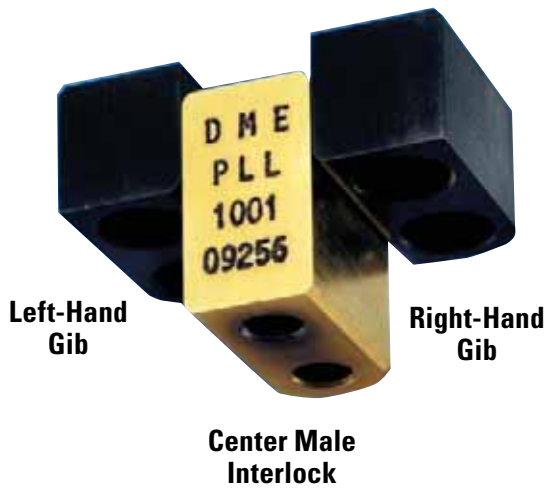


Parting Line Interlocks



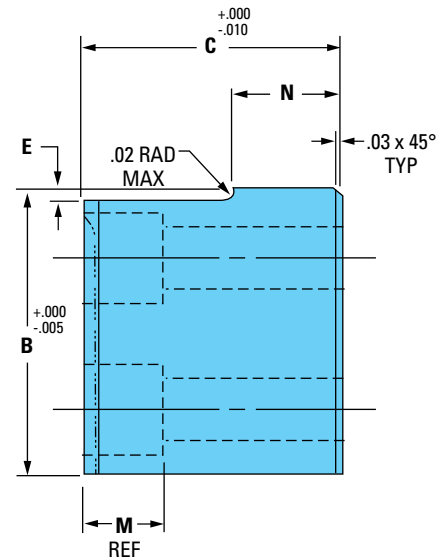
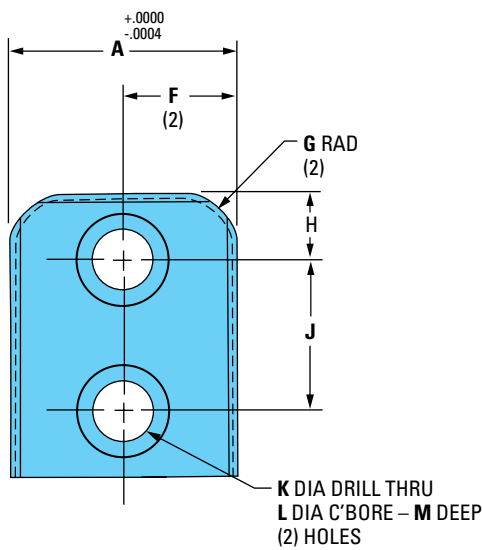
- For accurate alignment between mold halves
- All machining can be done from the parting line ... saving set-up time and machining costs
- Components can be purchased individually

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

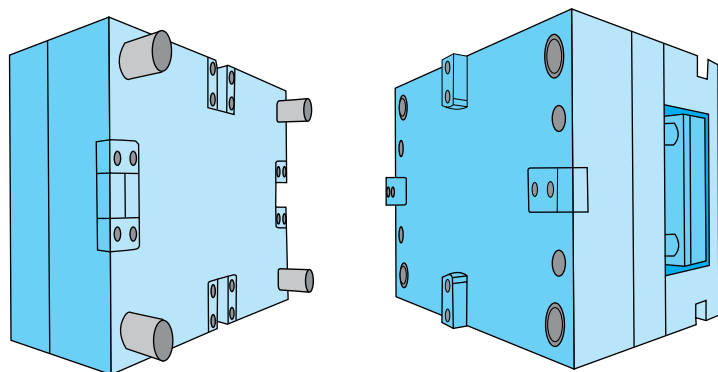


Material: S7 Steel, 52-58 HRC, Titanium Nitrided
80-85 HRC for wear and lubricity

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.

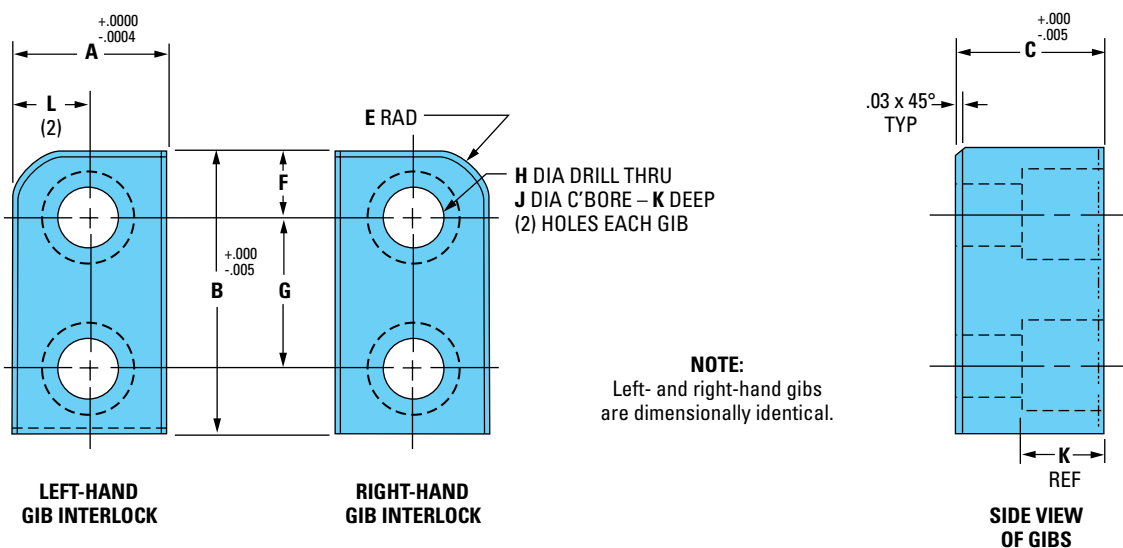
Parting Line Interlocks



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

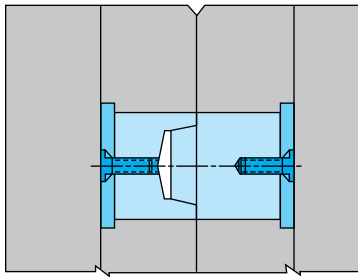
ITEM NUMBER		A WIDTH	B LENGTH	C	E	F	G	H	J	K	L
LEFT-HAND GIBS	RIGHT-HAND GIBS										
PLL-3001	PLL-2001	.5000	1.000	.500	.19	.250	.500	.219	.344	.22	.250
PLL-3002	PLL-2002	.7500	1.500	.750	.25	.312	.875	.281	.406	.28	.375
PLL-3003	PLL-2003	1.0000	2.000	1.000	.38	.438	1.125	.406	.594	.41	.500
PLL-3004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

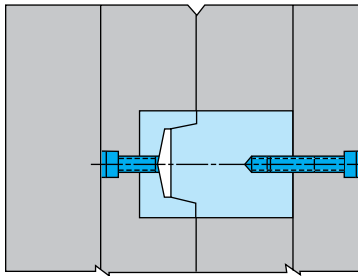
Tapered Interlocks (Round)



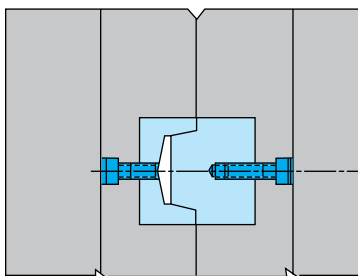
Through



Combination



Blind

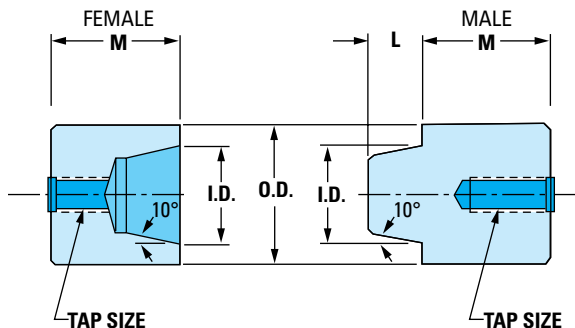


D-M-E Tapered Interlocks provide positive metal-to-metal mold registry to align mold halves, mold plates or individual cavities and cores. The larger sizes are generally used with large molds or plates. The 1/2 and 3/4 sizes are generally used with small molds or to align cavities and cores. At least 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.

Tapered Interlocks (Round)



Female Tapered Interlocks – FT (Round)

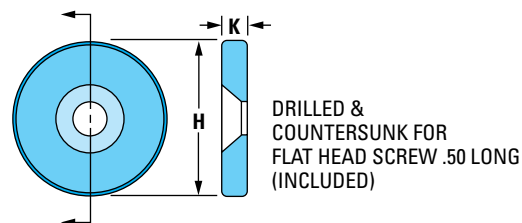
O.D. $+0.000$ -0.005	I.D. $+0.002$ -0.000	TAP SIZE	M $+0.015$ $+0.020$	ITEM NUMBER
1/2	5/16	10-24	11/16	FT04-11
			7/8	FT04-14
			13/16	FT04-19
			13/8	FT04-22
3/4	1/2	1/4-20	11/16	FT06-11
			7/8	FT06-14
			13/16	FT06-19
			13/8	FT06-22
1"	5/8	1/4-20	11/16	FT08-11
			7/8	FT08-14
			13/16	FT08-19
1 1/2	1"	5/16-18	13/8	FT12-22
			15/8	FT12-26
			1 1/8	FT16-18
2"	1 1/2	5/16-18	13/8	FT16-22
			1 5/8	FT16-26
			1 1/8	FT16-18

Male Tapered Interlocks – MT (Round)

O.D. $+0.000$ -0.005	I.D. $+0.000$ -0.002	L	TAP SIZE	M $+0.010$ $+0.015$	ITEM NUMBER
1/2	5/16	1/4	10-24	11/16	MT04-11
				7/8	MT04-14
				13/16	MT04-19
				13/8	MT04-22
3/4	1/2	9/32	1/4-20	11/16	MT06-11
				7/8	MT06-14
				13/16	MT06-19
				13/8	MT06-22
1"	5/8	11/32	1/4-20	11/16	MT08-11
				7/8	MT08-14
				13/16	MT08-19
1 1/2	1"	1/2	5/16-18	13/8	MT08-22
				1 1/8	MT12-18
				13/8	MT12-22
2"	1 1/2	1/2	5/16-18	15/8	MT12-26
				1 1/8	MT16-18
				13/8	MT16-22
				1 5/8	MT16-26

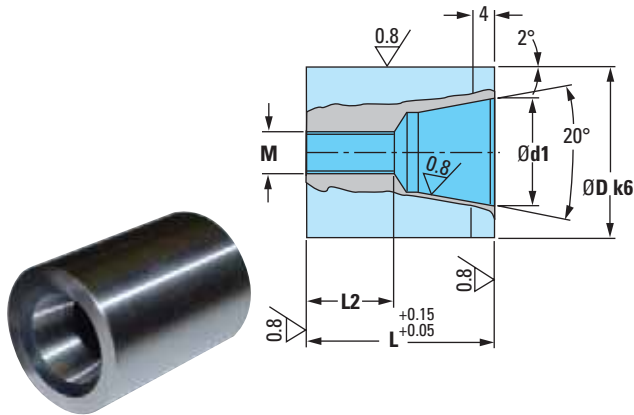
Shoulder Plates – SP (Must be ordered separately)

MALE OR FEMALE O.D.	$\varnothing H$	K $+0.000$ -0.002	J	ITEM NUMBER
1/2	11/16	3/16	10-24	SP-04
3/4	1"	3/16	1/4-20	SP-06
1"	13/16	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

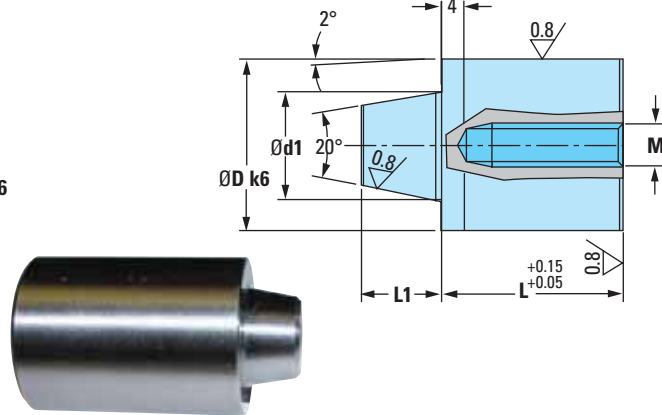


Tapered Interlocks (Round) – Metric

Tapered Interlocks – FT



Tapered Interlocks – MT



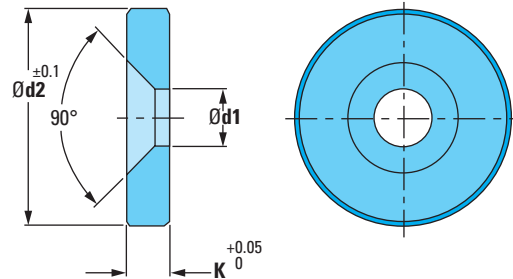
Material: DIN 1.7131 58-62 HRC

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

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

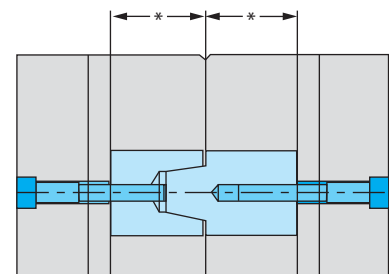
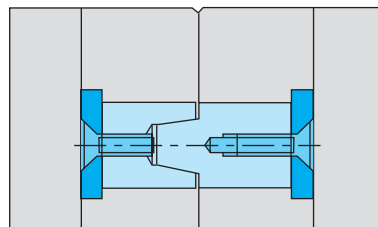


Material: DIN 1.7131 58-62 HRC

REF	d1	d2	^{+0.05} K 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.

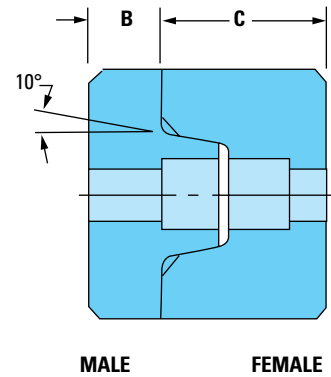
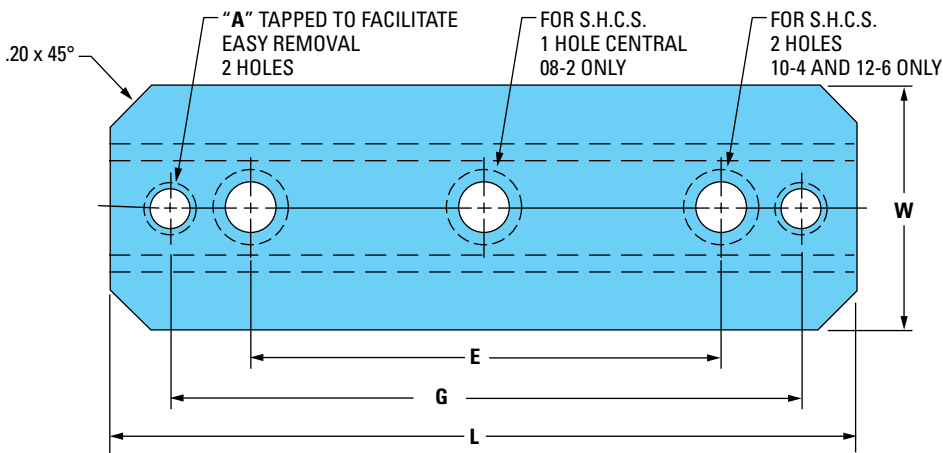


Tapered Interlocks (Rectangular)



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 ^{+0.000} / _{-.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 ^{+0.000} / _{-.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.