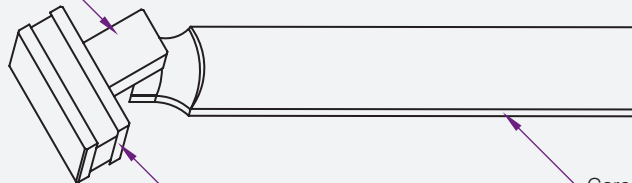




U-Coupling permits the Core Blade to seat at any angle.

The UniLifter's design eliminates the need for custom configurations with each design.



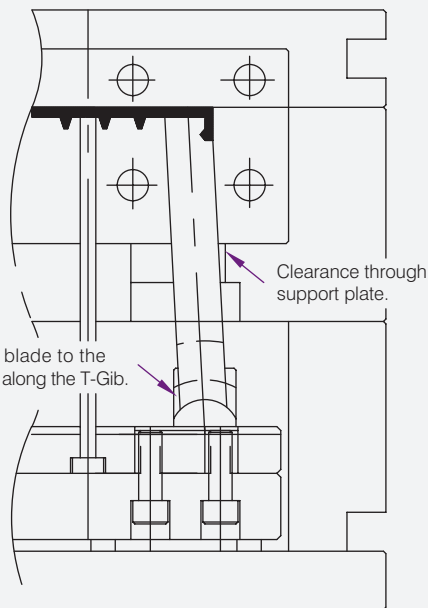
T-Gibs are available in several sizes to accommodate various travels required.

Core Blades are available in a wide range of standard sizes, with specials also available.

Undercut Release System

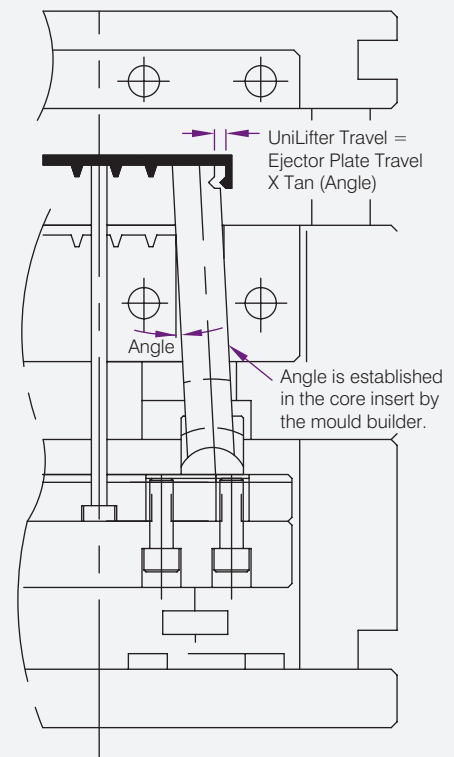
The Progressive UniLifter system is the most widely used standard product for moulding and releasing undercuts. Smooth performance is attained due to the U-Coupling design, eliminating wear and binding found in other fixed angle lifter designs.

The UniLifter undercut release system incorporates a three piece set: Core Blade, U-Coupling, and T-Gib.



U-Coupling seats the core blade to the correct angle while travelling along the T-Gib.

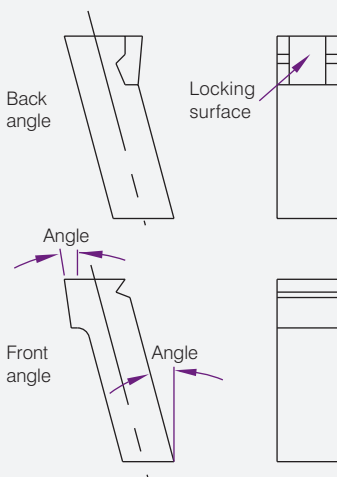
mould closed



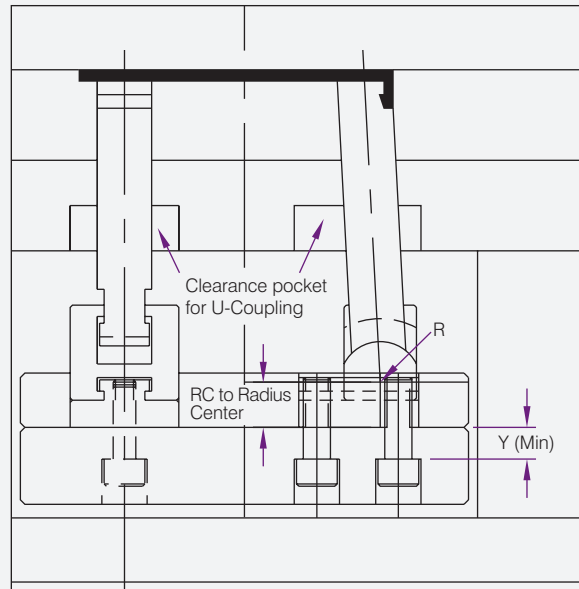
mould open



Locking Angles



Non-Standards



General Information

It is recommended that UniLifters be installed as shown at right, with the T-Gib mounted on the pin plate. The appropriate RC and Y dimensions are shown below. The RC dimensions refer to the distance from the bottom of the pin plate to the Radius Centre, and the Y dimension is the minimum distance needed to prevent interference between the U-Coupling and T-Gib screws.

Angles

Users report best results when the Core Blade is designed between 5° and 10° angles. However, users have also reported success at 15° or more when using guides in the support plate.

Alignment

Guided Ejection is recommended in all designs when using lifters. If less than 1/2 of the Core Blade is bearing in the core insert, lifter guide plates are recommended in the support plate.

Fitting

Recommended clearance for the T and W dimensions is .001 - .0015" total (.025 - .038) where permissible. Fitting stock of .005" per side over nominal is provided on rectangular core blades (i.e. CVS50x100 is T = .510, W = 1.010).

Additional Treatments

Although standard steel Core Blades are approximately 10 Rc above P-20 and 10 Rc below hardened tool steel, additional performance can be obtained by treating after machining is finished. Ion nitriding or a chromium treatment will increase the surface hardness of the H-13 core blades to levels suitable for high production moulds. For solid bronze Core Blades, a cold-process Titanium Nitride Coating will bring the surface hardness into the 75-80 Rc range.

Locking Angles

Locking angles may be designed in to provide locking surface against moulding pressure.

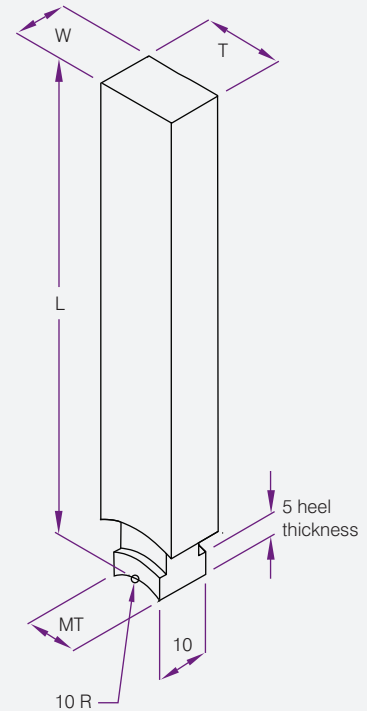
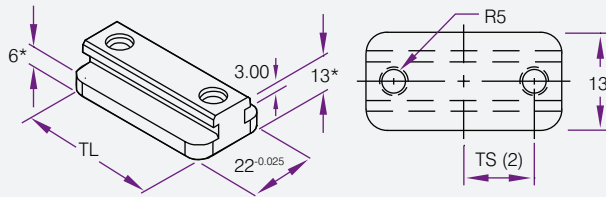
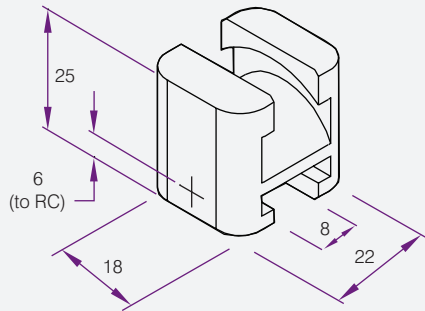
Non-Standards

L-Shaped Core Blades may be machined by the mould maker or supplied pre-machined. When machining, it is recommended that the material from the heel area not be removed, and the T1 dimension should be on the centre of the radius. Specials to order.

UniLifter Series	R Radius	RC	Y
MiniLifters	.250	.469	.78
UniLifters	.406	.406	.37
XL Series	.875	.375	.71
Metric Series	10mm	12mm	11mm



A complete Metric UniLifter system includes:
 (1) Core Blade
 (1) U-Coupling
 (1) T-Gib



U-Coupling
 Material: H13
 Hardness: 40-44RC
 Surface: 60-65RC

Core Blades
 Material: H13
 Hardness: 38-42RC

U-Coupling	
Product Code	Description
UCMM22	Metric Universal Coupling

Round Core Blade			
Product Code	D	L	MT
	+ .000 - .025	+2 -0	Min. Thk.
CBMM15DL250	15.00	250	10.0

T-Gib			
Product Code	TL	TS	Travel Allowed
	+ .00 - .25		
TGMM10	33.00	10.00	10.00
TGMM30	52.00	15.00	30.00

Flat Core Blade				
Product Code	T	W	L	MT
	+ .000 - .025	+ .000 - .025	+2 -0	Min. Thk.
CBMM10X10L250	10.25	10.25	250	10.0
CBMM15X15L250	15.25	15.25	250	15.0
CBMM20X20L250	20.25	20.25	400	15.0

M-5x20MM long SHCS included.

* Fitting stock provided of +.25/-.00 on the bottom of the T-Gibs for height adjustment.