



40-Taper Spindle - Toolholder and Pull Stud Information

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Translation Available

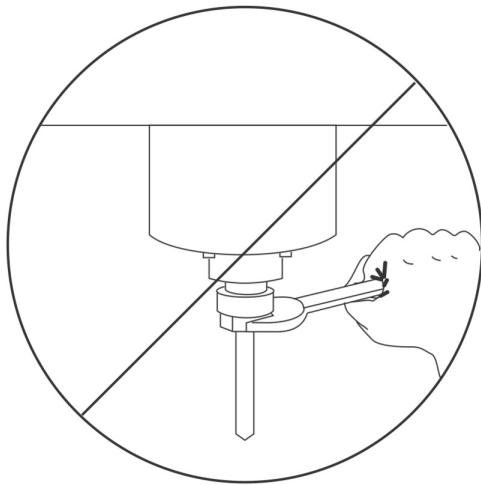
General Information

Examine tools, toolholders, and pull studs regularly. Replace toolholders and pull studs with surface damage.

RPMs higher than 10,000 must have balanced tooling of grade G2.5 or lower (ISO 1940 and ANSI S2.19).

Oversize Tools: In the **POCKET TOOL TABLE**, you must choose L-LARGE TOOL & ASSUMED HEAVY for tools with a diameter over 3" (80 mm). For machines with a SMTC, you must choose L-LARGE TOOL & ASSUMED HEAVY for tools with a diameter over 2.75" (70 mm).


 **Note:** An extra tool change can occur when the tool changer stores tools with the "Large" designation. The tool changer arm moves down 3.6" (92 mm) during a tool change.



 **Caution:** Do not use tools that have these problems:

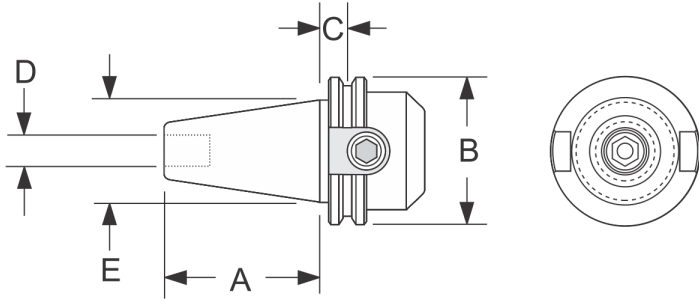
- incorrect taper size
- incorrect pull stud size or type
- damaged tool taper
- debris between the tool taper and the spindle taper

Tools with these problems can cause damage to the spindle.

 **Caution:** Do not use the spindle to tighten tools.

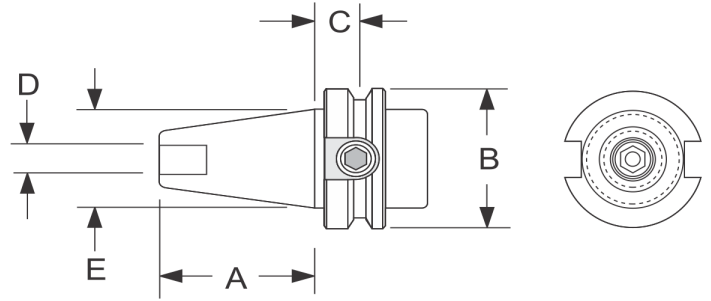
Toolholder Types

CT CAT V-Flange



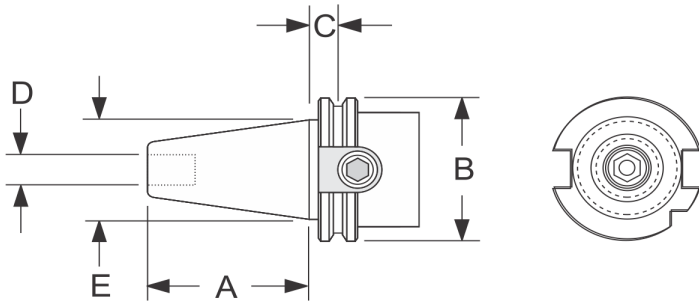
A	B	C	D	E
2.69	2.50	0.44	5/8"-11	1.75

BT MAS 403



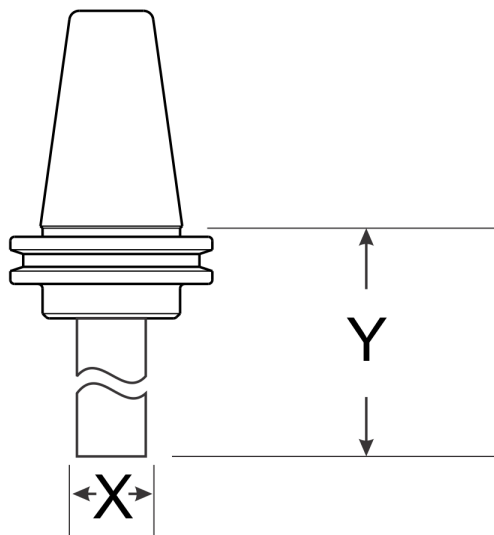
A	B	C	D	E
2.57	2.48	0.65	M16X2	1.75

DIN-69871 (MIKRON) ISO-7388



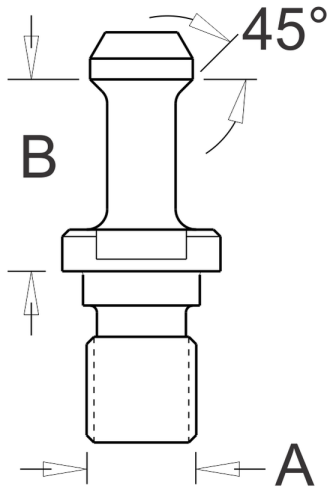
A	B	C	D	E
2.69	2.50	0.44	M16X2	1.75

Maximum Tool Length



Machine	Maximum Tool Weight	Maximum Tool Diameter (X)	Maximum Tool Length (Y)
VF-1-2 including YT and VM	12 lb (5.4kg)	5.0" (127 mm)	11" (280 mm)
VF 3-4 including YT and VM	12 lb (5.4kg)	5.0" (127 mm)	13" (330 mm)
VF 5-12/VM	12 lb (5.4kg)	6.0" (150 mm)	16" (410 mm)
UMC-750/750SS	12 lb (5.4kg)	5.0" (127 mm)	12" (305 mm)
EC-300	12 lb (5.4kg)	5.0" (127 mm)	10" (250 mm)
EC-400/400PP/500	12 lb (5.4kg)	6.0" (150 mm)	12" (305 mm)
DM-1/2	5.5 lb (2.5kg)	2.5" (63.5 mm)	7" (178 mm)
Minimill/Super Minimill	12 lb (5.4kg)	3.5" (88 mm)	12" (305 mm)
TM-1P/2P/3P	12 lb (5.4kg)	2.5" (63.5 mm)	7" (178 mm)

Pull Stud Information



Pull Studs: For the correct torque values refer to the specifications of the manufacturer.



Caution: Do not use an impact wrench to tighten the pull stud.

Drawbar: Incorrect pull studs damage the drawbar.

A damaged drawbar causes these problems:

1. Tools that fall out of the spindle
2. Unsatisfactory surface finish
3. Damaged tools

Through Spindle Coolant (TSC): Make sure a pull stud with a through hole is installed in the toolholder.

40 Taper	Thread (A)	Distance (B)	Haas Part Number
BT	M16 x 2	1.104" (28.0 mm)	Go to parts.haascnc.com . From the home page, go to: Performance Upgrade > Tooling > Mill Tooling.
CT	5/8 -11	0.990 " (25.1 mm)	
DIN/ISO	M16 x 2	0.990 " (25.1 mm)	