



# 50-Taper Spindle - Toolholder and Pull Stud Information

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Translation Available

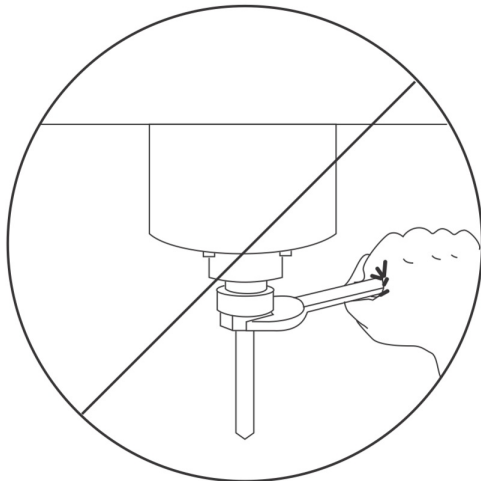
## General Information


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

RPMs higher than 7,000 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 4" (102 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:

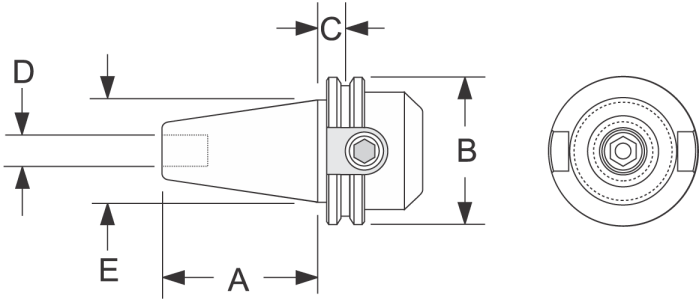
- incorrect taper size
- incorrect pull stud size or type
- damaged tool taper
- debris between the tool taper and the spindle taper

Tools with these problems can cause damage to the spindle.

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

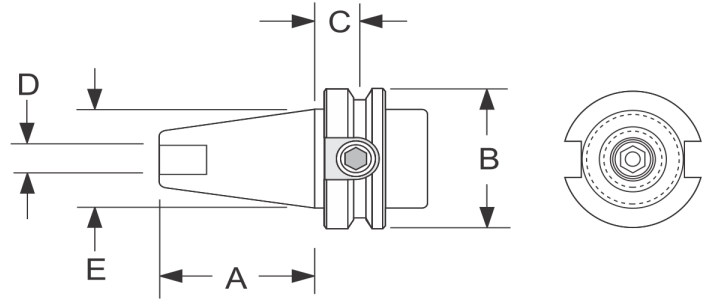
## Toolholder Types

### CT CAT V-Flange



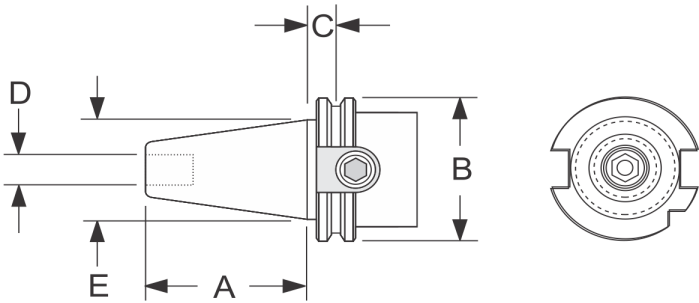
A	B	C	D	E
4.00	3.87	0.44	1"-8	2.75

### BT MAS 403



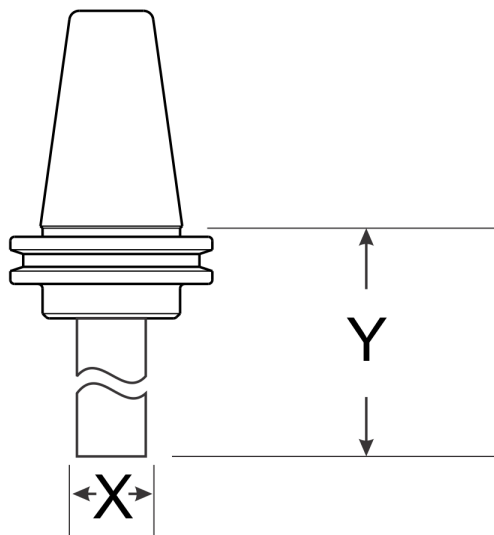
A	B	C	D	E
4.00	3.94	0.91	M24X3	2.75

### DIN-69871 (MIKRON) ISO-7388



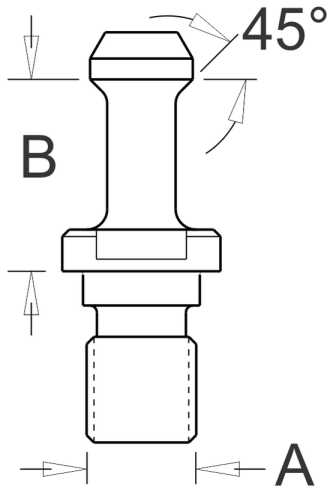
A	B	C	D	E
4.00	3.84	0.44	M24X3	2.75

## Maximum Tool Length



Machine	Maximum Tool Weight	Maximum Tool Diameter (X)	Maximum Tool Length (Y)
VF-3YT, VF-5	30 lb (14 kg)	7" (178 mm)	16" (406 mm)
VF 6-11	30 lb (14 kg)	10" (254 mm)	16" (406 mm)
EC-630 (50 Pocket)	30 lb (14 kg)	12" (305 mm)	24" (610 mm)
EC-630 (72 Pocket)	70 lb (32 kg)	12" (305 mm)	24" (610 mm)
EC-550 (50 Pocket)	30 lb (14 kg)	12" (305 mm)	22" (559 mm)
EC-550 (72 Pocket)	70 lb (32 kg)	12" (305 mm)	22" (559 mm)
EC 1600-3000, VS1-3	30 lb (14 kg)	10" (254 mm)	20" (508 mm)
HS 3-7	80 lb (36 kg)	9.8" (250 mm)	16" (406 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.

50 Taper	Thread (A)	Distance (B)	Haas Part Number
BT	M24 X 3	1.386 in (35.20 mm)	Go to <a href="https://parts.haascnc.com">parts.haascnc.com</a> . From the home page, go to: Performance Upgrade > Tooling > Mill Tooling.
CT	1-8	1.386 in (35.20 mm)	
DIN/ISO	M24 X 3	1.386 in (35.20 mm)	