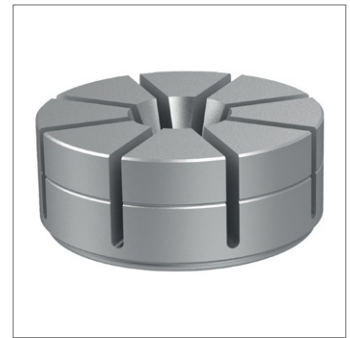
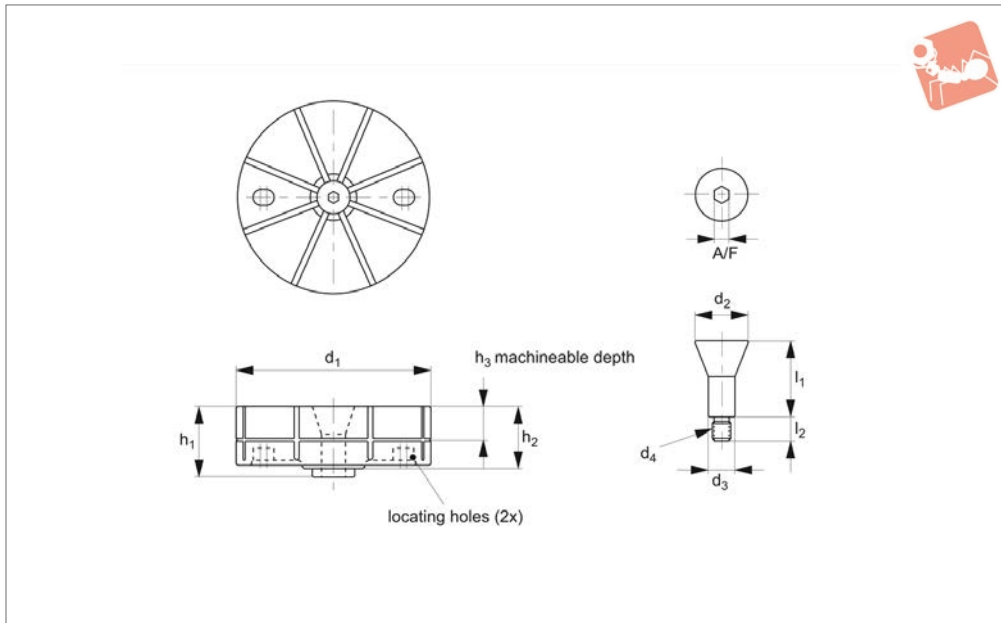
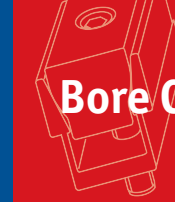




# Internal Form Holding Jaws

for flexible form holding clamp no. 12055

## Bore Clamping



**12057**

BORE CLAMPING

### Material

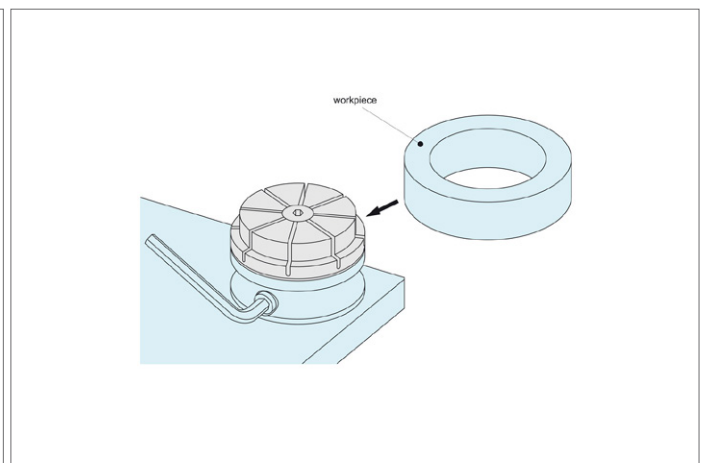
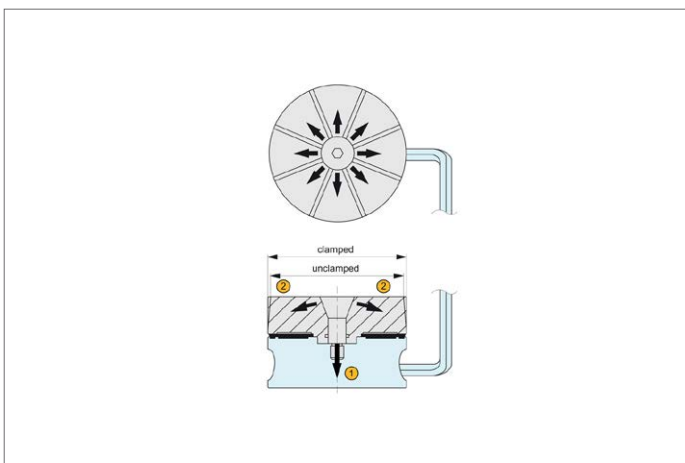
Jaws: aluminium (A7075), silver anodised.  
Tapered screw: steel (C45E), tempered, nickel plated.

Tapered screw expands jaw outwards to hold irregular shaped workpieces securely. Offers 0,15mm clamping stroke on jaw. Ideal for die-cast and extruded parts. Used with flexible form clamping base no. 12055.

### Technical Notes

Order jaw and tapered screw separately.

Order No.	$h_1$	$h_2$	$h_3$	$l_1$	Suitable for clamping base 12055	Type	Size	$d_1$	$d_2$	$d_3$	$d_4$	$l_2$	A/F	Suitable for internal jaw 12057	Weight g
12057.W0065	28,5	25	10		.W0065	Jaw	65	65							200
12057.W0090	34,5	30	15		.W0095	Jaw	90	90							400
12057.W0120	40,5	35	20		.W0120	Jaw	120	120							900
12057.W0160	46,5	40	25		.W0160	Jaw	160	160							1900
12057.W2065				29		Screw	65		22,5	13,2	M 8x1,25	10	6	.W1065	50
12057.W2090				35		Screw	90		27,0	16,0	M10x1,5	11	8	W.1090	80
12057.W2120				41		Screw	120		29,0	13,0	M10x1,5	16	8	W.1120	100
12057.W2160				47		Screw	160		33,0	18,0	M12x1,75	14	10	W.1160	150

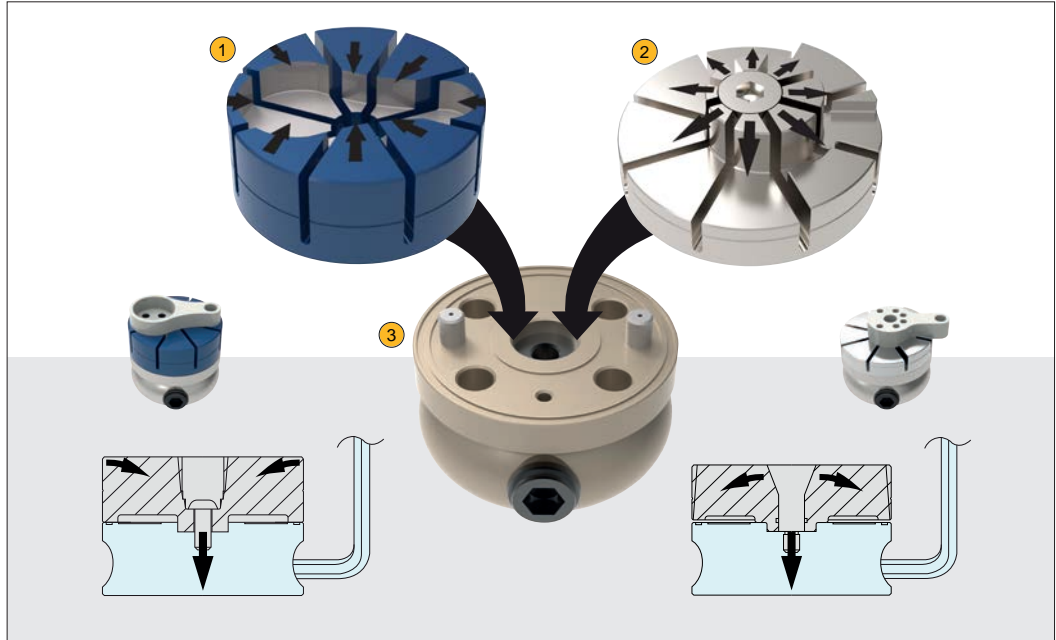




Versatile holding of complex shaped workpieces on either the external or internal form - quick, secure, versatile.

Single clamping base designed to accept either external form or internal form clamping jaws, fully flexible holding of custom forces.

- ① External Form Jaw - 12056
- ② Internal Form Jaw - 12057
- ③ Flexible Form Clamping Base - 12055

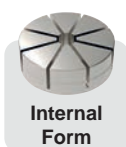
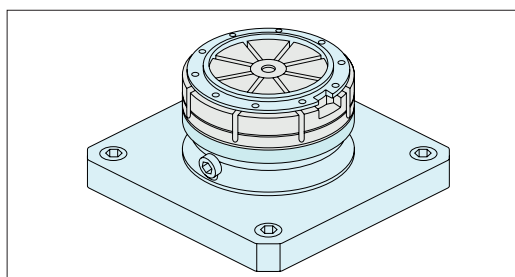
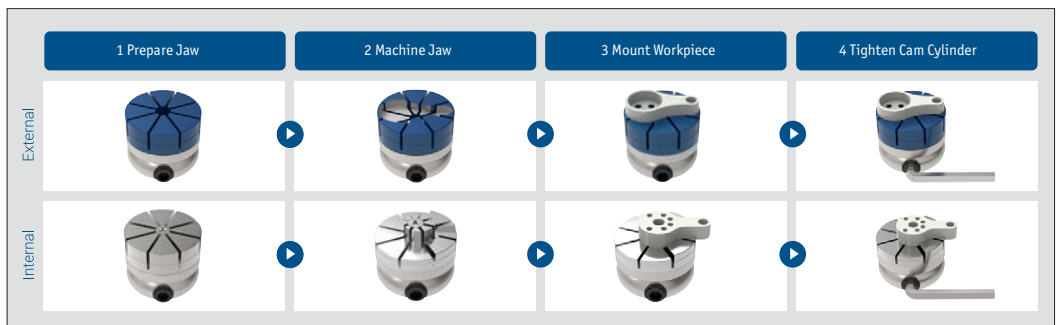


**External**

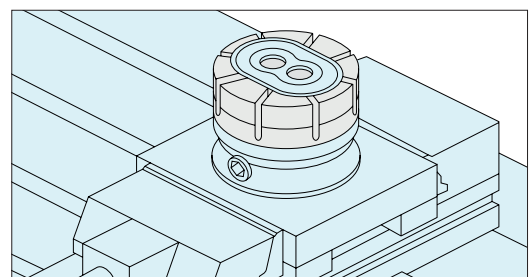
Parts 12055, 12056

**Internal**

Parts 12055, 12057



**Clamping Low Profile Workpiece**  
Parts 12055 and 10257. 8 jaw clamping sections distribute clamping force to workpiece for deformation prevention.



**Fixture for Temporal Job**  
Parts 12055 and 10256. Can be mounted on the existing vise by attaching the clamp on plate.

Note to control the tightening torque using adequate tools in reference to the data provided by the performance curve.



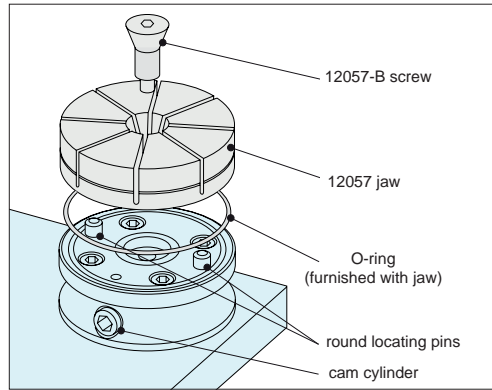
# Installation and Machining of Jaw Profile



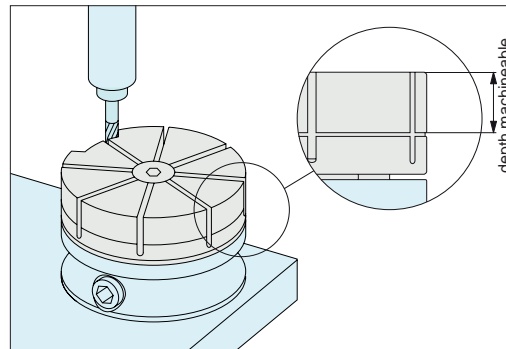
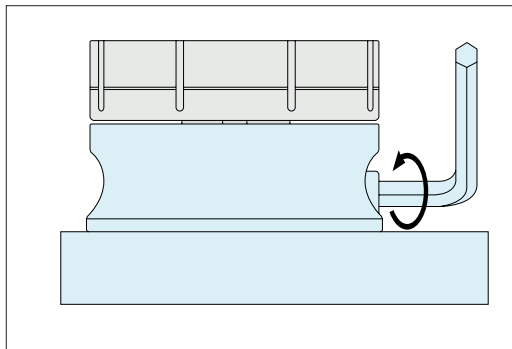
12057

Clamping & Height Setting

- Insert O-ring to the groove on top surface of the Flexible Form Holding Clamp 12055.
- Mount jaw 12057 to clamping base, align with locating pins and fix with tapered screw.



## Prepare Jaw for Mounting

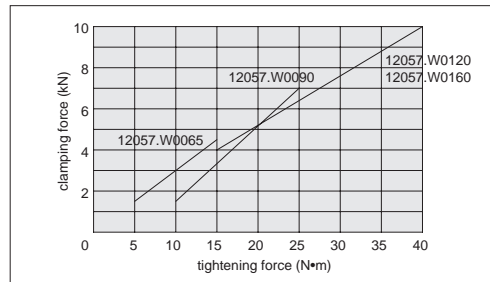
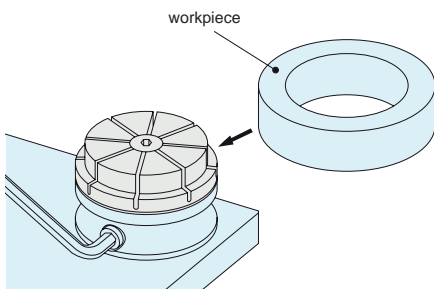


## Machine Jaw

2.1 Loosen the clamping bases cam cylinder fully. Measure dimension of the jaw for machining. Tighten the cam cylinder until each jaw section expands a further 0.15mm beyond desired clamping dimensions.

2.2 Machine the jaw to the contours of workpiece. (Do not machine the jaws beyond the machinable depth – see data tables of jaws 12056 and 12057 for dimension.)

After machining of jaw, loosen cam cylinder of clamp base and load workpiece. Tighten the cam cylinder again to clamp.

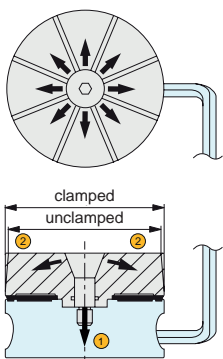


## Load Workpiece

Note: Do not tighten the cam cylinder without the workpiece set to prevent damage and deformation. Tightening with the torque beyond allowable screw torque will lower the durability of the jaw.

Take note of recommended tightening forces.

## Function



- Tapered screw fixes jaw to clamping base and expands the jaws in eight directions for 'pre-holding' of irregularly-shaped workpieces.
- Final 0.15mm clamping stroke of the jaw is activated via the cam cylinder to provide final clamping of workpiece on its internal contours.

- When the cam cylinder is tightened, the tapered screw is pulled down.
- At the same time the 8 jaw sections expand to clamp the internal form of workpiece.

