 TLU 214	4.377	2.877	2.877	4.377
18/26 TLU 215	4.877	3.377	3.377	4.877

Ordering information for frame and companion insert molds can be found in the front of this section.



MUD

Quick-Change™
Mold Frames & Inserts
for H-Style

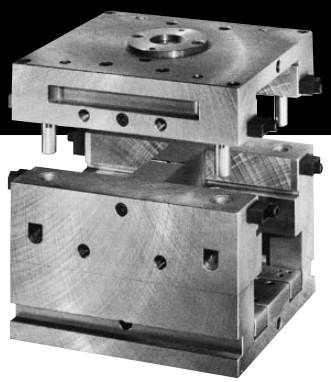
Frame Ordering Information

- Item number and description (see tables on respective page)
- "S" diameter of locating ring supplied standard 3.990" (see illustrations on respective page)
- Sprue specification "R" spherical radius of sprue bushing furnished 1/2" or 3/4" unless otherwise shown
- "O" small diameter of sprue bushing orifice furnished 5/32", 7/32", 9/32" or 11/32", unless otherwise shown
- Optional locating rings available on request
- Knockout hole location standard as shown (others optional)
- Runner size and description
- Cutouts in master ejector plate for insert mold pillar posts standard as shown on respective page
- Clamp slots standard unless otherwise shown on respective page
- Mounting holes optional unless shown on respective page
- Additional ejection height available (quotation on request)
- Frames standard in prehard steel with hardened steel center section; prehard stainless and other steel grades available (quotation on request)

Insert Mold Ordering Information

- Item number and description (see tables on respective page)
- Steel grades – 1020, 4130 prehard, P-20 prehard and H-13: 420 stainless and other grades on request
- H-13 and other tool steel insert molds supplied .010 oversize on outside dimensions, .010 – .013 oversize on thickness, and .025 – .035 undersize in the pin and bushing holes for machining after required heat treating
- "A" and "B" dimensions supplied .004 – .007 oversize unless otherwise specified

NOTE: The "A" and "B" dimensions for insert mold must match those of the companion H frame.

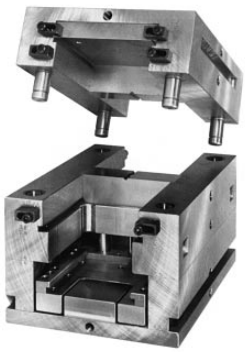


Quick-Change H frame options

- Spring-loaded master ejector plates
- Interlocking ejector rails
- Additional height on ejector rails
- Early return on ejector system
- Special knockout hole locations
- Runner shutoffs
- Choice of runner configuration
- Frame spacer bars
- Insulation boards
- Additional retainer slot and spacer plate
- Extended loading rails
- Water lines for center sections
- Water lines for rails and plates
- Machining for cartridge heaters
- Manifold for hot runner operation
- Hot sprue bushings
- Armorclad plating*
- Electroless nickel plating

* "Armorclad" is a registered trademark of Armorclad, Inc.

NOTE: Specifications subject to change without prior notice.



Quick-Change H frame features and applications

This MUD® Quick-Change frame series features a center runner bar for simultaneous molding with two standard-style companion insert molds. The series offers cost reduction benefits and time-saving advantages similar to the U frame series. It also provides comparable design flexibility.

The two companion insert molds for H frames can be changed independently and individually. A dummy insert is supplied for single insert mold production. This results in exceptional versatility for tailoring schedules to virtually all inventory requirements including just-in-time delivery.

H frames also offer special advantages for high volume production. Two insert molds permit doubling quantities for each molding cycle. Also, there is virtually no need to interrupt production for maintenance or repair since inexpensive back-up insert molds can be quickly installed.

H frames are supplied with hardened center runner bars and replaceable sprue puller pin assemblies. Each frame includes a locking locating ring and an integral master ejector plate with cutouts to allow installation of insert mold pillar posts. The master ejector plate is also supplied with positive aligning guide posts, bushings and grease fittings for a guided ejector system.

Options include interlocking ejector rails to lock the insert mold's ejector system to the master ejector plate. The master ejector plate can be spring loaded for returning the insert mold's ejector system. It can also be tied to the machine's hydraulic knockout system for stroking the insert mold's ejector assembly.

Other options include water lines in the center bar or other locations, insulation boards, runner shutoffs and hot sprue bushings. Frame spacer bars to accommodate shorter, more economical companion insert molds are available for frames designed for longer sizes. Additional retainer slots and a spacer plate in the frame's cavity half allow the frame to accept insert molds with different thicknesses.

Quick-Change Hot Runner Molding

All of the advantages of the MUD Quick-Change Concept can be added to a hot runner molding system with the addition of a manifold to the H frame. Both the frame and the hot runner system remain in the molding machine. Only the insert molds are changed to produce new parts, just as in other Quick-Change applications. This means faster changeovers, lower tooling costs and greater scheduling flexibility for hot runner molding.

Steel specifications: Standard frames are produced in prehard steel (285-325 Brinell) with hardened center sections. Frames are also available in prehard stainless, 420 stainless, H-13 and other grades on request. Armorclad* Number One can be specified.

* "Armorclad" is a registered trademark of Armorclad, Inc.

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Companion insert mold features and applications

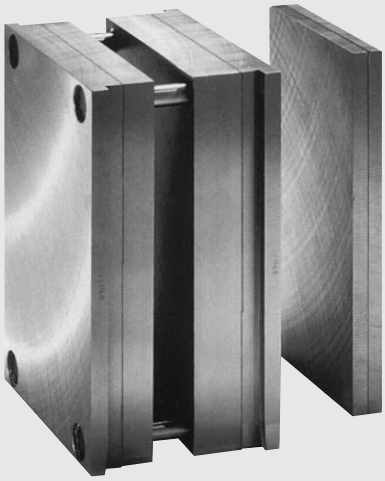
Standard style companion insert molds for H frames are available in solid or laminated construction and include three- and four-plate designs.

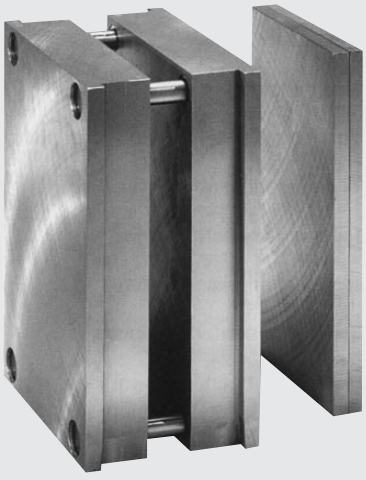
Insert mold options include machining for stripper plates, sleeve ejection, return pins and pillar posts. Machining for cartridge heater holes, water lines, taper locks, rough and finished custom pockets and other special applications is available.

Design options for insert molds include spring loading, early return, unscrewing mechanisms, hot runner molding and machining for cam slides. Insert molds can be ordered with interlocking ejector plates for positive return and stroking action when used with frames having an interlocking ejector system.

Steel specifications: Companion insert molds are available in 1020, 4130 prehard, P-20 prehard and H-13. 420 stainless and other grades are available on request. Armorclad* Number One can be specified.

* "Armorclad" is a registered trademark of Armorclad, Inc.





Companion insert mold options

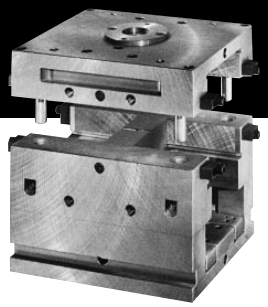
- Solid or laminated construction
- Stripper plates
- Interlocking ejector plates
- Return pins
- Pillar posts
- Sleeve ejection
- Machining for taper locks
- Machining for cartridge heater holes
- Machining for water lines
- Rough cut pockets
- Finished custom pockets
- Machining for special applications
- Armorclad plating*

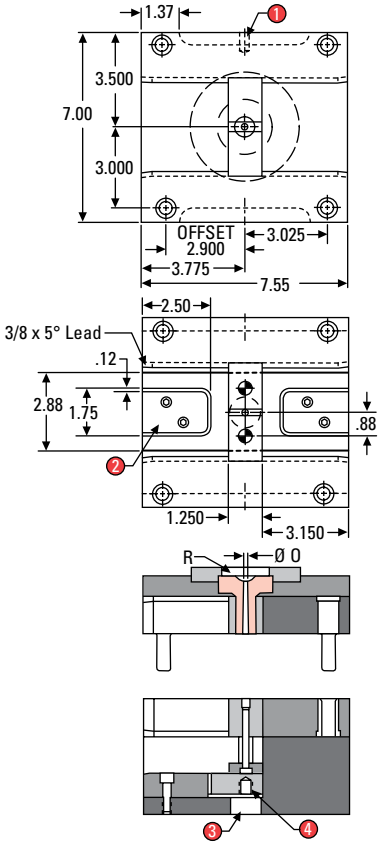
* "Armorclad" is a registered trademark of Armorclad, Inc.

NOTE: Specifications subject to change without prior notice.

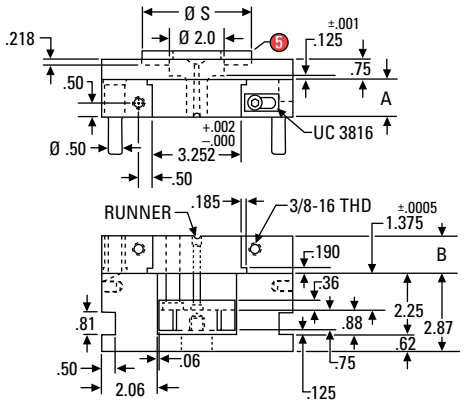


HF Quick-Change H-Style
Frame & Companion Insert Molds





1. 3/8-16 handling holes supplied standard as shown.
2. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
3. 1 1/8 diameter knockout supplied standard at center.
4. 1/2-13 THD at knockout locations standard as shown.
5. Locking locating ring supplied standard as shown.



"H" Style Quick-Change™ Frame

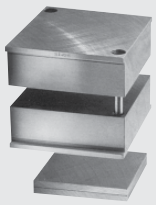
ITEM NO.	A	B
07/07 HF 321	1.377	1.377
07/07 HF 322	1.877	1.377
07/07 HF 323	1.877	1.877
07/07 HF 324	2.377	1.877

Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).



Standard Solid Construction

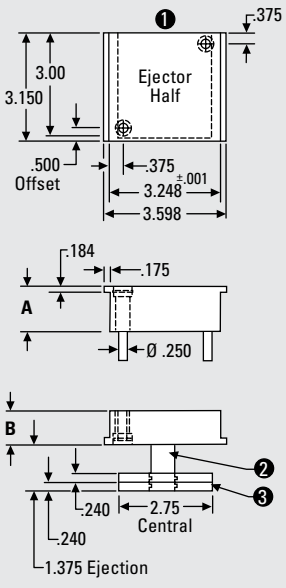
ITEM NO.	A	B
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07/07 SSH 222	1.877	1.377
07/07 SSH 223	1.877	1.877
07/07 SSH 224	2.377	1.877



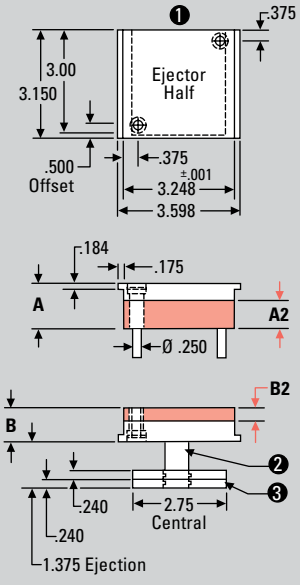
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
07/07 SLH 281	1.377	0.877	0.877	1.377
07/07 SLH 282	1.877	1.377	0.877	1.377
07/07 SLH 283	1.877	1.377	1.377	1.877
07/07 SLH 284	2.377	1.877	1.377	1.877

Standard Solid: 3.25 x 3.15

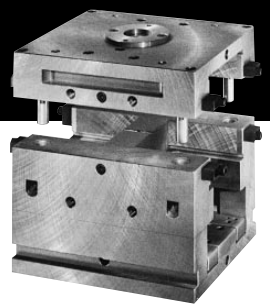


Standard Laminated: 3.25 x 3.15

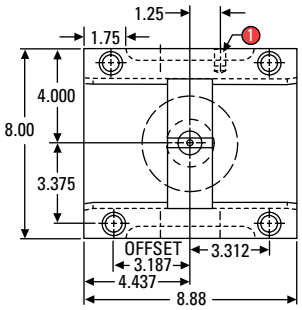


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HF Quick-Change H-Style
Frame & Companion Insert Molds



1. 1/2-13 handling holes supplied standard as shown.
2. Waterlines in center sections optional (quotation on request).
3. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
4. 1 1/8 diameter knockouts supplied standard at center.
5. 1/2-13 THD at knockout locations standard as shown.
6. Positive ejector plate guidance.
7. Locking locating ring supplied standard as shown.

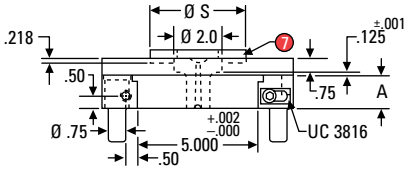


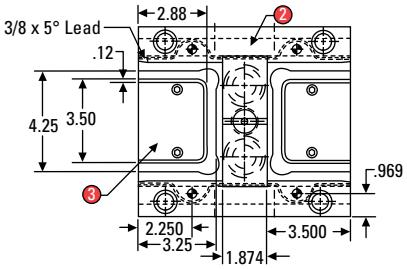
"H" Style Quick-Change™ Frame

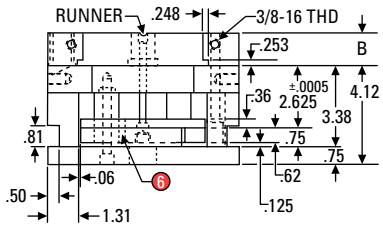
ITEM NO.	A	B
08/09 HF 321	1.877	1.377
08/09 HF 322	1.877	1.877
08/09 HF 323	2.377	1.877

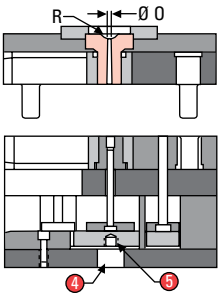
Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.





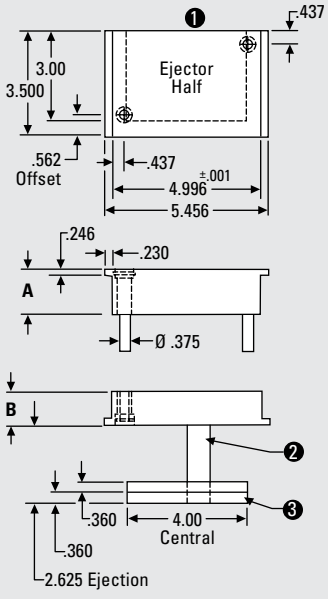




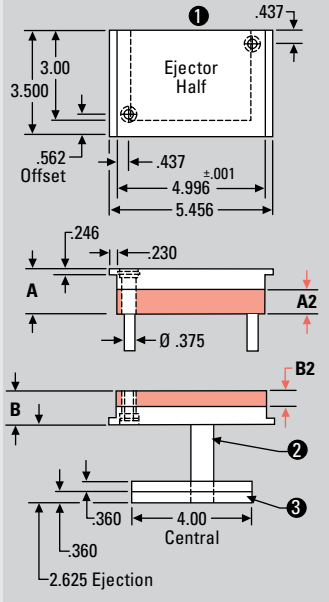
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).

Standard Solid:
5.0 x 3.5

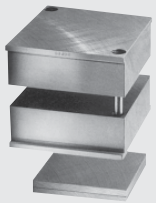


Standard Laminated:
5.0 x 3.5



Standard Solid Construction

ITEM NO.	A	B
08/09 SSH 221	1.877	1.377
08/09 SSH 222	1.877	1.877
08/09 SSH 223	2.377	1.877

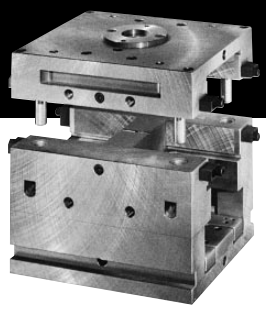


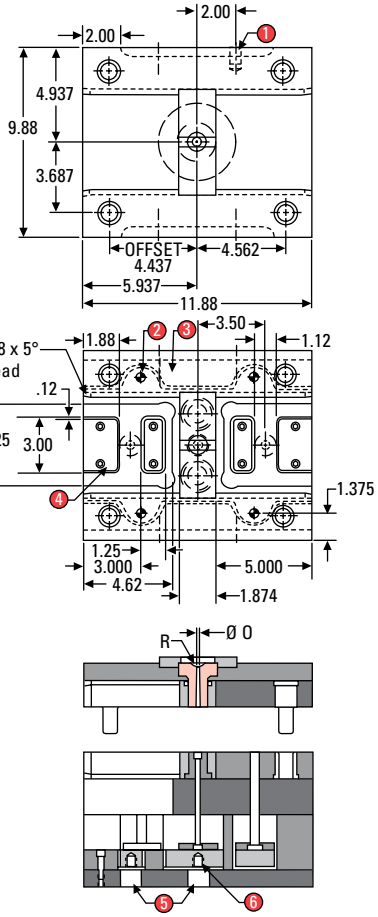
Standard Laminated Construction

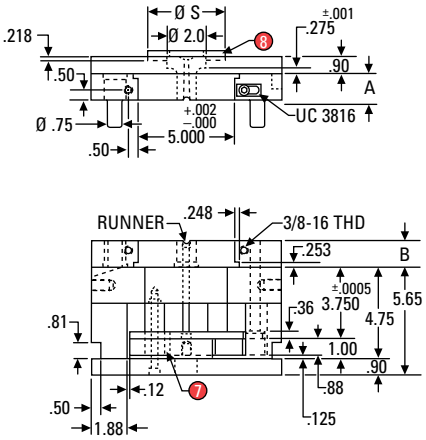
ITEM NO.	A	A2	B2	B
08/09 SLH 281	1.877	0.877	0.877	1.377
08/09 SLH 282	1.877	0.877	0.877	1.877
08/09 SLH 283	2.377	1.377	0.877	1.877



HF Quick-Change H-Style
Frame & Companion Insert Molds







1. 5/8-11 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.

"H" Style Quick-Change™ Frame

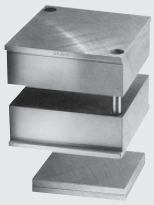
ITEM NO.	A	B
10/12 HF 321	1.877	1.377
10/12 HF 322	1.877	1.877
10/12 HF 323	1.877	2.377
10/12 HF 324	2.377	1.877
10/12 HF 325	2.377	2.377

Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

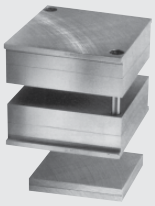
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).



Standard Solid Construction

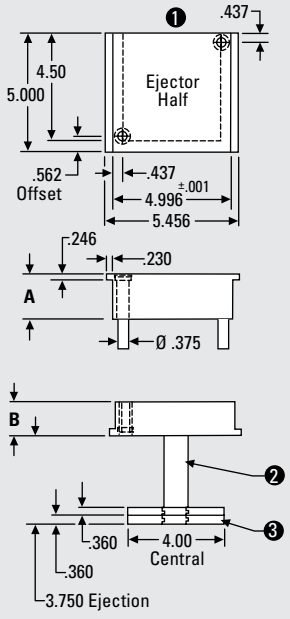
ITEM NO.	A	B
10/12 SSH 221	1.877	1.377
10/12 SSH 222	1.877	1.877
10/12 SSH 223	1.877	2.377
10/12 SSH 224	2.377	1.877
10/12 SSH 225	2.377	2.377



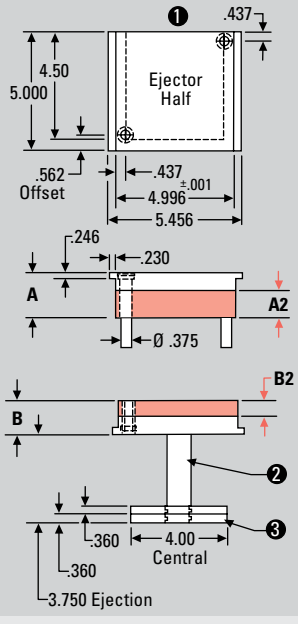
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
10/12 SLH 281	1.877	0.877	0.877	1.377
10/12 SLH 282	1.877	0.877	0.877	1.877
10/12 SLH 283	1.877	0.877	1.377	2.377
10/12 SLH 284	2.377	1.377	0.877	1.877
10/12 SLH 285	2.377	1.377	1.377	2.377

Standard Solid:
5.0 x 5.0

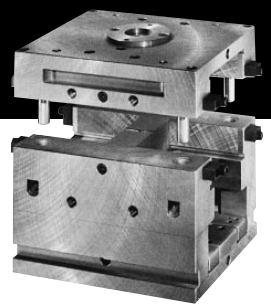


Standard Laminated:
5.0 x 5.0

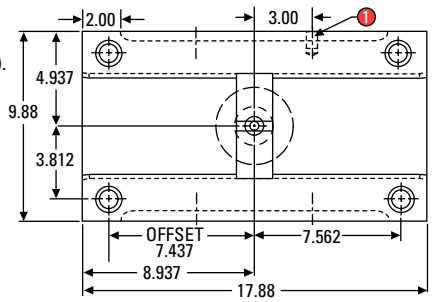


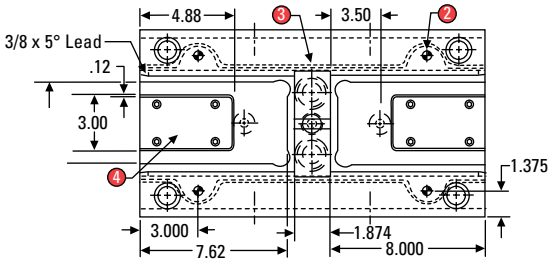
ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

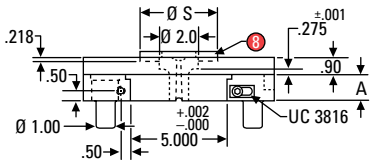
HF Quick-Change H-Style
Frame & Companion Insert Molds

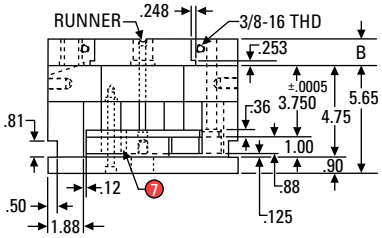


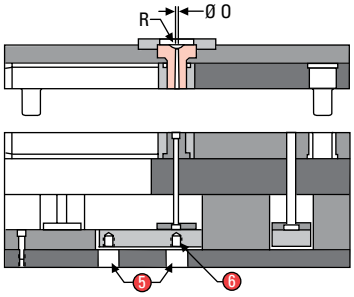
1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.











"H" Style Quick-Change™ Frame

ITEM NO.	A	B
10/18 HF 321	1.877	1.377
10/18 HF 322	1.877	1.877
10/18 HF 323	1.877	2.377
10/18 HF 324	2.377	1.877
10/18 HF 325	2.377	2.377
10/18 HF 326	2.377	2.877
10/18 HF 327	2.877	2.377
10/18 HF 328	2.877	2.877

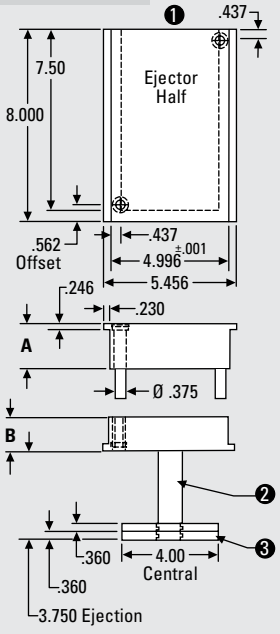
Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

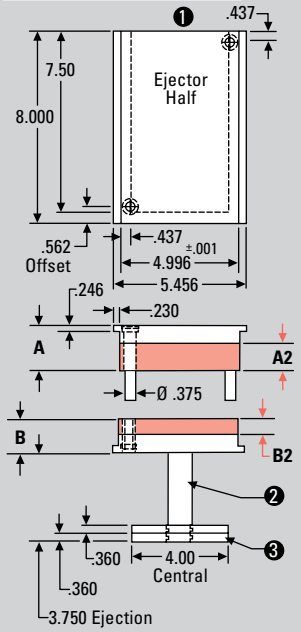
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).

Standard Solid:
5.0 x 8.0

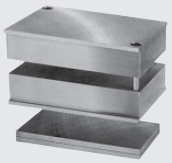


Standard Laminated:
5.0 x 8.0



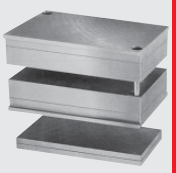
Standard Solid Construction

ITEM NO.	A	B
10/18 SSH 221	1.877	1.377
10/18 SSH 222	1.877	1.877
10/18 SSH 223	1.877	2.377
10/18 SSH 224	2.377	1.877
10/18 SSH 225	2.377	2.377
10/18 SSH 226	2.377	2.877
10/18 SSH 227	2.877	2.377
10/18 SSH 228	2.877	2.877

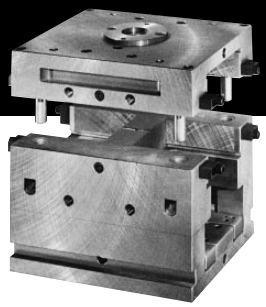


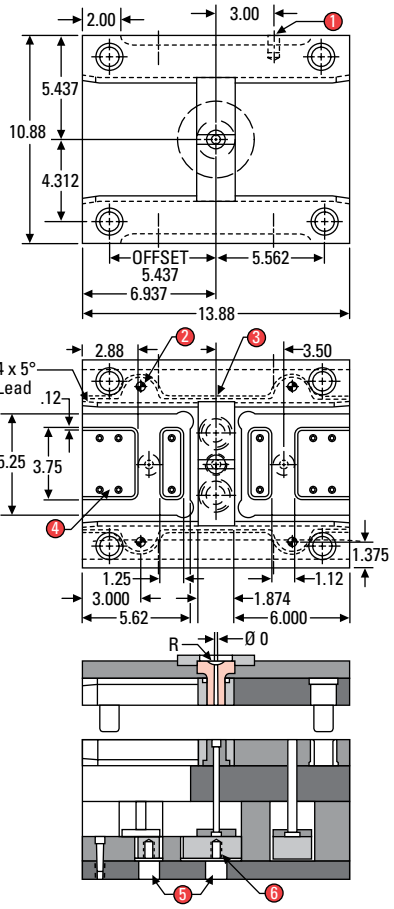
Standard Laminated Construction

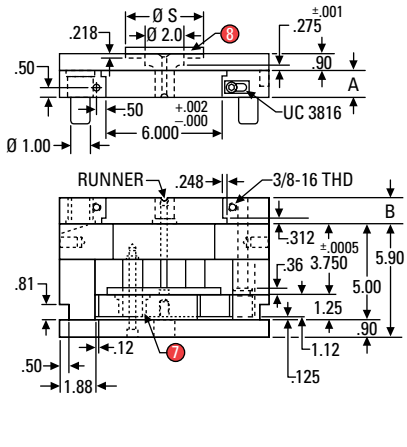
ITEM NO.	A	A2	B2	B
10/18 SLH 281	1.877	0.877	0.877	1.377
10/18 SLH 282	1.877	0.877	0.877	1.877
10/18 SLH 283	1.877	0.877	1.377	2.377
10/18 SLH 284	2.377	1.377	0.877	1.877
10/18 SLH 285	2.377	1.377	1.377	2.377
10/18 SLH 286	2.377	1.377	1.877	2.877
10/18 SLH 287	2.877	1.877	1.377	2.377
10/18 SLH 288	2.877	1.877	1.877	2.877



HF Quick-Change H-Style
Frame & Companion Insert Molds







1. 5/8-11 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.

"H" Style Quick-Change™ Frame

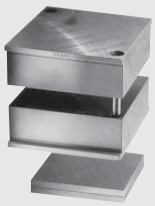
ITEM NO.	A	B
11/14 HF 321	1.877	1.377
11/14 HF 322	1.877	1.877
11/14 HF 323	2.377	1.877
11/14 HF 324	2.377	2.377
11/14 HF 325	2.877	2.377
11/14 HF 326	2.877	2.877

Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

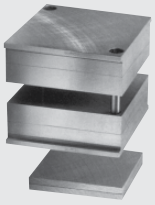
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).



Standard Solid Construction

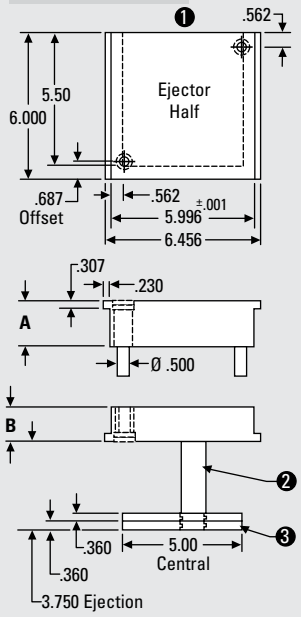
ITEM NO.	A	B
11/14 SSH 221	1.877	1.377
11/14 SSH 222	1.877	1.877
11/14 SSH 223	2.377	1.877
11/14 SSH 224	2.377	2.377
11/14 SSH 225	2.877	2.377
11/14 SSH 226	2.877	2.877



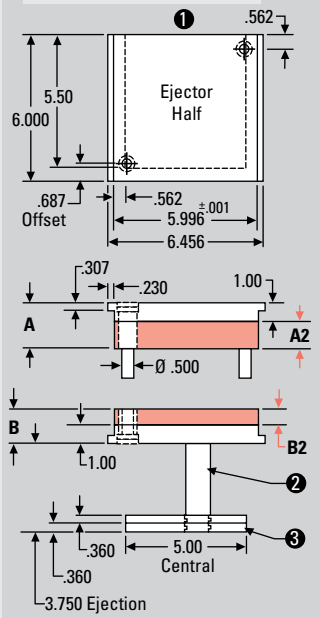
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
11/14 SLH 282	1.877	0.877	0.877	1.877
11/14 SLH 283	2.377	1.377	0.877	1.877
11/14 SLH 284	2.377	1.377	1.377	2.377
11/14 SLH 285	2.877	1.877	1.377	2.377
11/14 SLH 286	2.877	1.877	1.877	2.877

Standard Solid:
6.0 x 6.0

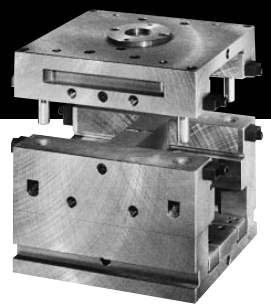


Standard Laminated:
6.0 x 6.0

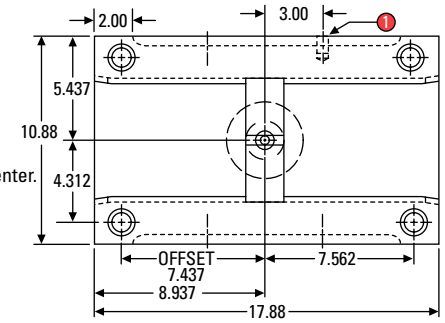


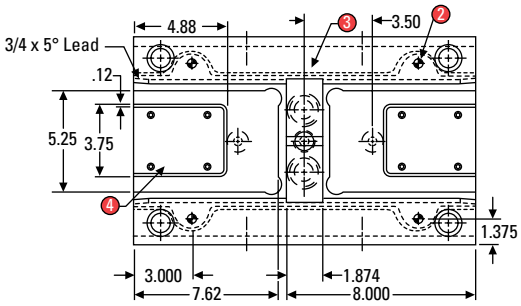
ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

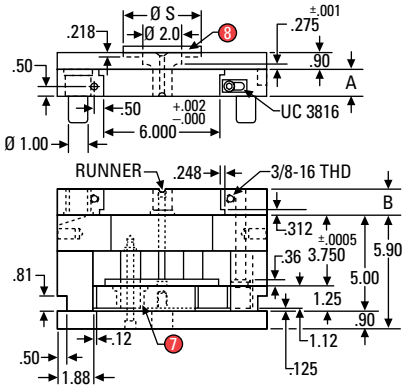
HF Quick-Change H-Style
Frame & Companion Insert Molds

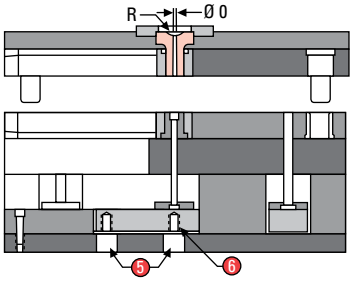


1. 5/8-11 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.









"H" Style Quick-Change™ Frame

ITEM NO.	A	B
11/18 HF 321	1.877	1.877
11/18 HF 322	2.377	1.877
11/18 HF 323	2.377	2.377
11/18 HF 324	2.877	2.377
11/18 HF 325	2.877	2.877

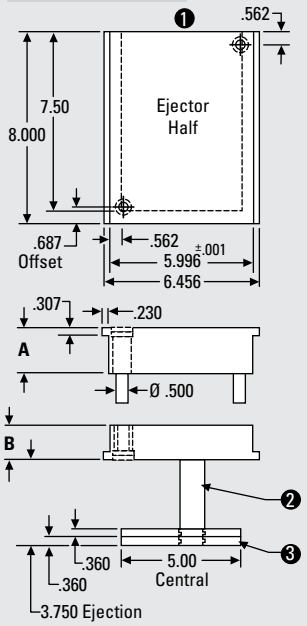
Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

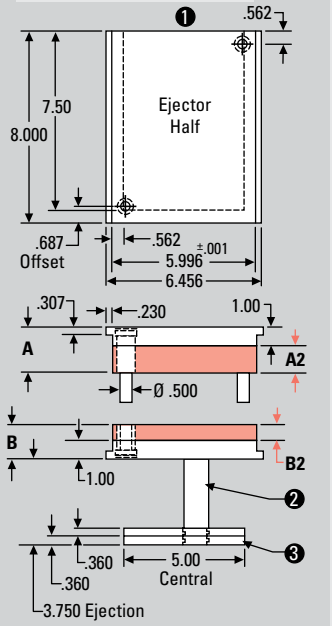
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).

Standard Solid:
6.0 x 8.0

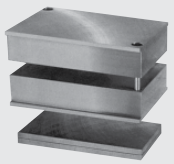


Standard Laminated:
6.0 x 8.0



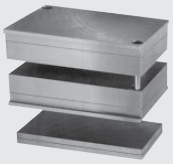
Standard Solid Construction

ITEM NO.	A	B
11/18 SSH 221	1.877	1.877
11/18 SSH 222	2.377	1.877
11/18 SSH 223	2.377	2.377
11/18 SSH 224	2.877	2.377
11/18 SSH 225	2.877	2.877

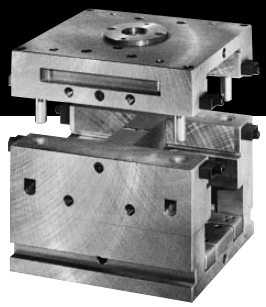


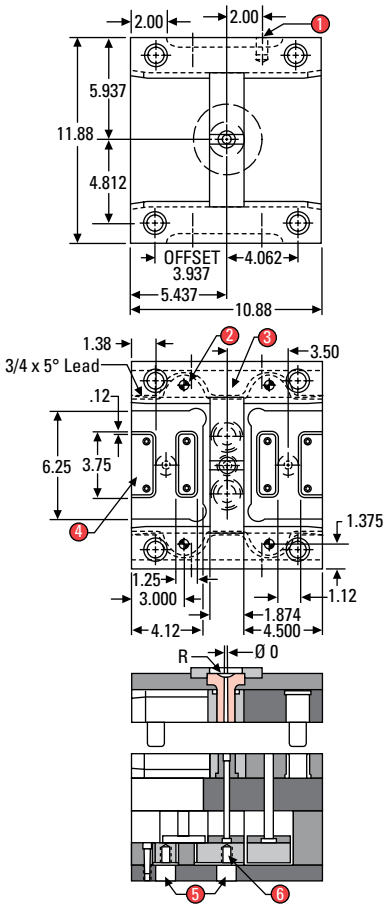
Standard Laminated Construction

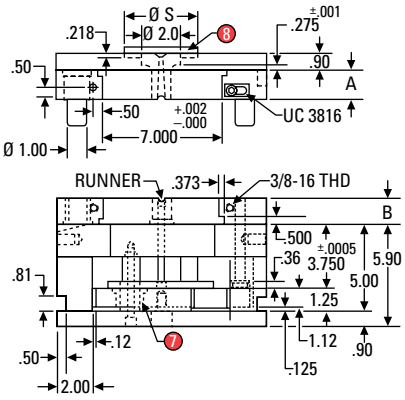
ITEM NO.	A	A2	B2	B
11/18 SLH 281	1.877	0.877	0.877	1.877
11/18 SLH 282	2.377	1.377	0.877	1.877
11/18 SLH 283	2.377	1.377	1.377	2.377
11/18 SLH 284	2.877	1.877	1.377	2.377
11/18 SLH 285	2.877	1.877	1.877	2.877



HF Quick-Change H-Style
Frame & Companion Insert Molds







1. 5/8-11 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.

"H" Style Quick-Change™ Frame

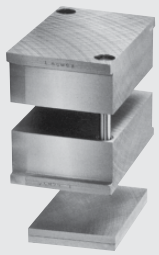
ITEM NO.	A	B
12/11 HF 321	1.877	1.877
12/11 HF 322	1.877	2.377
12/11 HF 323	2.377	1.877
12/11 HF 324	2.377	2.377

Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

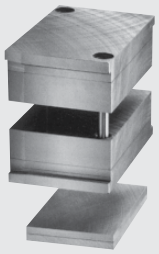
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).



Standard Solid Construction

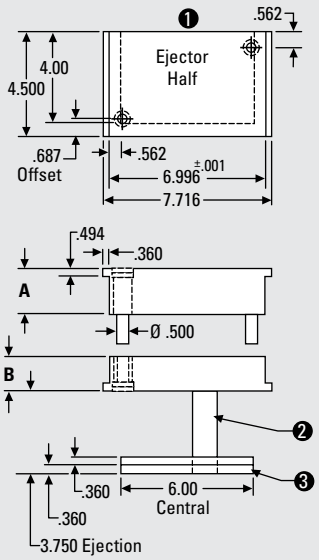
ITEM NO.	A	B
12/11 SSH 221	1.877	1.877
12/11 SSH 222	1.877	2.377
12/11 SSH 223	2.377	1.877
12/11 SSH 224	2.377	2.377



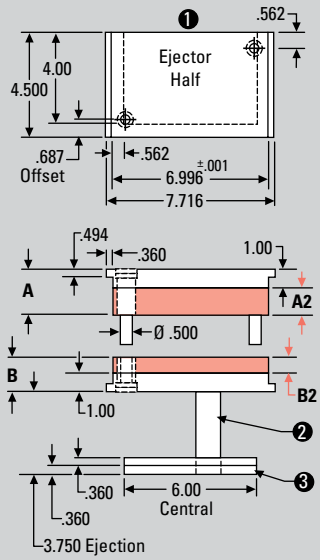
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
12/11 SLH 281	1.877	0.877	0.877	1.877
12/11 SLH 282	1.877	0.877	1.377	2.377
12/11 SLH 283	2.377	1.377	0.877	1.877
12/11 SLH 284	2.377	1.377	1.377	2.377

Standard Solid:
7.0 x 4.5

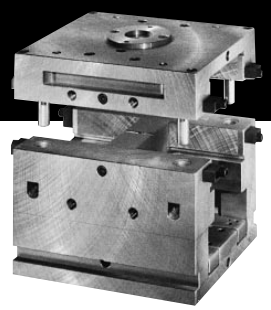


Standard Laminated:
7.0 x 4.5

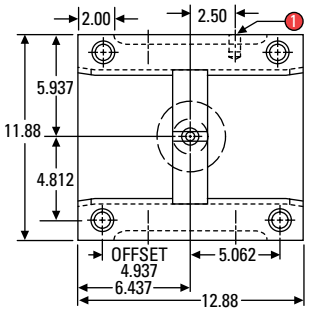


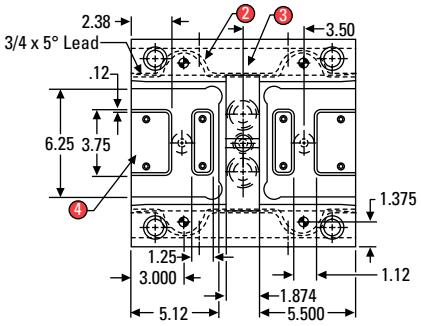
ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

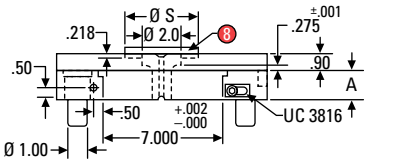
HF Quick-Change H-Style
Frame & Companion Insert Molds

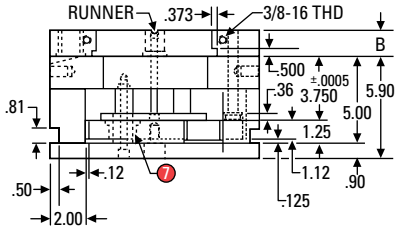


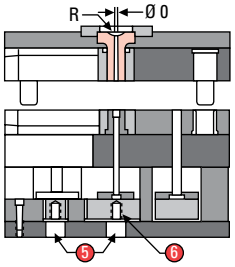
1. 5/8-11 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.











"H" Style Quick-Change™ Frame

ITEM NO.	A	B
12/13 HF 321	1.877	1.877
12/13 HF 322	1.877	2.377
12/13 HF 323	2.377	1.877
12/13 HF 324	2.377	2.377

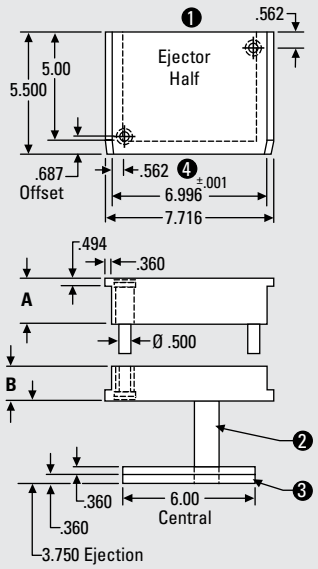
Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

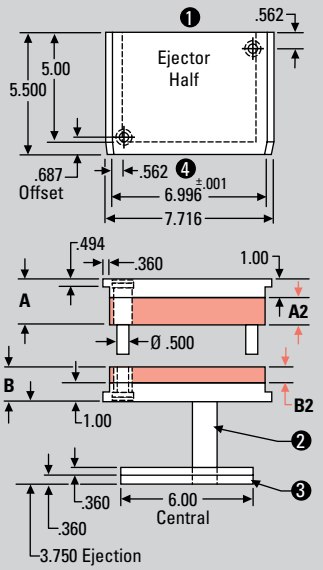
Companion Interchangeable Insert Molds

1. Frame clamps this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

Standard Solid: 7.0 x 5.5

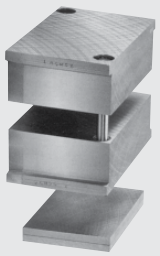


Standard Laminated: 7.0 x 5.5



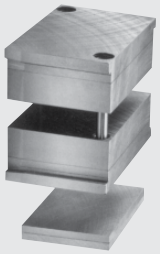
Standard Solid Construction

ITEM NO.	A	B
12/13 SSH 221	1.877	1.877
12/13 SSH 222	1.877	2.377
12/13 SSH 223	2.377	1.877
12/13 SSH 224	2.377	2.377

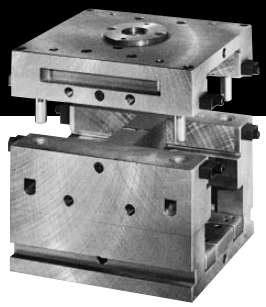


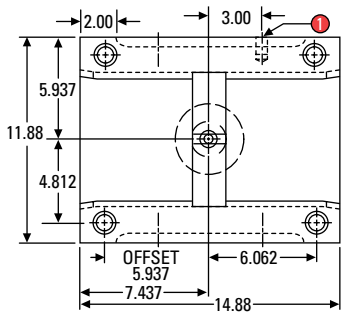
Standard Laminated Construction

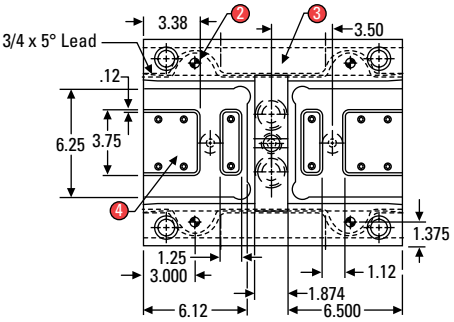
ITEM NO.	A	A2	B2	B
12/13 SLH 281	1.877	0.877	0.877	1.877
12/13 SLH 282	1.877	0.877	1.377	2.377
12/13 SLH 283	2.377	1.377	0.877	1.877
12/13 SLH 284	2.377	1.377	1.377	2.377

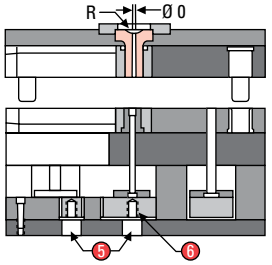


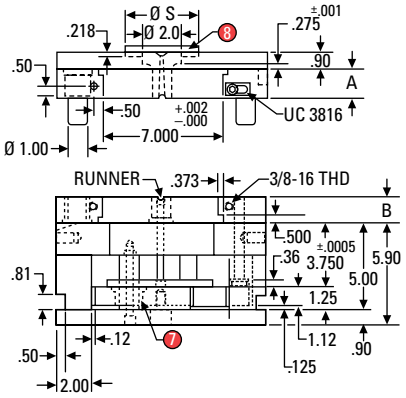
HF Quick-Change H-Style
Frame & Companion Insert Molds











1. 5/8-11 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.

"H" Style Quick-Change™ Frame

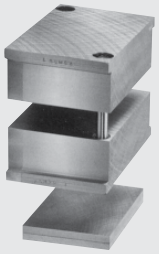
ITEM NO.	A	B
12/15 HF 321	1.877	1.877
12/15 HF 322	1.877	2.377
12/15 HF 323	2.377	1.877
12/15 HF 324	2.377	2.377

Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

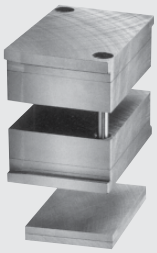
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.



Standard Solid Construction

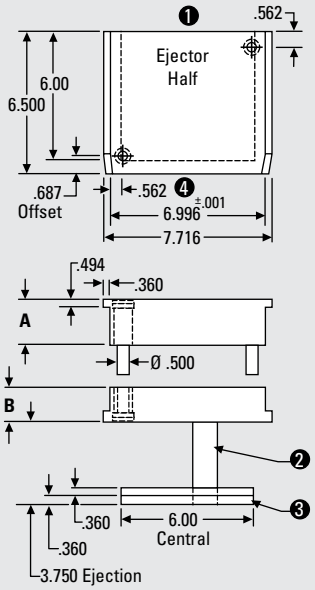
ITEM NO.	A	B
12/15 SSH 221	1.877	1.877
12/15 SSH 222	1.877	2.377
12/15 SSH 223	2.377	1.877
12/15 SSH 224	2.377	2.377



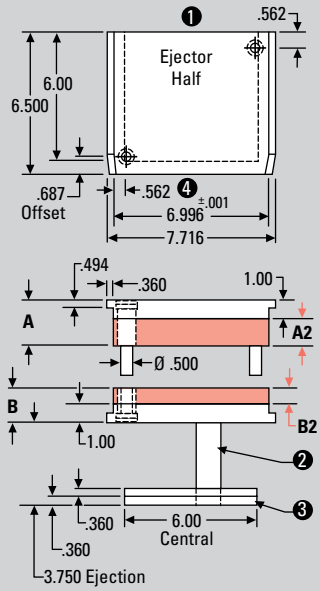
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
12/15 SLH 281	1.877	0.877	0.877	1.877
12/15 SLH 282	1.877	0.877	1.377	2.377
12/15 SLH 283	2.377	1.377	0.877	1.877
12/15 SLH 284	2.377	1.377	1.377	2.377

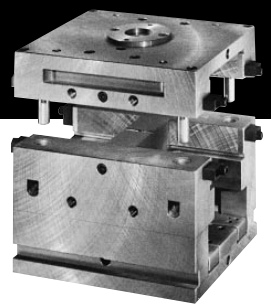
Standard Solid:
7.0 x 6.5



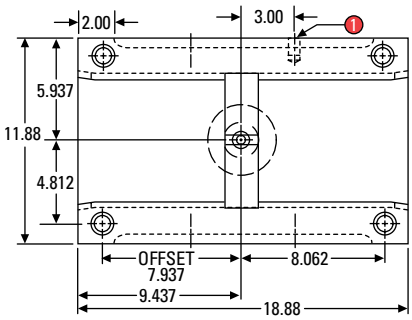
Standard Laminated:
7.0 x 6.5

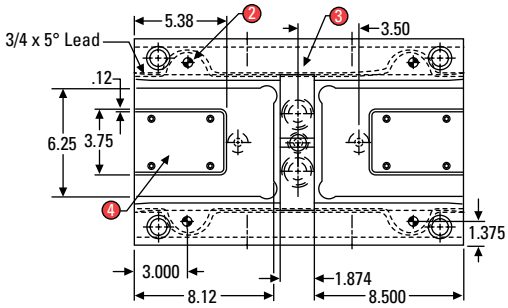


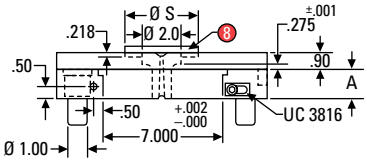
HF Quick-Change H-Style
Frame & Companion Insert Molds

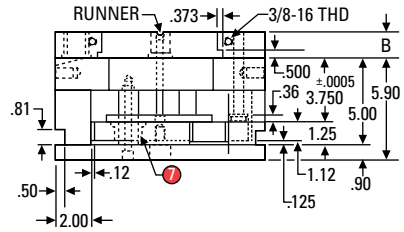


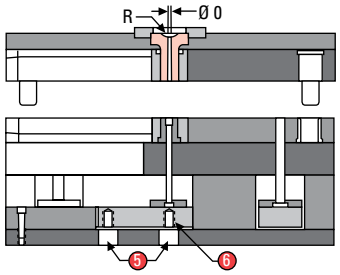
1. 5/8-11 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.











"H" Style Quick-Change™ Frame

ITEM NO.	A	B
12/19 HF 321	1.877	1.877
12/19 HF 322	1.877	2.377
12/19 HF 323	2.377	1.877
12/19 HF 324	2.377	2.377

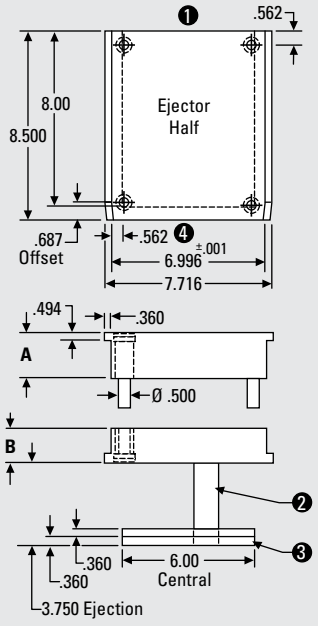
Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

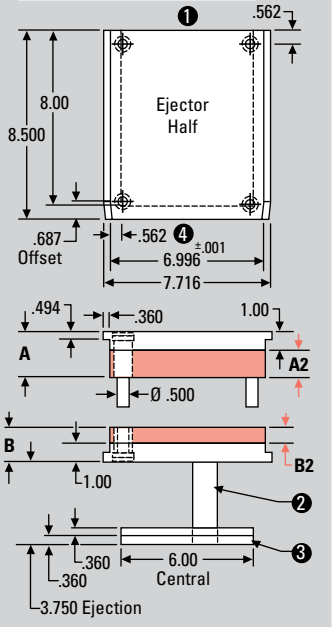
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

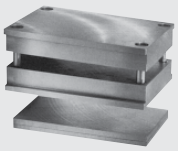
Standard Solid: 7.0 x 8.5



Standard Laminated: 7.0 x 8.5

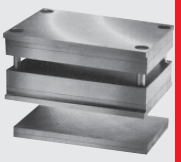


Standard Solid Construction



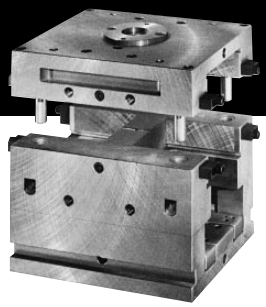
ITEM NO.	A	B
12/19 SSH 221	1.877	1.877
12/19 SSH 222	1.877	2.377
12/19 SSH 223	2.377	1.877
12/19 SSH 224	2.377	2.377

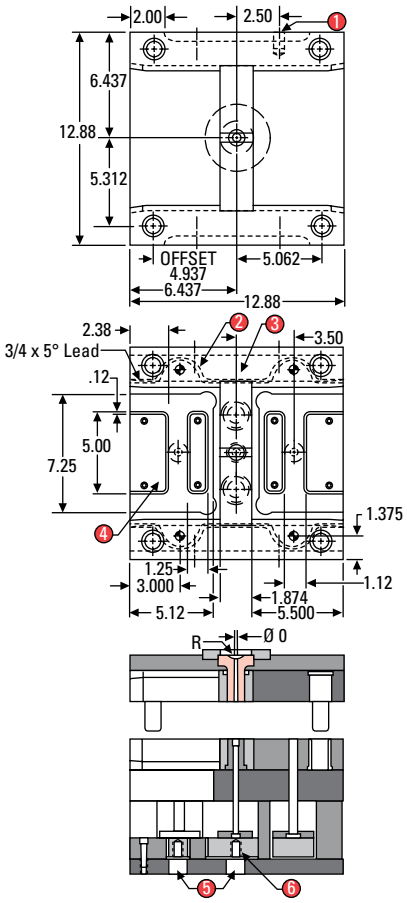
Standard Laminated Construction

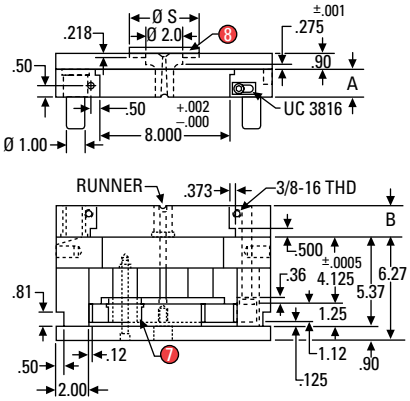


ITEM NO.	A	A2	B2	B
12/19 SLH 281	1.877	0.877	0.877	1.877
12/19 SLH 282	1.877	0.877	1.377	2.377
12/19 SLH 283	2.377	1.377	0.877	1.877
12/19 SLH 284	2.377	1.377	1.377	2.377

HF Quick-Change H-Style
Frame & Companion Insert Molds







1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.

"H" Style Quick-Change™ Frame

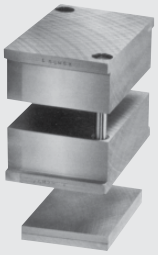
ITEM NO.	A	B
13/13 HF 321	1.877	1.877
13/13 HF 322	1.877	2.377
13/13 HF 323	2.377	1.877
13/13 HF 324	2.377	2.377
13/13 HF 325	2.377	2.877
13/13 HF 326	2.877	2.377
13/13 HF 327	2.877	2.877

Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

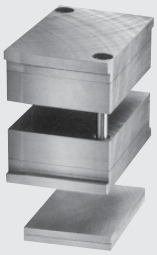
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.



Standard Solid Construction

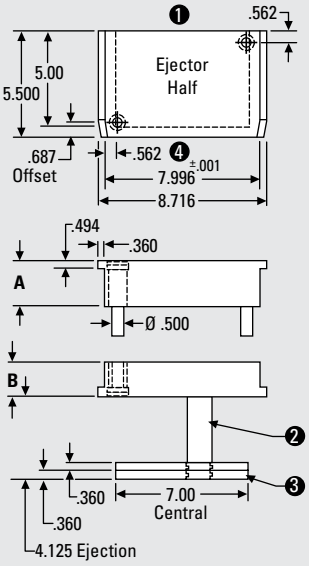
ITEM NO.	A	B
13/13 SSH 221	1.877	1.877
13/13 SSH 222	1.877	2.377
13/13 SSH 223	2.377	1.877
13/13 SSH 224	2.377	2.377
13/13 SSH 225	2.377	2.877
13/13 SSH 226	2.877	2.377
13/13 SSH 227	2.877	2.877



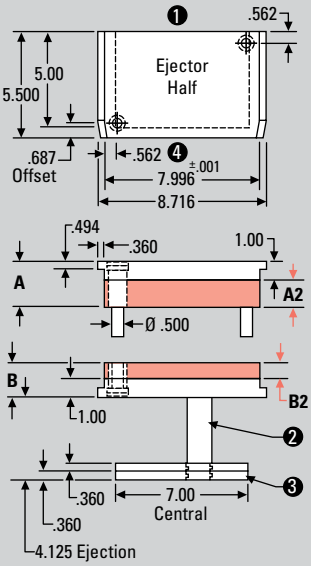
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
13/13 SLH 281	1.877	0.877	0.877	1.877
13/13 SLH 282	1.877	0.877	1.377	2.377
13/13 SLH 283	2.377	1.377	0.877	1.877
13/13 SLH 284	2.377	1.377	1.377	2.377
13/13 SLH 285	2.377	1.377	1.877	2.877
13/13 SLH 286	2.877	1.877	1.377	2.377
13/13 SLH 287	2.877	1.877	1.877	2.877

Standard Solid:
8.0 x 5.5

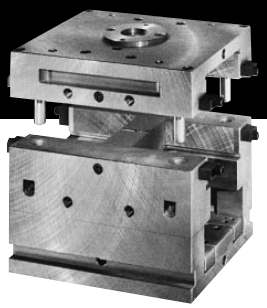


Standard Laminated:
8.0 x 5.5

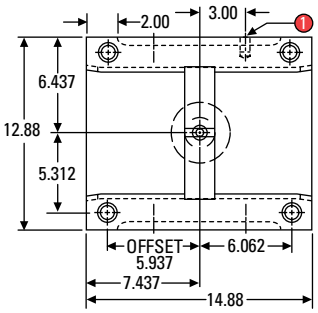


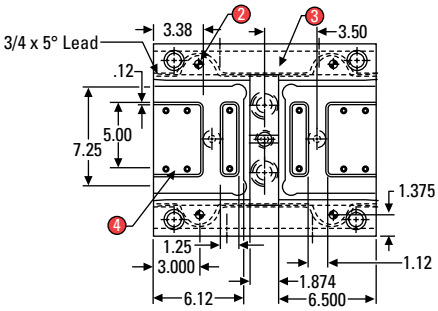
ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

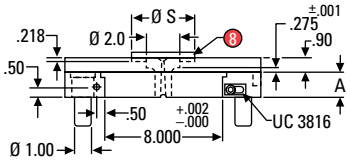
HF Quick-Change H-Style
Frame & Companion Insert Molds

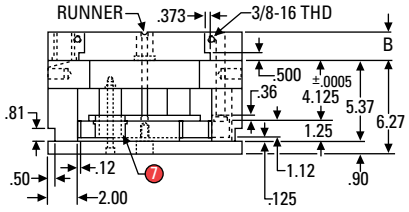


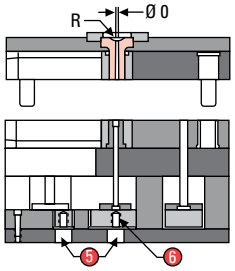
1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.











"H" Style Quick-Change™ Frame

ITEM NO.	A	B
13/15 HF 321	1.877	1.877
13/15 HF 322	1.877	2.377
13/15 HF 323	2.377	1.877
13/15 HF 324	2.377	2.377
13/15 HF 325	2.377	2.877
13/15 HF 326	2.877	2.377
13/15 HF 327	2.877	2.877

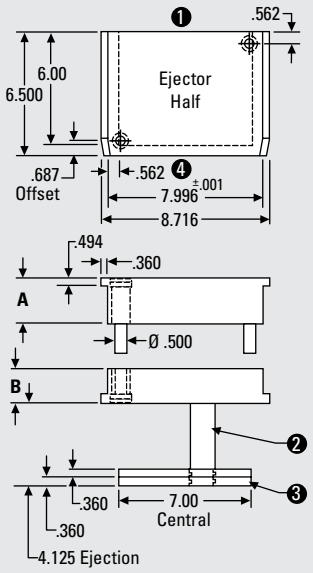
Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

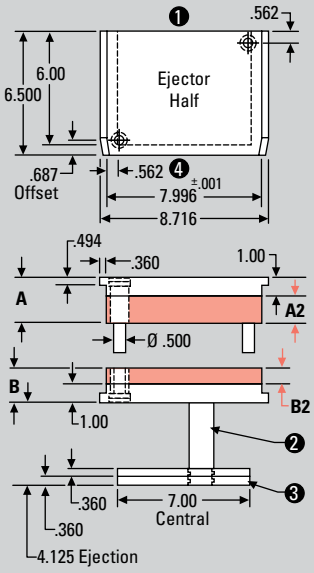
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

Standard Solid: 8.0 x 6.5

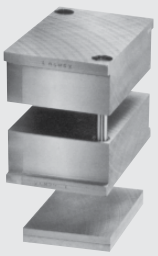


Standard Laminated: 8.0 x 6.5



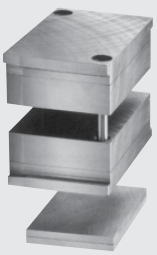
Standard Solid Construction

ITEM NO.	A	B
13/15 SSH 221	1.877	1.877
13/15 SSH 222	1.877	2.377
13/15 SSH 223	2.377	1.877
13/15 SSH 224	2.377	2.377
13/15 SSH 225	2.377	2.877
13/15 SSH 226	2.877	2.377
13/15 SSH 227	2.877	2.877

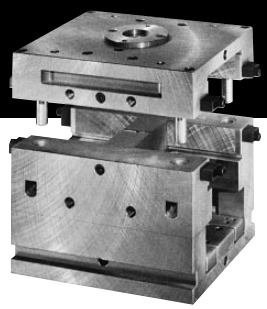


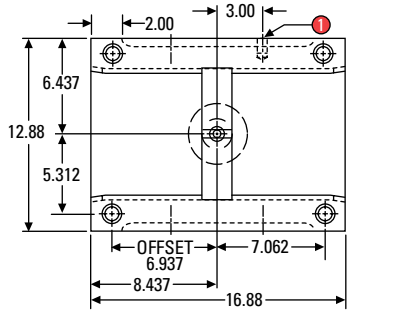
Standard Laminated Construction

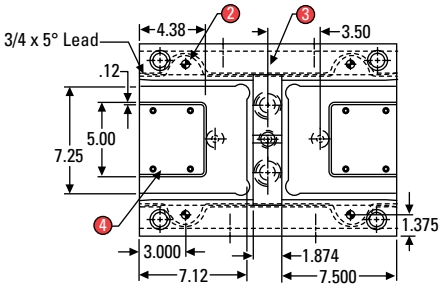
ITEM NO.	A	A2	B2	B
13/15 SLH 281	1.877	0.877	0.877	1.877
13/15 SLH 282	1.877	0.877	1.377	2.377
13/15 SLH 283	2.377	1.377	0.877	1.877
13/15 SLH 284	2.377	1.377	1.377	2.377
13/15 SLH 285	2.377	1.377	1.877	2.877
13/15 SLH 286	2.877	1.877	1.377	2.377
13/15 SLH 287	2.877	1.877	1.877	2.877

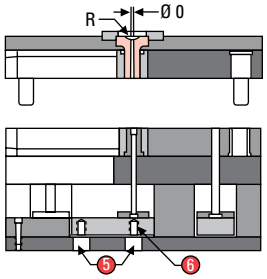


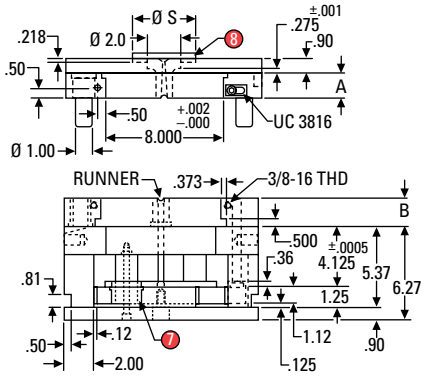
HF Quick-Change H-Style
Frame & Companion Insert Molds











1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.

"H" Style Quick-Change™ Frame

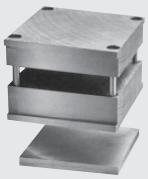
ITEM NO.	A	B
13/17 HF 321	1.877	1.877
13/17 HF 322	1.877	2.377
13/17 HF 323	2.377	1.877
13/17 HF 324	2.377	2.377
13/17 HF 325	2.377	2.877
13/17 HF 326	2.877	2.377
13/17 HF 327	2.877	2.877

Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

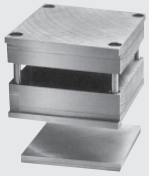
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.



Standard Solid Construction

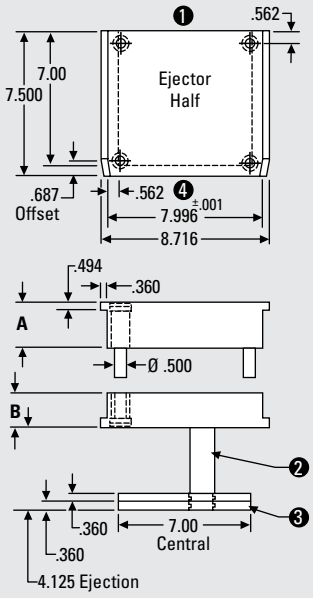
ITEM NO.	A	B
13/17 SSH 221	1.877	1.877
13/17 SSH 222	1.877	2.377
13/17 SSH 223	2.377	1.877
13/17 SSH 224	2.377	2.377
13/17 SSH 225	2.377	2.877
13/17 SSH 226	2.877	2.377
13/17 SSH 227	2.877	2.877



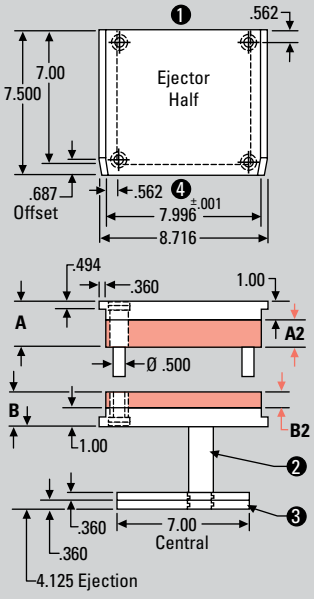
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
13/17 SLH 281	1.877	0.877	0.877	1.877
13/17 SLH 282	1.877	0.877	1.377	2.377
13/17 SLH 283	2.377	1.377	0.877	1.877
13/17 SLH 284	2.377	1.377	1.377	2.377
13/17 SLH 285	2.377	1.377	1.877	2.877
13/17 SLH 286	2.877	1.877	1.377	2.377
13/17 SLH 287	2.877	1.877	1.877	2.877

Standard Solid:
8.0 x 7.5

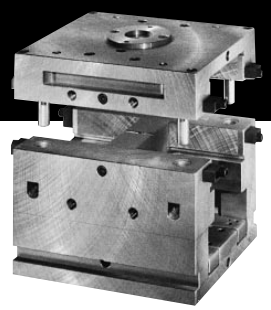


Standard Laminated:
8.0 x 7.5

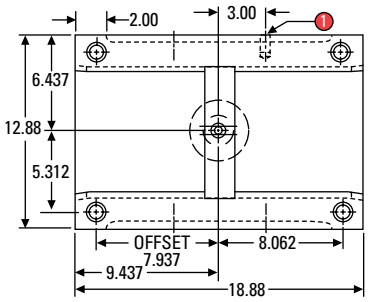


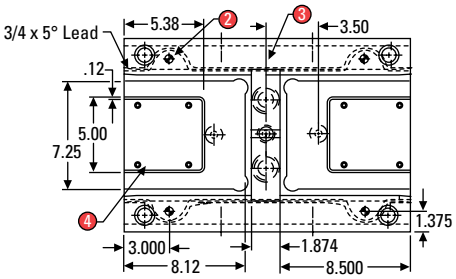
ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

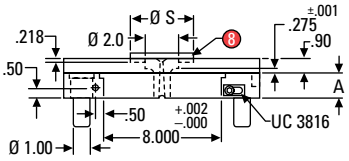
HF Quick-Change H-Style
Frame & Companion Insert Molds

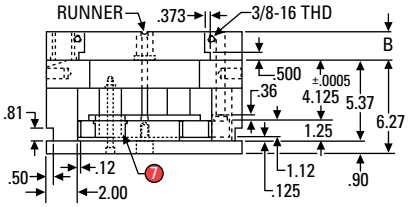


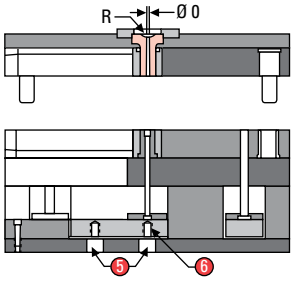
1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.











"H" Style Quick-Change™ Frame

ITEM NO.	A	B
13/19 HF 321	1.877	1.877
13/19 HF 322	1.877	2.377
13/19 HF 323	2.377	1.877
13/19 HF 324	2.377	2.377
13/19 HF 325	2.377	2.877
13/19 HF 326	2.877	2.377
13/19 HF 327	2.877	2.877

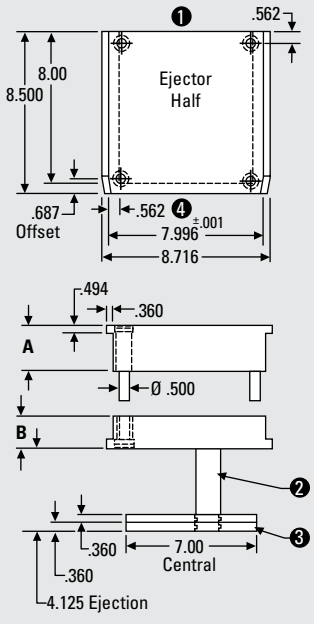
Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

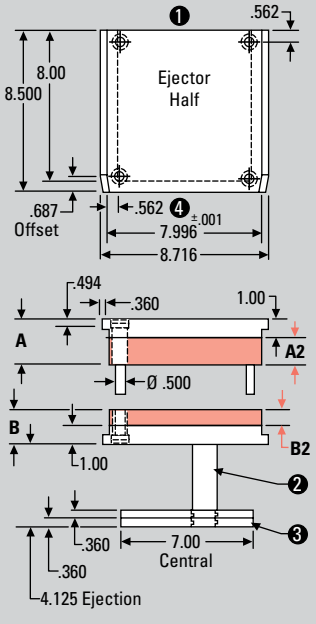
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

Standard Solid: 8.0 x 8.5

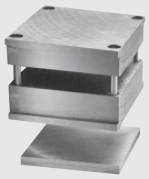


Standard Laminated: 8.0 x 8.5



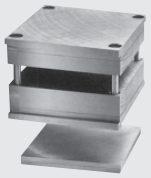
Standard Solid Construction

ITEM NO.	A	B
13/19 SSH 221	1.877	1.877
13/19 SSH 222	1.877	2.377
13/19 SSH 223	2.377	1.877
13/19 SSH 224	2.377	2.377
13/19 SSH 225	2.377	2.877
13/19 SSH 226	2.877	2.377
13/19 SSH 227	2.877	2.877

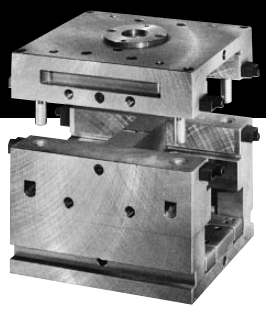


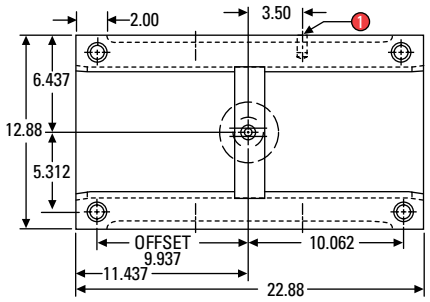
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
13/19 SLH 281	1.877	0.877	0.877	1.877
13/19 SLH 282	1.877	0.877	1.377	2.377
13/19 SLH 283	2.377	1.377	0.877	1.877
13/19 SLH 284	2.377	1.377	1.377	2.377
13/19 SLH 285	2.377	1.377	1.877	2.877
13/19 SLH 286	2.877	1.877	1.377	2.377
13/19 SLH 287	2.877	1.877	1.877	2.877

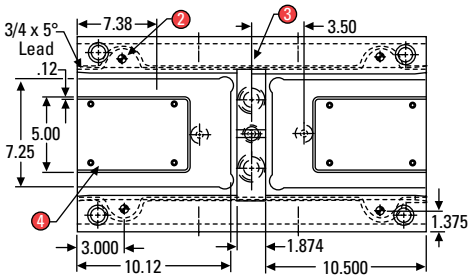


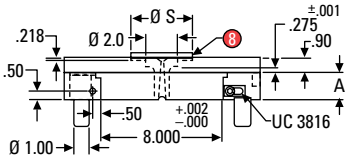
HF Quick-Change H-Style
Frame & Companion Insert Molds

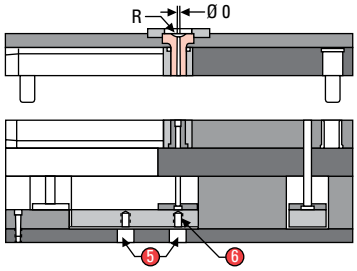


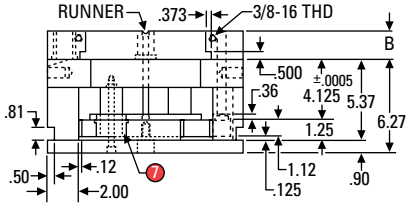


1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.









"H" Style Quick-Change™ Frame

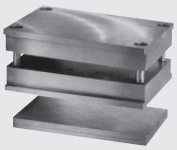
ITEM NO.	A	B
13/23 HF 321	1.877	1.877
13/23 HF 322	1.877	2.377
13/23 HF 323	2.377	1.877
13/23 HF 324	2.377	2.377
13/23 HF 325	2.377	2.877
13/23 HF 326	2.877	2.377
13/23 HF 327	2.877	2.877

Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

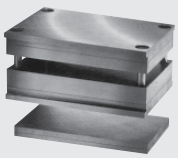
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.



Standard Solid Construction

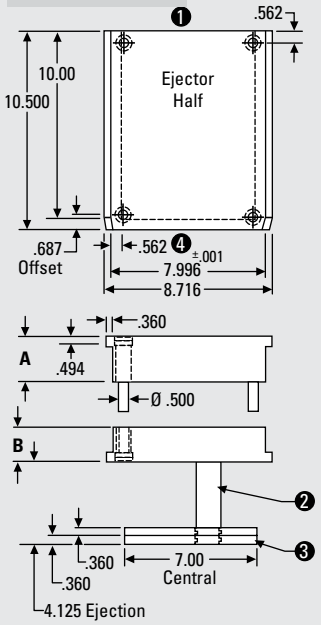
ITEM NO.	A	B
13/23 SSH 221	1.877	1.877
13/23 SSH 222	1.877	2.377
13/23 SSH 223	2.377	1.877
13/23 SSH 224	2.377	2.377
13/23 SSH 225	2.377	2.877
13/23 SSH 226	2.877	2.377
13/23 SSH 227	2.877	2.877



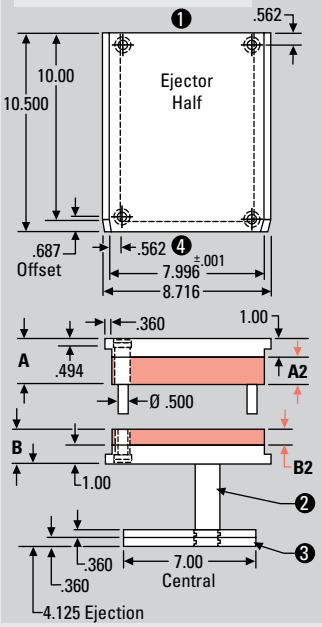
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
13/23 SLH 281	1.877	0.877	0.877	1.877
13/23 SLH 282	1.877	0.877	1.377	2.377
13/23 SLH 283	2.377	1.377	0.877	1.877
13/23 SLH 284	2.377	1.377	1.377	2.377
13/23 SLH 285	2.377	1.377	1.877	2.877
13/23 SLH 286	2.877	1.877	1.377	2.377
13/23 SLH 287	2.877	1.877	1.877	2.877

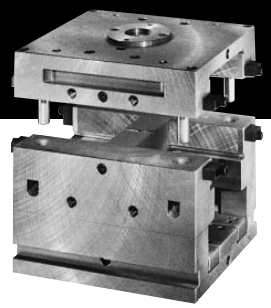
Standard Solid:
8.0 x 10.5



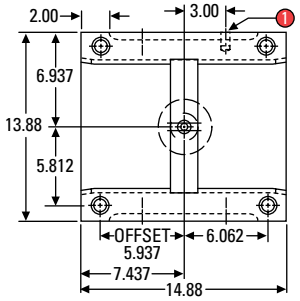
Standard Laminated:
8.0 x 10.5

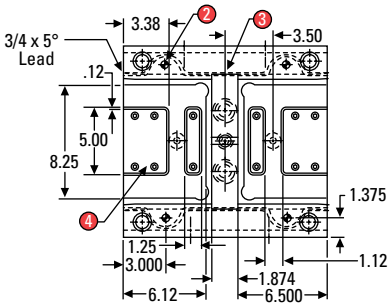


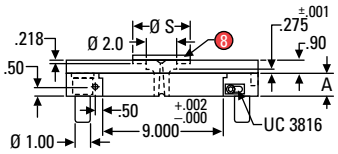
HF Quick-Change H-Style
Frame & Companion Insert Molds

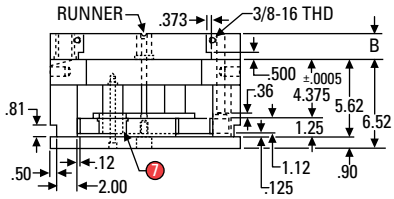


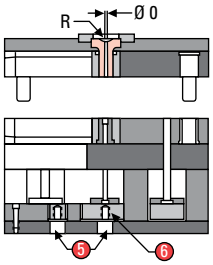
1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.











"H" Style Quick-Change™ Frame

ITEM NO.	A	B
14/15 HF 321	1.877	2.377
14/15 HF 322	2.377	1.877
14/15 HF 323	2.377	2.377
14/15 HF 324	2.377	2.877
14/15 HF 325	2.877	2.377
14/15 HF 326	2.877	2.877
14/15 HF 327	2.877	3.377
14/15 HF 328	3.377	2.877
14/15 HF 329	3.377	3.377

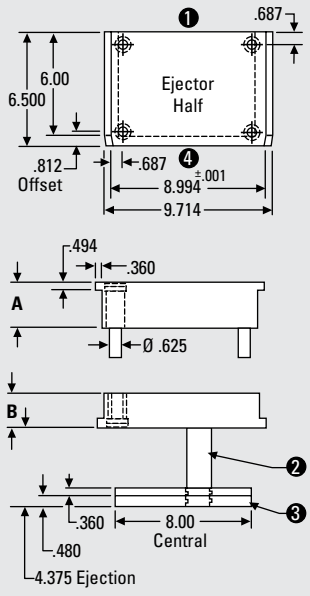
Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

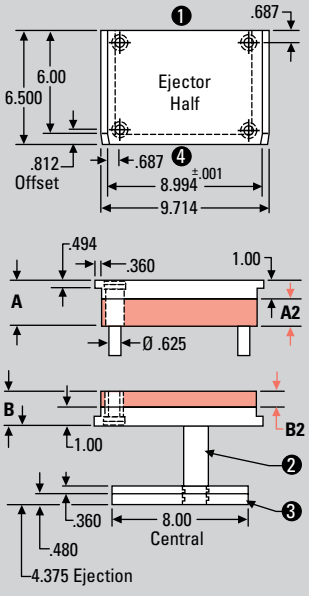
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

Standard Solid: 9.0 x 6.5

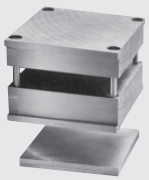


Standard Laminated: 9.0 x 6.5



Standard Solid Construction

ITEM NO.	A	B
14/15 SSH 221	1.877	2.377
14/15 SSH 222	2.377	1.877
14/15 SSH 223	2.377	2.377
14/15 SSH 224	2.377	2.877
14/15 SSH 225	2.877	2.377
14/15 SSH 226	2.877	2.877
14/15 SSH 227	2.877	3.377
14/15 SSH 228	3.377	2.877
14/15 SSH 229	3.377	3.377

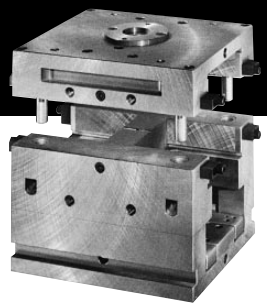


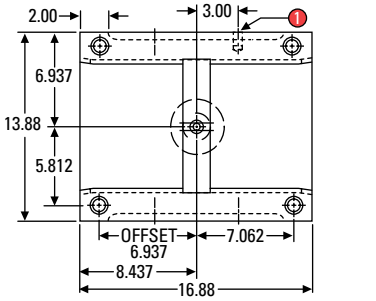
Standard Laminated Construction

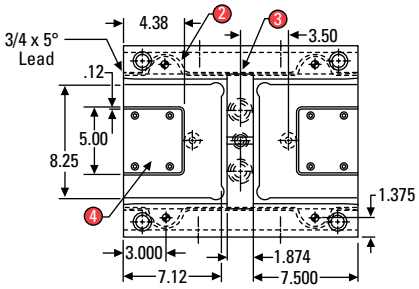
ITEM NO.	A	A2	B2	B
14/15 SLH 281	1.877	0.877	1.377	2.377
14/15 SLH 282	2.377	1.377	0.877	1.877
14/15 SLH 283	2.377	1.377	1.377	2.377
14/15 SLH 284	2.377	1.377	1.877	2.877
14/15 SLH 285	2.877	1.877	1.377	2.377
14/15 SLH 286	2.877	1.877	1.877	2.877
14/15 SLH 287	2.877	1.877	2.377	3.377
14/15 SLH 288	3.377	2.377	1.877	2.877
14/15 SLH 289	3.377	2.377	2.377	3.377

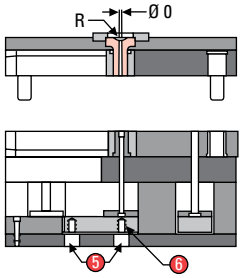


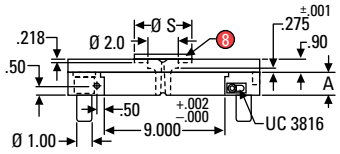
HF Quick-Change H-Style
Frame & Companion Insert Molds

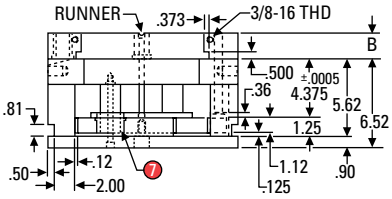












1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.

"H" Style Quick-Change™ Frame

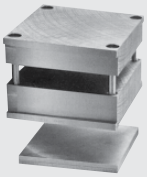
ITEM NO.	A	B
14/17 HF 321	1.877	2.377
14/17 HF 322	2.377	1.877
14/17 HF 323	2.377	2.377
14/17 HF 324	2.377	2.877
14/17 HF 325	2.877	2.377
14/17 HF 326	2.877	2.877
14/17 HF 327	2.877	3.377
14/17 HF 328	3.377	2.877
14/17 HF 329	3.377	3.377

Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.



Standard Solid Construction

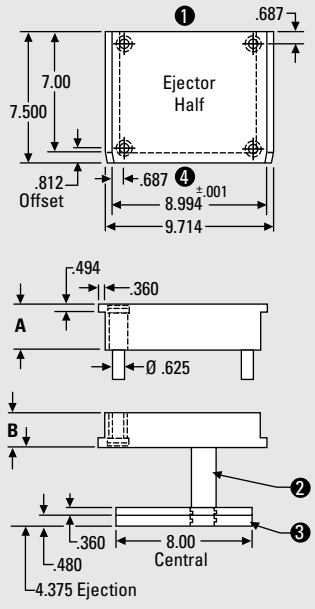
ITEM NO.	A	B
14/17 SSH 221	1.877	2.377
14/17 SSH 222	2.377	1.877
14/17 SSH 223	2.377	2.377
14/17 SSH 224	2.377	2.877
14/17 SSH 225	2.877	2.377
14/17 SSH 226	2.877	2.877
14/17 SSH 227	2.877	3.377
14/17 SSH 228	3.377	2.877
14/17 SSH 229	3.377	3.377



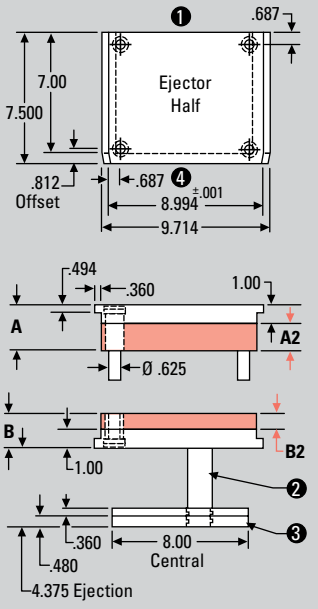
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
14/17 SLH 281	1.877	0.877	1.377	2.377
14/17 SLH 282	2.377	1.377	0.877	1.877
14/17 SLH 283	2.377	1.377	1.377	2.377
14/17 SLH 284	2.377	1.377	1.877	2.877
14/17 SLH 285	2.877	1.877	1.377	2.377
14/17 SLH 286	2.877	1.877	1.877	2.877
14/17 SLH 287	2.877	1.877	2.377	3.377
14/17 SLH 288	3.377	2.377	1.877	2.877
14/17 SLH 289	3.377	2.377	2.377	3.377

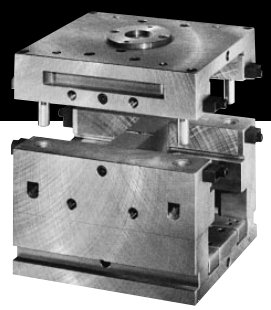
Standard Solid: 9.0 x 7.5



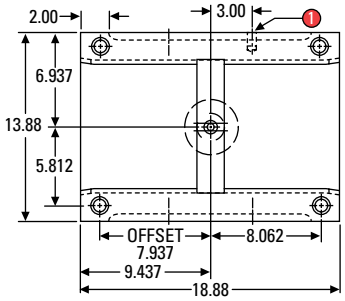
Standard Laminated: 9.0 x 7.5

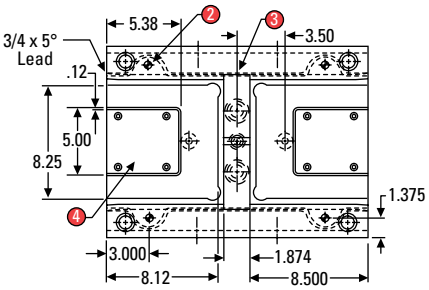


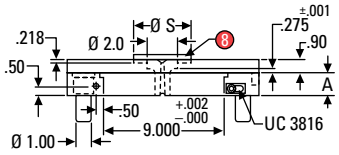
HF Quick-Change H-Style
Frame & Companion Insert Molds

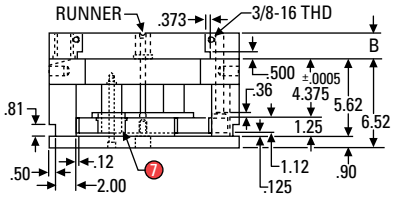


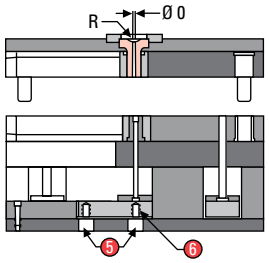
1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.











"H" Style Quick-Change™ Frame

ITEM NO.	A	B
14/19 HF 321	1.877	2.377
14/19 HF 322	2.377	1.877
14/19 HF 323	2.377	2.377
14/19 HF 324	2.377	2.877
14/19 HF 325	2.877	2.377
14/19 HF 326	2.877	2.877
14/19 HF 327	2.877	3.377
14/19 HF 328	3.377	2.877
14/19 HF 329	3.377	3.377

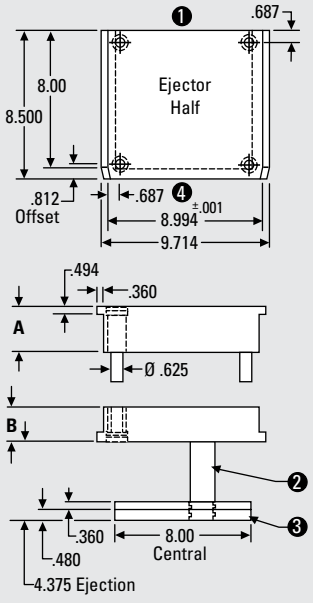
Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

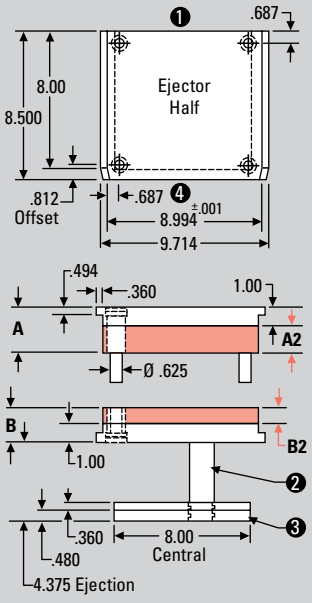
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

Standard Solid: 9.0 x 8.5

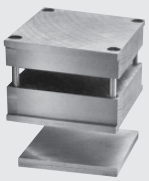


Standard Laminated: 9.0 x 8.5



Standard Solid Construction

ITEM NO.	A	B
14/19 SSH 221	1.877	2.377
14/19 SSH 222	2.377	1.877
14/19 SSH 223	2.377	2.377
14/19 SSH 224	2.377	2.877
14/19 SSH 225	2.877	2.377
14/19 SSH 226	2.877	2.877
14/19 SSH 227	2.877	3.377
14/19 SSH 228	3.377	2.877
14/19 SSH 229	3.377	3.377

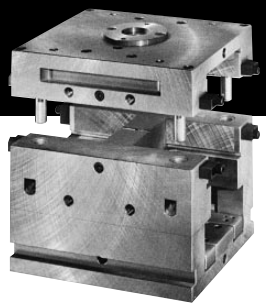


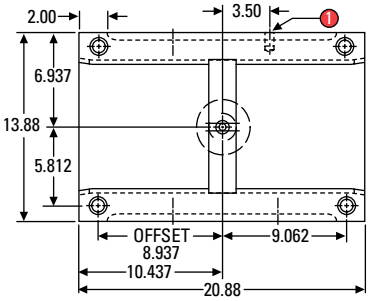
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
14/19 SLH 281	1.877	0.877	1.377	2.377
14/19 SLH 282	2.377	1.377	0.877	1.877
14/19 SLH 283	2.377	1.377	1.377	2.377
14/19 SLH 284	2.377	1.377	1.877	2.877
14/19 SLH 285	2.877	1.877	1.377	2.377
14/19 SLH 286	2.877	1.877	1.877	2.877
14/19 SLH 287	2.877	1.877	2.377	3.377
14/19 SLH 288	3.377	2.377	1.877	2.877
14/19 SLH 289	3.377	2.377	2.377	3.377

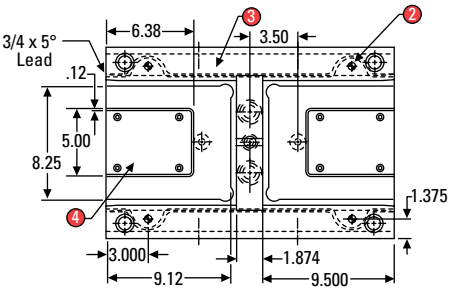


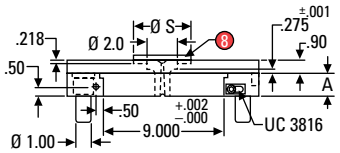
HF Quick-Change H-Style
Frame & Companion Insert Molds

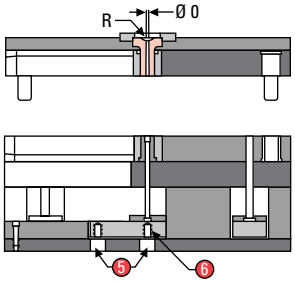


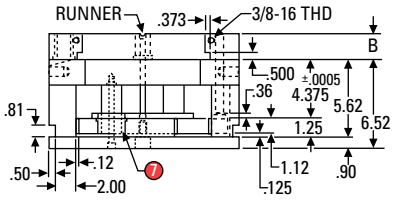


1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.









"H" Style Quick-Change™ Frame

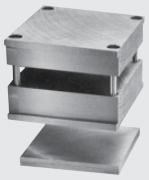
ITEM NO.	A	B
14/21 HF 321	1.877	2.377
14/21 HF 322	2.377	1.877
14/21 HF 323	2.377	2.377
14/21 HF 324	2.377	2.877
14/21 HF 325	2.877	2.377
14/21 HF 326	2.877	2.877
14/21 HF 327	2.877	3.377
14/21 HF 328	3.377	2.877
14/21 HF 329	3.377	3.377

Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

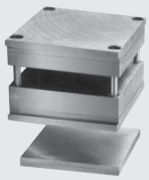
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.



Standard Solid Construction

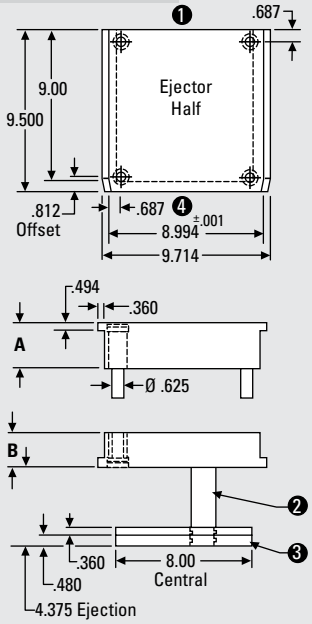
ITEM NO.	A	B
14/21 SSH 221	1.877	2.377
14/21 SSH 222	2.377	1.877
14/21 SSH 223	2.377	2.377
14/21 SSH 224	2.377	2.877
14/21 SSH 225	2.877	2.377
14/21 SSH 226	2.877	2.877
14/21 SSH 227	2.877	3.377
14/21 SSH 228	3.377	2.877
14/21 SSH 229	3.377	3.377



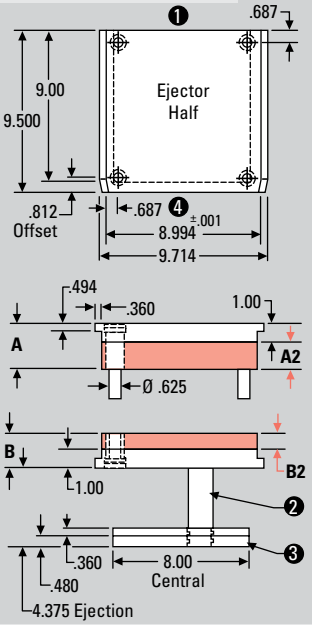
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
14/21 SLH 281	1.877	0.877	1.377	2.377
14/21 SLH 282	2.377	1.377	0.877	1.877
14/21 SLH 283	2.377	1.377	1.377	2.377
14/21 SLH 284	2.377	1.377	1.877	2.877
14/21 SLH 285	2.877	1.877	1.377	2.377
14/21 SLH 286	2.877	1.877	1.877	2.877
14/21 SLH 287	2.877	1.877	2.377	3.377
14/21 SLH 288	3.377	2.377	1.877	2.877
14/21 SLH 289	3.377	2.377	2.377	3.377

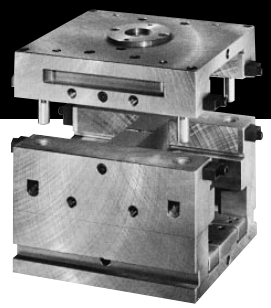
Standard Solid: 9.0 x 9.5



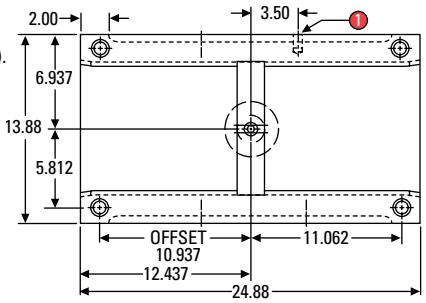
Standard Laminated: 9.0 x 9.5

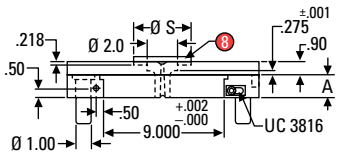


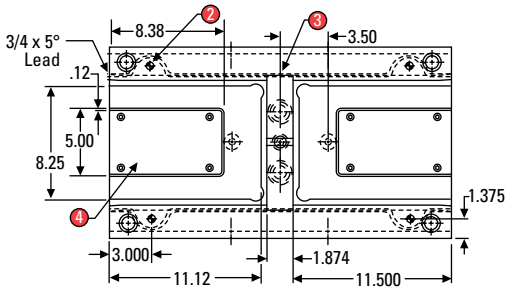
HF Quick-Change H-Style
Frame & Companion Insert Molds

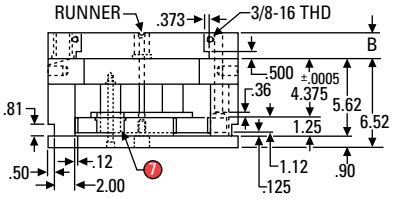


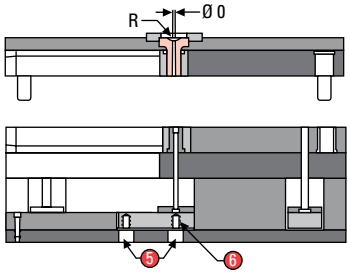
1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.











"H" Style Quick-Change™ Frame

ITEM NO.	A	B
14/25 HF 321	1.877	2.377
14/25 HF 322	2.377	1.877
14/25 HF 323	2.377	2.377
14/25 HF 324	2.377	2.877
14/25 HF 325	2.877	2.377
14/25 HF 326	2.877	2.877
14/25 HF 327	2.877	3.377
14/25 HF 328	3.377	2.877
14/25 HF 329	3.377	3.377

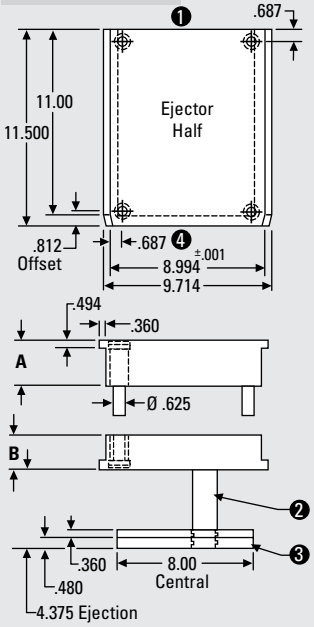
Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

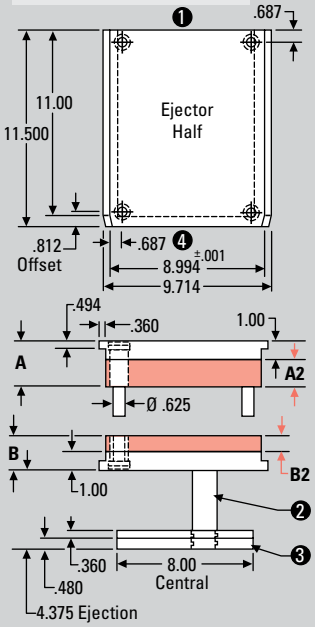
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

Standard Solid:
9.0 x 11.5

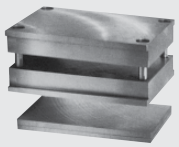


Standard Laminated:
9.0 x 11.5



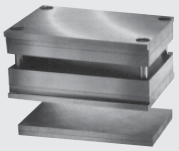
Standard Solid Construction

ITEM NO.	A	B
14/25 SSH 221	1.877	2.377
14/25 SSH 222	2.377	1.877
14/25 SSH 223	2.377	2.377
14/25 SSH 224	2.377	2.877
14/25 SSH 225	2.877	2.377
14/25 SSH 226	2.877	2.877
14/25 SSH 227	2.877	3.377
14/25 SSH 228	3.377	2.877
14/25 SSH 229	3.377	3.377

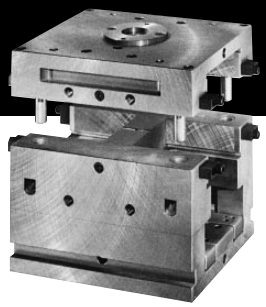


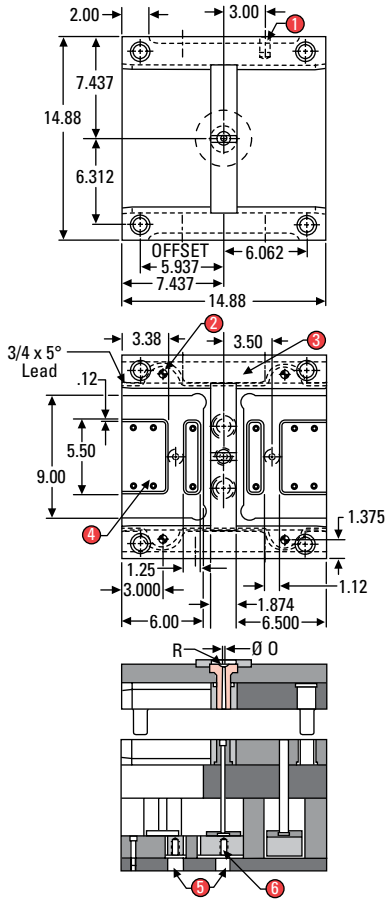
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
14/25 SLH 281	1.877	0.877	1.377	2.377
14/25 SLH 282	2.377	1.377	0.877	1.877
14/25 SLH 283	2.377	1.377	1.377	2.377
14/25 SLH 284	2.377	1.377	1.877	2.877
14/25 SLH 285	2.877	1.877	1.377	2.377
14/25 SLH 286	2.877	1.877	1.877	2.877
14/25 SLH 287	2.877	1.877	2.377	3.377
14/25 SLH 288	3.377	2.377	1.877	2.877
14/25 SLH 289	3.377	2.377	2.377	3.377

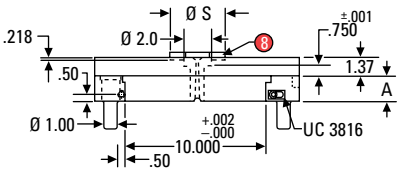


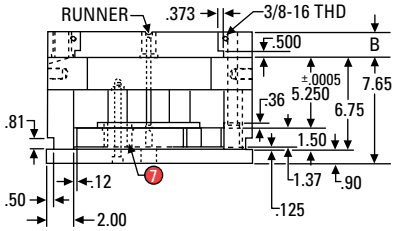
HF Quick-Change H-Style
Frame & Companion Insert Molds





1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.





"H" Style Quick-Change™ Frame

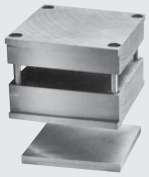
ITEM NO.	A	B
15/15 HF 321	1.877	2.377
15/15 HF 322	2.377	1.877
15/15 HF 323	2.377	2.377
15/15 HF 324	2.377	2.877
15/15 HF 325	2.877	2.377
15/15 HF 326	2.877	2.877
15/15 HF 327	2.877	3.377
15/15 HF 328	2.877	3.877
15/15 HF 329	3.877	3.377
15/15 HF 330	3.877	3.877

Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.



Standard Solid Construction

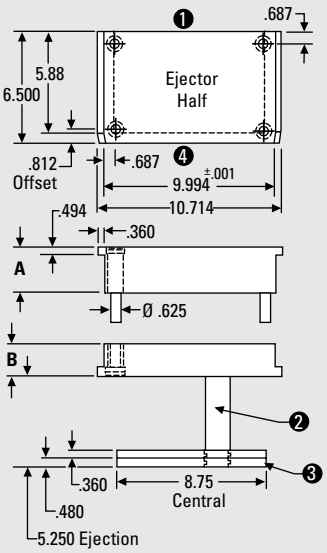
ITEM NO.	A	B
15/15 SSH 221	1.877	2.377
15/15 SSH 222	2.377	1.877
15/15 SSH 223	2.377	2.377
15/15 SSH 224	2.377	2.877
15/15 SSH 225	2.877	2.377
15/15 SSH 226	2.877	2.877
15/15 SSH 227	2.877	3.377
15/15 SSH 228	2.877	3.877
15/15 SSH 229	3.877	3.377
15/15 SSH 230	3.877	3.877



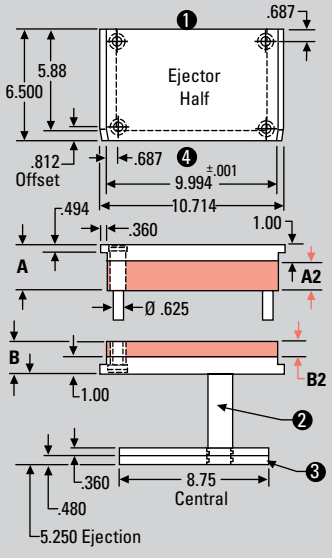
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
15/15 SLH 281	1.877	0.877	1.377	2.377
15/15 SLH 282	2.377	1.377	0.877	1.877
15/15 SLH 283	2.377	1.377	1.377	2.377
15/15 SLH 284	2.377	1.377	1.877	2.877
15/15 SLH 285	2.877	1.877	1.377	2.377
15/15 SLH 286	2.877	1.877	1.877	2.877
15/15 SLH 287	2.877	1.877	2.377	3.377
15/15 SLH 288	2.877	1.877	2.877	3.877
15/15 SLH 289	3.877	2.877	2.377	3.377
15/15 SLH 290	3.877	2.877	2.877	3.877

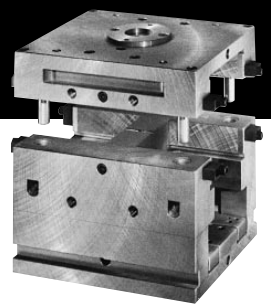
Standard Solid:
10.0 x 6.5



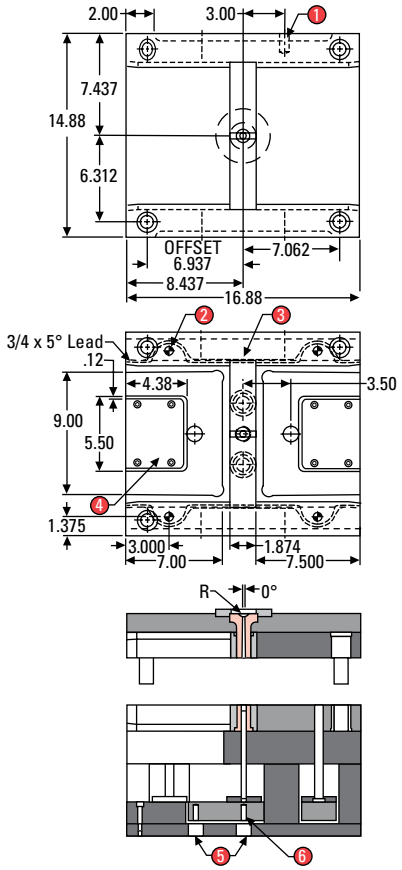
Standard Laminated:
10.0 x 6.5

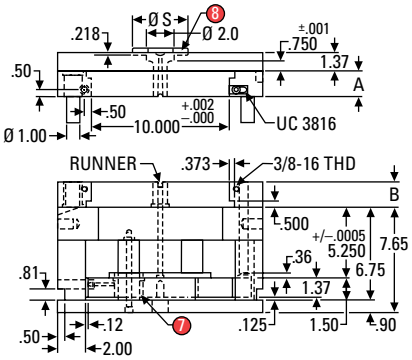


HF Quick-Change H-Style
Frame & Companion Insert Molds



1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.





"H" Style Quick-Change™ Frame

ITEM NO.	A	B
15/17 HF 321	1.877	2.377
15/17 HF 322	2.377	1.877
15/17 HF 323	2.377	2.377
15/17 HF 324	2.377	2.877
15/17 HF 325	2.877	2.377
15/17 HF 326	2.877	2.877
15/17 HF 327	2.877	3.377
15/17 HF 328	2.877	3.877
15/17 HF 329	3.877	3.377
15/17 HF 330	3.877	3.877

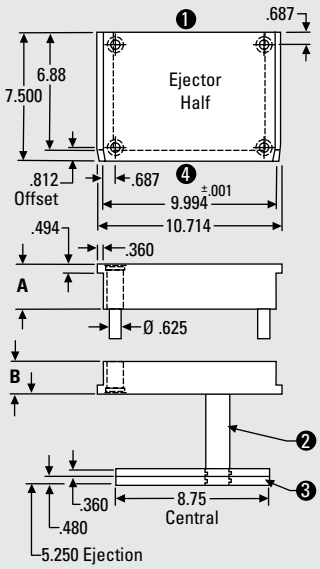
Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

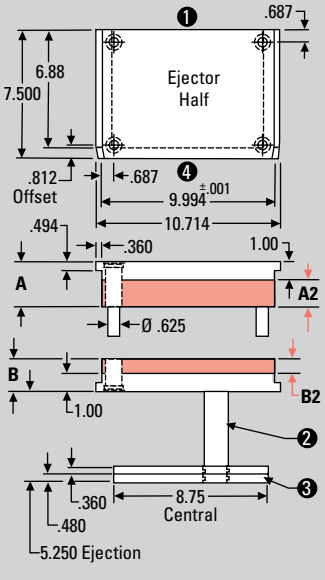
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

Standard Solid: 10.0 x 7.5

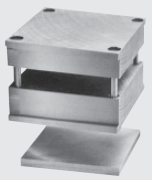


Standard Laminated: 10.0 x 7.5



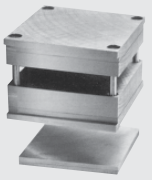
Standard Solid Construction

ITEM NO.	A	B
15/17 SSH 221	1.877	2.377
15/17 SSH 222	2.377	1.877
15/17 SSH 223	2.377	2.377
15/17 SSH 224	2.377	2.877
15/17 SSH 225	2.877	2.377
15/17 SSH 226	2.877	2.877
15/17 SSH 227	2.877	3.377
15/17 SSH 228	2.877	3.877
15/17 SSH 229	3.877	3.377
15/17 SSH 230	3.877	3.877

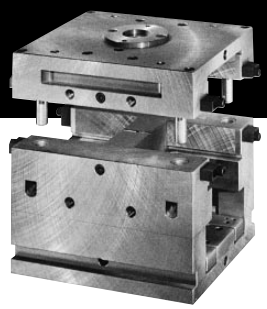


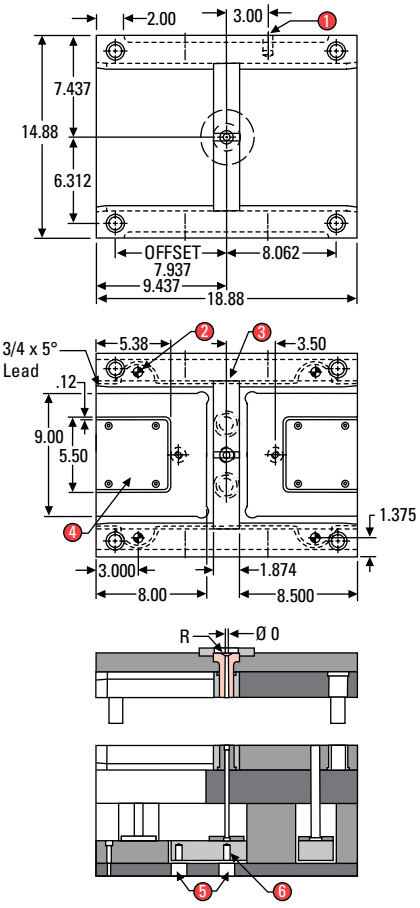
Standard Laminated Construction

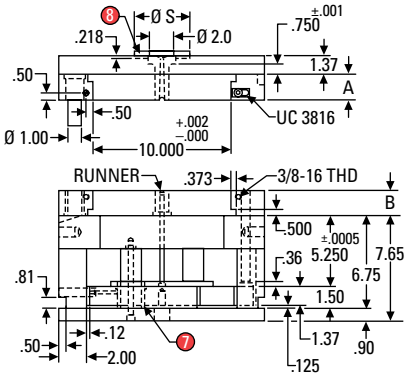
ITEM NO.	A	A2	B2	B
15/17 SLH 281	1.877	0.877	1.377	2.377
15/17 SLH 282	2.377	1.377	0.877	1.877
15/17 SLH 283	2.377	1.377	1.377	2.377
15/17 SLH 284	2.377	1.377	1.877	2.877
15/17 SLH 285	2.877	1.877	1.377	2.377
15/17 SLH 286	2.877	1.877	1.877	2.877
15/17 SLH 287	2.877	1.877	2.377	3.377
15/17 SLH 288	2.877	1.877	2.877	3.877
15/17 SLH 289	3.877	2.877	2.377	3.377
15/17 SLH 290	3.877	2.877	2.877	3.877



HF Quick-Change H-Style
Frame & Companion Insert Molds







1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.

"H" Style Quick-Change™ Frame

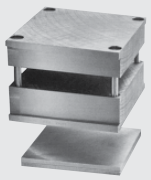
ITEM NO.	A	B
15/19 HF 321	1.877	2.377
15/19 HF 322	2.377	1.877
15/19 HF 323	2.377	2.377
15/19 HF 324	2.377	2.877
15/19 HF 325	2.877	2.377
15/19 HF 326	2.877	2.877
15/19 HF 327	2.877	3.377
15/19 HF 328	2.877	3.877
15/19 HF 329	3.877	3.377
15/19 HF 330	3.877	3.877

Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

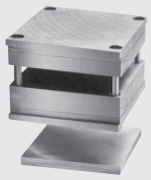
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.



Standard Solid Construction

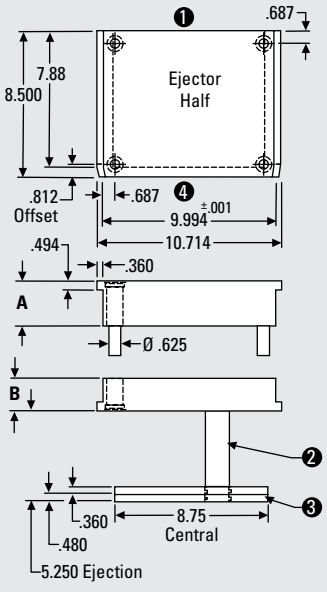
ITEM NO.	A	B
15/19 SSH 221	1.877	2.377
15/19 SSH 222	2.377	1.877
15/19 SSH 223	2.377	2.377
15/19 SSH 224	2.377	2.877
15/19 SSH 225	2.877	2.377
15/19 SSH 226	2.877	2.877
15/19 SSH 227	2.877	3.377
15/19 SSH 228	2.877	3.877
15/19 SSH 229	3.877	3.377
15/19 SSH 230	3.877	3.877



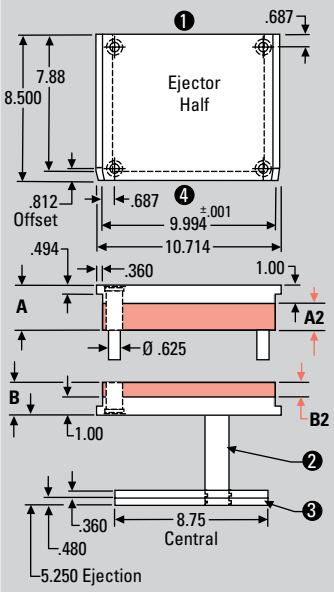
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
15/19 SLH 281	1.877	0.877	1.377	2.377
15/19 SLH 282	2.377	1.377	0.877	1.877
15/19 SLH 283	2.377	1.377	1.377	2.377
15/19 SLH 284	2.377	1.377	1.877	2.877
15/19 SLH 285	2.877	1.877	1.377	2.377
15/19 SLH 286	2.877	1.877	1.877	2.877
15/19 SLH 287	2.877	1.877	2.377	3.377
15/19 SLH 288	2.877	1.877	2.877	3.877
15/19 SLH 289	3.877	2.877	2.377	3.377
15/19 SLH 290	3.877	2.877	2.877	3.877

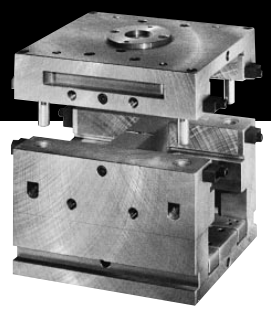
Standard Solid:
10.0 x 8.5



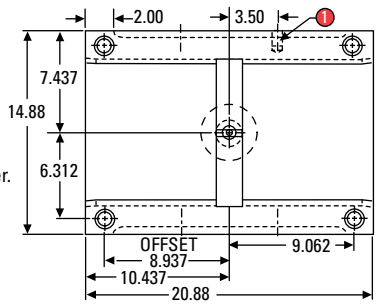
Standard Laminated:
10.0 x 8.5

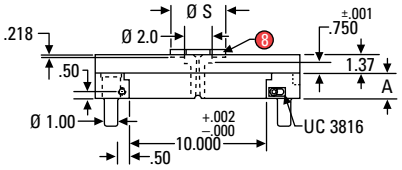


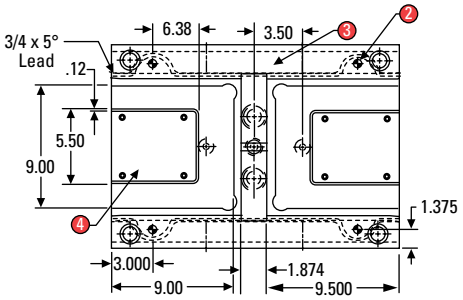
HF Quick-Change H-Style
Frame & Companion Insert Molds

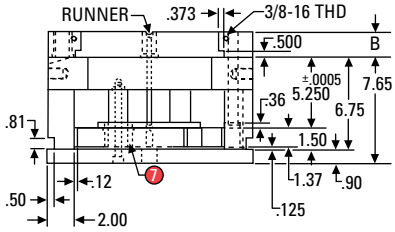


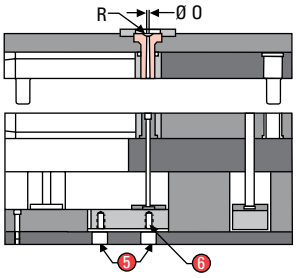
1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.











"H" Style Quick-Change™ Frame

ITEM NO.	A	B
15/21 HF 321	1.877	2.377
15/21 HF 322	2.377	1.877
15/21 HF 323	2.377	2.377
15/21 HF 324	2.377	2.877
15/21 HF 325	2.877	2.377
15/21 HF 326	2.877	2.877
15/21 HF 327	2.877	3.377
15/21 HF 328	2.877	3.877
15/21 HF 329	3.877	3.377
15/21 HF 330	3.877	3.877

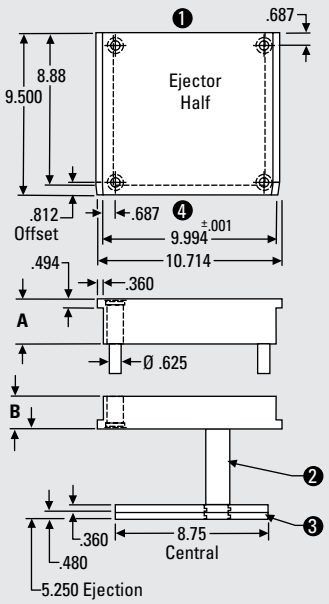
Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

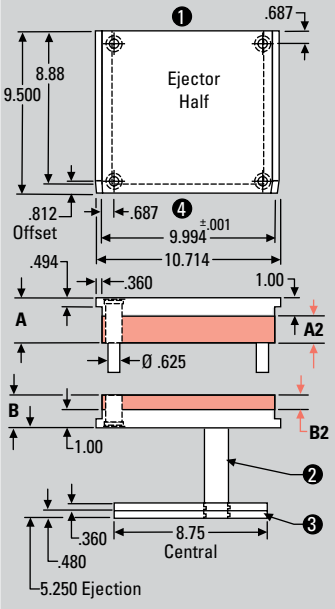
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

Standard Solid:
10.0 x 9.5

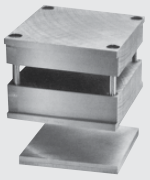


Standard Laminated:
10.0 x 9.5



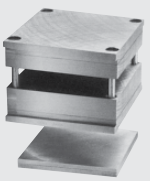
Standard Solid Construction

ITEM NO.	A	B
15/21 SSH 221	1.877	2.377
15/21 SSH 222	2.377	1.877
15/21 SSH 223	2.377	2.377
15/21 SSH 224	2.377	2.877
15/21 SSH 225	2.877	2.377
15/21 SSH 226	2.877	2.877
15/21 SSH 227	2.877	3.377
15/21 SSH 228	2.877	3.877
15/21 SSH 229	3.877	3.377
15/21 SSH 230	3.877	3.877

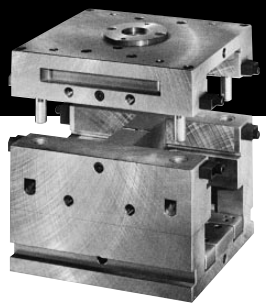


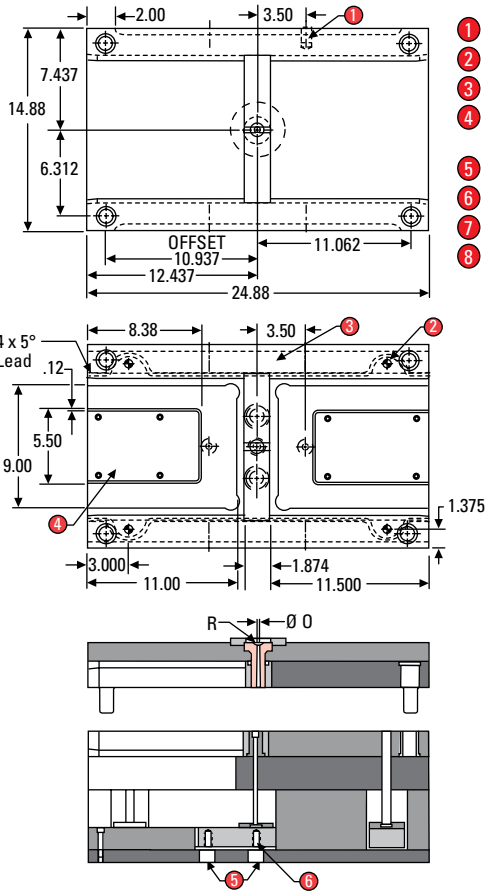
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
15/21 SLH 281	1.877	0.877	1.377	2.377
15/21 SLH 282	2.377	1.377	0.877	1.877
15/21 SLH 283	2.377	1.377	1.377	2.377
15/21 SLH 284	2.377	1.377	1.877	2.877
15/21 SLH 285	2.877	1.877	1.377	2.377
15/21 SLH 286	2.877	1.877	1.877	2.877
15/21 SLH 287	2.877	1.877	2.377	3.377
15/21 SLH 288	2.877	1.877	2.877	3.877
15/21 SLH 289	3.877	2.877	2.377	3.377
15/21 SLH 290	3.877	2.877	2.877	3.877

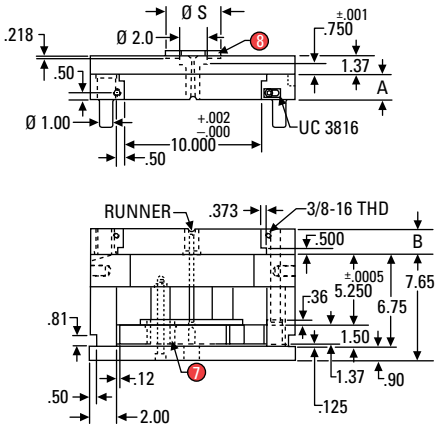


HF Quick-Change H-Style
Frame & Companion Insert Molds





1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.



"H" Style Quick-Change™ Frame

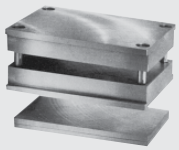
ITEM NO.	A	B
15/25 HF 321	1.877	2.377
15/25 HF 322	2.377	1.877
15/25 HF 323	2.377	2.377
15/25 HF 324	2.377	2.877
15/25 HF 325	2.877	2.377
15/25 HF 326	2.877	2.877
15/25 HF 327	2.877	3.377
15/25 HF 328	2.877	3.877
15/25 HF 329	3.877	3.377
15/25 HF 330	3.877	3.877

Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

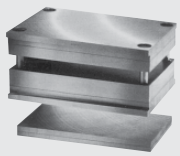
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.



Standard Solid Construction

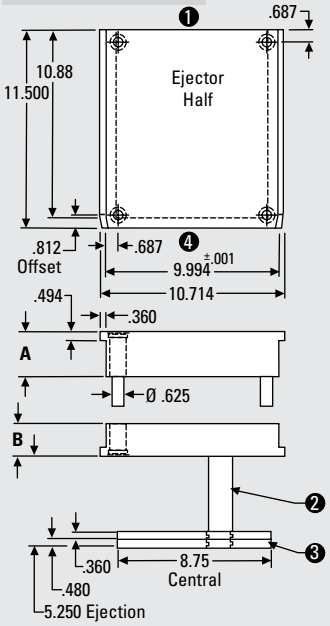
ITEM NO.	A	B
15/25 SSH 221	1.877	2.377
15/25 SSH 222	2.377	1.877
15/25 SSH 223	2.377	2.377
15/25 SSH 224	2.377	2.877
15/25 SSH 225	2.877	2.377
15/25 SSH 226	2.877	2.877
15/25 SSH 227	2.877	3.377
15/25 SSH 228	2.877	3.877
15/25 SSH 229	3.877	3.377
15/25 SSH 230	3.877	3.877



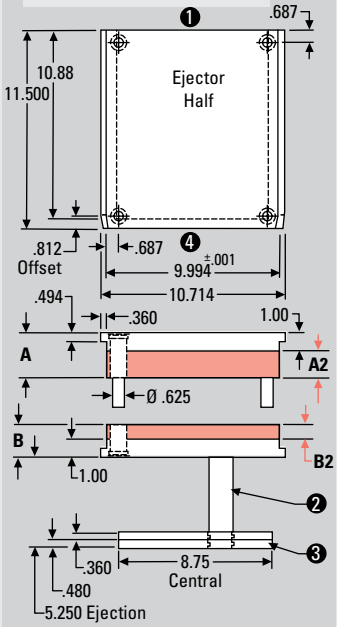
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
15/25 SLH 281	1.877	0.877	1.377	2.377
15/25 SLH 282	2.377	1.377	0.877	1.877
15/25 SLH 283	2.377	1.377	1.377	2.377
15/25 SLH 284	2.377	1.377	1.877	2.877
15/25 SLH 285	2.877	1.877	1.377	2.377
15/25 SLH 286	2.877	1.877	1.877	2.877
15/25 SLH 287	2.877	1.877	2.377	3.377
15/25 SLH 288	2.877	1.877	2.877	3.877
15/25 SLH 289	3.877	2.877	2.377	3.377
15/25 SLH 290	3.877	2.877	2.877	3.877

Standard Solid:
10.0 x 11.5

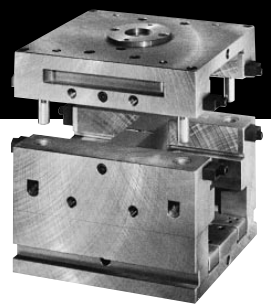


Standard Laminated:
10.0 x 11.5



ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

HF Quick-Change H-Style
Frame & Companion Insert Molds



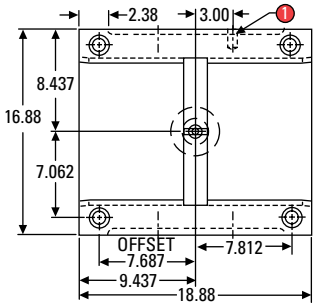
"H" Style Quick-Change™ Frame

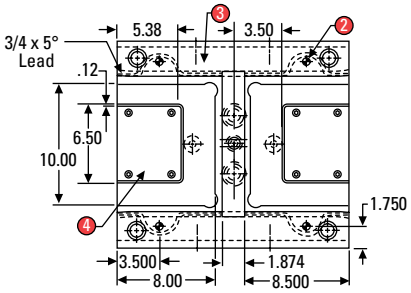
ITEM NO.	A	B
17/19 HF 321	1.877	2.377
17/19 HF 322	2.377	1.877
17/19 HF 323	2.377	2.377
17/19 HF 324	2.377	2.877
17/19 HF 325	2.877	2.377
17/19 HF 326	2.877	2.877
17/19 HF 327	2.877	3.377
17/19 HF 328	2.877	3.877
17/19 HF 329	3.877	3.377
17/19 HF 330	3.877	3.877

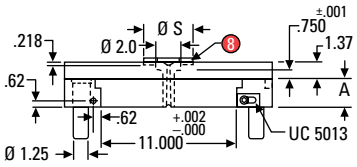
Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

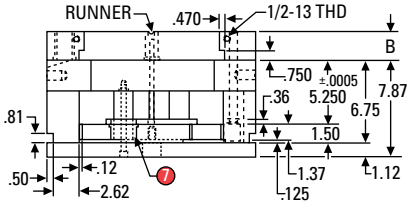
See front of this section for standard and optional frame features.

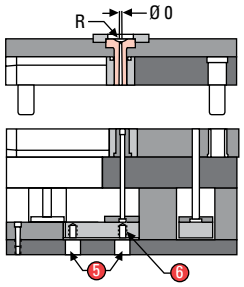
1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.







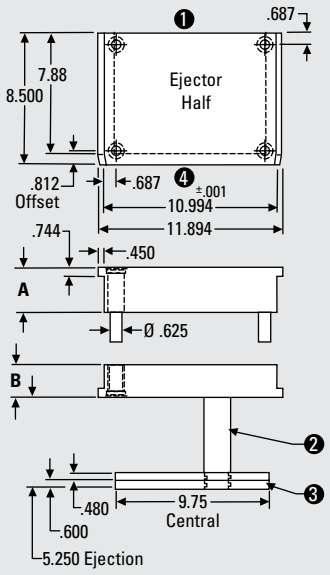




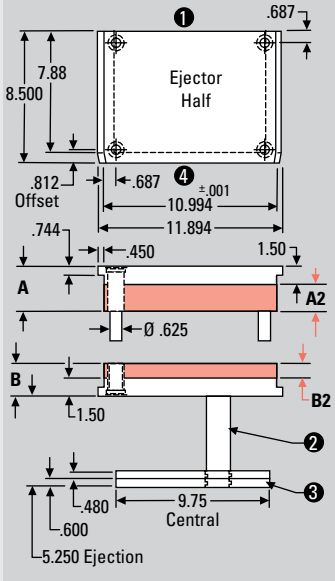
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

Standard Solid: 11.0 x 8.5

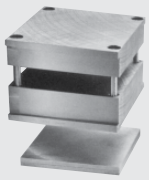


Standard Laminated: 11.0 x 8.5



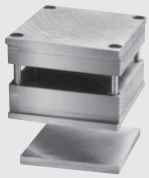
Standard Solid Construction

ITEM NO.	A	B
17/19 SSH 221	1.877	2.377
17/19 SSH 222	2.377	1.877
17/19 SSH 223	2.377	2.377
17/19 SSH 224	2.377	2.877
17/19 SSH 225	2.877	2.377
17/19 SSH 226	2.877	2.877
17/19 SSH 227	2.877	3.377
17/19 SSH 228	2.877	3.877
17/19 SSH 229	3.877	3.377
17/19 SSH 230	3.877	3.877

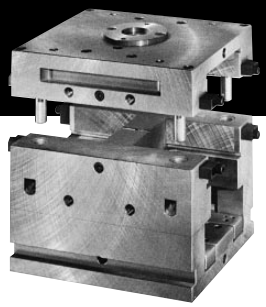


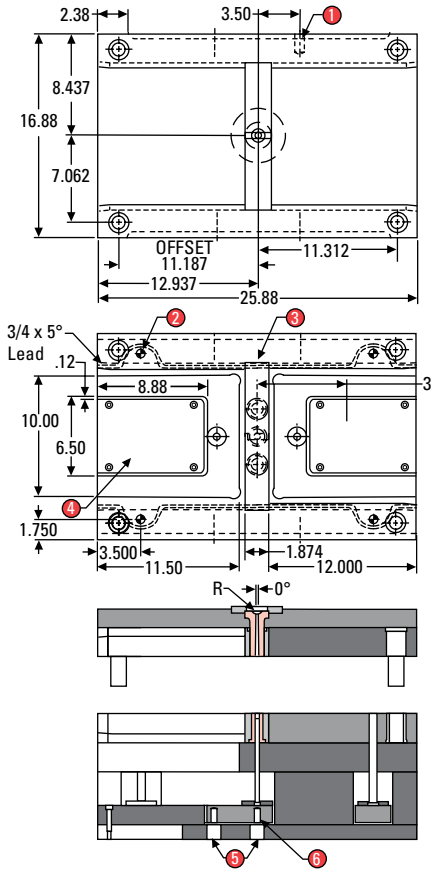
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
17/19 SLH 283	2.377	0.877	0.877	2.377
17/19 SLH 284	2.377	0.877	1.377	2.877
17/19 SLH 285	2.877	1.377	0.877	2.377
17/19 SLH 286	2.877	1.377	1.377	2.877
17/19 SLH 287	2.877	1.377	1.877	3.377
17/19 SLH 288	2.877	1.377	2.377	3.877
17/19 SLH 289	3.877	2.377	1.877	3.377
17/19 SLH 290	3.877	2.377	2.377	3.877

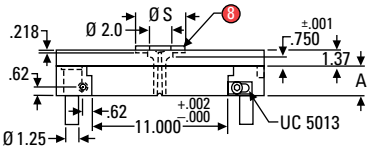


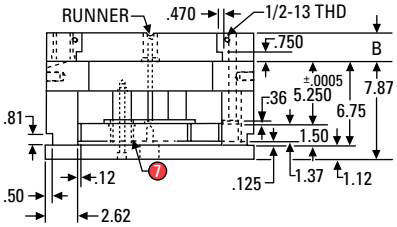
HF Quick-Change H-Style
Frame & Companion Insert Molds





1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.





"H" Style Quick-Change™ Frame

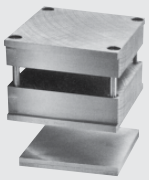
ITEM NO.	A	B
17/26 HF 321	1.877	2.377
17/26 HF 322	2.377	1.877
17/26 HF 323	2.377	2.377
17/26 HF 324	2.377	2.877
17/26 HF 325	2.877	2.377
17/26 HF 326	2.877	2.877
17/26 HF 327	2.877	3.377
17/26 HF 328	2.877	3.877
17/26 HF 329	3.877	3.377
17/26 HF 330	3.877	3.877

Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

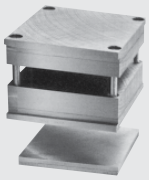
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.



Standard Solid Construction

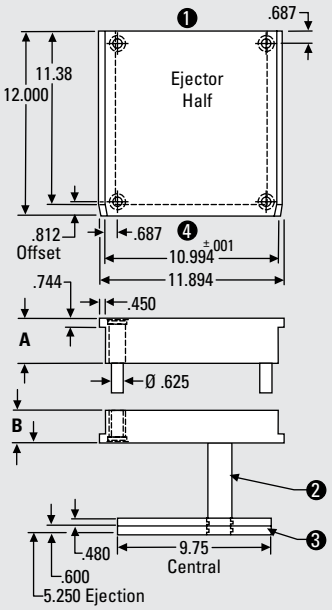
ITEM NO.	A	B
17/26 SSH 221	1.877	2.377
17/26 SSH 222	2.377	1.877
17/26 SSH 223	2.377	2.377
17/26 SSH 224	2.377	2.877
17/26 SSH 225	2.877	2.377
17/26 SSH 226	2.877	2.877
17/26 SSH 227	2.877	3.377
17/26 SSH 228	2.877	3.877
17/26 SSH 229	3.877	3.377
17/26 SSH 230	3.877	3.877



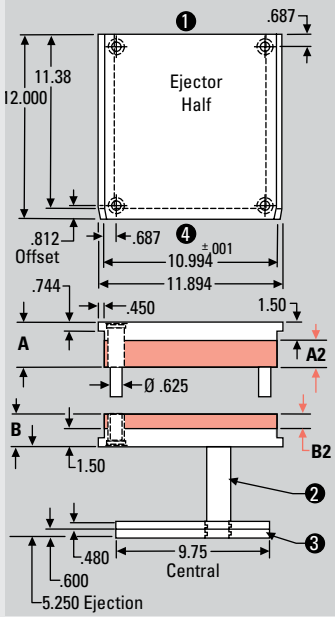
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
17/26 SLH 283	2.377	0.877	0.877	2.377
17/26 SLH 284	2.377	0.877	1.377	2.877
17/26 SLH 285	2.877	1.377	0.877	2.377
17/26 SLH 286	2.877	1.377	1.377	2.877
17/26 SLH 287	2.877	1.377	1.877	3.377
17/26 SLH 288	2.877	1.377	2.377	3.877
17/26 SLH 289	3.877	2.377	1.877	3.377
17/26 SLH 290	3.877	2.377	2.377	3.877

Standard Solid:
11.0 x 12.0

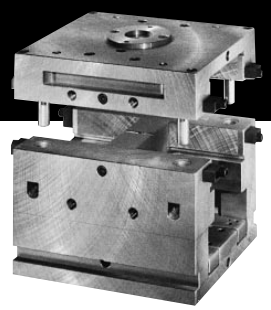


Standard Laminated:
11.0 x 12.0

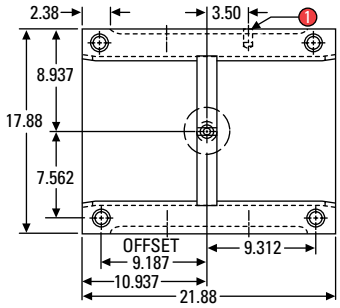


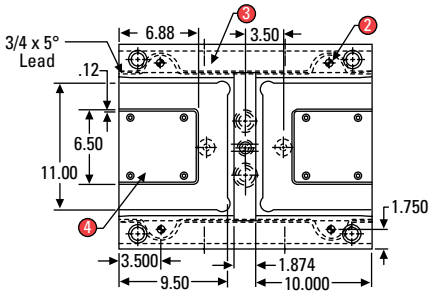
ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

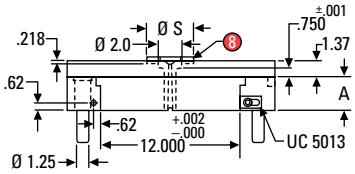
HF Quick-Change H-Style
Frame & Companion Insert Molds

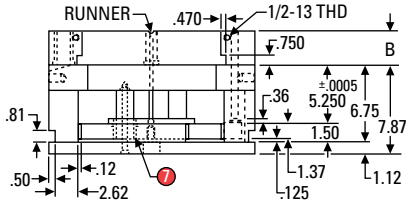


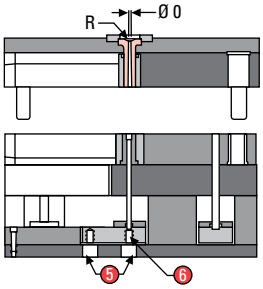
1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.











"H" Style Quick-Change™ Frame

ITEM NO.	A	B
18/22 HF 321	1.877	2.377
18/22 HF 322	2.377	1.877
18/22 HF 323	2.377	2.377
18/22 HF 324	2.377	2.877
18/22 HF 325	2.877	2.377
18/22 HF 326	2.877	2.877
18/22 HF 327	2.877	3.377
18/22 HF 328	2.877	3.877
18/22 HF 329	3.877	3.377
18/22 HF 330	3.877	3.877

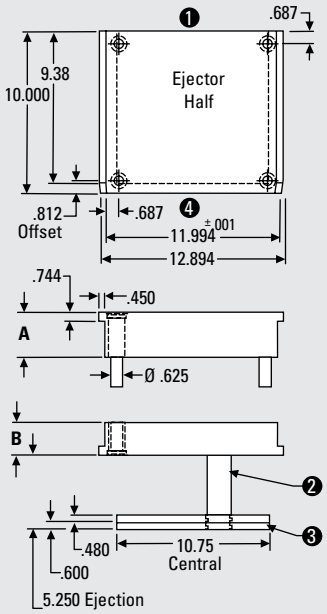
Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

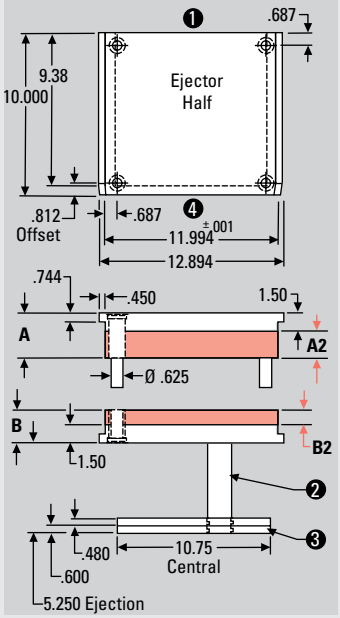
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

Standard Solid: 12.0 x 10.0

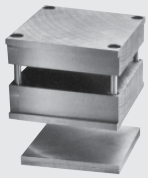


Standard Laminated: 12.0 x 10.0



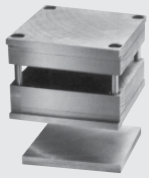
Standard Solid Construction

ITEM NO.	A	B
18/22 SSH 221	1.877	2.377
18/22 SSH 222	2.377	1.877
18/22 SSH 223	2.377	2.377
18/22 SSH 224	2.377	2.877
18/22 SSH 225	2.877	2.377
18/22 SSH 226	2.877	2.877
18/22 SSH 227	2.877	3.377
18/22 SSH 228	2.877	3.877
18/22 SSH 229	3.877	3.377
18/22 SSH 230	3.877	3.877

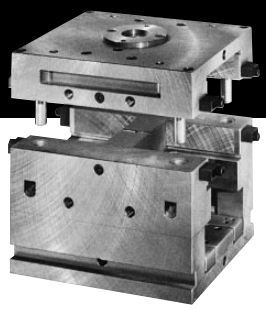


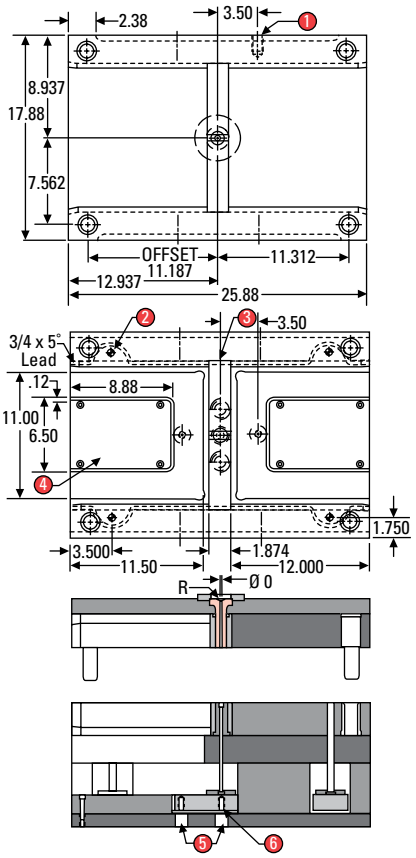
Standard Laminated Construction

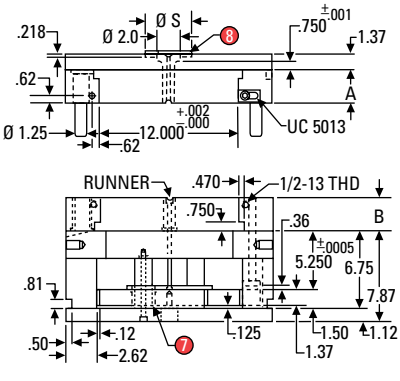
ITEM NO.	A	A2	B2	B
18/22 SLH 283	2.377	0.877	0.877	2.377
18/22 SLH 284	2.377	0.877	1.377	2.877
18/22 SLH 285	2.877	1.377	0.877	2.377
18/22 SLH 286	2.877	1.377	1.377	2.877
18/22 SLH 287	2.877	1.377	1.877	3.377
18/22 SLH 288	2.877	1.377	2.377	3.877
18/22 SLH 289	3.877	2.377	1.877	3.377
18/22 SLH 290	3.877	2.377	2.377	3.877



HF Quick-Change H-Style
Frame & Companion Insert Molds







1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.

"H" Style Quick-Change™ Frame

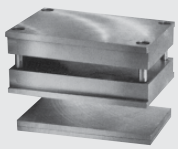
ITEM NO.	A	B
18/26 HF 321	1.877	2.377
18/26 HF 322	2.377	1.877
18/26 HF 323	2.377	2.377
18/26 HF 324	2.377	2.877
18/26 HF 325	2.877	2.377
18/26 HF 326	2.877	2.877
18/26 HF 327	2.877	3.377
18/26 HF 328	2.877	3.877
18/26 HF 329	3.877	3.377
18/26 HF 330	3.877	3.877

Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

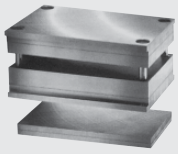
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.



Standard Solid Construction

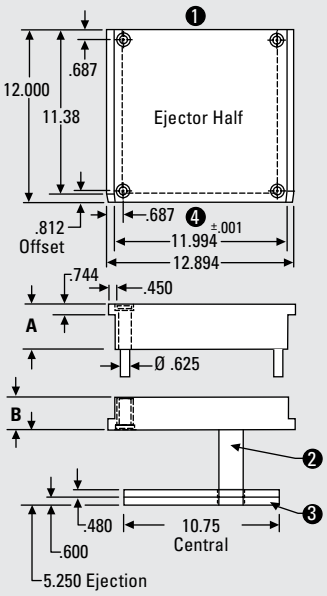
ITEM NO.	A	B
18/26 SSH 221	1.877	2.377
18/26 SSH 222	2.377	1.877
18/26 SSH 223	2.377	2.377
18/26 SSH 224	2.377	2.877
18/26 SSH 225	2.877	2.377
18/26 SSH 226	2.877	2.877
18/26 SSH 227	2.877	3.377
18/26 SSH 228	2.877	3.877
18/26 SSH 229	3.877	3.377
18/26 SSH 230	3.877	3.877



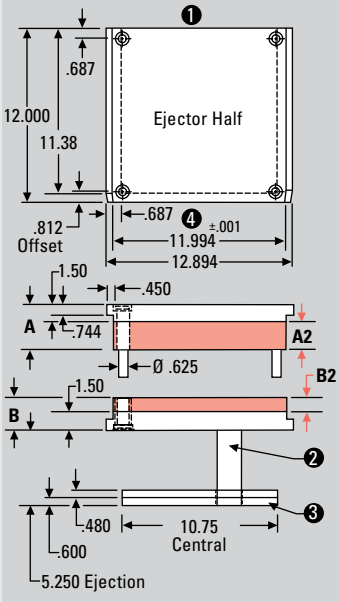
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
18/26 SLH 283	2.377	0.877	0.877	2.377
18/26 SLH 284	2.377	0.877	1.377	2.877
18/26 SLH 285	2.877	1.377	0.877	2.377
18/26 SLH 286	2.877	1.377	1.377	2.877
18/26 SLH 287	2.877	1.377	1.877	3.377
18/26 SLH 288	2.877	1.377	2.377	3.877
18/26 SLH 289	3.877	2.377	1.877	3.377
18/26 SLH 290	3.877	2.377	2.377	3.877

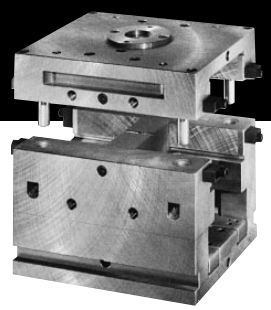
Standard Solid:
12.0 x 12.0



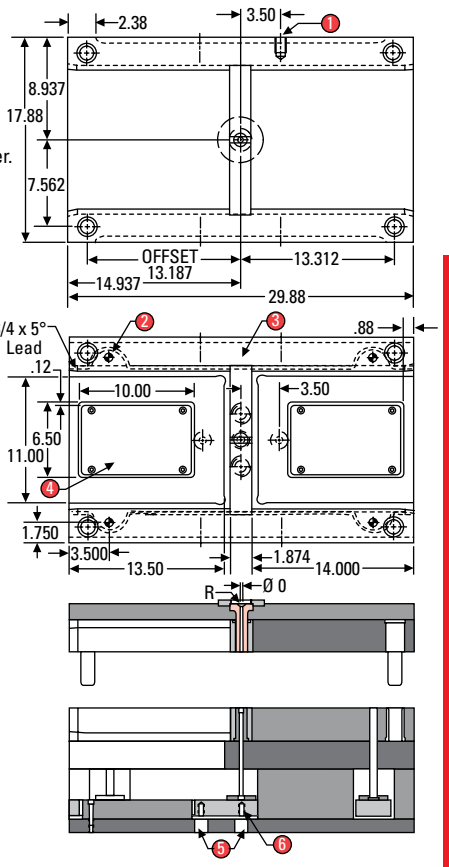
Standard Laminated:
12.0 x 12.0



HF Quick-Change H-Style
Frame & Companion Insert Molds



1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Waterlines in center sections optional (quotation on request).
4. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
5. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
6. 1/2-13 THD at knockout locations standard as shown.
7. Positive ejector plate guidance.
8. Locking locating ring supplied standard as shown.



"H" Style Quick-Change™ Frame

ITEM NO.	A	B
18/30 HF 321	1.877	2.377
18/30 HF 322	2.377	1.877
18/30 HF 323	2.377	2.377
18/30 HF 324	2.377	2.877
18/30 HF 325	2.877	2.377
18/30 HF 326	2.877	2.877
18/30 HF 327	2.877	3.377
18/30 HF 328	2.877	3.877
18/30 HF 329	3.877	3.377
18/30 HF 330	3.877	3.877

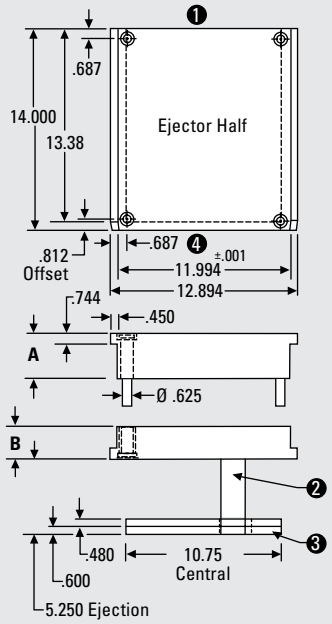
Ordering and installing information for H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

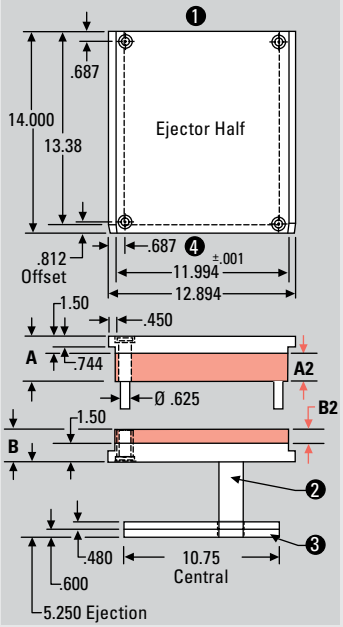
Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

Standard Solid: 12.0 x 14.0

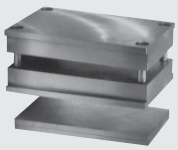


Standard Laminated: 12.0 x 14.0



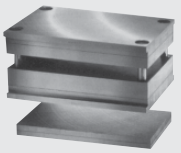
Standard Solid Construction

ITEM NO.	A	B
18/30 SSH 221	1.877	2.377
18/30 SSH 222	2.377	1.877
18/30 SSH 223	2.377	2.377
18/30 SSH 224	2.377	2.877
18/30 SSH 225	2.877	2.377
18/30 SSH 226	2.877	2.877
18/30 SSH 227	2.877	3.377
18/30 SSH 228	2.877	3.877
18/30 SSH 229	3.877	3.377
18/30 SSH 230	3.877	3.877

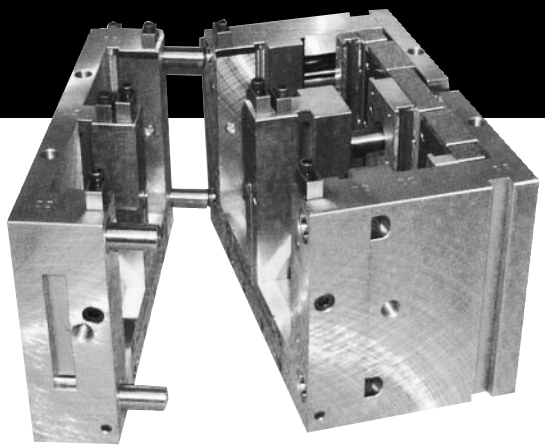


Standard Laminated Construction

ITEM NO.	A	A2	B2	B
18/30 SLH 283	2.377	0.877	0.877	2.377
18/30 SLH 284	2.377	0.877	1.377	2.877
18/30 SLH 285	2.877	1.377	0.877	2.377
18/30 SLH 286	2.877	1.377	1.377	2.877
18/30 SLH 287	2.877	1.377	1.877	3.377
18/30 SLH 288	2.877	1.377	2.377	3.877
18/30 SLH 289	3.877	2.377	1.877	3.377
18/30 SLH 290	3.877	2.377	2.377	3.877



E-Style
Mold Frame

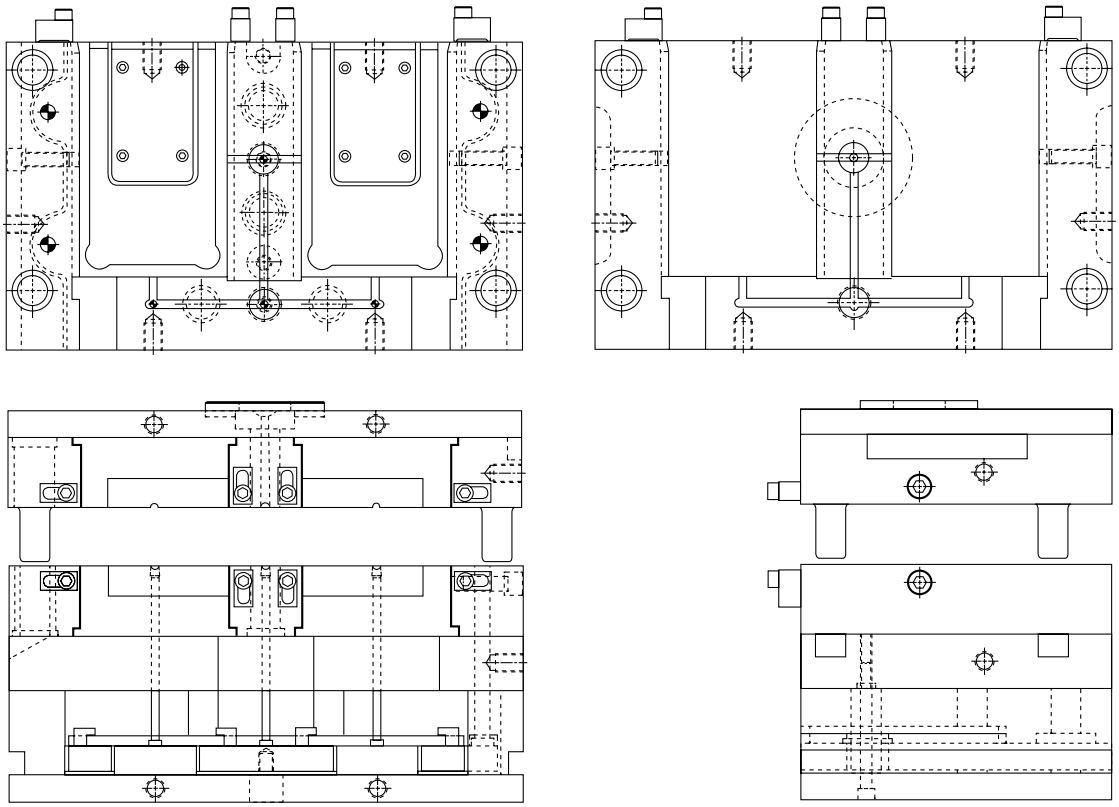


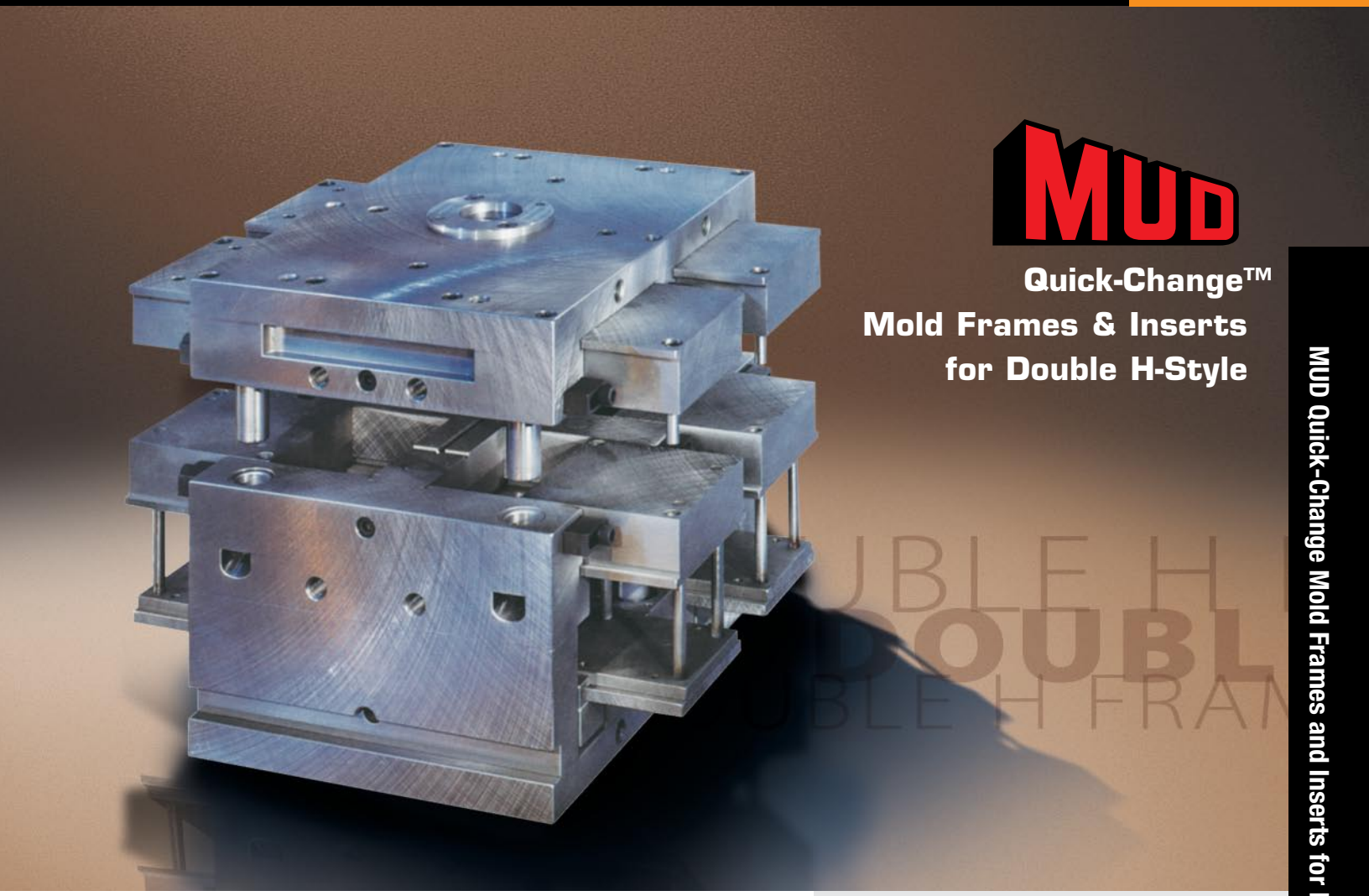
E-Style Mold Frame benefits and options

- Accepts the same size insert molds as the MUD H style frame
- Features top loading of inserts from one overhead location — an easier, safer method of loading large, heavy insert molds than horizontal loading
- Accepts two standard MUD insert molds
- Offers the same available options as the MUD H style frame
- Optional runner system allows standard gating to the side or end of the molds controlled by a simple turn of runner shut-off at the sprue injection site
- Optional temperature control lines in the frame
- Optional spring loading of master ejector plate system
- Optional positive return rails
- Optional hot sprue bushings
- Optional insulation board
- All E-Style Frames are special order (quotation on request)

Standard "E" Style Mold Frame Sizes with their Corresponding "H" Frame Interchangeable Insert

E FRAME	H FRAME INSERT
18/11 EF	10/18 HF
20/11 EF	11/18 HF
22/11 EF	12/19 HF
24/11 EF	13/19 HF
24/13 EF	13/23 HF
26/11 EF	14/19 HF
26/12 EF	14/21 HF
26/14 EF	14/25 HF
28/11 EF	15/19 HF
28/12 EF	15/21 HF
28/14 EF	15/25 HF
31/12 EF	17/19 HF
31/15 EF	17/26 HF
33/13 EF	18/22 HF
33/15 EF	18/26 HF
33/17 EF	18/30 HF





MUD

Quick-Change™
Mold Frames & Inserts
for Double H-Style

Frame Ordering Information

- Item number and description (see tables on respective page)
- "S" diameter of locating ring supplied standard 3.990" (see illustrations on respective page)
- Sprue specification "R" spherical radius of sprue bushing furnished 1/2" or 3/4" unless otherwise shown
- "O" small diameter of sprue bushing orifice furnished 5/32", 7/32", 9/32" or 11/32", unless otherwise shown
- Optional locating rings available on request
- Knockout hole location standard as shown (others optional)
- Runner size and description
- Cutouts in master ejector plate for insert mold pillar posts standard as shown on respective page
- Clamp slots standard unless otherwise shown on respective page
- Mounting holes optional unless shown on respective page
- Additional ejection height available (quotation on request)
- Frames standard in prehard steel with hardened steel center section; prehard stainless and other steel grades available (quotation on request)

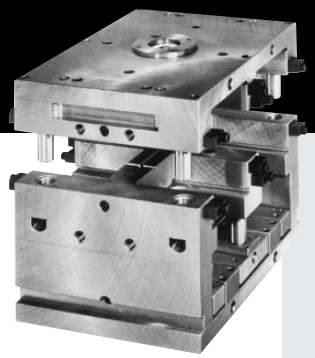
Insert Mold Ordering Information

- Item number and description (see tables on respective page)
- Steel grades – 1020, 4130 prehard, P-20 prehard and H-13: 420 stainless and other grades on request
- H-13 and other tool steel insert molds supplied .010 oversize on outside dimensions, .010 – .013 oversize on thickness, and .025 – .035 undersize in the pin and bushing holes for machining after required heat treating
- "A" and "B" dimensions supplied .004 – .007 oversize unless otherwise specified

NOTE: The "A" and "B" dimensions for insert mold must match those of the companion Double H frame.

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

TOC



Quick-Change Double H frame options

- Spring-loaded master ejector plates
- Interlocking ejector rails
- Additional height on ejector rails
- Early return on ejector system
- Special knockout hole locations
- Runner shutoffs
- Choice of runner configuration
- Frame spacer bars
- Insulation boards
- Additional retainer slot and spacer plate
- Water lines for center sections
- Water lines for rails and plates
- Machining for cartridge heaters
- Manifold for hot runner operation
- Hot sprue bushings
- Armorclad plating*
- Electroless nickel plating

* "Armorclad" is a registered trademark of Armorclad, Inc.

NOTE: Specifications subject to change without prior notice.

Quick-Change Double H frame features and applications

This MUD® Quick-Change frame series features a fixed center runner bar for simultaneous molding with four standard-style companion insert molds. The series offers cost reduction benefits and time-saving advantages similar to the U frame and H frame series. It also provides comparable design flexibility.

Each of the four companion insert molds for Double H frames can be changed individually and independently. Dummy inserts or runner shutoffs are available for molding with fewer than four insert molds. These features give the Double H frame series maximum versatility for tailoring production to inventory requirements including just-in-time scheduling.

Double H frames also offer special advantages for high volume production. Simultaneous molding with four insert molds quadruples quantities for each cycle. Also, there is virtually no need to interrupt production for maintenance or repair since inexpensive backup insert molds can be installed quickly.

Double H frames are supplied with hardened center runner bars and replaceable sprue puller pin assemblies. Each frame includes a locking locating ring and an integral master ejector plate with cutouts to allow installation of insert mold pillar posts. The master ejector plate is also supplied with positive aligning guide posts, bushings and grease fittings for a guided ejector system.

Options include interlocking ejector rails to lock the insert mold's ejector system to the master ejector plate. The master ejector plate can be spring loaded for returning the insert mold's ejector system. It can also be tied to the machine's hydraulic knockout system for stroking the insert mold's ejector assembly.

Other options include water lines in the center bar or other locations, insulation boards, runner shutoffs and hot sprue bushings. Frame spacer bars to accommodate shorter, more economical companion insert molds are available for frames designed for longer sizes. Additional retainer slots and a spacer plate in the frame's cavity half allow the frame to accept insert molds with different thicknesses.

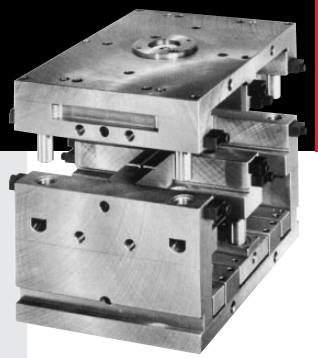
Quick-Change Hot Runner Molding

All of the advantages of the MUD Quick-Change Concept can be added to a hot runner molding system with the addition of a manifold to the Double H frame. Both the frame and the hot runner system remain in the molding machine. Only the insert molds are changed to produce new parts, just as in other Quick-Change applications. This means faster changeovers, lower tooling costs and greater scheduling flexibility for hot runner molding.

Steel specifications: Standard frames are produced in prehard steel (285-325 Brinell) with hardened center sections. Frames are also available in prehard stainless, 420 stainless, H-13 and other grades on request. Armorclad* Number One can be specified.

* "Armorclad" is a registered trademark of Armorclad, Inc.

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Companion insert mold features and applications

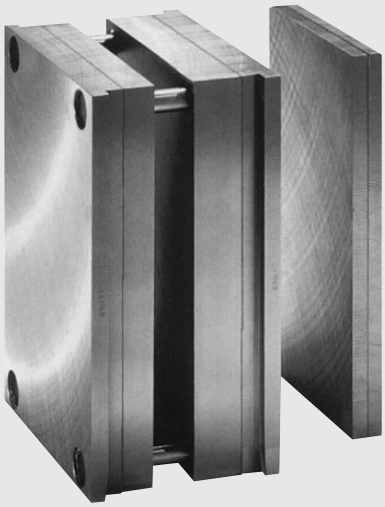
Standard style companion insert molds for Double H frames are available in solid or laminated construction and include three- and four-plate designs.

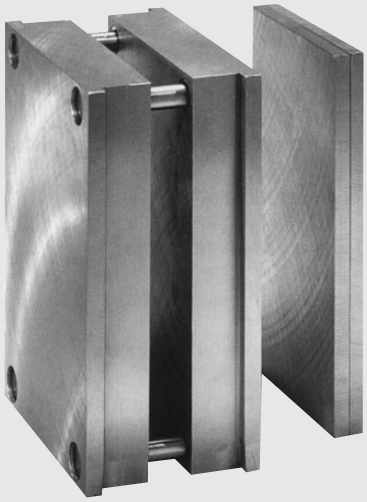
Insert mold options include machining for stripper plates, sleeve ejection, return pins and pillar posts. Machining for cartridge heater holes, water lines, taper locks, rough and finished custom pockets and other special applications is available.

Design options for insert molds include spring loading, early return, unscrewing mechanisms, hot runner molding and machining for cam slides. Insert molds can be ordered with interlocking ejector plates for positive return and stroking action when used with frames having an interlocking ejector system.

Steel specifications: Companion insert molds are available in 1020, 4130 prehard, P-20 prehard and H-13. 420 stainless and other grades are available on request. Armorclad* Number One can be specified.

* "Armorclad" is a registered trademark of Armorclad, Inc.





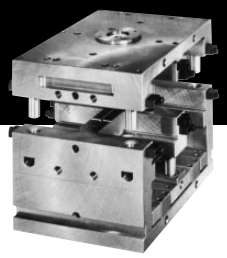
Companion insert mold options

- Solid or laminated construction
- Stripper plates
- Interlocking ejector plates
- Return pins
- Pillar posts
- Sleeve ejection
- Machining for taper locks
- Machining for cartridge heater holes
- Machining for water lines
- Rough cut pockets
- Finished custom pockets
- Machining for special applications
- Armorclad plating*

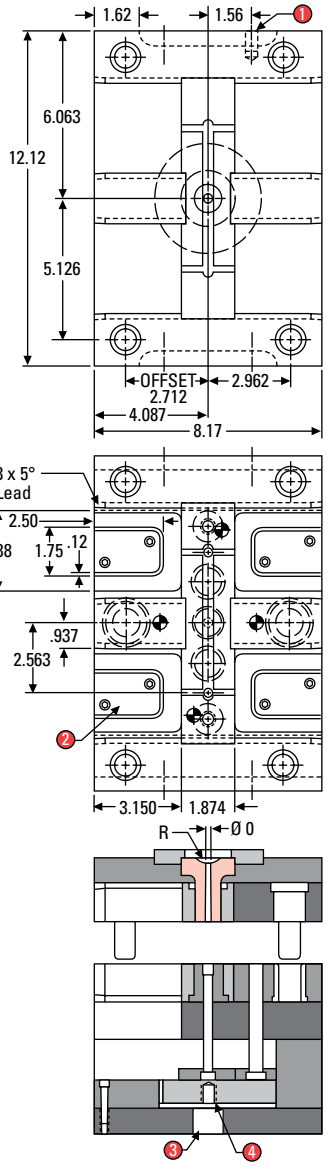
* "Armorclad" is a registered trademark of Armorclad, Inc.

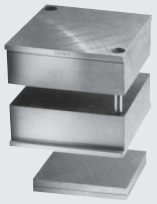
NOTE: Specifications subject to change without prior notice.



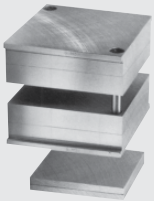


DF Quick-Change DH-Style
Frame & Companion Insert Molds



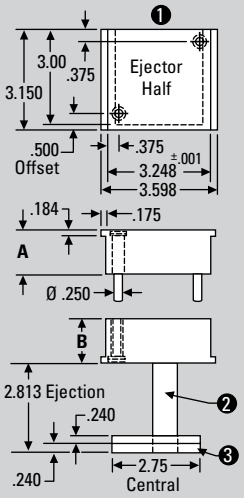


STANDARD SOLID INSERT MOLD

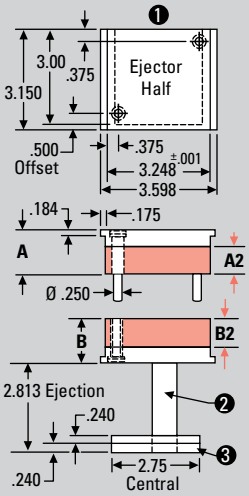


STANDARD LAMINATED INSERT MOLD

Standard Solid: 3.25 x 3.15



Standard Laminated: 3.25 x 3.15



Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).

Double "H" Style Quick-Change™ Frame

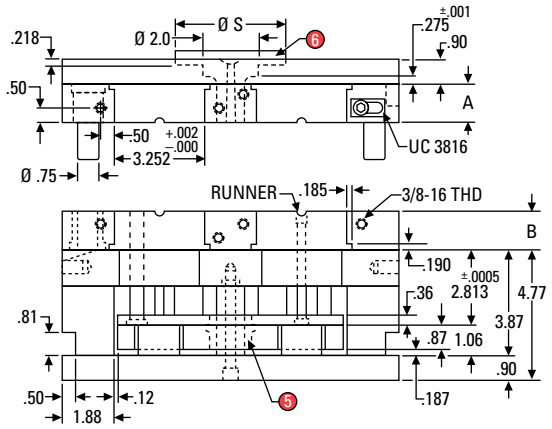
ITEM NO.	A	B
12/08 DF 321	1.377	1.377
12/08 DF 322	1.877	1.377
12/08 DF 323	1.877	1.877
12/08 DF 324	2.377	1.877

Standard Laminated Construction

ITEM NO.	A	A2	B2	B
12/08 SLD 281	1.377	0.877	0.877	1.377
12/08 SLD 282	1.877	1.377	0.877	1.377
12/08 SLD 283	1.877	1.377	1.377	1.877
12/08 SLD 284	2.377	1.877	1.377	1.877

Standard Solid Construction

ITEM NO.	A	B
12/08 SSD 221	1.377	1.377
12/08 SSD 222	1.877	1.377
12/08 SSD 223	1.877	1.877
12/08 SSD 224	2.377	1.877



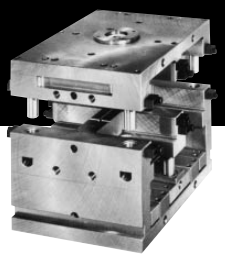
1. 1/2-13 handling holes supplied standard as shown.
2. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
3. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
4. 1/2-13 THD at knockout locations standard as shown.
5. Positive ejector plate guidance.
6. Locking locating ring supplied standard as shown.

Ordering and installing information for Double H frame and companion insert molds can be found in the front of this section.

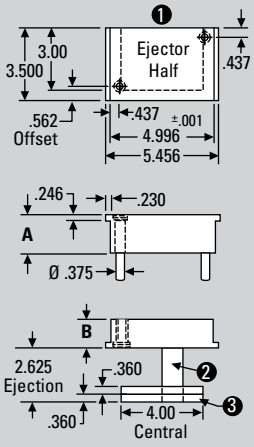
See front of this section for standard and optional frame features.

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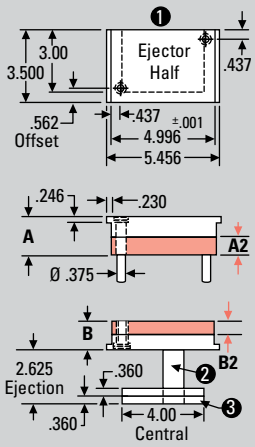
DF Quick-Change DH-Style
Frame & Companion Insert Molds

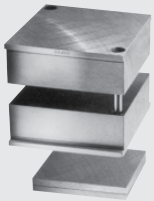


Standard Solid:
5.0 x 3.5

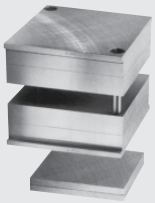


Standard Laminated:
5.0 x 3.5

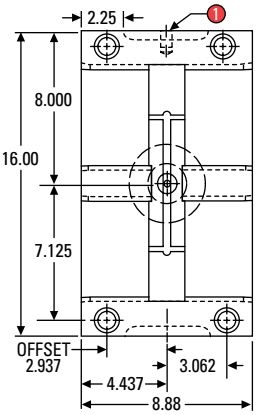


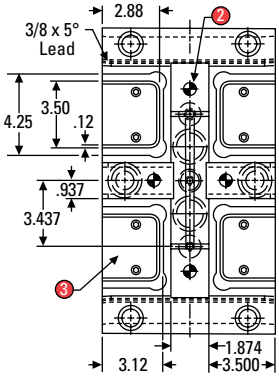


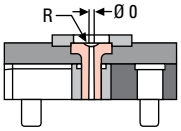
STANDARD SOLID INSERT MOLD

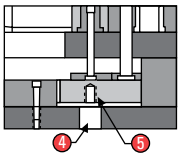


STANDARD LAMINATED INSERT MOLD









Double "H" Style Quick-Change™ Frame

ITEM NO.	A	B
16/09 DF 321	1.877	1.377
16/09 DF 322	1.877	1.877
16/09 DF 323	2.377	1.877

Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).

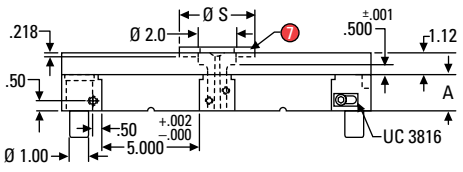
Standard Solid Construction

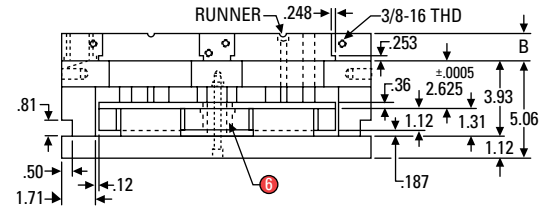
ITEM NO.	A	B
16/09 SSD 221	1.877	1.377
16/09 SSD 222	1.877	1.877
16/09 SSD 223	2.377	1.877

Standard Laminated Construction

ITEM NO.	A	A2	B2	B
16/09 SLD 281	1.877	0.877	0.877	1.377
16/09 SLD 282	1.877	0.877	0.877	1.877
16/09 SLD 283	2.377	1.377	0.877	1.877

1. 5/8-11 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
4. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
5. 1/2-13 THD at knockout locations standard as shown.
6. Positive ejector plate guidance.
7. Locking locating ring supplied standard as shown.

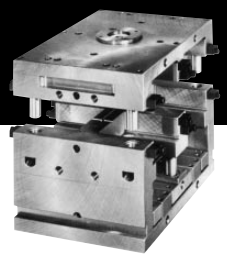


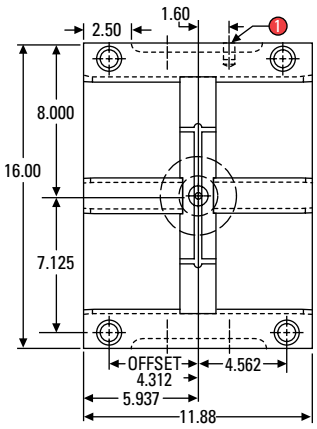


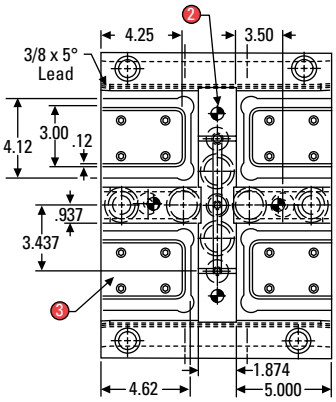
Ordering and installing information for Double H frame and companion insert molds can be found in the front of this section.

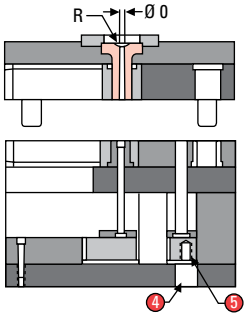
See front of this section for standard and optional frame features.

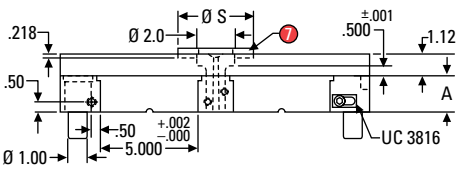
DF Quick-Change DH-Style
Frame & Companion Insert Molds

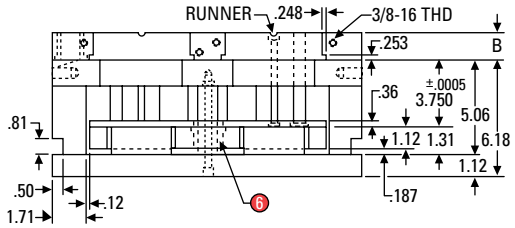


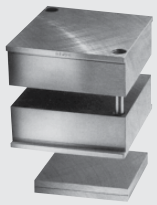




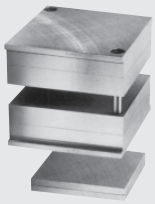






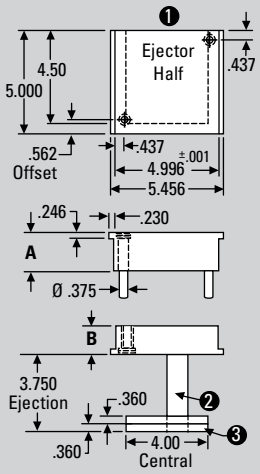


STANDARD SOLID INSERT MOLD

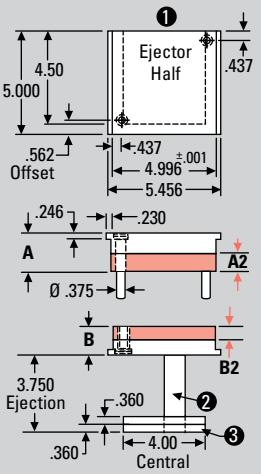


STANDARD LAMINATED INSERT MOLD

Standard Solid: 5.0 x 5.0



Standard Laminated: 5.0 x 5.0



Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).

Double "H" Style Quick-Change™ Frame

ITEM NO.	A	B
16/12 DF 321	1.877	1.377
16/12 DF 322	1.877	1.877
16/12 DF 323	1.877	2.377
16/12 DF 324	2.377	1.877
16/12 DF 325	2.377	2.377

Standard Laminated Construction

ITEM NO.	A	A2	B2	B
16/12 SLD 281	1.877	0.877	0.877	1.377
16/12 SLD 282	1.877	0.877	0.877	1.877
16/12 SLD 283	1.877	0.877	1.377	2.377
16/12 SLD 284	2.377	1.377	0.877	1.877
16/12 SLD 285	2.377	1.377	1.377	2.377

Standard Solid Construction

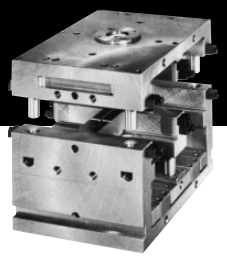
ITEM NO.	A	B
16/12 SSD 221	1.877	1.377
16/12 SSD 222	1.877	1.877
16/12 SSD 223	1.877	2.377
16/12 SSD 224	2.377	1.877
16/12 SSD 225	2.377	2.377

1. 5/8-11 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
4. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
5. 1/2-13 THD at knockout locations standard as shown.
6. Positive ejector plate guidance.
7. Locking locating ring supplied standard as shown.

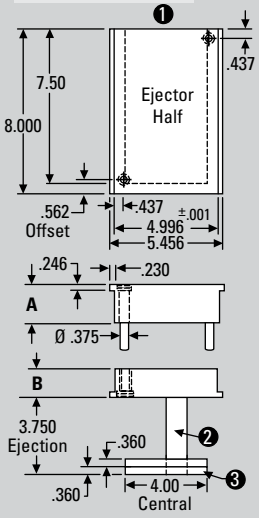
Ordering and installing information for Double H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

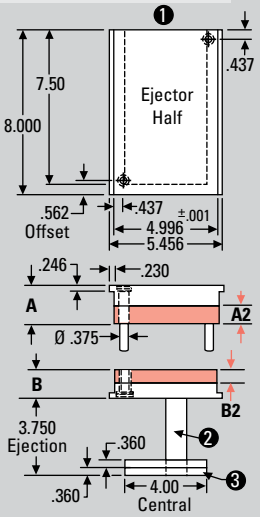
DF Quick-Change DH-Style
Frame & Companion Insert Molds

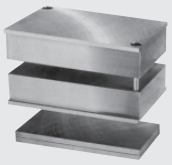


Standard Solid:
5.0 x 8.0

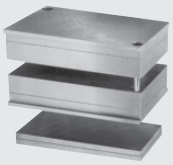


Standard Laminated:
5.0 x 8.0

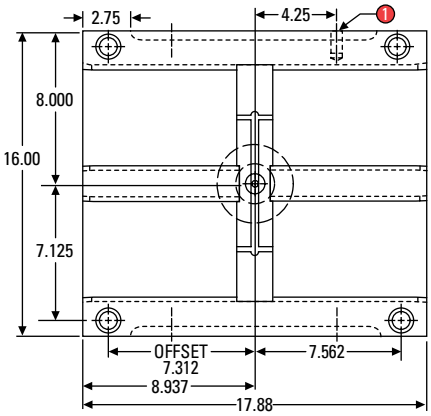


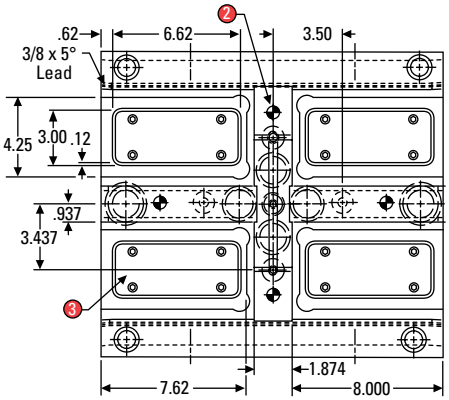


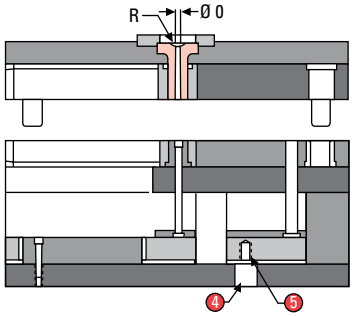
STANDARD SOLID INSERT MOLD



STANDARD LAMINATED INSERT MOLD







Double "H" Style Quick-Change™ Frame

ITEM NO.	A	B
16/18 DF 321	1.877	1.377
16/18 DF 322	1.877	1.877
16/18 DF 323	1.877	2.377
16/18 DF 324	2.377	1.877
16/18 DF 325	2.377	2.377
16/18 DF 326	2.377	2.877
16/18 DF 327	2.877	2.377
16/18 DF 328	2.877	2.877

Companion Interchangeable Insert Molds

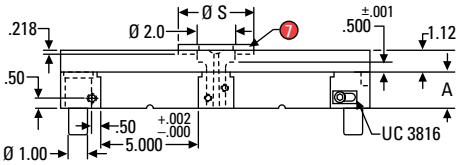
1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).

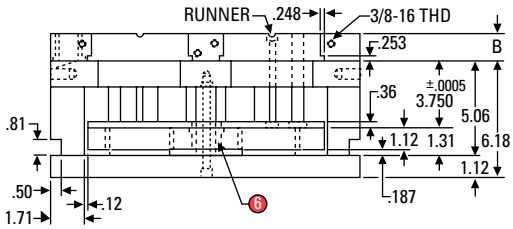
Standard Solid Construction

ITEM NO.	A	B
16/18 SSD 221	1.877	1.377
16/18 SSD 222	1.877	1.877
16/18 SSD 223	1.877	2.377
16/18 SSD 224	2.377	1.877
16/18 SSD 225	2.377	2.377
16/18 SSD 226	2.377	2.877
16/18 SSD 227	2.877	2.377
16/18 SSD 228	2.877	2.877

Standard Laminated Construction

ITEM NO.	A	A2	B2	B
16/18 SLD 281	1.877	0.877	0.877	1.377
16/18 SLD 282	1.877	0.877	0.877	1.877
16/18 SLD 283	1.877	0.877	1.377	2.377
16/18 SLD 284	2.377	1.377	0.877	1.877
16/18 SLD 285	2.377	1.377	1.377	2.377
16/18 SLD 286	2.377	1.377	1.877	2.877
16/18 SLD 287	2.877	1.877	1.377	2.377
16/18 SLD 288	2.877	1.877	1.877	2.877

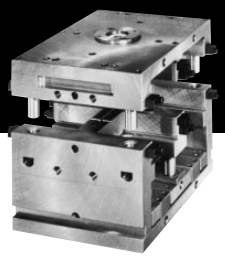




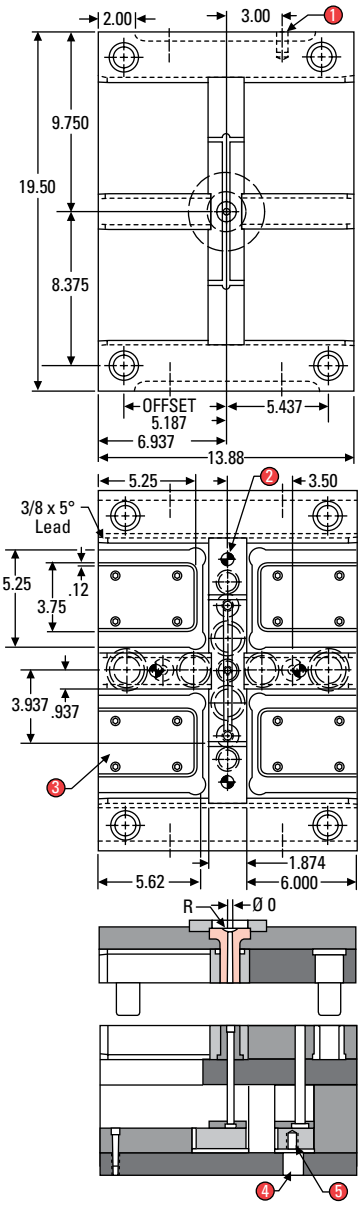
1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
4. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
5. 1/2-13 THD at knockout locations standard as shown.
6. Positive ejector plate guidance.
7. Locking locating ring supplied standard as shown.

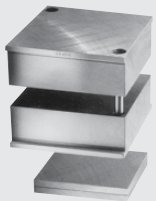
Ordering and installing information for Double H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

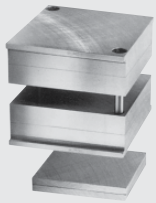


DF Quick-Change DH-Style
Frame & Companion Insert Molds



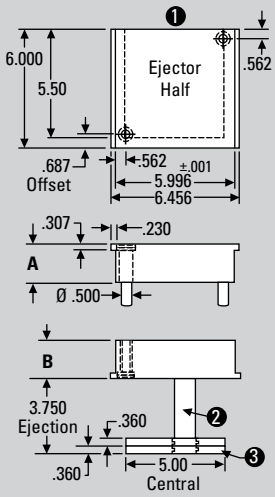


STANDARD SOLID INSERT MOLD

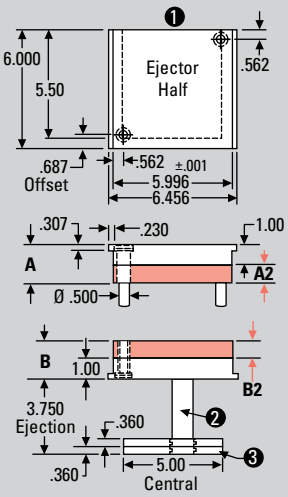


STANDARD LAMINATED INSERT MOLD

Standard Solid: 6.0 x 6.0



Standard Laminated: 6.0 x 6.0



Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).

Double "H" Style Quick-Change™ Frame

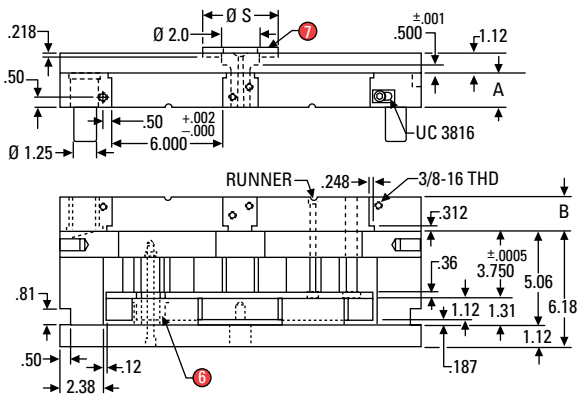
ITEM NO.	A	B
20/14 DF 322	1.877	1.877
20/14 DF 323	2.377	1.877
20/14 DF 324	2.377	2.377
20/14 DF 325	2.877	2.377
20/14 DF 326	2.877	2.877

Standard Laminated Construction

ITEM NO.	A	A2	B2	B
20/14 SLD 282	1.877	0.877	0.877	1.877
20/14 SLD 283	2.377	1.377	0.877	1.877
20/14 SLD 284	2.377	1.377	1.377	2.377
20/14 SLD 285	2.877	1.877	1.377	2.377
20/14 SLD 286	2.877	1.877	1.877	2.877

Standard Solid Construction

ITEM NO.	A	B
20/14 SSD 222	1.877	1.877
20/14 SSD 223	2.377	1.877
20/14 SSD 224	2.377	2.377
20/14 SSD 225	2.877	2.377
20/14 SSD 226	2.877	2.877

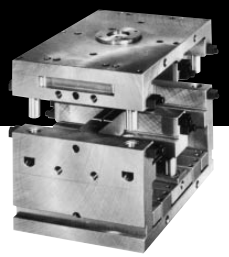


1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
4. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
5. 1/2-13 THD at knockout locations standard as shown.
6. Positive ejector plate guidance.
7. Locking locating ring supplied standard as shown.

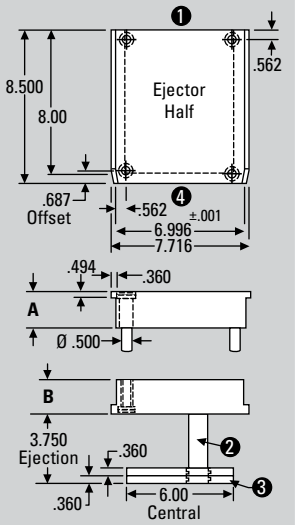
Ordering and installing information for Double H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.

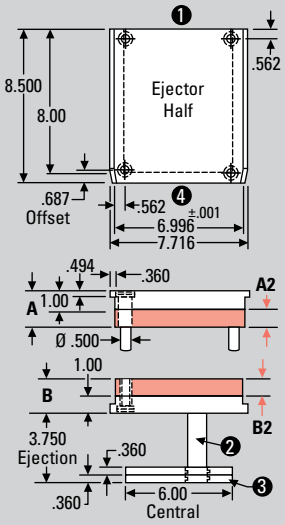
DF Quick-Change DH-Style
Frame & Companion Insert Molds

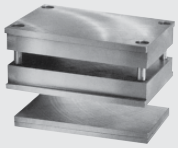


Standard Solid:
7.0 x 8.5

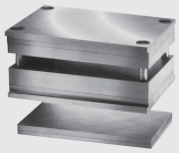


Standard Laminated:
7.0 x 8.5

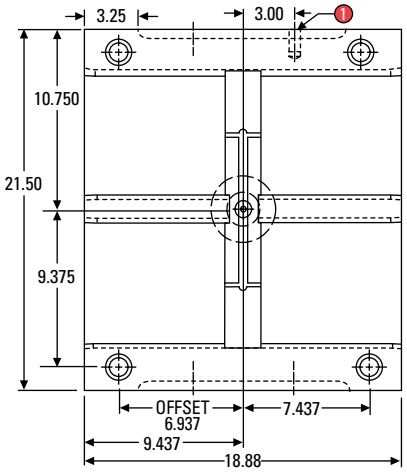


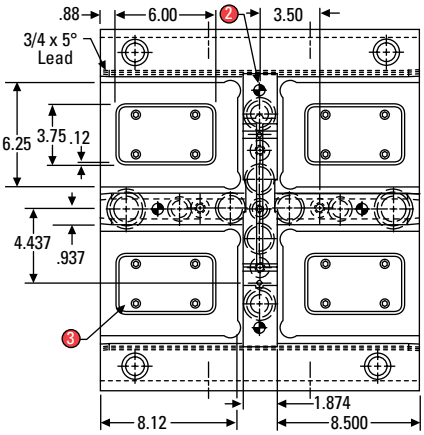


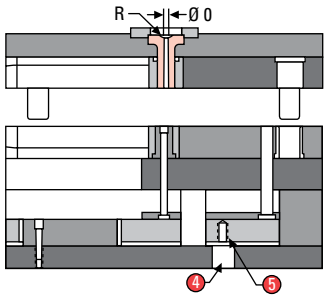
STANDARD SOLID INSERT MOLD



STANDARD LAMINATED INSERT MOLD







Double "H" Style Quick-Change™ Frame

ITEM NO.	A	B
22/19 DF 321	1.877	1.877
22/19 DF 322	1.877	2.377
22/19 DF 323	2.377	1.877
22/19 DF 324	2.377	2.377

Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

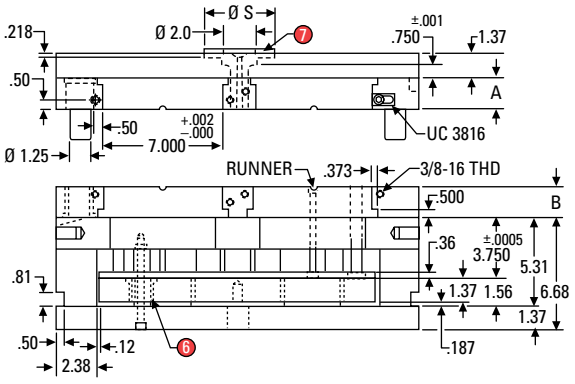
Standard Solid Construction

ITEM NO.	A	B
22/19 SSD 221	1.877	1.877
22/19 SSD 222	1.877	2.377
22/19 SSD 223	2.377	1.877
22/19 SSD 224	2.377	2.377

Standard Laminated Construction

ITEM NO.	A	A2	B2	B
22/19 SLD 281	1.877	0.877	0.877	1.877
22/19 SLD 282	1.877	0.877	1.377	2.377
22/19 SLD 283	2.377	1.377	0.877	1.877
22/19 SLD 284	2.377	1.377	1.377	2.377

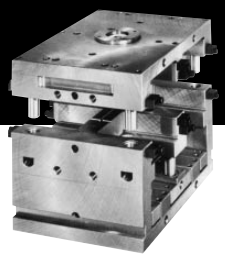
1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
4. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
5. 1/2-13 THD at knockout locations standard as shown.
6. Positive ejector plate guidance.
7. Locking locating ring supplied standard as shown.

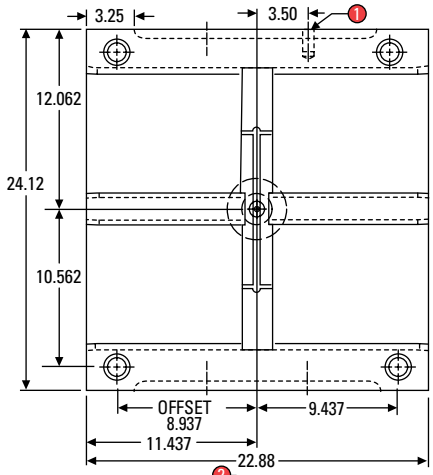


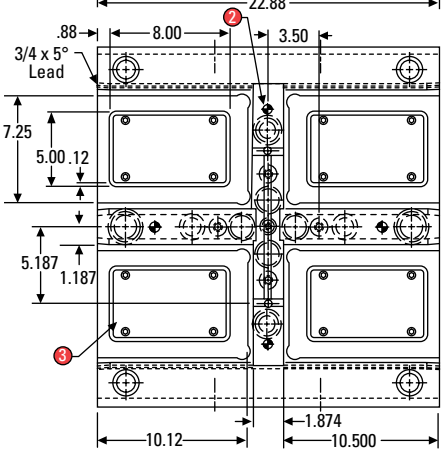
Ordering and installing information for Double H frame and companion insert molds can be found in the front of this section.

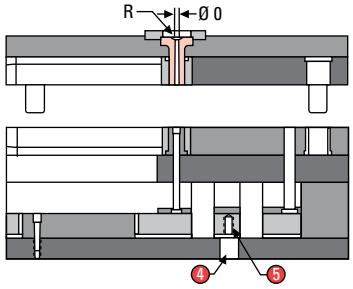
See front of this section for standard and optional frame features.

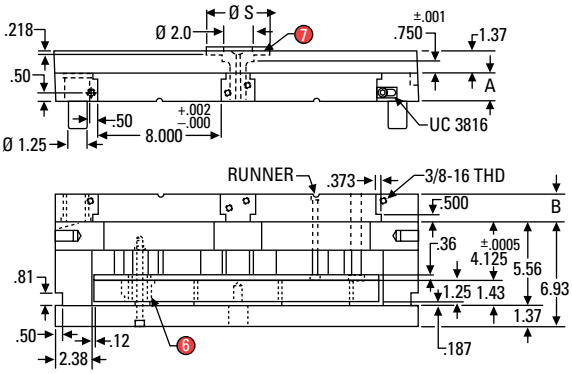
DF Quick-Change DH-Style
Frame & Companion Insert Molds

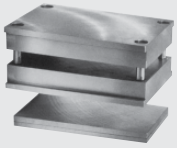




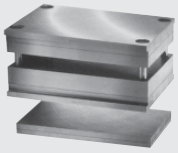






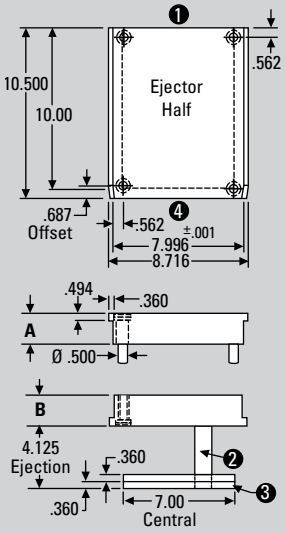


STANDARD SOLID INSERT MOLD

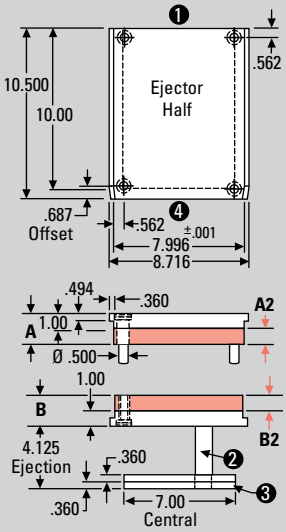


STANDARD LAMINATED INSERT MOLD

Standard Solid: 8.0 x 10.5



Standard Laminated: 8.0 x 10.5



Companion Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection (see page C 131).
3. Thicker plate optional (quotation on request).
4. 3/4 x 5° lead this end.

Double "H" Style Quick-Change™ Frame

ITEM NO.	A	B
24/23 DF 321	1.877	1.877
24/23 DF 322	1.877	2.377
24/23 DF 323	2.377	1.877
24/23 DF 324	2.377	2.377
24/23 DF 325	2.377	2.877
24/23 DF 326	2.877	2.377
24/23 DF 327	2.877	2.877

Standard Laminated Construction

ITEM NO.	A	A2	B2	B
24/23 SLD 281	1.877	0.877	0.877	1.877
24/23 SLD 282	1.877	0.877	1.377	2.377
24/23 SLD 283	2.377	1.377	0.877	1.877
24/23 SLD 284	2.377	1.377	1.377	2.377
24/23 SLD 285	2.377	1.377	1.877	2.877
24/23 SLD 286	2.877	1.877	1.377	2.377
24/23 SLD 287	2.877	1.877	1.877	2.877

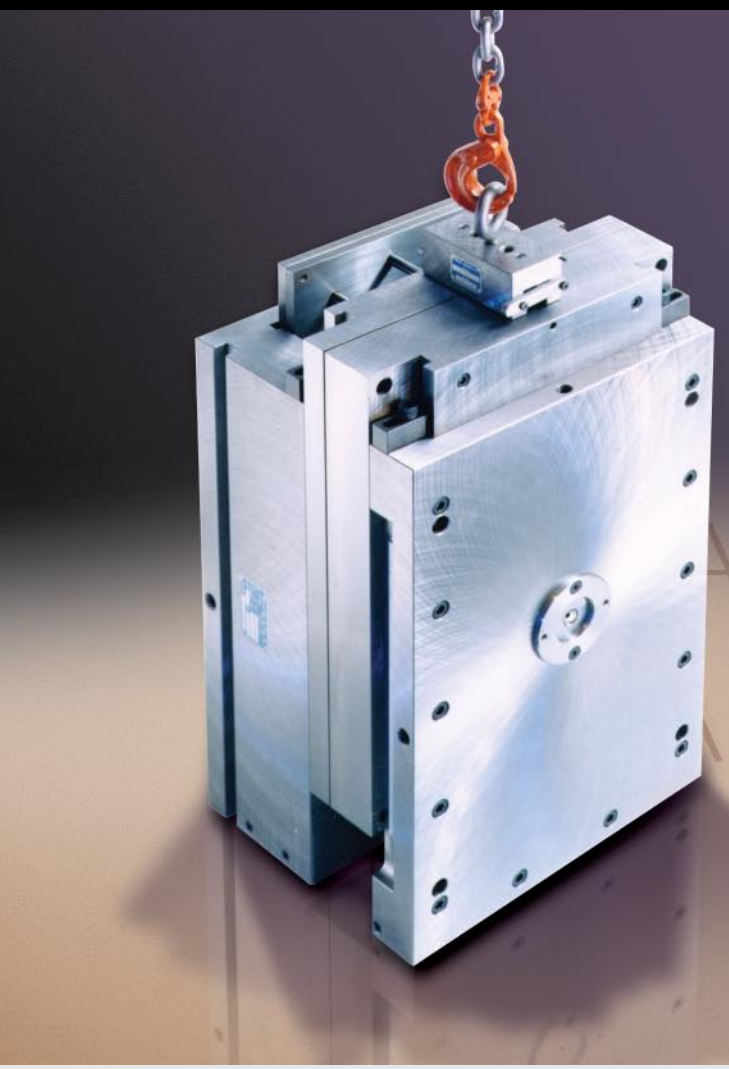
Standard Solid Construction

ITEM NO.	A	B
24/23 SSD 221	1.877	1.877
24/23 SSD 222	1.877	2.377
24/23 SSD 223	2.377	1.877
24/23 SSD 224	2.377	2.377
24/23 SSD 225	2.377	2.877
24/23 SSD 226	2.877	2.377
24/23 SSD 227	2.877	2.877

1. 3/4-10 handling holes supplied standard as shown.
2. Ejector system designed for spring loading (quotation on request).
3. Cutout in ejector plate to accommodate pillar post supplied standard as shown.
4. 1 1/8 diameter knockouts supplied standard at center and 3.50 off center.
5. 1/2-13 THD at knockout locations standard as shown.
6. Positive ejector plate guidance.
7. Locking locating ring supplied standard as shown.

Ordering and installing information for Double H frame and companion insert molds can be found in the front of this section.

See front of this section for standard and optional frame features.



MUD

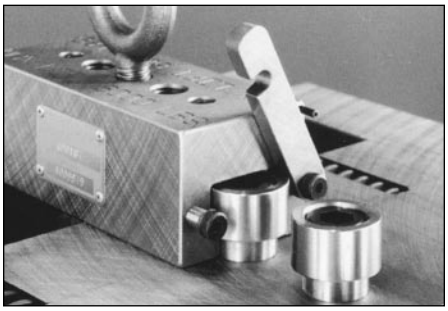
Quick-Change™ Adapter Frame Systems for Standard Mold Bases

Frame Ordering Information

- Item number and description (see tables on respective page)
- Standard frames and ear plates are constructed of prehard steel. Prehard stainless and other steel grades available (quotation on request). Armorclad* can also be specified. Frame rails have been treated for enhanced wear resistance.
  * "Armorclad" is the registered trademark of Armorclad, Inc.
- Ear plate sets include mounting holes, dowel holes, knockout holes and locating ring clearance holes as illustrated
- "S" supplied standard 3.990"
- Frame supplied standard with clamp slots
- Mounting screws optional. Specify locations



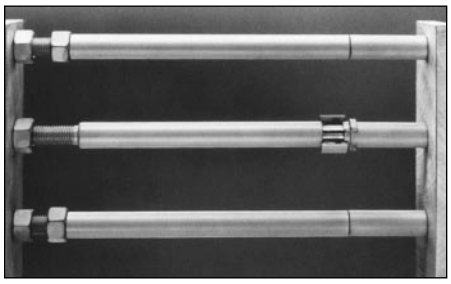
Adapter frame system accessories



MUD Balancing Lift Bars
These bars feature slide-and-lock attachment for fast positioning at the balance point of the standard mold base. This allows the mold base to be easily lowered in and raised out of the adapter frame. The bar fits over inexpensive buttons mounted on mold bases in place of eye bolts. Lifting bars and companion buttons are available in capacities to 5,140 pounds. (See page AF 103)

Quick Coupler KO Rod Systems
This optional assembly permits molding machines' hydraulic knockout systems to operate at their maximum stroke. The recommended system is based on three push points and one pull back. It locks the mold ejector system to the machine's hydraulic knockout system with a simple push and turn action. (See page AF 102)

NOTE: Specifications subject to change without prior notice.



The Quick-Change concept for standard mold bases

Production changeovers in less than 10 minutes

Standard mold bases can be interchanged in less than 10 minutes with MUD's Quick-Change adapter frame system. It's the most economical quick-change system available and it works with any standard mold base in any molding machine up to 500-ton capacity.

The system is based on a Master Unit Die frame that remains in the molding machine during production changeovers. The frame is installed without modifying the machine. Standard mold bases equipped with companion ear plates are interchanged within this adapter frame.

Just one adapter frame accommodates an unlimited number of standard mold bases. While these frames can remain in the machine indefinitely, they are easily transferred to other machines. No other special mounting hardware is required.

The MUD Quick-Change system is based on the unique slide and clamp approach to mold changeovers developed by Master Unit Die Products. Standard mold bases equipped with MUD ear plate sets simply slide in and out of the Quick-Change adapter frame. Just one MUD adapter frame is needed for each molding machine selected for Quick-Change operation.

Installation is fast. Simply clamp the Quick-Change adapter frame to the platens of any molding machine selected for Quick-Change operation. Companion ear plates are bolted to the standard mold bases to be interchanged in the machine. Both the machine and the standard mold bases are now ready for production changeovers in less than ten minutes.

MUD Quick-Change adapter frames and companion ear plates are available in six standard sizes. Each accommodates a wide range of standard mold bases. Selecting the largest adapter frame that fits a molding machine allows interchanging of standard mold bases up to the machine's maximum capacity.

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Companion ear plate installation instructions

Equipping standard mold bases with MUD Quick-Change adapter system companion ear plates is a fast and easy procedure. The following steps are an efficient and recommended installation method.

Preparation

Before installing Master Unit Die Quick-Change adapter frame companion ear plates, inspect the plates for foreign matter and high spots (400 grit stone is recommended for removing high spots). After the plates are cleaned and free of burrs, spray the surfaces with a high quality mold protection. This aids in preventing build-up between the MUD companion ear plates and the standard mold base.

Installation

STEP 1: Mount the ear plate to the cavity side of the standard mold base using the base's locating ring to locate the ear plate. Scale the side of the standard mold base in parallel to the ear plate and transfer the bolt holes. Then dowel the ear plate to the standard mold base.

STEP 2: Remove the ear plate from the standard mold base.

STEP 3: Set the cavity side ear plate on a machine capable of locating holes ±.001. Strap the ear plate on the machine, top side down. Indicate the runner side of the ear plate in straight.

STEP 4: Use indicator to find center of locating ring hole.

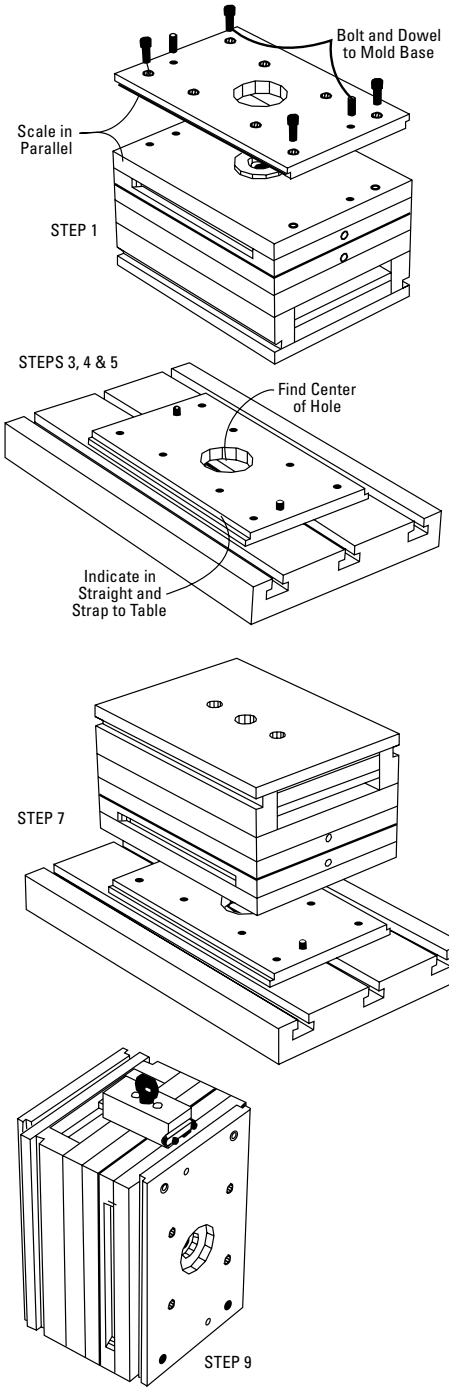
STEP 5: Place the two dowel pins in the plate or the standard mold base and set it on the ear plate.

STEP 6: Strap the standard mold base on the machine.

STEP 7: Install the ejector side ear plate bolt and dowel pin holes as indicated on the ear plate print.

STEP 8: Ear plates can be installed on each individual standard mold base for the most efficient production changeovers, or they can be transferred from one standard mold base to another.

STEP 9: After the companion ear plates are installed on a standard mold base and the adapter frame is installed in the molding machine, the MUD Quick-Change adapter frame system is ready for operation. Mold changes can now be made in as little as six to ten minutes.



MUD Mold Base Adapter System

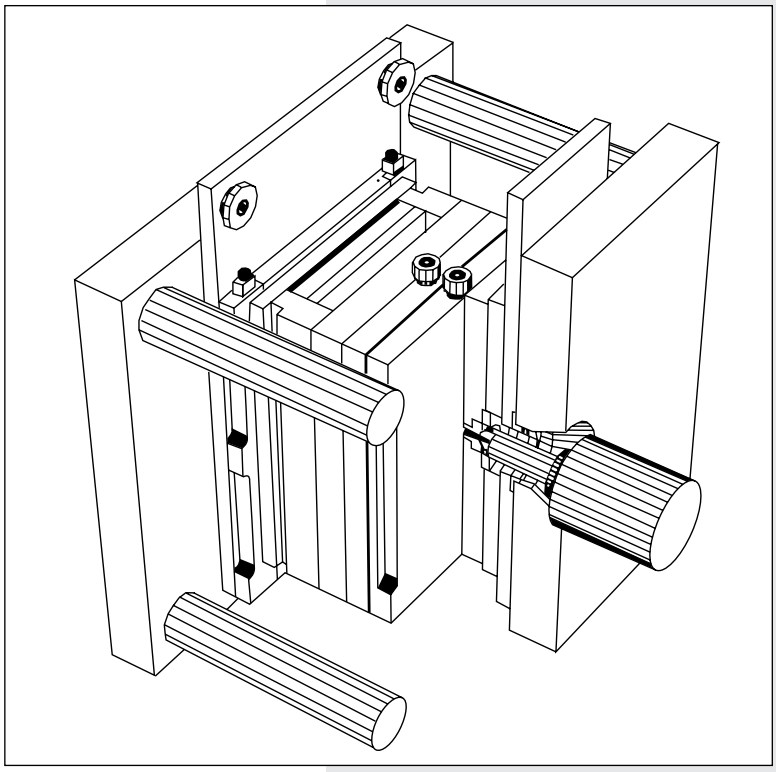
Prior to installation

Just as in the case of the companion ear plates, the installation of a MUD Quick-Change adapter frame is a simple procedure. Once installed, a single adapter frame will accommodate an unlimited number of standard mold bases.

Preparation

Before installing Master Unit Die Quick-Change adapter frame, thoroughly clean and wipe down the molding machine platen. Inspect for rust build-up and high spots. Be sure all platen surfaces are flat. Also, inspect the MUD adapter frame plates for foreign matter and high spots (400 grit stone is recommended for removing high spots).

After the platens and MUD adapter frame plates are cleaned and free of burrs, spray the surfaces with a high quality mold protection. This aids in preventing build-up between platens and the MUD adapter frame system.



ALWAYS check the ear plates for burrs and nicks, stoning or filing as required. Lubricate the slide areas of the ear plate and adapter frame surfaces to extend their life and to allow surfaces to slide more freely.

Installation instructions

Cavity Side Installation

STEP 1: Install the cavity side adapter frame in the molding machine, using clamps or bolting directly through the clamp plate of the frame. The cavity side adapter frame is aligned by the locating ring.

Rotate the adapter frame to a vertical position by using a level on the inside of the ear plate retainer rail. Be sure the mounting bolts or clamps are tight.

STEP 2: Determine that the adapter frame companion ear plates are mounted on the standard mold base as detailed in the ear plate installation instructions.

Ejector Side Installation

STEP 3: With the ear plates installed on the standard mold base, slide it into the ejector side of the adapter frame prior to installation in the molding machine. Now clamp the standard mold base in the adapter frame using the clamps on the end of the frame.

STEP 4: Measure the total shut height of the ear plates, standard mold base and adapter frame. Adjust the machine platens open an additional 1/16" to 3/16" to allow the assembly to slide between the platens and into the cavity side of the adapter frame.

STEP 5: Lift the ejector half of the adapter frame with the standard mold base installed using a MUD balanced lifting bar. Slide the standard mold base and ejector half adapter frame into the cavity half adapter frame already installed in the machine (Step 1).

STEP 6: Close the machine to clamp the mold halves together.

STEP 7: Clamp the standard mold base adapter frame ejector half to the machine platen.

STEP 8: To remove the ear plate equipped standard mold base from the adapter frame, unclamp the four (4) ear plate hold down clamps located on the tops of the adapter frame rails. Then open the machine approximately 1/16" to 3/16".

STEP 9: If bolts are to be used through the adapter frame clamp plate, remove the standard mold base from the frame and install the bolts.

STEP 10: If the adapter frame is bolted through the clamp plate to the platen, the clamps (Step 7) can now be removed.

STEP 11: THE MUD Quick-Change adapter frame is now ready to accept an unlimited number of standard mold bases equipped with companion ear plates.

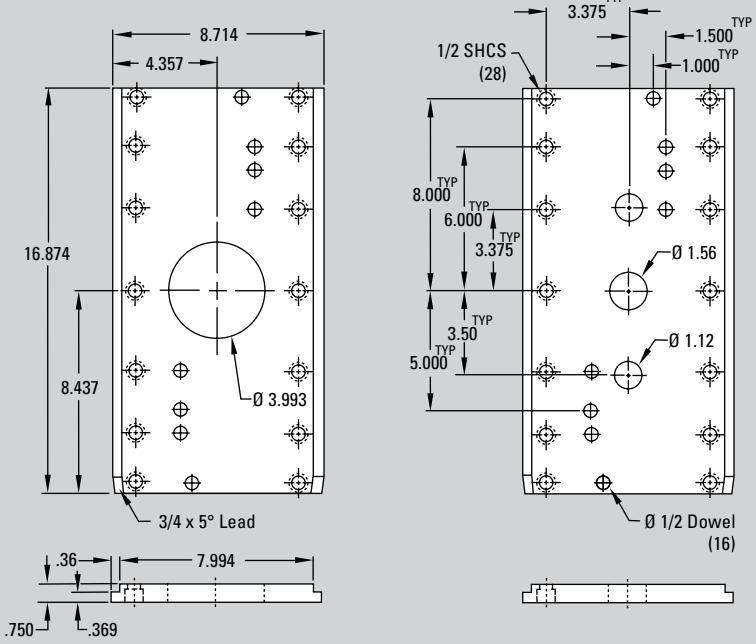
AF Quick-Change Adapter
Frame & Companion Ear Plates

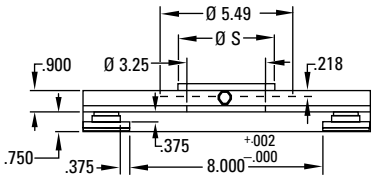


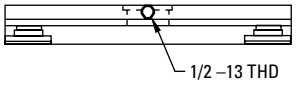
ITEM NO.	DESCRIPTION
12/18 AF 010	Adapter Frame
12/18 AEP 011	Ear Plate Set
12/18 AEP 022	Ear Plate Set w/o Mounting Holes

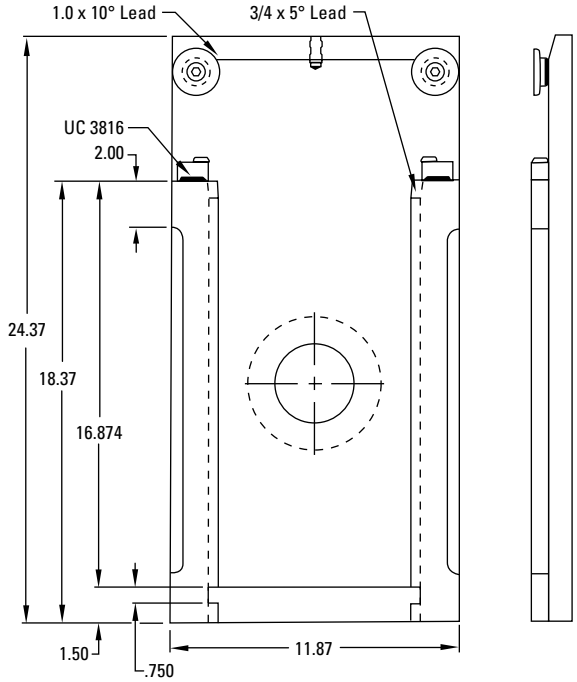
Ordering and installing information for adapter frame and companion ear plates can be found in the front of this section.

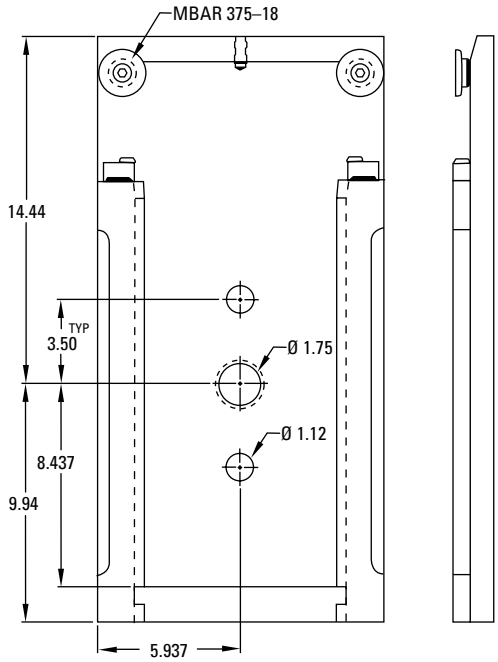
Extended nozzle is required to extend the additional thickness of the ear plate and back plate of the mold base adapter assembly.







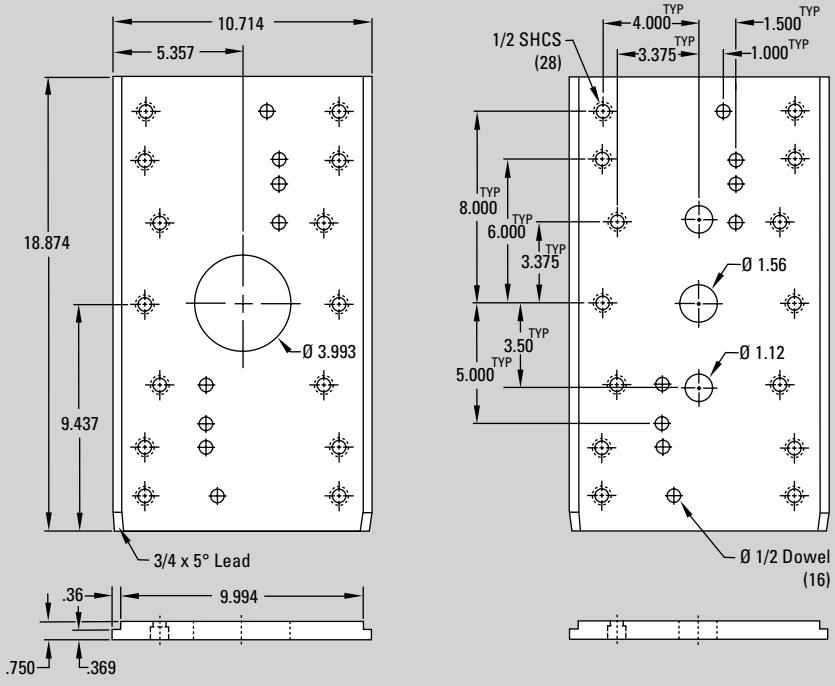




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14/20 AF 010

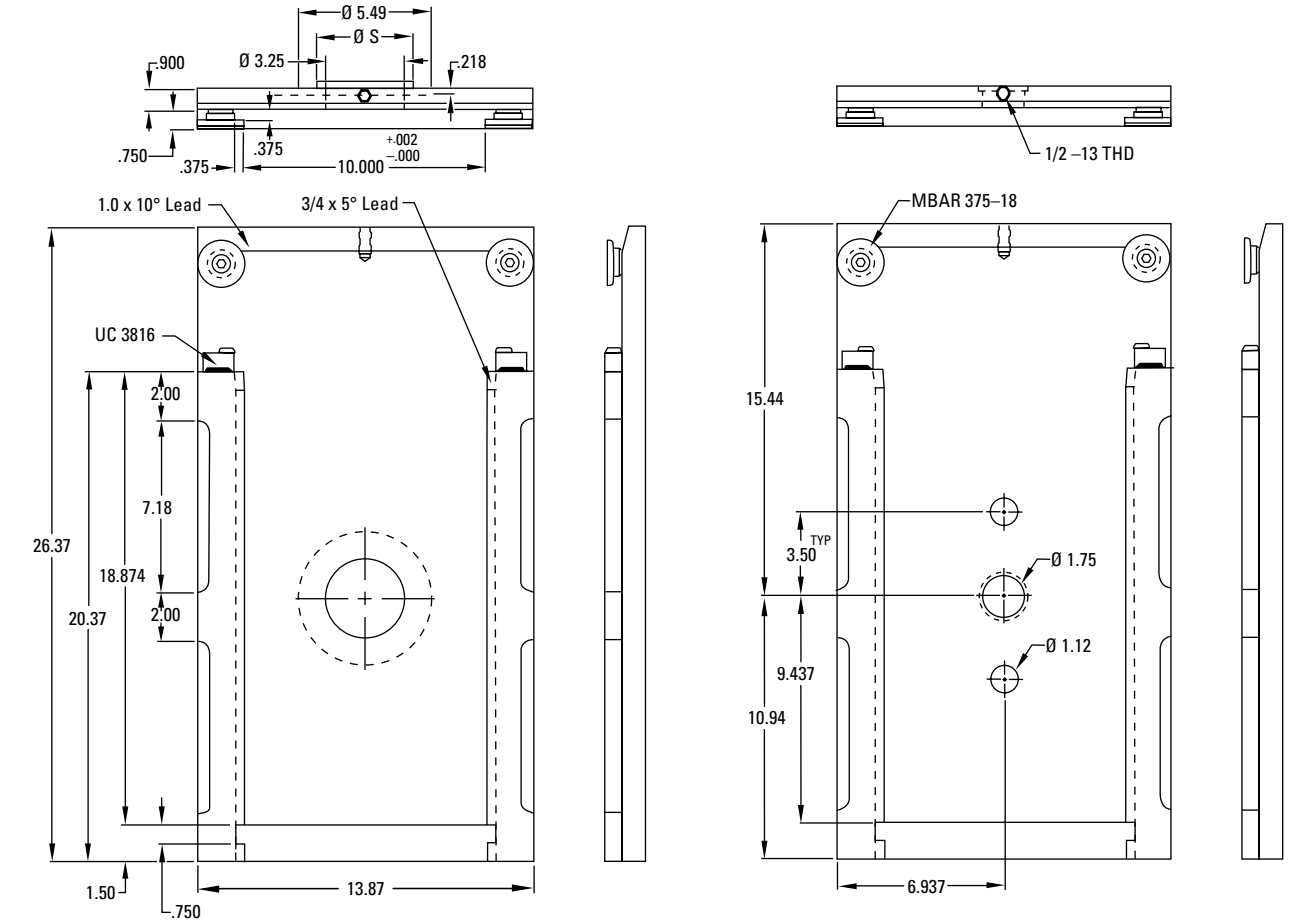




ITEM NO.	DESCRIPTION
14/20 AF 010	Adapter Frame
14/20 AEP 011	Ear Plate Set
14/20 AEP 022	Ear Plate Set w/o Mounting Holes

Ordering and installing information for adapter frame and companion ear plates can be found in the front of this section.

Extended nozzle is required to extend the additional thickness of the ear plate and back plate of the mold base adapter assembly.



MUD Quick-Change Adapter Frame Systems for Standard Mold Bases | 14/20 AF 010

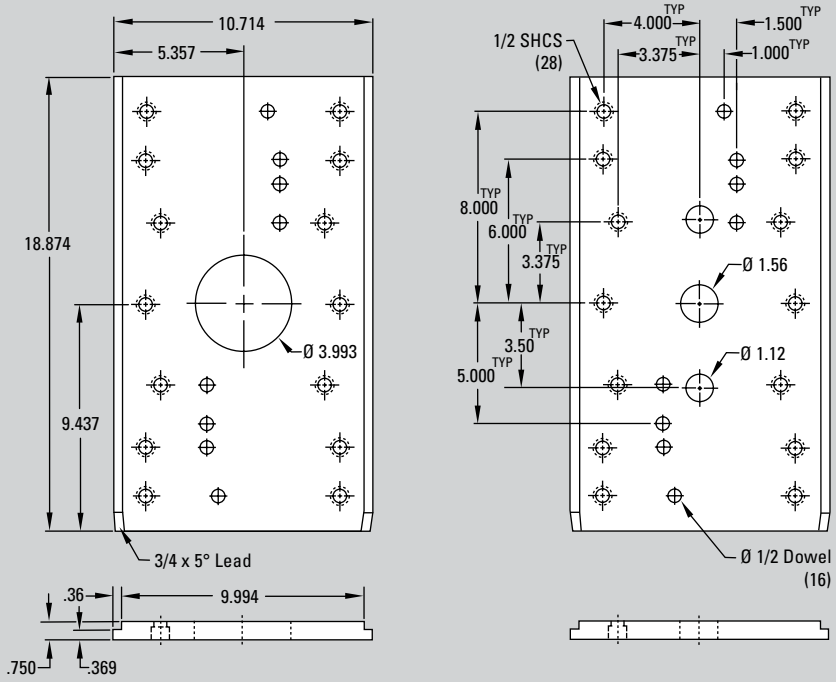
AF Quick-Change Adapter
Frame & Companion Ear Plates

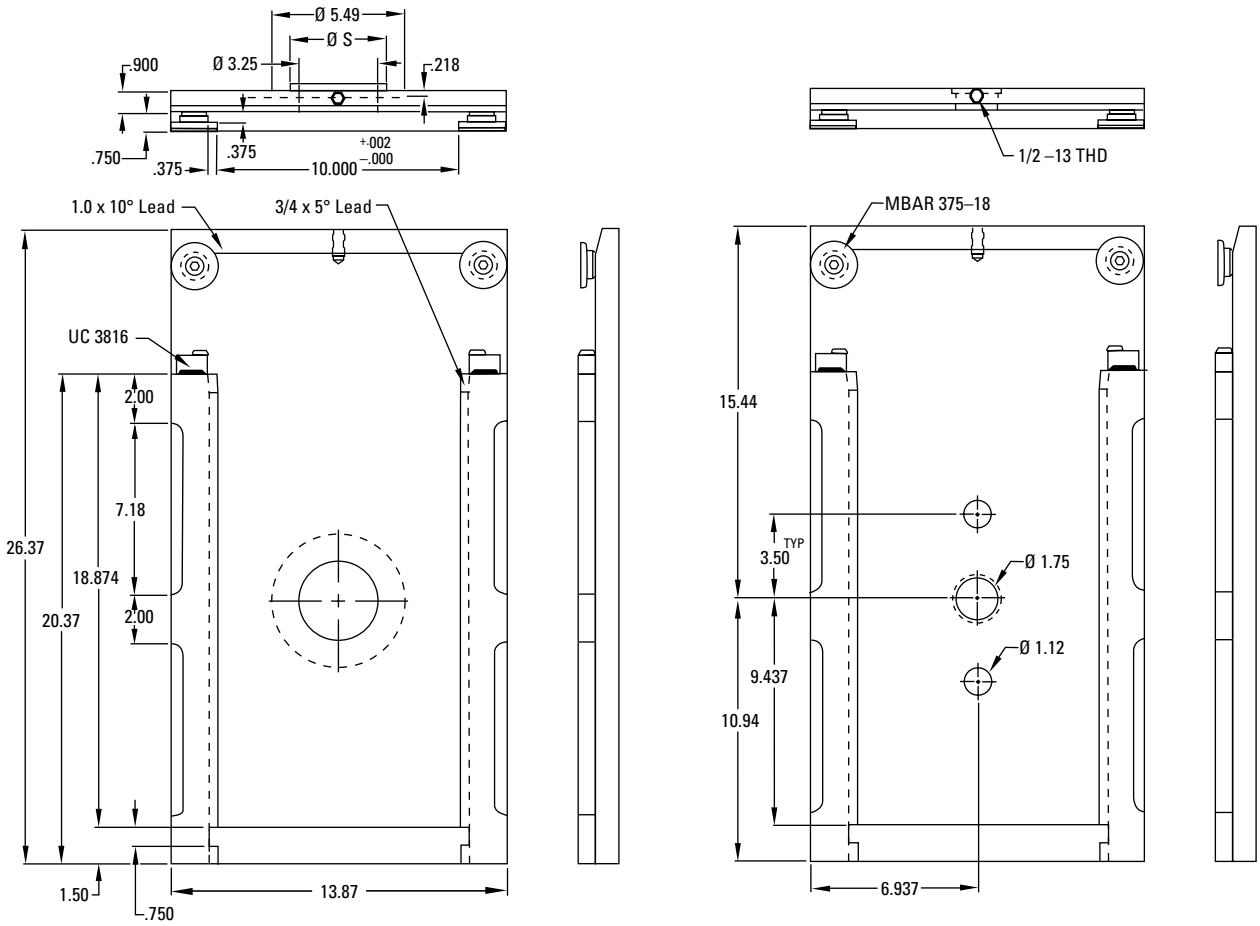


ITEM NO.	DESCRIPTION
16/21 AF 010	Adapter Frame
16/21 AEP 011	Ear Plate Set
16/21 AEP 022	Ear Plate Set w/o Mounting Holes

Ordering and installing information for adapter frame and companion ear plates can be found in the front of this section.

Extended nozzle is required to extend the additional thickness of the ear plate and back plate of the mold base adapter assembly.



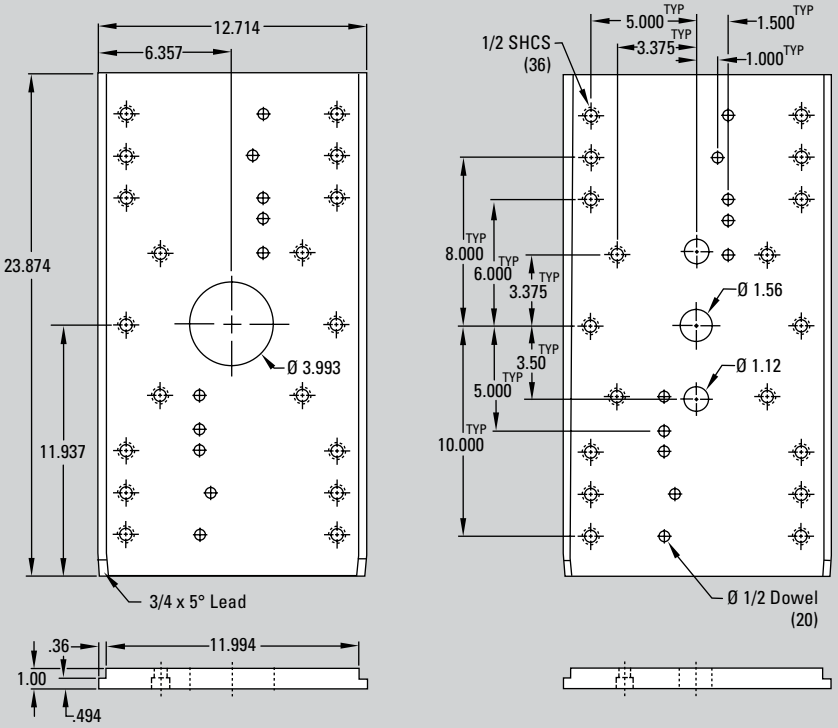


MUD Quick-Change Adapter Frame Systems for Standard Mold Bases | 16/21 AF 010

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18/26 AF 010

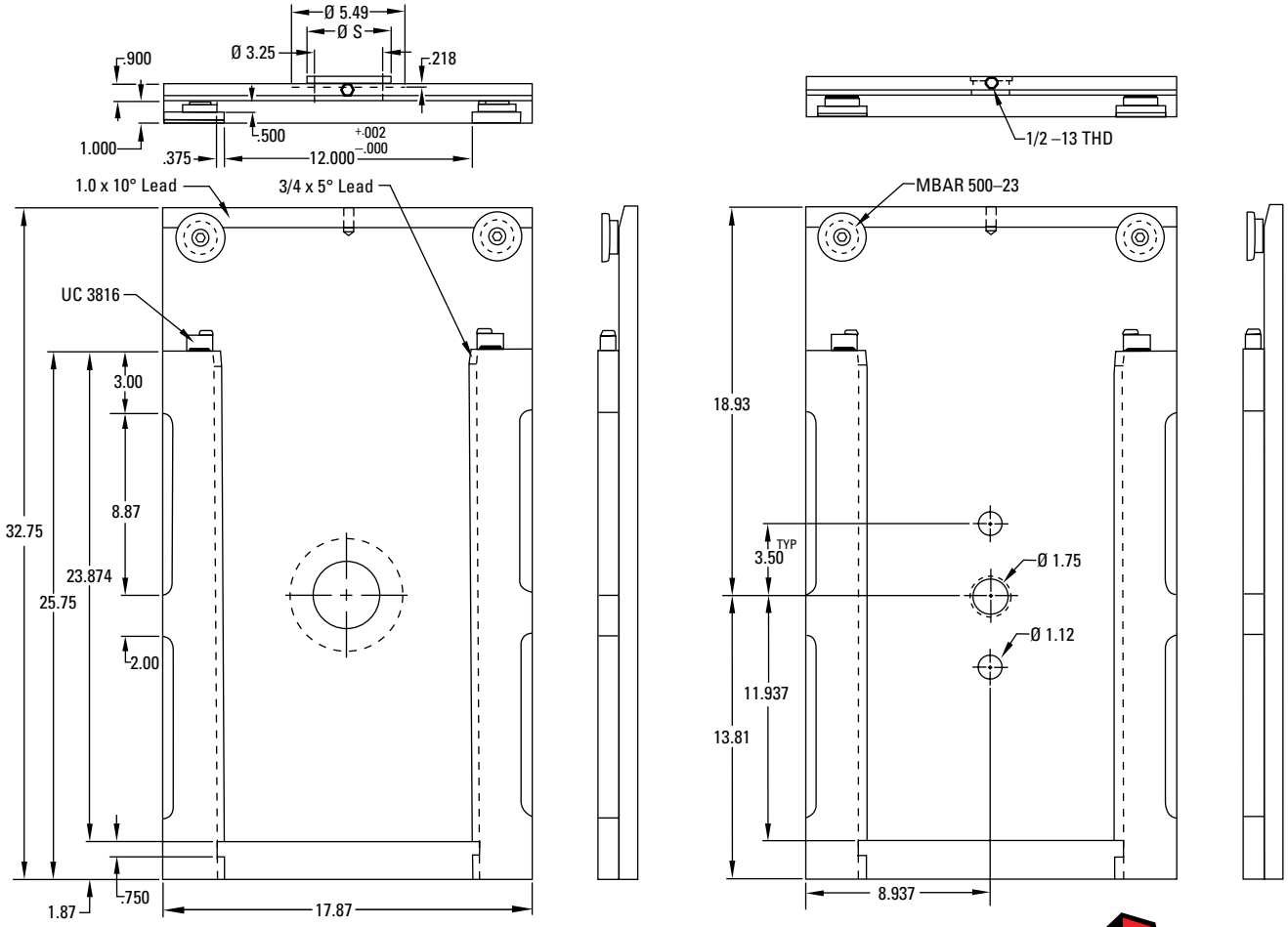




ITEM NO.	DESCRIPTION
18/26 AF 010	Adapter Frame
18/26 AEP 011	Ear Plate Set
18/26 AEP 022	Ear Plate Set w/o Mounting Holes

Ordering and installing information for adapter frame and companion ear plates can be found in the front of this section.

Extended nozzle is required to extend the additional thickness of the ear plate and back plate of the mold base adapter assembly.



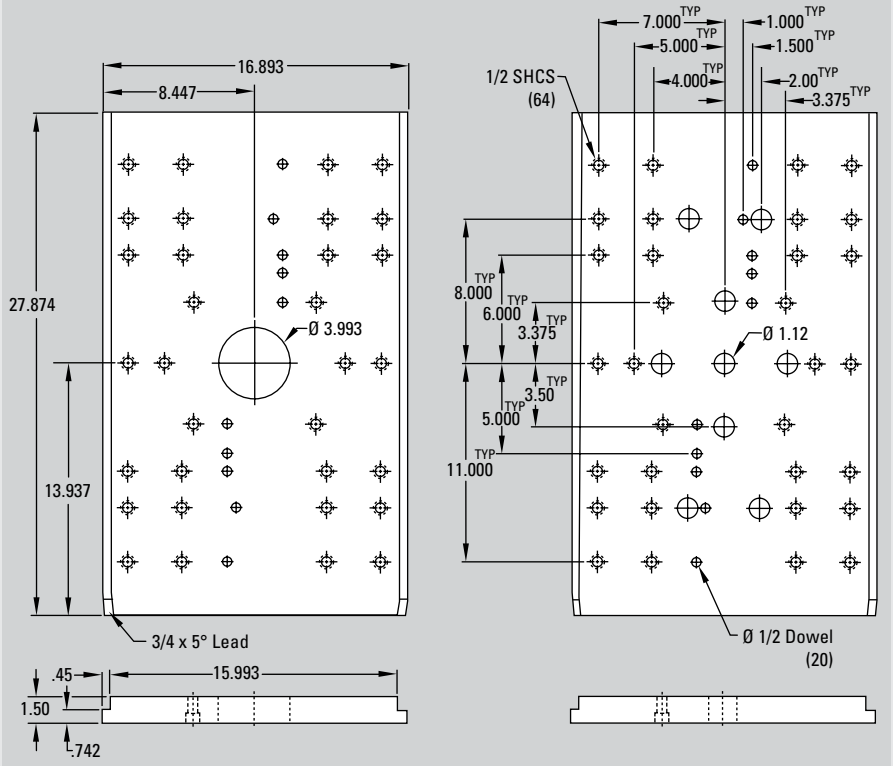
AF Quick-Change Adapter
Frame & Companion Ear Plates

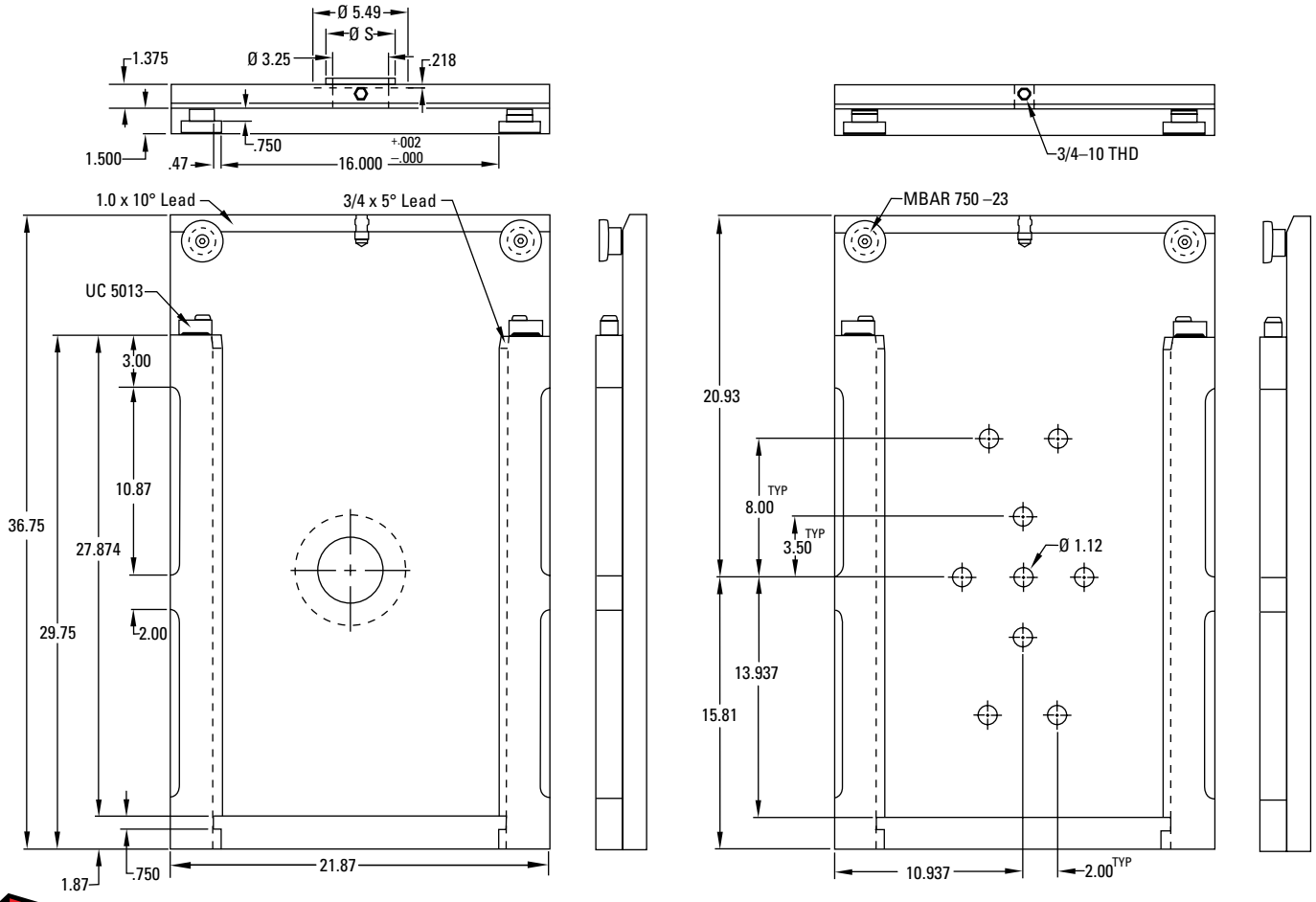


ITEM NO.	DESCRIPTION
22/30 AF 010	Adapter Frame
22/30 AEP 011	Ear Plate Set
22/30 AEP 022	Ear Plate Set w/o Mounting Holes

Ordering and installing information for adapter frame and companion ear plates can be found in the front of this section.

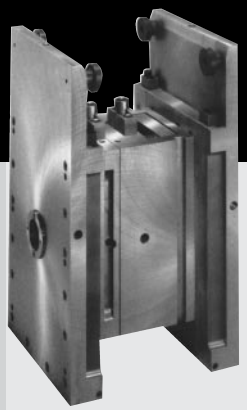
Extended nozzle is required to extend the additional thickness of the ear plate and back plate of the mold base adapter assembly.

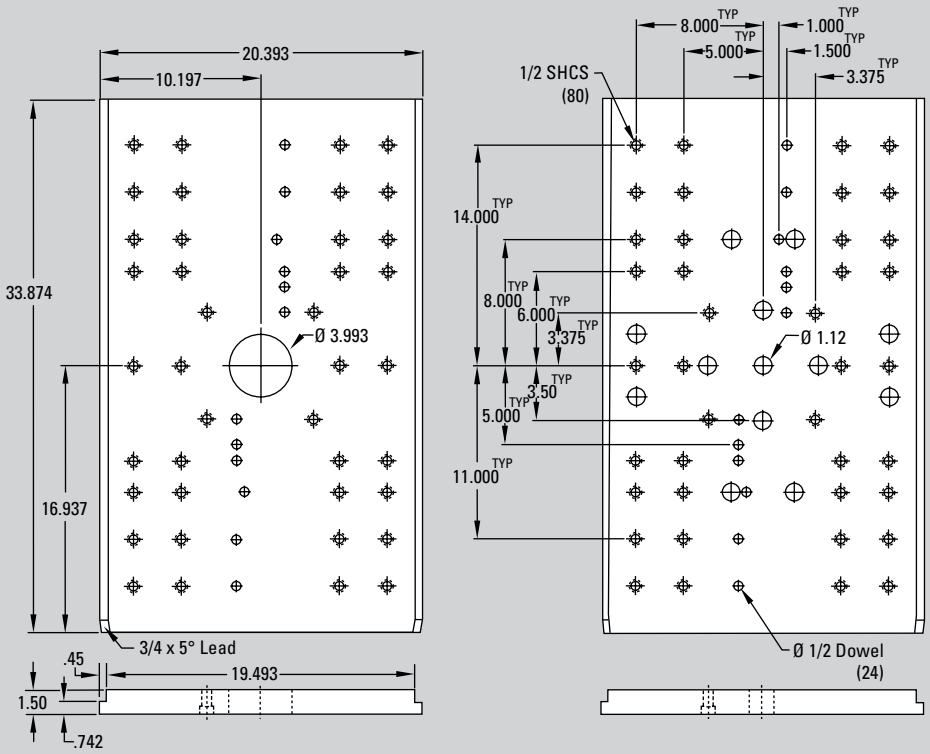




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24/36 AF 010

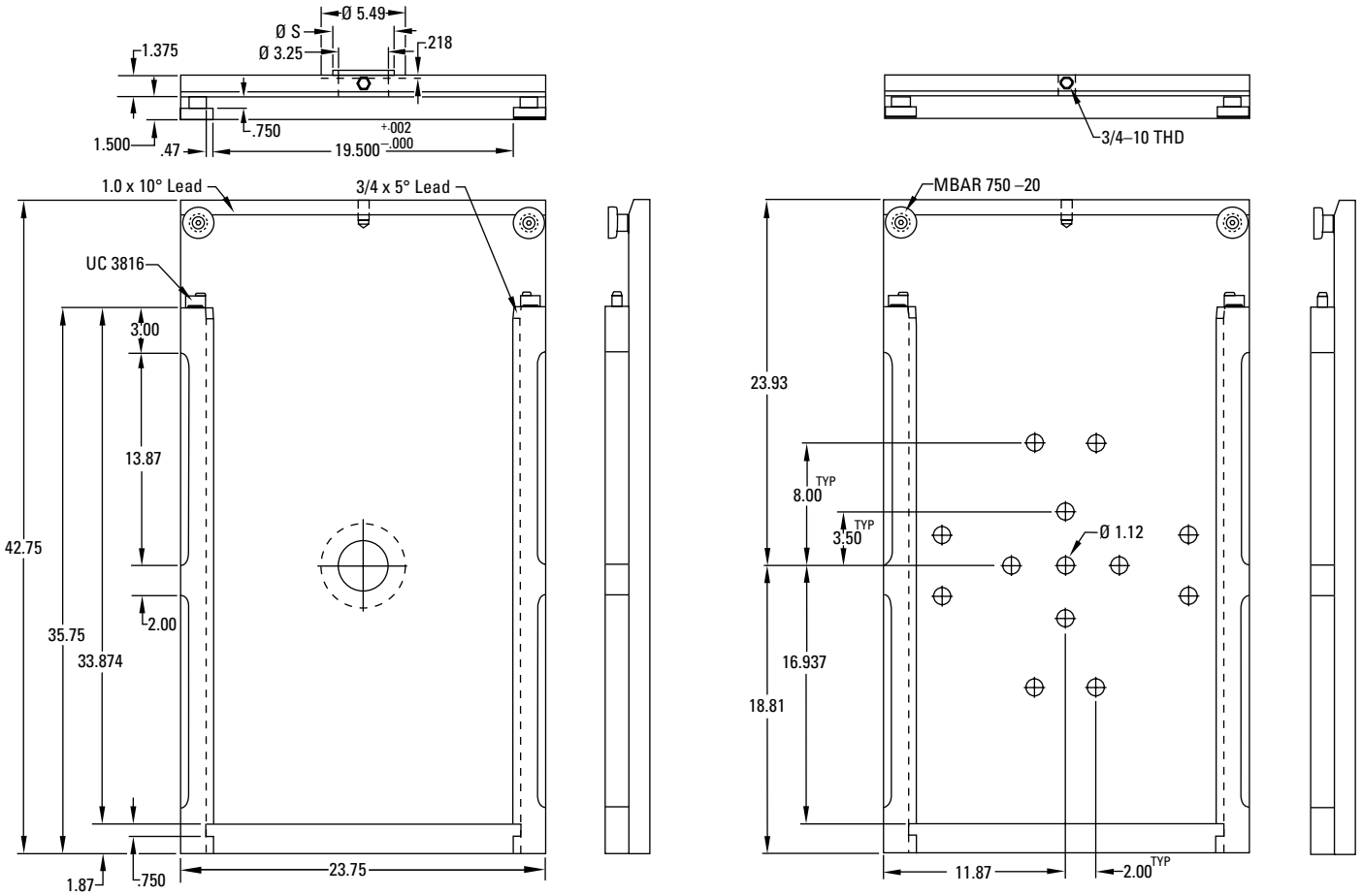




ITEM NO.	DESCRIPTION
24/36 AF 010	Adapter Frame
24/36 AEP 011	Ear Plate Set
24/36 AEP 022	Ear Plate Set w/o Mounting Holes

Ordering and installing information for adapter frame and companion ear plates can be found in the front of this section.

Extended nozzle is required to extend the additional thickness of the ear plate and back plate of the mold base adapter assembly.

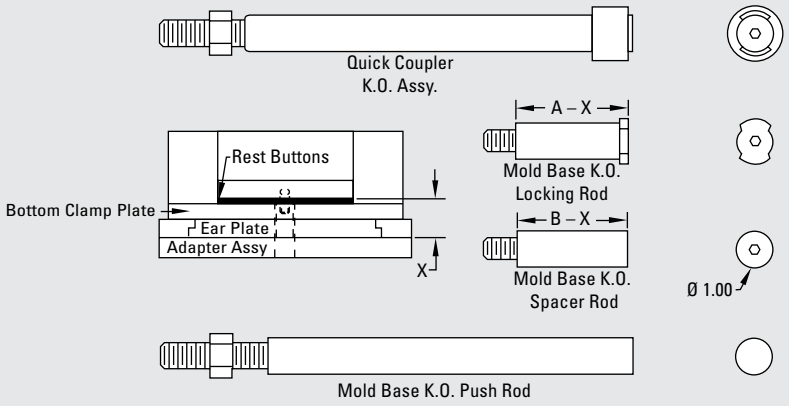


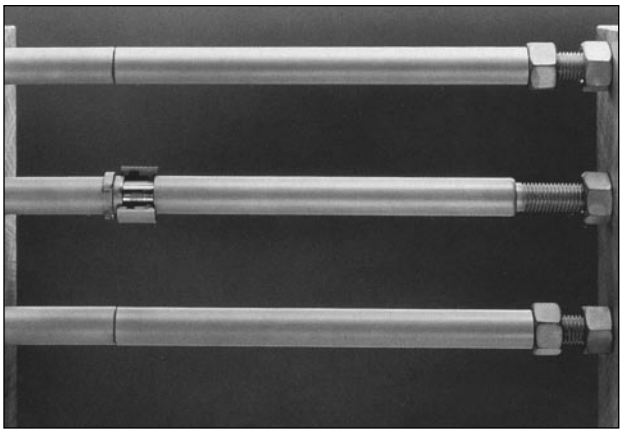
Quick Coupler Locking KO Rod System

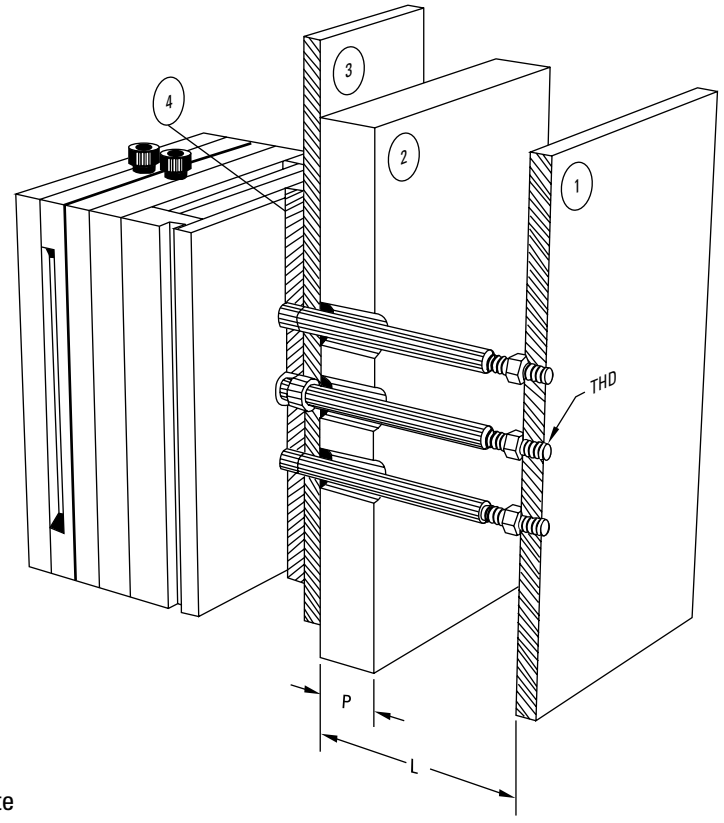
This knockout rod assembly is recommended for use with MUD standard mold base adapter frame systems. It permits the molding machine's hydraulic knockout system to operate at its maximum stroke. The KO system is designed with three push points and one pull back. The A & B rods, supplied extra long for finishing to precise length, are threaded into the mold's ejector plate flush with the back of the ear plate. The center rod locks the ejector plate to the special knockout rod installed on the machine's hydraulic knockout plates. Two rods, threaded for adjusting to proper length, are also installed on the machine's knockout plate flush with the inside surface of the adapter frame's rear clamp plate.

Quick Coupler Locking Knockout Rod Assembly and Rods

ITEM NO.	DESCRIPTION
PLKA 192	Knockout rod assembly (1 required)
MLKS 193	Mold knockout locking rod (1 required)
PKR 194	Push rods (2 required)
MKS 195	Knockout spacer rod (2 required)







For each press supply:
THD, P & L

① Press ejector plate
② Press platen
③ Adapter frame clamp plate
④ Adapter ear plate

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Balancing Lift Bars and Buttons

MUD Balancing Lift Bars are designed with a slide-and-lock attachment for fast positioning at the balance points of insert molds and standard mold bases. These bars fit over inexpensive buttons mounted on the mold in place of eye bolts. This combination allows insert molds as well as standard mold bases to be easily lowered in and raised out of the molding machine. These bars are available in capacities to 5,140 pounds.

NOTE: Specifications subject to change without prior notice.

INSTALLING THE LIFTING BAR: Three holes (A, B and C) have been drilled and tapped in the lifting bar to accept an eye bolt (D). These holes allow positioning the eye bolt at either the center (B) or off-center (A or C) of the balancing lift bar. This position is based on the approximate weight of the mold.

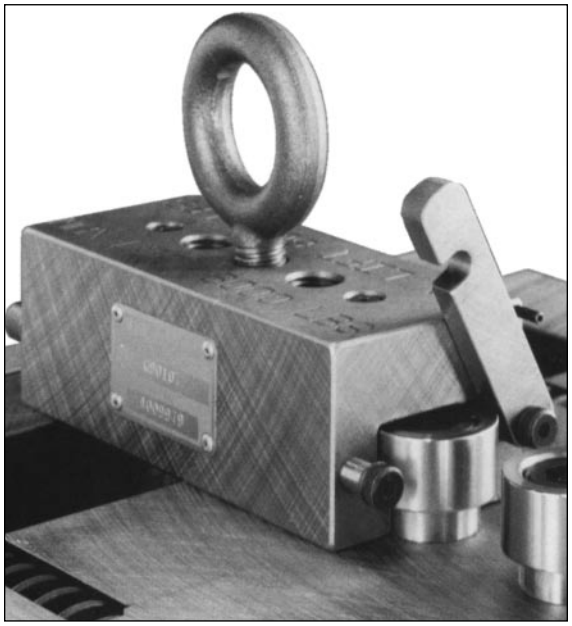
The final positioning of the lifting bar is determined by sliding the lifting bar over the mold's lifting buttons until the exact balance point is established. A line is then scribed on the mold to identify this stop-point location. The A, B or C position for the eye bolt should also be noted.

Lifting Bar Buttons

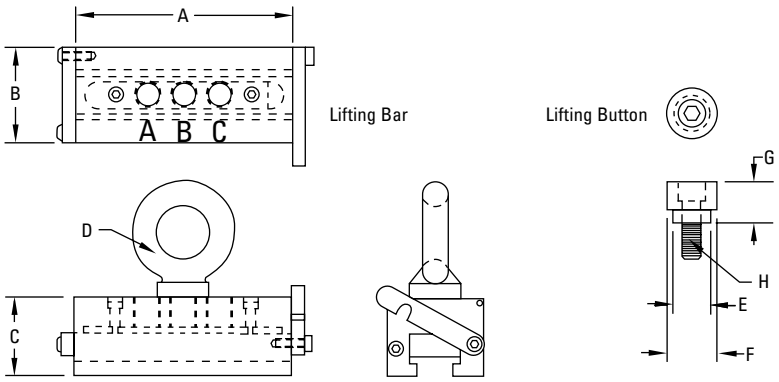
ITEM NO.	E	F	G	H
LB 2-37	0.750	1.00	1.00	3/8-16
LB 2-50	0.750	1.00	1.00	1/2-13
LB 6-50	1.000	1.37	1.12	1/2-13
LB 6-62	1.000	1.37	1.12	5/8-11
LB 12-62	1.370	1.87	1.75	5/8-11
LB 12-75	1.370	1.87	1.75	3/4-10
LB 12-10	1.370	1.87	1.75	1.00-8

Balancing Lift Bar

ITEM NO.	Max. Lift	A	B	C	D
LB 2	1720#	4.00	1.75	1.75	1/2-13
LB 6	3320#	6.00	2.62	2.12	3/4-10
LB 12	5140#	10.00	3.25	3.38	1 1/4-7



U.S. PATENT #5,033,784



MUD Mold Change Cart





The **MUD mold change cart** expedites transferring molds between storage and production areas. The cart is equipped with two mold holders, one for the mold to be installed in the molding machine and one for the mold being removed.

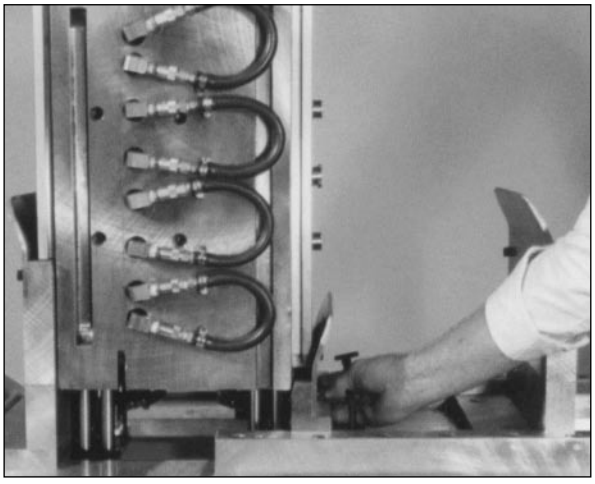
The cart's mold retainer blocks adjust to accommodate various mold thicknesses. The cart also features adjustable rails to accommodate a wide range of standard mold bases equipped with MUD Quick-Change adapter frame companion ear plates.

The cart includes a manifold for waterline connections. An optional temperature control unit can be installed in the cart's base to permit preconditioning the mold to the desired molding temperature prior to installing it in the molding machine.

The cart retains the mold in the position required for installation in the molding machine. This permits the use of a MUD balanced lifting bar to decrease mold changeover time. The cart is also easily moved to align the mold with the machine platen when hoist movement is limited.

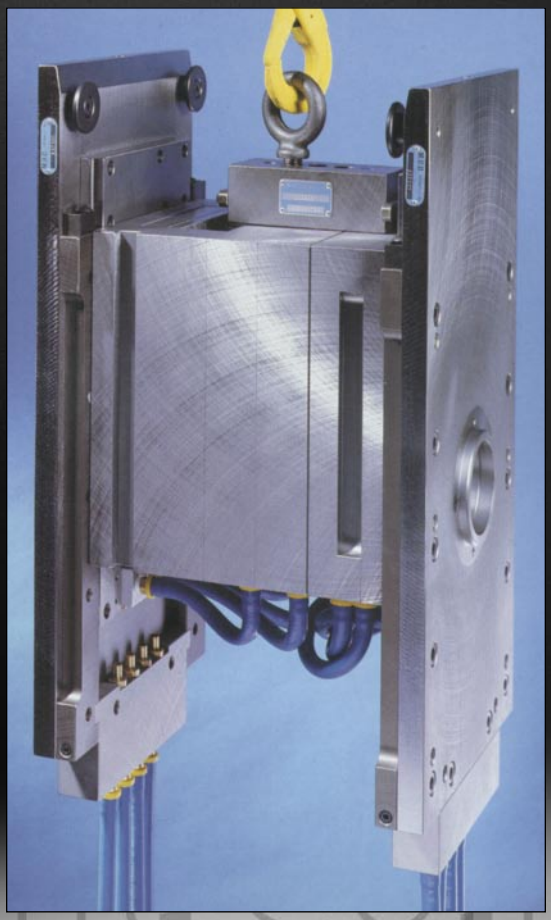
The MUD mold change cart is designed for greater efficiency in transferring both the incoming and the outgoing molds between the storage area and the production line.





The cart features mold retainer blocks to accommodate various mold thicknesses. Adjustable rails accommodate a complete range of standard mold bases equipped with MUD Quick-Change adapter frame companion inserts.

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MUD Quick-Change™ Mold Base Adapter Systems

with Instant-Connect™ Waterlines

U.S. PATENT No. 5,562,935

Ordering Information

Step 1: Determine which MUD Quick-Change™ Mold Base Adapter System fits your molding machine(s). Refer to the MUD Quick-Change™ Adapter Systems section pages AF94 - AF101 for specifications, or call D-M-E for personal assistance.

Step 2: Determine the number of machines that will be used with the Instant-Connect™ Waterline System. You will need to order a set of back section manifolds and adapter frames for each machine. The back section manifold replaces the back section supplied with the MUD Quick-Change Mold Base Adapter Frame.

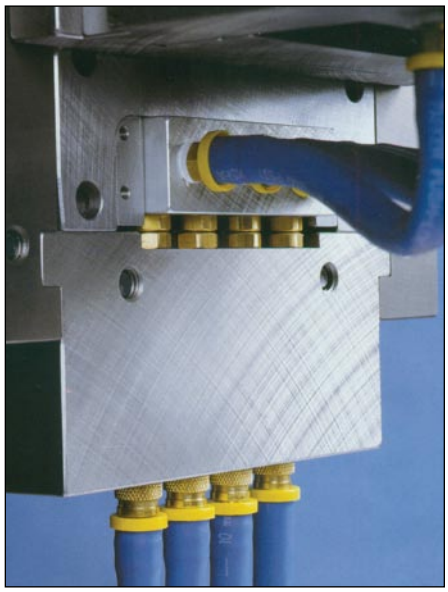
Step 3: Determine the number of molds that will be used with the Instant-Connect Waterline System. You will need to order a set of ear plates and gibs for each mold. Each set of ear plates will need to be machined to mount the waterline manifolds. You can modify the ear plates yourself or arrange to have them machined by D-M-E.

Step 4: Measure the lengths of the molds that will be used with the Instant-Connect Waterline System. You will need to specify a manifold for each mold length. Any mold length that extends over the face of the manifold will require the use of a universal manifold and the appropriate extended flow plate to enable installation of the mold waterlines to the ear plate manifold. Longer flow plates will also accommodate shorter mold lengths.

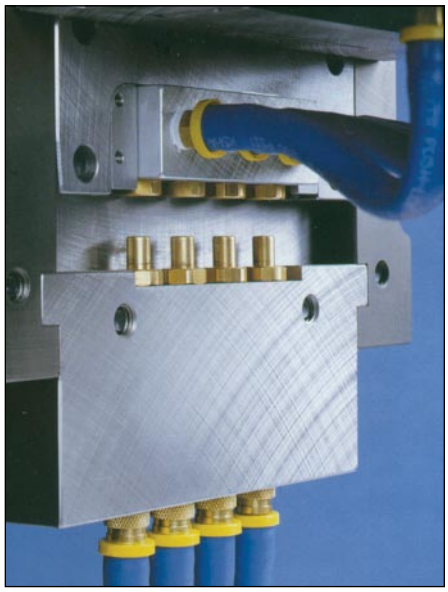
Step 5: Call D-M-E. Our service representatives will help you choose the right components and place your order.

NOT RECOMMENDED for temperatures in excess of 200° F

MUD Quick-Change
Mold Base Adapter Systems



Waterlines are permanently attached to the quick change manifolds to assure accurate connections, every time.



The Instant-Connect feature of the system automatically connects or disconnects your waterlines whenever you install or remove a mold.

The world's fastest Quick-Change™ system for standard mold bases

Five-minute mold changes from part to part? Absolutely! The Master Unit Die Quick-Change™ Adapter System for standard mold bases with Instant-Connect™ Waterlines is an engineering breakthrough that revolutionized the plastic injection molding industry.

The Quick-Change Adapter System provides molders with several important advantages:

- Reduces changeover time — dramatically!
- Easy to install — no machine modifications and only minor mold modifications
- Simple and easy to use
- Affordably priced
- Dependable — precision-built for years of trouble-free use
- Assures accurate waterline connections, every time

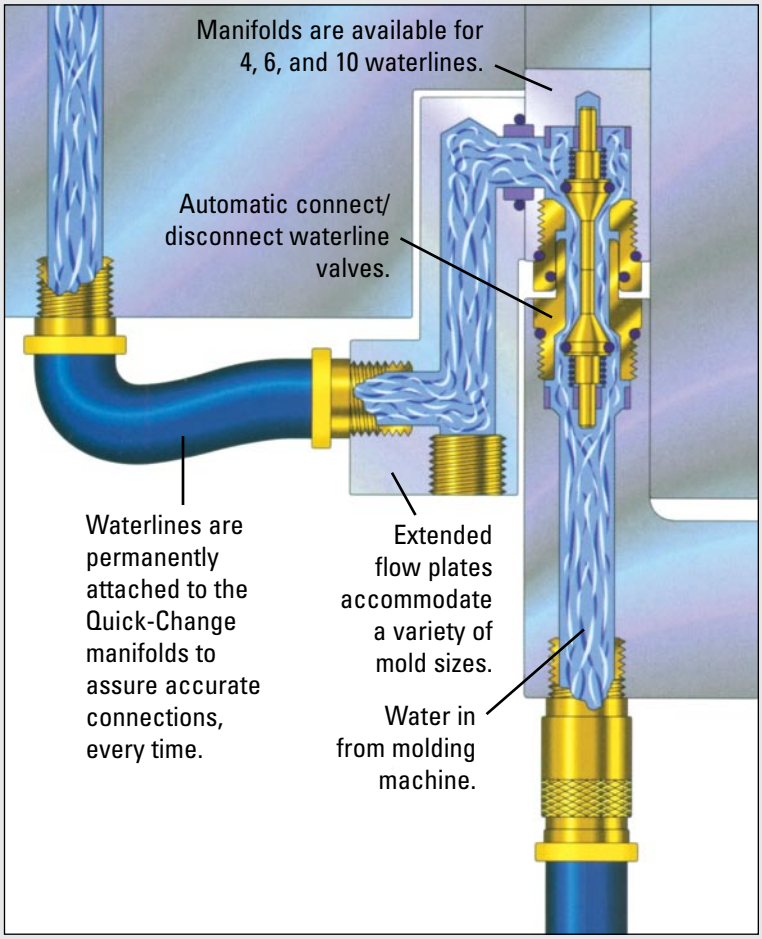
If you use standard mold bases, you understand the frustration of excessive downtime, complex set-ups, lost production, and inaccurate waterline connections. The MUD Quick-Change Adapter System with Instant-Connect Waterlines changes all that.

This innovative, yet simple technology automatically connects or disconnects your waterlines whenever you install or remove a mold — a process made possible with MUD's integrated adapter frames and companion ear plates. MUD Quick-Change adapter frames and companion ear plates are available in six standard sizes, each accommodating a wide range of standard mold bases.

To install the system, attach the adapter frame to your molding machine and connect the waterlines to the manifolds located in the back sections of the frame. Then, attach the ear plates to your standard mold base and connect the waterlines to the flow plate located on the end of each ear plate. Now, you're ready for a true 5-minute mold change!

The Instant-Connect Waterline System is available with manifolds for 4, 6, and 10 waterlines. The system is also available with extended flow plates to accommodate a variety of mold sizes. All manifolds and flow plates can be quickly removed for cleaning or servicing.

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To achieve the full benefit of the Quick-Change system, the use of a MUD mold change cart is highly recommended. This specially designed cart, with its built-in waterline manifolds, allows you to precondition the mold prior to installation. The cart is equipped to hold two molds, which makes it perfect for changing and transporting molds.

Changeovers are easy. When the new mold is properly preconditioned, remove the existing mold from the molding machine and place it on the mold change cart. When the mold is lifted, the waterlines will be automatically disconnected. Then, lift the new mold from the mold change cart and lower it into the adapter frame. When the mold is in place, the waterlines will be automatically connected. It's just that easy, and just that fast!

Learn more about this breakthrough technology, and how it can help you improve your productivity. Call D-M-E to request a MUD DVD that includes the MUD Quick-Change Mold Base Adapter Systems video.



The MUD mold change cart, with its built-in waterline manifolds, allows you to precondition molds prior to installation. The cart is also equipped with two mold holders, which makes it perfect for changing and transporting molds.



A proven time-saver, MUD's exclusive Balancing Lift Bars feature slide-and-lock attachment for fast positioning at the balance point and easy in-and-out mold changes.

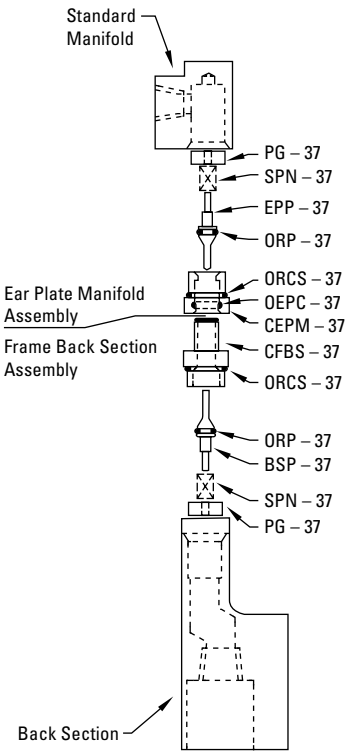
4-Coupler Instant-Connect™ Waterline System

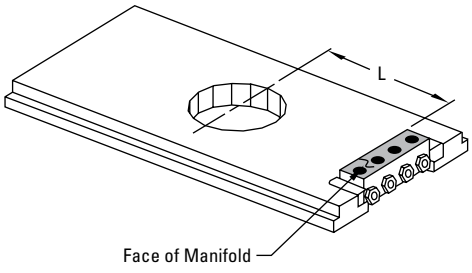
Fits 12/18 and 14/20 Mold Base Adapter Systems

Mold Base Adapter Ear Plate	Mold Base Length	L = Centerline of Ear Plate to Face of Manifold	P = Centerline of Ear Plate to Extended Flow Plate	Standard Manifold	Universal Manifold with Straight Flow Plate	Universal Manifold with Extended Flow Plate		
						3.37	5.37	7.37
12/18 AEP 011	14.00"	7.03		•	•			
	*18.75"	9.40	*7.00			•		
	*22.75"	11.40	*7.00				•	
	*26.75"	13.40	*7.00					•
14/20 AEP 011	16.00"	8.03		•	•			
	*20.75"	10.40	*8.00			•		
	*24.75"	12.40	*8.00				•	
	*28.75"	14.40	*8.00					•

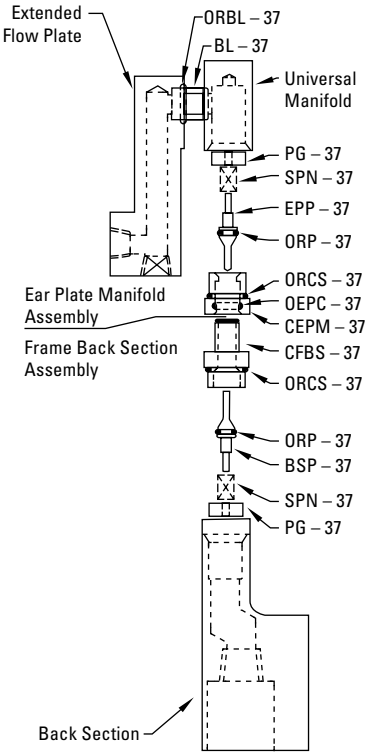
* Top and bottom clamp plates of mold base must have pocket machined to accept these extended flow plates.

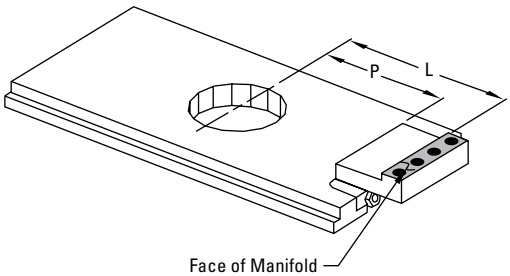
ITEM NO.	DESCRIPTION
EPM-FP-374	Standard Manifold





ITEM NO.	DESCRIPTION
EPM-374	Universal Manifold

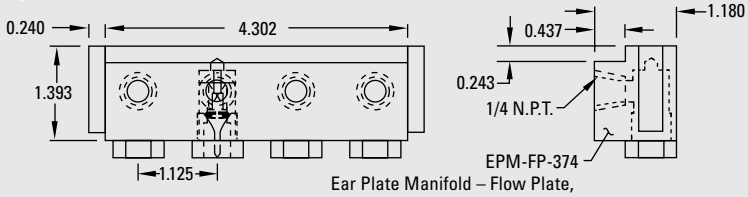




4-Coupler Instant-Connect™ Waterline System

For use with Standard Manifold

ITEM NO.	DESCRIPTION
EPM-FP-374	Standard Manifold

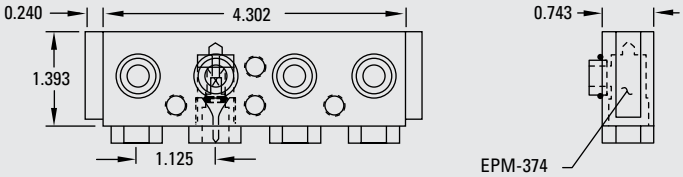


Ear Plate Manifold – Flow Plate, Supplied with Fittings

4-Coupler Instant-Connect™ Waterline System

For use with Universal Manifold

ITEM NO.	DESCRIPTION
EPM-374	Universal Manifold

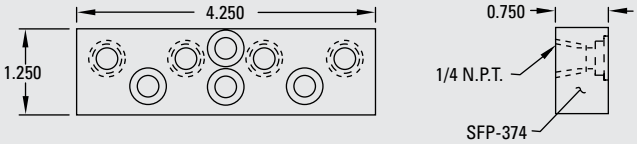


Ear Plate Manifold Supplied with Fittings, Bolts, O-rings & Bushings

Straight Flow Plate

For use with Universal Manifold

ITEM NO.
SFP-374

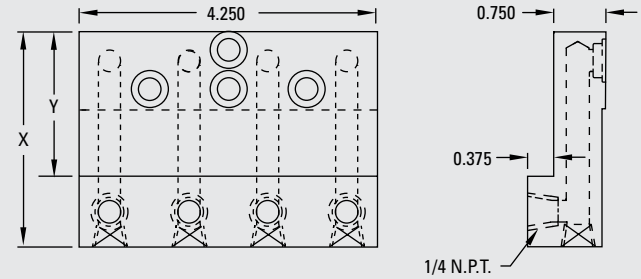


Straight Flow Plate

Extended Flow Plates

For use with Universal Manifold

ITEM NO.	X	Y
337-EFP-374	3.37	2.37
537-EFP-374	5.37	4.37
737-EFP-374	7.37	6.37



Choosing the right system for your application

The 4-Coupler Instant-Connect Waterline System is designed to fit 12/18 and 14/20 Mold Base Adapter Systems. The 4-Coupler Instant-Connect™ waterline manifold provides 2 waterline inlets and outlets for both the cavity and core halves of the mold. The system is uniquely designed to accommodate a wide range of standard mold base sizes. This built-in flexibility is achieved through the use of either a Standard or Universal Manifold System.

Standard Manifold System

The Standard Manifold System is designed to fit any compatible mold base that does not extend over the face of the manifold. No mold modifications are necessary to use a Standard Manifold System. To achieve the full benefits of the system, one set of Instant-Connect manifolds and ear plates should be ordered for each mold base.

Universal Manifold System

The Universal Manifold System incorporates the use of one manifold with a family of interchangeable flow plates. Each flow plate accommodates a different mold base length (see table). The universal system offers two important advantages. First, it allows the use of a wide range of mold base lengths. Secondly, it lets you accommodate a variety of mold bases with one universal manifold and interchangeable set of flow plates. To provide room for the attachment of extended flow plates, a pocket must be machined in the top and bottom clamp plate of the mold base.

NOT RECOMMENDED for temperatures in excess of 200˚F

Ordering information for the Instant-Connect™ Waterline System can be found on page AF 105, or call D-M-E.

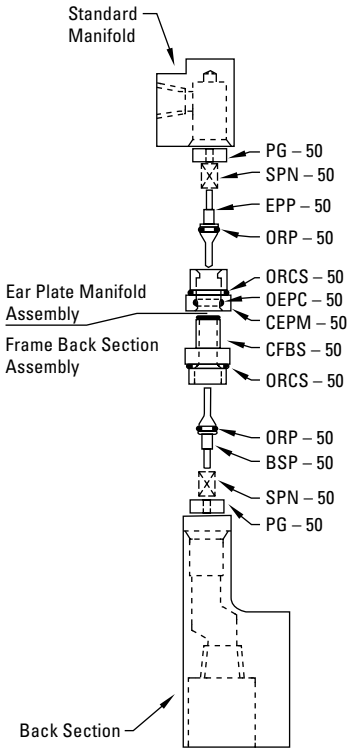
6-Coupler Instant-Connect™ Waterline System

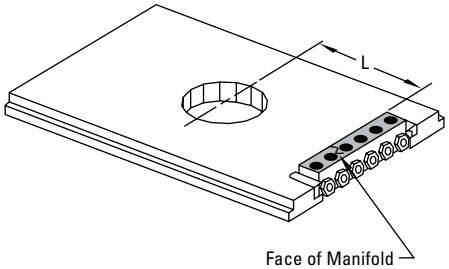
Fits 16/21 and 18/26 Mold Base Adapter Systems

Mold Base Adapter Ear Plate	Mold Base Length	L = Centerline of Ear Plate to Face of Manifold	P = Centerline of Ear Plate to Extended Flow Plate	Standard Manifold	Universal Manifold with Straight Flow Plate	Universal Manifold with Extended Flow Plate		
						3.37	5.37	7.37
16/21 AEP 011	15.5"	7.78		•	•			
	*19.5"	9.84	*7.75			•		
	*23.5"	11.84	*7.75				•	
	*27.5"	13.84	*7.75					•
18/26 AEP 011	20.5"	10.28		•	•			
	*24.5"	12.34	*10.25			•		
	*28.5"	14.34	*10.25				•	
	*32.5"	16.34	*10.25					•

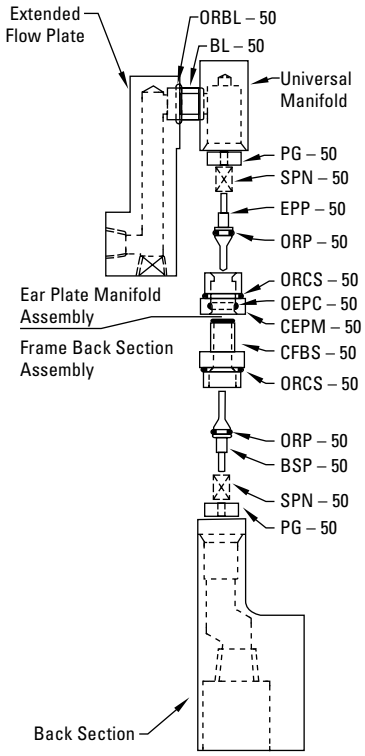
* Top and bottom clamp plates of mold base must have pocket machined to accept these extended flow plates.

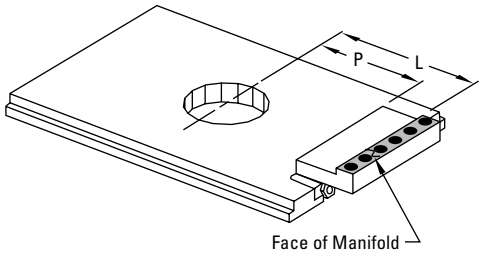
ITEM NO.	DESCRIPTION
EPM-FP-506	Standard Manifold





ITEM NO.	DESCRIPTION
EPM-506	Universal Manifold

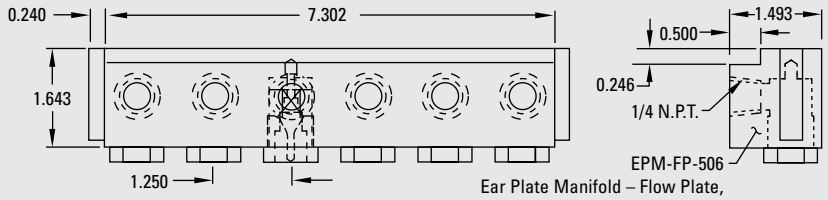




6-Coupler Instant-Connect™ Waterline System

For use with Standard Manifold

ITEM NO.	DESCRIPTION
EPM-FP-506	Standard Manifold

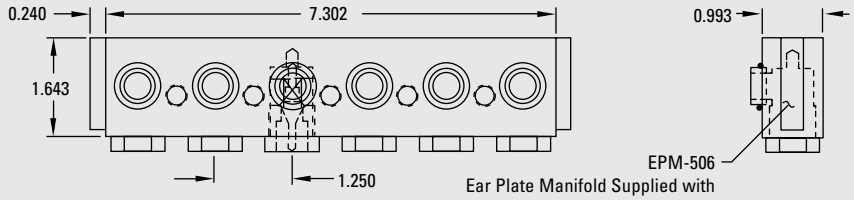


Ear Plate Manifold – Flow Plate, Supplied with Fittings

6-Coupler Instant-Connect™ Waterline System

For use with Universal Manifold

ITEM NO.	DESCRIPTION
EPM-506	Universal Manifold

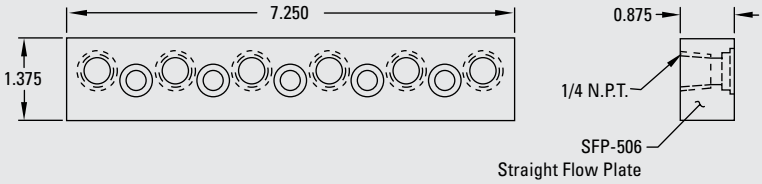


Ear Plate Manifold Supplied with Fittings, Bolts, O-rings & Bushings

Straight Flow Plate

For use with Universal Manifold

ITEM NO.
SFP-506

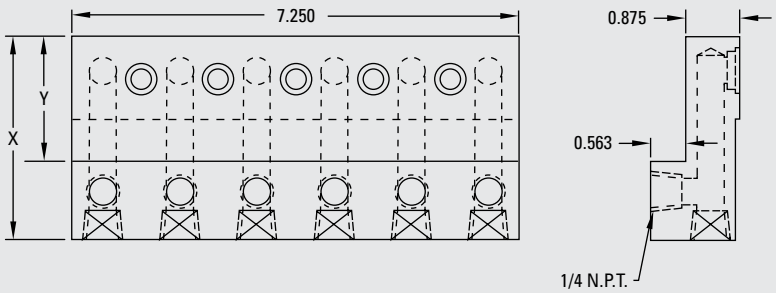


Straight Flow Plate

Extended Flow Plates

For use with Universal Manifold

ITEM NO.	X	Y
337-EFP-506	3.37	2.06
537-EFP-506	5.37	4.06
737-EFP-506	7.37	6.06



Choosing the right system for your application

The 6-Coupler Instant-Connect Waterline System is designed to fit 16/21 and 18/26 Mold Base Adapter Systems. The 6-Coupler Instant-Connect™ waterline manifold provides 3 waterline inlets and outlets for both the cavity and core halves of the mold. The system is uniquely designed to accommodate a wide range of standard mold base sizes. This built-in flexibility is achieved through the use of either a Standard or Universal Manifold System.

Standard Manifold System

The Standard Manifold System is designed to fit any compatible mold base that does not extend over the face of the manifold. No mold modifications are necessary to use a Standard Manifold System. To achieve the full benefits of the system, one set of Instant-Connect manifolds and ear plates should be ordered for each mold base.

Universal Manifold System

The Universal Manifold System incorporates the use of one manifold with a family of interchangeable flow plates. Each flow plate accommodates a different mold base length (see table). The universal system offers two important advantages. First, it allows the use of a wide range of mold base lengths. Secondly, it lets you accommodate a variety of mold bases with one universal manifold and interchangeable set of flow plates. To provide room for the attachment of extended flow plates, a pocket must be machined in the top and bottom clamp plate of the mold base.

NOT RECOMMENDED for temperatures in excess of 200˚F

Ordering information for the Instant-Connect™ Waterline System can be found on page AF 105, or call D-M-E.

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-43 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

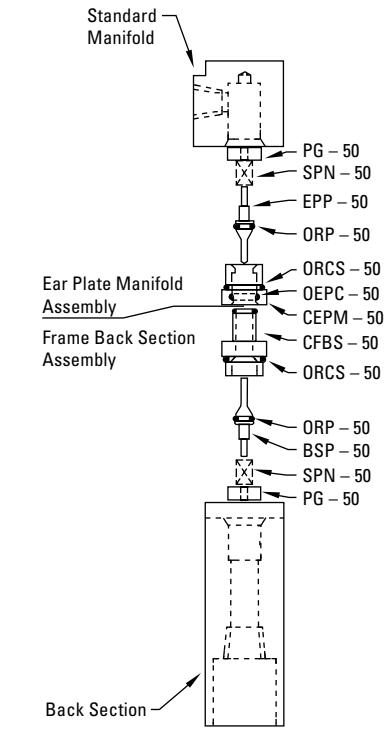
10-Coupler Instant-Connect™ Waterline System

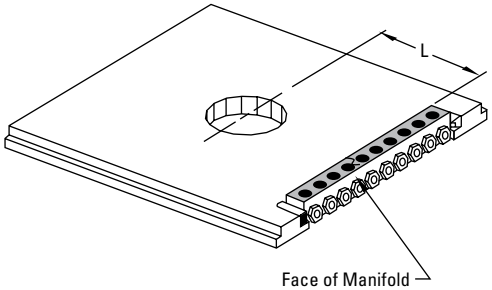
Fits 22/30 and 24/36 Mold Base Adapter Systems

Mold Base Adapter Ear Plate	Mold Base Length	L = Centerline of Ear Plate to Face of Manifold	P = Centerline of Ear Plate to Extended Flow Plate	Standard Manifold	Universal Manifold with Straight Flow Plate	Universal Manifold with Extended Flow Plate		
						3.37	5.37	7.37
22/30 AEP 011	24.5"	12.28		•	•			
	*28.5"	14.34	*12.25			•		
	*32.5"	16.34	*12.25				•	
	*36.5"	18.34	*12.25					•
24/36 AEP 011	30.5"	15.28		•	•			
	*34.5"	17.34	*15.25			•		
	*38.5"	19.34	*15.25				•	
	*42.5"	21.34	*15.25					•

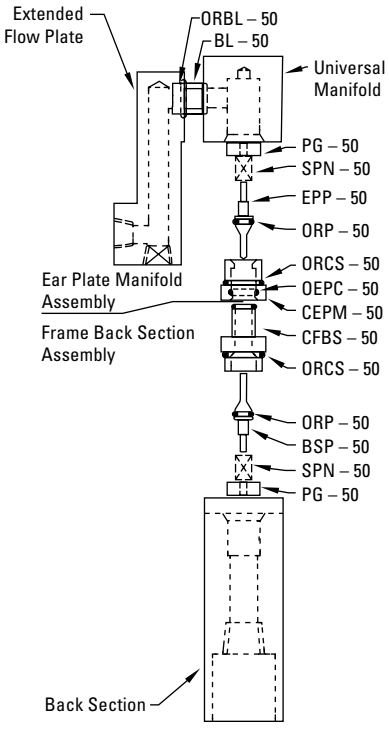
* Top and bottom clamp plates of mold base must have pocket machined to accept these extended flow plates.

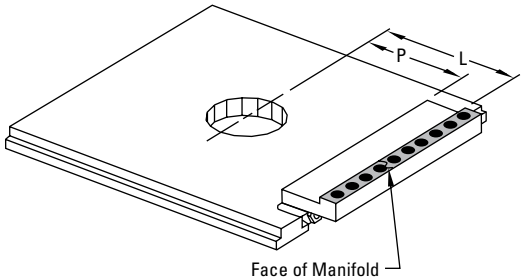
ITEM NO.	DESCRIPTION
EPM-FP-5010	Standard Manifold





ITEM NO.	DESCRIPTION
EPM-5010	Universal Manifold

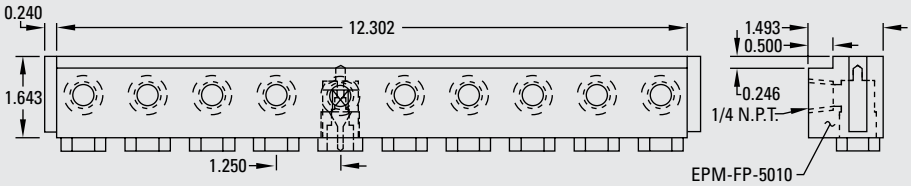




10-Coupler Instant-Connect™ Waterline System

For use with Standard Manifold

ITEM NO.	DESCRIPTION
EPM-FP-5010	Standard Manifold

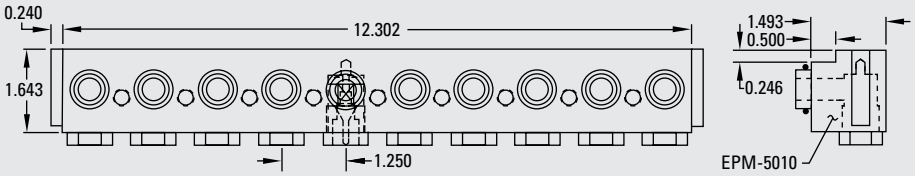


Ear Plate Manifold – Flow Plate, Supplied with Fittings

10-Coupler Instant-Connect™ Waterline System

For use with Universal Manifold

ITEM NO.	DESCRIPTION
EPM-5010	Universal Manifold

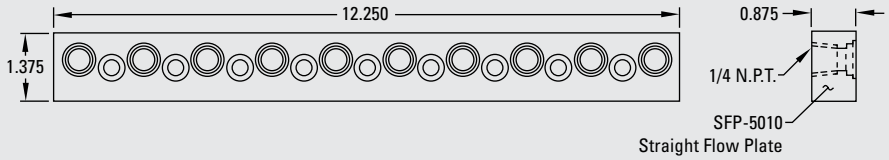


Ear Plate Manifold Supplied with Fittings, Bolts, O-rings & Bushings

Straight Flow Plate

For use with Universal Manifold

ITEM NO.
SFP-5010

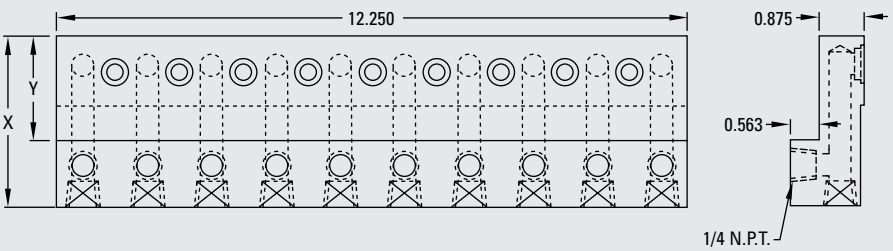


Straight Flow Plate

Extended Flow Plates

For use with Universal Manifold

ITEM NO.	X	Y
337-EFP-5010	3.37	2.06
537-EFP-5010	5.37	4.06
737-EFP-5010	7.37	6.06



Choosing the right system for your application

The 10-Coupler Instant-Connect Waterline System is designed to fit 22/30 and 24/36 Mold Base Adapter Systems. The 10-Coupler Instant-Connect™ waterline manifold provides 5 waterline inlets and outlets for both the cavity and core halves of the mold. The system is uniquely designed to accommodate a wide range of standard mold base sizes. This built-in flexibility is achieved through the use of either a Standard or Universal Manifold System.

Standard Manifold System

The Standard Manifold System is designed to fit any compatible mold base that does not extend over the face of the manifold. No mold modifications are necessary to use a Standard Manifold System. To achieve the full benefits of the system, one set of Instant-Connect manifolds and ear plates should be ordered for each mold base.

Universal Manifold System

The Universal Manifold System incorporates the use of one manifold with a family of interchangeable flow plates. Each flow plate accommodates a different mold base length (see table). The universal system offers two important advantages. First, it allows the use of a wide range of mold base lengths. Secondly, it lets you accommodate a variety of mold bases with one universal manifold and interchangeable set of flow plates. To provide room for the attachment of extended flow plates, a pocket must be machined in the top and bottom clamp plate of the mold base.

NOT RECOMMENDED for temperatures in excess of 200˚F

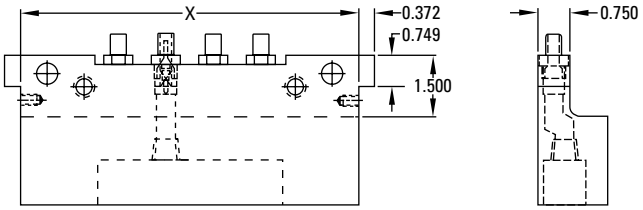
Ordering information for the Instant-Connect™ Waterline System can be found on page AF 105, or call D-M-E.

Mold Base Adapter
Back Section Manifolds

4-Coupler Back Section Manifold

12/18 AF and 14/20 AF

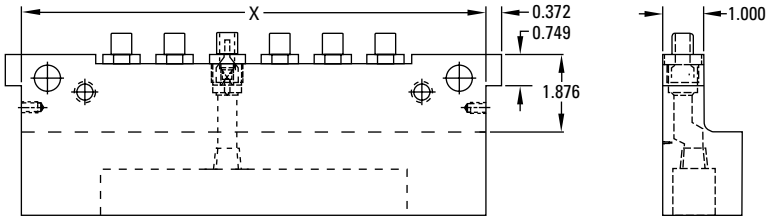
ITEM NO.	FRAME	X
12/18 AFBSM 104	12/18 AF	8.001
14/20 AFBSM 104	14/20 AF	10.001



6-Coupler Back Section Manifold

16/21 AF and 18/26 AF

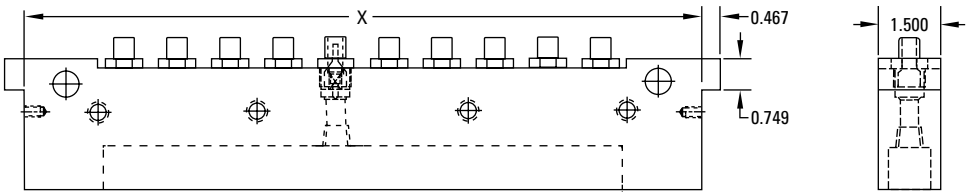
ITEM NO.	FRAME	X
16/21 AFBSM 106	16/21 AF	11.001
18/26 AFBSM 106	18/26 AF	12.001



10-Coupler Back Section Manifold

22/30 AF and 24/36 AF

ITEM NO.	FRAME	X
22/30 AFBSM 110	22/30 AF	16.001
24/36 AFBSM 110	24/36 AF	19.501



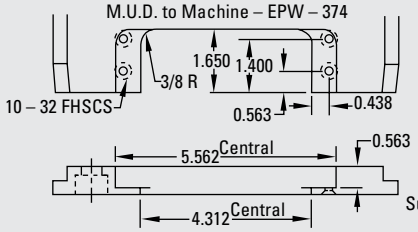
Ear Plate Machining Specifications

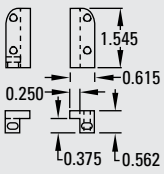
4-Coupler Ear Plate Pocket

12/18 AF and 14/20 AF

ITEM NO.	DESCRIPTION
EPW-374	4-Coupler Ear Plate Pocket
EPGA-374	Ear Plate Gibs

For Use On .750 Thick Adapter Frame Ear Plates
M.U.D. to Machine – EPW – 374





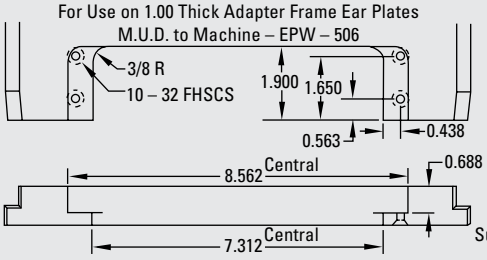
EPG – 374, Ear Plate Gib
Supplied with 10 – 32 FHSCS
& Locks (EPL – 374)
Set of 4

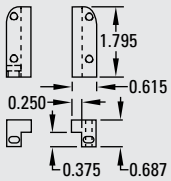
6-Coupler Ear Plate Pocket

16/21 AF and 18/26 AF

ITEM NO.	DESCRIPTION
EPW-506	6-Coupler Ear Plate Pocket
EPGA-506	Ear Plate Gibs

For Use on 1.00 Thick Adapter Frame Ear Plates
M.U.D. to Machine – EPW – 506





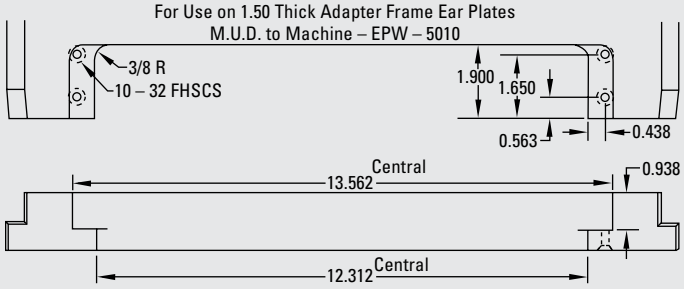
EPG – 506, Ear Plate Gib
Supplied with 10 – 32 FHSCS
& Locks (EPL – 506)
Set of 4

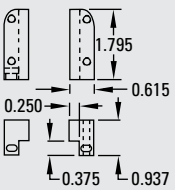
10-Coupler Ear Plate Pocket

22/30 AF and 24/36 AF

ITEM NO.	DESCRIPTION
EPW-5010	10-Coupler Ear Plate Pocket
EPGA-5010	Ear Plate Gibs

For Use on 1.50 Thick Adapter Frame Ear Plates
M.U.D. to Machine – EPW – 5010

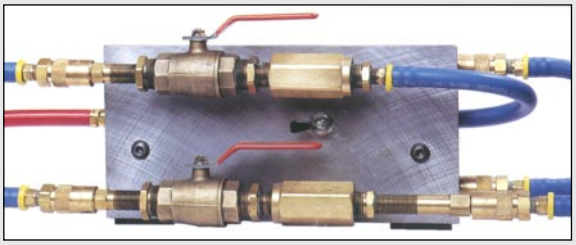




EPG – 5010, Ear Plate Gib
Supplied with 10 – 32 FHSCS
& Locks (EPL – 5010)
Set of 4

The MUD Waterline Purge System™

ITEM NO.
PSA-1000



THE MUD Waterline Purge System is specifically engineered for easy operation and virtually no maintenance.

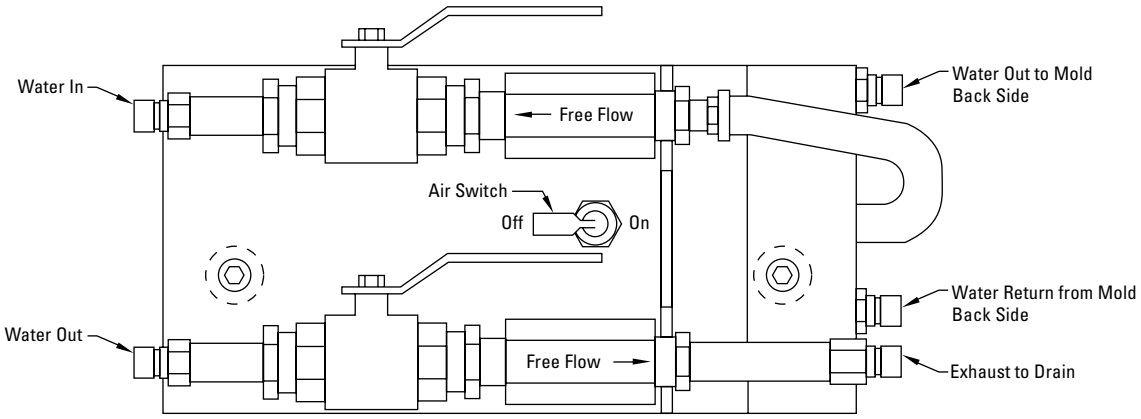
Easy to use and sensibly priced

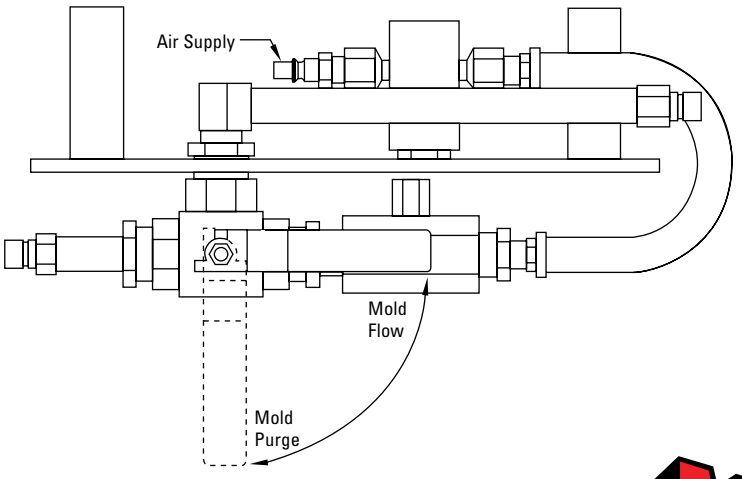
The MUD Waterline Purge System is ideal for molders who prefer to purge the waterlines before storing their molds. This completely mechanical purge system is specifically engineered for easy operation and virtually no maintenance. The system is installed on the molding machine and becomes an integral part of the waterline system.

This new system allows you to purge your waterlines in 30 seconds or less!

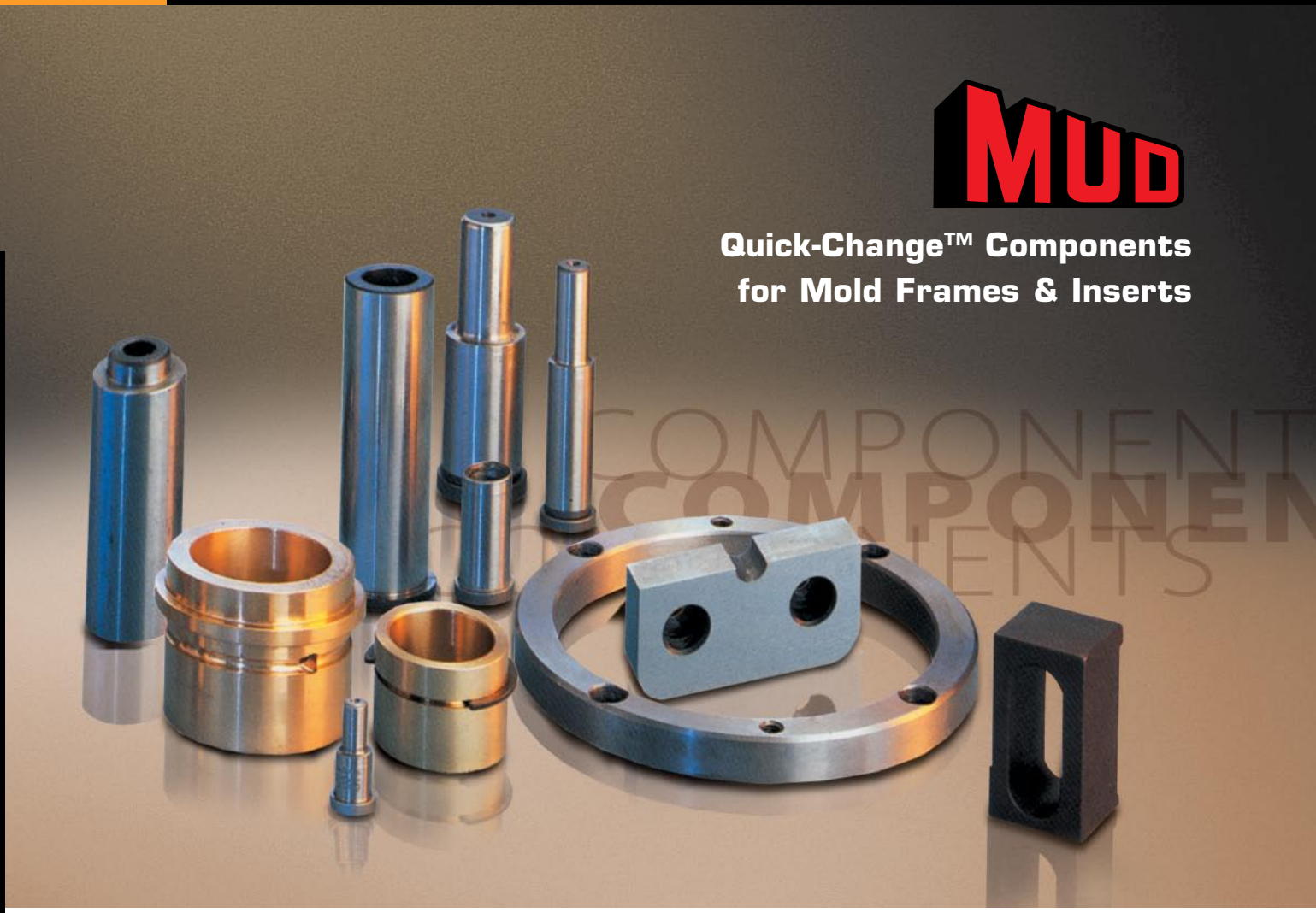
Operation of the MUD Waterline Purge System involves three easy steps. First, turn off the water supply with the two valves. Then, activate the air switch to inject air into the waterlines. After the cooling media has been purged from the system, the mold is ready to be changed. To begin the water flow, just return the valves to the open position. Please note: If you use an enclosed system, the purged cooling media must be drained into a holding container.

Learn more about the MUD Waterline Purge System and the MUD Quick-Change™ Adapter System with Instant-Connect™ Waterlines. Call D-M-E to request a MUD DVD that includes the MUD Quick-Change Mold Base Adapter Systems video.





MUD Quick-Change Systems from D-M-E



Customize MUD frames and insert molds with a full range of components

MUD® Quick-Change frames and companion insert mold series are available with a full range of components. These components permit tailoring MUD frames and insert molds to every injection molding machine up to 500 tons. This makes the cost-saving benefits and time-saving advantages of the Master Unit Die Concept available to virtually every mold maker and plastic molder in the industry.

The components included in this brochure include all of the standard parts installed in the MUD basic Quick-Change frames and companion insert molds. U, H and Double H frame components include sprue bushings, locating rings and guide posts. Components for T style and standard style insert molds include leader pins and bushings, ejector plates and ear plates.

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

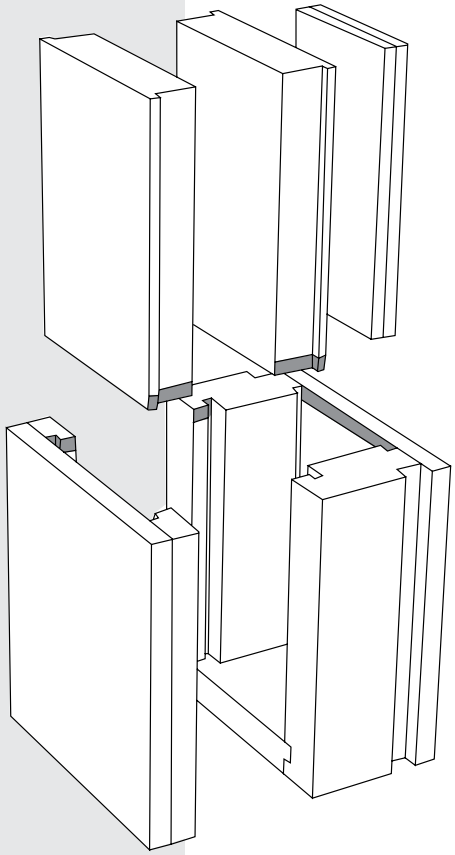
Quick-Change Components
Frame & Insert Mold Tapered Leads

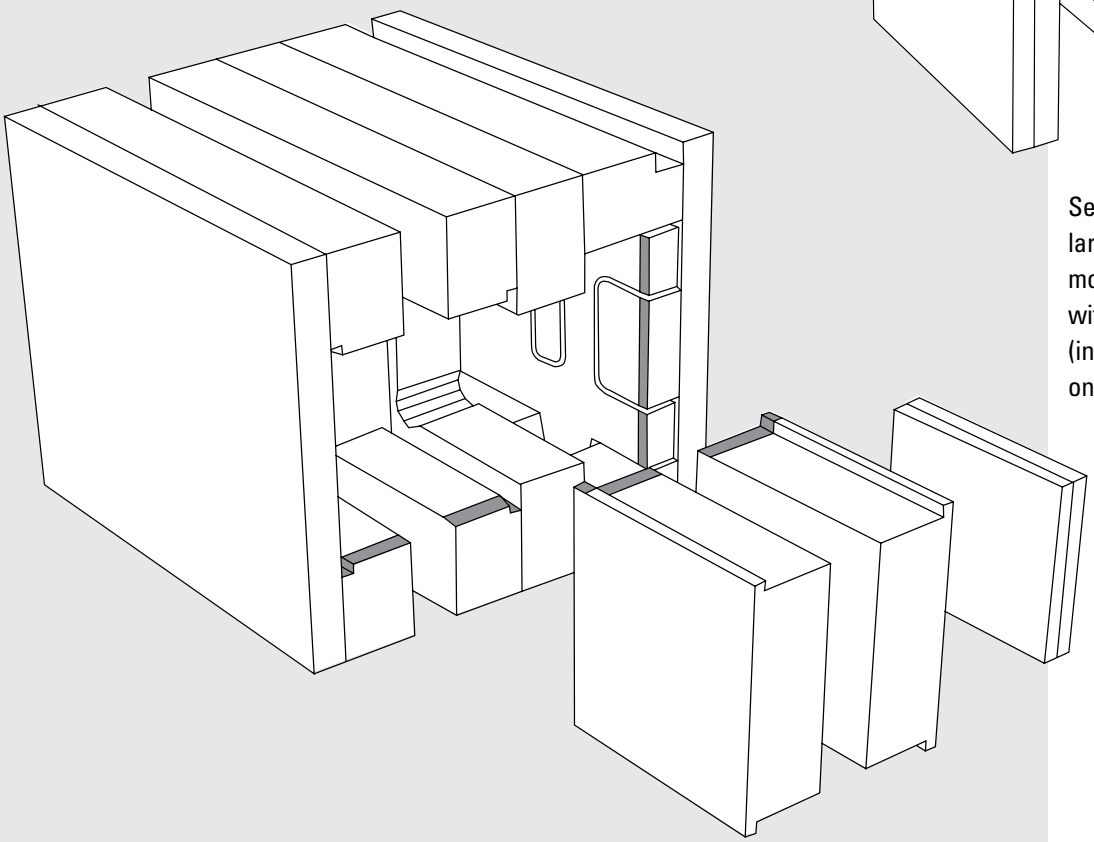
Easy alignment, faster mold changes with MUD tapered leads

D-M-E has an ongoing research and development program. One of the primary objectives of this program is to facilitate faster mold changes. MUD Quick-Change systems are predicated on making these mold changes as efficient as possible. One result of this program is the 5° tapered lead.

All MUD Quick-Change frame ear slots are now machined with these tapered leads. Seven-inch wide and larger companion insert molds are also machined with a tapered lead. The gray shading on the illustrations indicates the areas with this 5° tapered lead.

The result of this product improvement is easier alignment and faster installation of companion insert molds in MUD Quick-Change frames.



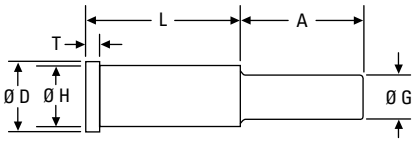


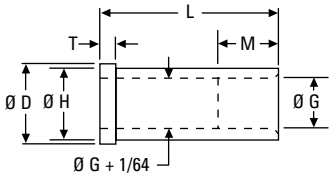
Seven-inch wide and larger companion insert molds are machined with a 5° tapered lead (indicated by gray shading on the illustrations).

Quick-Change Components
Leader Pins, Bushings & Accessories









Shoulder Leader Pins

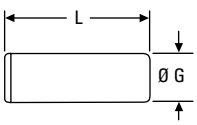
ITEM NO.	G +.0000 -.0005	H +.0005 -.0000	D +.000 -.010	T +.000 -.003	L ±.01	A ±.01
P2-585	.2495	.3750	.485	.125	.585	.500
P2-835	.2495	.3750	.485	.125	.835	.750
P2-1210	.2495	.3750	.485	.125	1.210	1.250
P2-1335	.2495	.3750	.485	.125	1.335	1.000
P2-1710	.2495	.3750	.485	.125	1.710	1.250
P2-2210	.2495	.3750	.485	.125	2.210	1.250
P3-585	.3750	.5005	.610	.125	.585	.750
P3-835	.3750	.5005	.610	.125	.835	.750
P3-1085	.3750	.5005	.610	.125	1.085	1.000
P3-1210	.3750	.5005	.610	.125	1.210	1.000
P3-1710-10	.3750	.5005	.610	.125	1.710	1.000
P3-1710-15	.3750	.5005	.610	.125	1.710	1.500
P3-2210	.3750	.5005	.610	.125	2.210	1.500
P3-2710	.3750	.5005	.610	.125	2.710	1.750
P5-585-6	.4990	.7510	.853	.187	.585	.625
P5-585-8	.4990	.7510	.853	.187	.585	.875
P5-835-6	.4990	.7510	.853	.187	.835	.625
P5-835-8	.4990	.7510	.853	.187	.835	.875
P5-1085	.4990	.7510	.853	.187	1.085	1.000
P5-1210	.4990	.7510	.853	.187	1.210	1.250
P5-1335	.4990	.7510	.853	.187	1.335	.750
P5-1710-12	.4990	.7510	.853	.187	1.710	1.250
P5-1710	.4990	.7510	.853	.187	1.710	1.750
P5-2210	.4990	.7510	.853	.187	2.210	1.750
P5-2710	.4990	.7510	.853	.187	2.710	1.750
P6-710	.6240	.8760	.985	.187	.710	.750
P6-1210-7	.6240	.8760	.985	.187	1.210	.750
P6-1210-12	.6240	.8760	.985	.187	1.210	1.250
P6-1710	.6240	.8760	.985	.187	1.710	1.250
P6-2210-12	.6240	.8760	.985	.187	2.210	1.250
P6-2210	.6240	.8760	.985	.187	2.210	1.750
P6-2710	.6240	.8760	.985	.187	2.710	1.750
P6-3210	.6240	.8760	.985	.187	3.210	1.750
P6-3710	.6240	.8760	.985	.187	3.710	1.750
P6-4210	.6240	.8760	.985	.187	4.210	2.500
P6-4710	.6240	.8760	.985	.187	4.710	2.500

Shoulder Bushings

ITEM NO.	G +.0005 -.0000	H +.0005 -.0000	D +.000 -.010	T +.000 -.003	L ±.01	M MIN
B2-585	.2500	.3750	.485	.125	.585	—
B2-835	.2500	.3750	.485	.125	.835	.50
B2-1210	.2500	.3750	.485	.125	1.210	.50
B2-1335	.2500	.3750	.485	.125	1.335	.50
B2-1710	.2500	.3750	.485	.125	1.710	.50
B3-585	.3755	.5005	.610	.125	.585	—
B3-835	.3755	.5005	.610	.125	.835	.50
B3-1085	.3755	.5005	.610	.125	1.085	.50
B3-1210	.3755	.5005	.610	.125	1.210	.50
B3-1710	.3755	.5005	.610	.125	1.710	.50
B3-2210	.3755	.5005	.610	.125	2.210	.50
B3-2710	.3755	.5005	.610	.125	2.710	.50
B5-585	.5000	.7510	.853	.187	.585	—
B5-835	.5000	.7510	.853	.187	.835	—
B5-1085	.5000	.7510	.853	.187	1.085	.75
B5-1210	.5000	.7510	.853	.187	1.210	.75
B5-1335	.5000	.7510	.853	.187	1.335	.75
B5-1710	.5000	.7510	.853	.187	1.710	.75
B5-2210	.5000	.7510	.853	.187	2.210	.75
B5-2710	.5000	.7510	.853	.187	2.710	.75
B6-710	.6250	.8760	.985	.187	.710	—
B6-1210	.6250	.8760	.985	.187	1.210	.75
B6-1710	.6250	.8760	.985	.187	1.710	.75
B6-2210	.6250	.8760	.985	.187	2.210	.75
B6-2710	.6250	.8760	.985	.187	2.710	.75
B6-3210	.6250	.8760	.985	.187	3.210	.75
B6-3710	.6250	.8760	.985	.187	3.710	.75
B6-4210	.6250	.8760	.985	.187	4.210	.75
B6-4710	.6250	.8760	.985	.187	4.710	.75

Dowel Leader Pins*

ITEM NO.	G	L
P-25	0.250	1.25
P-37	0.375	1.50
P-50	0.500	1.50
P-62	0.625	2.00
P-75	0.750	2.00

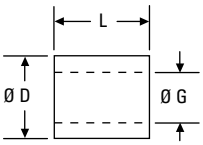


***Replacement leader pins for certain previously constructed insert molds.**

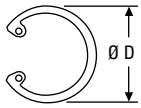
ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

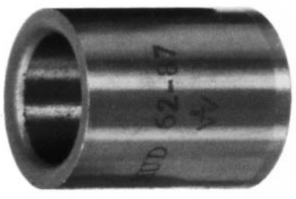
Quick-Change Components
Components

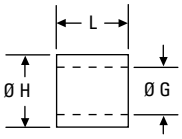












Spacers

ITEM NO.	G	D	L
SB2525	0.28	0.497	0.250
SB2550	0.28	0.497	0.500
SB3825	0.40	0.622	0.250
SB3850	0.40	0.622	0.500
SB3810	0.40	0.622	1.000
SB5025	0.53	0.863	0.250
SB5050	0.53	0.863	0.500
SB5010	0.53	0.863	1.000
SB6205	0.65	0.995	0.500
SB6210	0.65	0.995	1.000
SB6215	0.65	0.995	1.500

Snap Rings

ITEM NO.	PIN	D
MUD5000-50	Ø 0.250	0.55
MUD5000-62	Ø 0.375	0.69
MUD5000-86	Ø 0.500	0.96
MUD5000-100	Ø 0.625	1.11

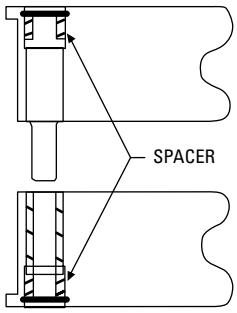
Straight Bushings*

ITEM NO.	G	H	L
MUD25-37	0.252	0.376	0.50
MUD37-50	0.377	0.501	0.50
MUD50-75	0.502	0.751	0.75
MUD62-87	0.627	0.876	1.00
MUD75-87	0.751	1.125	0.87
MUD75-13	0.751	1.125	1.38

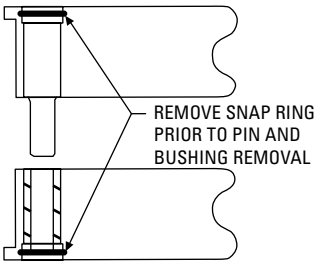
***Replacement bushings for certain previously constructed insert molds.**



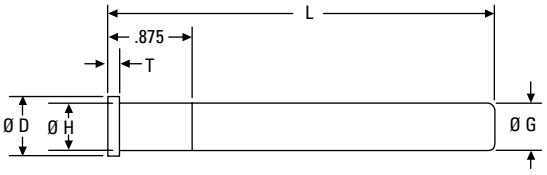
Shoulder Leader Pin and Bushing Assembly (see p. C 118)



Shoulder leader pin and bushing **with** spacer



Shoulder leader pin and bushing **without** spacer



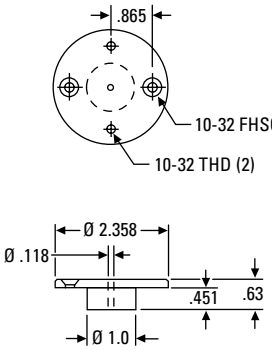
Straight Leader Pins**

ITEM NO.	G	H	D	T	L
SP3-4000	0.374	0.3755	0.610	0.125	4.0
SP5-4000	0.499	0.5005	0.610	0.125	4.0
SP6-4000	0.624	0.6255	0.853	0.187	4.0
SP3-6000	0.374	0.3755	0.610	0.125	6.0
SP5-6000	0.499	0.5005	0.610	0.125	6.0
SP6-6000	0.624	0.6255	0.853	0.187	6.0

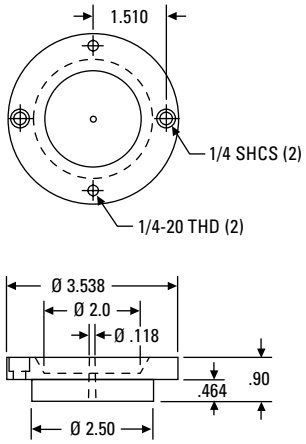
**** Designed for stripper plate and three-plate molds.**

Quick-Change Components
Sprue Bushings

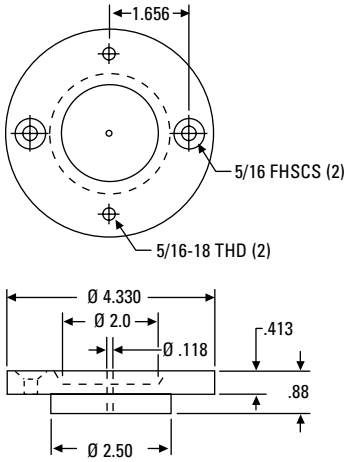




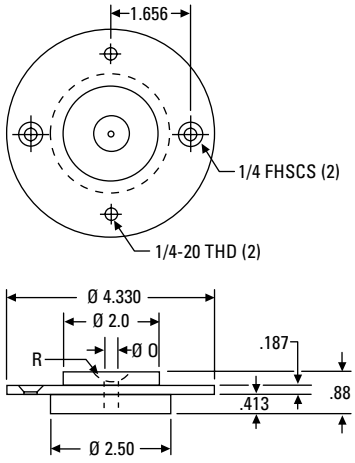
ITEM NO.
SB2310-63-001



ITEM NO.
SB3525-90-001

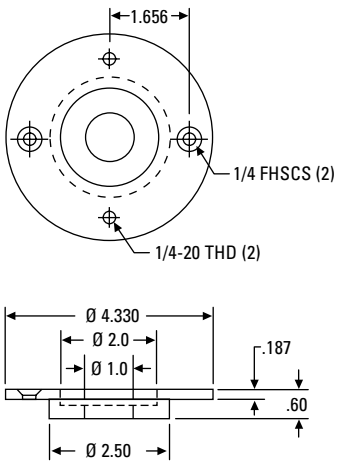


ITEM NO.
SB4325-88-001



ITEM NO.
SB2025-88

SB2025-88 sprue bushing supplied flat with 1/8" orifice or with 1/2" or 3/4" radius with 1/8", 5/32", 7/32" or 9/32" orifice.



ITEM NO.
SB4325-60

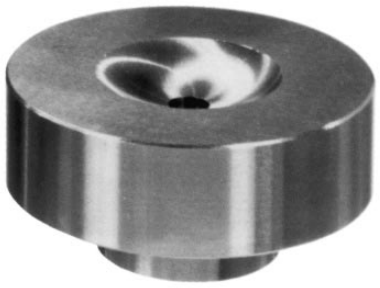
SB4325-60 adapter ring is designed for frames having a 2-1/2" sprue opening to accept SB2010-92 sprue bushing.

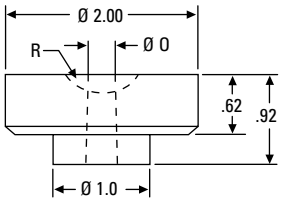
Ordering Information for Sprue Bushings

- Item number and description
- Orifice taper is 1° 11" per side

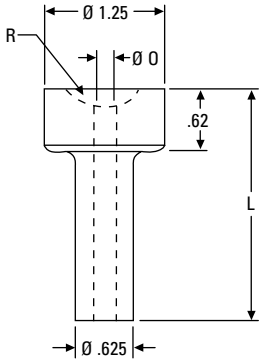
ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

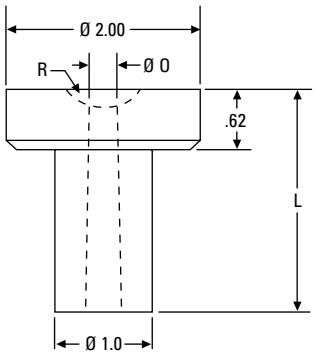






ITEM NO.
SB2010-92





Sprue Bushings

ITEM NO.	L
SB1262-19	1.90
SB1262-29	2.90

H Frame Sprue Bushings

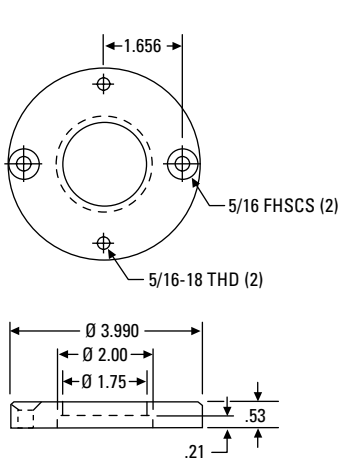
ITEM NO.	L
SB2010-18	1.81
SB2010-23	2.31
SB2010-28	2.81
SB2010-33	3.31
SB2010-38	3.81
SB2010-43	4.31

Ordering Information for Sprue Bushings

- Item number and description
- Specify "O" (orifice) available in 5/32", 7/32" and 9/32"
- Specify "R" (radius) available in 1/2" and 3/4"
- Taper is 1/2" per foot (included angle)

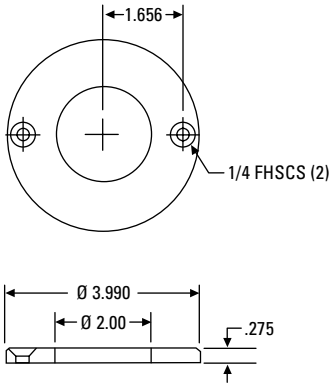
Quick-Change Components
Top Locating Rings





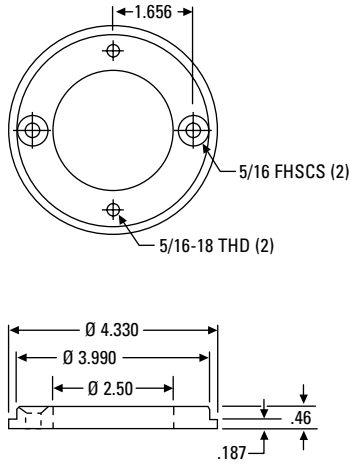
ITEM NO.
LR191R



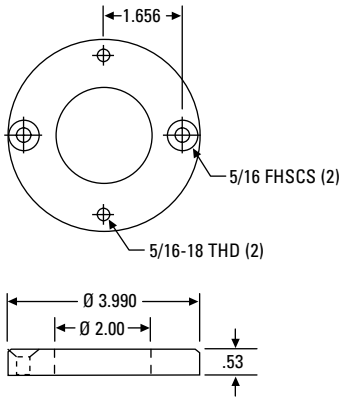


ITEM NO.
LR171

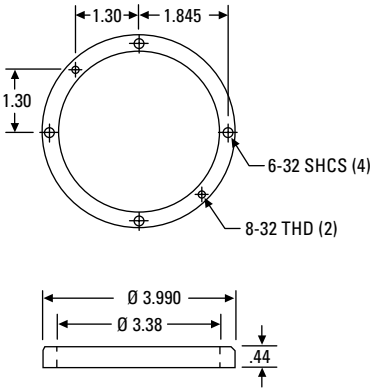




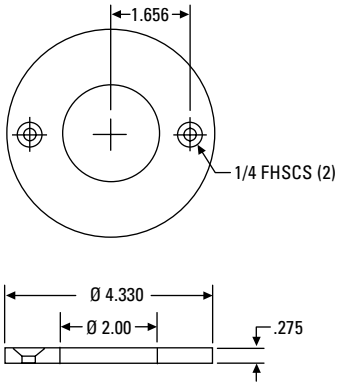
ITEM NO.
LR153



ITEM NO.
LR191



ITEM NO.
LR181

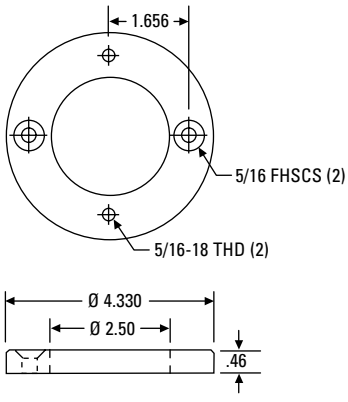


ITEM NO.
LR173

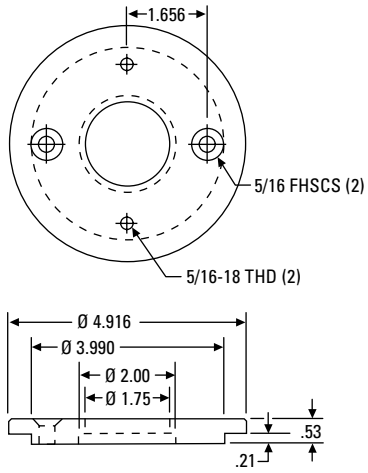




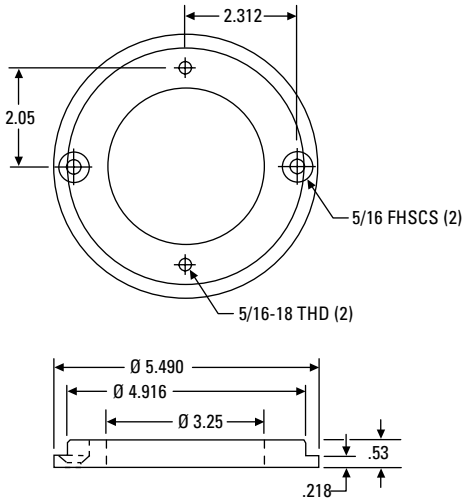




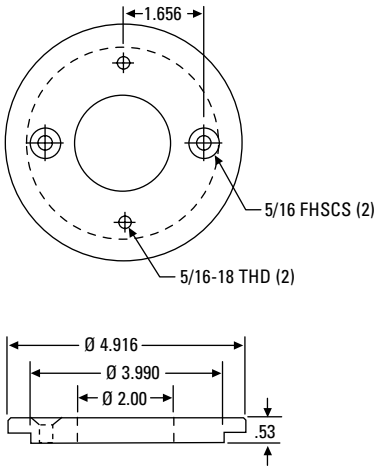
ITEM NO.
LR163



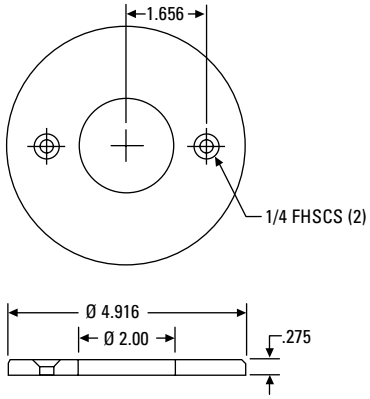
ITEM NO.
LR192R



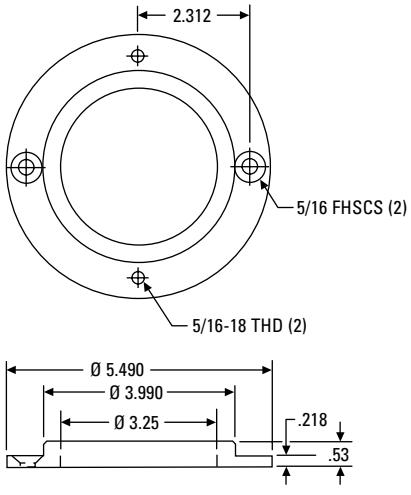
ITEM NO.
LR202



ITEM NO.
LR192



ITEM NO.
LR174

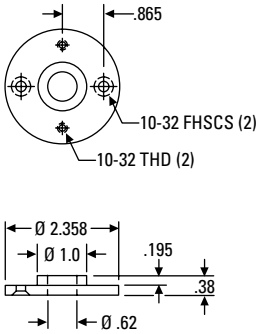


ITEM NO.
LR201

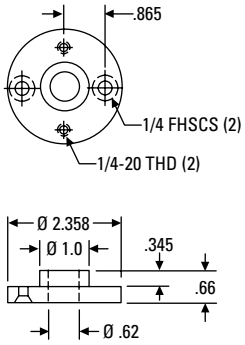
Quick-Change Components
Bottom Locating Rings



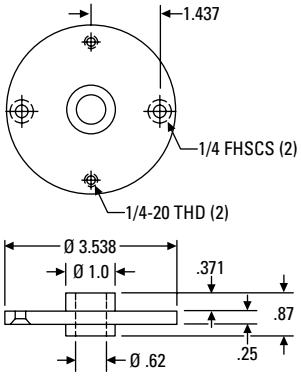




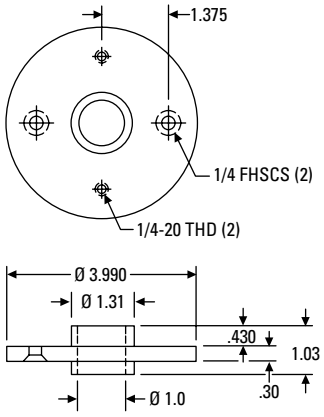
ITEM NO.	DESCRIPTION
LR135	Locating Ring
EX37M10	Knockout Rod CC



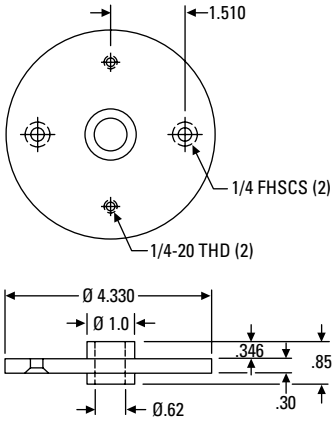
ITEM NO.	DESCRIPTION
LR172	Locating Ring
EX37M10	Knockout Rod CC



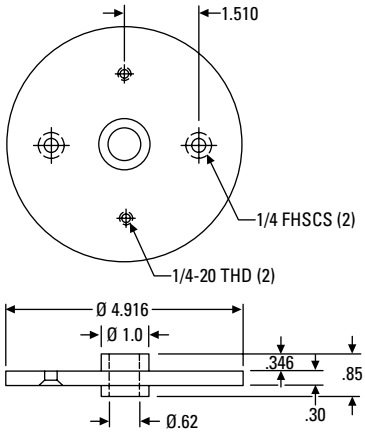
ITEM NO.	DESCRIPTION
LR142	Locating Ring
EX37M10	Knockout Rod CC



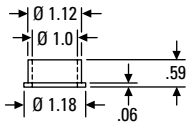
ITEM NO.	DESCRIPTION
LR182	Locating Ring
EX47M10	Knockout Rod CC



ITEM NO.	DESCRIPTION
LR165	Locating Ring
EX37M10	Knockout Rod CC

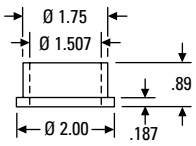


ITEM NO.	DESCRIPTION
LR166	Locating Ring
EX37M10	Knockout Rod CC



ITEM NO.
LR168

Adapter bushing for 08/09UF and 84/90UF bottom locating rings.



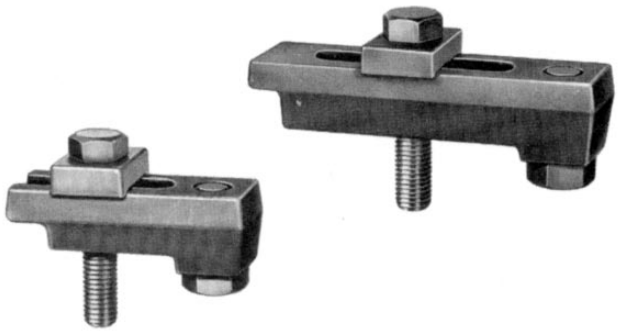
ITEM NO.
KOB-150

Bushing for standard mold base adapter KO rod (bronze).

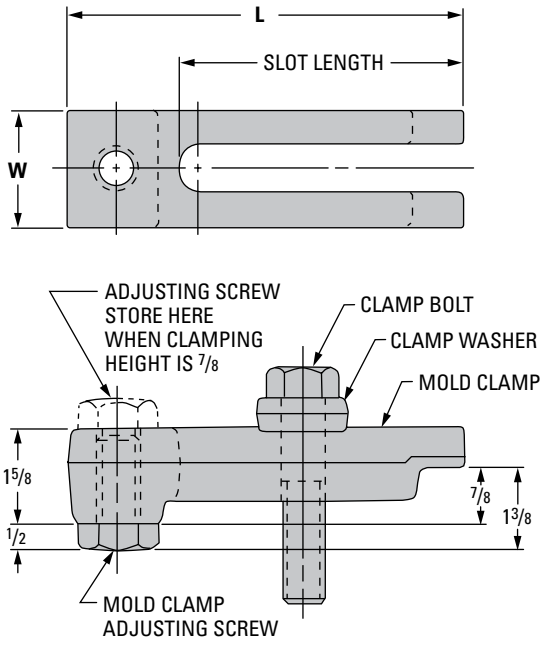
Quick-Change Components
Mold Clamps

FOR PLASTIC MOLDS

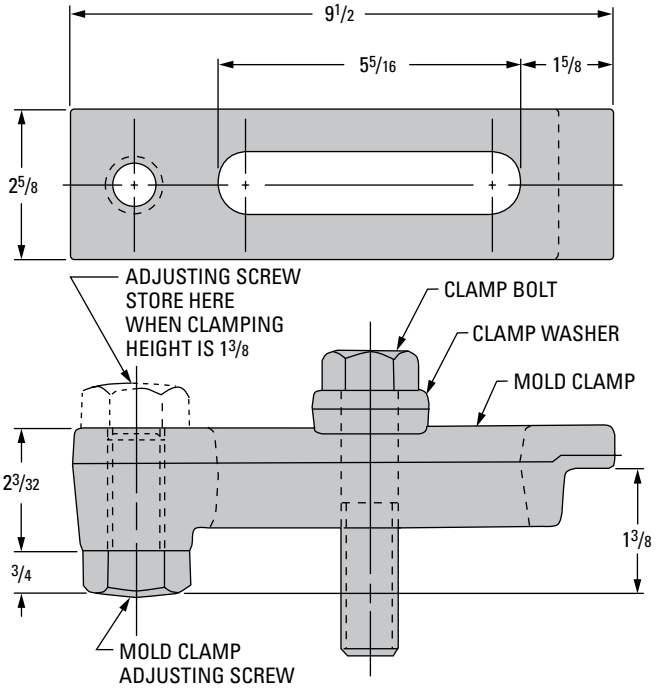
Forged from Hi-tensile steel and carbonitride hardened. The design features a hardened no-turn washer and a shape and range of sizes that permit universal application for any mold.



ITEM NO'S. MCA-4-4 TO MCA-6-7



ITEM NO. MCA-8-95



Mold Clamps for Plastic Molds – MCA

ITEM NUMBER	CLAMP DIMENSIONS L LENGTH	W WIDTH	SLOT LENGTH	CLAMP SCREW SIZE (†) THD. x LENGTH	REPLACEMENT PARTS CLAMP BOLT AND WASHER KIT	ADJUSTING SCREW
MCA-4-4	4 3/16	1 5/8	2 13/16	1/2-13 x 3"	MCK-4	MCAS-5
MCA-5-5	5 3/16	1 7/8	3 3/8	5/8-11 x 3 1/2"	MCK-5	MCAS-6
MCA-5-7	7	1 7/8	5	5/8-11 x 3 1/2"		
MCA-6-5	5 3/16	2	3 3/8	3/4-10 x 3 1/2"	MCK-6	
MCA-6-7	7	2	5	3/4-10 x 3 1/2"		
MCA-8-95	9 1/2	2 5/8	5 5/16	1-8 x 4 1/2"	MCK-8	MCAS-8

Mold Assembly consists of:
1 – Mold Clamp
1 – Clamp Washer
1 – Clamp Bolt
1 – Mold Clamp Adjusting Screw

QUANTITY DISCOUNTS:
Discounts apply to current Net Prices.
60 to 99 ..... Less 5%
100 or more cases..... Less 10%

Standard sizes may be combined on one order for quantity discounts.

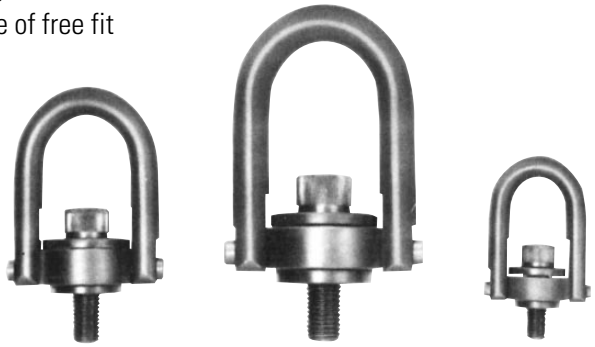
†NOTE:
Mold Clamp Screws supplied with assembly are of high-tensile strength alloy steel. Lengths shown will accommodate clamping ledges up to a maximum of 1.375. For Clamping ledges in excess of 1.375, use longer screws accordingly.

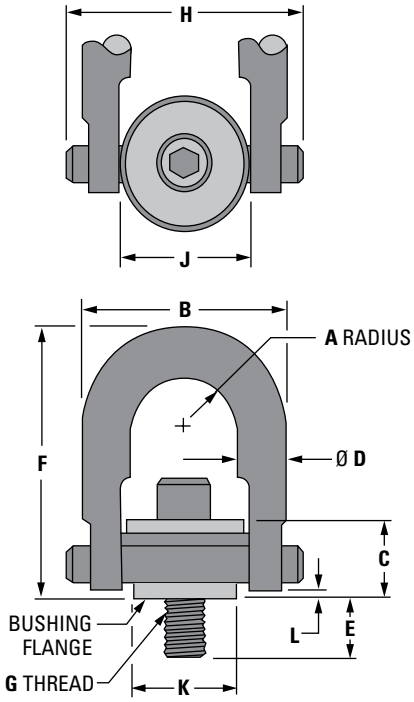
Hoist Rings – INCH
Installation and Ordering Information

Material: Alloy steel (certified heat treatment), black oxide
Safety Factor: 5 times rated load in any direction
Range of Movement.: 360° swivel; 180° pivot
Dimensions: Shown in inches (in)

Installation Data

Tap workpiece for hoist ring bolt with axis vertical to mounting surface. Work surface should be flat and smooth to provide full 360° flush seating for the bushing flange. For installation in ferrous materials, the screw should be tightened to the full torque loading recommended in column TL below, +25% – 0. (SAFETY NOTE: Some loosening may develop after prolonged service in a permanent installation. It is advisable to periodically retighten the mounting bolt to maintain the specified torque value.) For maximum safety with soft metal workpieces such as aluminum, use extra length bolts with minimum effective thread engagement of 2 times thread diameter. The use of free fit spacers between the bushing flange and mounting surface is not recommended, as this will reduce the safe load rating on angularly applied loads. Hoist ring must be free to swivel 360° and pivot 180° at all times.





NOTE: Additional hoist ring sizes and bolt lengths (including metric versions) are also available on request.

Hoist Rings – SHR (includes bolt and retaining ring)

ITEM NUMBER	RATED LOAD (LBS)	A RADIUS	B	C	Ø D	E EFFECTIVE THREAD PROJECTION	F	G	H CLEARANCE DIMENSION	J	K	L	TL** FOOT LBS	WEIGHT
SHR0001	800	7/16	1 5/8	41/64	3/8	9/16	2 5/8	5/16-18	2	1	3/4	3/32	7	5 OZ.
SHR0002	1,000	7/16	1 5/8	41/64	3/8	9/16	2 5/8	3/8-16	2	1	3/4	3/32	12	5 OZ.
SHR0003	2,500	7/8	3 1/4	15/32	3/4	3/4	4 3/4	1/2-13	3 5/8	2	1 1/2	3/32	28	2 LB. 5 OZ.
SHR0004	4,000	7/8	3 1/4	15/32	3/4	1	4 3/4	5/8-11	3 5/8	2	1 1/2	3/32	60	2 LB. 7 OZ.
SHR0005	5,000	7/8	3 1/4	15/32	3/4	1	4 3/4	3/4-10	3 5/8	2	1 1/2	3/32	100	2 LB. 9 OZ.
SHR0006	10,000	1 13/32	4 13/16	1 11/16	1	1 1/2	6 1/2	1"-8	5 1/8	3	2 5/16	17/64	230	7 LB.
SHR0007	15,000	1 3/4	6	2 1/8	1 1/4	1 7/8	8 3/4	1 1/4-7	6 1/2	3 3/4	3 1/4	11/32	470	14 LB.

**Recommended torque load +25% – 0

Replacement Bolt Kits – SHK (includes bolt and retaining ring)

ITEM NUMBER	USED WITH	SIZE	E
SHK0001	SHR0001	5/16-18 X 1 1/4	9/16
SHK0002	SHR0002	3/8-16 X 1 1/4	9/16
SHK0003	SHR0003	1/2-13 X 2	3/4
*SHK0004		1/2-13 X 2 1/4	1
SHK0005	SHR0004	5/8-11 X 2 1/4	1
*SHK0006		5/8-11 X 2 1/2	1 1/4
SHK0007	SHR0005	3/4-10 X 2 1/4	1
*SHK0008		3/4-10 X 2 3/4	1 1/2
SHK0009	SHR0006	1"-8 X 3 1/4	1 1/2
*SHK0010		1"-8 X 3 3/4	2
SHK0011	SHR0007	1 1/4-7 X 4	1 7/8

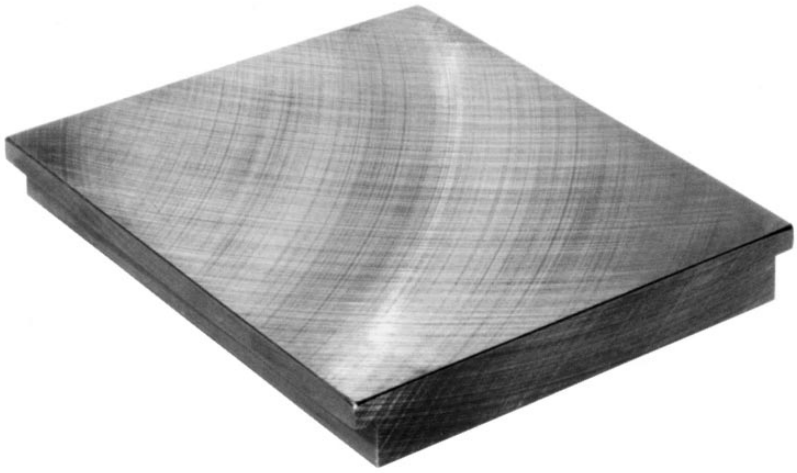


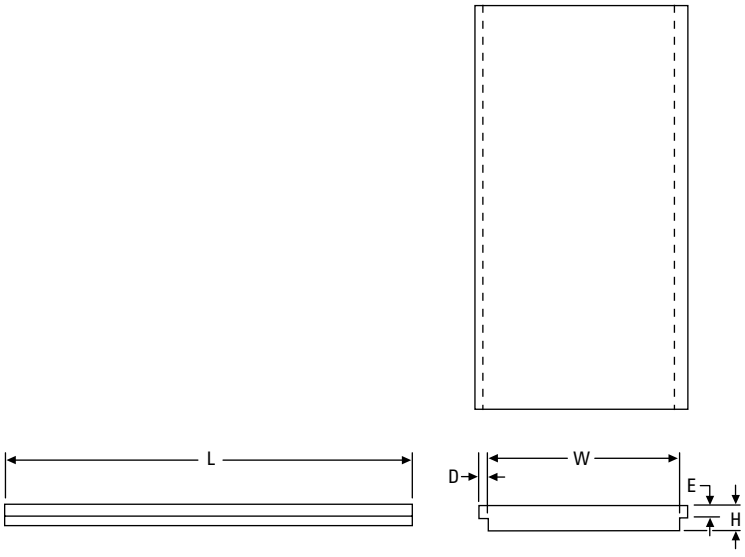
QUANTITY DISCOUNTS:
Discounts apply to current Net Prices. Ring and replacement bolts counted separately for quantity discounts. Different sizes may be combined.
25 to 49 . . . . . Less 10%
50 to 99 . . . . . Less 13%
100 or more Quoted by request

NOTES:
E = Effective Thread Projection
*Bolts not marked with an asterisk (*) are identical to those supplied with hoist rings. Bolts marked with an asterisk are longer, to provide thread projection of twice the bolt diameter, recommended for use with softer metals.

Quick-Change Components

Ear Plates for T-Style Insert Molds





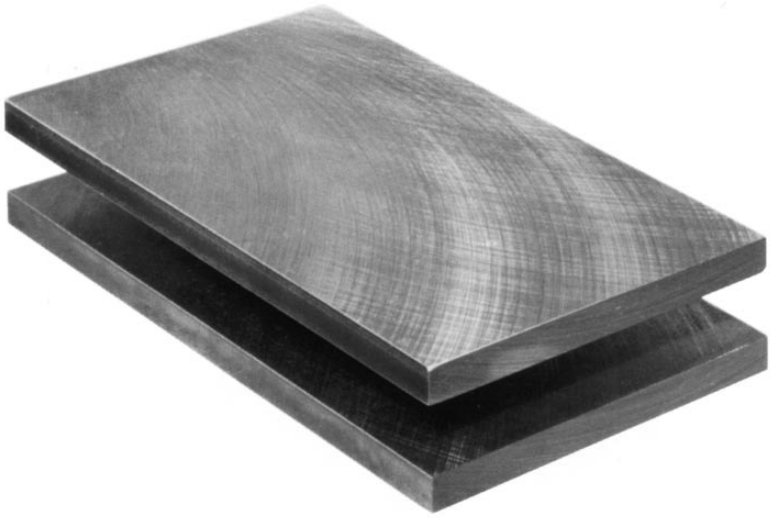
Ear Plates for T-Style Insert Molds

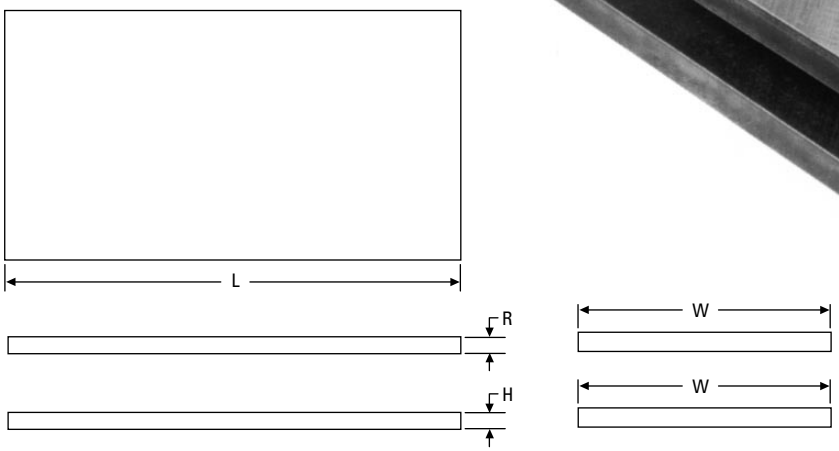
ITEM NO.	W	L	H	E	D
05/05EPU	3.248	3.750	0.450	0.184	0.175
07/07EPU	4.496	6.250	0.625	0.246	0.230
08/09EPU	4.996	8.000	0.750	0.246	0.230
08/10EPU	4.996	9.000	0.750	0.246	0.230
84/90EPU	6.496	8.000	0.750	0.246	0.230
09/07EPU	5.996	6.000	0.750	0.246	0.230
09/07EPE	5.996	6.000	0.750	0.246	0.230
10/12EPU	6.996	10.874	1.000	0.494	0.360
10/14EPU	6.996	12.874	1.000	0.494	0.360
10/16EPU	6.996	14.874	1.000	0.494	0.360
11/11EPU	7.996	10.000	1.000	0.494	0.360
12/08EPU	7.996	7.000	1.000	0.494	0.360
12/14EPU	7.994	12.874	1.000	0.494	0.360
12/16EPU	7.994	14.874	1.000	0.494	0.360
12/18EPU	7.994	16.874	1.000	0.494	0.360
12/20EPU	7.994	18.874	1.000	0.494	0.360
13/16EPU	8.994	14.874	1.000	0.494	0.360
13/18EPU	8.994	16.874	1.000	0.494	0.360
13/20EPU	8.994	18.874	1.000	0.494	0.360
13/22EPU	8.994	20.874	1.000	0.494	0.360
14/16EPU	9.994	14.874	1.000	0.494	0.360
14/18EPU	9.994	16.874	1.000	0.494	0.360
14/20EPU	9.994	18.874	1.000	0.494	0.360
14/22EPU	9.994	20.874	1.000	0.494	0.360
16/18EPU	10.994	15.874	1.500	0.744	0.450
16/21EPU	10.994	18.874	1.500	0.744	0.450
16/24EPU	10.994	21.874	1.500	0.744	0.450
16/27EPU	10.994	24.874	1.500	0.744	0.450
18/20EPU	11.994	17.874	1.500	0.744	0.450
18/26EPU	11.994	23.874	1.500	0.744	0.450

Ordering Information for Ear Plates for T-Style Insert Molds

- Item number and description
- First four digits of item number must match those of companion insert molds
- Item number is for a set of two (2) plates
- Steel grade: Prehard (240-330 BHN) unless otherwise specified

Quick-Change Components
Standard Ejector Plate Sets





Standard Ejector Plate Sets for U Frame Series

ITEM NO.	R	H	W	L
05/05EJU	0.240	0.240	2.75	3.62
07/07EJU	0.360	0.360	3.87	6.00
08/09EJU	0.360	0.360	4.00	7.88
08/10EJU	0.360	0.360	4.00	8.88
84/90EJU	0.360	0.360	5.50	7.87
09/07EJE	0.360	0.360	5.00	5.88
10/12EJU	0.480	0.480	6.00	10.75
10/14EJU	0.480	0.480	6.00	12.75
10/16EJU	0.480	0.480	6.00	14.75
11/11EJU	0.480	0.480	7.00	9.88
12/08EJU	0.360	0.360	7.00	6.88
12/14EJU	0.480	0.480	7.00	12.75
12/16EJU	0.480	0.480	7.00	14.75
12/18EJU	0.480	0.480	7.00	16.75
12/20EJU	0.480	0.480	7.00	18.75
13/16EJU	0.480	0.480	8.00	14.75
13/18EJU	0.480	0.480	8.00	16.75
13/20EJU	0.480	0.480	8.00	18.75
13/22EJU	0.480	0.480	8.00	20.75
14/16EJU	0.480	0.480	9.00	14.75
14/18EJU	0.480	0.480	9.00	16.75
14/20EJU	0.480	0.480	9.00	18.75
14/22EJU	0.480	0.480	9.00	20.75
16/18EJU	0.600	0.600	9.75	15.75
16/21EJU	0.600	0.600	9.75	18.75
16/24EJU	0.600	0.600	9.75	21.75
16/27EJU	0.600	0.600	9.75	24.75
18/20EJU	0.600	0.600	10.75	17.75
18/26EJU	0.600	0.600	10.75	23.75

Standard Ejector Plate Sets for H Frame Series

ITEM NO.	R	H	W	L
07/07EJH	0.240	0.240	2.75	3.00
08/09EJH	0.360	0.360	4.00	3.00
10/12EJH	0.360	0.360	4.00	4.50
10/18EJH	0.360	0.360	4.00	7.50
11/14EJH	0.360	0.360	5.00	5.50
11/18EJH	0.360	0.360	5.00	7.50
12/11EJH	0.360	0.360	6.00	4.00
12/13EJH	0.360	0.360	6.00	5.00
12/15EJH	0.360	0.360	6.00	6.00
12/19EJH	0.360	0.360	6.00	8.00
13/13EJH	0.360	0.360	7.00	5.00
13/15EJH	0.360	0.360	7.00	6.00
13/17EJH	0.360	0.360	7.00	7.00
13/19EJH	0.360	0.360	7.00	8.00
13/23EJH	0.360	0.360	7.00	10.00
14/15EJH	0.360	0.480	8.00	6.00
14/17EJH	0.360	0.480	8.00	7.00
14/19EJH	0.360	0.480	8.00	8.00
14/21EJH	0.360	0.480	8.00	9.00
14/25EJH	0.360	0.480	8.00	11.00
15/15EJH	0.360	0.480	8.75	5.88
15/17EJH	0.360	0.480	8.75	6.88
15/19EJH	0.360	0.480	8.75	7.88
15/21EJH	0.360	0.480	8.75	8.88
15/25EJH	0.360	0.480	8.75	10.88
17/19EJH	0.480	0.600	9.75	7.88
17/26EJH	0.480	0.600	9.75	11.38
18/22EJH	0.480	0.600	10.75	9.38
18/26EJH	0.480	0.600	10.75	11.38
18/30EJH	0.480	0.600	10.75	13.38

Standard Ejector Plate Sets for Double H Frame Series

ITEM NO.	R	H	W	L
12/08EJD	0.240	0.240	2.75	3.00
16/09EJD	0.360	0.360	4.00	3.00
16/12EJD	0.360	0.360	4.00	4.50
16/18EJD	0.360	0.360	4.00	7.50
20/14EJD	0.360	0.360	5.00	5.50
22/19EJD	0.360	0.360	6.00	8.00
24/23EJD	0.360	0.360	7.00	10.00

Standard Ejector Plate Sets for Removable Center Bar Series

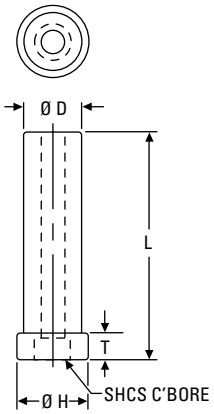
ITEM NO.	R	H	W	L
08/10EJB	0.360	0.360	4.00	3.88
84/90EJB	0.360	0.360	5.50	3.38
11/11EJB	0.480	0.480	7.00	3.88

Ordering Information for Standard Ejector Plate Sets

- Item number and description
- First four digits of item number must match those of companion insert molds
- Item number is for a set of two (2) plates
- Steel grade: Mild

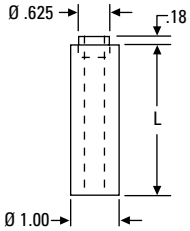
Quick-Change Components
Guide Posts





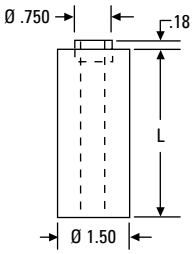
Mold Retainer Pillars

ITEM NO.	L	D	H	T	SHCS
MRP-1025	2.501	.75	1.00	.350	5/16-18
MRP-1026	2.626	.75	1.00	.350	5/16-18
MRP-1037	3.751	1.00	1.25	.350	3/18-16
MRP-1041	4.126	1.00	1.25	.350	3/18-16
MRP-1035	3.501	1.00	1.25	.470	3/18-16
MRP-1040	4.001	1.00	1.25	.470	3/18-16



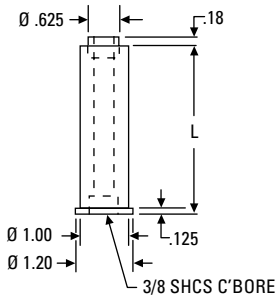
ITEM NO.	LENGTH
AGP120	2.501
AGP125	2.563
AGP128	2.876
AGP131	3.126
AGP134	3.438
AGP136	3.688

Furnished with PPAB-6.



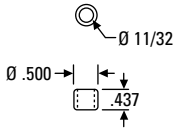
ITEM NO.	LENGTH
AGP234	3.438
AGP235	3.501
AGP236	3.688
AGP237	3.751
AGP243	4.376

Furnished with PPAB-7.

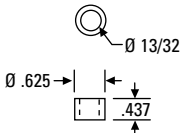


ITEM NO.	LENGTH
CSP125	2.501
CSP127	2.751
CSP135	3.501
CSP140	4.001

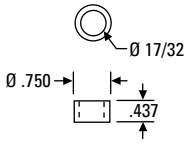
Furnished with PPAB-6.



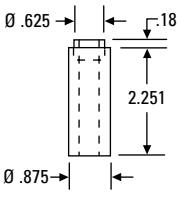
ITEM NO.
PPAB-5



ITEM NO.
PPAB-6

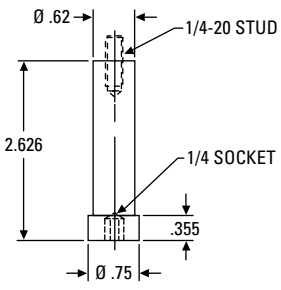


ITEM NO.
PPAB-7

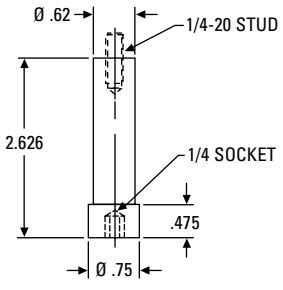


ITEM NO.
AGP875

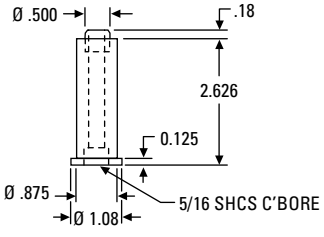
Furnished with PPAB-6.



ITEM NO.
CBP0809



ITEM NO.
CBP8490



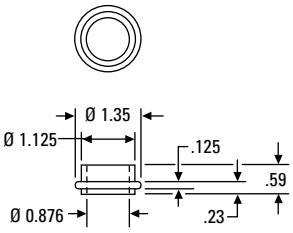
ITEM NO.
AGP826

Insert mold guide post furnished with PPAB-5.

Quick-Change Components
Guide Bushings

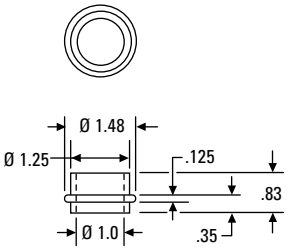






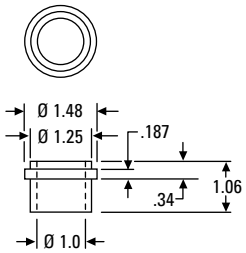
ITEM NO.
AGB360

Insert mold guide bushing.

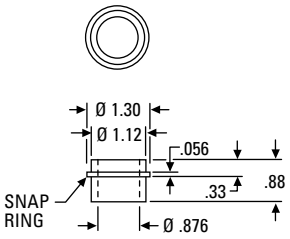


ITEM NO.
AGB480

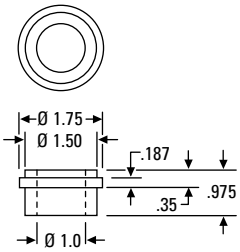
Insert mold guide bushing.



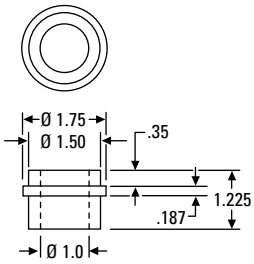
ITEM NO.
RCS0010



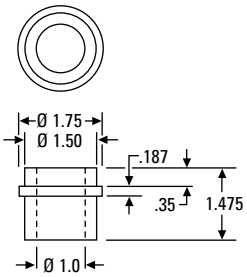
ITEM NO.
MUD2-0087



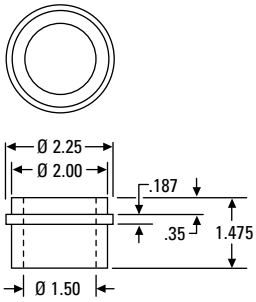
ITEM NO.
CB0010



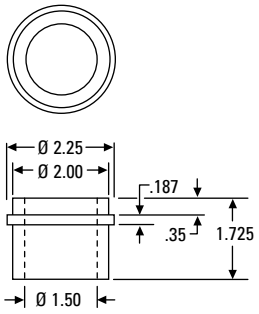
ITEM NO.
MUD2-0010-8



ITEM NO.
MUD2-0010-11



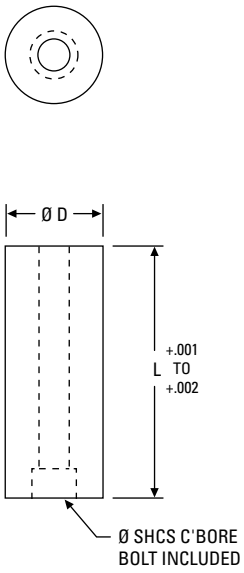
ITEM NO.
MUD2-0015-11

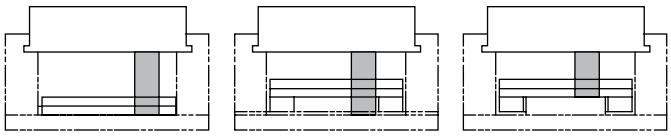


ITEM NO.
MUD2-0015-13

Quick-Change Components
Insert Mold Pillar Posts







D-M-E cold rolled steel pillar posts are precision ground to length for MUD Quick-Change systems. Each is predrilled and supplied with socket head cap screws for easy installation in insert molds.

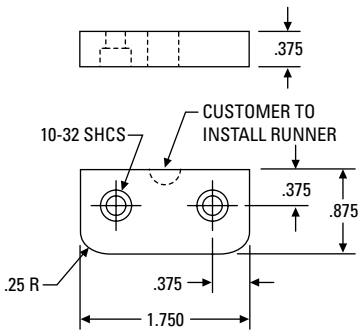
Frames supplied with master ejector plates are supplied standard with pillar post pads. The pillar post pad is the same height as the height of the ejection. In cases where pillar post pads are not utilized, the pillar post will rest on the back clamp plate. All molds require pillar posts and the pillar post will be precision ground .001 to .002 higher than the height of ejection.

Insert Mold Pillar Posts

ITEM NO.	DIAMETER	LENGTH	BOLT SIZE
MPP1025	1.00	2.500	5/16
MPP1026	1.00	2.625	5/16
MPP1035	1.00	3.500	5/16
MPP1037	1.00	3.750	3/8
MPP1040	1.00	4.000	3/8
MPP1041	1.00	4.125	3/8
MPP1225	1.25	2.500	5/16
MPP1226	1.25	2.625	5/16
MPP1235	1.25	3.500	5/16
MPP1237	1.25	3.750	3/8
MPP1240	1.25	4.000	3/8
MPP1241	1.25	4.125	3/8
MPP1525	1.50	2.500	5/16
MPP1526	1.50	2.625	5/16
MPP1535	1.50	3.500	5/16
MPP1537	1.50	3.750	3/8
MPP1540	1.50	4.000	3/8
MPP1541	1.50	4.125	3/8

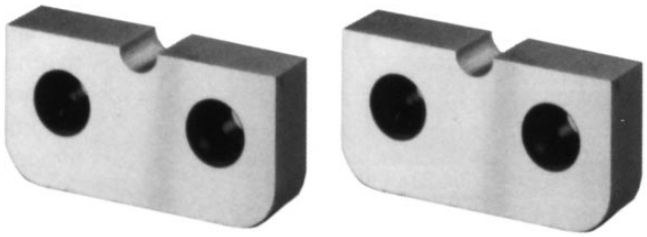
Bolt included with each pillar post.
Other sizes available on request.

Quick-Change Components
Hardened Runner Pads



ITEM NO.
09/07HRP

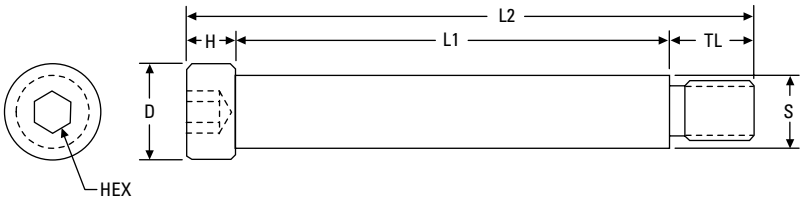
One required for each insert mold half.



D-M-E hardened runner pads are designed for installation in insert molds ordered for MUD Quick-Change shuttle frame applications (09/07UF, 09/07EB and 12/08UF). These pads allow the molding machine injection nozzle to contact the companion insert mold without damage.

Quick-Change Components
Shoulder Screws, Sprue Plugs & Rest Buttons





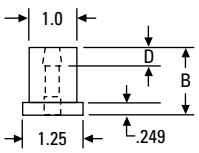
Frame Shoulder Screws

ITEM NO.	S	TL	L1	L2	H	D	HEX	THD
SS5022	0.498	0.63	2.250	3.19	0.312	0.750	1/4	3/8-16
SS5030	0.498	0.63	3.000	3.94	0.312	0.750	1/4	3/8-16
SS6230	0.623	0.75	3.000	4.13	0.375	0.875	5/16	1/2-13
SS6240	0.623	0.75	4.000	5.13	0.375	0.875	5/16	1/2-13
SS6245	0.623	0.75	4.500	5.63	0.375	0.875	5/16	1/2-13
SS7545	0.748	0.88	4.500	5.88	0.500	1.000	3/8	5/8-11
SS7555	0.748	0.88	5.500	6.88	0.500	1.000	3/8	5/8-11

Shoulder screws are installed in H frames and Double H frames to align the bottom clamp plate and ejector rails with the support plate.





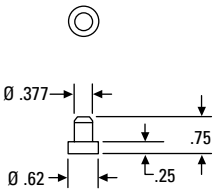


Sprue Puller Plugs

ITEM NO.	P	B	D
SPP25-13	0.250	1.377	0.336
SPP25-18	0.250	1.877	0.336
SPP25-23	0.250	2.377	0.336
SPP25-28	0.250	2.877	0.336
SPP31-13	0.312	1.377	0.367
SPP31-18	0.312	1.877	0.367
SPP31-23	0.312	2.377	0.367
SPP31-28	0.312	2.877	0.367
SPP31-33	0.312	3.377	0.367
SPP31-38	0.312	3.877	0.367
SPP38-13	0.375	1.377	0.430
SPP38-18	0.375	1.877	0.430
SPP38-23	0.375	2.377	0.430
SPP38-28	0.375	2.877	0.430
SPP38-33	0.375	3.377	0.430
SPP38-38	0.375	3.877	0.430

Sprue puller plugs are installed in the center section of H frame and Double H frame ejector halves. Each center section has a 1.000 hole to accept this plug. The plug has been machined to receive three pin and puller sizes for accommodating a range of sprue and runner sizes.





Rest Buttons

ITEM NO.
RB62

Rest buttons are installed in master ejector plates.

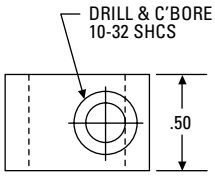
ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

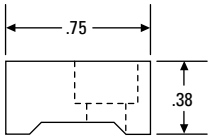
Quick-Change Components
Insert Mold Holding Clamps



Insert Mold Holding Clamps

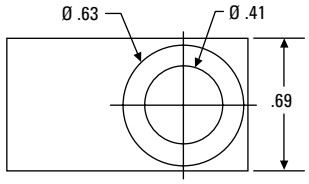
ITEM NO.	W	L	H	T
UC1032	(see drawing below left)			
UC3862	(see drawing below center)			
UC2520	0.50	1.00	0.50	0.27
UC3816	0.62	1.25	0.75	0.40
UC5013	1.00	1.88	1.00	0.53

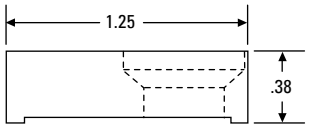




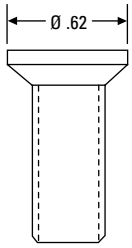
UC1032 insert mold holding clamp is designed for frames:

- 06/04 FAU 301
- 05/05 FAU 301
- 07/05 FAU 301
- 07/10 FAU 301
- 04/05 FAU 301

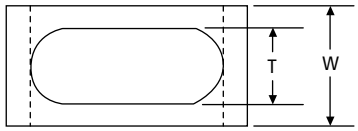


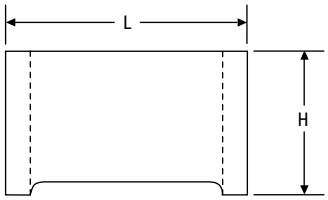


UC3862 insert mold holding clamp is designed for 09/07 UF 321 frame when clearance between machine safety gate and frame is minimal.

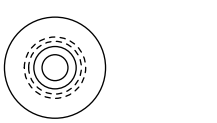


3/8 FHSCS
ALTERED

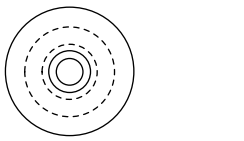




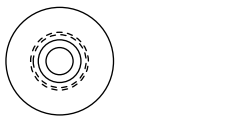
Quick-Change Components
Mold Base Adapter Frame Rollers



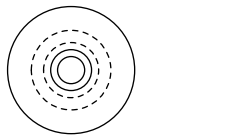
ITEM NO.
MBAR375-18



ITEM NO.
MBAR500-23

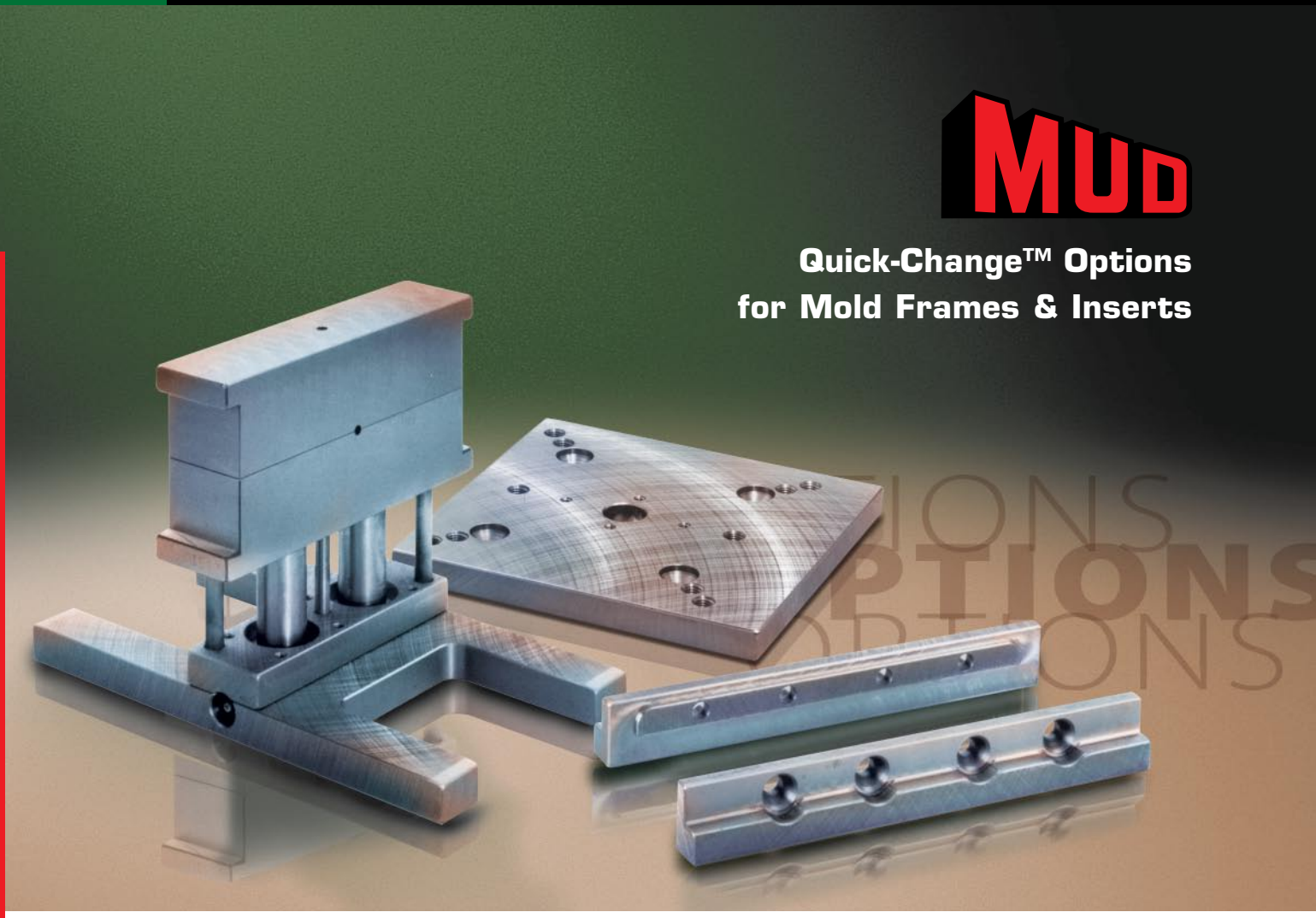


ITEM NO.
MBAR750-20



ITEM NO.
MBAR750-23





Mold and Die Steels

STEELS FOR STRUCTURAL SECTIONS

D-M-E No. 1 Steel

No. 1 Steel is a medium carbon (SAE 1030), silicon-killed forging quality steel with approximately 25% greater tensile strength than typical low-carbon warehouse steels. It machines easily, but is not "sticky," permitting a faster and smoother cut.

D-M-E No. 2 Steel

No. 2 Steel is an AISI 4130 type steel. It is supplied pre-heat treated to 28-34 HRC (271-321 Bhn). A high-strength steel, it is ideal for cavity and core retainer plates, clamping plates and support plates in molds and dies.

STEELS FOR CAVITIES AND CORES

D-M-E No. 3 Steel

No. 3 Steel is a P-20 AISI 4130 (modified) type cavity steel. Exceptionally clean, it is pre-heat treated to 28-34 HRC (271-321 Bhn). It provides high hardness, good machinability and exceptional polishability for both plastics molds and die cast dies.

D-M-E No. 5 Steel

No. 5 Steel is a thermal shock resistant, hotwork die steel (AISI-SAE H-13 type). Supplied fully annealed 13-20 HRC (approx. 200 Bhn) for easy machinability, it can be subsequently heat treated to the desired hardness with a minimum of deformation. Mainly used for die cast dies, it is also suitable for plastics molds with exceptional hardness or polishability requirements. D-M-E No. 5 Steel meets or exceeds the acceptance criteria established by the NADCA as detailed in Technical Digest Number 01-80-01D.

MUD Quick-Change™ Options features and applications

The wide range of available options enhance the exceptional design versatility of the Master Unit Die Concept. These options can also increase the cost saving benefits and time saving features of this superior approach to injection molding.

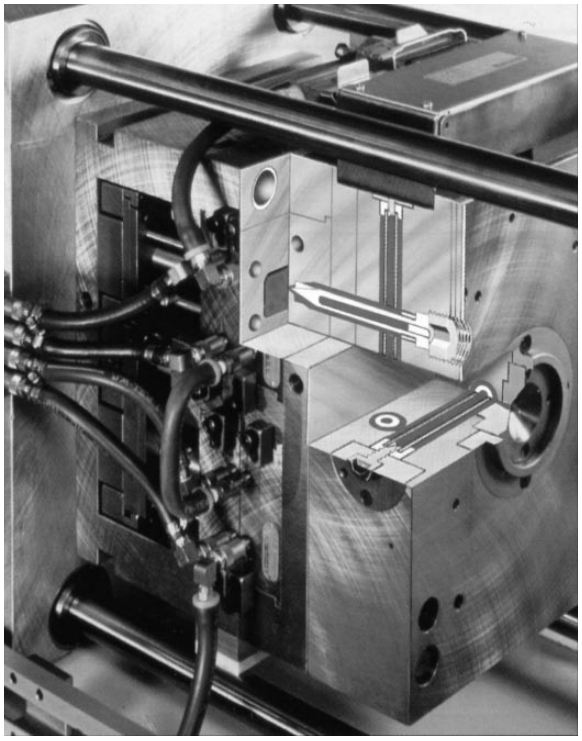
The basic design of MUD Quick-Change frames and companion insert molds adds to these advantages. The open configuration of the frame permits installation of water lines or hydraulic cylinders in the insert mold. The smaller size and lighter weight of insert molds simplifies machining. These design features also simplify routine maintenance.

Frame options include interlocking ejector rails to lock the insert mold's ejector system to the master ejector plate. The master ejector plate can be spring loaded for returning the insert mold's ejector system. It can also be tied to the machine's hydraulic knockout system for stroking the insert mold's ejector assembly.

Other frame options include water lines in the center bar or other locations, insulation boards, runner shutoffs and hot tip sprue bushings. Frame spacer bars to accommodate shorter, more economical companion insert molds are available for frames designed for longer sizes. Additional retainer slots and a spacer plate in the frame's cavity half allow the frame to accept insert molds with different thicknesses. Either option results in greater production and scheduling flexibility.

MUD Quick-Change U frames can be adapted to multiple insert molding similar to H frames with the addition of an optional removable center runner bar and a master ejector plate. This allows simultaneous molding with two smaller insert molds.

Design options for insert molds include spring loading, early return, unscrewing mechanisms, hot runner molding and machining for cam slides. Insert molds can be ordered with interlocking ejector plates for stroking action when used with frames having an interlocking ejector system.

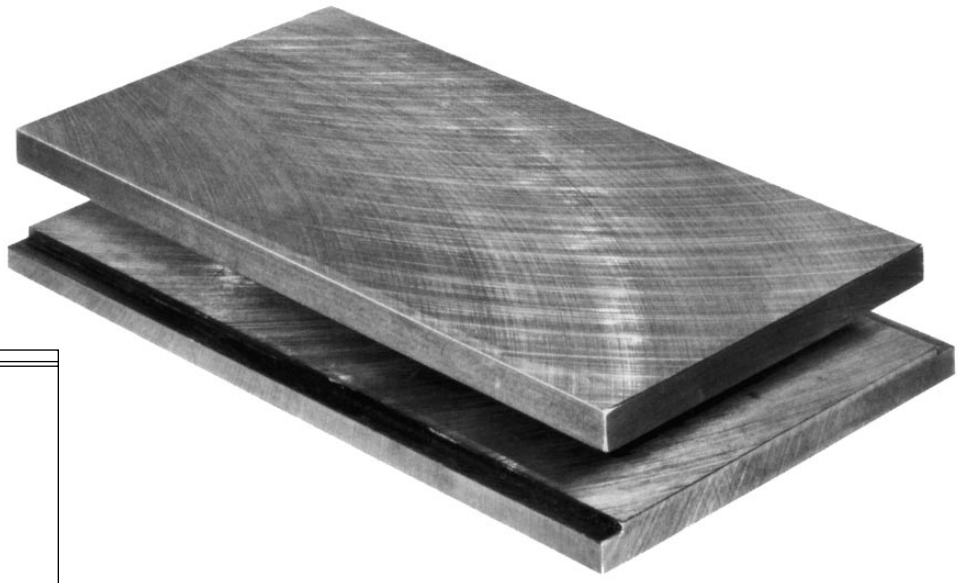


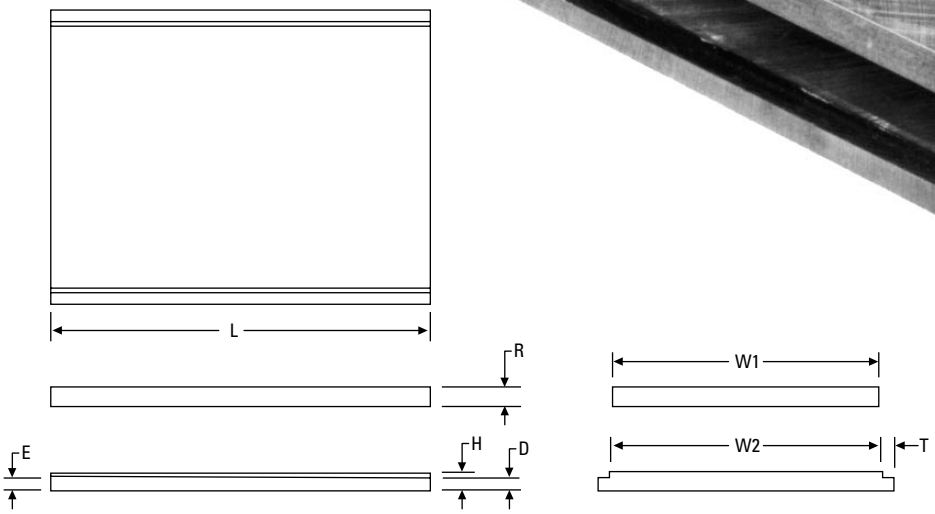
Insert molds are available with a complete ejector system including return pins and pillar posts. Other options include stripper plates, sleeve ejection and three-plate construction for a pinpoint gating system. Machining is also available for heater cartridge holes, water lines, rough or finished pockets, taper locks and other special applications.

The addition of a hot manifold brings all of the advantages of the Quick-Change Concept to hot runner molding. Since both the frame and the hot runner system remain in the molding machine, only the insert molds are changed for new parts. This means faster changeovers, lower tooling costs and greater scheduling flexibility for hot runner systems, too.

MUD Quick-Change tooling combined with the options and accessories included in the following pages offer mold makers, design engineers and manufacturing engineers the most efficient system in the plastics industry.

Quick-Change Options
Sleeve Ejector Plate Assemblies





Ordering Information for Sleeve Ejector Plate Assemblies

- Item number and description (see table at right)
- First four digits of item number must match those of companion frame
- Item number is for a set of two (2) plates
- Steel grade: Mild

Sleeve Ejector Plate Assemblies

ITEM NO.	W1	W2	L	R	H	E	D	T
05/05SEPU	2.75	2.81	3.62	0.240	0.175	0.123	0.107	0.15
07/07SEPU	3.88	4.00	6.00	0.360	0.360	0.185	0.159	0.18
08/09SEPU	4.00	4.00	7.88	0.360	0.360	0.283	0.247	0.25
08/10SEPU	4.00	4.12	8.87	0.360	0.360	0.287	0.248	0.25
84/90SEPU	5.50	5.62	7.88	0.360	0.360	0.283	0.247	0.25
10/12SEPU	6.00	6.12	10.75	0.480	0.480	0.477	0.429	0.25
10/14SEPU	6.00	6.12	12.75	0.480	0.480	0.477	0.420	0.25
10/16SEPU	6.00	6.12	14.75	0.480	0.480	0.477	0.412	0.25
11/11SEPU	7.00	7.12	9.88	0.360	0.360	0.331	0.287	0.25
12/14SEPU	7.00	7.12	12.75	0.480	0.480	0.477	0.420	0.25
12/16SEPU	7.00	7.12	14.75	0.480	0.480	0.477	0.412	0.25
12/18SEPU	7.00	7.12	16.75	0.480	0.480	0.477	0.403	0.25
12/20SEPU	7.00	7.12	18.75	0.480	0.480	0.477	0.399	0.25
13/16SEPU	8.00	8.12	14.75	0.480	0.480	0.477	0.412	0.25
13/18SEPU	8.00	8.12	16.75	0.480	0.480	0.477	0.403	0.25
13/20SEPU	8.00	8.12	18.75	0.480	0.480	0.477	0.394	0.25
13/22SEPU	8.00	8.12	20.75	0.480	0.480	0.477	0.385	0.25
14/16SEPU	9.00	9.12	14.75	0.480	0.480	0.477	0.412	0.25
14/18SEPU	9.00	9.12	16.75	0.480	0.480	0.477	0.403	0.25
14/20SEPU	9.00	9.12	18.75	0.480	0.480	0.477	0.394	0.25
14/22SEPU	9.00	9.12	20.75	0.480	0.480	0.477	0.385	0.25
16/18SEPU	9.75	9.88	15.75	0.600	0.600	0.477	0.407	0.25
16/21SEPU	9.75	9.88	18.75	0.600	0.600	0.477	0.395	0.25
16/24SEPU	9.75	9.88	21.75	0.600	0.600	0.477	0.381	0.25
16/27SEPU	9.75	9.88	24.75	0.600	0.600	0.477	0.368	0.25
18/20SEPU	10.75	10.88	17.75	0.600	0.600	0.477	0.398	0.25
18/26SEPU	10.75	10.88	23.75	0.600	0.600	0.477	0.372	0.25

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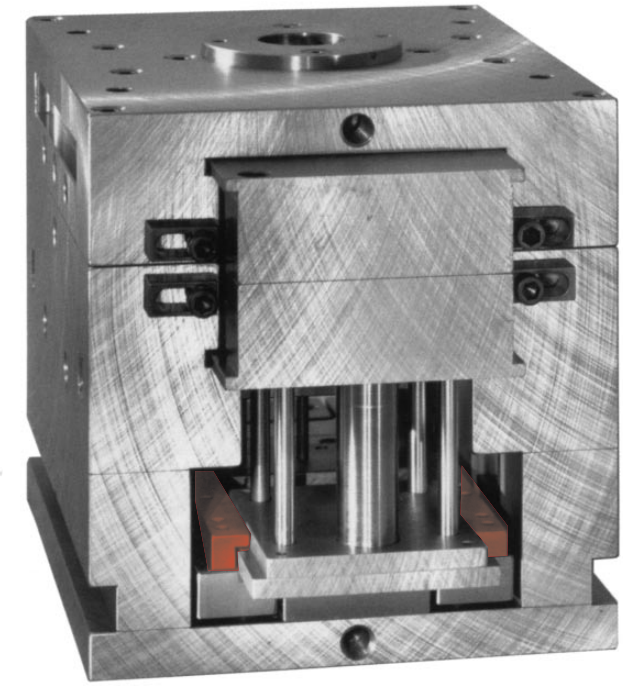
Quick-Change Options
Interlocking Ejector Plate Rails

Interlocking ejector system designed for two-unit H frames and four-unit Double H frames

MUD H frames and Double H frames are available with interlocking ejector systems. These systems, based on rails precisely located on the frame's master ejector plate, allow the option of tying the insert mold's ejector system to the master ejector plate.

The insert mold's bottom ejector plate is wider to slide into the rails mounted on the frame's master ejector plate. The interlocking master ejector plate may be spring loaded or tied to the hydraulic knockout plate of the molding machine.

Tying the master ejector plate to the machine's hydraulic knockout system allows multiple stroking of the insert mold ejector system which assists in the automatic operation of the insert mold. This option is available on predrilled existing frames manufactured after June 1990.



Ordering Information for Interlocking Ejector Plate Rails

- Item number and description (see tables at right)
- First four digits of item number must match those of companion insert molds
- Item number is for a set of four (4) rails for H frames and eight (8) rails for DH frames
- See page OP 138 for companion ejector plates

H Frame Series Interlocking Ejector Plate Rails

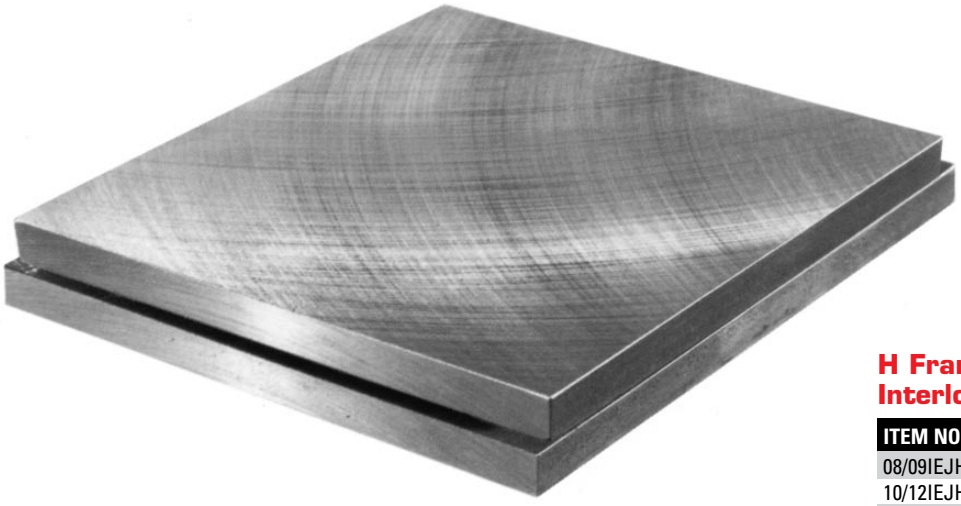
ITEM NO.	FRAME SIZE
08/09IFH	08/09
10/12IFH	10/12
10/18IFH	10/18
11/14IFH	11/14
11/18IFH	11/18
12/11IFH	12/11
12/13IFH	12/13
12/15IFH	12/15
12/19IFH	12/19
13/13IFH	13/13
13/15IFH	13/15
13/17IFH	13/17
13/19IFH	13/19
13/23IFH	13/23
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14/19IFH	14/19
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14/25IFH	14/25
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15/21IFH	15/21
15/25IFH	15/25
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18/26IFH	18/26
18/30IFH	18/30

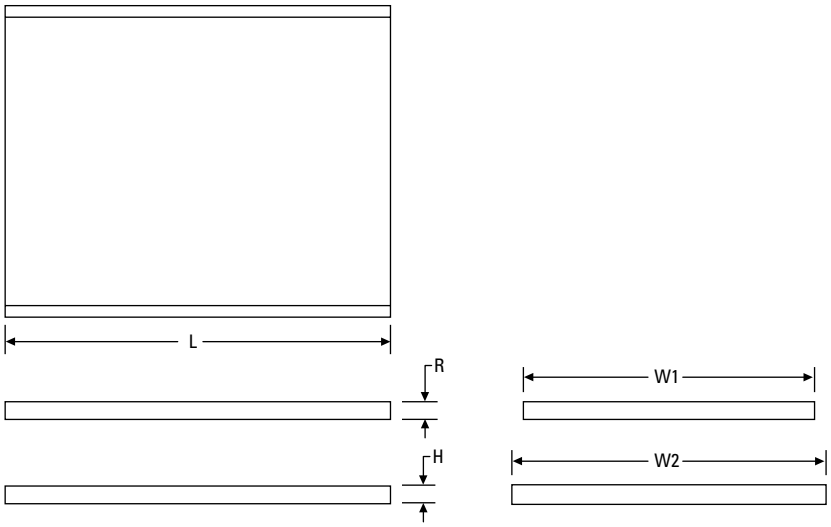
Double H Frame Series Interlocking Ejector Plate Rails

ITEM NO.	FRAME SIZE
16/09IFD	16/09
16/12IFD	16/12
16/18IFD	16/18
20/14IFD	20/14
22/19IFD	22/19
24/23IFD	24/23

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Quick-Change Options
Interlocking Ejector Plates





H Frame Series
Interlocking Ejector Plates

ITEM NO.	W1	W2	L	R	H
08/09IEJH	4.00	4.50	3.00	0.360	0.360
10/12IEJH	4.00	4.50	4.50	0.360	0.360
10/18IEJH	4.00	4.50	7.50	0.360	0.360
11/14IEJH	5.00	5.50	5.50	0.360	0.360
11/18IEJH	5.00	5.50	7.50	0.360	0.360
12/11IEJH	6.00	6.50	4.00	0.360	0.360
12/13IEJH	6.00	6.50	5.00	0.360	0.360
12/15IEJH	6.00	6.50	6.00	0.360	0.360
12/19IEJH	6.00	6.50	8.00	0.360	0.360
13/13IEJH	7.00	7.50	5.00	0.360	0.360
13/15IEJH	7.00	7.50	6.00	0.360	0.360
13/17IEJH	7.00	7.50	7.00	0.360	0.360
13/19IEJH	7.00	7.50	8.00	0.360	0.360
13/23IEJH	7.00	7.50	10.00	0.360	0.360
14/15IEJH	8.00	8.50	6.00	0.360	0.480
14/17IEJH	8.00	8.50	7.00	0.360	0.480
14/19IEJH	8.00	8.50	8.00	0.360	0.480
14/21IEJH	8.00	8.50	9.00	0.360	0.480
14/25IEJH	8.00	8.50	11.00	0.360	0.480
15/15IEJH	8.75	9.25	5.88	0.360	0.480
15/17IEJH	8.75	9.25	6.88	0.360	0.480
15/19IEJH	8.75	9.25	7.88	0.360	0.480
15/21IEJH	8.75	9.25	8.88	0.360	0.480
15/25IEJH	8.75	9.25	10.88	0.360	0.480
17/19IEJH	9.75	10.25	7.88	0.480	0.600
17/26IEJH	9.75	10.25	11.38	0.480	0.600
18/22IEJH	10.75	11.25	9.38	0.480	0.600
18/26IEJH	10.75	11.25	11.38	0.480	0.600
18/30IEJH	10.75	11.25	13.38	0.480	0.600

Ordering Information for Interlocking Ejector Plates

- Item number and description (see tables at right)
- First four digits of item number must match those of companion insert molds
- Item number is for a set of two (2) plates
- Steel grade: Mild

Double H Frame Series
Interlocking Ejector Plates

ITEM NO.	W1	W2	L	R	H
16/09IEJD	4.00	4.50	3.00	0.360	0.360
16/12IEJD	4.00	4.50	4.50	0.360	0.360
16/18IEJD	4.00	4.50	7.50	0.360	0.360
20/14IEJD	5.00	5.50	5.50	0.360	0.360
22/19IEJD	6.00	6.50	8.00	0.360	0.360
24/23IEJD	7.00	7.50	10.00	0.360	0.360

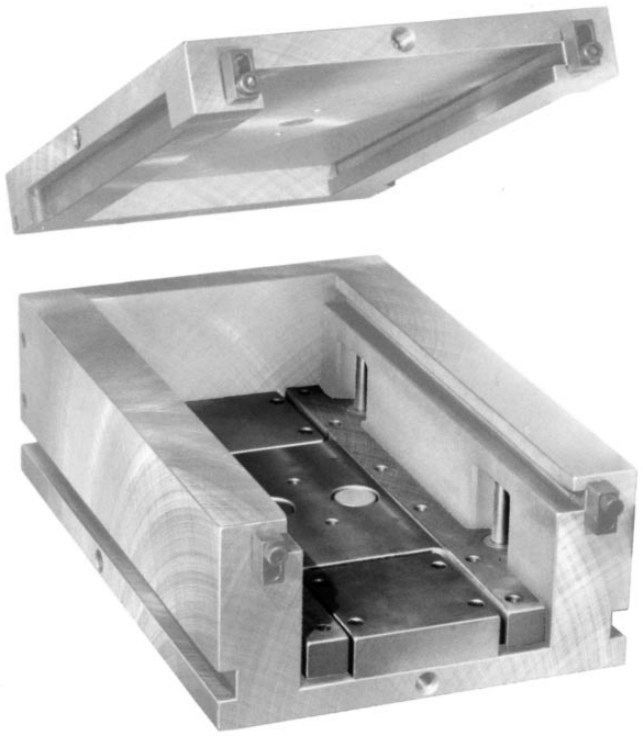
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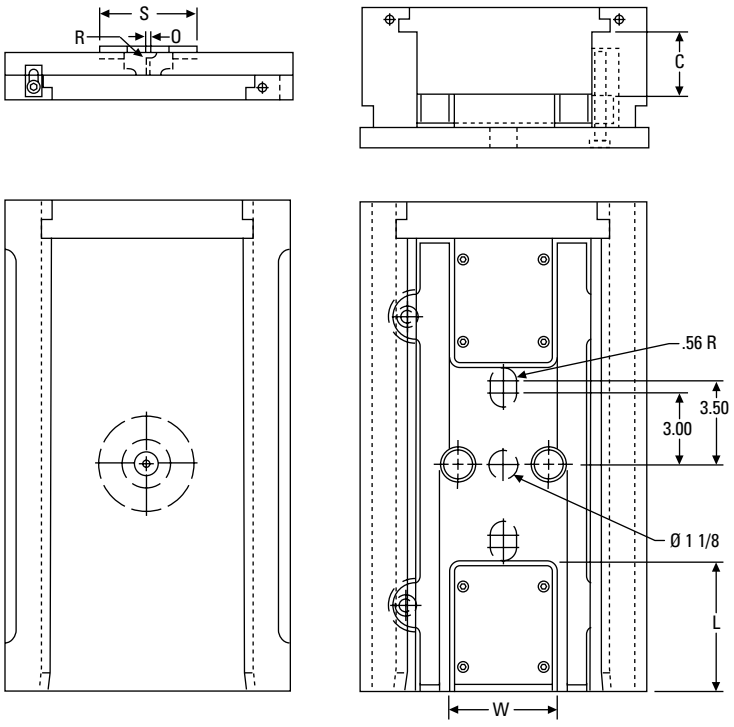
Quick-Change Options

U Frames with Master Ejector Systems

Ordering Information for U Frame with Master Ejector System

- Item number and description (see table below right)
- "S" diameter of locating ring supplied standard 3.990
- Sprue bushing (if required) – "R" spherical radius of sprue bushing furnished 1/2" or 3/4"
- "O" small diameter of sprue orifice furnished 7/32", 9/32" or 11/32"; 5/32" available on request
- Optional locating rings and sprue bushings
- Knockout hole locations standard as shown (others optional)
- Clamp slots as shown
- Mounting holes optional
- Additional ejection height available (quotation on request)
- Optional interlocking ejector plate rails available (quotation on request)
- Frames standard in prehard steel; prehard stainless and other steel grades available (quotation on request)



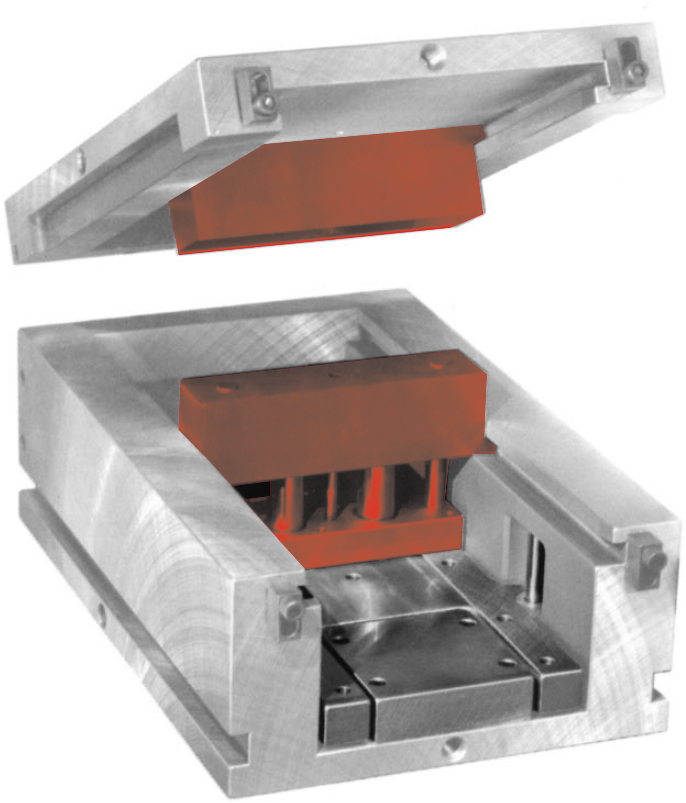


MUD U frames with master ejector systems are designed to accept one Quick-Change insert mold or a removable center section with two smaller Quick-Change insert molds for complete application flexibility. Each frame's master ejector system is equipped with pillar post pads to support insert molds.

U Frame with Self-Contained Master Ejector System

ITEM NO.	C
10/12UF321MEP	2.500
10/14UF321MEP	2.500
10/16UF321MEP	2.500
12/14UF321MEP	2.750
12/16UF321MEP	2.750
12/18UF321MEP	2.750
13/16UF321MEP	2.750
13/18UF321MEP	2.750
14/16UF321MEP	2.750
14/18UF321MEP	2.750

Quick-Change Options
Removable Center Sections

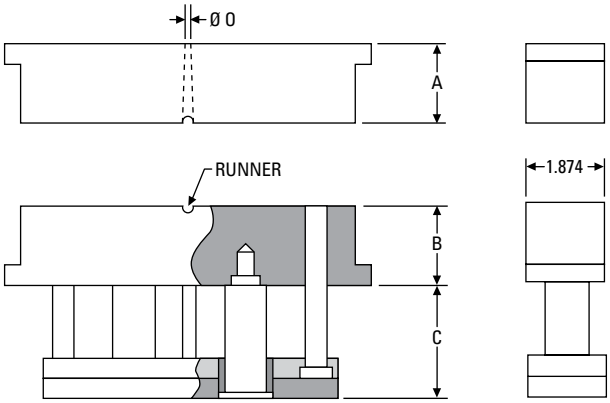


Removable Center Sections for U Frame with Master Ejector System

ITEM NO.	INSERT SIZE	A	B	C
10/12RCS-1	7.0 x 4.5	1.877	1.877	2.500
10/12RCS-2		1.877	2.377	2.500
10/12RCS-3		2.377	1.877	2.500
10/14RCS-1	7.0 x 5.5	1.877	1.877	2.500
10/14RCS-2		1.877	2.377	2.500
10/14RCS-3		2.377	1.877	2.500
10/16RCS-1	7.0 x 6.5	2.377	1.877	2.500
10/16RCS-2		1.877	2.377	2.500
10/16RCS-3		2.377	2.377	2.500
12/14RCS-1	8.0 x 5.5	1.877	1.877	2.750
12/14RCS-2		1.877	2.377	2.750
12/14RCS-3		2.377	1.877	2.750
12/16RCS-1	8.0 x 6.5	2.377	1.877	2.750
12/16RCS-2		1.877	2.377	2.750
12/16RCS-3		2.377	2.377	2.750
12/18RCS-1	8.0 x 7.5	2.377	1.877	2.750
12/18RCS-2		1.877	2.377	2.750
12/18RCS-3		2.377	2.377	2.750
13/16RCS-1	9.0 x 6.5	2.377	2.377	2.750
13/16RCS-2		2.377	2.877	2.750
13/16RCS-3		2.877	2.377	2.750
13/18RCS-1	9.0 x 7.5	2.377	2.377	2.750
13/18RCS-2		2.377	2.877	2.750
13/18RCS-3		2.877	3.377	2.750
14/16RCS-1	10.0 x 6.5	2.377	2.377	2.750
14/16RCS-2		2.377	2.877	2.750
14/16RCS-3		2.877	2.377	2.750
14/18RCS-1	10.0 x 7.5	2.377	2.377	2.750
14/18RCS-2		2.377	2.877	2.750
14/18RCS-3		2.877	2.377	2.750

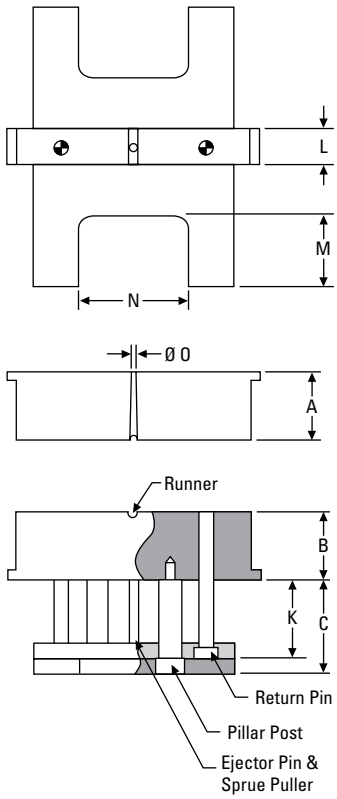
Ordering Information for Removable Center Sections

- Item number and description (see table above right)
- First four digits of item number must match those of companion frame
- Specify "O" (orifice diameter)
- Runner size and configuration
- Center bar: Hardened steel
- Optional center bar to fit frame supplied with interlocking ejector plate rails available (quotation on request)



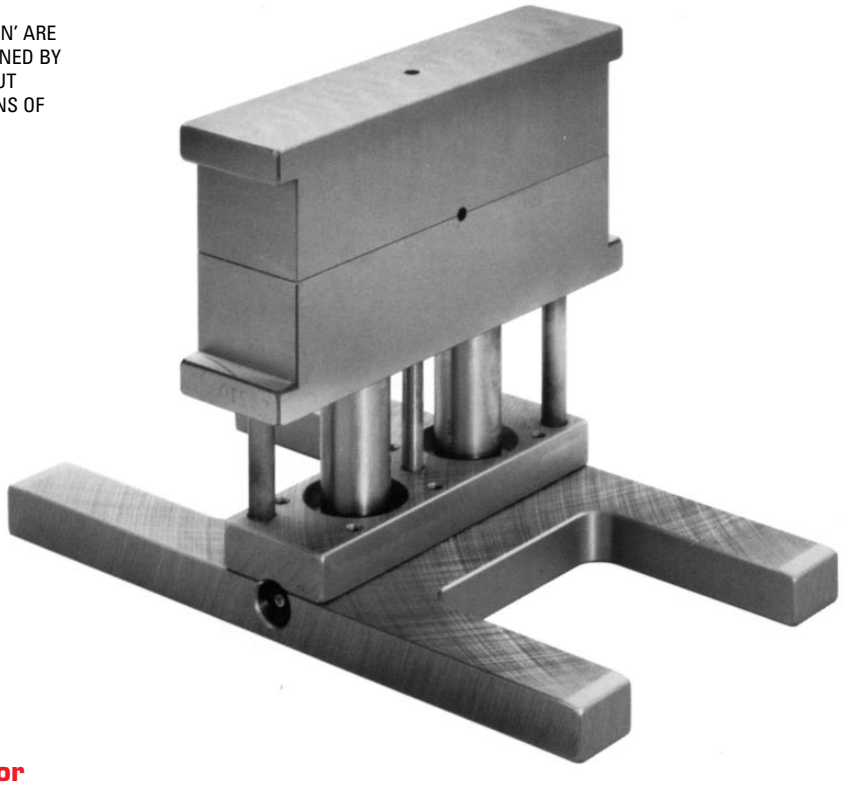
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Quick-Change Options
Removable Center Bar Assemblies



NOTE:
'M' AND 'N' ARE DETERMINED BY KNOCKOUT LOCATIONS OF FRAME

D-M-E removable center bars are designed for U frames without integral master ejector plates. The center bar includes its own self-contained ejector plate system and is designed for production with two smaller Quick-Change insert molds.



Removable Center Bar Assemblies for U Frame without Master Ejector System

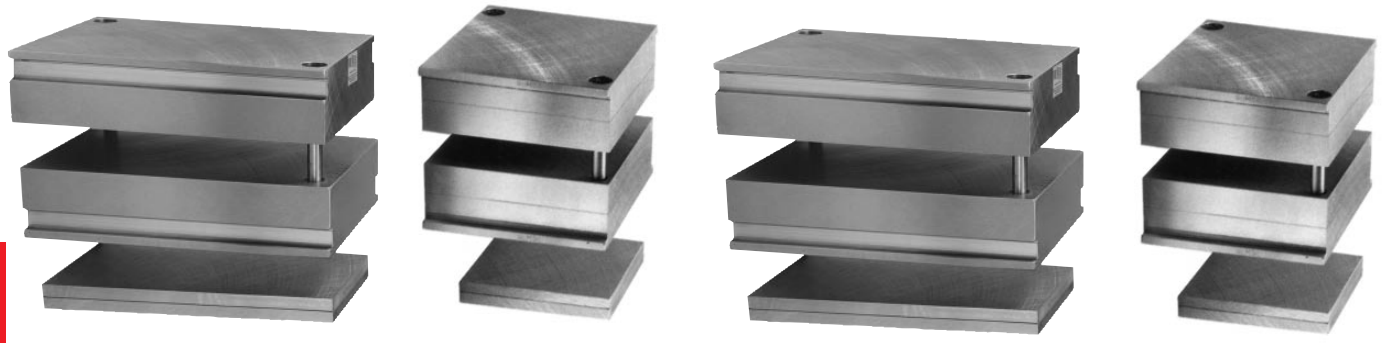
ITEM NO.	INSERT	A	B	C	K	L
08/09 CB 231	5.0 x 3.5	1.877	1.377	2.625	2.265	1.000
08/09 CB 232		1.877	2.377	2.625	2.265	1.000
08/09 CB 233		2.377	1.877	2.625	2.265	1.000
08/10 CB 241	5.0 x 4.0	1.877	1.377	2.625	2.265	1.000
08/10 CB 242		1.877	2.377	2.625	2.265	1.000
08/10 CB 243		2.377	1.877	2.625	2.265	1.000
84/90 CB 251	6.5 x 3.5	1.877	1.877	2.625	2.146	1.000
84/90 CB 252		1.877	2.377	2.625	2.146	1.000
84/90 CB 253		2.377	1.877	2.625	2.146	1.000
10/12 CB 261	7.0 x 4.5	1.877	1.877	3.500	2.750	1.874
10/12 CB 262		1.877	2.377	3.500	2.750	1.874
10/12 CB 263		2.377	1.877	3.500	2.750	1.874
10/14 CB 271	7.0 x 5.5	1.877	1.877	3.500	2.750	1.874
10/14 CB 272		1.877	2.377	3.500	2.750	1.874
10/14 CB 273		2.377	1.877	3.500	2.750	1.874
11/11 CB 281	8.0 x 4.0	1.877	1.877	3.500	2.750	2.000
11/11 CB 282		1.877	2.377	3.500	2.750	2.000
11/11 CB 283		2.377	1.877	3.500	2.750	2.000
12/14 CB 291	8.0 x 5.5	1.877	1.877	4.000	3.000	1.874
12/14 CB 292		1.877	2.377	4.000	3.000	1.874
12/14 CB 293		2.377	1.877	4.000	3.000	1.874

All removable center bar ejector plates are supplied with cutout for pillar posts.

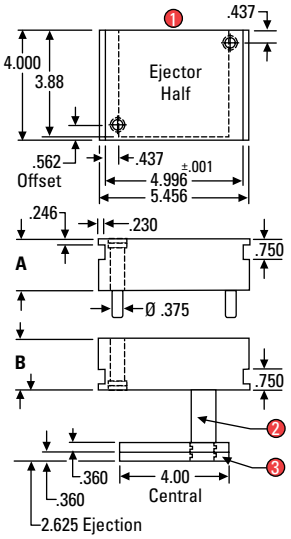
Ordering Information for Removable Center Bar Assemblies

- Item number and description (see table at left)
- First four digits of item number must match those of companion frame
- Specify "O" (orifice diameter)
- Runner size and configuration
- Center bar: Hardened steel

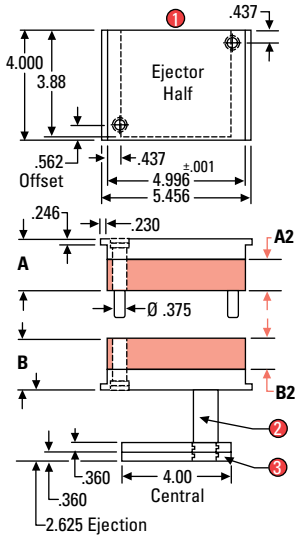
Quick-Change Options
Center Bar Insert Molds



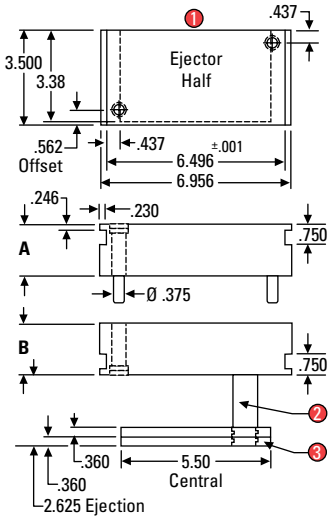
Standard Solid: 5.0 x 4.0



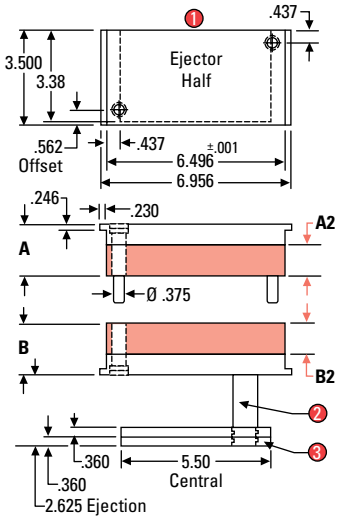
Standard Laminated: 5.0 x 4.0



Standard Solid: 6.5 x 3.5



Standard Laminated: 6.5 x 3.5



Standard Solid Construction

ITEM NO.	A	B
08/10SSB221	1.877	1.377
08/10SSB222	1.877	2.377
08/10SSB223	2.377	1.877

Standard Laminated Construction

ITEM NO.	A	A2	B2	B
08/10SLB281	1.877	0.877	0.877	1.377
08/10SLB282	1.877	0.877	1.377	2.377
08/10SLB283	2.377	1.377	0.877	1.877

Standard Solid Construction

ITEM NO.	A	B
84/90SSB221	1.877	1.877
84/90SSB222	1.877	2.377
84/90SSB223	2.377	1.877

Standard Laminated Construction

ITEM NO.	A	A2	B2	B
84/90SLB281	1.877	0.877	0.877	1.877
84/90SLB282	1.877	0.877	1.377	2.377
84/90SLB283	2.377	1.377	0.877	1.877

Standard Interchangeable Insert Molds

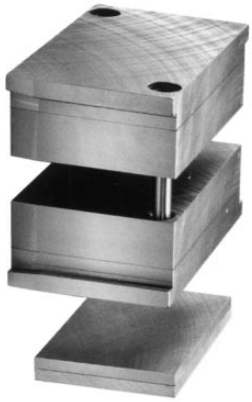
1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection.
3. Thicker plate optional (quotation on request).

Ordering Information for Center Bar Insert Molds

- Item number (see tables above)
- Steel grades: 1020, 4130 prehard, P-20 prehard and H-13; 420 stainless and other grades on request
- H-13 and other tool steel insert molds supplied .010 oversize on outside dimension, .010 to .013 oversize on thickness, and .025 to .035 undersize in pin and bushing holes for machining after required heat treating
- "A" & "B" dimensions supplied .004 to .007 oversize unless otherwise specified
- "A" and "B" dimensions for insert mold must match those of the removable center bar

Quick-Change Options
Center Bar Insert Molds





Standard Interchangeable Insert Molds

1. Frame clamps at this end of insert mold and ejector plates are flush with this end of insert.
2. Support post not supplied. Grind +.001 to +.002 higher than height of ejection.
3. Thicker plate optional (quotation on request).

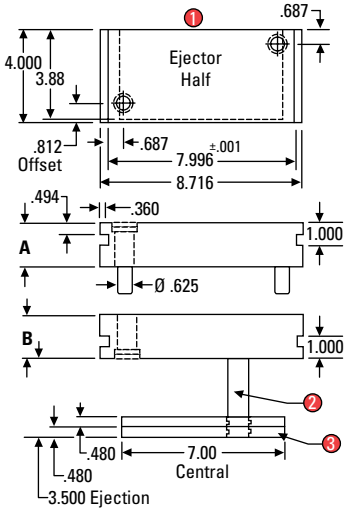
Standard Solid Construction

ITEM NO.	A	B
11/11SSB221	1.877	1.877
11/11SSB222	1.877	2.377
11/11SSB223	2.377	1.877

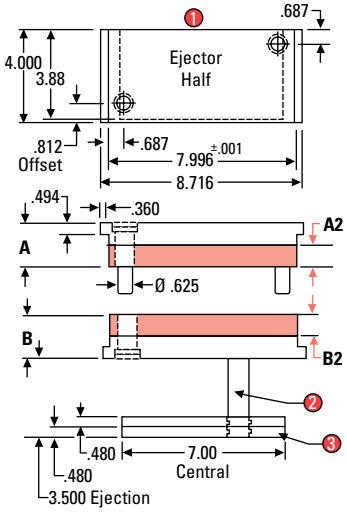
Standard Laminated Construction

ITEM NO.	A	A2	B2	B
11/11SLB281	1.877	0.877	0.877	1.877
11/11SLB282	1.877	0.877	1.377	2.377
11/11SLB283	2.377	1.377	0.877	1.877

Standard Solid:
8.0 x 4.0



Standard Laminated:
8.0 x 4.0



Ordering Information for Center Bar Insert Molds

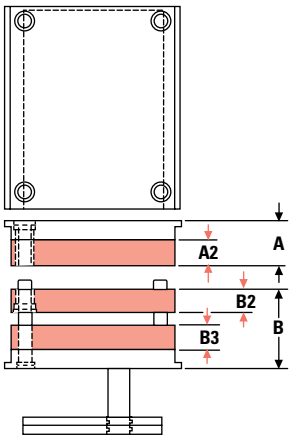
- Item number (see tables above)
- Steel grades: 1020, 4130 prehard, P-20 prehard and H-13; 420 stainless and other grades on request
- H-13 and other tool steel insert molds supplied .010 oversize on outside dimension, .010 to .013 oversize on thickness, and .025 to .035 undersize in pin and bushing holes for machining after required heat treating
- "A" & "B" dimensions supplied .004 to .007 oversize unless otherwise specified
- "A" and "B" dimensions for insert mold must match those of the removable center bar

Quick-Change Options
Stripper Plate & Three-Plate Insert Molds

D-M-E manufactures special stripper plate and three-plate insert molds to customer specifications. Quotation on request.

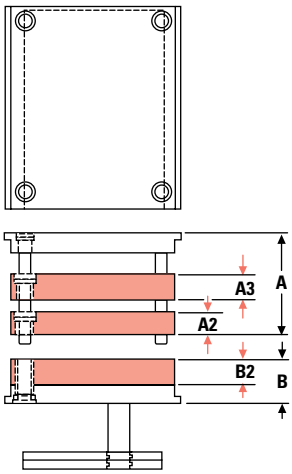
Stripper Plate Insert Mold





Three-Plate Insert Mold





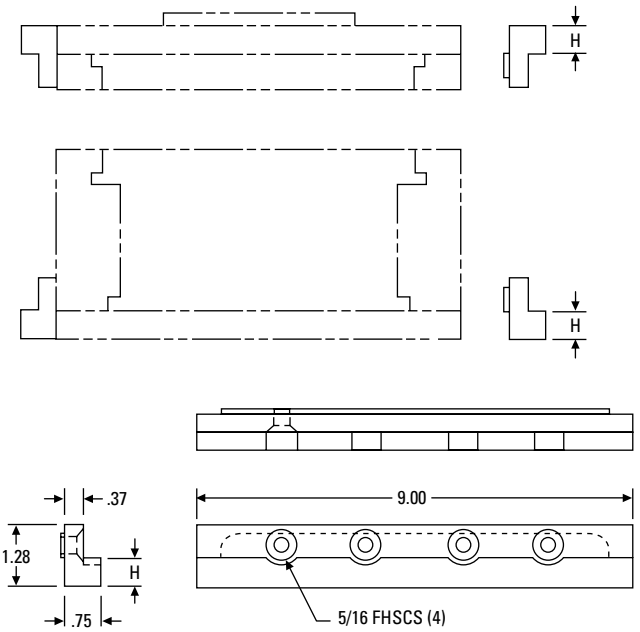
A & B dimensions are overall stack height of each half in closed position.

Quick-Change Options
84/90 UF Extended Clamp Bar Sets

D-M-E extended clamp bar sets bolt to 84/90 U frames for clamping to machine platens requiring mold clamps.

NOTE: If you are using the 84/90 UF Extended Clamp Bar Sets, please also reference the 94/90 UF 321 MUD Quick-Change Frame which has standard clamp slots and accepts all the 84/90 UF 321 Quick-Change Inserts.

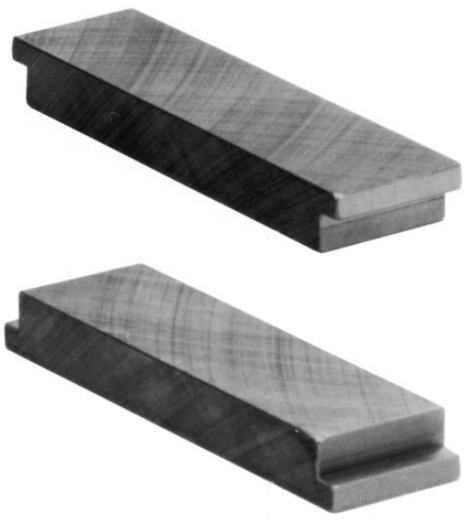


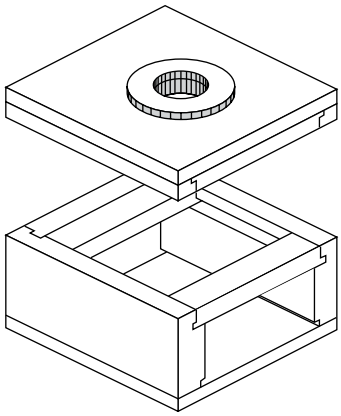


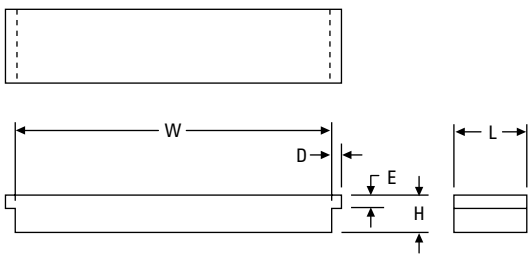
Extended Clamp Bar Sets

ITEM NO.	H
84/90ECB-6	.60
84/90ECB-9	.90

Quick-Change Options
08/09 and 84/90 UF Spacer Plate Sets







4 REQUIRED

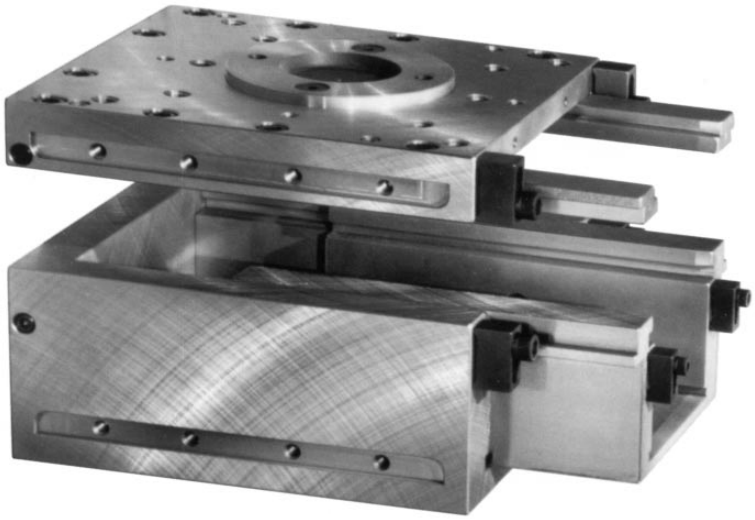
D-M-E spacer plate sets are installed to center shorter insert molds in frames designed for longer insert molds. Set includes four spacer plates (two 'A' and two 'B'). Quotation for other sizes on request.

Spacer Plate Sets

ITEM NO.	INSERT	W	H	L	D	E
08/09SP	5.0 x 3.5	4.996	0.750	2.250	0.230	0.246
84/90SP	6.5 x 3.5	6.496	0.750	2.250	0.230	0.246

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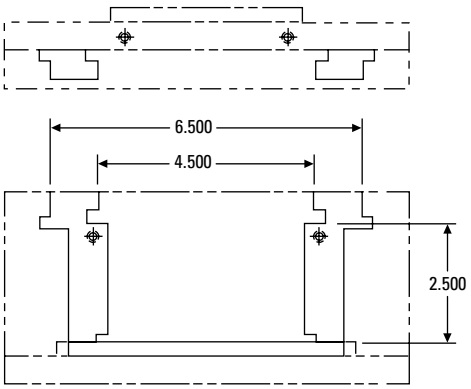
Quick-Change Options
84/90 UF Adapter Assemblies



84/90 UF 301 frame with 07/07 adapter assembly partially installed.

07/07 Adapter Assembly

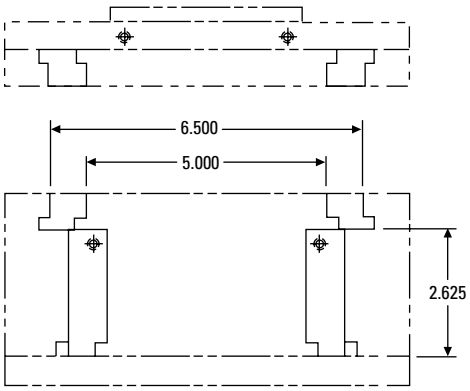




ITEM NO.
84/90UF 7-7

08/09 Adapter Assembly





ITEM NO.
84/90UF 8-9

D-M-E adapter rail assemblies permit 84/90 UF Quick-Change frames to accept insert molds from 07/07 UF (previously 06/07 FAU) frames (left) or 08/09 UF frames (right).

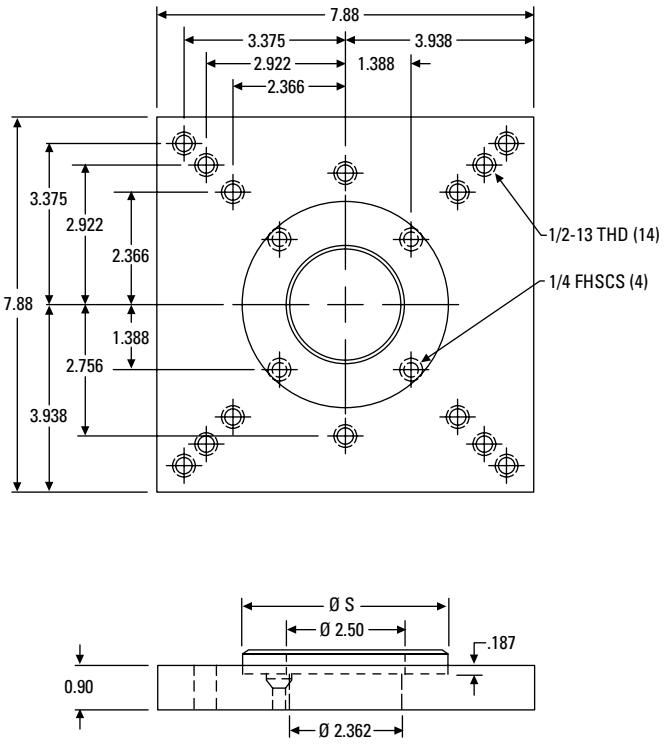
Quick-Change Options
05/05 UF Adapter Plates



D-M-E adapter plates bolt on the cavity and ejector halves of 05/05 U frames for installation on most molding machines with standard mounting screws or clamps.

ITEM NO.
05/05UFAP

Set of 2 supplied.

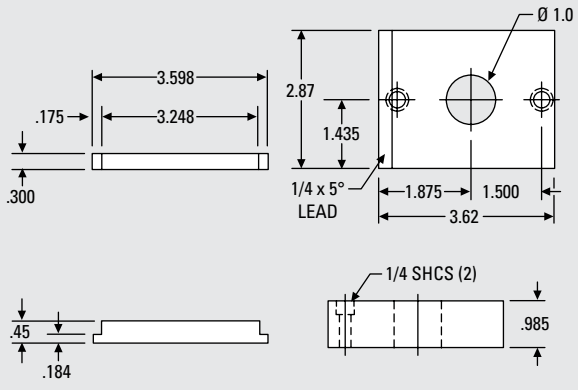


Spacer Plate Sets

The addition of the spacer plate set illustrated below permits the 05/05 UF 321 frame to accept 3.25 x 3.15 insert molds.

ITEM NO.
05/05SP

Item number includes one plate and four spacers

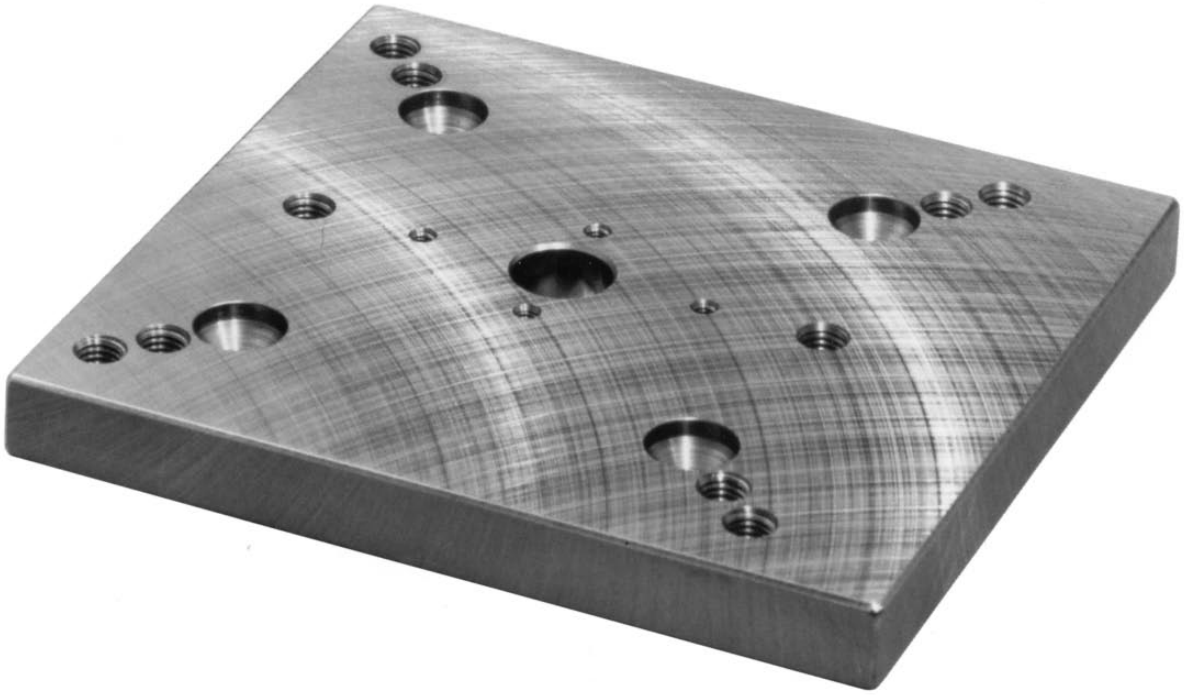


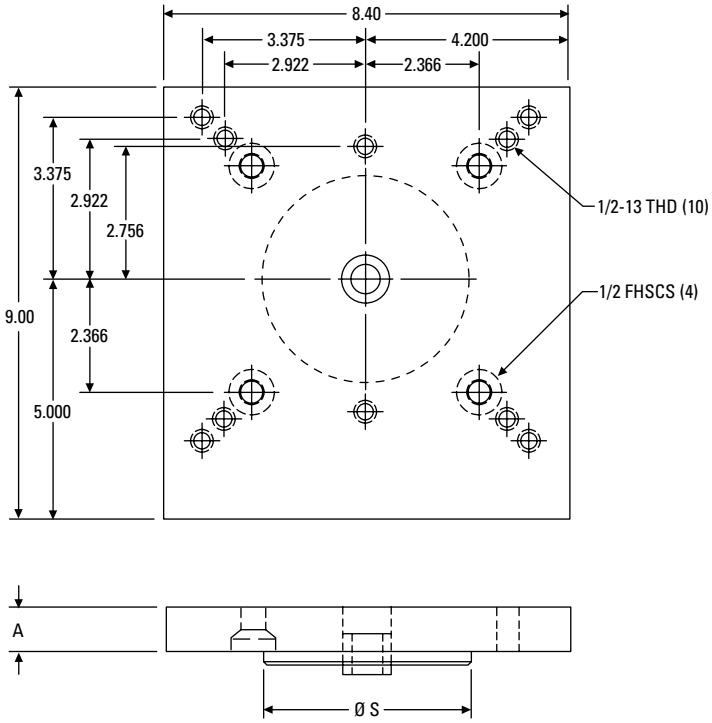
FOUR SPACERS SUPPLIED

ONE PLATE SUPPLIED

Quick-Change Options

08/09 and 84/90 UF Bolster Plates



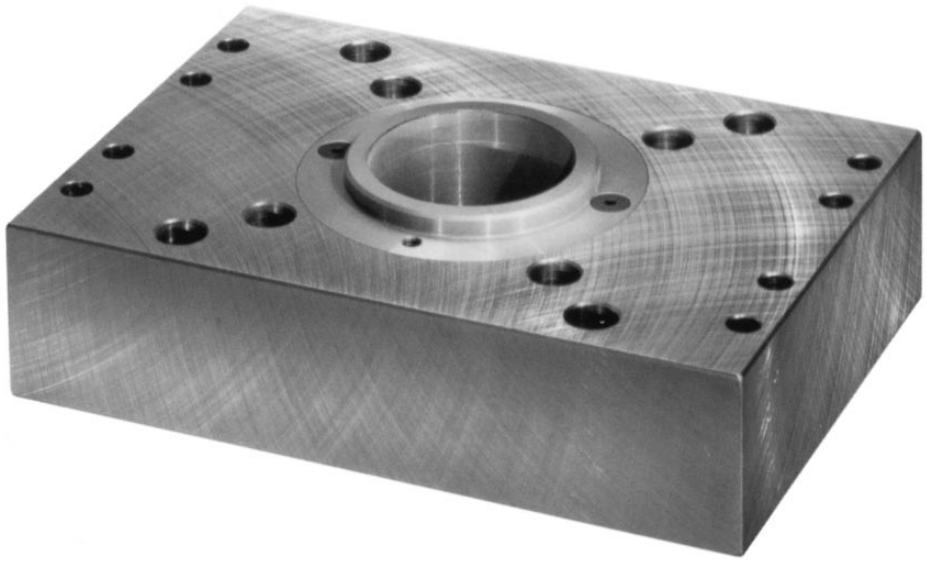


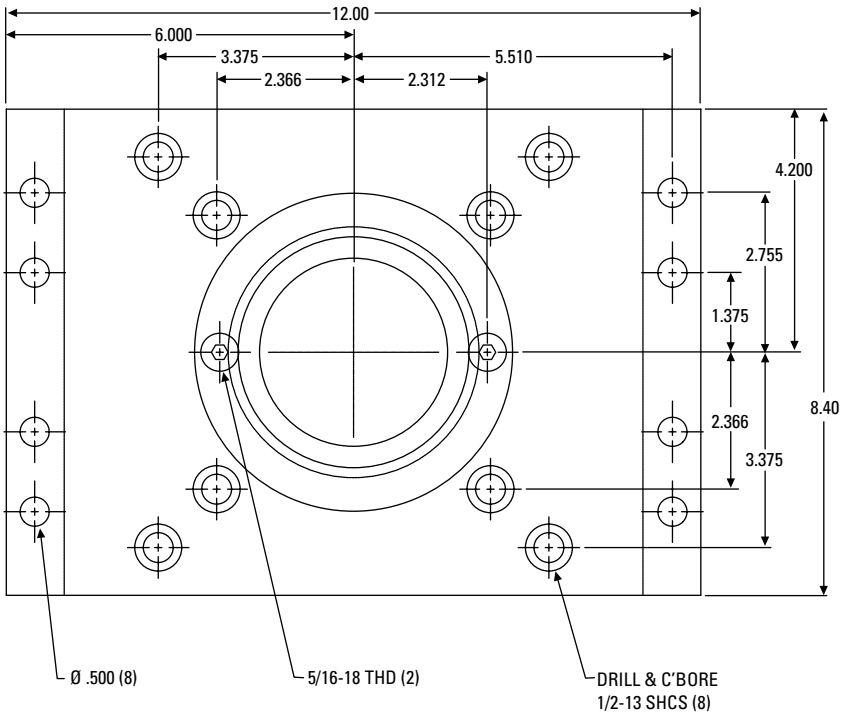
D-M-E bolster plates install on the ejector half of 08/09 and 84/90 U frames to meet the minimum shut height requirements.

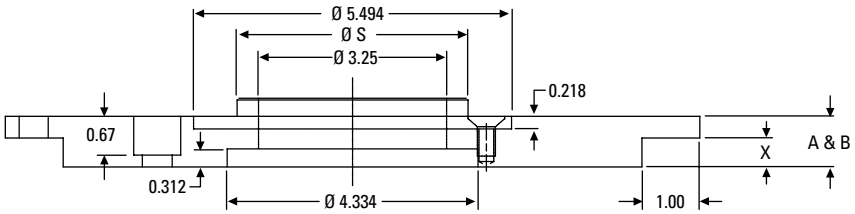
Bolster Plates

ITEM NO.	A	S DIA
BBP001	0.900	2.358
BBP002	0.900	4.330
BBP003	2.875	4.916
BBP004	0.900	none
BBP005	0.900	2.358
BBP006	0.900	2.358
BBP007	0.900	4.330
BBP008	2.875	4.916
BBP009	2.875	4.916

Quick-Change Options
Special Adapter Plates







TWO PLATES REQUIRED (CAVITY HALF AND EJECTOR HALF)

D-M-E adapter plates bolt on the cavity and ejector halves of 08/09 and 84/90 U frames to meet minimum shut height requirements.

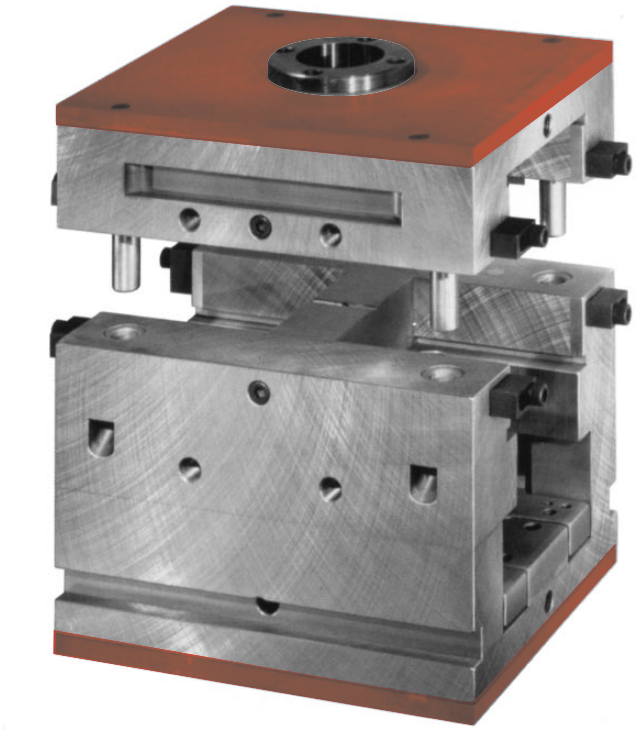
ITEM NO.	A DIM	B DIM	S
APA101	0.875	0.875	3.928
APA102	0.875	2.875	3.990 4.916
APA103	0.875	2.875	4.916

Check machine for specific locating ring size (specify "S" size).

PLATE THICKNESS	X
0.875	0.500
2.875	0.660

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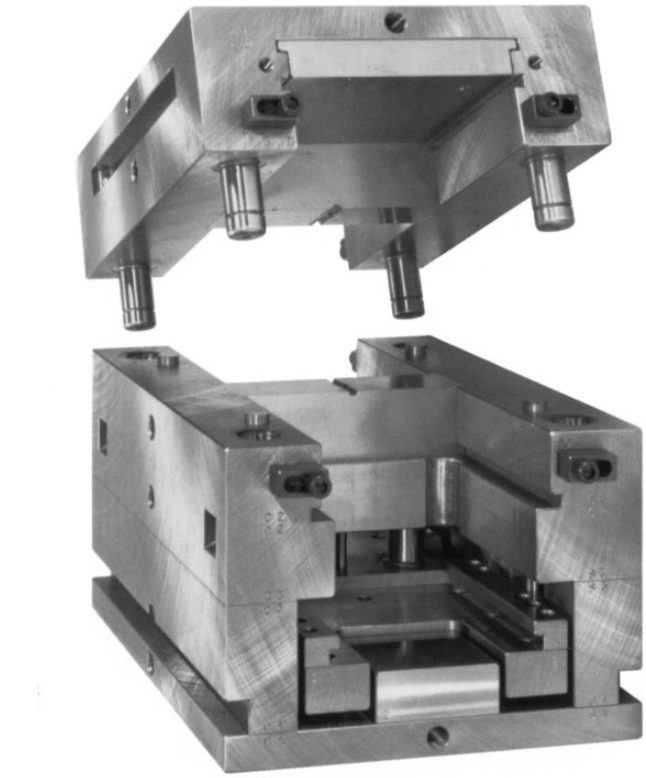
Quick-Change Options
High Temperature Insulator Sheets



MUD insulator sheets are installed between the top of the Quick-Change frame and the stationary platen, and between the bottom of the frame and the movable platen. The thermal insulating properties of these asbestos-free sheets inhibit heat transfer between the platens and the frame. This saves energy and extends both insert mold and machine life. Compression molded in glass-reinforced polymer composite, the sheets have more compressive strength than either asbestos or mica materials. The sheets' dimensional stability is excellent and they are supplied micro-finished top and bottom, parallel within ± .002". Quotation on request.

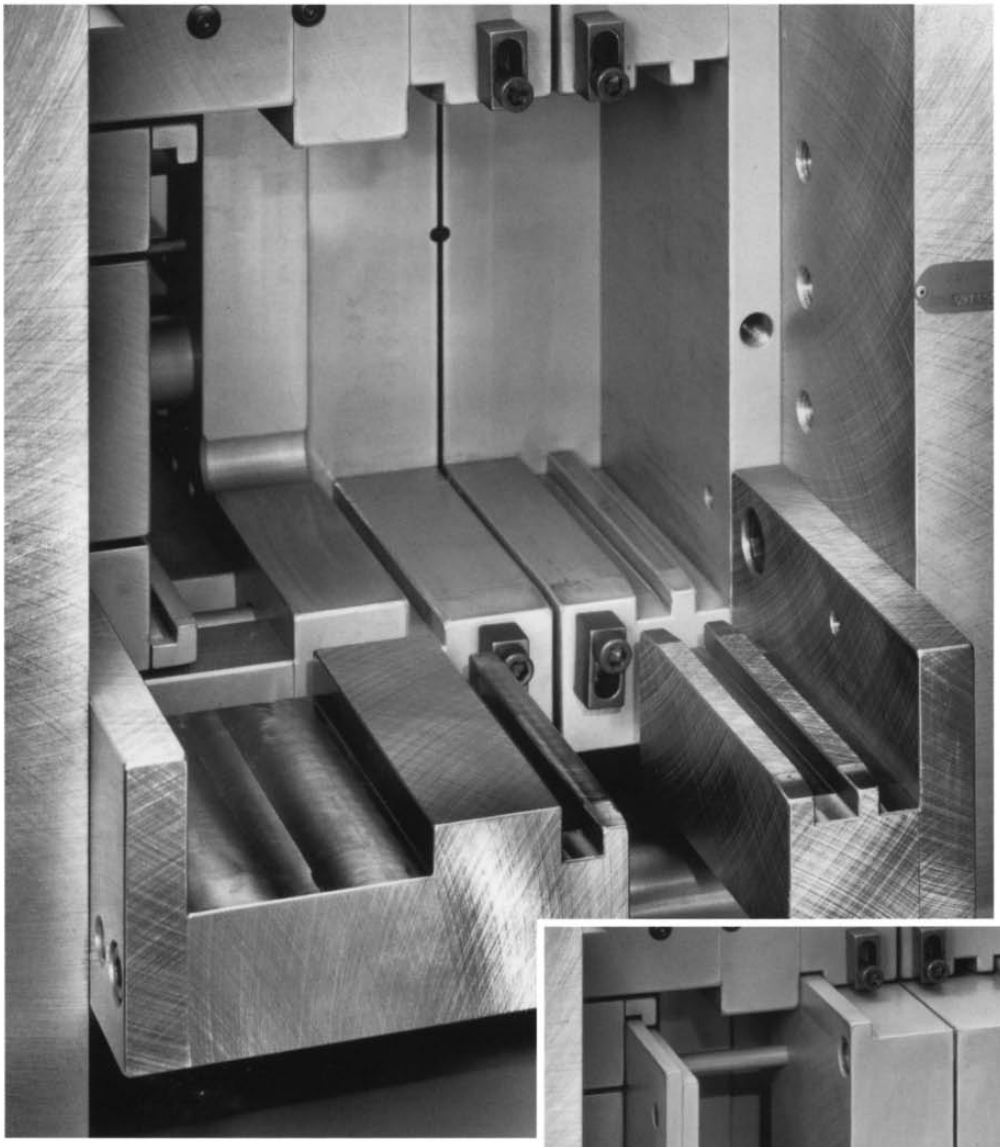
ENERGY SAVINGS
1/4 THICK = 27,508 BTU/hr
1/2 THICK = 31,004 BTU/hr

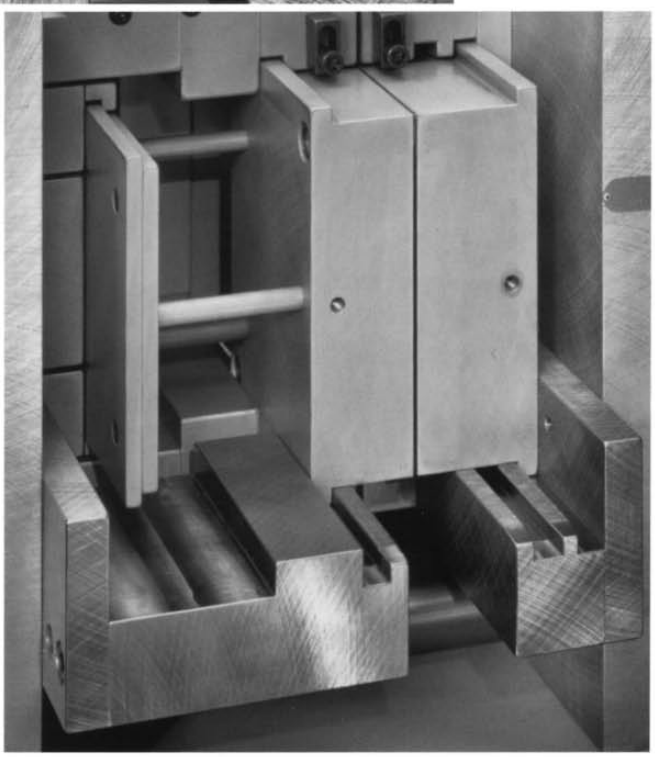
Quick-Change Options
Additional Ear Slots



H frames and Double H frames can be ordered with a second pair of ear slots machined in the A half. This second pair of ear slots permits insert molds of two different thicknesses to be interchanged in this half of the frame. The second size insert mold is one inch thinner and is lighter and less costly. Quotation on request.

Quick-Change Options
Insert Mold Loading Rails



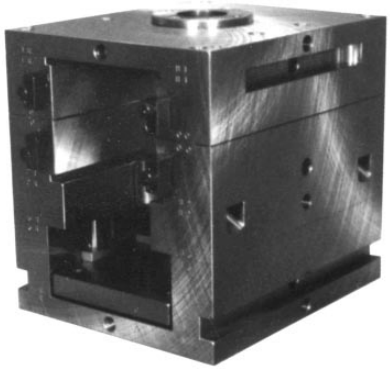


Loading rails are designed to further simplify the production changeovers of larger companion insert molds in H frames and Double H frames. These optional rails are attached to molding machine platens and are produced for specific frame models. Quotation on request.

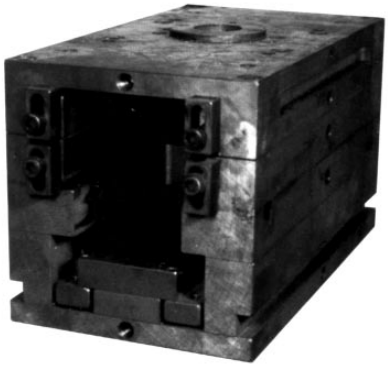
Photograph at right illustrates companion insert mold partially installed in Quick-Change frame equipped with loading rails.

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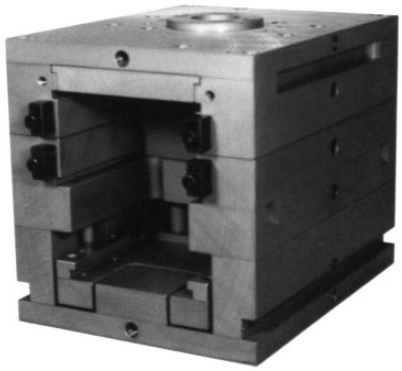
Quick-Change Options
Mold Tooling Protection with Armorclad



Wish you could maintain that new tool appearance?



Unfortunately, rust and corrosion cause old tool appearance over time.



Protect your investment with MUD's Armorclad treatment.

Combat high tooling and production costs with Armorclad* by MUD

The plastic molding and die casting tools presented by MUD are precision tools whose versatility assures a dramatic reduction in tooling costs. When in service, this tooling is subjected to atmospheric and operating conditions which, over time, cause deterioration leading to maintenance and replacement costs. The two basic destruction forces that age tooling are wear and corrosion. By significantly reducing the effect of those persistent forces a dramatic reduction in maintenance and replacement costs can be achieved. The tool maintains a new tool appearance promoting "new tooling" handling by employees.

The surface hardness, low coefficient of friction, and anti-corrosive properties of the Armorclad Treatment contributes to the protection afforded your tooling.

SURFACE HARDNESS – Armorclad is a metallic coating that is harder than any steel, even after heat treat. For example, it will withstand the impact, pressure, and temperature generated during cold extrusion.

COEFFICIENT OF FRICTION – The Armorclad surface has approximately 50% of the friction of steel against steel.

ANTI-CORROSION – Armorclad is a dense protective coating which will outlast conventional coatings by a factor of 2 to 1 or greater.

The Armorclad Treatment is a low temperature (never exceeding 150°F), electrochemical application of a thin metallic coating (deposit thicknesses range from 0.000020 to .0002 inches depending on the specific requirements needed and tolerances allowed) over a perfectly clean base metal that forms a hard (70-72 HRC equivalent), smooth surface with a low coefficient of friction. Armorclad penetrates the pores of the base metal, assuring a continuous surface that will not chip, peel, crack, flake, or spall even when subjected to tortuous testing.

The thin Armorclad coating, coupled with the fact that it is applied evenly over the entire surface and will not build up significantly on edges, means that most items to be treated may be finished, ground, or polished to their final dimension before treatment. The Armorclad application process causes no distortion to the item regardless of its length or cross-sectional dimensions. Finishes as fine as 6-8 micro inch are readily reproducible – Armorclad itself can be polished to produce a "mirror" finish that cannot scratch accidently or corrode due to moisture.

*"Armorclad" is the registered trademark of Armorclad, Inc.

U FRAME SIZES	ADDED COST
05/05; 07/07	11%
08/09; 08/10; 84/90; 94/90; 09/07; 12/08	13%
10/12; 10/14; 11/11	15%
10/16; 12/14; 12/16	17%
12/18; 12/20; 13/16; 13/18; 14/16	18%
13/20; 13/22; 14/18; 14/20; 16/18	20%
14/22; 16/21; 16/24; 16/27; 18/20; 18/26	22%

H FRAME SIZES	ADDED COST
07/07; 08/09	13%
10/12; 11/14; 12/11; 12/13	15%
10/18; 11/18; 12/15; 13/13; 13/15	17%
12/19; 13/17; 13/19; 14/15; 14/17; 15/15	18%
13/23; 14/19; 14/21; 15/17; 15/19	20%
14/25; 15/21; 17/19; 17/26; 18/22; 18/26	22%
18/30	28%

DOUBLE H SIZES	ADDED COST
12/08	14%
16/09	15%
16/12	18%
16/18	19%
20/14	19%
22/19	22%
24/23	28%

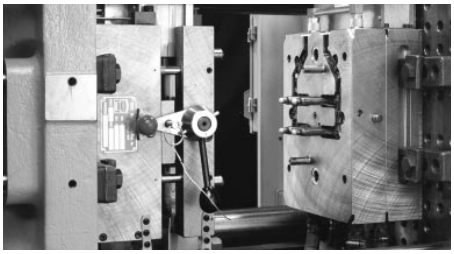
The additional cost for Armorclad treatment of any frame is determined by applying the percentage figure listed in the table above to the standard catalog price of the frame.

Quick-Change Options
Hot Runner-Infused Quick-Change™ Systems

Increase Productivity and Reduce Molding Costs With Hot Runner-Infused Quick-Change Systems

Now the production efficiencies of hot runner molding can be further enhanced when combined with a Master Unit Die (MUD) Quick-Change Frame. An unlimited number of different parts can be produced with this industry-leading combination of hot runners within a quick-change system because only the MUD Companion Insert Mold is swapped out. The MUD Frame/Hot Runner System remains in the mold.

Combining D-M-E Hot Runners with MUD Quick-Change Systems provides many advantages to virtually any injection molding operation, including:

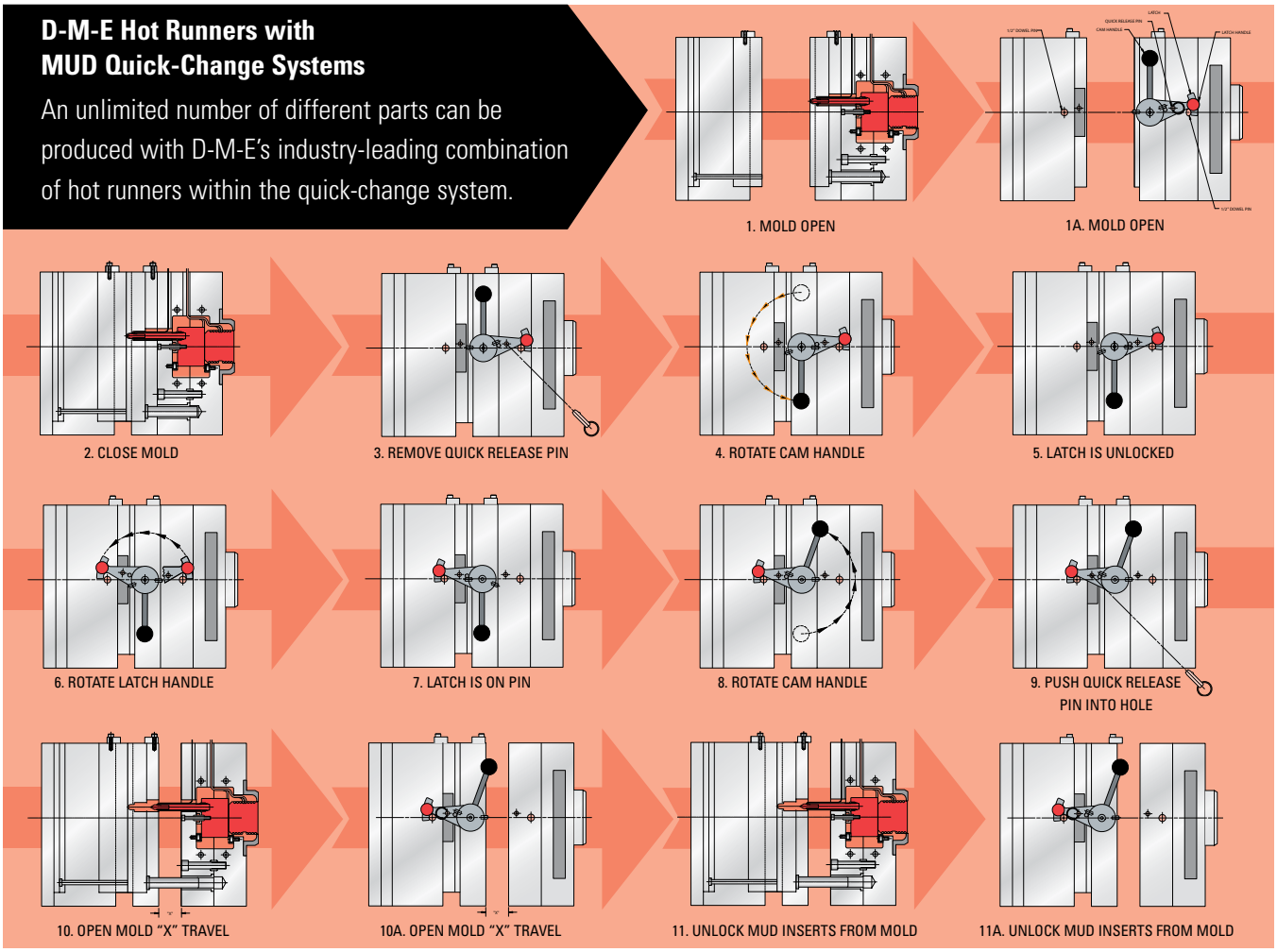


- Enables molders to use the same D-M-E Hot Runner System with many different cavity and core configurations with MUD Companion Insert Molds
- Quickens production changeovers, often in as little as five minutes
- Provides cost justification for the Hot Runner System and/or the MUD Quick-Change System for multiple tooling projects
- Simplifies design with the use of the MUD Quick-Change Latch Handle

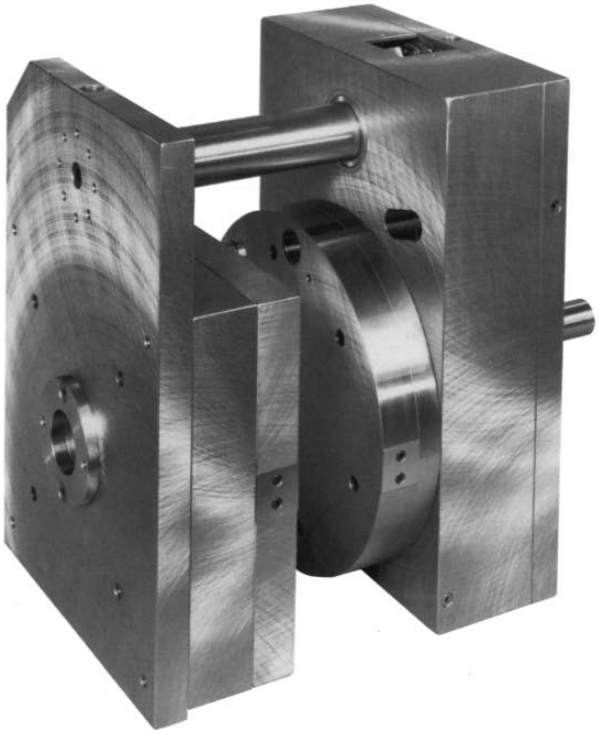
Contact your D-M-E representative or call us today to find out more about how the combination of a D-M-E Hot Runner System and the MUD Quick-Change System will not only substantially increase your production efficiency but significantly reduce your molding costs. Many companies incorporate the D-M-E hot runner/quick-change combo into their Lean initiatives.

D-M-E Hot Runners with MUD Quick-Change Systems

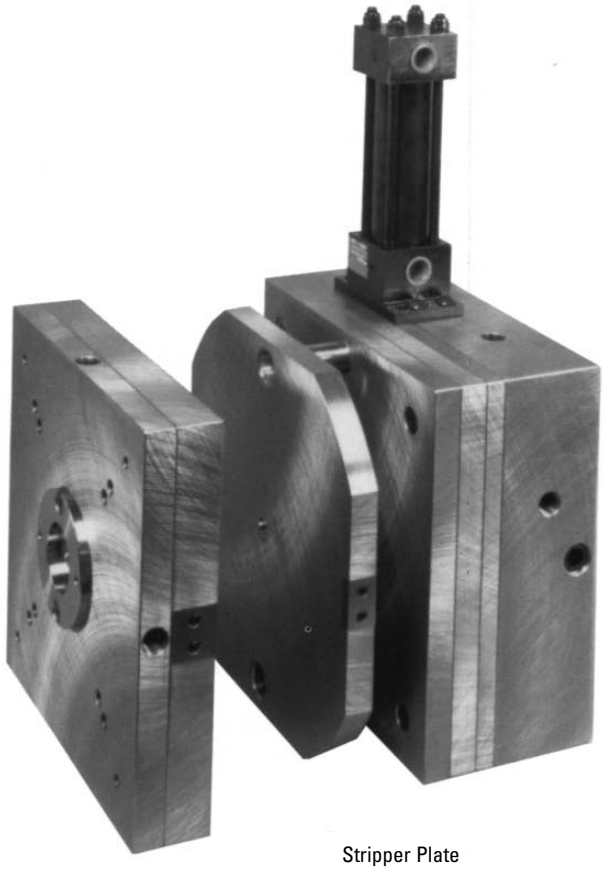
An unlimited number of different parts can be produced with D-M-E's industry-leading combination of hot runners within the quick-change system.



Quick-Change Options
Two-Color, Two-Material Molding



Common Core



Stripper Plate

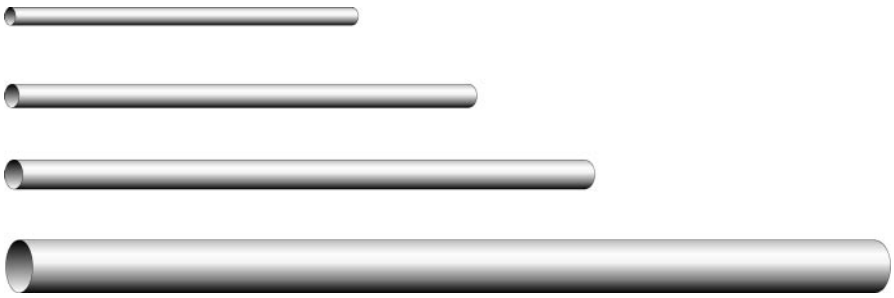
Automatic two-color, two-material injection molding system available

D-M-E two-color/two-material mold frames permit automatic molding of two-color or two-material parts. These frames are specifically designed for all two-color and two-material equipment currently available. Both core and cavity plates can be changed without removing the frame from the machine.

Other features include water cooling for the A and B sections except the indexing component. Automatic positive 180° indexing is mechanically rotated by either the clamp opening or closing stroke of the machine. Pneumatic or hydraulic power can be utilized. This approach to two-color, two-material molding offers smooth and efficient operation that's completely automatic.

NOTE: MUD two-color/two-material mold frames are quoted items based on customer specifications.

Quick-Change Options
D-M-E Standard Heat Pipes



- Reduce cycle time
- Improve part quality
- Simplify mold and die design
- Reduce operating and maintenance costs
- Upgrade existing molds and dies
- Salvage damaged molds and dies

Selecting the Right Size, Shape and Temperature Range

The standard diameters, lengths and temperature ranges of TPL, TPH and TPDC Series Heat Pipes will satisfy most applications.

NOTE: Heat Pipes cannot be used as ejector pins and parts cannot be molded or cast against them. Also, Heat Pipes cannot be cut, machined, bent or plated. If a special size is required, contact D-M-E to discuss your application.

TPL, TPH and TPDC SERIES	TOLERANCES
Diameter (O.D.)	±.004
Length	±.020

TPL and TPH Heat Pipes for Injection Molding

For low-temperature Heat Pipes (40°-200°F) use TPL (color-coded BLACK) as a prefix in front of item number in the table below. For high-temperature Heat Pipes (150°-400°F) use TPH (color-coded WHITE) as the prefix.
Examples: TPL8-600; TPH6-500.

LENGTH (INCHES)	TPL & TPH DIAMETER & ITEM NUMBER					
	1/8	3/16	1/4	5/16	3/8	1/2
3	4-300	6-300	8-300	10-300	12-300	16-300
4	4-400	6-400	8-400	10-400	12-400	16-400
5	4-500	6-500	8-500	—	—	—
6	4-600	6-600	8-600	10-600	12-600	16-600
7	4-700	6-700	8-700	—	—	—
8	4-800	6-800	8-800	10-800	12-800	16-800
10	—	—	—	10-1000	12-1000	16-1000
12	—	—	—	—	—	16-1200

TPDC Heat Pipes for Die Casting

The internal operating temperature range for TPDC Heat Pipes (color-coded RED) is 150°-600°F. Use Copper Heat Transfer Compound for die casting applications.

LENGTH (INCHES)	TPDC DIAMETER & ITEM NUMBER		
	1/4	5/16	3/8
4	TPDC8-400	TPDC10-400	—
5	TPDC8-500	TPDC10-500	TPDC12-500
8	TPDC8-800	TPDC10-800	—
10	TPDC8-1000	TPDC10-1000	—
12	—	TPDC10-1200	TPDC12-1200

Silver Heat Transfer Compound* for TPL and TPH Series Heat Pipes (Item No. HTC-06S)

Contains micronic particles of silver to provide a thermal resistance of 4.75°C in/watt. The compound is supplied in a 5cc plastic syringe. (D-M-E recommends the Silver Heat Transfer Compound because it has eight times lower thermal resistance than the copper equivalent.)

Copper Heat Transfer Compound* for TPL, TPH and TPDC Series Heat Pipes (Item No. HTC-30C)

Contains micronic particles of copper to provide a thermal resistance of 38°C in/watt. The compound is supplied in a 5cc plastic syringe.

* For .125" diameter Heat Pipes, do not use applicator tube supplied with Heat Transfer Compound. Apply desired amount of compound directly into core hole.

Tamp Ring Sets

Each set includes 32 silver alloy tamp rings (enough for installing 16 Heat Pipes) and one hollow tamping tube. Select the required tamp ring set by its I.D. to match the O.D. of the Heat Pipe being used.

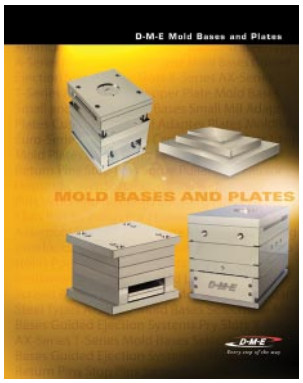
ITEM NO.	TARS-04	TARS-06	TARS-08	TARS-10	TARS-12	TARS-16
Ring I.D.	1/8	3/16	1/4	5/16	3/8	1/2

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D-M-E: Your Complete Mold Technologies Provider

D-M-E
Every step of the way

Check Out All Of The D-M-E Mold Technology Catalogs And You'll See Why We're An Essential Resource To Thousands Of Customers Worldwide!



CATALOG: 308 PAGES

D-M-E Mold Bases & Plates

Choose from the world's widest selection of mold bases from uniquely featured, off-the-shelf solutions to full-featured, custom-configured offerings. An array of standard and specially-machined mold plate sizes gives you unlimited options.



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D-M-E Hot Runner Systems

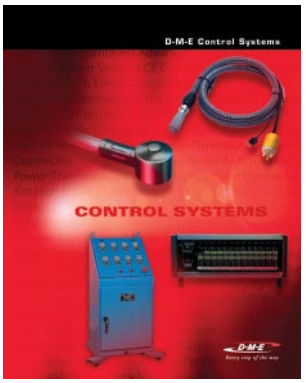
Moldmakers, molders and mold designers worldwide look to the D-M-E Hot Runner Systems Catalog for essential hot runner solutions. From best-in-class components to complete, fully-functioning hot half systems, D-M-E has the broadest range of hot runner products and services.



CATALOG: 174 PAGES

D-M-E Mold Components

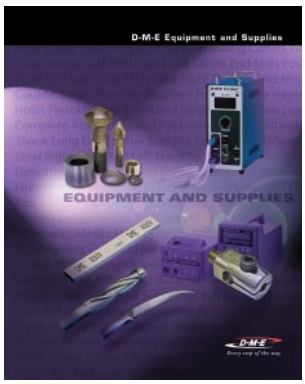
With the largest selection of mold components available around the globe, the D-M-E Mold Components Catalog has the products that will help you meet the unprecedented demands you face for speed, cost reduction and performance.



CATALOG: 76 PAGES

D-M-E Control Systems

Powerful. Flexible. Affordable. That's what molders want from today's generation of hot runner, valve gate, and process controls, and D-M-E delivers with a broad line of controllers sure to fit the most demanding application.



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D-M-E Equipment and Supplies

From high-speed cutting tools and finishing and polishing systems to a vast array of maintenance, repair and operation-related products, the D-M-E Equipment and Supplies Catalog is an invaluable resource for mold technology professionals.



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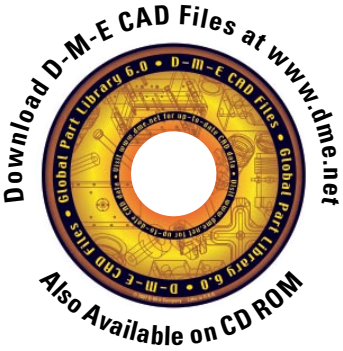
D-M-E Technical Services

From powerful, online resources available 24/7, to our team of trained, experienced experts committed to helping customers achieve maximum productivity, reliable operation, and better performance, D-M-E's goal is simple: to be an essential resource for your molding challenges every step of the way.

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D-M-E, an essential resource to the customers it serves worldwide, offers the industry's broadest range of market-leading products, unsurpassed knowledge and expertise, a global logistics infrastructure that ensures speed and accuracy, and a support organization unrivaled for its ability to assist customers when and where they need it. A complete line of hot runner systems, control systems, mold bases, MUD quick-change mold systems, mold components, moldmaking and molding equipment supplies, and technical services helps customers compete every step of the way.





D-M-E
Every step of the way

World Headquarters
D-M-E Company
29111 Stephenson Highway
Madison Heights, MI 48071
800-626-6653 *toll-free tel*
248-398-6000 *tel*
888-808-4363 *toll-free fax*
www.dme.net *web*
info@dme.net *e-mail*

D-M-E of Canada, Ltd.
6210 Northwest Drive
Mississauga, Ontario
Canada L4V 1J6
800-387-6600 *toll-free tel*
905-677-6370 *tel*
800-461-9965 *toll-free fax*
dme_canada@dme.net *e-mail*

D-M-E Europe C.V.B.A.
Industriepark Noord
B-2800 Mechelen Belgium
32-15-215011 *tel*
32-15-218235 *fax*
sales@dmeeu.com *e-mail*

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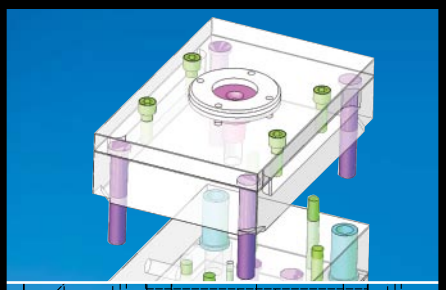
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D-M-E Technical Services

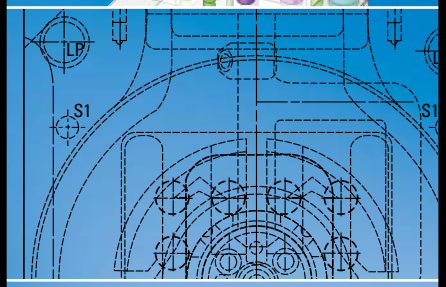


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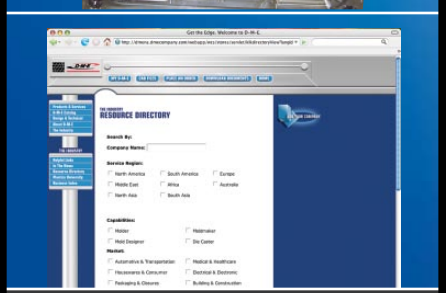
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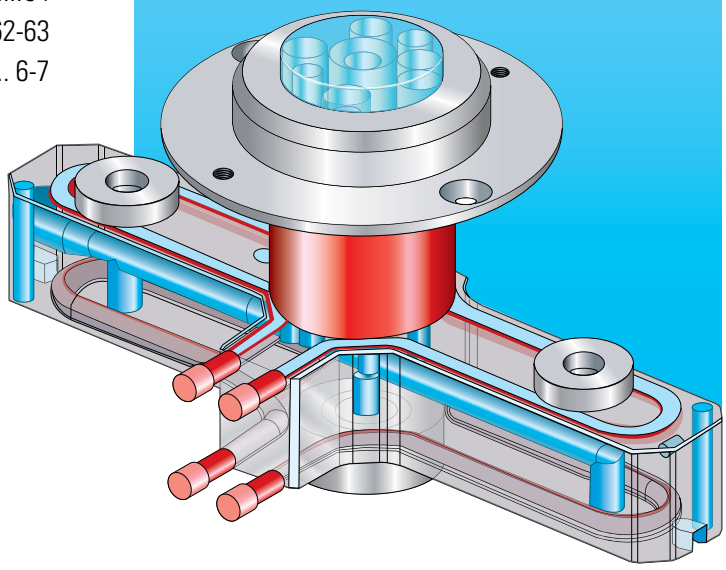
Online Price Guide

Go to www.dme.net/prices for the latest pricing guide.

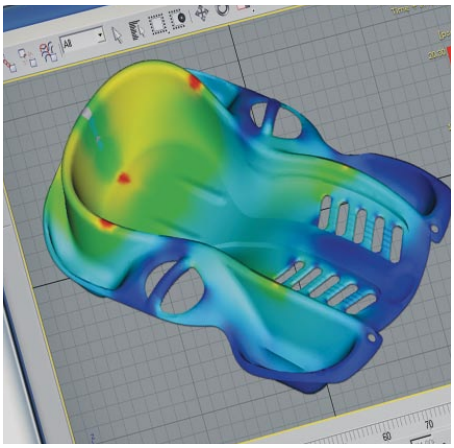
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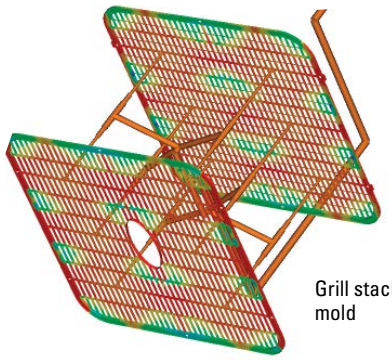
D-M-E has supported moldmakers, processors and designers around the globe since it innovated the standard mold base in 1942. Today, we offer the industry's broadest range of market-leading products.



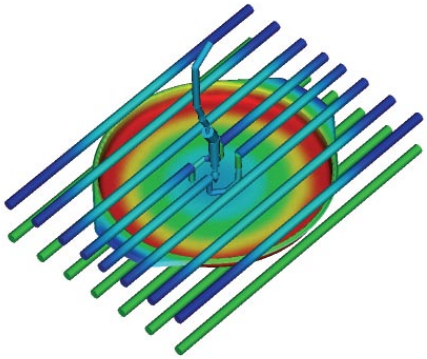
Moldflow™ Services — Optimize Part and Mold Design







Grill stack mold



Comprehensive Analysis and Modeling

With today's shrinking time-to-market window, development speed is essential. As part of its commitment to the molding industry, D-M-E is now offering Moldflow™ analysis to help optimize part and mold design – especially for hot runner molds. D-M-E is the first mold technologies supplier to earn Moldflow's silver certification in this advanced technology.

A Competitive Advantage

Predictive analysis, utilizing Moldflow software, yields tremendous benefits, including:

- Optimize part design
- Reduce time-to-market
- Save cost and time on mold tryouts
- Lower development and production costs
- Provide a framework to establish reputable processes
- Improve product quality
- Decrease cycle times

What is Moldflow?

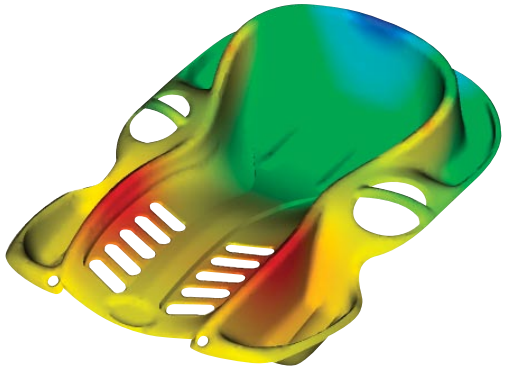
D-M-E uses Moldflow Plastics Insight™ (MPI) software which is an integrated suite of analysis tools that utilize CAD files and apply advanced Finite Element Analysis (FEA) techniques to quickly and easily enable a virtual "what if" design environment before initiating mold construction. MPI provides in-depth part/mold design and process parameter optimization. This is in contrast to Moldflow Plastics Advisor™ (MPA) which is primarily useful for parts with low to medium complexity, conceptual designs, and quick part design validation. D-M-E is a certified, licensed provider of Moldflow analysis services.

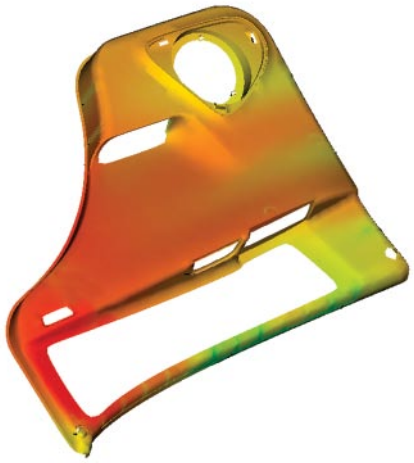
Mold Fill Analysis

The Mold Fill module uses predictive technology to simulate the filling process. Key analyses include:

- Optimize the number, size, and location of gates
- Balance the runner system design
- Reduce material stress levels

Moldflow™ Services — Optimize Part and Mold Design







- Predict weld line locations
- Validate pressure and temperature distribution within the mold
- Optimize processing conditions – including melt temperature, injection rate, and cavity pressure

Mold Pack Analysis

Building on the results of a Mold Fill analysis, the Mold Pack module optimizes the packing phase to ensure a uniform packing condition. As an indication of part warpage, volumetric shrinkage is evaluated and the pack pressure profile is optimized. The result is minimized warpage with an improved surface appearance.

Mold Cool Analysis

The Cool Analysis module assesses an existing cooling layout to determine potential molding problems. Steel types, cooling channel sizes, bubblers, baffles, coolant temperatures, and flow rates are all evaluated. Using this analysis, the Mold Cool module recommends practical tooling design changes to ensure uniform cooling. Mold Cool takes into account:

- Number, location, depth, and pitch of cooling channels
- Steel types
- Cooling circuit layouts
- Coolant temperatures and flow rates
- Cycle times

Warp Analysis

Using the results from the Fill and Cool analyses, the Warp Analysis module enables prediction of plastic part shrinkage and warpage. Warp Analysis diagnoses the cause(s) of warping and recommends the appropriate solution, such as gate location changes, design parameter changes, and reduction of wall thickness variations.

MPI 3D

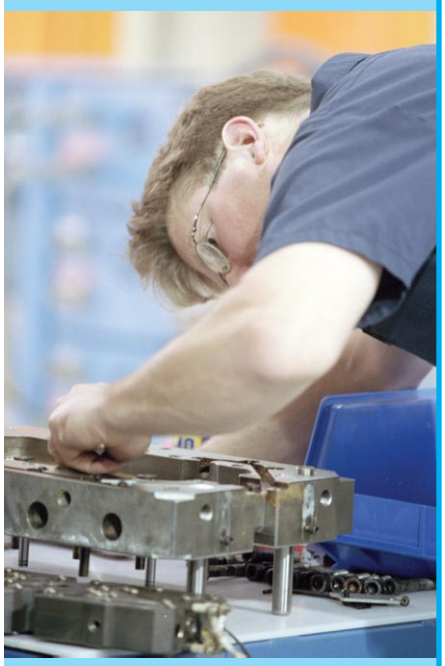
MPI 3D addresses a class of problems previously unsolvable using traditional finite element analysis techniques. In thick-walled parts, molten plastic can flow in all directions. Using a proven methodology based on a solid tetrahedral, finite element volume mesh, MPI 3D enables true, three-dimensional simulations on thick-walled parts.

Where Do I Start?

Contact your D-M-E representative for more information regarding MoldFlow Services. The D-M-E Applications Engineering Department is available to provide a customized MoldFlow analysis and assist you in maximizing the results of your next application.

D-M-E Hot Runner Service Center – Ensuring the Productivity of every Hot Runner System





Full-Service Hot Runner Support

Mold technology leader D-M-E – known for our innovative family of hot runner systems including Galaxy, Meteor, and Stellar – now also provides total support for your hot runner systems. Whether it's a D-M-E system or not, we can repair, reconfigure – even totally rebuild it to help ensure maximum uptime and performance of your system.

A Dedicated Center for Hot Runner Systems

Our new Hot Runner Service Center, located in Madison Heights, Michigan, is exclusively dedicated to supporting your hot runner systems. Staffed by a team whose sole focus is hot runner systems, we're quickly able to get your system operating at maximum efficiency. This group has over three decades of experience installing, assembling, and repairing hot runner systems. And, because we're centrally located, we can get your system back in your shop quickly and cost-effectively. If appropriate, we can also perform many basic operations in one of our D-M-E regional centers – further speeding turnaround.

A Wide Range of Services

D-M-E recognizes the value of your time – that's why we've developed a comprehensive suite of hot runner services to provide a single source for maintenance and optimization of your system. Key services include:

- Repairs – including expedited service
- System cleaning – including complete bake-out
- Total system rebuild
- Re-configuration
- Operator training
- Mold tryouts

Repairs Get You Back Up Quickly

Time is money. When a critical tool is out of commission, productivity is lost and production schedules can be threatened. We understand this at D-M-E. That's why our team of hot runner repair specialists are always available to get you back in service.

Whether you're experiencing leaks, heating issues, flow problems, or would simply like a system bake-out, we'll repair your system quickly and cost-effectively.

Standard turnaround for repairs on systems from 1-12 drops (depending on parts availability for non-D-M-E systems) is 5 working days or less. If your system has over 12 drops, contact us for an estimated turnaround time. And, we offer emergency 24-hour turnaround service.

D-M-E Hot Runner Service Center – Ensuring the Productivity of every Hot Runner System

Rebuilds Ensure Performance

After tens of thousands of cycles you may have noticed your system just doesn't perform the way it used to. Or maybe you've run high-temperature engineered materials and the tolerances just aren't as tight. Key benefits of system rebuilds include:

- Cost savings of at least 40% as compared to new systems
- Extended life for your tool
- Maximizing system uptime and performance
- Improved finished part quality

Whether you need a total system rebuild, or a simple cleaning and inspection D-M-E can help. System rebuilds can be performed on any brand of hot runner system and typically include:

- Complete bake-out cleaning
- Check and replace heaters and thermocouples
- Inspect and correct wiring
- Replace seals and bushings
- Clean or replace nozzle components
- Check all dimensions and re-assemble system

Cost-Effective Reconfiguration

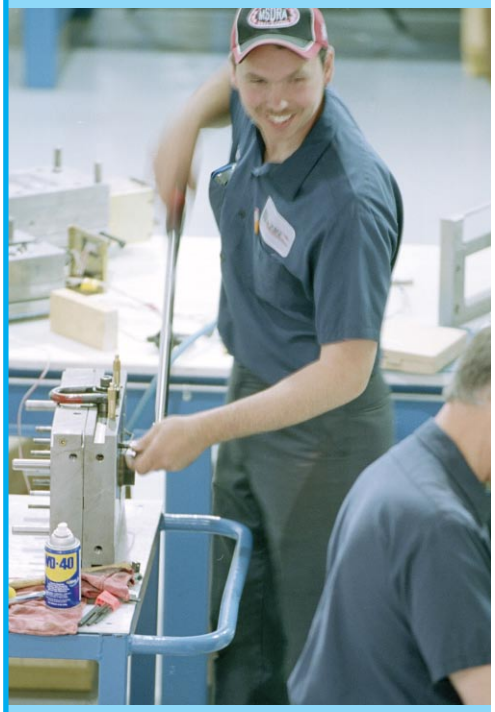
When your process needs change, without a significant tooling change, we can adapt your hot runner to the new process. Whether it's a material switch, or a part design change, D-M-E can help reconfigure your existing system.

Training Maximizes Productivity, Speeds Set-Up

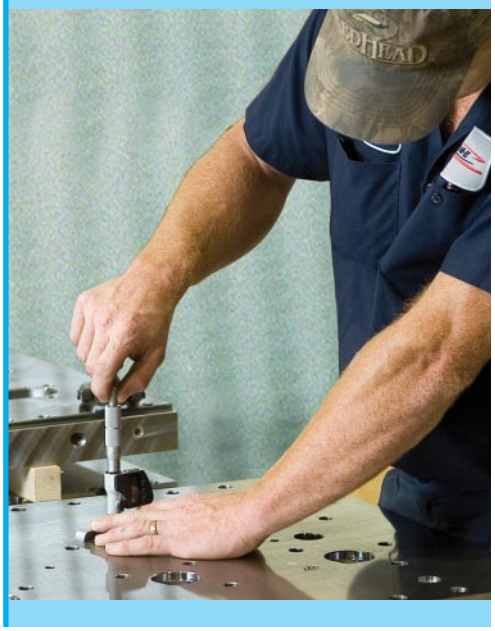
The D-M-E Hot Runner Service Center can provide comprehensive operator training in start-up or prototyping. Our hands-on programs help your operators get up-to-speed, or stay current on hot runner technology.

Mold Tryouts

We also offer mold tryouts at the Hot Runner Service Center. Injection molding machines from 110 to 1,000 tons are available to run your mold and ensure proper performance.







D-M-E Online Tools

Powerful New Online Resources

www.dme.net

> Download CAD drawings
> Check pricing
> Place orders
> Confirm shipping status
> Access innovative product documents
> And more . . .

Now the first real-time e-commerce website in the mold technologies industry is even better. The newly redesigned D-M-E website makes it easier to access a full complement of tools and resources designed to improve efficiency for moldmakers, molders, and mold designers. A completely new design makes it even easier to find the information you need quickly and with only a few clicks of your mouse.

Our new web presence is complemented by the industry's broadest range of market-leading products, a customer service team that provides you with unsurpassed knowledge and expertise, and a logistics infrastructure that ensures speed and accuracy across the order-to-shipment continuum. All of these efforts support our goal to be an essential resource to help you meet the unprecedented demands for speed, cost reduction and performance that you face every day.

Services and Products to Help You Every Step of the Way!

- **Online ordering**
  Place and track orders online. Get free ground freight for orders placed online. Please contact a D-M-E customer service representative to activate this feature for your account; a login ID and password are required.

- **Resource directory**
  Customers that add their company to this free directory become part of a resource listing their services that can result in new business when users contact them. (See page 61 for more details.)

- **CAD data**
  Download thousands of D-M-E product geometries in over 80 native and neutral CAD formats. See the next page for details.

- **Promotional items list**
  View Special Mold Base lists, updated regularly, and other specials to learn of current promotions.

- **Industry's largest online catalog**
  Access information on over 13,000 products. View individual pages or entire sections. Pages can be downloaded or printed.

- **Design guides/product application guides**
  View or download design guides enabling you to use the products correctly, safely, and to the fullest capability,

- **MSDS sheets**
  Easy access to Material Safety Data Sheets for over 40 products including Steel, Mold Cleaner and Saver, Insulator Sheets and Self-Lubricating Bushings.

- **Easy search tools**
  Quickly search the entire catalog for specific technical information day or night.

- **Frequently asked questions (FAQ)**
  A quick-reference guide to frequently asked questions related to mechanical parts such as heat pipes, collapsible cores, and early ejector returns; also temperature control guides, and error code troubleshooting.

- **Plastics University**
  The D-M-E Plastics University, created in conjunction with Ferris State University, is a great educational resource featuring 8 training modules.

- **D-M-E InStep mold technologies newsletter**
  An electronic newsletter, featuring essential resources for moldmakers, molders, and mold designers, created with the knowledge and expertise of D-M-E.

D-M-E Online Tools

- **New Product and Service Information**
  Find out what's new and exciting regarding D-M-E products and service. Information on new products and promotional specials are added frequently.

- **The largest collection of available formats**
  Whether you need 3D or 2D models, in native or neutral formats, the D-M-E Global Parts Library has the data you're looking for.

- **Easy import speeds design**
  Directly import D-M-E CAD models into your designs to speed the development process. Advanced compression algorithms ensure efficient download times.

- **The latest data**
  Access the most current, verified specifications for thousands of D-M-E products, including:
  > A, B and MoldBasics mold bases
  > Heating and cooling components
  > Metric Components
  > Ejector Pins
  > Mold and Die Components
  > Hot Runner Components
  > MUD inserts

- **Easy, powerful search capabilities**
  A powerful search engine makes finding the needed CAD models quickly and easily a snap.

- **Comprehensive CAD models**
  Dimensionally correct geometries include exterior envelope data, as well as key mounting features.

- **Flexibility to work the way you work**
  Customize CAD format preferences to properly configure files for import into your CAD system.

What are you waiting for? With the D-M-E Global Parts Library, you could be working faster and smarter to develop and build mold designs from the simplest to the most complex.

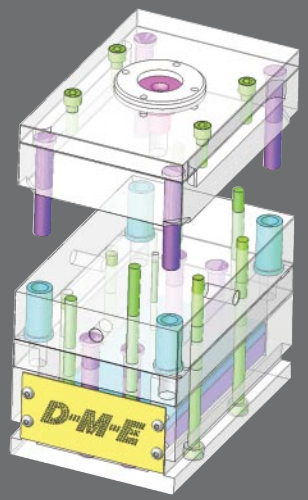
24/7 CAD Files in the Formats You Need

www.dme.net

> Crunching on that last minute design?
> Need CAD data?

Did you know the D-M-E web site offers CAD files for more than 60,000 parts in over 80 different formats?

D-M-E offers mold designers, moldmakers, and molders an easy way to access CAD files in a wide range of formats. Our newly redesigned website features the industry's most robust solution for delivery of CAD data – the D-M-E Global Parts Library. Powered by PARTsolutions™, the D-M-E Global Parts Library gives users real-time access to the critical information they need in most of the formats in use in the moldmaking industry today.



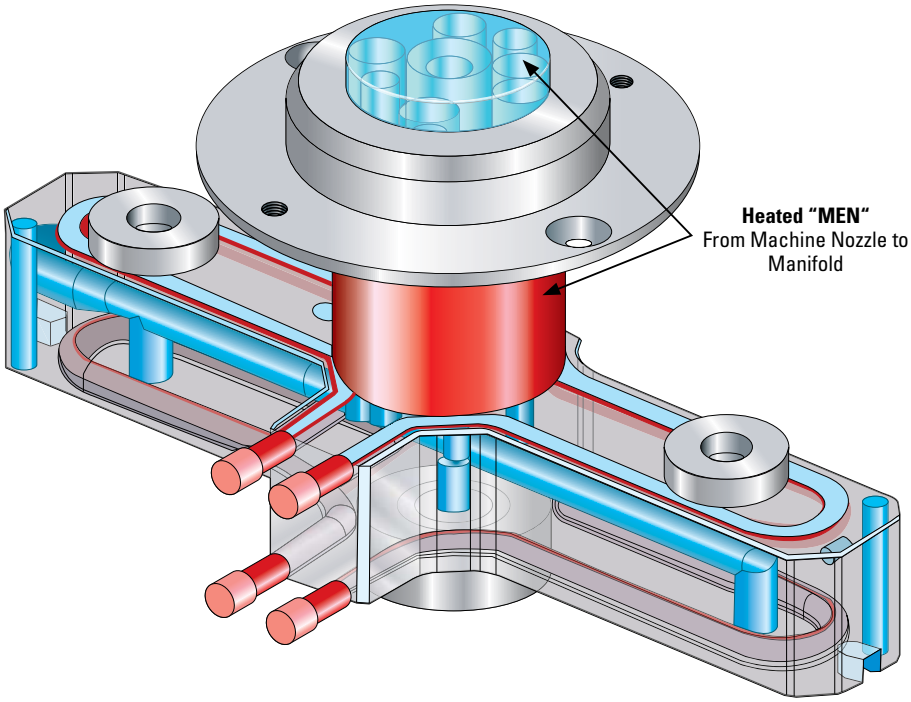
Standard Global Manifold and Components

D-M-E Global Manifolds and Components are standardized worldwide to ensure that even the smallest detail provides operational excellence regardless of where D-M-E hot runner products are used. Whether you're relying on a quick-delivery manifold or an applications-engineered, custom manifold, the D-M-E Global Manifold Standard ensures optimal hot runner performance no matter where in the world it was built.

Key Features of the D-M-E Global Manifold Include:

- Flexible tubular heaters
- Locating rings that fit virtually any injection press platen hole diameters
- Heated Manifold Extension Nozzles that match up to different locating ring diameters and machine nozzle radii
- High-tolerance, press-fit heaters
- Upper and center Manifold supports constructed of high-strength, low-heat conductive titanium that minimizes heat loss and maintains an even heat profile
- J-type thermocouples are black-and-white, coinciding with the IEC 584-3 International Standard
- Flow channel sizes range from 6mm to 16mm

D-M-E customers are assured that D-M-E Manifold Systems are designed and built with a global standard that ensures efficient molding anywhere in the world. And, since replacement parts are identical worldwide, they are readily available wherever your mold is operating, not just where it was built. All D-M-E nozzles, including Galaxy, Stellar, Gate-Mate and the Hot One, perform flawlessly with the D-M-E Global Manifold Standard.



Available in all balanced design layout patterns up to 64 nozzle drops*, including in-line, X, Y, H, Double H & Multiple Level Systems.

*Contact D-M-E for Higher Cavitation

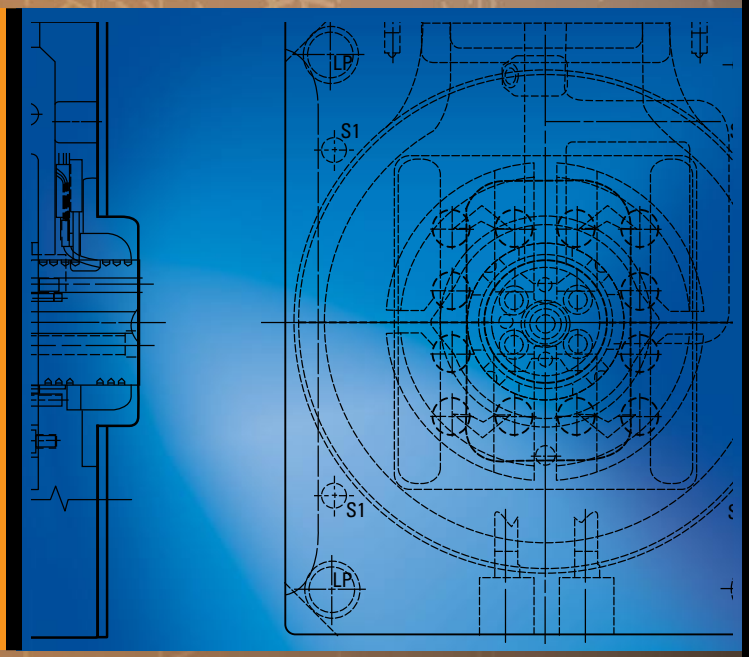
MANIFOLD DESIGN, SPECIFICATION & TOLERANCE STANDARDS HARMONIZED FOR GLOBAL PRODUCT OFFERING

AMERICAS – EUROPE – ASIA – AUSTRALIA / NEW ZEALAND

D-M-E Customer Design Criteria (CDC) Forms

DESIGN CRITERIA DOCUMENTS

FOR HOT RUNNER SYSTEMS



ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

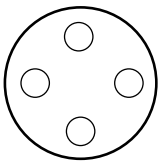
Stellar Quick Delivery Systems – 1

APPLICATIONS ENGINEERING		CUSTOMER DESIGN CRITERIA	Tool delivery is based upon receipt of this completed document at D-M-E.
AE004.20	05-26-04	*BLUE AREAS ARE FOR D-M-E USE ONLY*	

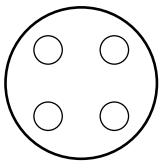
CUSTOMER NAME:	DATE	ACCOUNT #	VERIFIED BY:
CONTACT NAME:	PHONE #	FAX #	
D-M-E STAT # / QUOTE #	P.O. #	JOB #	MATERIAL – SEE NOTES ON NEXT PAGE GENERIC NAME: BRAND NAME:
Z DIM: (GATE TO TOP OF MOLD STEEL)	CUSTOMER EMAIL ADDRESS: FORMAT: ☐ DXF ☐ IGES ☐ DWG		PROCESS TEMP: ☐ °F ☐ °C (SEE NEXT PAGE FOR PART WEIGHT AND FLOW CAPACITIES)

STELLAR QUICK DELIVERY SYSTEMS

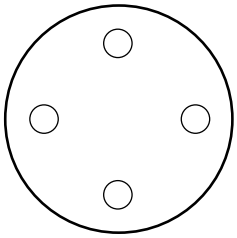
STELLAR 1 ROUND MNAs – MANIFOLD OPTIONS



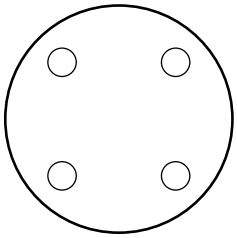
4-Drop 40 mm
90°



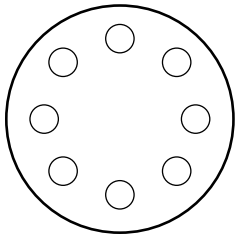
4-Drop 40 mm
45°



4-Drop 70 mm
90°

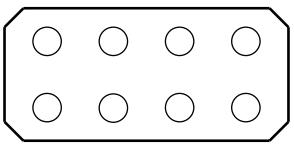


4-Drop 70 mm
45°

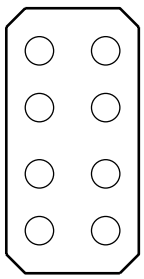


8-Drop 70 mm

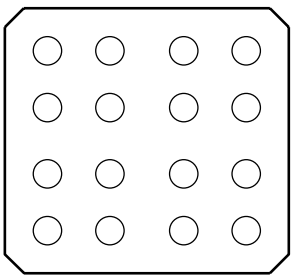
STELLAR 2 RECTANGULAR MNAs – MANIFOLD OPTIONS



8-Drop 30 mm
Horizontal



8-Drop 30 mm
Vertical



16-Drop 30 mm

NOTE:
This page MUST be completely filled out and returned to D-M-E in order to proceed. Please refer to all information on following page prior to completing this form.

Return completed forms to D-M-E Company – Madison Heights, MI. **DELIVERY SCHEDULE:** Stellar 1 (3-5 days) following receipt of all customer information.	email address: appl_eng@dme.net fax #: 248-544-5707

Stellar Quick Delivery Systems – 1

NOTES:

1. These systems are designed to process materials that do not contain fillers or flame retardants.
2. Maximum process temperature = 600° F/315° C.
3. Maximum part weight allowed: SEE CHART BELOW
4. These systems are designed to operate at 240 volt/3-phase.
5. Refer to Stellar MNA Design & Assembly guides for additional information.

GATING STYLE	FLOW CAPACITY IN GRAMS			
	GATE DIAMETER	LOW VISCOSITY MFI >16	MEDIUM VISCOSITY MFI 7-16	HIGH VISCOSITY MFI .02-7
Stellar Point Gate Tip	1.0 mm/0.040 in	12	12	5
	1.5 mm/0.060 in	16	16	12
Stellar Sprue Gate Tip	2.0 mm/0.080 in	40	30	20



All CDC Forms in this section can be found at:
www.dme.net/CDC

Stellar Quick Delivery Systems – 2

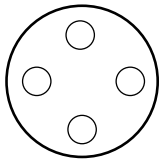
APPLICATIONS ENGINEERING		CUSTOMER DESIGN CRITERIA	Tool delivery is based upon receipt of this completed document at D-M-E.
AE004.21	05-26-04	***BLUE AREAS ARE FOR D-M-E USE ONLY***	

CUSTOMER NAME:	DATE	ACCOUNT #	VERIFIED BY:
CONTACT NAME:	PHONE #	FAX #	

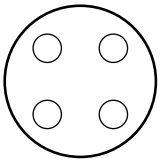
D-M-E STAT #	QUOTE #	P.O. #	JOB #	MATERIAL
				GENERIC NAME:
				BRAND NAME:
Z DIM: (GATE TO TOP OF MOLD STEEL)	CUSTOMER EMAIL ADDRESS: FORMAT: ☐ DXF ☐ IGES ☐ DWG			PROCESS TEMP: ☐ °F ☐ °C

STELLAR QUICK DELIVERY SYSTEMS

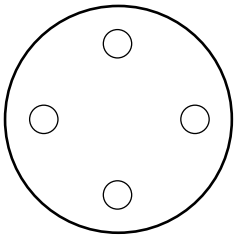
STELLAR 2 ROUND MNAs – MANIFOLD OPTIONS



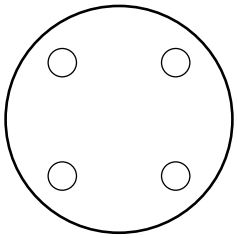
4-Drop 40 mm
90°



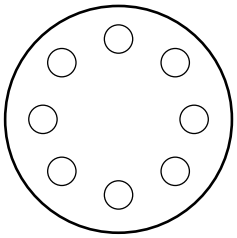
4-Drop 40 mm
45°



4-Drop 70 mm
90°

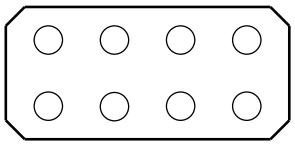


4-Drop 70 mm
45°

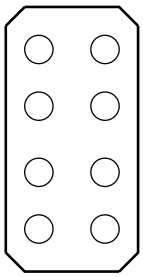


8-Drop 70 mm

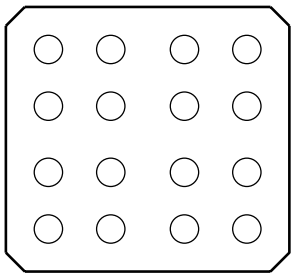
STELLAR 2 RECTANGULAR MNAs – MANIFOLD OPTIONS



8-Drop 30 mm
Horizontal



8-Drop 30 mm
Vertical

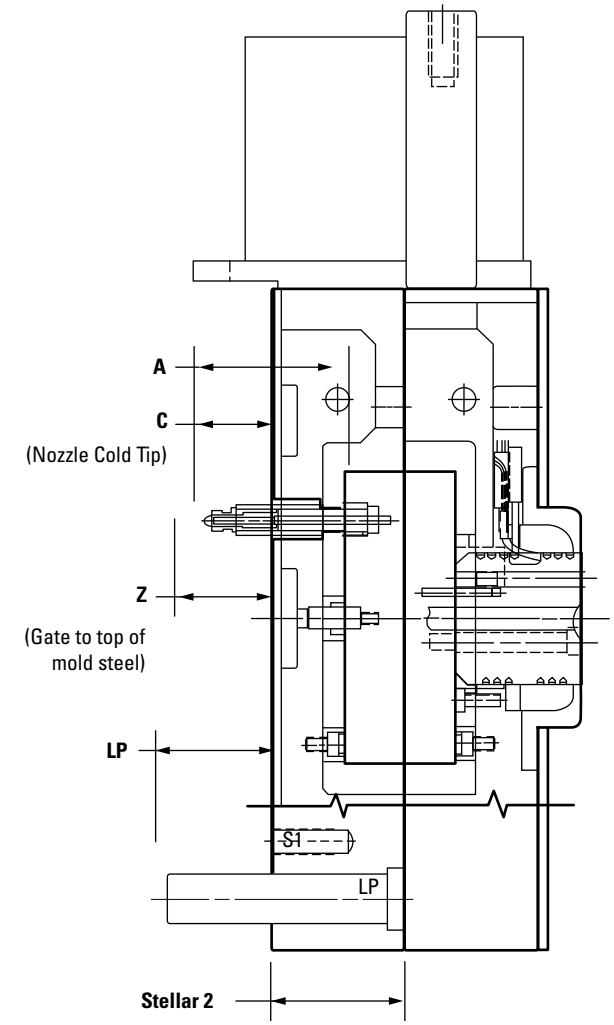


16-Drop 30 mm

NOTE:
This page MUST be completely filled out and returned to D-M-E in order to proceed. Please refer to all information on following page prior to completing this form.

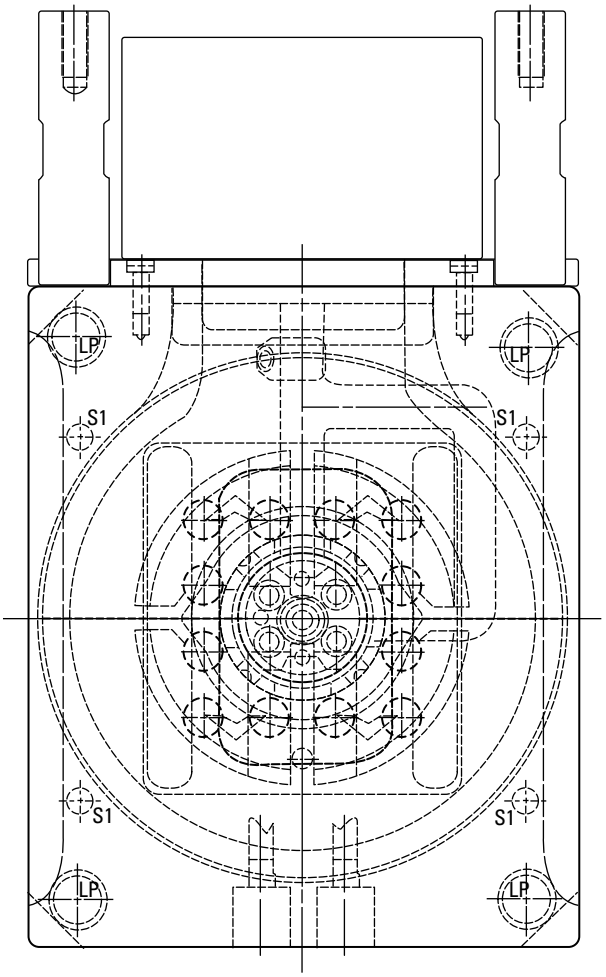
Return completed forms to D-M-E Company – Madison Heights, MI.	email address: appl_eng@dme.net
DELIVERY SCHEDULE: Stellar 2 (5 days) following receipt of all customer information.	fax #: 248-544-5707

Stellar Quick Delivery Systems – 2



Fixed Nozzle Plate Thickness
60.32 [2.375]

TOP OF MOLD



Metric Calculation
Z = **C** + [(Process temp °C – 20) × (0.00016)] × **A**
Inch Calculation
Z = **C** + [(Process temp °F – 68) × (0.0000063)] × **A**

NOZZLE	TIP	A	STELLAR 2 C	STELLAR 2 LP
ITEM NO	ITEM NO			
SXY8065	SXG4010 POINT	65.10	31.12	47.63
SXY8085		85.10	51.12	73.03
SXY8105		105.10	71.12	85.73
SXY4065	SXT1040 SPRUE	65.10	31.12	47.63
SXY4085		85.10	51.12	73.03
SXY4105		105.10	71.12	85.73

NOTE: Dimensions in brackets are in inches. All others are in millimeters.

Stellar Quick Delivery Systems – 2

ROUND ASSEMBLY SELECTION CHART

DESCRIPTION	REFERENCE ASSEMBLY NUMBER	MNA	NOZZLE	TIP	LOCATING RING	MANIFOLD EXTENSION NOZZLE	TERMINAL BOX
ROUND	ITEM NO.	ITEM NO.	ITEM NO.	ITEM NO.	ITEM NO.	ITEM NO.	ITEM NO.
4-Drop 40 mm 90 Degree	SRD4004-2-0808P065N	SRD4004	SXY8065	SXG4010 POINT	SXL1101	SXX1010	PTC-8-TB-TS
	SRD4004-2-0808P085N		SXY8085				
	SRD4004-2-0808P105N		SXY8105				
	SRD4004-2-0808S065N		SXY8065	SXT1040 SPRUE			
	SRD4004-2-0808S085N		SXY8085				
	SRD4004-2-0808S105N		SXY8105				
4-Drop 40 mm 45 Degree	SRD4004-2-0808P065F		SXY8065	SXG4010 POINT			
	SRD4004-2-0808P085F		SXY8085				
	SRD4004-2-0808P105F		SXY8105				
	SRD4004-2-0808S065F		SXY8065	SXT1040 SPRUE			
	SRD4004-2-0808S085F		SXY8085				
	SRD4004-2-0808S105F		SXY8105				
4-Drop 70 mm 90 Degree	SRD7004-2-1012P065N	SRD7004	SXY8065	SXG4010 POINT			
	SRD7004-2-1012P085N		SXY8085				
	SRD7004-2-1012P105N		SXY8105				
	SRD7004-2-1012S065N		SXY8065	SXT1040 SPRUE			
	SRD7004-2-1012S085N		SXY8085				
	SRD7004-2-1012S105N		SXY8105				
4-Drop 70 mm 45 Degree	SRD7004-2-1012P065F		SXY8065	SXG4010 POINT			
	SRD7004-2-1012P085F		SXY8085				
	SRD7004-2-1012P105F		SXY8105				
	SRD7004-2-1012S065F		SXY8065	SXT1040 SPRUE			
	SRD7004-2-1012S085F		SXY8085				
	SRD7004-2-1012S105F		SXY8105				
8-Drop 70 mm	SRD7008-2-1012P065	SRD7008	SXY8065	SXG4010 POINT		SXX1012	PTC-12-TB-TS
	SRD7008-2-1012P085		SXY8085				
	SRD7008-2-1012P105		SXY8105				
	SRD7008-2-1012S065		SXY8065	SXT1040 SPRUE			
	SRD7008-2-1012S085		SXY8085				
	SRD7008-2-1012S105		SXY8105				

Stellar Quick Delivery Systems – 3

APPLICATIONS ENGINEERING		CUSTOMER DESIGN CRITERIA	Tool delivery is based upon receipt of this completed document at D-M-E.
AE004.22	05-26-04	*BLUE AREAS ARE FOR D-M-E USE ONLY*	

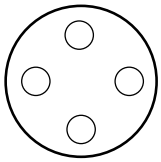
CUSTOMER NAME:	DATE	ACCOUNT #	VERIFIED BY:
CONTACT NAME:	PHONE #	FAX #	

D-M-E STAT #	QUOTE #	P.O. #	JOB #	MATERIAL – SEE PAGE 20 NOTES
				GENERIC NAME:
				BRAND NAME:
				PROCESS TEMP: ☐ °F ☐ °C

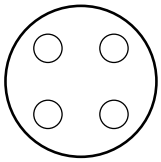
Z DIM: (GATE TO TOP OF MOLD STEEL)	CUSTOMER EMAIL ADDRESS: FORMAT: ☐ DXF ☐ IGES ☐ DWG	(SEE PAGE 20 FOR PART WEIGHT AND FLOW CAPACITIES)

STELLAR QUICK DELIVERY SYSTEMS

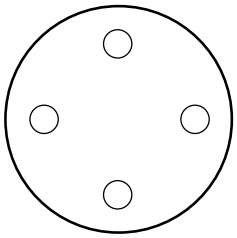
STELLAR 3 ROUND MNAs – MANIFOLD OPTIONS



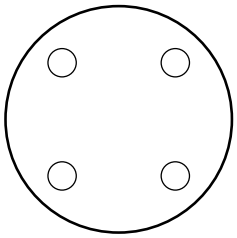
4-Drop 40 mm
90°



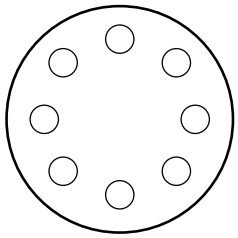
4-Drop 40 mm
45°



4-Drop 70 mm
90°

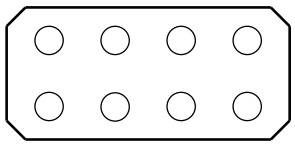


4-Drop 70 mm
45°

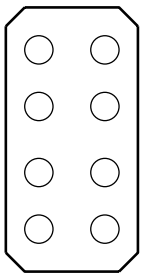


8-Drop 70 mm

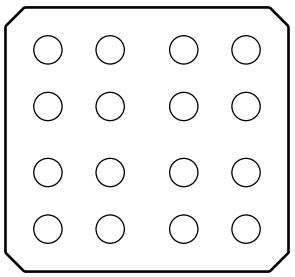
STELLAR 3 RECTANGULAR MNAs – MANIFOLD OPTIONS



8-Drop 30 mm
Horizontal



8-Drop 30 mm
Vertical

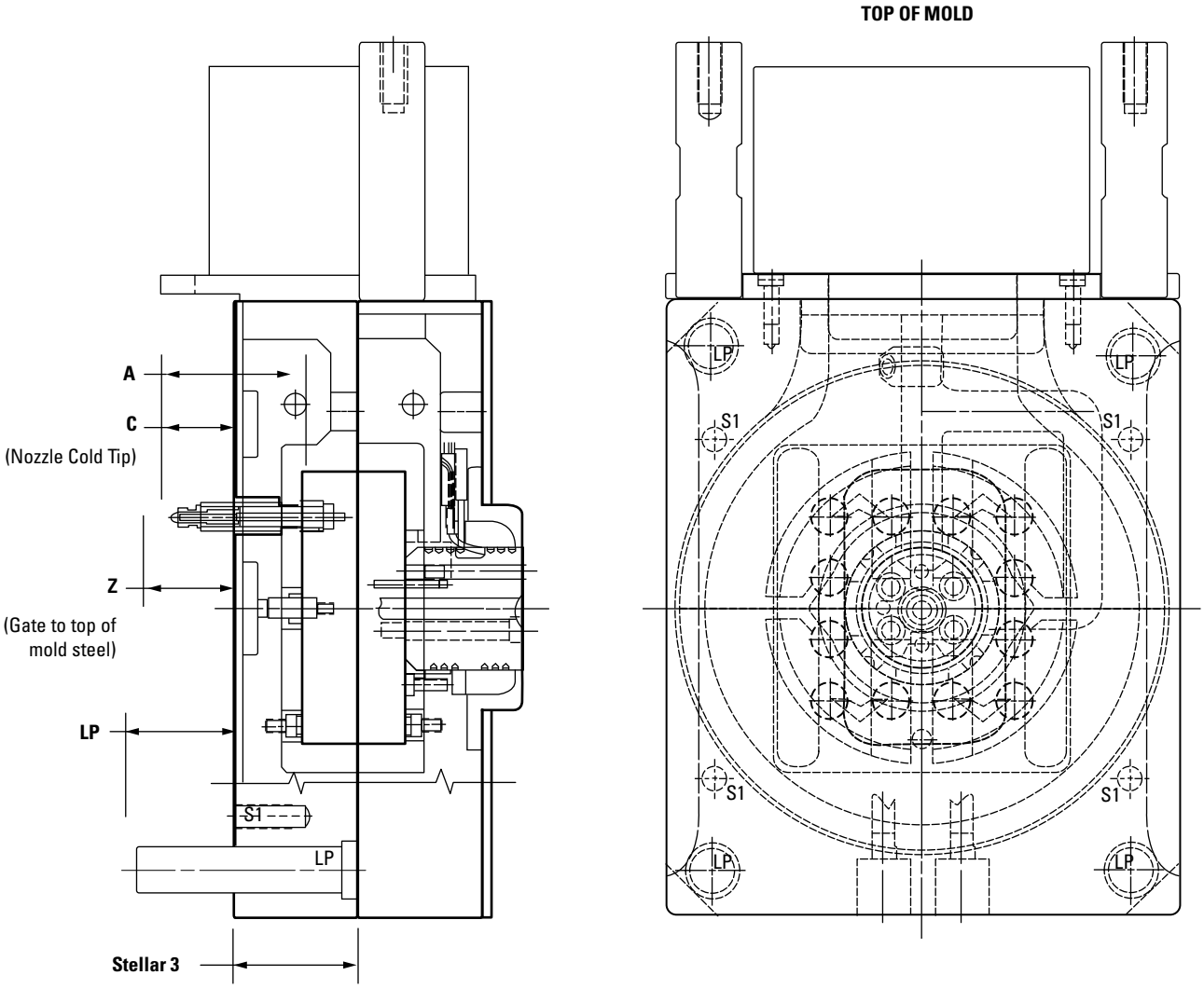


16-Drop 30 mm

NOTE:
This page MUST be completely filled out and returned to D-M-E in order to proceed. Please refer to all information on following page prior to completing this form.

Return completed forms to D-M-E Company – Madison Heights, MI.	email address: appl_eng@dme.net
DELIVERY SCHEDULE: Stellar 3 (10 days) following receipt of all customer information.	fax #: 248-544-5707

Stellar Quick Delivery Systems – 3



Variable Nozzle Plate Thickness

MAX = 79.23 [3.125]

MIN = 60.32 [2.375]

Metric Calculation
Z = **C** + [(Process temp °C – 20) × (0.00016)] × **A**
Inch Calculation
Z = **C** + [(Process temp °F – 68) × (0.0000063)] × **A**

NOZZLE	TIP	A	STELLAR 3 C		STELLAR 3 LP	
ITEM NO	ITEM NO		MIN	MAX	MIN	MAX
SXY8065	SXG4010 POINT	65.10	13.00	31.12	28.58	47.63
SXY8085		85.10	32.07	51.12	34.95	73.03
SXY8105		105.10	52.07	71.12	66.68	85.73
SXY4065	SXT1040 SPRUE	65.10	13.00	31.12	28.58	47.63
SXY4085		85.10	32.07	51.12	34.95	73.03
SXY4105		105.10	52.07	71.12	66.68	85.73

NOTE: Dimensions in brackets are in inches. All others are in millimeters.

Stellar Quick Delivery Systems – 3

ROUND ASSEMBLY SELECTION CHART

DESCRIPTION	REFERENCE ASSEMBLY NUMBER	MNA	NOZZLE	TIP	LOCATING RING	MANIFOLD EXTENSION NOZZLE	TERMINAL BOX
ROUND	ITEM NO.	ITEM NO.	ITEM NO.	ITEM NO.	ITEM NO.	ITEM NO.	ITEM NO.
4-Drop 40 mm 90 Degree	SRD4004-3-0808P065N	SRD4004	SXY8065	SXG4010 POINT	SXL1101	SXX1010	PTC-8-TB-TS
	SRD4004-3-0808P085N		SXY8085				
	SRD4004-3-0808P105N		SXY8105				
	SRD4004-3-0808S065N		SXY8065	SXT1040 SPRUE			
	SRD4004-3-0808S085N		SXY8085				
	SRD4004-3-0808S105N		SXY8105				
4-Drop 40 mm 45 Degree	SRD4004-3-0808P065F		SXY8065	SXG4010 POINT			
	SRD4004-3-0808P085F		SXY8085				
	SRD4004-3-0808P105F		SXY8105				
	SRD4004-3-0808S065F		SXY8065	SXT1040 SPRUE			
	SRD4004-3-0808S085F		SXY8085				
	SRD4004-3-0808S105F		SXY8105				
4-Drop 70 mm 90 Degree	SRD7004-3-1012P065N	SRD7004	SXY8065	SXG4010 POINT			
	SRD7004-3-1012P085N		SXY8085				
	SRD7004-3-1012P105N		SXY8105				
	SRD7004-3-1012S065N		SXY8065	SXT1040 SPRUE			
	SRD7004-3-1012S085N		SXY8085				
	SRD7004-3-1012S105N		SXY8105				
4-Drop 70 mm 45 Degree	SRD7004-3-1012P065F		SXY8065	SXG4010 POINT			
	SRD7004-3-1012P085F		SXY8085				
	SRD7004-3-1012P105F		SXY8105				
	SRD7004-3-1012S065F		SXY8065	SXT1040 SPRUE			
	SRD7004-3-1012S085F		SXY8085				
	SRD7004-3-1012S105F		SXY8105				
8-Drop 70 mm	SRD7008-3-1012P065	SRD7008	SXY8065	SXG4010 POINT		SXX1012	PTC-12-TB-TS
	SRD7008-3-1012P085		SXY8085				
	SRD7008-3-1012P105		SXY8105				
	SRD7008-3-1012S065		SXY8065	SXT1040 SPRUE			
	SRD7008-3-1012S085		SXY8085				
	SRD7008-3-1012S105		SXY8105				

Stellar Quick Delivery Systems – 3

RECTANGULAR ASSEMBLY SELECTION CHART

DESCRIPTION	REFERENCE ASSEMBLY NUMBER	MNA	NOZZLE	TIP	LOCATING RING	MANIFOLD EXTENSION NOZZLE	TERMINAL BOX
RECTANGULAR	ITEM NO.	ITEM NO.	ITEM NO.	ITEM NO.	ITEM NO.	ITEM NO.	ITEM NO.
8-Drop 30 mm Horizontal	SRC3308-3-1012P065H	SRC3308	SXY8065	SXG4010 POINT	GXL2001	SXX1010	PTC-12-TB-TS
	SRC3308-3-1012P085H		SXY8085				
	SRC3308-3-1012P105H		SXY8105				
	SRC3308-3-1012S065H		SXY8065	SXT1040 SPRUE			
	SRC3308-3-1012S085H		SXY8085				
	SRC3308-3-1012S105H		SXY8105				
8-Drop 30 mm Vertical	SRC3308-3-1012P065V		SXY8065	SXG4010 POINT			
	SRC3308-3-1012P085V		SXY8085				
	SRC3308-3-1012P105V		SXY8105				
	SRC3308-3-1012S065V		SXY8065	SXT1040 SPRUE			
	SRC3308-3-1012S085V		SXY8085				
	SRC3308-3-1012S105V		SXY8105				
16-Drop 30 mm Version 1	SRC3316-3-1012P065A	SRC3316	SXY8065	SXG4010 POINT			PTC-24TBG-TS
	SRC3316-3-1012P085A		SXY8085				
	SRC3316-3-1012P105A		SXY8105				
	SRC3316-3-1012S065A		SXY8065	SXT1040 SPRUE			
	SRC3316-3-1012S085A		SXY8085				
	SRC3316-3-1012S105A		SXY8105				
16-Drop 30 mm Version 2	SRC3316-3-1012P065B		SXY8065	SXG4010 POINT			(2) IMB-1200
	SRC3316-3-1012P085B		SXY8085				
	SRC3316-3-1012P105B		SXY8105				
	SRC3316-3-1012S065B		SXY8065	SXT1040 SPRUE			
	SRC3316-3-1012S085B		SXY8085				
	SRC3316-3-1012S105B		SXY8105				

NOTES:

1. These systems are designed to process materials that do not contain fillers or flame retardants.
2. Maximum process temperature = 600° F/315° C.
3. Maximum part weight allowed: SEE CHART BELOW.
4. Z dim is determined based on nozzle cold tip length and expansion factor.
5. Nozzle plate thickness is determined based upon Z dim.
6. Manifold Extension Nozzles have both ¾ and ½ spherical radius.
7. These systems are supplied assembled, wired, and tested.
8. ø7/8 leader pins are provided at standard locations.
9. These systems are designed to operate at 240 volt/ 3-phase.
10. S1 screws are ½-13 SHCS.
11. Refer to Stellar MNA Design & Assembly guides for additional information.

GATING STYLE	FLOW CAPACITY IN GRAMS			
	GATE DIAMETER	LOW VISCOSITY MFI >16	MEDIUM VISCOSITY MFI 7-16	HIGH VISCOSITY MFI .02-7
Stellar Point Gate Tip	1.0 mm/0.040 in	12	12	5
	1.5 mm/0.060 in	16	16	12
Stellar Sprue Gate Tip	2.0 mm/0.080 in	40	30	20

Cool One System

APPLICATION ENGINEERING		CUSTOMER DESIGN CRITERIA	DATE TOOL REQUIRED AT CUSTOMER SITE:
AE-004-3-A	12-02-03	*BLUE AREAS ARE FOR D-M-E USE ONLY*	

CUSTOMER NAME:	DATE	FINALS REC'D	VERIFIED BY:

CONTACT NAME:	PHONE #	FAX #	MATERIAL
			GENERIC NAME:
			BRAND NAME:
			FILLER:
			PROCESS TEMP:

D-M-E STAT #	QUOTE #	P.O. #	JOB #

MAXIMUM MOLD HEIGHT:

MACHINE NOZZLE RADIUS:
☐ ½ ☐ ¾ ☐ SPECIAL
ADD SPECIAL SIZE (if needed):

MOLD BASE SIZE:
ADD SIZE

ASSEMBLY SCREW DIRECTION:
ASSEMBLY SCREW LOCATION:

TYPE OF ALIGNMENT:
QUANTITY REQUIRED: ☐ 2 ☐ 4

ASSEMBLY SCREW AND ALIGNMENT DETERMINED BY:
☐ D-M-E ☐ CUSTOMER

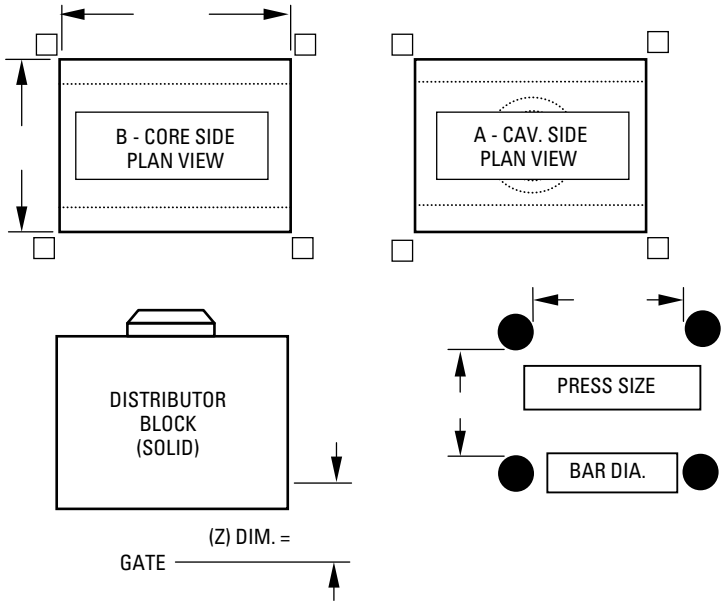
CLAMP LEDGE REQUIRED:
☐ ⅞ ☐ 1-⅜ OTHER:

MOLD BASE BEING BUILT BY:
☐ D-M-E ☐ CUSTOMER

D-M-E MANUFACTURING LOCATION:
☐ CMI ☐ MELROSE PARK

COOL ONE SYSTEM

SHOW THE FOLLOWING:
TOP OF MOLD; OFFSET CORNER; OPERATOR; LOCATION OF TERMINAL BOX; WATER ENTRANCE & EXIT



TERMINAL BOX & CONNECTORS:
☐ 5-ZONE ☐ 8-ZONE ☐ 12-ZONE
☐ D-M-E SUPPLIED ☐ CUST. SUPPLIED
☐ D-M-E BRAND ☐ NON-D-M-E BRAND
LIST BRAND IF NON-D-M-E:

PROBE TYPE:

 # OF PROBES:

DISTRIBUTOR TUBE BORE DIA:
PRIMARY = SECONDARY =
TERNARY =
SYMMETRICALLY BALANCED:
 # OF TUBES =

OPERATING VOLTAGE AT MOLDERS:
☐ 208 ☐ 210 ☐ 220 ☐ 230 ☐ 240
OTHER:
PHASE REQUIRED AT MOLDERS:
☐ SINGLE PHASE ☐ THREE PHASE

ELECTRICAL ZONE NUMBERING:
☐ D-M-E STANDARD
☐ CUSTOMER SUPPLIED CAVITY/NOZZLE NUMBERS

CUSTOMER REQUESTS CAD DATA
TYPE: FORMAT:
FTP:
E-MAIL:

COMMENTS:

Hot One Package System

APPLICATION ENGINEERING		CUSTOMER DESIGN CRITERIA	DATE TOOL REQUIRED AT CUSTOMER SITE:
AE-004-1-A	12-02-03	*BLUE AREAS ARE FOR D-M-E USE ONLY*	

CUSTOMER NAME:		DATE	FINALS REC'D	VERIFIED BY:
CONTACT NAME:		PHONE #	FAX #	MATERIAL GENERIC NAME: BRAND NAME:
D-M-E STAT #	QUOTE #	P.O. #	JOB #	FILLER: PROCESS TEMP:

MAXIMUM MOLD HEIGHT:

MACHINE NOZZLE RADIUS:
☐ ½ ☐ ¾ ☐ SPECIAL
ADD SPECIAL SIZE (if needed):

MOLD BASE SIZE:
ADD SIZE

ASSEMBLY SCREW DIRECTION:
ASSEMBLY SCREW LOCATION:

TYPE OF ALIGNMENT:
QUANTITY REQUIRED: ☐ 2 ☐ 4

ASSEMBLY SCREW AND ALIGNMENT DETERMINED BY:
☐ D-M-E ☐ CUSTOMER

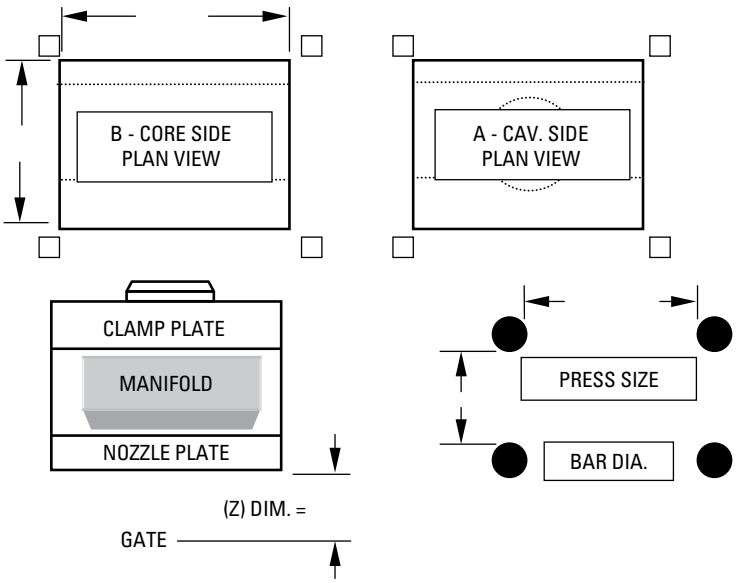
CLAMP LEDGE REQUIRED:
☐ ⅞ ☐ 1 - ⅜ OTHER:

MOLD BASE BEING BUILT BY:
☐ D-M-E ☐ CUSTOMER

D-M-E MANUFACTURING LOCATION:
☐ CMI ☐ MELROSE PARK

HOT ONE PACKAGE SYSTEM

SHOW THE FOLLOWING:
TOP OF MOLD; OFFSET CORNER; OPERATOR; LOCATION OF TERMINAL BOX; WATER ENTRANCE & EXIT



TERMINAL BOX & CONNECTORS:
☐ 5-ZONE ☐ 8-ZONE ☐ 12-ZONE
☐ D-M-E SUPPLIED ☐ CUST. SUPPLIED
☐ D-M-E BRAND ☐ NON-D-M-E BRAND
LIST BRAND IF NON-D-M-E:

NOZZLE TYPE:

TIP TYPE:
(T) DIA. OF SPRUE/RING GATE:

FLOW DIA:
PRIMARY = SECONDARY=
TERNARY=
SYMMETRICALLY BALANCED:
 # OF DROPS=

OPERATING VOLTAGE AT MOLDERS:
☐ 208 ☐ 210 ☐ 220 ☐ 230 ☐ 240
OTHER:
PHASE REQUIRED AT MOLDERS:
☐ SINGLE PHASE ☐ THREE PHASE

ELECTRICAL ZONE NUMBERING:
☐ D-M-E STANDARD
☐ CUSTOMER SUPPLIED CAVITY/NOZZLE NUMBERS

CUSTOMER REQUESTS CAD DATA
TYPE: FORMAT:
FTP:
E-MAIL:

COMMENTS:

Hot One Manifold and Components

APPLICATION ENGINEERING		CUSTOMER DESIGN CRITERIA	DATE TOOL REQUIRED AT CUSTOMER SITE:
AE004-2-A	12-02-03	*BLUE AREAS ARE FOR D-M-E USE ONLY*	

CUSTOMER NAME:	DATE	FINALS REC'D	VERIFIED BY:
CONTACT NAME:	PHONE #	FAX #	MATERIAL GENERIC NAME: BRAND NAME:
D-M-E STAT # / QUOTE #	P.O. #	JOB #	FILLER: PROCESS TEMP:

MAXIMUM MOLD HEIGHT:

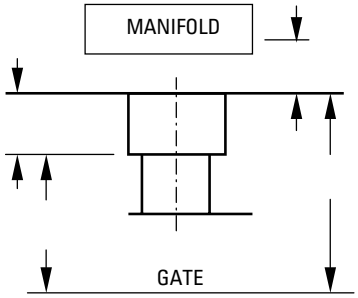
MACHINE NOZZLE RADIUS:
☐ ½ ☐ ¾ ☐ SPECIAL
ADD SPECIAL SIZE (if needed):

MOLD BASE SIZE:
ADD SIZE:

MOLD BASE BEING BUILT BY:
☐ D-M-E ☐ CUSTOMER

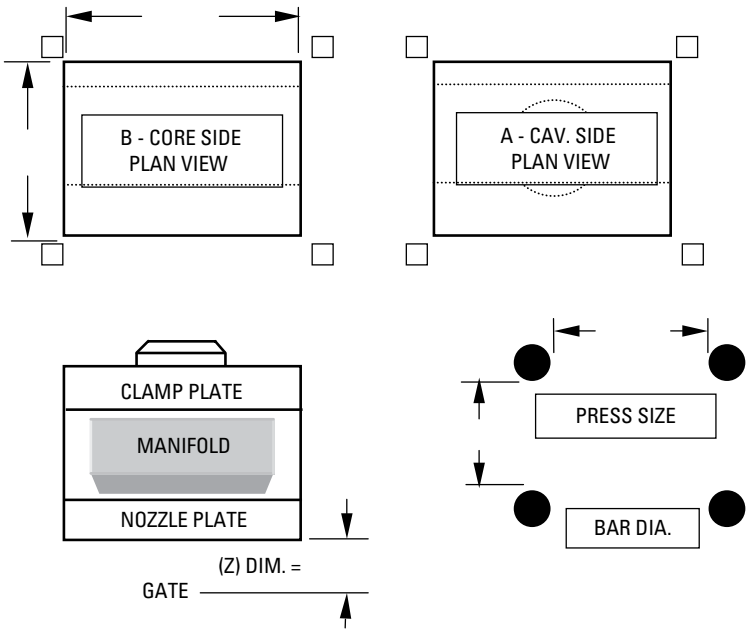
D-M-E MANUFACTURING LOCATION:
☐ CMI ☐ MELROSE PARK

SKETCH AREA (IF NEEDED)



HOT ONE MANIFOLD & COMPONENTS

SHOW THE FOLLOWING:
TOP OF MOLD; OFFSET CORNER; OPERATOR; LOCATION OF TERMINAL BOX;



TERMINAL BOX & CONNECTORS:
☐ 5-ZONE ☐ 8-ZONE ☐ 12-ZONE
☐ D-M-E SUPPLIED ☐ CUST. SUPPLIED
☐ D-M-E BRAND ☐ NON-D-M-E BRAND
LIST BRAND IF NON-D-M-E:

NOZZLE TYPE:

TIP TYPE:
(T) DIA. OF SPRUE/RING GATE:

FLOW DIA:
PRIMARY = SECONDARY =
TERNARY =
SYMMETRICALLY BALANCED:
 # OF DROPS =

OPERATING VOLTAGE AT MOLDERS:
☐ 208 ☐ 210 ☐ 220 ☐ 230 ☐ 240
OTHER:
PHASE REQUIRED AT MOLDERS:
☐ SINGLE PHASE ☐ THREE PHASE

ELECTRICAL ZONE NUMBERING:
☐ D-M-E STANDARD
☐ CUSTOMER SUPPLIED CAVITY/NOZZLE NUMBERS

COMMENTS:

ELECTRONIC DATA REQUIRED:
TYPE: FORMAT:
FTP:
E-MAIL:

Hot One QDS Manifold and Component System

APPLICATIONS ENGINEERING		CUSTOMER DESIGN CRITERIA	DATE TOOL REQUIRED AT CUSTOMER SITE:
AE.004.23	04-01-05	*BLUE AREAS ARE FOR D-M-E USE ONLY*	

CUSTOMER NAME:	DATE	FINALS REC'D	VERIFIED BY:

CONTACT NAME: ☐ CHECK TO WAVE VERIFICATION	PHONE #	FAX #	MATERIAL
			GENERIC NAME:
			BRAND NAME:
			FILLER:
			PROCESS TEMP:

D-M-E STAT #	QUOTE #	P.O. #	JOB #

*** MACHINE NOZZLE RADIUS:**
☐ ½ ☐ ¾

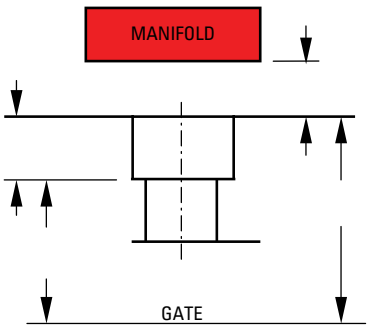
*** TERMINAL BOX & CONNECTORS:**
☐ 5-ZONE ☐ 8-ZONE ☐ 12-ZONE
☐ D-M-E SUPPLIED ☐ CUST. SUPPLIED

*** OPERATING VOLTAGE:**
☐ 208 ☐ 210 ☐ 220 ☐ 230 ☐ 240
OTHER:

*** PHASE REQUIRED:**
☐ SINGLE PHASE ☐ THREE PHASE

MAXIMUM MOLD HEIGHT:
MOLD BASE SIZE:

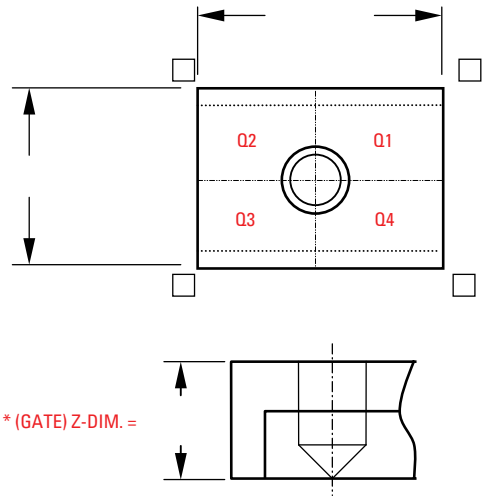
SKETCH AREA (IF NEEDED)



HOT ONE QDS M&C SYSTEM (2&4 DROP)

TOP OF MOLD; OFFSET CORNER; OPERATOR SIDE; ELECTRICAL BOX

DROP LOCATION: Q1> X= , Y= , ZONE #
DROP LOCATION: Q2> X= , Y= , ZONE #
DROP LOCATION: Q3> X= , Y= , ZONE #
DROP LOCATION: Q4> X= , Y= , ZONE #



NOTE: Plan view shown is viewed from top side of tool.

ELECTRONIC DATA REQUIREMENT FORMAT: CUSTOMER E-MAIL ADDRESS:	NOZZLE TYPE: TIP TYPE: (T) DIA. OF SPRUE/RING GATE:	FLOW DIA: PRIMARY = SECONDARY = TERNARY = SYMMETRICALLY BALANCED: # OF DROPS =

***NOTE:** All items need to be filled out, with red items being of highest importance, and form emailed back at time of purchase order.

COMMENTS:

Return completed form to D-M-E company at: appl_eng@dme.net

Electronic version available at D-M-E web site under: D-M-E brochures and application guides.

Meteor-2 Center Exit Manifold

APPLICATION ENGINEERING		CUSTOMER DESIGN CRITERIA	1-Week delivery is based upon receipt of this completed document at D-M-E.
AE004.14	06-20-05	*BLUE AREAS ARE FOR D-M-E USE ONLY*	

CUSTOMER NAME:	DATE	ACCOUNT #	SHOP ORDER #:
CONTACT NAME:	PHONE #	FAX #	DELIVERY DATE:

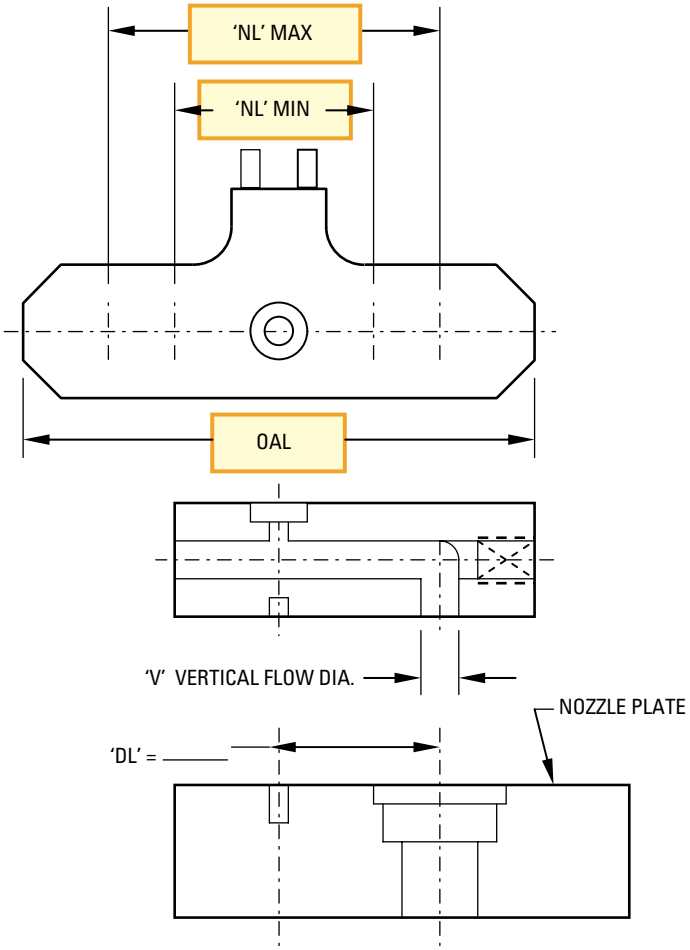
D-M-E STAT #	QUOTE #	P.O. #	JOB #	MATERIAL
				GENERIC NAME:
				BRAND NAME:
				FILLER:
				PROCESS TEMP: ☐ °F ☐ °C

MANIFOLD KIT PLUS ITEM #:	CUSTOMER EMAIL ADDRESS:

METEOR-2 CENTER EXIT MANIFOLD

Vertical flow diameter machined, end plug and set screw installed.

NOTE:
This page MUST be completely filled out and returned to D-M-E in order to proceed.



The vertical flow channel **'V'** location will be calculated by D-M-E based on the customer's **'DL'** dimension and the material process temperature.

'DL' equals the distance from the centerline of the mold to the actual drop/gate location in the mold.

Return completed form to D-M-E Company – Madison Heights, MI.

See next page for available manifold sizes.

email address: appl_eng@dme.net
fax #: 248-544-5707

Meteor-2 Center Exit Manifold

METEOR-2 CENTER EXIT MANIFOLD
MANIFOLD SELECTION CHART

MANIFOLD KIT PLUS ITEM #	NOZZLE SERIES	NL-MIN		NL-MAX		OAL		V-VERTICAL FLOW DIAMETER	
		MM	INCH	MM	INCH	MM	INCH	MM	INCH
MCM0100KP	250 EHA 250 CIA Mini Gate-Mate Gate-Mate 4	55	2.165	100	3.937	195	7.677	9	0.354
MCM0150KP		100	3.937	150	5.906	245	9.646		
MCM0200KP		150	5.906	200	7.874	295	11.614		
MCM0300KP	375 EHA 375 CIA Gate-Mate 4	200	7.874	300	11.811	395	15.551	12	0.472
MCM0400KP		300	11.811	400	15.748	495	19.088		
MCM0500KP		400	15.748	500	19.685	595	23.425		

These systems are designed to operate on a 240 volt, 3 phase supply

NOTE: See Meteor system assembly guide for installation details.
The above chart is for reference purposes only.



All CDC Forms in this section can be found at:
www.dme.net/CDC

Meteor-2 In-Line End Exit Manifold

APPLICATION ENGINEERING		CUSTOMER DESIGN CRITERIA	1-Week delivery is based upon receipt of this completed document at D-M-E.
AE004.13	06-20-05	*BLUE AREAS ARE FOR D-M-E USE ONLY*	

CUSTOMER NAME:	DATE	ACCOUNT #	SHOP ORDER #:
CONTACT NAME:	PHONE #	FAX #	DELIVERY DATE:

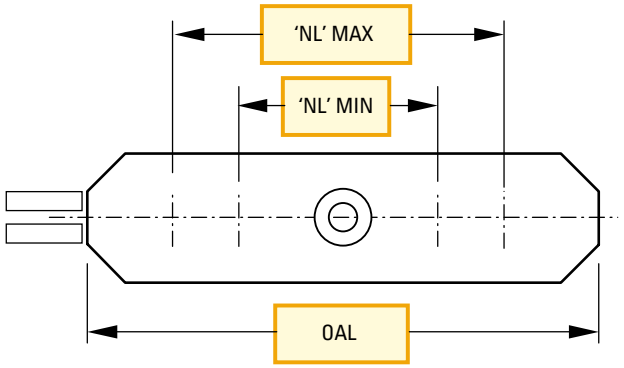
D-M-E STAT #	QUOTE #	P.O. #	JOB #	MATERIAL
				GENERIC NAME:
				BRAND NAME:
				FILLER:
				PROCESS TEMP: ☐ °F ☐ °C

MANIFOLD KIT PLUS ITEM #:	CUSTOMER EMAIL ADDRESS:

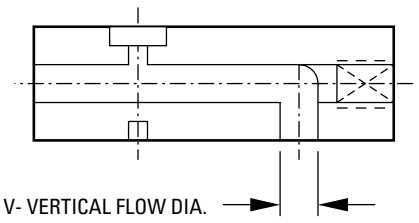
METEOR-2 IN-LINE END EXIT MANIFOLD

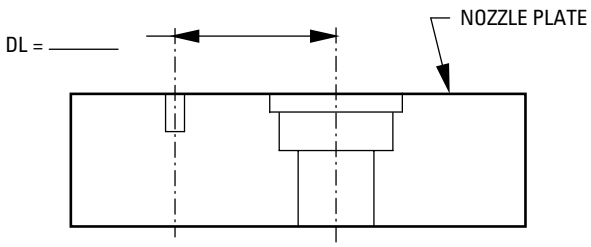
Vertical flow diameter machined, end plug and set screw installed.

NOTE:
This page MUST be completely filled out and returned to D-M-E in order to proceed.



The vertical flow channel **'V'** location will be calculated by D-M-E based on the customer's **'DL'** dimension and the material process temperature.





'DL' equals the distance from the centerline of the mold to the actual drop/gate location in the mold.

Return completed form to D-M-E Company – Madison Heights, MI.	email address: appl_eng@dme.net
See next page for available manifold sizes.	fax #: 248-544-5707

Meteor-2 In-Line End Exit Manifold

METEOR-2 IN-LINE END EXIT MANIFOLD
MANIFOLD SELECTION CHART

MANIFOLD KIT PLUS ITEM #	NOZZLE SERIES	NL-MIN		NL-MAX		OAL		V-VERTICAL FLOW DIAMETER	
		MM	INCH	MM	INCH	MM	INCH	MM	INCH
MEM0100KP	250 EHA 250 CIA Mini Gate-Mate Gate-Mate 4	55	2.165	100	3.937	195	7.677	9	0.354
MEM0150KP		100	3.937	150	5.906	245	9.646		
MEM0200KP		150	5.906	200	7.874	295	11.614		
MEM0300KP	375 EHA 375 CIA Gate-Mate 4	200	7.874	300	11.811	395	15.551	12	0.472
MEM0400KP		300	11.811	400	15.748	495	19.088		
MEM0500KP		400	15.748	500	19.685	595	23.425		

These systems are designed to operate on a 240 volt, 3 phase supply

NOTE: See Meteor system assembly guide for installation details.
The above chart is for reference purposes only.



All CDC Forms in this section can be found at:
www.dme.net/CDC

Meteor-2 Single Drop Manifold

APPLICATION ENGINEERING		CUSTOMER DESIGN CRITERIA	1-Week delivery is based upon receipt of this completed document at D-M-E.
AE004.19	06-20-05	*BLUE AREAS ARE FOR D-M-E USE ONLY*	

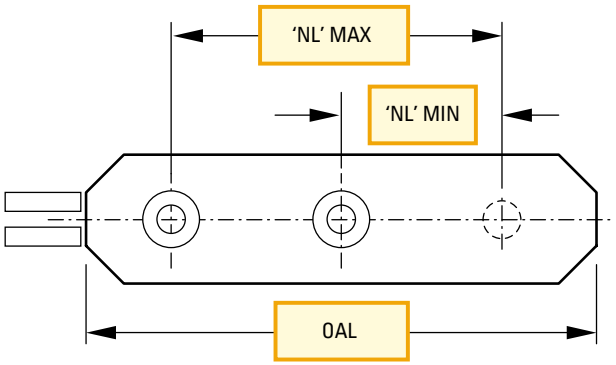
CUSTOMER NAME:	DATE	ACCOUNT #	SHOP ORDER #:
CONTACT NAME:	PHONE #	FAX #	DELIVERY DATE:

D-M-E STAT #	QUOTE #	P.O. #	JOB #	MATERIAL
				GENERIC NAME:
MANIFOLD KIT PLUS ITEM #:	CUSTOMER EMAIL ADDRESS:			BRAND NAME:
				FILLER:
				PROCESS TEMP: ☐ °F ☐ °C

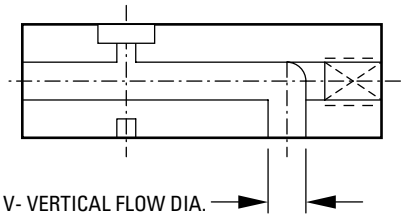
METEOR-2 SINGLE DROP MANIFOLD

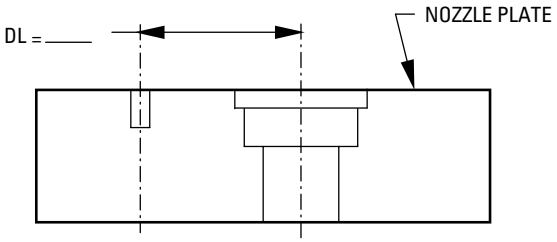
Vertical flow diameter machined, end plug and set screw installed.

NOTE:
This page MUST be completely filled out and returned to D-M-E in order to proceed.



The vertical flow channel **'V'** location will be calculated by D-M-E based on the customer's **'DL'** dimension and the material process temperature.





'DL' equals the distance from the centerline of the mold to the actual drop/gate location in the mold.

Return completed form to D-M-E Company – Madison Heights, MI.

See next page for available manifold sizes.

email address: appl_eng@dme.net
fax #: 248-544-5707

Meteor-2 Single Drop Manifold

METEOR-2 SINGLE DROP MANIFOLD
MANIFOLD SELECTION CHART

MANIFOLD KIT PLUS ITEM #	NOZZLE SERIES	NL-MIN		NL-MAX		OAL		V-VERTICAL FLOW DIAMETER	
		MM	INCH	MM	INCH	MM	INCH	MM	INCH
MEM0100KPS	250 EHA 250 CIA Mini Gate-Mate Gate-Mate 4	55	2.165	100	3.937	195	7.677	9	0.354
MEM0150KPS		100	3.937	150	5.906	245	9.646		
MEM0200KPS		150	5.906	200	7.874	295	11.614		
MEM0300KPS	375 EHA 375 CIA Gate-Mate 4	200	7.874	300	11.811	395	15.551	12	0.472
MEM0400KPS		300	11.811	400	15.748	495	19.088		
MEM0500KPS		400	15.748	500	19.685	595	23.425		

These systems are designed to operate on a 240 volt, 3 phase supply

NOTE: See Meteor system assembly guide for installation details.
The above chart is for reference purposes only.



All CDC Forms in this section can be found at:
www.dme.net/CDC

Meteor-2 X-Style Manifold

APPLICATION ENGINEERING		CUSTOMER DESIGN CRITERIA	1-Week delivery is based upon receipt of this completed document at D-M-E.
AE004.15	06-20-05	*BLUE AREAS ARE FOR D-M-E USE ONLY*	

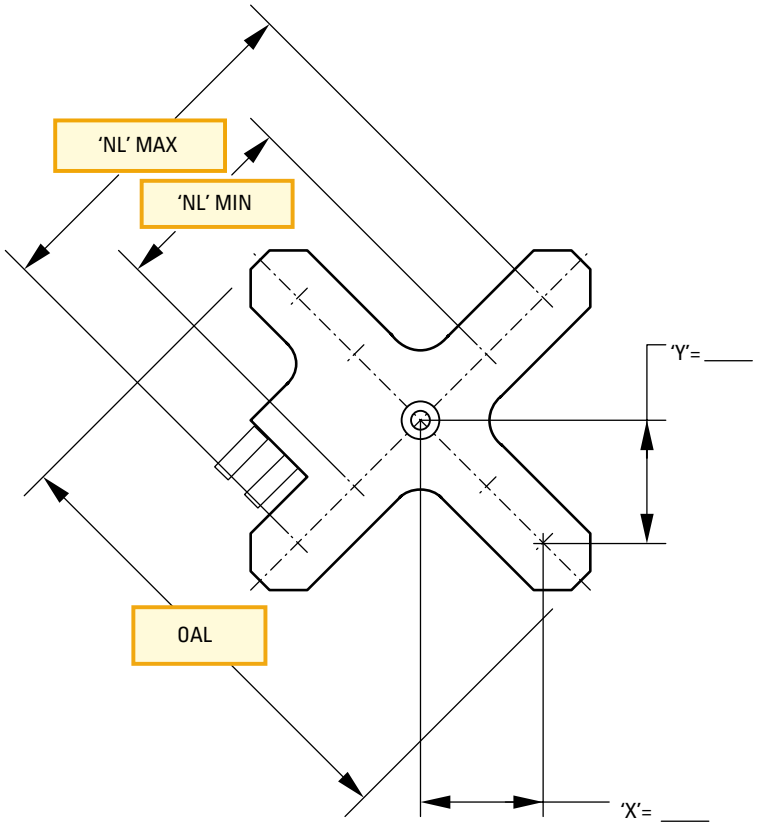
CUSTOMER NAME:	DATE	ACCOUNT #	SHOP ORDER #:
CONTACT NAME:	PHONE #	FAX #	DELIVERY DATE:

D-M-E STAT #	QUOTE #	P.O. #	JOB #	MATERIAL
				GENERIC NAME:
				BRAND NAME:
				FILLER:
				PROCESS TEMP: ☐ °F ☐ °C

MANIFOLD KIT PLUS ITEM #:	CUSTOMER EMAIL ADDRESS:

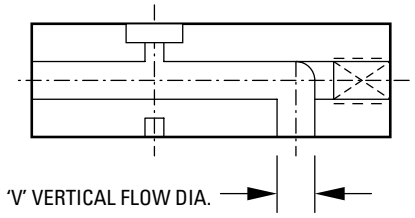
METEOR-2 X-STYLE MANIFOLD

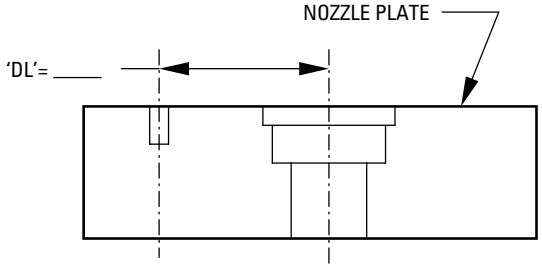
Vertical flow diameter machined, end plug and set screw installed.



NOTE:
This page MUST be completely filled out and returned to D-M-E in order to proceed.

The vertical flow channel **'V'** location will be calculated by D-M-E based on the customer's **'DL'** dimension and the material process temperature.





'DL' equals the diagonal distance from the centerline of the mold to the actual drop/gate location in the mold.

Return completed form to D-M-E Company – Madison Heights, MI.	email address: appl_eng@dme.net
See next page for available manifold sizes.	fax #: 248-544-5707

Meteor 2 X-Style Manifold

METEOR-2 CENTER EXIT MANIFOLD
MANIFOLD SELECTION CHART

MANIFOLD KIT PLUS ITEM #	NOZZLE SERIES	NL-MIN		NL-MAX		OAL		V-VERTICAL FLOW DIAMETER	
		MM	INCH	MM	INCH	MM	INCH	MM	INCH
MCM0100KP	250 EHA 250 CIA Mini Gate-Mate Gate-Mate 4	55	2.165	100	3.937	195	7.677	9	0.354
MCM0150KP		100	3.937	150	5.906	245	9.646		
MCM0200KP		150	5.906	200	7.874	295	11.614		
MCM0300KP	375 EHA 375 CIA Gate-Mate 4	200	7.874	300	11.811	395	15.551	12	0.472
MCM0400KP		300	11.811	400	15.748	495	19.088		
MCM0500KP		400	15.748	500	19.685	595	23.425		

These systems are designed to operate on a 240 volt, 3 phase supply

NOTE: See Meteor system assembly guide for installation details.
The above chart is for reference purposes only.



All CDC Forms in this section can be found at:
www.dme.net/CDC

Meteor-3 In-Line Center Exit

APPLICATION ENGINEERING		CUSTOMER DESIGN CRITERIA	3-Week delivery is based upon receipt of this completed document at D-M-E.
AE004.17	06-20-05	*BLUE AREAS ARE FOR D-M-E USE ONLY*	

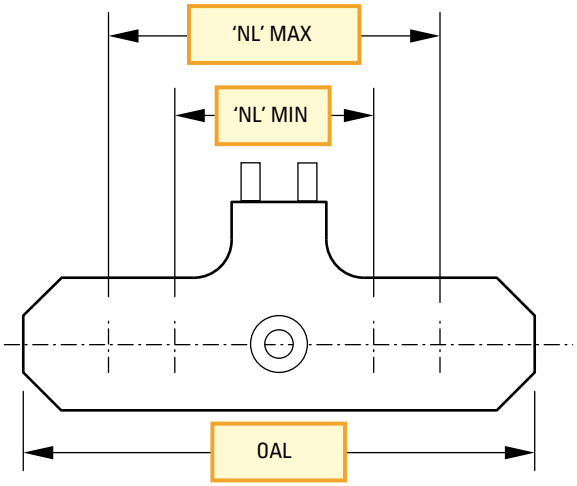
CUSTOMER NAME:	DATE	ACCOUNT #	SHOP ORDER #:
CONTACT NAME:	**PHONE #**	**FAX #**	**DELIVERY DATE:**

D-M-E STAT #	QUOTE #	P.O. #	JOB #	MATERIAL
				GENERIC NAME:
				BRAND NAME:
				FILLER:
				PROCESS TEMP: ☐ °F ☐ °C

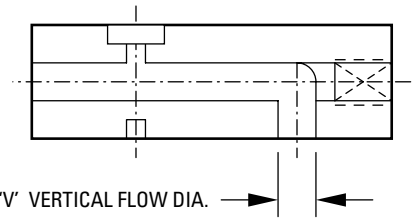
HOT HALF ASSEMBLY ITEM #:	CUSTOMER EMAIL ADDRESS:

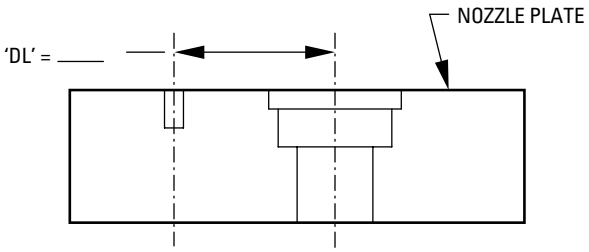
METEOR-3 IN-LINE CENTER EXIT

NOTE:
Pages 33 and 34 MUST be completely filled out and returned to D-M-E in order to proceed.



The vertical flow channel **'V'** location will be calculated by D-M-E based on the customer's **'DL'** dimension and the material process temperature.

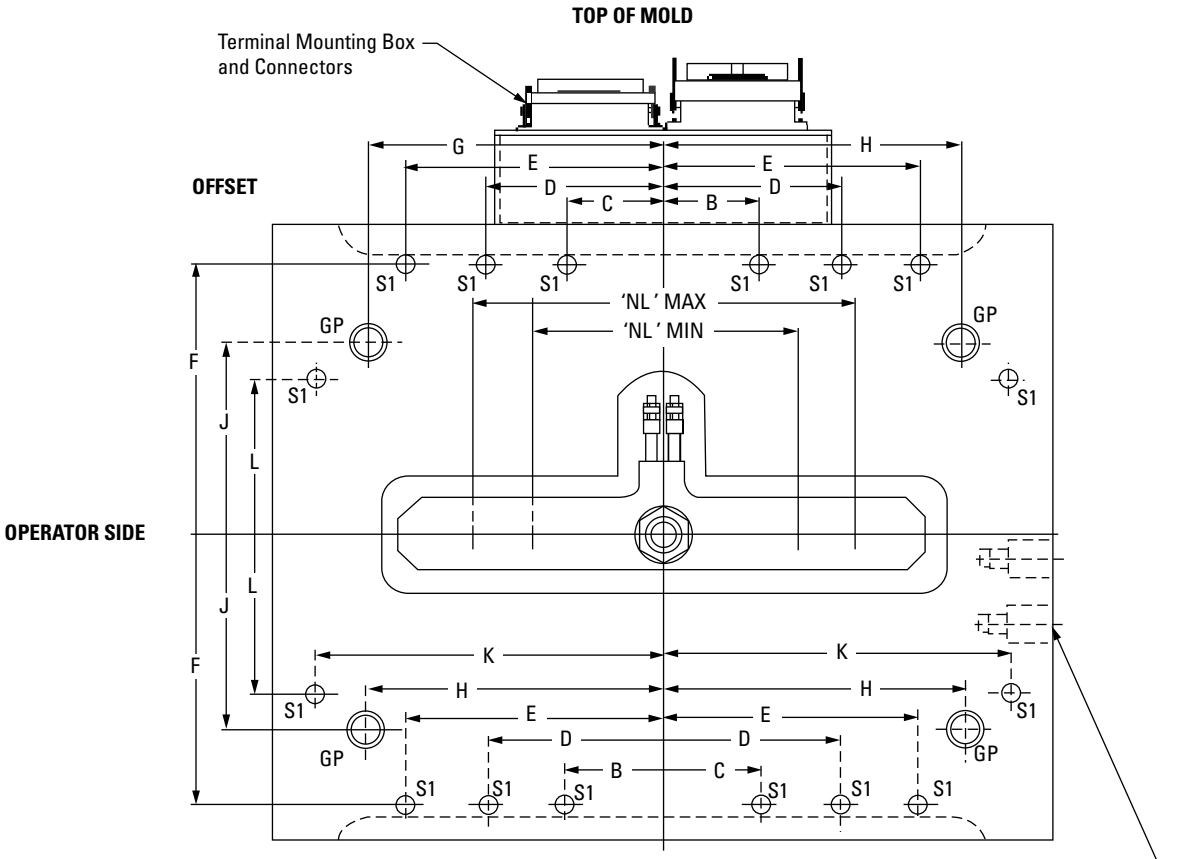




'DL' equals the distance from the centerline of the mold to the actual drop/gate location in the mold.

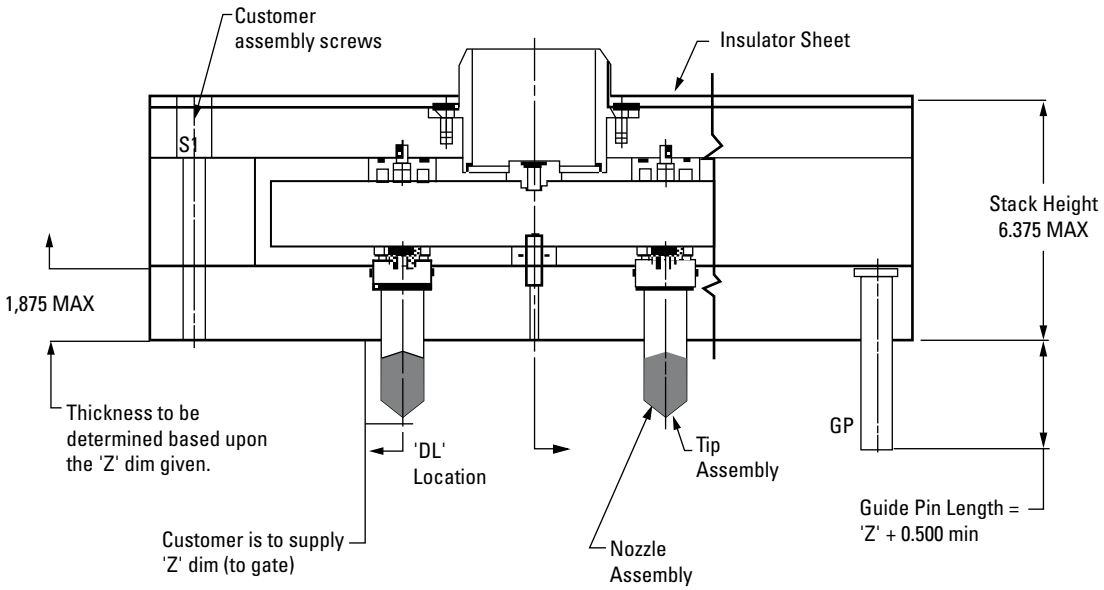
Return completed forms to D-M-E Company – Madison Heights, MI.	email address: appl_eng@dme.net
See page 35 for available manifold sizes.	fax #: 248-544-5707

Meteor-3 In-Line Center Exit



NOTE: The plan view is from mold locating ring/machine nozzle.

Waterlines in the Top Clamp Plate, Manifold Retainer Plate, and Nozzle Plate.



'Z' =	'DL' =	Nozzle Item #	Tip Item #	&	(if needed)

Meteor-3 In-Line Center Exit

METEOR-3 CENTER EXIT MANIFOLD
MANIFOLD SELECTION CHART

HOT HALF ASSEMBLY ITEM #	NOZZLE SERIES	NL-MIN		NL-MAX		OAL		V-VERTICAL FLOW DIAMETER	
		MM	INCH	MM	INCH	MM	INCH	MM	INCH
MCM0100KPH	250 EHA 250 CIA Mini Gate-Mate Gate-Mate 4	55	2.165	100	3.937	195	7.677	9	0.354
MCM0150KPH		100	3.937	150	5.906	245	9.646		
MCM0200KPH		150	5.906	200	7.874	295	11.614		
MCM0300KPH	375 EHA 375 CIA Gate-Mate 4	200	7.874	300	11.811	395	15.551	12	0.472
MCM0400KPH		300	11.811	400	15.748	495	19.088		
MCM0500KPH		400	15.748	500	19.685	595	23.425		

NOTES:

1. All dimensions are in inches unless otherwise specified.
2. **ONLY** 250 Series nozzles will be used with manifolds; MCM0100KPH, MCM0150KPH, MCM0200KPH.
3. High Performance nozzles (CIA) and wear resistant tips are recommended for materials processing over 500° F and/or any filled material.
4. Drop locations to be within the range of 'NL' MIN and 'NL' MAX.
5. 7⁄16" diameter waterlines with ¼ npt will be machined in the Top Clamp Plate, Manifold Retainer Plate, and Nozzle Plate.
6. ¾" diameter guide pins (4) are provided.
7. D-M-E Terminal Mounting Box with Connectors is attached to the Nozzle Plate and Manifold Retainer Plate.
8. S1 customer assembly screws can be tapped into the mold base from the hot half or from parting line, into the hot half. (Customer preference.)
9. Nozzle Seat is supplied as combination type ½" and ¾" spherical radius.
10. All of the hot half systems are supplied assembled, wired, and tested.
11. Pages 33 and 34 **MUST** be completely filled out in order to process the tool.
12. Email and/or fax completed document to D-M-E appl_eng@dme.net.
13. Refer to Meteor Assembly Guide for additional information.
14. Wiring into the Terminal Mounting Box will be as shown in the table below.
15. These systems are designed to operate at 240 Volt, 3 Phase supply.

HOT HALF ASSEMBLY ITEM #	D-M-E CONTROLLER	WIRING LOCATION FOR NOZZLES AND MANIFOLD					
		ZONE #1	ZONE #2	ZONE #3	ZONE #4	ZONE #5	ZONE #6
MCM0100KPH	5-ZONE	NOZZLE #1	NOZZLE #2	MANIFOLD			
MCM0150KPH		NOZZLE #1	NOZZLE #2	MANIFOLD			
MCM0200KPH		NOZZLE #1	NOZZLE #2	MANIFOLD			
MCM0300KPH		NOZZLE #1	NOZZLE #2	MANIFOLD			
MCM0400KPH		NOZZLE #1	NOZZLE #2	MANIFOLD			
MCM0500KPH		NOZZLE #1	NOZZLE #2	MANIFOLD TOP	MANIFOLD BTM		

Meteor-3 In-Line Center Exit

MOLD BASE REFERENCE INFORMATION

HOT HALF ASSEMBLY ITEM #	MOLD BASE SIZE	B	C	D	E	F	G	H	J	K	L
MCM0100KPH	1215	—	1.000	—	5.375	4.969	5.4375	5.6250	3.8125	—	—
	1315	—	1.000	—	5.375	5.719	5.4375	5.6250	4.5000	—	—
	1220	—	1.000	—	7.500	4.969	7.5625	7.7500	3.8125	—	—
	1321	—	1.000	—	7.625	5.719	7.9375	8.1250	4.1875	—	—
	1620	—	1.000	—	7.125	6.969	7.5625	7.7500	5.0000	—	—
MCM0150KPH	1220	—	1.000	—	7.500	4.969	7.5625	7.7500	3.8125	—	—
	1321	—	1.000	—	7.625	5.719	7.9375	8.1250	4.1875	—	—
	1620	—	1.000	—	7.125	6.969	7.5625	7.7500	5.0000	—	—
MCM0200KPH	1321	—	1.000	—	7.625	5.719	7.9375	8.1250	4.1875	—	—
	1524	3.625	3.625	—	8.625	6.469	8.4375	8.6250	5.0000	—	—
	1924	3.625	3.625	—	8.625	8.781	8.6875	8.8750	7.0000	—	—
MCM300KPH	1524	3.625	3.625	—	8.625	6.469	8.4375	8.6250	5.0000	—	—
	1924	3.625	3.625	—	8.625	8.781	8.6875	8.8750	7.0000	—	
	1929	4.562	4.562	—	12.000	8.781	12.1875	12.3750	7.0000	—	—
MCM0400KPH	1826	4.000	4.000	—	10.250	7.969	10.4375	10.6250	6.0000	—	—
	1929	4.562	4.562	—	12.000	8.781	12.1875	12.3750	7.0000	—	—
	2429	4.812	4.812	—	11.750	10.844	11.5625	11.7500	8.5000	13.750	6.750
MCM0500KPH	2429	4.812	4.812	—	11.750	10.844	11.5625	11.7500	8.5000	13.750	6.750
	2435	3.875	3.875	9.625	14.750	10.844	14.6875	14.8750	8.5000	16.750	6.750

NOTE: S1 screws for 24" wide mold bases require $\frac{5}{8}$-11 S.H.C.S.
All other mold bases require $\frac{1}{2}$-13 S.H.C.S.

Meteor-3 In-Line End Exit

APPLICATION ENGINEERING		CUSTOMER DESIGN CRITERIA	3-Week delivery is based upon receipt of this completed document at D-M-E.
AE004.16	06-20-05	***BLUE AREAS ARE FOR D-M-E USE ONLY***	

CUSTOMER NAME:	DATE	ACCOUNT #	SHOP ORDER #:
CONTACT NAME:	PHONE #	FAX #	DELIVERY DATE:

D-M-E STAT #	QUOTE #	P.O. #	JOB #	MATERIAL
				GENERIC NAME:
				BRAND NAME:
				FILLER:
				PROCESS TEMP: ☐ °F ☐ °C

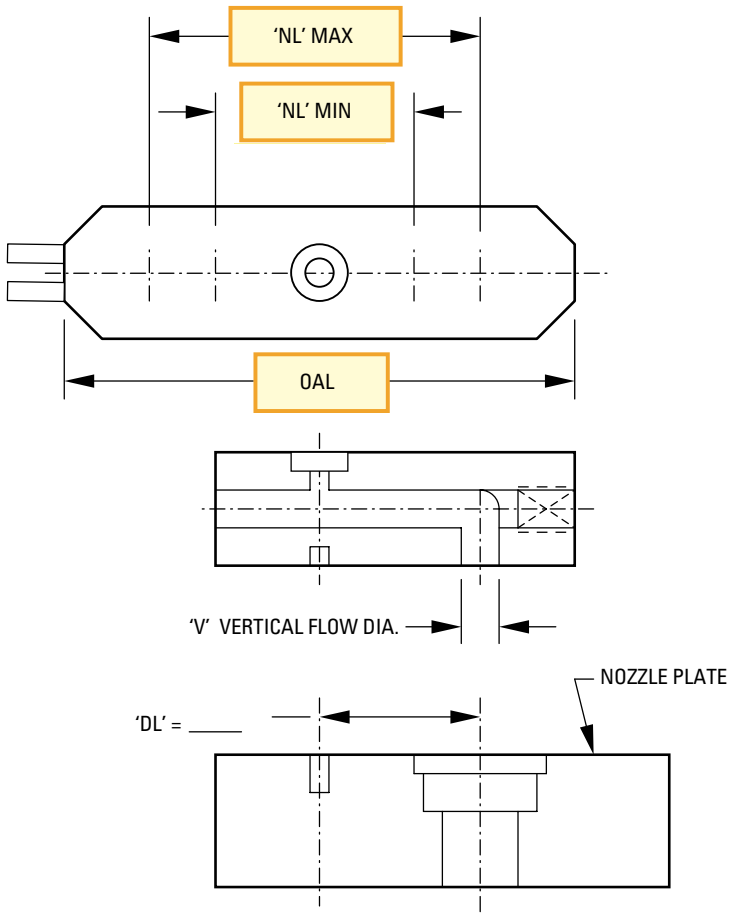
HOT HALF ASSEMBLY ITEM #:	CUSTOMER EMAIL ADDRESS:

METEOR-3 IN-LINE END EXIT

NOTE:
Pages 37 and 38 MUST be completely filled out and returned to D-M-E in order to proceed.

The vertical flow channel **'V'** location will be calculated by D-M-E based on the customer's **'DL'** dimension and the material process temperature.

'DL' equals the distance from the centerline of the mold to the actual drop/gate location in the mold.

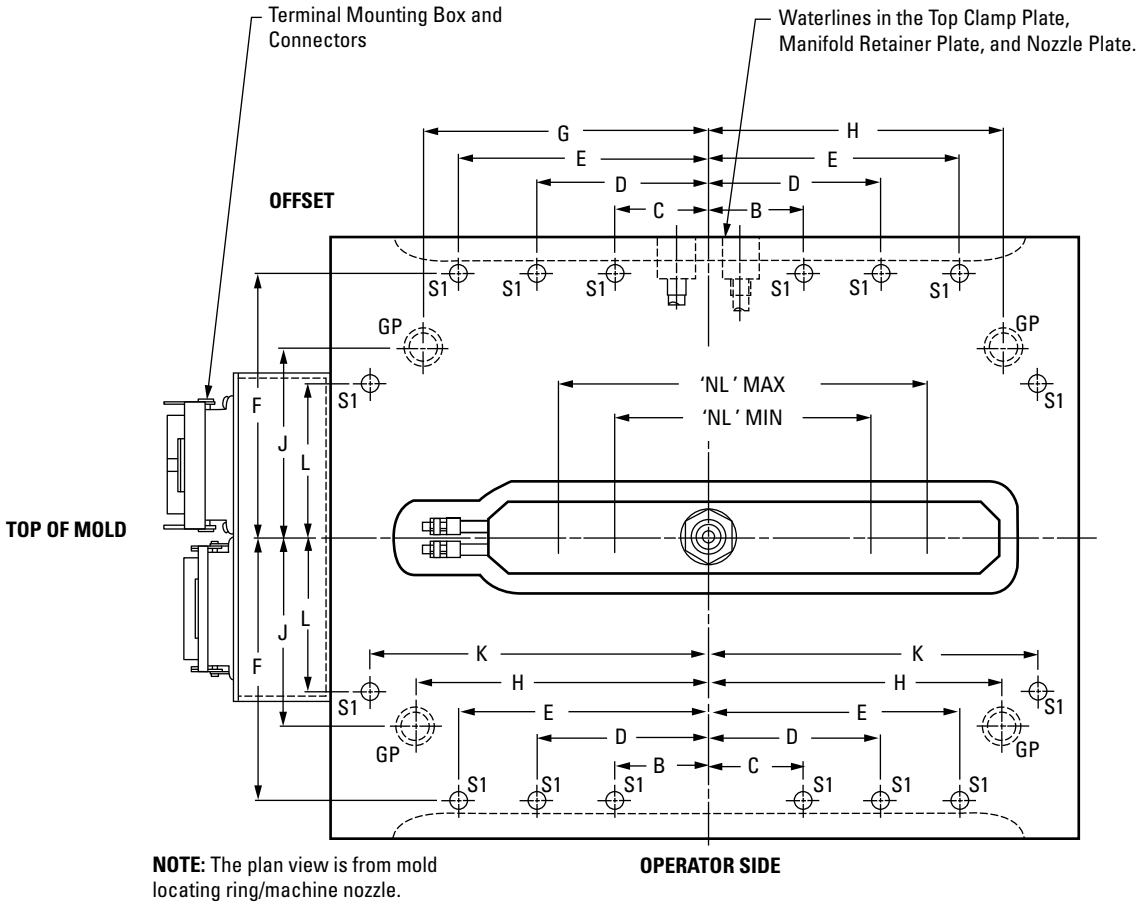


Return completed forms to D-M-E Company – Madison Heights, MI.

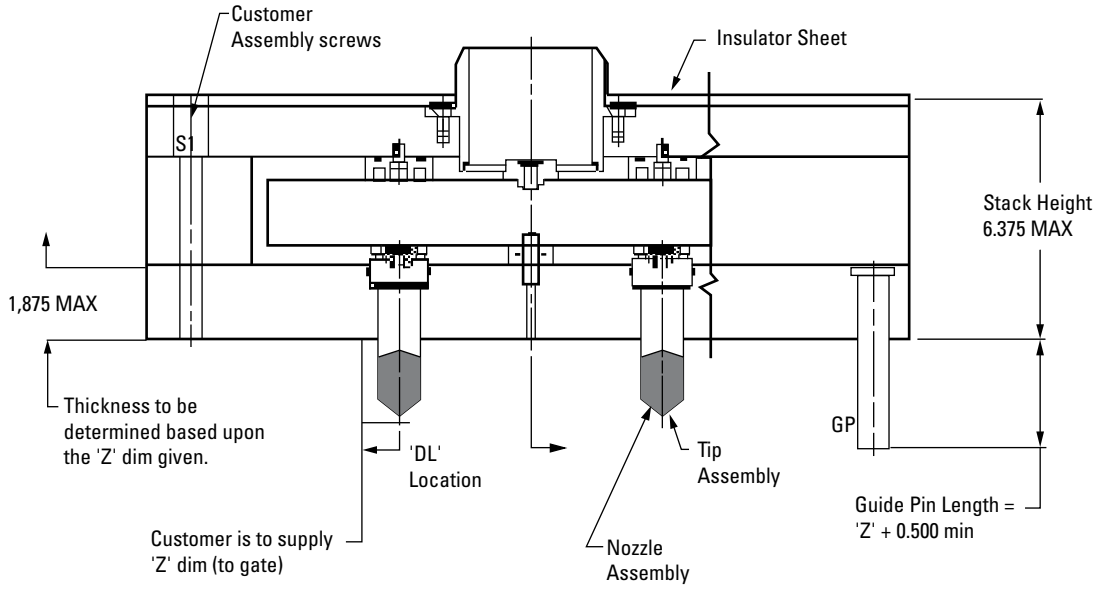
See page 39 for available manifold sizes.

email address: appl_eng@dme.net
fax #: 248-544-5707

Meteor-3 In-Line End Exit



NOTE: The plan view is from mold locating ring/machine nozzle.



'Z' =	'DL' =	Nozzle Item #	Tip Item #	&	(if needed)

Meteor-3 In-Line End Exit

METEOR-3 END EXIT MANIFOLD
MANIFOLD SELECTION CHART

HOT HALF ASSEMBLY ITEM #	NOZZLE SERIES	NL-MIN		NL-MAX		OAL		V-VERTICAL FLOW DIAMETER	
		MM	INCH	MM	INCH	MM	INCH	MM	INCH
MEM0100KPH	250 EHA 250 CIA Mini Gate-Mate Gate-Mate 4	55	2.165	100	3.937	195	7.677	9	0.354
MEM0150KPH		100	3.937	150	5.906	245	9.646		
MEM0200KPH		150	5.906	200	7.874	295	11.614		
MEM0300KPH	375 EHA 375 CIA Gate-Mate 4	200	7.874	300	11.811	395	15.551	12	0.472
MEM0400KPH		300	11.811	400	15.748	495	19.088		
MEM0500KPH		400	15.748	500	19.685	595	23.425		

NOTES:

1. All dimensions are in inches unless otherwise specified.
2. **ONLY** 250 Series nozzles will be used with manifolds; MEM0100KPH, MEM0150KPH, MEM0200KPH.
3. High Performance nozzles (CIA) and wear resistant tips are recommended for materials processing over 500° F and/or any filled material.
4. Drop locations to be within the range of 'NL' MIN and 'NL' MAX.
5. 7/16" diameter waterlines with ¼ npt will be machined in the Top Clamp Plate, Manifold Retainer Plate, and Nozzle Plate.
6. ¾" diameter guide pins (4) are provided.
7. D-M-E Terminal Mounting Box with Connectors is attached to the Nozzle Plate and Manifold Retainer Plate.
8. S1 customer assembly screws can be tapped into the mold base from the hot half or from parting line, into the hot half. (Customer preference.)
9. Nozzle Seat is supplied as combination type ½" and ¾" spherical radius.
10. All of the hot half systems are supplied assembled, wired, and tested.
11. Pages 37 and 38 **MUST** be completely filled out in order to process the tool.
12. Email and/or fax completed document to D-M-E at appl_eng@dme.net.
13. Refer to Meteor Assembly Guide for additional information.
14. Wiring into the Terminal Mounting Box will be as shown in the table below.
15. These systems are designed to operate at 240 Volt, 3 Phase supply.

HOT HALF ASSEMBLY ITEM #	D-M-E CONTROLLER	WIRING LOCATION FOR NOZZLES AND MANIFOLD					
		ZONE #1	ZONE #2	ZONE #3	ZONE #4	ZONE #5	ZONE #6
MEM0100KPH	5-ZONE	NOZZLE #1	NOZZLE #2	MANIFOLD			
MEM0150KPH		NOZZLE #1	NOZZLE #2	MANIFOLD			
MEM0200KPH		NOZZLE #1	NOZZLE #2	MANIFOLD			
MEM0300KPH		NOZZLE #1	NOZZLE #2	MANIFOLD			
MEM0400KPH		NOZZLE #1	NOZZLE #2	MANIFOLD			
MEM0500KPH		NOZZLE #1	NOZZLE #2	MANIFOLD TOP	MANIFOLD BTM		

Meteor-3 In-Line End Exit

MOLD BASE REFERENCE INFORMATION

HOT HALF ASSEMBLY ITEM #	MOLD BASE SIZE	B	C	D	E	F	G	H	J	K	L
MEM0100KPH	1215	—	1.000	—	5.375	4.969	5.4375	5.6250	3.8125	—	—
	1315	—	1.000	—	5.375	5.719	5.4375	5.6250	4.5000	—	—
	1220	—	1.000	—	7.500	4.969	7.5625	7.7500	3.8125	—	—
	1321	—	1.000	—	7.625	5.719	7.9375	8.1250	4.1875	—	—
	1620	—	1.000	—	7.125	6.969	7.5625	7.7500	5.0000	—	—
MEM0150KPH	1220	—	1.000	—	7.500	4.969	7.5625	7.7500	3.8125	—	—
	1321	—	1.000	—	7.625	5.719	7.9375	8.1250	4.1875	—	—
	1620	—	1.000	—	7.125	6.969	7.5625	7.7500	5.0000	—	—
MEM0200KPH	1321	—	1.000	—	7.625	5.719	7.9375	8.1250	4.1875	—	—
	1524	3.625	3.625	—	8.625	6.469	8.4375	8.6250	5.0000	—	—
	1924	3.625	3.625	—	8.625	8.781	8.6875	8.8750	7.0000	—	—
MEM0300KPH	1524	3.625	3.625	—	8.625	6.469	8.4375	8.6250	5.0000	—	—
	1924	3.625	3.625	—	8.625	8.781	8.6875	8.8750	7.0000	—	
	1929	4.562	4.562	—	12.000	8.781	12.1875	12.3750	7.0000	—	—
MEM0400KPH	1826	4.000	4.000	—	10.250	7.969	10.4375	10.6250	6.0000	—	—
	1929	4.562	4.562	—	12.000	8.781	12.1875	12.3750	7.0000	—	—
	2429	4.812	4.812	—	11.750	10.844	11.5625	11.7500	8.5000	13.750	6.750
MEM0500KPH	2429	4.812	4.812	—	11.750	10.844	11.5625	11.7500	8.5000	13.750	6.750
	2435	3.875	3.875	9.625	14.750	10.844	14.6875	14.8750	8.5000	16.750	6.750

NOTE: S1 screws for 24" wide mold bases require ⅝-11 S.H.C.S.
All other mold bases require ½-13 S.H.C.S.

Meteor-3 X-Style Manifold

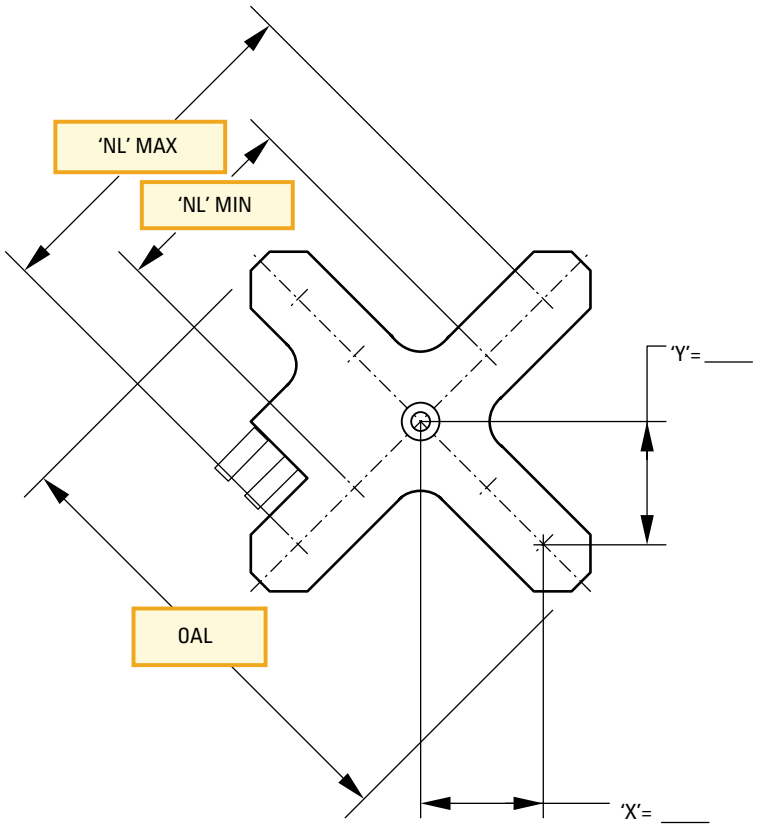
APPLICATION ENGINEERING		CUSTOMER DESIGN CRITERIA	3-Week delivery is based upon receipt of this completed document at D-M-E.
AE004.18	06-20-05	*BLUE AREAS ARE FOR D-M-E USE ONLY*	

CUSTOMER NAME:	DATE	ACCOUNT #	SHOP ORDER #:
CONTACT NAME:	PHONE #	FAX #	DELIVERY DATE:

D-M-E STAT #	QUOTE #	P.O. #	JOB #	MATERIAL
				GENERIC NAME:
				BRAND NAME:
				FILLER:
				PROCESS TEMP: ☐ °F ☐ °C

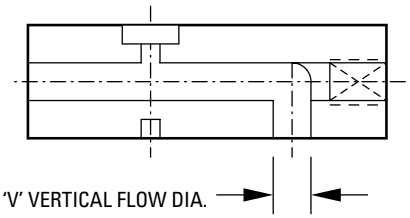
HOT HALF ASSEMBLY ITEM #:	CUSTOMER EMAIL ADDRESS:

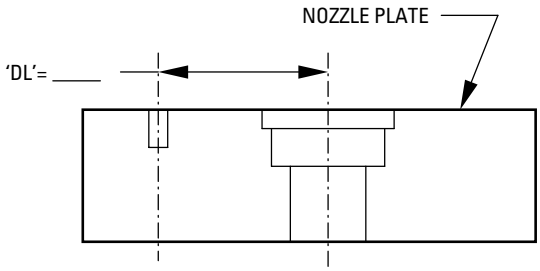
METEOR-3 X-STYLE MANIFOLD



NOTE:
Pages 41 and 42 MUST be completely filled out and returned to D-M-E in order to proceed.

The vertical flow channel **'V'** location will be calculated by D-M-E based on the customer's **'DL'** dimension and the material process temperature.





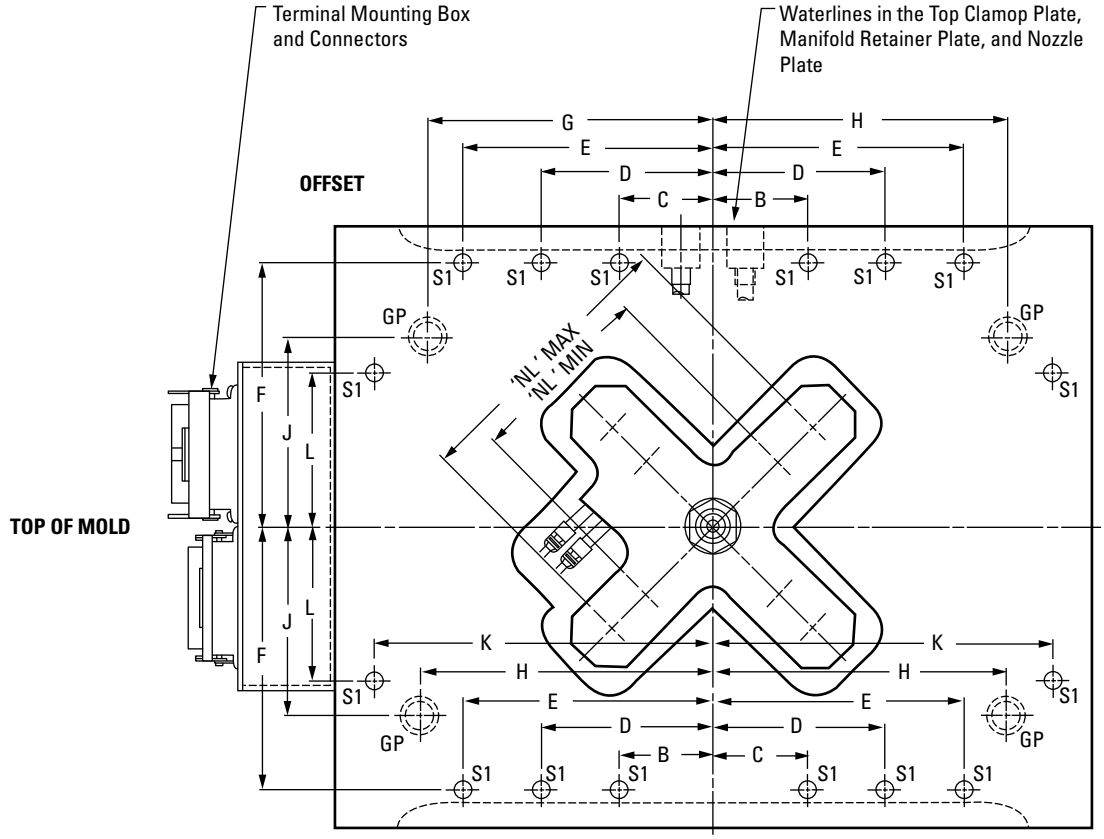
'DL' equals the diagonal distance from the centerline of the mold to the actual drop/gate location in the mold.

Return completed forms to D-M-E Company – Madison Heights, MI.

See page 43 for available manifold sizes.

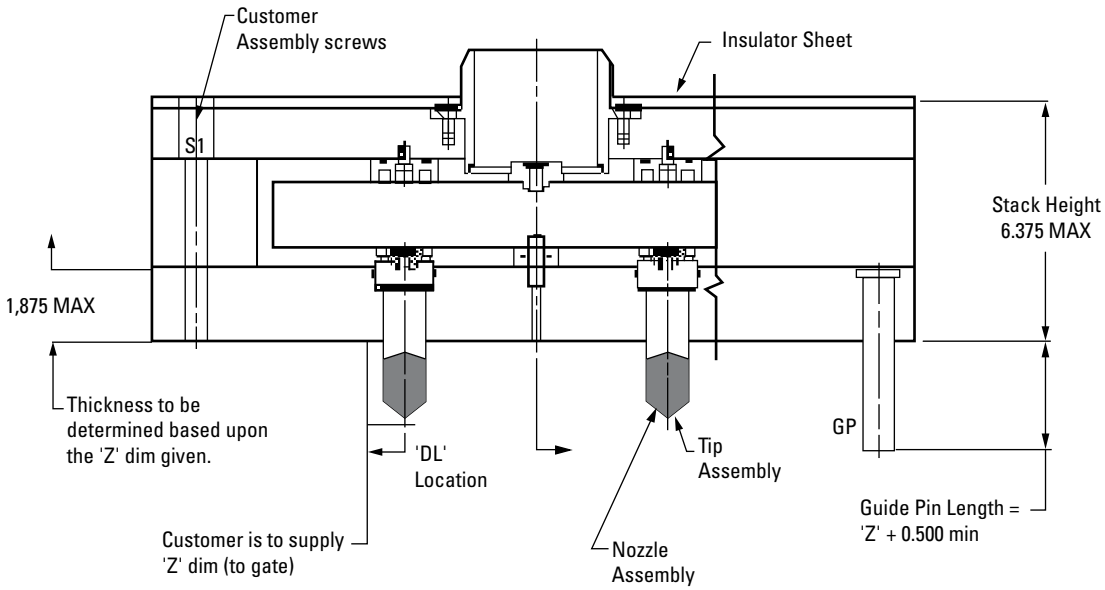
email address: appl_eng@dme.net
fax #: 248-544-5707

Meteor-3 X-Style Manifold



NOTE: The plan view is from mold locating ring/machine nozzle.

OPERATOR SIDE



'Z' =	'DL' =	Nozzle Item #	Tip Item #	&	(if needed)

Meteor-3 X-Style Manifold

METEOR-3 X-STYLE MANIFOLD
MANIFOLD SELECTION CHART

HOT HALF ASSEMBLY ITEM #	NOZZLE SERIES	NL-MIN		NL-MAX		OAL		V-VERTICAL FLOW DIAMETER	
		MM	INCH	MM	INCH	MM	INCH	MM	INCH
MXM0100KPH	250 EHA 250 CIA	55	2.165	100	3.937	195	7.677	9	0.354
MXM0150KPH		100	3.937	150	5.906	245	9.646		
MXM0200KPH		150	5.906	200	7.874	295	11.614		
MXM0300KPH	375 EHA 375 CIA	200	7.874	300	11.811	395	15.551	12	0.472

NOTES:

1. All dimensions are in inches unless otherwise specified.
2. **ONLY** 250 Series nozzles will be used with manifolds: MXM0100KPH, MXM0150KPH, MXM0200KPH. ONLY 375 Series nozzles will be used with manifolds: MXM0300KPH.
3. High Performance nozzles (CIA) and wear resistant tips are recommended for materials processing over 500° F and/or any filled material.
4. Drop locations to be within the range of 'NL' MIN and 'NL' MAX.
5. 7/16" diameter waterlines with ¼ npt will be machined in the Top Clamp Plate, Manifold Retainer Plate, and Nozzle Plate.
6. ¾" diameter guide pins (4) are provided.
7. D-M-E Terminal Mounting Box with Connectors is attached to the Nozzle Plate and Manifold Retainer Plate.
8. S1 customer assembly screws can be tapped into the mold base from the hot half or from parting line, into the hot half. (Customer preference.)
9. Nozzle Seat is supplied as combination type ½" and ¾" spherical radius.
10. All of the hot half systems are supplied assembled, wired, and tested.
11. Pages 41 and 42 **MUST** be completely filled out in order to process the tool.
12. Email and/or fax completed document to D-M-E at appl_eng@dme.net
13. Refer to Meteor Assembly Guide for additional information.
14. Wiring into the Terminal Mounting Box will be as shown in the table below.
15. These systems are designed to operate at 240 Volt, 3 Phase supply.

HOT HALF ASSEMBLY ITEM #	D-M-E CONTROLLER	WIRING LOCATION FOR NOZZLES AND MANIFOLD					
		ZONE #1	ZONE #2	ZONE #3	ZONE #4	ZONE #5	ZONE #6
MXM0100KPH	5-ZONE	NOZZLE #1	NOZZLE #2	NOZZLE #3	NOZZLE #4	MANIFOLD	
MXM0150KPH		NOZZLE #1	NOZZLE #2	NOZZLE #3	NOZZLE #4	MANIFOLD	
MXM0200KPH	8-ZONE	NOZZLE #1	NOZZLE #2	NOZZLE #3	NOZZLE #4	MANIFOLD TOP	MANIFOLD BTM
MXM0300KPH		NOZZLE #1	NOZZLE #2	NOZZLE #3	NOZZLE #4	MANIFOLD TOP	MANIFOLD BTM

Meteor-3 X-Style Manifold

MOLD BASE REFERENCE INFORMATION

HOT HALF ASSEMBLY ITEM #	MOLD BASE SIZE	B	C	D	E	F	G	H	J	K	L
MXM0100KPH	1518	—	1.000	—	6.312	6.469	5.4375	5.6250	5.2500	—	—
	1616	—	1.000	—	5.125	6.969	4.6875	4.8750	5.1825	—	—
	1620	—	1.000	—	7.125	6.969	7.5625	7.7500	5.0000	—	—
MXM0150KPH	1518	—	1.000	—	6.312	6.469	5.4375	5.6250	5.2500	—	—
	1616	—	1.000	—	5.125	6.969	4.6875	4.8750	5.1825	—	—
	1620	—	1.000	—	7.125	6.969	7.5625	7.7500	5.0000	—	—
MXM0200KPH	1818	—	1.000	—	4.562	7.969	5.1825	6.0000	6.5000	—	—
	1820	—	1.000	—	5.562	7.969	6.8125	7.0000	6.5000	—	—
	1924	3.625	3.625	—	8.625	8.781	8.6875	8.8750	7.0000	—	—
MXM0300KPH	2424	3.875	3.875	—	8.875	10.844	8.1250	8.3125	9.1250	10.8125	6.750
	2429	4.812	4.812	—	11.750	10.844	10.6250	10.8125	9.1250	13.7500	6.750
	2435	3.875	3.875	9.625	14.750	10.844	13.6250	13.8125	9.1250	16.7500	6.750

NOTE: S1 screws for 24" wide mold bases require ⅝-11 S.H.C.S.
All other mold bases require ½-13 S.H.C.S.



All CDC Forms in this section can be found at:
www.dme.net/CDC

Multi-Gate Nozzle Package System

APPLICATION ENGINEERING		CUSTOMER DESIGN CRITERIA	DATE TOOL REQUIRED AT CUSTOMER SITE:
AE-004-12-A	12-02-03	*BLUE AREAS ARE FOR D-M-E USE ONLY*	

CUSTOMER NAME:	DATE	FINALS REC'D	VERIFIED BY:
CONTACT NAME:	PHONE #	FAX #	MATERIAL GENERIC NAME: BRAND NAME:
D-M-E STAT # / QUOTE #	P.O. #	JOB #	FILLER: PROCESS TEMP:

MAXIMUM MOLD HEIGHT:

MACHINE NOZZLE RADIUS:
☐ ½ ☐ ¾ ☐ SPECIAL
ADD SPECIAL SIZE (if needed):

MOLD BASE SIZE:
ADD SIZE

ASSEMBLY SCREW DIRECTION:
ASSEMBLY SCREW LOCATION:

TYPE OF ALIGNMENT:
QUANTITY REQUIRED: ☐ 2 ☐ 4

ASSEMBLY SCREW AND ALIGNMENT DETERMINED BY:
☐ D-M-E ☐ CUSTOMER

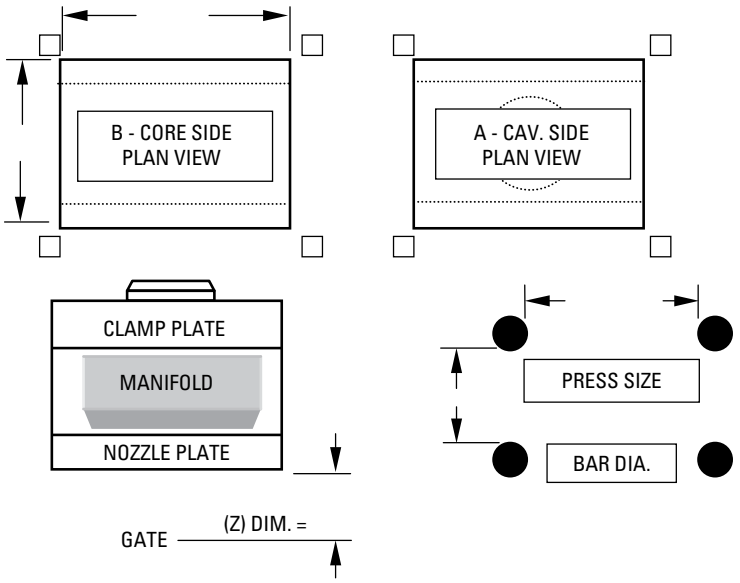
CLAMP LEDGE REQUIRED:
☐ ⅛ ☐ 1-⅜ OTHER:

MOLD BASE BEING BUILT BY:
☐ D-M-E ☐ CUSTOMER

D-M-E MANUFACTURING LOCATION:
☐ CMI ☐ MELROSE PARK

MULTI-GATE NOZZLE PACKAGE SYSTEM

SHOW THE FOLLOWING:
TOP OF MOLD; OFFSET CORNER; OPERATOR; LOCATION OF TERMINAL BOX; WATER ENTRANCE & EXIT



TERMINAL BOX & CONNECTORS:
☐ 5-ZONE ☐ 8-ZONE ☐ 12-ZONE
☐ D-M-E SUPPLIED ☐ CUST. SUPPLIED
☐ D-M-E BRAND ☐ NON-D-M-E BRAND
LIST BRAND IF NON-D-M-E:

MGN NOZZLE BODY TYPE:
☐ 300 ☐ 350 ☐ 400
OTHER:

OPERATING VOLTAGE AT MOLDERS:
☐ 208 ☐ 210 ☐ 220 ☐ 230 ☐ 240
OTHER:
PHASE REQUIRED AT MOLDERS:
☐ SINGLE PHASE ☐ THREE PHASE

ELECTRICAL ZONE NUMBERING:
☐ D-M-E STANDARD
☐ CUSTOMER SUPPLIED CAVITY/NOZZLE NUMBERS

CUSTOMER REQUESTS CAD DATA
TYPE: **FORMAT:**
FTP:
E-MAIL:

COMMENTS:

Single Valve Gate Package System

APPLICATION ENGINEERING		CUSTOMER DESIGN CRITERIA	DATE TOOL REQUIRED AT CUSTOMER SITE:
AE-004-6-A	12-02-03	*BLUE AREAS ARE FOR D-M-E USE ONLY*	

CUSTOMER NAME:	DATE	FINALS REC'D	VERIFIED BY:
CONTACT NAME:	PHONE #	FAX #	MATERIAL GENERIC NAME: BRAND NAME:
D-M-E STAT # / QUOTE #	P.O. #	JOB #	FILLER: PROCESS TEMP:

MAXIMUM MOLD HEIGHT:

MACHINE NOZZLE RADIUS:
☐ ½ ☐ ¾ ☐ SPECIAL
ADD SPECIAL SIZE (if needed):

MOLD BASE SIZE:
ADD SIZE

ASSEMBLY SCREW DIRECTION:
ASSEMBLY SCREW LOCATION:

TYPE OF ALIGNMENT:
QUANTITY REQUIRED: ☐ 2 ☐ 4

ASSEMBLY SCREW AND ALIGNMENT DETERMINED BY:
☐ D-M-E ☐ CUSTOMER

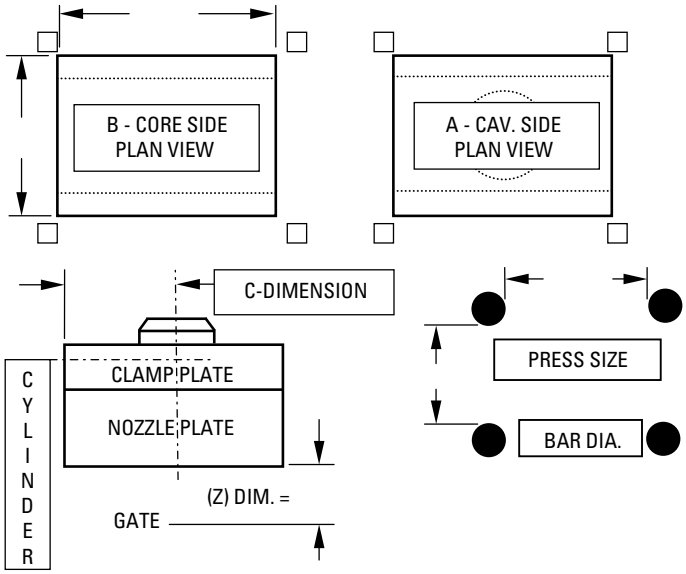
CLAMP LEDGE REQUIRED:
☐ ⅞ ☐ 1-⅜ OTHER:

MOLD BASE BEING BUILT BY:
☐ D-M-E ☐ CUSTOMER

D-M-E MANUFACTURING LOCATION:
☐ CMI ☐ MELROSE PARK

SINGLE VALVE GATE PACKAGE SYSTEM

SHOW THE FOLLOWING:
TOP OF MOLD; OFFSET CORNER; OPERATOR; LOCATION OF TERMINAL BOX; WATER ENTRANCE & EXIT



TERMINAL BOX & CONNECTORS:
☐ 5-ZONE ☐ 8-ZONE ☐ 12-ZONE
☐ D-M-E SUPPLIED ☐ CUST. SUPPLIED
☐ D-M-E BRAND ☐ NON-D-M-E BRAND
LIST BRAND IF NON-D-M-E:

NOZZLE TYPE:

TIP TYPE:
FULL BODY TIP DIA:
PIN ORIFICE "O" DIA:

FLOW DIA:
PRIMARY = **SECONDARY =**
TERNARY =
SYMMETRICALLY BALANCED:
 # OF DROPS =

OPERATING VOLTAGE AT MOLDERS:
☐ 208 ☐ 210 ☐ 220 ☐ 230 ☐ 240
OTHER:
PHASE REQUIRED AT MOLDERS:
☐ SINGLE PHASE ☐ THREE PHASE

ELECTRICAL ZONE NUMBERING:
☐ D-M-E STANDARD
☐ CUSTOMER SUPPLIED CAVITY/NOZZLE NUMBERS

COMMENTS:

CUSTOMER REQUESTS CAD DATA
TYPE: **FORMAT:**
FTP:
E-MAIL:

Valve Gate Package System

APPLICATION ENGINEERING		CUSTOMER DESIGN CRITERIA	DATE TOOL REQUIRED AT CUSTOMER SITE:
AE-004-4-A	12-02-03	*BLUE AREAS ARE FOR D-M-E USE ONLY*	

CUSTOMER NAME:	DATE	FINALS REC'D	VERIFIED BY:

CONTACT NAME:	PHONE #	FAX #	MATERIAL
			GENERIC NAME:
			BRAND NAME:

D-M-E STAT #	QUOTE #	P.O. #	JOB #

FILLER:

PROCESS TEMP:

MAXIMUM MOLD HEIGHT:

MACHINE NOZZLE RADIUS:
☐ ½ ☐ ¾ ☐ SPECIAL
ADD SPECIAL SIZE (if needed):

MOLD BASE SIZE:
ADD SIZE

ASSEMBLY SCREW DIRECTION:
ASSEMBLY SCREW LOCATION:

TYPE OF ALIGNMENT:
QUANTITY REQUIRED: ☐ 2 ☐ 4

ASSEMBLY SCREW AND ALIGNMENT DETERMINED BY:
☐ D-M-E ☐ CUSTOMER

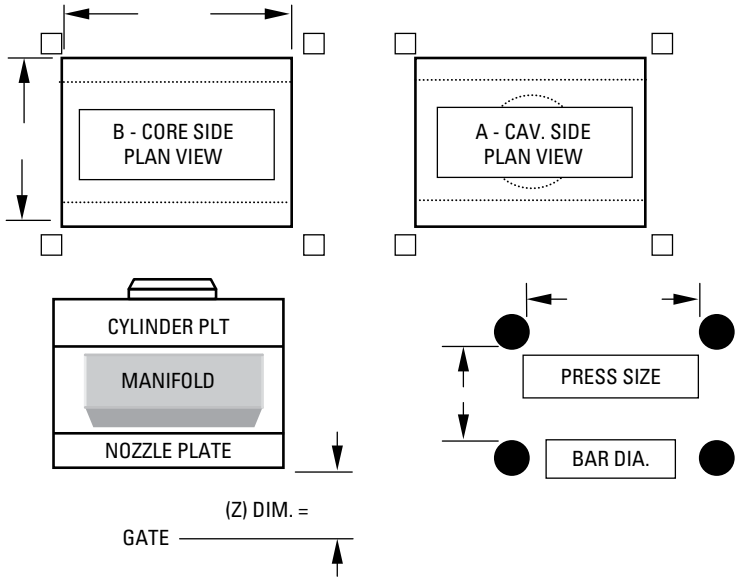
CLAMP LEDGE REQUIRED:
☐ ⅛ ☐ 1-⅜ OTHER:

MOLD BASE BEING BUILT BY:
☐ D-M-E ☐ CUSTOMER

D-M-E MANUFACTURING LOCATION:
☐ CMI ☐ MELROSE PARK

VALVE GATE PACKAGE SYSTEM

SHOW THE FOLLOWING:
TOP OF MOLD; OFFSET CORNER; OPERATOR; LOCATION OF TERMINAL BOX; WATER ENTRANCE & EXIT



TERMINAL BOX & CONNECTORS:
☐ 5-ZONE ☐ 8-ZONE ☐ 12-ZONE
☐ D-M-E SUPPLIED ☐ CUST. SUPPLIED
☐ D-M-E BRAND ☐ NON-D-M-E BRAND
LIST BRAND IF NON-D-M-E:

NOZZLE TYPE:

TIP TYPE:
FULL BODY TIP DIA:
PIN ORIFICE "O" DIA:

FLOW DIA:
PRIMARY = **SECONDARY =**
TERNARY =
SYMMETRICALLY BALANCED:
 # OF DROPS =

OPERATING VOLTAGE AT MOLDERS:
☐ 208 ☐ 210 ☐ 220 ☐ 230 ☐ 240
OTHER:
PHASE REQUIRED AT MOLDERS:
☐ SINGLE PHASE ☐ THREE PHASE

ELECTRICAL ZONE NUMBERING:
☐ D-M-E STANDARD
☐ CUSTOMER SUPPLIED CAVITY/NOZZLE NUMBERS

CUSTOMER REQUESTS CAD DATA
TYPE: **FORMAT:**
FTP:
E-MAIL:

COMMENTS:

Valve Gate Manifold and Components

APPLICATION ENGINEERING		CUSTOMER DESIGN CRITERIA	DATE TOOL REQUIRED AT CUSTOMER SITE:
AE-004-5-A	12-02-03	*BLUE AREAS ARE FOR D-M-E USE ONLY*	

CUSTOMER NAME:	DATE	FINALS REC'D	VERIFIED BY:
CONTACT NAME:	PHONE #	FAX #	MATERIAL GENERIC NAME: BRAND NAME:
D-M-E STAT # / QUOTE #	P.O. #	JOB #	FILLER: PROCESS TEMP:

MAXIMUM MOLD HEIGHT:

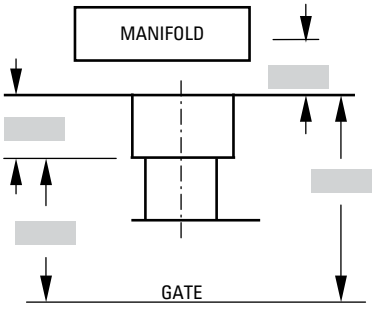
MACHINE NOZZLE RADIUS:
☐ ½ ☐ ¾ ☐ SPECIAL
ADD SPECIAL SIZE (if needed):

MOLD BASE SIZE:
ADD SIZE:

MOLD BASE BEING BUILT BY:
☐ D-M-E ☐ CUSTOMER

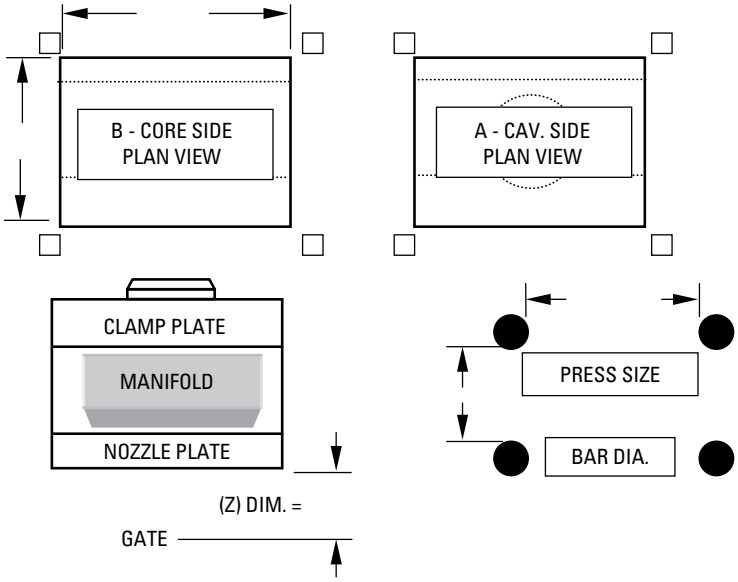
D-M-E MANUFACTURING LOCATION:
☐ CMI ☐ MELROSE PARK

SKETCH AREA (IF NEEDED)



VALVE GATE MANIFOLD & COMPONENTS

SHOW THE FOLLOWING:
TOP OF MOLD; OFFSET CORNER; OPERATOR; LOCATION OF TERMINAL BOX



TERMINAL BOX & CONNECTORS:
☐ 5-ZONE ☐ 8-ZONE ☐ 12-ZONE
☐ D-M-E SUPPLIED ☐ CUST. SUPPLIED
☐ D-M-E BRAND ☐ NON-D-M-E BRAND
LIST BRAND IF NON-D-M-E:

NOZZLE TYPE:

TIP TYPE: FULL BODY
FULL BODY TIP DIA:
PIN ORIFICE "O" DIA:

FLOW DIA:
PRIMARY = **SECONDARY =**
TERNARY =
SYMMETRICALLY BALANCED:
 # OF DROPS =

OPERATING VOLTAGE AT MOLDERS:
☐ 208 ☐ 210 ☐ 220 ☐ 230 ☐ 240
OTHER:
PHASE REQUIRED AT MOLDERS:
☐ SINGLE PHASE ☐ THREE PHASE

ELECTRONIC DATA REQUIRED:
TYPE: **FORMAT:**
FTP:
E-MAIL:

ELECTRICAL ZONE NUMBERING:
☐ D-M-E STANDARD
☐ CUSTOMER SUPPLIED CAVITY/NOZZLE NUMBERS

COMMENTS:

D-M-E Edge Mold Bases

THE LOWEST-PRICED
MOLD BASE ON THE MARKET
IS IN STOCK IN
70 DIFFERENT SIZES



ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Providing a Competitive Advantage

THE NEW EDGE MOLD BASE GIVES YOUR CUSTOMERS A COMPETITIVE ADVANTAGE

What is the "Edge" concept? It's an A-Series Mold Base with seven features in D-M-E #3 steel with a 30-40% price advantage. And with every Edge Mold Base, you get seven decades of reliable D-M-E quality-assured manufacturing capabilities that includes the absolute best service, price and delivery that will have your customers coming back for more.

D-M-E has supported moldmakers, processors and designers around the globe since it innovated the standard mold base in 1942. Today, we offer the industry's broadest range of market-leading products. In a recent Moldmaking Industry Survey, moldmakers said they needed an edge to better compete. That's why our full featured, ready-to-ship mold base is called the Edge. Essentially, moldmakers named it for us! The Edge gives you the competitive and profitability advantages that D-M-E customers demand.

As you continue to positively impact your operations through process efficiencies, technology enhancements, and automation improvements, the D-M-E Edge Mold Base is with you every step of the way by providing the value, speed and exceptional quality that customers have long expected from the industry's standard-setter in mold technologies. Even our competitors look to us as standard-setters; so much so, that today, competitors still promote their products by comparing them to ours.

Get the Edge Mold Base and you'll have another ingredient for the formula for a successful, growing business, and a partnership with the global mold technologies leader.

FREQUENTLY ASKED QUESTIONS ABOUT D-M-E

Where is the Edge Mold Base manufactured?

The D-M-E Edge Mold Base is manufactured by D-M-E's sister company located in Brazil. D-M-E has had an extensive manufacturing and distributing presence in Brazil for over 20 years. The Edge Mold Base is manufactured using the same stringent quality-assured processes and standards that have been adhered to during the manufacture of D-M-E U.S.-made mold bases for many decades. This manufacturing consistency and repeatability on every continent ensures D-M-E customers that every mold base has the quality steel and construction that makes D-M-E mold bases the highest valued mold bases throughout the world.

I make my own mold bases; can the D-M-E Edge Mold Base make me more competitive?

Yes! With our low U.S. prices, the Edge Mold Base is more than competitive when compared against in-house manufactured bases. In today's marketplace, most moldmakers don't have the luxury of having tool makers and/or apprentices make mold bases. Factoring direct labor costs alone, the D-M-E Edge Mold Base is priced so low that even the most efficient shop will save money by purchasing instead of making.

Does D-M-E offer special machining services?

Yes! D-M-E has the most comprehensive worldwide product offering for in-house machining services! Whether you need simple pocket roughing, 3D contour roughing of core and cavity blocks, or a completely finished mold base that meets your exact specifications and tolerances, D-M-E is the industry leader for complete, comprehensive special machining both locally and globally. No one in our industry offers a wider range of special machining services, and no one in our industry has the decades of machining experience and steel supplier relationships that provide our competitive advantage.

Industry-leading D-M-E Manufacturing, Tolerances and Distribution!
Get the competitive and profitability advantage with the D-M-E Edge!

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

Advantages and Features

EDGE MOLD BASE ADVANTAGES

70 different mold base assemblies ready for quick delivery
The lowest-priced mold base on the market
Most sizes available for same-day shipment
Seven popular mold base features
Reliable D-M-E quality-assured services, including manufacturing, inspection and distribution

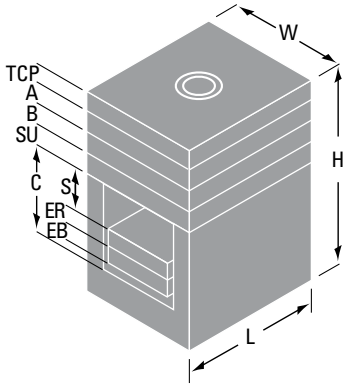


EDGE MOLD BASE FEATURES

- A-Plate, B-Plate and Support plates supplied with D-M-E #3 steel
- Pry slots installed on both sides of "B" plate
- Lift holes installed
- Return pins installed 0.125 inboard to allow for spring pockets
- Leader pin vents machined in the housing under the bushing location
- Guided ejection installed
- Three-piece ejector housing
- Center hole machining included

NOTE: See Standard & Optional Mold Base Features section in the Mold Base Catalog for specifications regarding Edge Mold Base features.

Product Selection Tables



Variables

Below is a list of the variables for the Edge series mold bases and their definitions

W = Width
L = Length
TCP = Top clamp plate thickness
A = A plate thickness
B = B plate thickness
SU = Support plate thickness
C = Height of the riser
S = Maximum stroke of the ejector bar
H = Mold base height
EB = Ejector bar thickness
ER = Ejector retainer thickness
P = Housing riser thickness
RPx = Return pin location on the X axis (3 places)
RPy = Return pin location on the Y axis (4 places)
RPos = Return pin offset on the X axis (1 place)
RPg = Return pin diameter
LPg = Leader pin diameter

7.875 × 7.875

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA0808-07-07	7.875	7.875	0.875	0.875	2.500	0.813	7.375	111
EDA0808-13-13	7.875	7.875	1.375	1.375	2.500	0.813	8.375	129
EDA0808-17-17	7.875	7.875	1.875	1.875	2.500	0.813	9.375	147
EDA0808-23-23	7.875	7.875	2.375	2.375	3.000	1.313	10.875	167

All Items	W	7.875	EB	1.000	P	1.250	TCP	0.875	RPx	3.313	RPg	0.500
	L	7.875	ER	0.500	SU	1.375	RPos	3.188	RPy	1.500	LPg	0.750

7.875 × 11.875

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA0812-07-07	7.875	11.875	0.875	0.875	2.500	0.813	7.375	174
EDA0812-13-13	7.875	11.875	1.375	1.375	3.000	1.313	8.875	205
EDA0812-17-17	7.875	11.875	1.875	1.875	3.500	1.813	10.375	235
EDA0812-23-23	7.875	11.875	2.375	2.375	3.500	1.813	11.375	262

All Items	W	7.875	EB	1.000	P	1.250	TCP	0.875	RPx	5.313	RPg	0.500
	L	11.875	ER	0.500	SU	1.375	RPos	5.188	RPy	1.500	LPg	0.750

9.875 × 8.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1008-07-07	9.875	8.000	0.875	0.875	2.500	0.813	7.375	158
EDA1008-13-13	9.875	8.000	1.375	1.375	2.500	0.813	8.875	181
EDA1008-17-17	9.875	8.000	1.875	1.875	3.500	1.813	10.875	209

All Items	W	9.875	EB	1.000	P	1.438	TCP	0.875	RPx	3.250	RPg	0.625
	L	8.000	ER	0.500	SU	1.875	RPos	3.125	RPy	2.250	LPg	0.750

9.875 × 11.875

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1012-07-07	9.875	11.875	0.875	0.875	2.500	0.813	7.875	235
EDA1012-13-13	9.875	11.875	1.375	1.375	3.000	1.313	9.375	273
EDA1012-17-17	9.875	11.875	1.875	1.875	3.500	1.813	10.875	311
EDA1012-23-23	9.875	11.875	2.375	2.375	3.500	1.813	11.875	344

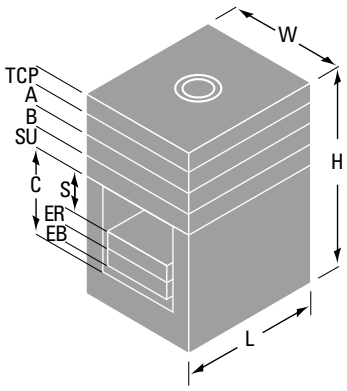
All Items	W	9.875	EB	1.000	P	1.438	TCP	0.875	RPx	5.188	RPg	0.625
	L	11.875	ER	0.500	SU	1.875	RPos	5.063	RPy	2.250	LPg	0.875

9.875 × 16.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1016-07-07	9.875	16.000	0.875	0.875	2.500	0.813	7.875	316
EDA1016-13-13	9.875	16.000	1.375	1.375	3.000	1.313	9.375	367
EDA1016-17-17	9.875	16.000	1.875	1.875	3.500	1.813	10.875	418
EDA1016-23-23	9.875	16.000	2.375	2.375	3.500	1.813	11.875	463

All Items	W	9.875	EB	1.000	P	1.438	TCP	0.875	RPx	7.250	RPg	0.625
	L	16.000	ER	0.500	SU	1.875	RPos	7.125	RPy	2.250	LPg	0.875

Product Selection Tables



Below is a list of the variables for the Edge series mold bases and their definitions

W = Width
L = Length
TCP = Top clamp plate thickness
A = A plate thickness
B = B plate thickness
SU = Support plate thickness
C = Height of the riser
S = Maximum stroke of the ejector bar
H = Mold base height
EB = Ejector bar thickness
ER = Ejector retainer thickness
P = Housing riser thickness
RPx = Return pin location on the X axis (3 places)
RPy = Return pin location on the Y axis (4 places)
RPos = Return pin offset on the X axis (1 place)
RPg = Return pin diameter
LPg = Leader pin diameter

9.875 × 20.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1020-13-13	9.875	20.000	1.375	1.375	3.000	1.313	9.375	459
EDA1020-17-17	9.875	20.000	1.875	1.875	3.500	1.813	10.875	523
EDA1020-23-23	9.875	20.000	2.375	2.375	3.500	1.813	11.875	579

All Items	W	9.875	EB	1.000	P	1.438	TCP	0.875	RPx	9.250	RPg	0.625
	L	20.000	ER	0.500	SU	1.875	RPos	9.125	RPy	2.250	LPg	0.875

10.875 × 12.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1112-13-13	10.875	12.000	1.375	1.375	3.000	1.313	9.375	305
EDA1112-17-17	10.875	12.000	1.875	1.875	3.500	1.813	10.875	347
EDA1112-23-23	10.875	12.000	2.375	2.375	3.500	1.813	11.875	384

All Items	W	10.875	EB	1.000	P	1.688	TCP	0.875	RPx	5.250	RPg	0.625
	L	12.000	ER	0.500	SU	1.875	RPos	5.125	RPy	2.813	LPg	0.875

10.875 × 14.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1114-13-13	10.875	14.000	1.375	1.375	3.000	1.313	9.375	355
EDA1114-17-17	10.875	14.000	1.875	1.875	3.500	1.813	10.875	405
EDA1114-23-23	10.875	14.000	2.375	2.375	3.500	1.813	11.875	448

All Items	W	10.875	EB	1.000	P	1.688	TCP	0.875	RPx	6.250	RPg	0.625
	L	14.000	ER	0.500	SU	1.875	RPos	6.125	RPy	2.813	LPg	0.875

10.875 × 18.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1118-13-13	10.875	18.000	1.375	1.375	3.000	1.313	9.375	457
EDA1118-17-17	10.875	18.000	1.875	1.875	3.500	1.813	10.875	521
EDA1118-23-23	10.875	18.000	2.375	2.375	3.500	1.813	11.875	576

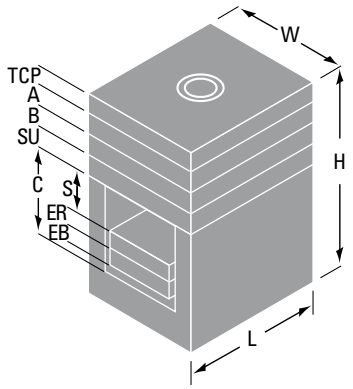
All Items	W	10.875	EB	1.000	P	1.688	TCP	0.875	RPx	8.250	RPg	0.625
	L	18.000	ER	0.500	SU	1.875	RPos	8.125	RPy	2.813	LPg	0.875

11.875 × 12.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1212-13-13	11.875	12.000	1.375	1.375	3.000	1.188	9.375	335
EDA1212-17-17	11.875	12.000	1.875	1.875	3.000	1.188	10.375	375
EDA1212-23-23	11.875	12.000	2.375	2.375	3.500	1.688	11.875	422
EDA1212-27-27	11.875	12.000	2.875	2.875	4.000	2.188	13.375	468

All Items	W	11.875	EB	1.125	P	1.688	TCP	0.875	RPx	5.125	RPg	0.750
	L	12.000	ER	0.500	SU	1.875	RPos	5.000	RPy	3.188	LPg	1.000

Product Selection Tables



Variables

Below is a list of the variables for the Edge series mold bases and their definitions

W = Width
L = Length
TCP = Top clamp plate thickness
A = A plate thickness
B = B plate thickness
SU = Support plate thickness
C = Height of the riser
S = Maximum stroke of the ejector bar
H = Mold base height
EB = Ejector bar thickness
ER = Ejector retainer thickness
P = Housing riser thickness
RPx = Return pin location on the X axis (3 places)
RPy = Return pin location on the Y axis (4 places)
RPos = Return pin offset on the X axis (1 place)
RPg = Return pin diameter
LPg = Leader pin diameter

11.875 × 15.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1215-13-13	11.875	15.000	1.375	1.375	3.000	1.188	9.375	419
EDA1215-17-17	11.875	15.000	1.875	1.875	3.000	1.188	10.375	469
EDA1215-23-23	11.875	15.000	2.375	2.375	3.500	1.688	11.875	527
EDA1215-27-27	11.875	15.000	2.875	2.875	4.000	2.188	13.375	584

All Items	W	11.875	EB	1.125	P	1.688	TCP	0.875	RPx	6.625	RPg	0.750
	L	15.000	ER	0.500	SU	1.875	RPos	6.500	RPy	3.188	LPg	1.000

11.875 × 20.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1220-13-13	11.875	20.000	1.375	1.375	3.000	1.188	9.375	558
EDA1220-17-17	11.875	20.000	1.875	1.875	3.000	1.188	10.375	625
EDA1220-23-23	11.875	20.000	2.375	2.375	3.500	1.688	11.875	702
EDA1220-27-27	11.875	20.000	2.875	2.875	4.000	2.188	13.375	779

All Items	W	11.875	EB	1.125	P	1.688	TCP	0.875	RPx	9.125	RPg	0.750
	L	20.000	ER	0.500	SU	1.875	RPos	9.000	RPy	3.188	LPg	1.000

13.375 × 15.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1315-13-13	13.375	15.000	1.375	1.375	3.000	1.063	9.875	505
EDA1315-17-17	13.375	15.000	1.875	1.875	3.000	1.063	10.875	562
EDA1315-23-23	13.375	15.000	2.375	2.375	3.500	1.563	12.375	627
EDA1315-27-27	13.375	15.000	2.875	2.875	4.000	2.063	13.875	692

All Items	W	13.375	EB	1.125	P	1.875	TCP	1.375	RPx	6.625	RPg	0.750
	L	15.000	ER	0.625	SU	1.875	RPos	6.500	RPy	3.813	LPg	1.000

13.375 × 18.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1318-13-13	13.375	18.000	1.375	1.375	3.000	1.063	9.875	606
EDA1318-17-17	13.375	18.000	1.875	1.875	3.000	1.063	10.875	675
EDA1318-23-23	13.375	18.000	2.375	2.375	3.500	1.563	12.375	752
EDA1318-27-27	13.375	18.000	2.875	2.875	4.000	2.063	13.875	830

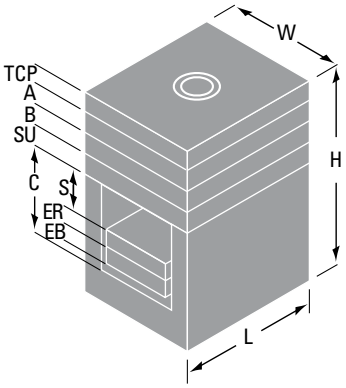
All Items	W	13.375	EB	1.125	P	1.875	TCP	1.375	RPx	8.125	RPg	0.750
	L	18.000	ER	0.625	SU	1.875	RPos	8.000	RPy	3.813	LPg	1.000

13.375 × 20.750

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1321-17-17	13.375	20.750	1.875	1.875	3.000	1.063	10.875	777
EDA1321-23-23	13.375	20.750	2.375	2.375	3.500	1.563	12.375	867
EDA1321-27-27	13.375	20.750	2.875	2.875	4.000	2.063	13.875	957

All Items	W	13.375	EB	1.125	P	1.875	TCP	1.375	RPx	9.500	RPg	0.750
	L	12.750	ER	0.625	SU	1.875	RPos	9.375	RPy	3.813	LPg	1.000

Product Selection Tables



Variables

Below is a list of the variables for the Edge series mold bases and their definitions

W = Width
L = Length
TCP = Top clamp plate thickness
A = A plate thickness
B = B plate thickness
SU = Support plate thickness
C = Height of the riser
S = Maximum stroke of the ejector bar
H = Mold base height
EB = Ejector bar thickness
ER = Ejector retainer thickness
P = Housing riser thickness
RPx = Return pin location on the X axis (3 places)
RPy = Return pin location on the Y axis (4 places)
RPos = Return pin offset on the X axis (1 place)
RPg = Return pin diameter
LPg = Leader pin diameter

13.375 × 23.500

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1323-17-17	13.375	23.500	1.875	1.875	3.000	1.063	10.875	881
EDA1323-23-23	13.375	23.500	2.375	2.375	3.500	1.563	12.375	982
EDA1323-27-27	13.375	23.500	2.875	2.875	4.000	2.063	13.875	1084

All Items	W	13.375	EB	1.125	P	1.875	TCP	1.375	RPx	10.875	RPg	0.750
	L	23.500	ER	0.625	SU	1.875	RPos	10.750	RPy	3.813	LPg	1.000

14.875 × 17.875

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1518-17-17	14.875	17.875	1.875	1.875	3.500	1.563	11.875	790
EDA1518-23-23	14.875	17.875	2.375	2.375	3.500	1.563	12.875	865
EDA1518-27-27	14.875	17.875	2.875	2.875	4.000	2.063	14.375	950

All Items	W	14.875	EB	1.125	P	1.875	TCP	1.375	RPx	8.063	RPg	0.750
	L	17.875	ER	0.625	SU	2.375	RPos	7.938	RPy	3.875	LPg	1.250

14.875 × 23.750

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1524-17-17	14.875	23.750	1.875	1.875	3.500	1.563	11.875	1050
EDA1524-23-23	14.875	23.750	2.375	2.375	3.500	1.563	12.875	1150
EDA1524-27-27	14.875	23.750	2.875	2.875	4.000	2.063	14.375	1262

All Items	W	14.875	EB	1.125	P	1.875	TCP	1.375	RPx	11.000	RPg	0.750
	L	23.750	ER	0.625	SU	2.375	RPos	10.875	RPy	3.875	LPg	1.250

15.875 × 16.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1616-23-23	15.875	16.000	2.375	2.375	3.500	1.563	12.875	825
EDA1616-27-27	15.875	16.000	2.875	2.875	4.000	2.063	14.375	906

All Items	W	15.875	EB	1.125	P	1.875	TCP	1.375	RPx	7.125	RPg	0.750
	L	16.000	ER	0.625	SU	2.375	RPos	7.000	RPy	4.375	LPg	1.250

15.875 × 20.000

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1620-23-23	15.875	20.000	2.375	2.375	3.500	1.563	12.875	1031
EDA1620-27-27	15.875	20.000	2.875	2.875	4.000	2.063	14.375	1132

All Items	W	15.875	EB	1.125	P	1.875	TCP	1.375	RPx	9.125	RPg	0.750
	L	20.000	ER	0.625	SU	2.375	RPos	9.000	RPy	4.375	LPg	1.250

15.875 × 23.500

ITEM NUMBER	W	L	A	B	C	S	H	WEIGHT (LBS)
EDA1623-23-23	15.875	23.500	2.375	2.375	3.500	1.563	12.875	1212
EDA1623-27-27	15.875	23.500	2.875	2.875	4.000	2.063	14.375	1330

All Items	W	15.875	EB	1.125	P	1.875	TCP	1.375	RPx	10.875	RPg	0.750
	L	23.500	ER	0.625	SU	2.375	RPos	10.750	RPy	4.375	LPg	1.250

Get the Edge with D-M-E Mold Components

D-M-E has been an innovator in the development of mold technologies ever since it standardized mold base offerings in the 1940s to enable moldmakers to focus their creativity on value-added core and cavity work. D-M-E continues its innovations by introducing new mold components that complement your Edge mold base, or any D-M-E mold base, for that matter.

Here are just a few of the mold components that will give your D-M-E mold base the edge:

Pins, sleeves and blades

A comprehensive line of pins, sleeves and blades – in Inch, DIN and JIS standards – all of which undergo rigorous D-M-E quality assurance testing, are available at competitive prices with fast delivery. From straight, shoulder or keyed ejector pins to nitrided ejector sleeves and close-tolerance ejector blades to core pins, return pins and sprue puller pins, D-M-E has the products that match your application needs.

D-M-E has the broadest selection of market-leading mold technologies available around the globe, with many choices within hundreds of product lines.



Sprue bushings and locating rings
A wide range of hardened, ground and polished sprue bushings and more than a dozen locating ring options are available from D-M-E to prepare for maximum production performance.

Check out the D-M-E Mold Components Catalog for the products that match your application needs.

Mold interlocks
For precise alignment of mold halves, mold plates or individual cavities or cores, D-M-E has a large selection of mold interlocks that are a perfect fit for all of your applications. From the innovative IN2 interlocks that offer interchangeable inserts to a variety of side, top, round and rectangular interlocks, D-M-E has the products to eliminate your mold alignment concerns.

Thousands of other mold components to complement your mold base selection
D-M-E has the broadest selection of market-leading mold technologies available around the globe, with many choices within hundreds of product lines. Our proven knowledge and expertise has made D-M-E the preferred supplier to many of the world's leading companies. Check out the D-M-E Mold Components Catalog for the products that match your application needs.



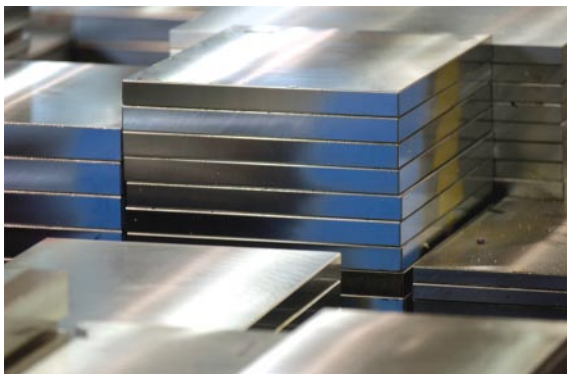




Quick Delivery Specials Features







D-M-E Standard Mold Bases Included in the QDS Program

- A-Series Mold Bases
- B-Series Mold Bases
- X-Series Mold Bases
- AX-Series Mold Bases
- T-Series Mold Bases
- Cavity Retainer Sets

Steel Types and Plate Thicknesses Included

- D-M-E #1, #2 and #3 steel from 7/8" thick to 5 7/8" thick
- D-M-E #7 steel from 7/8" thick to 2 7/8" thick

No Charge Features

Available on all D-M-E Mold Bases and Cavity Retainer Sets

- 1-piece or 3-piece housing (standard D-M-E rails)
- Ejector housing covers
- Relocate or omit return pins
- Relocate or omit assembly screws (top and/or bottom)
- Relocate or omit assembly screws in ejector set
- Relocate or omit leader pins and bushings
- Relocate or omit center holes
- Relocate or omit stop pins in ejector bar
- Sprue puller pin of your choice
- Machining for all D-M-E sprue bushings and most clamp slots
- Machining for most locating rings

All ship dates are calculated from receipt of final customer information.

Quick Delivery Specials Features

5-DAY SHIPPING Special Mold Bases Shipping in FIVE Working Days

Includes all D-M-E Standard Mold Bases #1, #2 and #3 steel ($^{7}/_{8}$" to $5^{7}/_{8}$" thick) and #7 steel ($^{7}/_{8}$" to $2^{7}/_{8}$" thick); and all "no charge" items, plus:

- Machine for and install guided ejection – 2 or 4 places
- Machine for and install support pillars
- Machine for and install additional stop pins
- Machine press knock-out in bottom clamp plate (tap in ejector bar, if required)
- Machine pry bar slots
- Machine leader pin vent slots in rails
- Machine for spring holes
- Drill and tap lifting holes
- Drill and tap safety strap holes (location $\pm^{1}/_{32}$")
- Machine for and install extra assembly screws in top and/or bottom
- Machine for and install extra assembly screws in ejector assembly
- Machine for and install added return pins
- Rough mill/bore cavity and core pocket; blind or through (NOTE: $^{1}/_{2}$" minimum radius required)

7-DAY SHIPPING Special Mold Bases Shipping in SEVEN Working Days

Includes all features specified above in five working days, plus:

- Machine for D-M-E three-piece extension bushings
- Drill and tap horizontal water lines
- Drill water pipe clearance holes
- Drill vertical water lines (excluding o-ring machining)
- Machine for D-M-E angle pin inserts
- Finish mill/bore cavity and core pocket; blind or through (NOTE: $^{1}/_{2}$" minimum radius required)

11-DAY SHIPPING Special Mold Bases Shipping in ELEVEN Working Days

Includes all features specified above in seven working days, plus:

- Machine for D-M-E parting line interlocks
- Provide special thickness plates (maximum plate thickness of $5^{7}/_{8}$" in D-M-E #1, #2 and #3 steels, and $2^{7}/_{8}$" in D-M-E #7 steel

Contour Roughing Services

Key Advantages of Contour Roughing

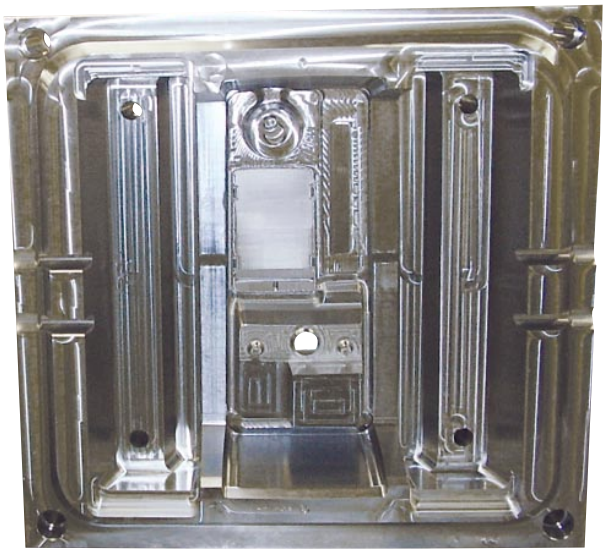
- Moldmakers can use this service to extend their in-house capacity, reduce lead time and focus on other high-value machining
- Consistent machining allowance throughout the surface of the cavity block provides even finishing without areas of heavy stock
- D-M-E can provide customers with the CAM program to continue the work where D-M-E left off, saving time and programming expense
- Contour roughing can be bundled with the option to stress-relieve cavity blocks and a custom mold base

At the request of moldmakers, D-M-E has begun to offer contour roughing services. D-M-E can rough mill complex part shapes into mold plates, even for milling that requires large and deep cavities.

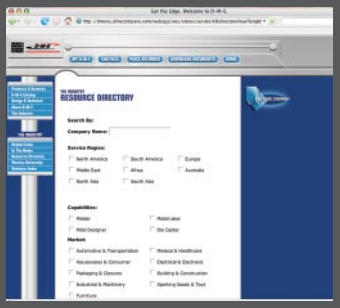


- The Contour Roughing Service begins with complex core and cavity CAD files from customers
- D-M-E programs 3D cavity roughing tool paths that generate a rough milled surface, allowing machining stock for finishing by the customer
- D-M-E uses industry-leading CAM software for programming contour roughing tool paths leaving consistent machining allowance throughout the surface of the cavity block

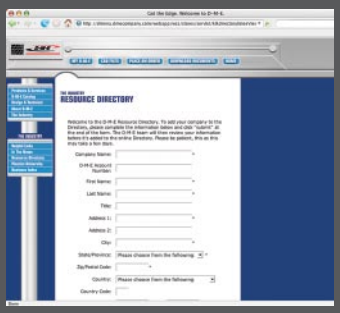
For more details on the Contour Roughing Service, contact your D-M-E representative today.



Resource Directory



Search on multiple parameters to find exactly the resource you need



Want to be included in the directory? It only takes a moment to add your information and it's free

D-M-E's Online Resource Directory

800-626-6653
www.dme.net/resource

D-M-E's new online Resource Directory helps match skills and needs for almost any task that needs doing

Looking for a mold polisher in Tucson? A prototype molding shop in Michigan? A designer in Twin Falls? A diecaster in Alabama? They're all here. The D-M-E website now includes a comprehensive, searchable database of service providers. Indexed to speed searches, this powerful tool connects resources with those who need them.

Comprehensive searchability

Find resources by almost any combination of specialty, geography, or name

The latest information

Access the latest listings in real-time to meet your needs fast

Connect with customers

Great new business resource for service suppliers looking to expand their client base

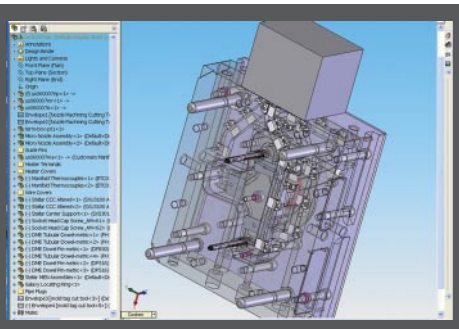
Easy to use

Intuitive user interface makes it easy to quickly find what you're looking for

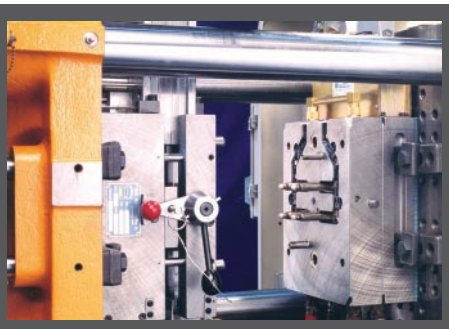
24/7 access

Find the resources you need when you need them

The D-M-E industry resource directory is just part of our commitment to help ensure moldmakers, molders, and mold designers have a productivity edge. Visit today to find resources. If you're a service provider, add your information to get started; it's free.







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D-M-E Technical Services



ООО "ВИВТЕХ Инжиниринг"

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D-M-E American Standard Mold Base Quote Request Form

Company Name:: _____ Date: _____

Additional Features – Ships in 5 Working Days

Guided Ejection:

Quantity: _____ Pin Dia.: _____ ☐ System 1 ☐ System 2

☐ Recommended Position ☐ Custom Position: GEx _____ GEy _____

☐ Bronze Bushing ☐ Self-Lubricating Bushing _____

Pry Slots: (4 places each plate)

(NOTE: P = Parting Line NP = Non Parting Line)

☐ TCP: P _____ NP _____

☐ A Plate: P _____ NP _____

☐ B Plate: P _____ NP _____

☐ Support Plate: P _____ NP _____

☐ Housing: P _____ NP _____

☐ _____ P _____ NP _____

Lift Holes: (Prints required if not on center)

☐ TCP: Quantity _____ Dia. _____

☐ A Plate: Quantity _____ Dia. _____

☐ B Plate: Quantity _____ Dia. _____

☐ Support Plate: Quantity _____ Dia. _____

☐ Housing:

☐ _____: Quantity _____ Dia. _____

☐ On center _____

☐ **Leader Pin Vents:**

(NOTE: Designed in all 15" and wider mold bases. When desired, can be specified on smaller molds.)

☐ **Rough Rectangular Pockets:** (Prints required) Length _____ Width _____

☐ Through ☐ Blind (specify depth): _____ Corner Radius (.50 min/1.00 max): _____

(NOTE: Rough Pocket tolerance -.062 per side)

☐ **Knock-out Holes:** (Prints required if not on center) Drill Quantity _____ Tap Quantity _____

☐ **Mold Strap Holes:** (Prints required) Quantity _____

☐ **Spring Pockets:** (Prints required) Quantity _____ Number of Plates _____

☐ **Support Pillars:** (Prints required) Quantity _____ Diameter _____ Style _____

Additional Components: (Prints required)

☐ Lower Assembly Screws: Quantity _____

☐ Upper Assembly Screws: Quantity _____

☐ Ejector Assembly Screws: Quantity _____

☐ Return Pins: Quantity _____

☐ Stop Pins: Quantity _____

Comments: _____

Additional Features – Ships in 7 Working Days (includes features listed in 5 working days)

☐ **Extension Bushing (T-Series):**

Extension Bushing Item Number: _____ Stripper Bushing: TEB-0001

☐ **Finished Rectangular Pockets:** (Prints required) Length _____ Width _____

☐ Through ☐ Blind (specify depth): _____ Corner Radius (.50 min/1.00 max): _____

(NOTE: Finished pocket tolerance +/- .001)

☐ **Waterlines:** (Prints required)

Diameter: _____

Number of Plates with Waterlines: _____

Total Length of Waterlines (in inches) in Each Plate: _____

Number of Sides: _____

Comments: _____

Additional Features – Ships in 11 Working Days (includes features listed in 7 working days)

☐ **Special Plate Thickness:**

Plate to be altered: _____ Thickness: _____

☐ **Parting Line Interlocks** (see Mold Components catalog; Print required)**:**

Quantity: _____

Part Numbers: _____

Comments: _____

For additional work, contact Customer Service at 800-626-6653 or email drawing files to dme_cad@dme.net

ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

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Hot Runner Quote Request Form

Fax your completed Hot Runner Quote Request Form to 248-544-5707 or call to discuss your application with D-M-E.

Date:	Account #
Bill to:	Ship to:
Contact name (First & Last):	
Phone #	Fax #
Extension	Email

Please provide the following information:

What is the material?	
Are there any fillers?	
Does it require a color change?	
How many cavities/drops?	
What type of gate is needed?	
Is balance needed?	
What is the part weight?	
What is the wall thickness?	
How far does the nozzle extend into the "A" plate?	
What is the mold base size?	
Is there anything special we should be aware of?	

D-M-E Application Engineering Systems

Galaxy Hot Runner Systems

Powerful performance for multi-cavity applications

Designed to maximize production and shorten set-up and service time, Galaxy systems are tailor-made for high-cavitation molding applications requiring excellent gate cosmetics, such as caps and closures, cosmetic packaging, cutlery, and small medical, electronic and automotive parts.

The D-M-E Applications Engineering Team carefully reviews the requirements of each project and then designs a Galaxy Hot Runner System to optimize molding performance. Each hot half system is fully assembled and tested prior to shipment to ensure maximum reliability, and backed by:

- The best service in the industry
- Global technical support
- Rapid manufacturing capabilities
- Value-added applications engineering



Meteor™ Hot Runner Systems



Custom configured for quick delivery

Meteor™ Hot Runner Systems provide a versatile yet economical solution for many hot runner mold designs. Two-drop (in-line) and four-drop (X-style) manifolds are available in sizes to suit a variety of applications. Pre-engineered with accurately machined flow channels, nozzle ports can be freely located anywhere within each manifold's flow channel limits.

Key features include:

- Complete hot half system, fully assembled, wired and tested, ready to bolt onto the mold
- Turnkey solution with optional D-M-E mold base and 5-zone or 8-zone temperature controller
- Industry-leading three-week delivery time

Stellar™ Hot Runner Systems



The best solution for precision thermoplastic micromolding

Stellar is based on new D-M-E hot runner system architecture designed to deliver tremendous flexibility to small part and high-cavitation molding. Stellar performs in a broad array of applications — including electrical, electronic, medical, and cosmetic packaging — and processes many demanding engineering resins without property degradation.

Look to Stellar to provide these advantages:

- Modular system design increases application flexibility
- Front-loaded components enable rapid serviceability to maximize uptime and productivity
- Precise heat profiling in all nozzle lengths ensures consistent processing temperatures
- Challenging materials process easily, including amorphous materials such as PET and crystalline materials such as PBT and PA

Hot Runner Warranty

D-M-E Company
29111 Stephenson Highway, Madison Heights, MI 48071
Tel. 248/398-6000 ▪ FAX 248/398-6174

D-M-E Hot Runner Systems and Temperature Controllers are warranted pursuant to D-M-E Company's standard terms and conditions for the time periods set forth below. The warranty (i) *covers items sold and shipped [supplied in accordance with orders placed by the customer with D-M-E on or after JULY 1, 2003,* (ii) *applies only to the original D-M-E customer and,* (iii) *is not transferable to subsequent owners of the product except as specifically set forth herein (see Transferability below for conditions).*

WARRANTY PERIODS APPLICABLE TO SPECIFIED D-M-E PRODUCTS; COVERAGE STARTS UPON DATE OF SHIPMENT:

ITEM	COVERAGE
D-M-E Hot Runner Package Systems (plates designed, machined & assembled by D-M-E, **excluding Electrical Parts**)	Three (3) years
Galaxy & Stellar Hot Runner Package Systems Only (plates designed, machined & assembled by D-M-E, **excluding Electrical Parts**)	Plastic leakage within hot runner plates covered for Three (3) years; **excluding Gate Detail. (Galaxy & Stellar Hot Runner Package Systems Only)**
D-M-E Hot Runner Systems supplied as Manifold and Components Only (neither plates nor assembly supplied by D-M-E, **excluding Electrical Parts**)	One (1) year
D-M-E Electrical Parts (all heaters and thermocouples)	One (1) year
D-M-E Mold Controls (Temperature, Valve Gate & Cavity Pressure Controls, **excluding Fuses & Triacs**)	Three (3) years

Replacement or repair will be made at the election of D-M-E; implemented at a D-M-E facility and/or by shipment of replacement parts to the customer for installation and/or return of defective parts to D-M-E for repair.

Transferability:

This warranty may be transferred by the original D-M-E Customer to a subsequent owner of the product *if all of the following conditions exist:* (i) the original D-M-E Customer purchased the product for purposes of re-sale or other immediate transfer and D-M-E was made aware of these purposes at the time of purchase in writing, (ii) within thirty (30) days from the date of invoice, D-M-E is notified in writing of the transfer and provided with the name of the new owner (hereafter "Transferee"), the contact person of the Transferee and the Transferee's address.

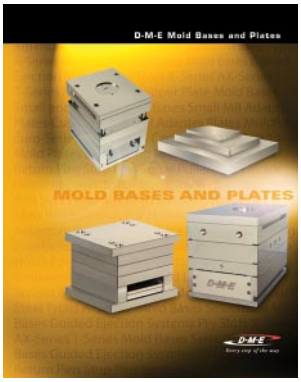
Exclusions:

- Normal wear of the system and components including, but not limited to: Nozzle Tips, Gate Shell Insulators, Nozzle Seal Rings, O-rings, Piston Seals, Valve Stems and Electrical connectors
- Damage to the critical seal-off areas on the manifold, nozzle bodies, or in the mating cavities or cavity inserts caused by improper assembly, operation, disassembly and maintenance
- Wear or damage resulting from corrosion or processing of abrasive/aggressive resins
- Damage due to failure to follow recommended operation and maintenance procedures specified in the D-M-E Hot Runner Manual, Hot Runner Nameplate, Service Bulletins, User Manuals or failure to follow standard industry operation and maintenance procedure
- Damage caused by abuse, neglect, and failure to adhere to D-M-E instructions and operational recommendations
- Damage caused by improper installation, operation and maintenance
- Damage resulting from modifications to the product or component parts, abuse or neglect
- Failure caused by modifications made to the product without the prior written approval of D-M-E
- Damage resulting from operation of products at injection pressures greater than 20,000 psi (1360 bar) on 250, 375, and 625 Series, Gate-Mate 4, Valve Gate, Galaxy and Stellar Systems; unless specifically designed and manufactured for higher pressure applications in agreement with manufacturer
- Damage or failure caused by the product's inability to perform as a component of a system design not supplied by D-M-E
- Operator absence or operator error
- Operator maintenance and training capability
- Electrical interruptions
- Events beyond the control of D-M-E
- Errors or actions by a third party
- Non-compliance with local laws, codes, ordinances or regulations codes or bylaws unless D-M-E is informed of them by our customer at the time of order placement

D-M-E: Your Complete Mold Technologies Provider

Every step of the way

Check Out All of the D-M-E Mold Technology Catalogs And You'll See Why We're an Essential Resource to Thousands of Customers Worldwide!



CATALOG: 308 PAGES

D-M-E Mold Bases & Plates

Choose from the world's widest selection of mold bases from uniquely featured, off-the-shelf solutions to full-featured, custom-configured offerings. An array of standard and specially machined mold plate sizes gives you unlimited options.



CATALOG: 156 PAGES

MUD Quick-Change Systems From D-M-E

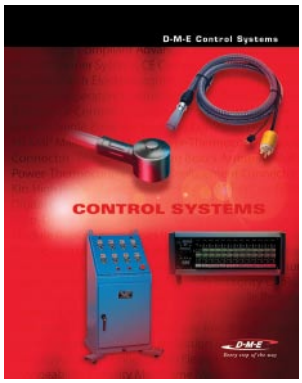
Reduce downtime by as much as 75 percent with an innovative approach to fast production changeovers. Master Unit Die is the leader in quick-change systems and the MUD Catalog offers many systems that will maximize your production volume.



CATALOG: 316 PAGES

D-M-E Mold Components

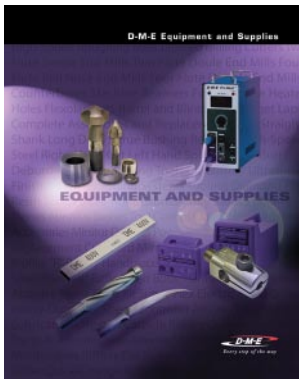
With the largest selection of mold components available around the globe, the D-M-E Mold Components Catalog has the products that will help you meet the unprecedented demands you face for speed, cost reduction and performance.



CATALOG: 76 PAGES

D-M-E Control Systems

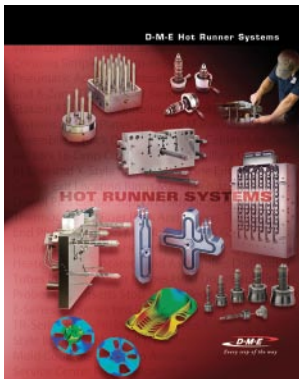
Powerful. Flexible. Affordable. That's what molders want from today's generation of hot runner, valve gate, and process controls, and D-M-E delivers with a broad line of controllers sure to fit the most demanding application.



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D-M-E Equipment and Supplies

From high-speed cutting tools and finishing and polishing systems to a vast array of maintenance, repair and operation-related products, the D-M-E Equipment and Supplies Catalog is an invaluable resource for mold technology professionals.



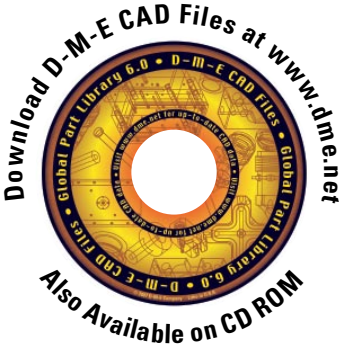
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D-M-E Hot Runner Systems

Moldmakers, molders and mold designers worldwide look to the D-M-E Hot Runner Systems Catalog for essential hot runner solutions. From best-in-class components to complete, fully-functioning hot half systems, D-M-E has the broadest range of hot runner products and services.

D-M-E, an essential resource to the customers it serves worldwide, offers the industry's broadest range of market-leading products, unsurpassed knowledge and expertise, a global logistics infrastructure that ensures speed and accuracy, and a support organization unrivaled for its ability to assist customers when and where they need it. A complete line of hot runner systems, control systems, mold bases, MUD quick-change mold systems, mold components, moldmaking and molding equipment supplies, and technical services helps customers compete every step of the way.





D-M-E
Every step of the way

World Headquarters
D-M-E Company
29111 Stephenson Highway
Madison Heights, MI 48071
800-626-6653 *toll-free tel*
248-398-6000 *tel*
888-808-4363 *toll-free fax*
www.dme.net *web*
info@dme.net *e-mail*

D-M-E of Canada, Ltd.
6210 Northwest Drive
Mississauga, Ontario
Canada L4V 1J6
800-387-6600 *toll-free tel*
905-677-6370 *tel*
800-461-9965 *toll-free fax*
dme_canada@dme.net *e-mail*

D-M-E Europe C.V.B.A.
Industriepark Noord
B-2800 Mechelen Belgium
32-15-215011 *tel*
32-15-218235 *fax*
sales@dmeeu.com *e-mail*

a Milacron Company

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ООО "ВИВТЕХ" Москва, ул. Руставели д. 14, стр. 6 +7 (495) 755-91-45 info@vivtech.ru www.vivtech.ru www.shop.vivtech.ru

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Every step of the way

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