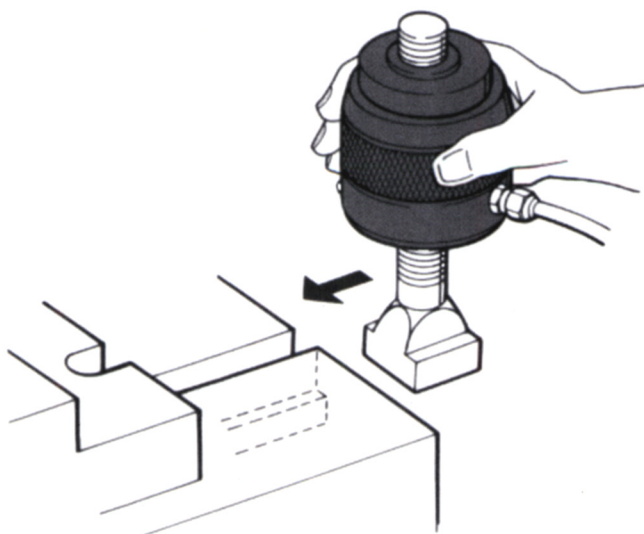
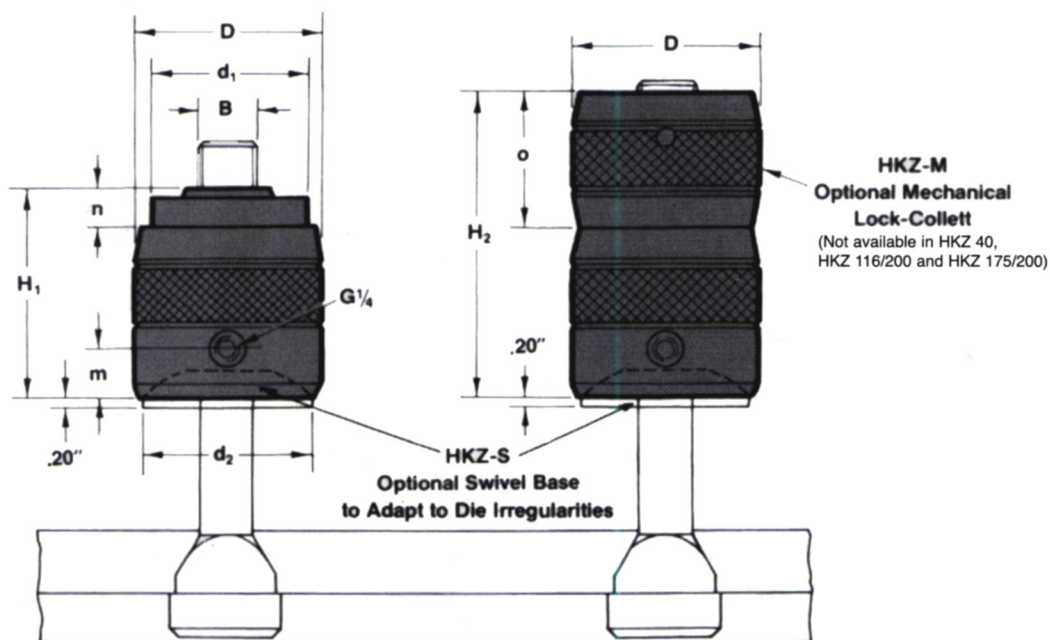


# Hydraulic T-Bolt Clamp



## Features

- A safe, quick and simple way to clamp Dies, Workpieces, and Fixtures
- Easily inserted into existing T-slots. Clamps at any position along the length of the T-bolt
- Hydraulically operated. Available with or without Mechanical Lock-Collett
- Self-locking in clamped position with the Mechanical Lock-Collett option
- Can be used with existing or specially hardened T-bolts



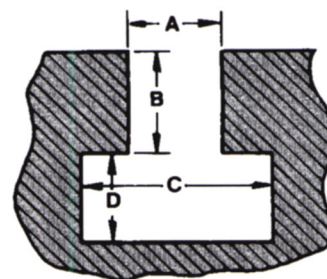
Type	Clamp Force (tons)		Stroke S	T-Bolt Dia B	H <sub>1</sub>	H <sub>2</sub>	D	d <sub>1</sub>	d <sub>2</sub>	m	n	o
	3000psi	6000 psi										
HKZ 40	2.2	4.4	.47	5/8", M16	3.15	N/A	2.76	N/A	2.20	.49	N/A	N/A
HKZ 65	3.5	7.0	.47	5/8", M16 and 3/4", M20	3.54	5.20	3.15	2.7	2.68	.83	.47	2.25
HKZ 104	5.7	11.4	.47	7/8", M24 and 1", M30	3.94	5.91	3.54	2.83	3.07	.84	.79	2.88
HKZ 116/200	13.0	26.0	.35	1", M30 and 1-1/4", M36	4.72	N/A	4.72	3.82	N/A	.94	.79	N/A
HKZ 175/200	19.5	N/A	.35	1", M30 and 1-1/4", M36	4.72	N/A	5.51	4.76	N/A	.94	.79	N/A

## Hydraulic T-Bolt Clamp

### Operating Procedures: To Clamp

1. Visually inspect clamp and T-bolt-for obvious defects. Clean off any debris or chips that may be in the T-slot or on the die shoe surface.
2. Place clamp and T-bolt into T-slot.
3. Unscrew clamp sufficiently so that it easily passes over the die shoe.
4. Push clamp and T-bolt assembly forward (toward die) as far as possible to ensure proper sealing. Make certain that the die shoe surface is free of debris and lubricants.
5. Pre-clamp by hand screwing the unit down as far as possible while still allowing free access to the hydraulic port located at the front of the clamp. Make certain that the clamp is down to within 1/16" or less of the die shoe surface before activating the hydraulic pump and clamping the HKZ unit.

6. If using the "M"-Type Mechanical Lock-Collett one needs to turn down the collett on every clamped HKZ unit **after** the hydraulic circuit has been activated. Once the "M" collett has been hand-turned so that it's snug on top of the hydraulic portion of the HKZ cylinder, the hydraulic pump **must be turned off** and all line pressure going to the clamps must be at **zero** psi in order for the units to be hydraulically independent and mechanically fail safe.



**Note:** Please give depth of throat dimension "B" even if using a standard T-slot.

### ORDERING INFORMATION

When ordering or requesting a quote, please take a few minutes to complete the following data sheet.

#### Necessary Data

Range of die shoe thickness: \_\_\_\_\_ min. \_\_\_\_\_ max.

Press tonnage: \_\_\_\_\_

Weight of dies: \_\_\_\_\_ top \_\_\_\_\_ bottom

Clearance between ram and bolster (shut height): \_\_\_\_\_

#### T-Slot Dimensions

If standard: \_\_\_\_\_

If **not-standard**: Width of throat (A) \_\_\_\_\_ Depth of throat (B) \_\_\_\_\_  
Width of head (C) \_\_\_\_\_ Depth of head (D) \_\_\_\_\_

### STANDARD T-SLOT DIMENSIONS

Diameter of T-Bolt	Width of Throat A	Depth of Throat B		Head Space Dimensions and Tolerances					
				Width C			Width D		
		Maximum	Minimum	Maximum (Basic)	Tolerance (Minus)	Minimum	Maximum (Basic)	Tolerance (Minus)	Minimum
1/2	9/16	11/16	5/16	31/32	0.063	29/32	25/64	0.031	23/64
5/8	11/16	7/8	7/16	1-1/4	0.063	1-3/16	31/64	0.031	29/64
3/4	13/16	1-1/16	9/16	1-15/32	0.094	1-3/8	5/8	0.031	19/32
1	1-1/16	1-1/4	3/4	1-27/32	0.094	1-3/4	53/64	0.047	25/32
1-1/4	1-5/16	1-9/16	1	2-7/32	0.094	2-1/8	1-3/32	0.063	1-1/32
1-1/2	1-9/16	1-15/16	1-1/4	2-21/32	0.094	2-9/16	1-11/32	0.063	1-9/32