

ROUND MATE®

Systems

MOLDMAKERS REFERENCE GUIDE

3", 4", 6" & 8" INSERTS

UNCONTROLLED FOR REFERENCE ONLY

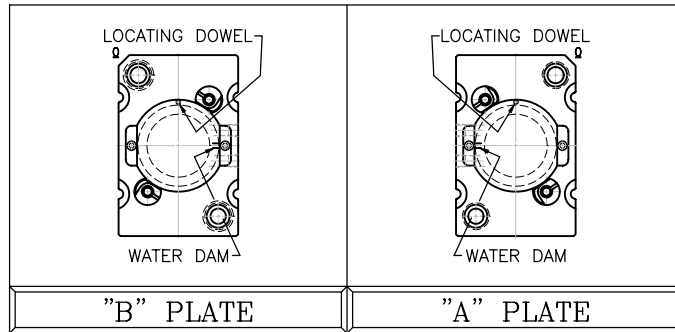
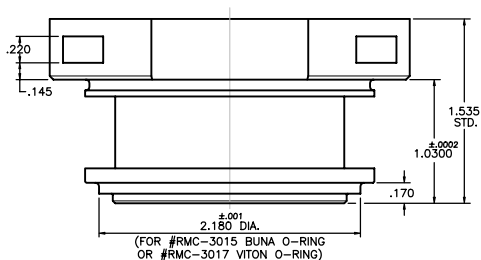
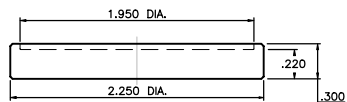
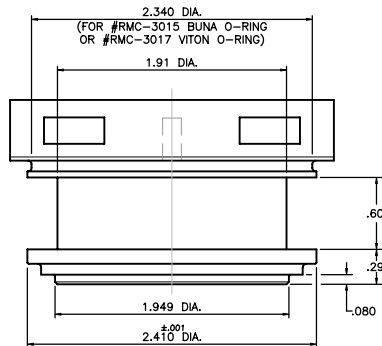
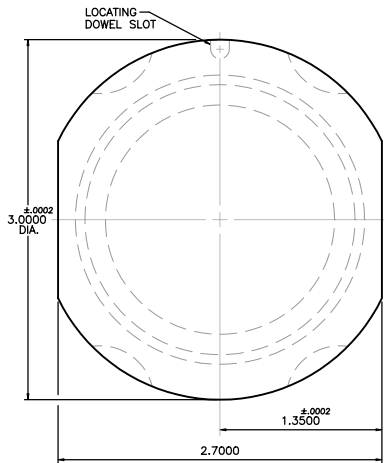
Issue Date:
February 12, 2003

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3" ROUND MATE® SINGLE POSITION INSERT DIMENSIONS



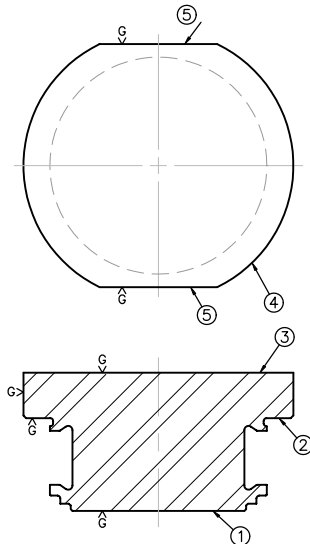
THE "A" INSERT IS THE SAME AS THE "B" INSERTS EXCEPT FOR THE WATER DAM LOCATION

TOOLMAKER IS TO INSTALL THE WATER DAM

WATER DAM IS TO LINE UP WITH WATER INLET/
OUTLET IN THE MASTER FRAME

3" ROUND MATE® SINGLE POSITION GRINDING PROCEDURES

(SEE ILLUSTRATION)



GRINDING PROCEDURES 3" ROUND MATE® INSERT

THIS DRAWING IS SUPPLIED TO AID IN GRINDING "HEAT TREATABLE" INSERTS AFTER "HEAT TREAT"

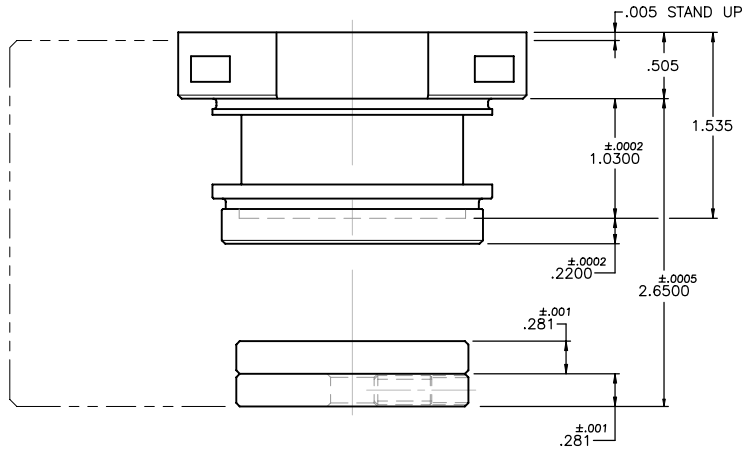
When you receive the "Round Mate"® insert, in any heat treatable steel, it is machined to .005 / .010 oversize, per side, on all critical dimensions. Following the heat treating process, this additional stock must be removed in the following sequence:

- (1) Grind .004 extra stock from the bottom, or small diameter end, of the insert.
- (2) Grind step, to the underside of the 3.000 diameter, to a measurement of 1.0300 (+/-.0002) Approximately the same .004 will be removed.
- (3) Grind the face, or parting line, of the insert to achieve an over-all thickness of 1.535 (+.005/-.004) Grinding within these tolerances places the O-rings in ideal position for a perfect seal.
- (4) Grind the outside diameter of the insert head to 3.0000 (+/-.0002)
- (5) The final step is grinding the flats. It is extremely important that the flats be ground in relationship to the center of the insert diameter to assure registration and the absence of a parting line mismatch on the molded part. The dimension is 2.7000 (+/-.0002) between the flats (the 2.7000 must be centered on the 3.000 diameter +/-.0002 TIR).

Note: The other outside surfaces on the insert are NOT shipped oversized, therefore , grinding will probably be unnecessary. However, we suggest you check these O.D.'s for accuracy after heat treat.

3" ROUND MATE® SINGLE POSITION

**PIN AND PARTING
LINE SETUP**



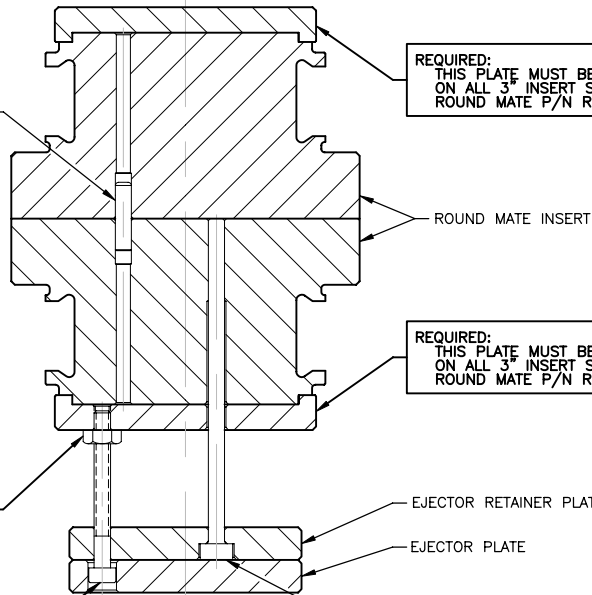
THIS DRAWING IS SUPPLIED TO AID WITH EJECTOR PIN AND PARTING LINE SET UP WHEN DESIGNING A ROUND MATE® MOLD.

THE 2.6500 DIMENSION IS SHOWN TO LOCATE THE EJECTOR PLATES, AND IN CONJUNCTION WITH DIMENSION: .281, TO DETERMINE EJECTOR PIN LENGTHS.

3" ROUND MATE® SINGLE POSITION REQUIREMENTS AND RECOMMENDATIONS

RECOMMENDED:
LEADER PINS ARE INSTALLED
IN THE MASTER FRAME. HOWEVER
DOWELS ARE GENERALLY INSTALLED
IN THE INSERT SET TO PROTECT
THE PARTING LINE WHILE ON THE
BENCH OR IN STORAGE.

REQUIRED:
THIS PLATE MUST BE INSTALLED
ON ALL 3" INSERT SETS.
ROUND MATE P/N RMC-3001

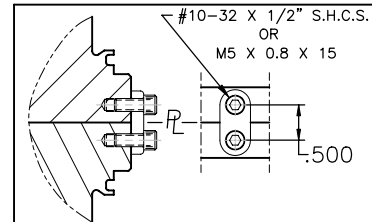


REQUIRED:
THIS PLATE MUST BE INSTALLED
ON ALL 3" INSERT SETS.
ROUND MATE P/N RMC-3001

REQUIRED:
ADD LOCK NUT TO BOLT.

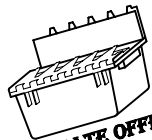
REQUIRED:
DRILL & C'BORE FOR SHCS TO
RETAIN EJECTOR PLATES WHILE
THE INSERT SET IS OUT OF THE
MASTER FRAME

RECOMMENDED:
RETURN PINS ARE INSTALLED
IN THE MASTER FRAME. HOWEVER
THEY ARE GENERALLY INSTALLED
IN THE INSERT SET TO PROTECT
THE PARTING LINE WHILE ON THE
BENCH OR IN STORAGE.



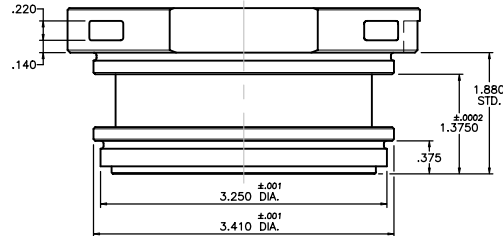
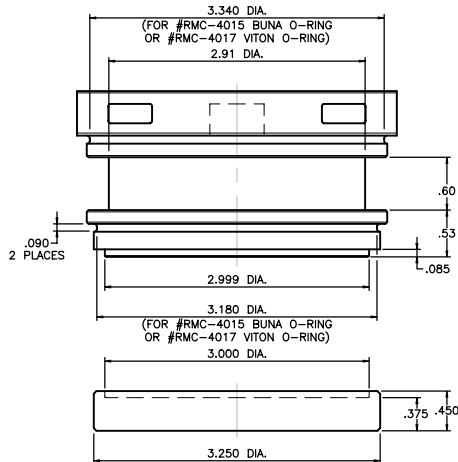
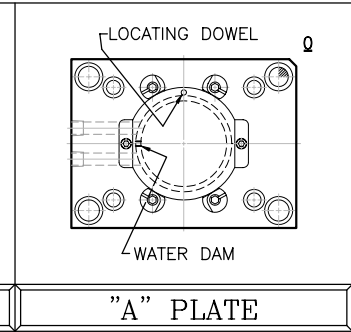
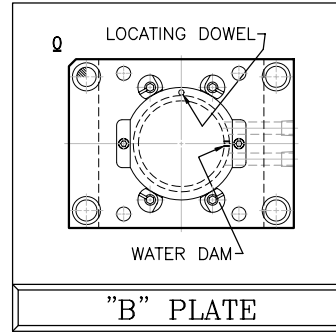
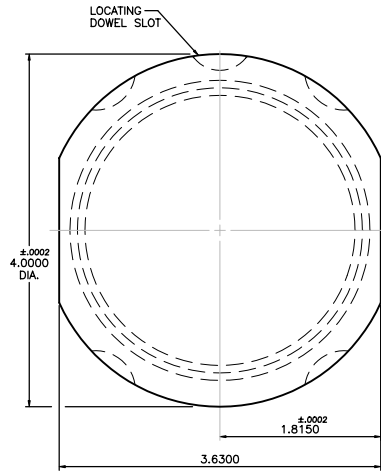
RECOMMENDED:
PARTING LINE SAFETY STRAPS
SHOULD BE USED WHEN THE MOLD
IS OUT OF THE MASTER FRAME
TO PROTECT THE PARTING LINE.
ONE INCLUDED WITH EACH INSERT
ROUND MATE P/N RMC-0017

NOTES



**ROUND MATE OFFERS
STORAGE BOXES FOR
ALL SIZES OF INSERT SETS.
REFERENCE CATALOG PAGE #6.02**

4" ROUND MATE® SINGLE POSITION INSERT DIMENSIONS



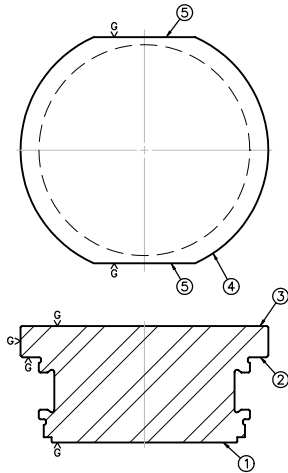
THE "A" INSERT IS THE SAME AS THE "B" INSERTS
EXCEPT FOR THE WATER DAM LOCATION

TOOLMAKER IS TO INSTALL THE WATER DAM

WATER DAM IS TO LINE UP WITH WATER INLET/
OUTLET IN THE MASTER FRAME

4" ROUND MATE® SINGLE POSITION GRINDING PROCEDURES

(SEE ILLUSTRATION)



GRINDING PROCEDURES 4" ROUND MATE® INSERT

- (1) Grind .004 extra stock from the bottom, or small diameter end, of the insert.
- (2) Grind step, to the underside of the 4.000 diameter, to a measurement of 1.375 ($\pm .0002$) Approximately the same .004 will be removed.
- (3) Grind the face, or parting line, of the insert to achieve an over-all thickness of 1.880 ($+0.005/-0.004$) (important note: this tolerance is compensated by springs under the return pins in the master frame. These spring will absorb up to .015 overall margin in the master frame parting line) Grinding within these tolerances places the O-rings in ideal position for a perfect seal.
- (4) Grind the outside diameter of the insert head to 4.0000 ($\pm .0002$)
- (5) The final step is grinding the flats. It is extremely important that the flats be ground in relationship to the center of the insert diameter to assure registration and the absence of a parting line mismatch on the molded part. The dimension is 3.6300 ($\pm .0002$) between the flats (the 3.6300 must be centered on the 4.000 diameter $\pm .0002$ TIR).

THIS DRAWING IS SUPPLIED TO AID IN GRINDING "HEAT TREATABLE" INSERTS AFTER "HEAT TREAT"

When you receive the "Round Mate"® insert, in any heat treatable steel, it is machined to .005 / .010 oversize, per side, on all critical dimensions. Following the heat treating process, this additional stock must be removed in the following sequence:

Note: The other outside surfaces on the insert are NOT shipped oversized, therefore, grinding will probably be unnecessary. However, we suggest you check these O.D.'s for accuracy after heat treat.

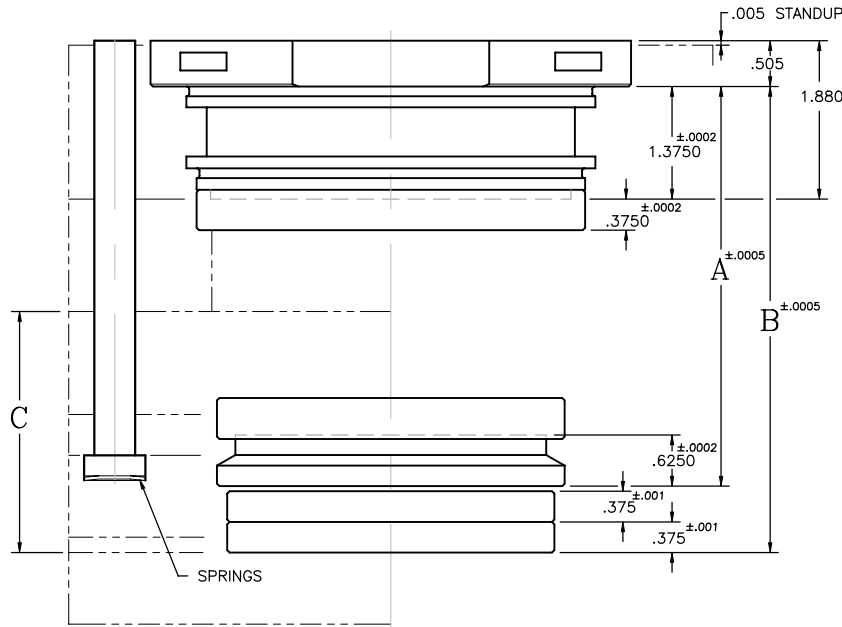
4" ROUND MATE® MULTI-POSITION PIN, SLEEVE, AND PARTING LINE SET UP

THIS DRAWING IS SUPPLIED TO AID WITH EJECTOR PIN, SLEEVE EJECTOR AND PARTING LINE SET UP WHEN DESIGNING A ROUND MATE® MOLD.

THE DIMENSION: "A", IS SHOWN TO LOCATE THE EJECTOR PLATES, AND IN CONJUNCTION WITH DIMENSION: .6250, TO DETERMINE EJECTOR PIN LENGTHS.

THE DIMENSION: "B", LOCATES THE CORE RETAINER PLATES, IF SLEEVE EJECTION IS UTILIZED, AND IN CONJUNCTION WITH DIMENSION: .375, TO DETERMINE CORE PIN LENGTHS.

ON MULTI POSITION MASTER FRAMES, WITH THE RUNNER RUNNING ACROSS THE FLAT OF THE INSERT FROM THE SIDE, THE .005 INSERT STANDUP ABOVE THE MOLD PLATE MUST BE HELD. RUNNER BLOCKS IN THE MASTER FRAME MUST LINE UP WITH THE PARTING LINE OF THE INSERT. THIS IS SET TO BE .005 ABOVE THE MOLD PLATE ON BOTH THE "A" AND THE "B" SIDES OF THE MASTER FRAME.

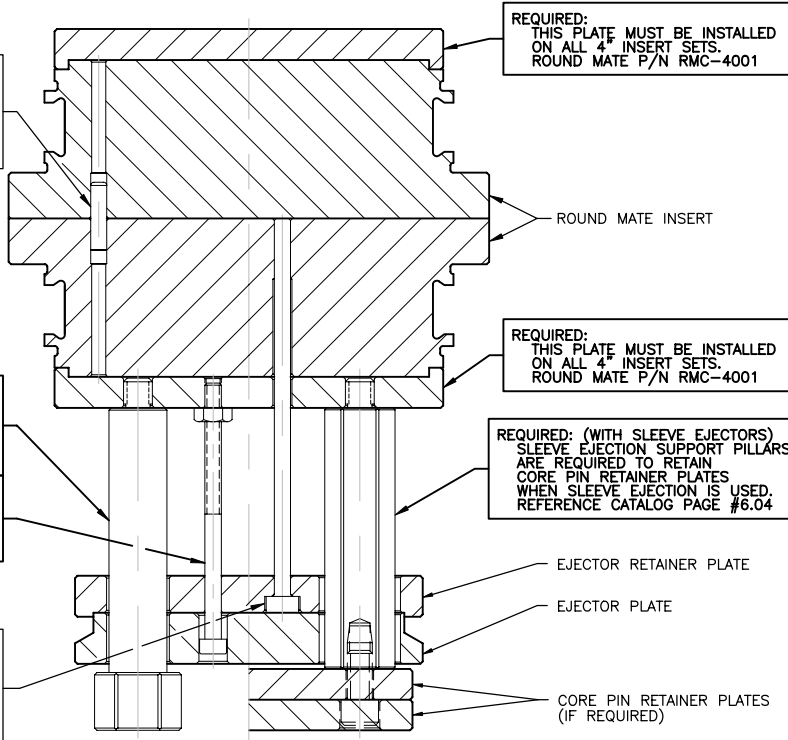


MASTER FRAME	C	A	B
RMF-0423	3.000	5.4375	6.2500

4" ROUND MATE® SINGLE POSITION & MULTI-POSITION

REQUIREMENTS AND RECOMMENDATIONS

RECOMMENDED:
LEADER PINS ARE INSTALLED
IN THE MASTER FRAME. HOWEVER
DOWELS ARE GENERALLY INSTALLED
IN THE INSERT SET TO PROTECT
THE PARTING LINE WHILE ON THE
BENCH OR IN STORAGE.



REQUIRED:
THIS PLATE MUST BE INSTALLED
ON ALL 4" INSERT SETS.
ROUND MATE P/N RMC-4001

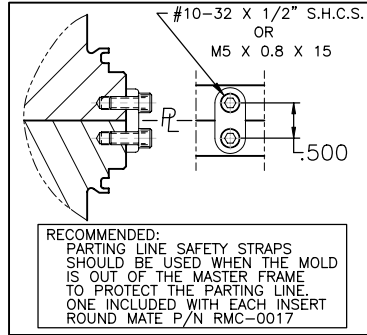
REQUIRED:
THIS PLATE MUST BE INSTALLED
ON ALL 4" INSERT SETS.
ROUND MATE P/N RMC-4001

REQUIRED: (WITH SLEEVE EJECTORS)
SLEEVE EJECTION SUPPORT PILLARS
ARE REQUIRED TO RETAIN
CORE PIN RETAINER PLATES
WHEN SLEEVE EJECTION IS USED.
REFERENCE CATALOG PAGE #6.04

REQUIRED: (PREFERRED OPTION)
SUPPORT PILLARS MUST BE USED
TO RETAIN EJECTOR PLATES WHILE
THE INSERT SET IS OUT OF THE
MASTER FRAME.
REFERENCE CATALOG PAGE #6.04

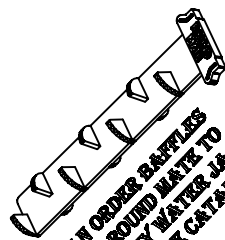
REQUIRED: (ALTERNATE OPTION)
DRILL & C'BORE FOR SHCS TO
RETAIN EJECTOR PLATES WHILE
THE INSERT SET IS OUT OF THE
MASTER FRAME

RECOMMENDED:
RETURN PINS ARE INSTALLED
IN THE MASTER FRAME. HOWEVER
THEY ARE GENERALLY INSTALLED
IN THE INSERT SET TO PROTECT
THE PARTING LINE WHILE ON THE
BENCH OR IN STORAGE.



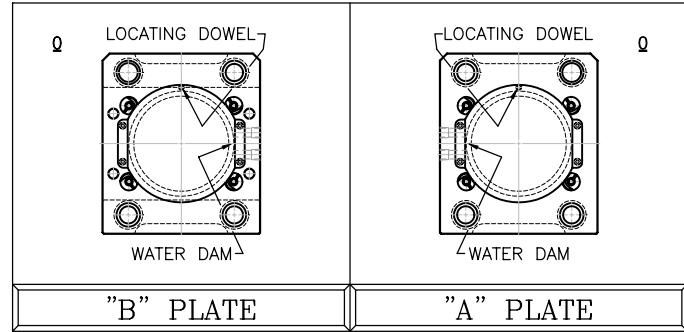
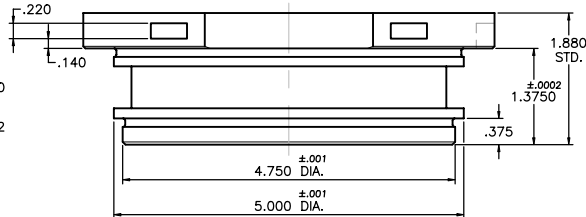
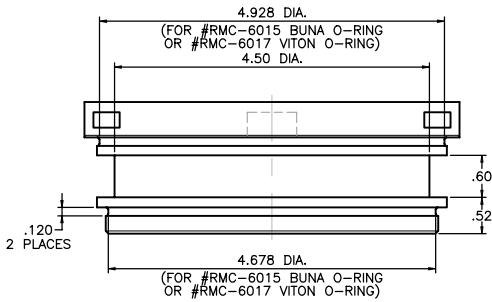
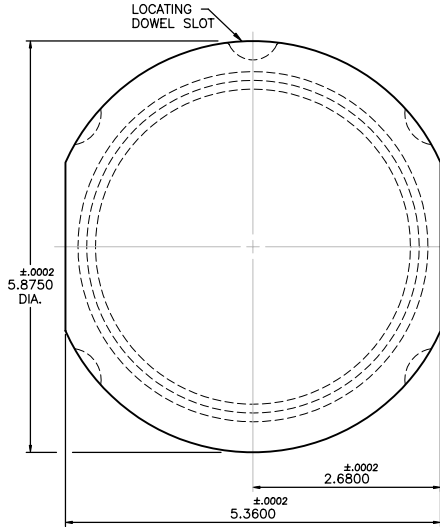
RECOMMENDED:
PARTING LINE SAFETY STRAPS
SHOULD BE USED WHEN THE MOLD
IS OUT OF THE MASTER FRAME
TO PROTECT THE PARTING LINE.
ONE INCLUDED WITH EACH INSERT
ROUND MATE P/N RMC-0017

NOTES



**I CAN ORDER BAFFLES
FROM ROUND WATER TO
USE IN MY WATER JACKETS.
REFERENCE CATALOG PAGE PG.08**

6" ROUND MATE® SINGLE POSITION INSERT DIMENSIONS



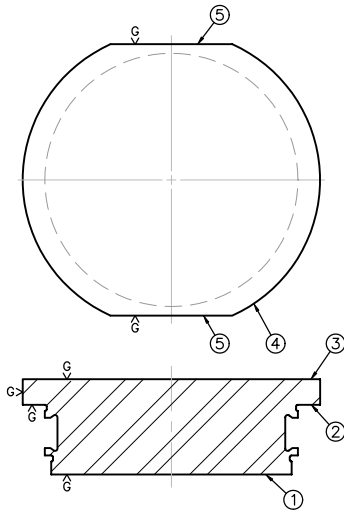
THE "A" INSERT IS THE SAME AS THE "B" INSERTS
EXCEPT FOR THE WATER DAM LOCATION

TOOLMAKER IS TO INSTALL THE WATER DAM

WATER DAM IS TO LINE UP WITH WATER INLET/
OUTLET IN THE MASTER FRAME

6" ROUND MATE® SINGLE POSITION GRINDING PROCEDURES

(SEE ILLUSTRATION)



THIS DRAWING IS SUPPLIED TO AID IN GRINDING "HEAT TREATABLE" INSERTS AFTER "HEAT TREAT"

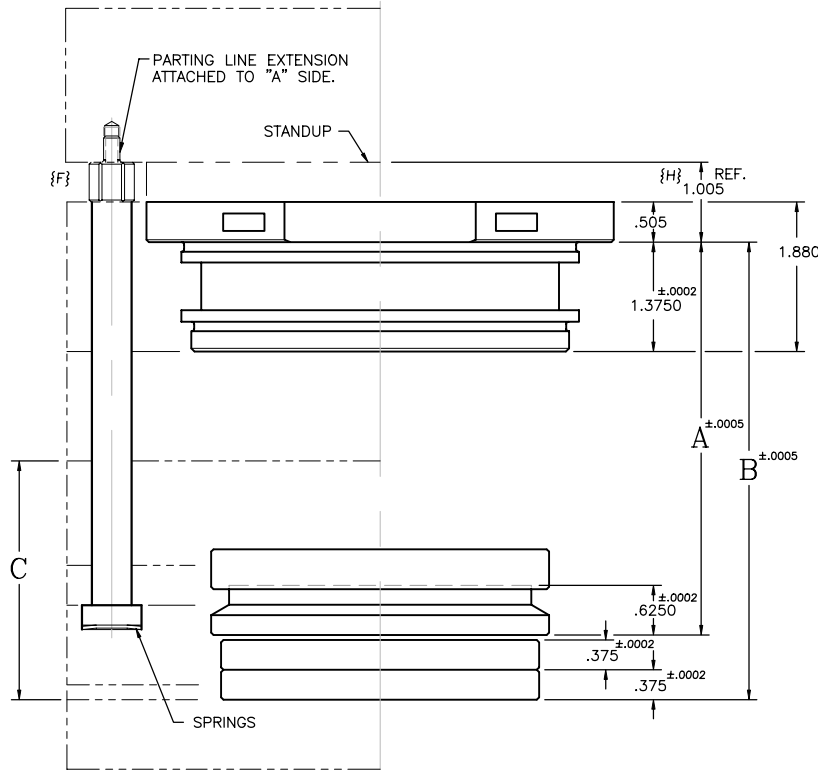
When you receive the "Round Mate"® insert, in any heat treatable steel, it is machined to .005 / .010 oversize, per side, on all critical dimensions. Following the heat treating process, this additional stock must be removed in the following sequence:

- (1) Grind .004 extra stock from the bottom, or small diameter end, of the insert.
- (2) Grind step, to the underside of the 5.875 diameter, to a measurement of 1.375 (+/-.0002) Approximately the same .004 will be removed.
- (3) Grind the face, or parting line, of the insert to achieve an over-all thickness of 1.880 (+.000/-.004) (important note: this tolerance is compensated by springs under the return pins in the master frame. These springs will absorb up to .015 overall margin in the master frame parting line) Grinding within these tolerances places the O-rings in ideal position for a perfect seal.
- (4) Grind the outside diameter of the insert head to 5.8750 (+/-.0002)
- (5) The final step is grinding the flats. It is extremely important that the flats be ground in relationship to the center of the insert diameter to assure registration and the absence of a parting line mismatch on the molded part. The dimension is 5.360 (+/-.0002) between the flats (the 5.360 must be centered on the 5.875 diameter +/--.0002 TIR).

Note: The other outside surfaces on the insert are NOT shipped oversized, therefore , grinding will probably be unnecessary. However, we suggest you check these O.D.'s for accuracy after heat treat.

6" ROUND MATE® SINGLE POSITION

PIN, SLEEVE, AND PARTING LINE SET UP



MASTER FRAME	C	A	B
RMF-0613	3.000	4.9375	5.7500
RMF-0614	4.000	5.9375	6.7500

THIS DRAWING IS SUPPLIED TO AID WITH EJECTOR PIN, SLEEVE EJECTOR AND PARTING LINE SET UP WHEN DESIGNING A ROUND MATE® MOLD.

THE DIMENSION: "A", IS SHOWN TO LOCATE THE EJECTOR PLATES, AND IN CONJUNCTION WITH DIMENSION: .6250, TO DETERMINE EJECTOR PIN LENGTHS.

THE DIMENSION: "B", LOCATES THE CORE RETAINER PLATES, IF SLEEVE EJECTION IS UTILIZED, AND IN CONJUNCTION WITH DIMENSION: .375, TO DETERMINE CORE PIN LENGTHS.

TO ALLOW FOR MINOR ADJUSTMENTS OF THE PARTING LINE OF THE INSERTS, (i.e. SHARPENED CAVITY EDGE, ETC.), THE WORKING THICKNESS OF THE INSERTS IS 1.880, WHILE THE "A" AND "B" PLATES OF THE MASTER FRAME ARE 1.875, LEAVING APPROXIMATELY .005 PER SIDE FOR ADJUSTMENT. PLEASE NOTE SPRINGS BENEATH THE RETURN PINS AUTOMATICALLY COMPENSATE FOR A .000 TO .015 GAP IN THE MASTER FRAME PARTING LINE.

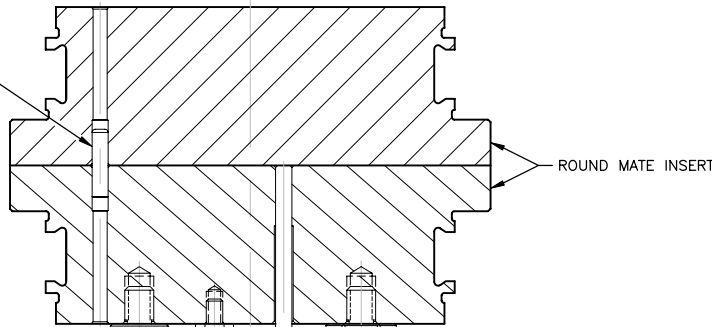
INSERTS THAT HAVE STANDUP FOR AN EXTENDED PARTING LINE, ARE TO BE KEPT ON HALF INCH INCREMENTS. THE HEAD DEPTH OF THE INSERT SHOULD MAINTAIN A .005 STAND UP AS ILLUSTRATED AT DIMENSION {H} IN THIS DRAWING.

ILLUSTRATION {F} SHOWS A RETURN PIN WITH EXTENSION IN PLACE, AS USED WITH AN EXTENDED PARTING LINE INSERT.

6" ROUND MATE® SINGLE POSITION

REQUIREMENTS AND RECOMMENDATIONS

RECOMMENDED:
LEADER PINS ARE INSTALLED
IN THE MASTER FRAME. HOWEVER
DOWELS ARE GENERALLY INSTALLED
IN THE INSERT SET TO PROTECT
THE PARTING LINE WHILE ON THE
BENCH OR IN STORAGE.



REQUIRED: (PREFERRED OPTION)
SUPPORT PILLARS MUST BE USED
TO RETAIN EJECTOR PLATES WHILE
THE INSERT SET IS OUT OF THE
MASTER FRAME
REFERENCE CATALOG PAGE #6.04

REQUIRED: (ALTERNATE OPTION)
DRILL & C BORE FOR SHCS TO
RETAIN EJECTOR PLATES WHILE
THE INSERT SET IS OUT OF THE
MASTER FRAME

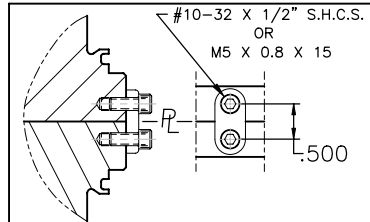
RECOMMENDED:
RETURN PINS ARE INSTALLED
IN THE MASTER FRAME. HOWEVER
THEY ARE GENERALLY INSTALLED
IN THE INSERT SET TO PROTECT
THE PARTING LINE WHILE ON THE
BENCH OR IN STORAGE.

REQUIRED: (WITH SLEEVE EJECTORS)
SLEEVE EJECTION SUPPORT PILLARS
ARE REQUIRED TO RETAIN
CORE PIN RETAINER PLATES
WHEN SLEEVE EJECTION IS USED.
REFERENCE CATALOG PAGE #6.04

EJECTOR RETAINER PLATE

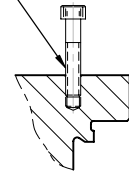
EJECTOR PLATE

CORE PIN RETAINER PLATES
(IF REQUIRED)



RECOMMENDED:
PARTING LINE SAFETY STRAPS
SHOULD BE USED WHEN THE MOLD
IS OUT OF THE MASTER FRAME
TO PROTECT THE PARTING LINE.
ONE INCLUDED WITH EACH INSERT
ROUND MATE P/N RMC-0017

TAP FOR S.H.C.S.



RECOMMENDED:
TAPPED HOLES CAN BE ADDED TO
THE PARTING LINE OF THE INSERT
SET. A BOLT CAN THEN BE USED
AS A HANDLE TO LOAD THE INSERT
SET INTO THE MASTER FRAME.

6" ROUND MATE® MULTI-POSITION

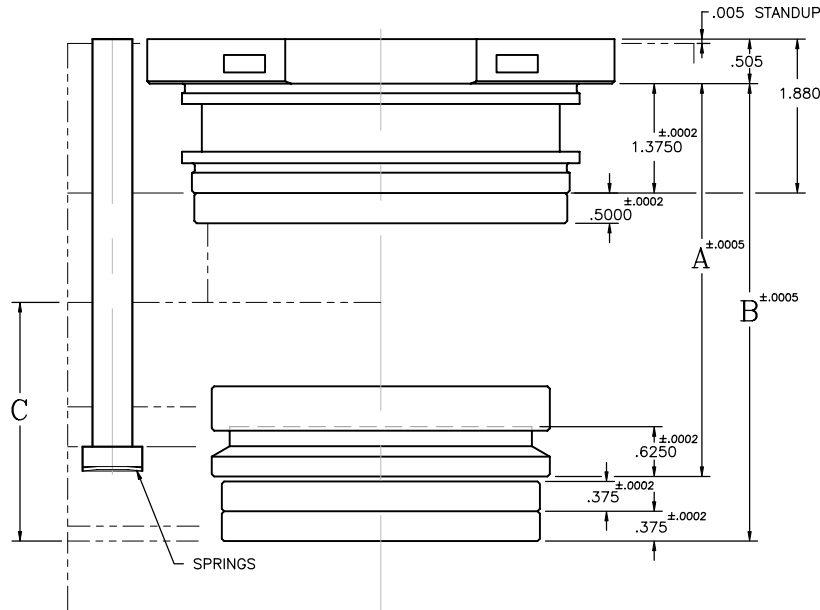
PIN, SLEEVE, AND PARTING LINE SET UP

THIS DRAWING IS SUPPLIED TO AID WITH EJECTOR PIN, SLEEVE EJECTOR AND PARTING LINE SET UP WHEN DESIGNING A ROUND MATE® MOLD.

THE DIMENSION: "A", IS SHOWN TO LOCATE THE EJECTOR PLATES, AND IN CONJUNCTION WITH DIMENSION: .6250, TO DETERMINE EJECTOR PIN LENGTHS.

THE DIMENSION: "B", LOCATES THE CORE RETAINER PLATES, IF SLEEVE EJECTION IS UTILIZED, AND IN CONJUNCTION WITH DIMENSION: .375, TO DETERMINE CORE PIN LENGTHS.

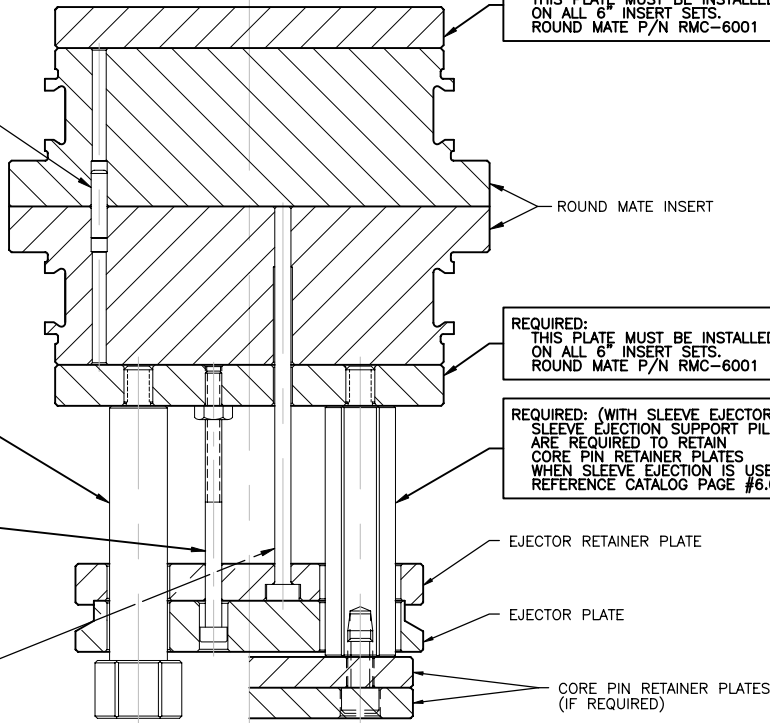
ON MULTI POSITION MASTER FRAMES, WITH THE RUNNER RUNNING ACROSS THE FLAT OF THE INSERT FROM THE SIDE, THE .005 INSERT STANDUP ABOVE THE MOLD PLATE MUST BE HELD. RUNNER BLOCKS IN THE MASTER FRAME MUST LINE UP WITH THE PARTING LINE OF THE INSERT. THIS IS SET TO BE .005 ABOVE THE MOLD PLATE ON BOTH THE "A" AND THE "B" SIDES OF THE MASTER FRAME.



MASTER FRAME	C	A	B
RMF-0623	3.000	4.9375	5.7500
RMF-0624	4.000	5.9375	6.7500
RMF-0625	5.000	6.9375	7.7500

6" ROUND MATE® MULTI-POSITION

REQUIREMENTS AND RECOMMENDATIONS



RECOMMENDED:
LEADER PINS ARE INSTALLED
IN THE MASTER FRAME. HOWEVER
DOWELS ARE GENERALLY INSTALLED
IN THE INSERT SET TO PROTECT
THE PARTING LINE WHILE ON THE
BENCH OR IN STORAGE.

REQUIRED: (PREFERRED OPTION)
SUPPORT PILLARS MUST BE USED
TO RETAIN EJECTOR PLATES WHILE
THE INSERT SET IS OUT OF THE
MASTER FRAME
REFERENCE CATALOG PAGE #6.04

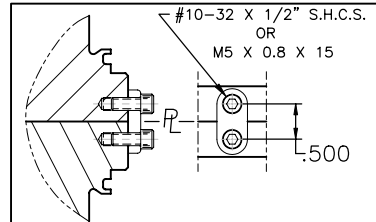
REQUIRED: (ALTERNATE OPTION)
DRILL & C'BORE FOR SHCS TO
RETAIN EJECTOR PLATES WHILE
THE INSERT SET IS OUT OF THE
MASTER FRAME

RECOMMENDED:
RETURN PINS ARE INSTALLED
IN THE MASTER FRAME. HOWEVER
THEY ARE GENERALLY INSTALLED
IN THE INSERT SET TO PROTECT
THE PARTING LINE WHILE ON THE
BENCH OR IN STORAGE.

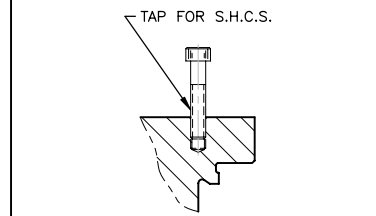
REQUIRED:
THIS PLATE MUST BE INSTALLED
ON ALL 6" INSERT SETS.
ROUND MATE P/N RMC-6001

REQUIRED:
THIS PLATE MUST BE INSTALLED
ON ALL 6" INSERT SETS.
ROUND MATE P/N RMC-6001

REQUIRED: (WITH SLEEVE EJECTORS)
SLEEVE EJECTION SUPPORT PILLARS
ARE REQUIRED TO RETAIN
CORE PIN RETAINER PLATES
WHEN SLEEVE EJECTION IS USED.
REFERENCE CATALOG PAGE #6.04

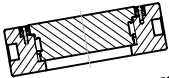
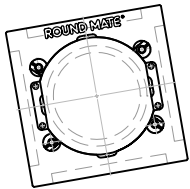


RECOMMENDED:
PARTING LINE SAFETY STRAPS
SHOULD BE USED WHEN THE MOLD
IS OUT OF THE MASTER FRAME
TO PROTECT THE PARTING LINE.
ONE INCLUDED WITH EACH INSERT
ROUND MATE P/N RMC-0017



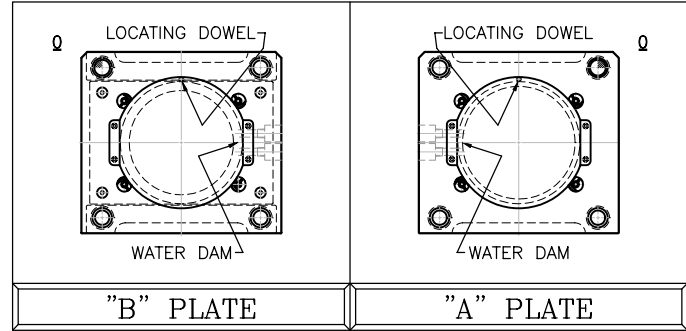
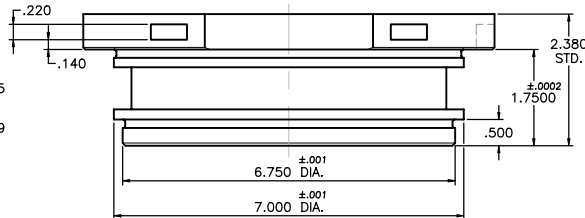
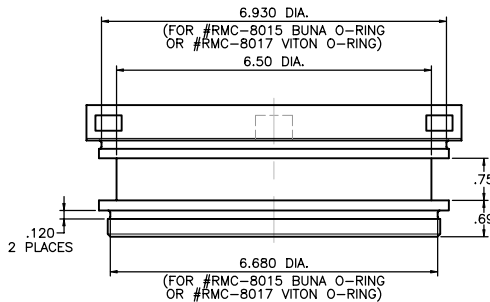
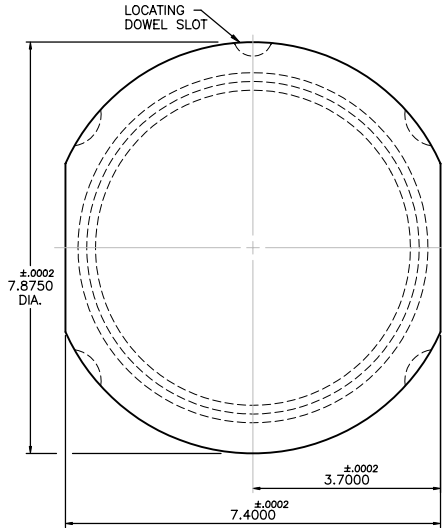
RECOMMENDED:
TAPPED HOLES CAN BE ADDED TO
THE PARTING LINE OF THE INSERT
SET. A BOLT CAN THEN BE USED
AS A HANDLE TO LOAD THE INSERT
SET INTO THE MASTER FRAME.

NOTES



**MACHINING FIXTURES ARE
AVAILABLE FROM ROUND MATE.
REFERENCE CATALOG PAGE #8.02**

8" ROUND MATE® SINGLE POSITION INSERT DIMENSIONS



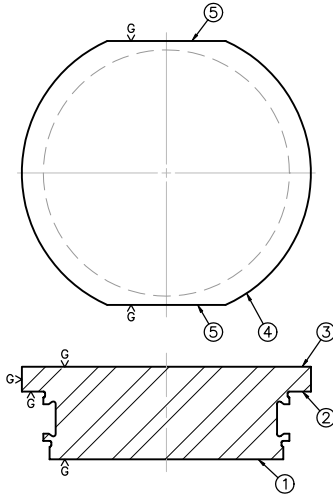
THE "A" INSERT IS THE SAME AS THE "B" INSERTS EXCEPT FOR THE WATER DAM LOCATION

TOOLMAKER IS TO INSTALL THE WATER DAM

WATER DAM IS TO LINE UP WITH WATER INLET/OUTLET IN THE MASTER FRAME

8" ROUND MATE® SINGLE POSITION GRINDING PROCEDURES

(SEE ILLUSTRATION)



THIS DRAWING IS SUPPLIED TO AID IN GRINDING "HEAT TREATABLE"
INSERTS AFTER "HEAT TREAT"

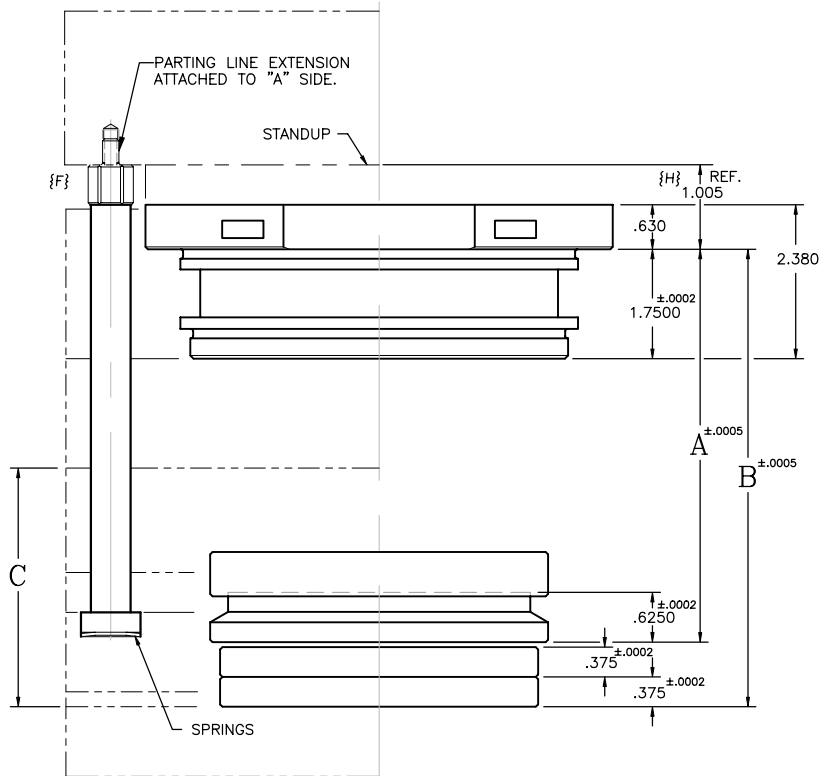
When you receive the "Round Mate"® insert, in any heat treatable steel, it is machined to .005 / .010 oversize, per side, on all critical dimensions. Following the heat treating process, this additional stock must be removed in the following sequence:

- (1) Grind .004 extra stock from the bottom, or small diameter end, of the insert.
- (2) Grind step, to the underside of the 7.875 diameter, to a measurement of 1.750 (+/− .0002) Approximately the same .004 will be removed.
- (3) Grind the face, or parting line, of the insert to achieve an over-all thickness of 2.380 (+0.000/−.004) (important note: this tolerance is compensated by springs under the return pins in the master frame. These springs will absorb up to .015 overall margin in the master frame parting line) Grinding within these tolerances places the O-rings in ideal position for a perfect seal.
- (4) Grind the outside diameter of the insert head to 7.8750 (+/−.0002)
- (5) The final step is grinding the flats. It is extremely important that the flats be ground in relationship to the center of the insert diameter to assure registration and the absence of a parting line mismatch on the molded part. The dimension is 7.400 (+/−.0002) between the flats (the 7.400 must be centered on the 7.875 diameter +/−.0002 TIR).

Note: The other outside surfaces on the insert are NOT shipped oversized, therefore , grinding will probably be unnecessary. However, we suggest you check these O.D.'s for accuracy, after heat treat.

8" ROUND MATE® SINGLE POSITION

PIN, SLEEVE, AND PARTING LINE SET UP



MASTER FRAME	C	A	B
RMF-0813	3.000	5.3125	6.1250
RMF-0814	4.000	7.3125	8.1250
RMF-0815	5.000	8.3125	9.1250

THIS DRAWING IS SUPPLIED TO AID WITH EJECTOR PIN, SLEEVE EJECTOR AND PARTING LINE SET UP WHEN DESIGNING A ROUND MATE® MOLD.

THE DIMENSION: "A", IS SHOWN TO LOCATE THE EJECTOR PLATES, AND IN CONJUNCTION WITH DIMENSION: .6250, TO DETERMINE EJECTOR PIN LENGTHS.

THE DIMENSION: "B", LOCATES THE CORE RETAINER PLATES, IF SLEEVE EJECTION IS UTILIZED, AND IN CONJUNCTION WITH DIMENSION: .375, TO DETERMINE CORE PIN LENGTHS.

TO ALLOW FOR MINOR ADJUSTMENTS OF THE PARTING LINE OF THE INSERTS, (I.E. SHARPEN CAVITY EDGE, ETC.), THE WORKING THICKNESS OF THE INSERTS IS 1.880, WHILE THE "A" AND "B" PLATES OF THE MASTER FRAME ARE 2.375, LEAVING APPROXIMATELY .005 PER SIDE FOR ADJUSTMENT. PLEASE NOTE SPRINGS BENEATH THE RETURN PINS AUTOMATICALLY COMPENSATE FOR A .000 TO .015 GAP IN THE MASTER FRAME PARTING LINE.

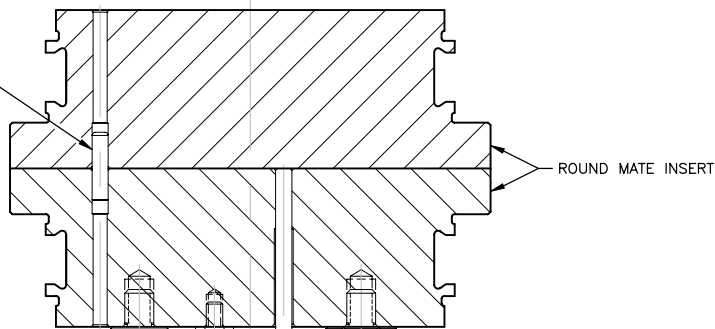
INSERTS THAT HAVE STANDUP FOR AN EXTENDED PARTING LINE, ARE TO BE KEPT ON HALF INCH INCREMENTS. THE HEAD DEPTH OF THE INSERT SHOULD MAINTAIN A .005 STAND UP AS ILLUSTRATED AT DIMENSION {H} IN THIS DRAWING.

ILLUSTRATION {F} SHOWS A RETURN PIN WITH EXTENSION IN PLACE, AS USED WITH AN EXTENDED PARTING LINE INSERT.

8" ROUND MATE® SINGLE POSITION

REQUIREMENTS AND RECOMMENDATIONS

RECOMMENDED:
LEADER PINS ARE INSTALLED
IN THE MASTER FRAME. HOWEVER
DOWELS ARE GENERALLY INSTALLED
IN THE INSERT SET TO PROTECT
THE PARTING LINE WHILE ON THE
BENCH OR IN STORAGE.



REQUIRED: (PREFERRED OPTION)
SUPPORT PILLARS MUST BE USED
TO RETAIN EJECTOR PLATES WHILE
THE INSERT SET IS OUT OF THE
MASTER FRAME
REFERENCE CATALOG PAGE #6.04

REQUIRED: (ALTERNATE OPTION)
DRILL & C BORE FOR SHCS TO
RETAIN EJECTOR PLATES WHILE
THE INSERT SET IS OUT OF THE
MASTER FRAME

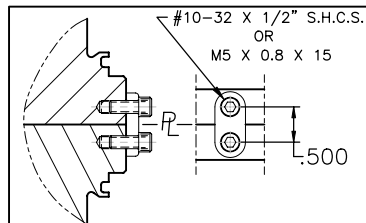
RECOMMENDED:
RETURN PINS ARE INSTALLED
IN THE MASTER FRAME. HOWEVER
THEY ARE GENERALLY INSTALLED
IN THE INSERT SET TO PROTECT
THE PARTING LINE WHILE ON THE
BENCH OR IN STORAGE.

REQUIRED: (WITH SLEEVE EJECTORS)
SLEEVE EJECTION SUPPORT PILLARS
ARE REQUIRED TO RETAIN
CORE PIN RETAINER PLATES
WHEN SLEEVE EJECTION IS USED.
REFERENCE CATALOG PAGE #6.04

EJECTOR RETAINER PLATE

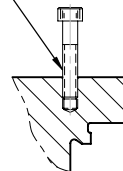
EJECTOR PLATE

CORE PIN RETAINER PLATES
(IF REQUIRED)



RECOMMENDED:
PARTING LINE SAFETY STRAPS
SHOULD BE USED WHEN THE MOLD
IS OUT OF THE MASTER FRAME
TO PROTECT THE PARTING LINE.
ONE INCLUDED WITH EACH INSERT
ROUND MATE P/N RMC-0017

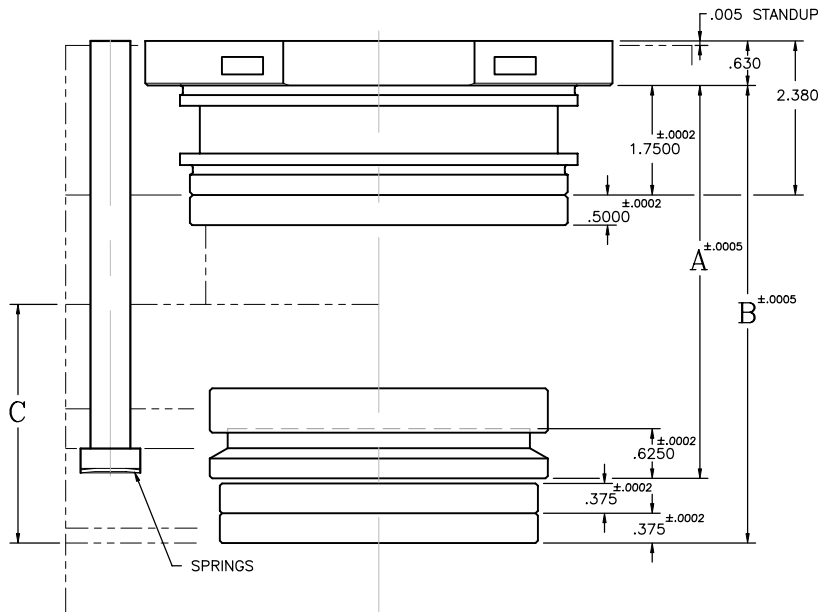
TAP FOR S.H.C.S.



RECOMMENDED:
TAPPED HOLES CAN BE ADDED TO
THE PARTING LINE OF THE INSERT
SET. A BOLT CAN THEN BE USED
AS A HANDLE TO LOAD THE INSERT
SET INTO THE MASTER FRAME.

8" ROUND MATE® MULTI-POSITION

PIN, SLEEVE, AND PARTING LINE SET UP



THIS DRAWING IS SUPPLIED TO AID WITH EJECTOR PIN, SLEEVE EJECTOR AND PARTING LINE SET UP WHEN DESIGNING A ROUND MATE® MOLD.

THE DIMENSION: "A", IS SHOWN TO LOCATE THE EJECTOR PLATES, AND IN CONJUNCTION WITH DIMENSION: .6250, TO DETERMINE EJECTOR PIN LENGTHS.

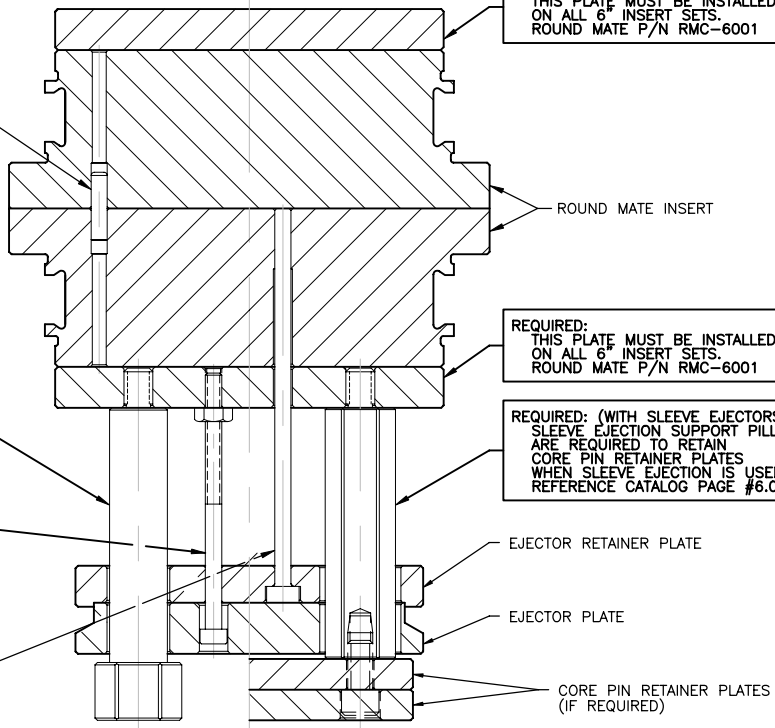
THE DIMENSION: "B", LOCATES THE CORE RETAINER PLATES, IF SLEEVE EJECTION IS UTILIZED, AND IN CONJUNCTION WITH DIMENSION: .375, TO DETERMINE CORE PIN LENGTHS.

ON MULTI POSITION MASTER FRAMES, WITH THE RUNNER RUNNING ACROSS THE FLAT OF THE INSERT FROM THE SIDE, THE .005 INSERT STANDUP ABOVE THE MOLD PLATE MUST BE HELD. RUNNER BLOCKS IN THE MASTER FRAME MUST LINE UP WITH THE PARTING LINE OF THE INSERT. THIS IS SET TO BE .005 ABOVE THE MOLD PLATE ON BOTH THE "A" AND THE "B" SIDES OF THE MASTER FRAME.

MASTER FRAME	C	A	B
RMF-0823	3.000	6.3125	7.1250
RMF-0824	4.000	7.3125	8.1250
RMF-0825	5.000	8.3125	9.1250

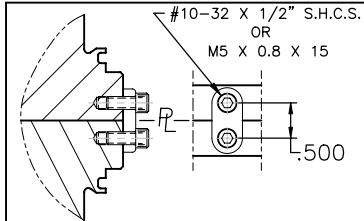
8" ROUND MATE® MULTI-POSITION

REQUIREMENTS AND RECOMMENDATIONS



RECOMMENDED:
LEADER PINS ARE INSTALLED
IN THE MASTER FRAME. HOWEVER
DOWELS ARE GENERALLY INSTALLED
IN THE INSERT SET TO PROTECT
THE PARTING LINE WHILE ON THE
BENCH OR IN STORAGE.

REQUIRED:
THIS PLATE MUST BE INSTALLED
ON ALL 6" INSERT SETS.
ROUND MATE P/N RMC-6001

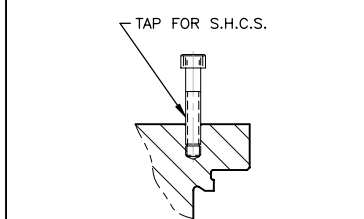


RECOMMENDED:
PARTING LINE SAFETY STRAPS
SHOULD BE USED WHEN THE MOLD
IS OUT OF THE MASTER FRAME
TO PROTECT THE PARTING LINE.
ONE INCLUDED WITH EACH INSERT
ROUND MATE P/N RMC-0017

REQUIRED: (PREFERRED OPTION)
SUPPORT PILLARS MUST BE USED
TO RETAIN EJECTOR PLATES WHILE
THE INSERT SET IS OUT OF THE
MASTER FRAME
REFERENCE CATALOG PAGE #6.04

REQUIRED:
THIS PLATE MUST BE INSTALLED
ON ALL 6" INSERT SETS.
ROUND MATE P/N RMC-6001

REQUIRED: (WITH SLEEVE EJECTORS)
SLEEVE EJECTION SUPPORT PILLARS
ARE REQUIRED TO RETAIN
CORE PIN RETAINER PLATES
WHEN SLEEVE EJECTION IS USED.
REFERENCE CATALOG PAGE #6.04

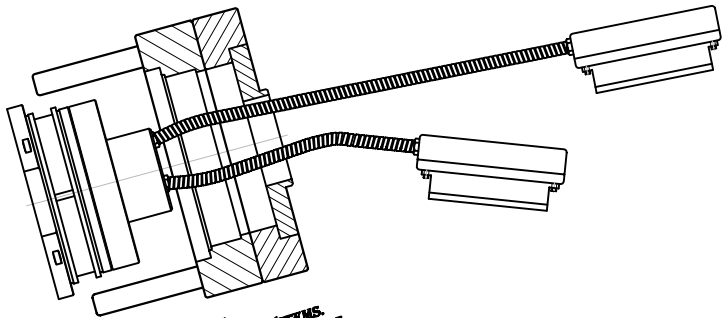


REQUIRED: (ALTERNATE OPTION)
DRILL & C'BORE FOR SHCS TO
RETAIN EJECTOR PLATES WHILE
THE INSERT SET IS OUT OF THE
MASTER FRAME

RECOMMENDED:
RETURN PINS ARE INSTALLED
IN THE MASTER FRAME. HOWEVER
THEY ARE GENERALLY INSTALLED
IN THE INSERT SET TO PROTECT
THE PARTING LINE WHILE ON THE
BENCH OR IN STORAGE.

RECOMMENDED:
TAPPED HOLES CAN BE ADDED TO
THE PARTING LINE OF THE INSERT
SET. A BOLT CAN THEN BE USED
AS A HANDLE TO LOAD THE INSERT
SET INTO THE MASTER FRAME.

NOTES



**ROUND MATE HAS
THEIR OWN MANFOLD SYSTEMS.
REFERENCE CATALOG SECTION #7**

ROUND MATE[®]

— *Systems* **—**

**ROUND MATE SYSTEMS USES A COMBINATION OF ENGINEERING, CREATIVITY,
SKILL AND CRAFTSMANSHIP TO DESIGN AND PRODUCE TOP QUALITY PRODUCTS.**

**WE ARE DEDICATED TO SERVING OUR CUSTOMERS IN THE MOST EFFICIENT
METHODS AVAILABLE WHILE MAINTAINING A TOTAL COMMITMENT TO QUALITY.**

MATERIAL SAFETY DATA SHEET (MSDS) ENCLOSED

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PH. (800) 860-3974 or PH. (419) 675-0556
FAX (419) 675-0557

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