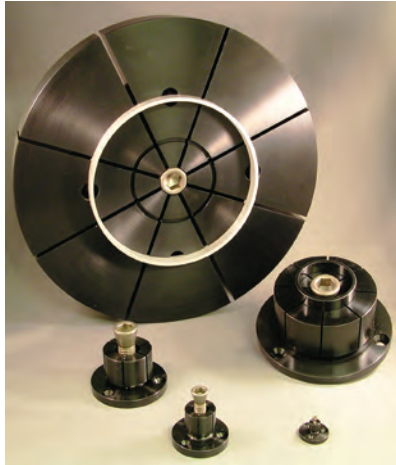


ID Xpansion™ Clamp



The ID Xpansion™ Clamp is the ideal way to hold multiple parts on an inside diameter for machining on your VMC or HMC. These machinable clamps are produced in 12 sizes and can hold internal diameters from 0.160 to 9.85.

- Low profile
- Ideal for secondary operations on lathe parts
- Easily machined to size on lathe or mill
- Excellent for palletized setups
- Allows more parts per workcube or fixture plates
- Clamp body made of mild steel for machinability
- Tighten with hex key or hydraulic pull cylinders
- Longer screws are available for hydraulic applications (pull cylinders)

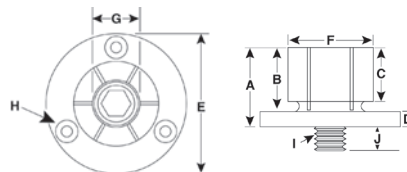
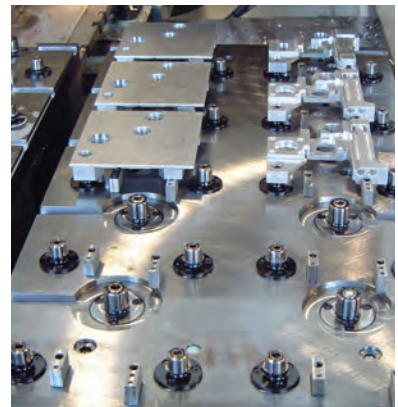


Model #00 - #6 ID Xpansion® Clamps

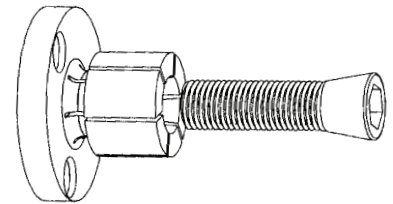
- Expand clamp approximately 0.002" to 0.003" (0.1mm) over relaxed diameter and machine to fit workpiece bore, either on lathe or mill.
- If machining the clamp on lathe use the nut provided on the back of the clamp to tighten the tapered screw. This nut is used only while machining the clamp.
- Machine a pocket in the fixture, for the close tolerance "E" dimension and drill and tap mounting holes per "H" column. Drill and tap a hole from the "I" column in the center of the pocket for the tapered screw.
- A recessed dowel pin may be installed into the flange for additional rigidity if required.
- Range of expansion 0.005" to 0.025" (0.2 to 0.5mm) depending upon size.

Model #7 - #10 ID Xpansion® Clamps

- Locking ring provided to ensure segments remain rigid while machining clamps to size.
- Insert ring and tighten drive screw, machine clamp to bore size. Remove ring to clamp workpiece.
- Aggressive material removal is not recommended when machining clamps to size.



Machining/Locking ring included on models #7-#10 to ensure the segments remain rigid while machining the clamp



Part No.	Model	A	B	C	D	E (+0.000/-0.002)	F	*G	*H	I	J	Max Torque (ft/lbs)	Holding Force (Lbs)	Code No.	Price \$
Inch															
31000	#00	0.42	0.30	0.24	0.12	0.787	0.29	0.16	2-56 on 0.540 BHC	2-56	0.16	0.5	250	604123	63.62
31050	#0	0.86	0.63	0.59	0.23	1.170	0.49	0.28	6-32 on 0.82 BHC	8-32	0.30	3.6	950	604124	63.62
31100	#1	0.98	0.75	0.59	0.23	1.240	0.56	0.48	6-32 on 0.910 BHC	1/4-20	0.50	13.3	1,900	604125	63.62
31150	#2	0.98	0.75	0.59	0.23	1.476	0.79	0.53	6-32 on 1.140 BHC	5/16-18	0.56	27.6	2,500	604126	67.75
31200	#3	1.13	0.88	0.69	0.25	1.969	1.06	0.71	8-32 on 1.550 BHC	3/8-16	0.71	49.3	4,500	604127	88.05
31250	#4	1.25	1.00	0.81	0.25	2.205	1.39	0.90	8-32 on 1.790 BHC	1/2-13	0.71	120.0	5,900	604128	108.60
31300	#5	1.56	1.25	1.06	0.31	2.736	1.65	1.15	10-32 on 2.200 BHC	5/8-11	0.79	224.0	10,000	604129	139.21
31350	#6	1.56	1.25	1.06	0.31	2.972	2.03	1.15	10-32 on 2.515 BHC	5/8-11	0.79	224.0	10,000	604130	152.74
31400	#7	1.79	1.48	1.27	0.31	4.232	3.06	1.15	1/4-20 on 3.646 BHC	5/8-11	0.79	224.0	10,000	604131	242.86
31450	#8	1.79	1.48	1.27	0.31	5.232	4.06	1.15	1/4-20 on 4.648 BHC	5/8-11	0.79	224.0	10,000	604132	297.98
31500	#9	1.79	1.48	1.27	0.31	5.232	6.89	1.15	1/4-20 on 4.648 BHC	5/8-11	0.79	224.0	10,000	604438	838.98
31550	#10*	1.79	1.48	1.27	0.31	6.000	9.85	1.15	1/4-20 on 5.250 BHC	5/8-11	0.79	125.0	6,000	604440	1,472.98

*G - Minimum diameter the "F" dimension can be machined or turned down

*H - (3) Mounting screws included - (4) for model numbers #9 and #10

*Model #10 Made from 7075-T6 Aluminum

Metric also available, call for more information