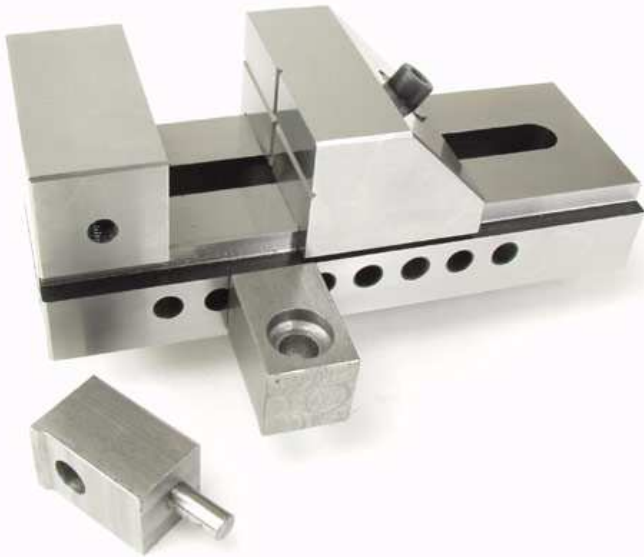


Screwless Vise Clamps

These vise mounting blocks provide a quick, easy way to secure a screwless vise to the mill table. They are easy to make and are a good starter project.



The vise mounting blocks use the holes in the side of the vise to hold it to the mill table. You can also use these blocks with the clamping slots in the ends of the screwless vise.

But how do you secure your vise while you are making the vise mounting blocks? Use your clamping kit to secure the screwless vise to the mill table. Two clamps on the fixed jaw and two clamps on the end of the base will do it. Put paper between the clamps and the vise so it doesn't slip and so the clamps don't mark the vise. This will be a good lesson in why the vise mounting blocks are so convenient.

Don't have a clamping kit? Get one; you will need it many times. But in the meantime, you *do* have stuff in your shop that will secure the vise. A couple of pieces of bar stock or small angle iron across the vise will secure it. Not pretty, but effective.

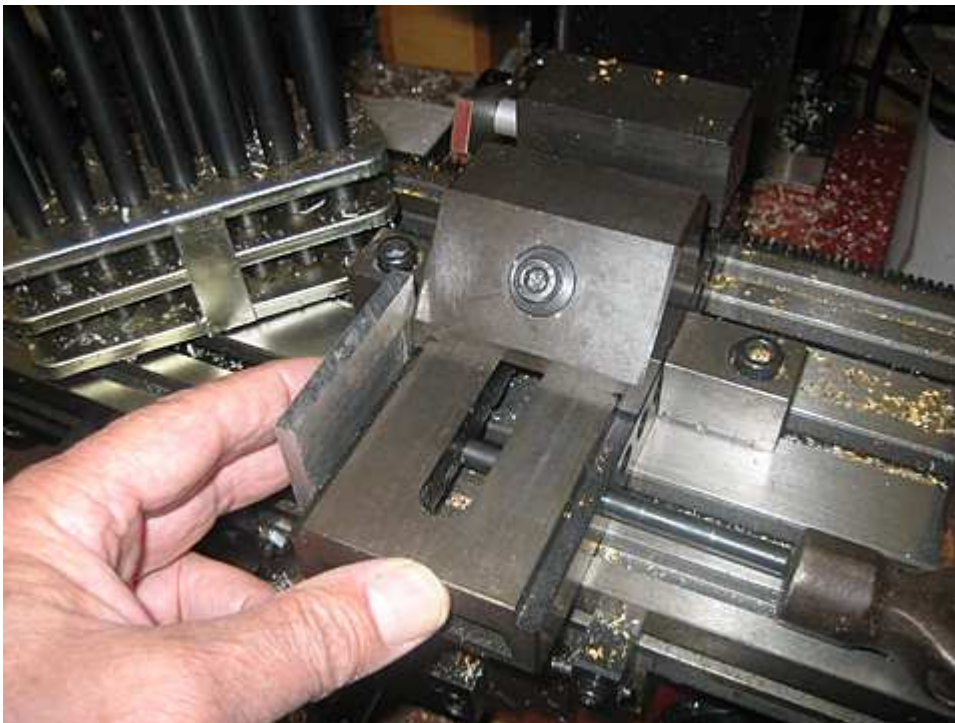
There are two drawings in this document showing vise clamps for 3" screwless vises and 2" screwless vises. The counterbored bolt holes on the 3" clamps are sized for 3/8" socket head cap screws. The counterbored bolt holes on the 2" clamps are sized for M6 socket head cap screws. You might want to adjust these dimensions if your T-slot nuts have threads that are different from these sizes.

The holes in the sides of the screwless vises are 8 mm nominal in 3" screwless vises and 6 mm nominal in 2" screwless vises. The drawings give you the option of using "inch" or metric size tool steel drill rod (sometimes called silver steel) for the steel rod pins. Use whichever you can get in your area. The pin diameter is not critical. It just can't be too big to fit in the hole.

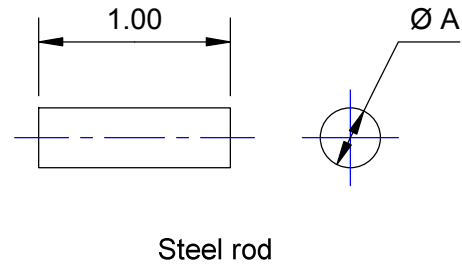
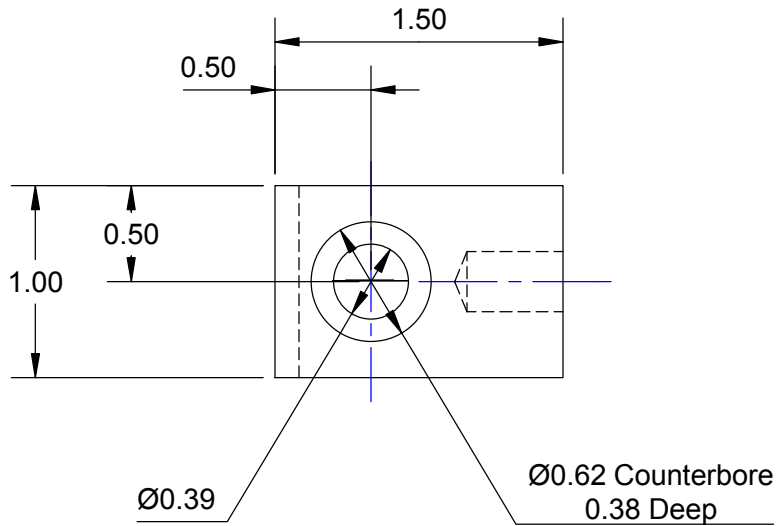
If the pins slip out of the holes, use a drop of Loctite to secure them.

The distance from the bottom of the vise to the center of the holes varies on different screwless vises. Measure this distance before you drill for the steel rods.

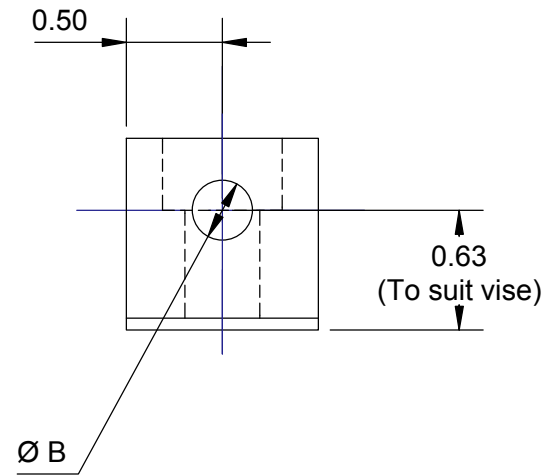
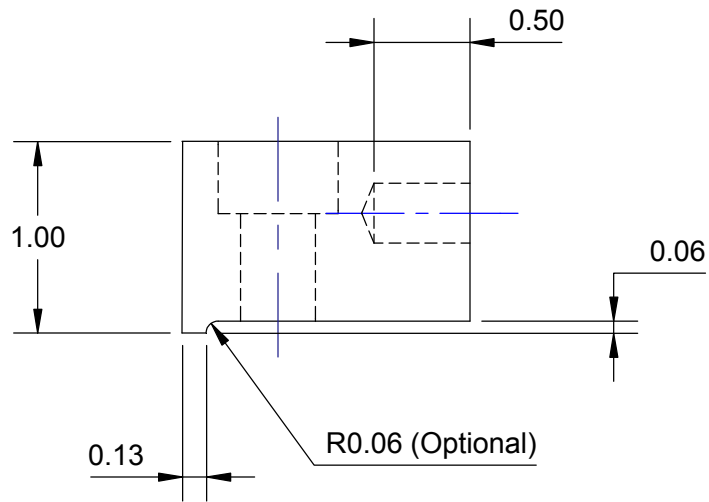
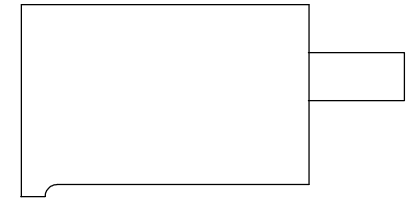
Measuring the distance to the center of a hole from the edge of a part is one of those dimensions that you can't get by direct measurement. Here is a quick way to make this measurement with plenty of accuracy for this project.



Use a transfer punch to mark the height on a scrap of material that has at least one straight side. Then measure from the punch mark to the edge of the scrap. Use this dimension to locate the hole for the steel pin.



Steel Rod	
Dia A	Dia B
5/16 in	0.313/0.314 in
8 mm	8.013/8.039 mm



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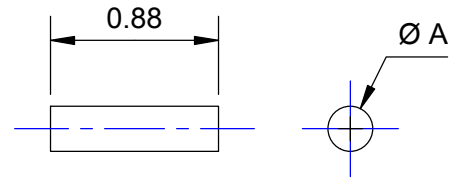
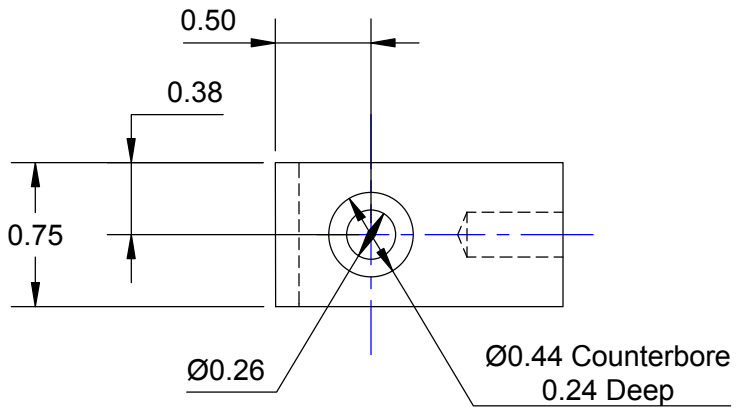
3" Screwless Vise Clamp

Revision 1

Scale 1:1

Sheet 1 of 1

Clamp material: Cold finished steel
Rod material: Tool steel drill rod

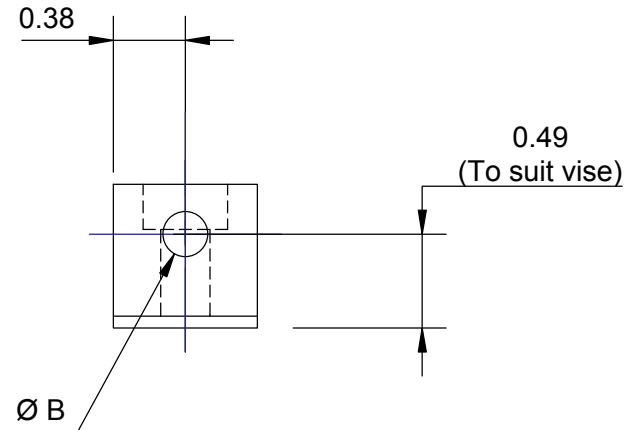
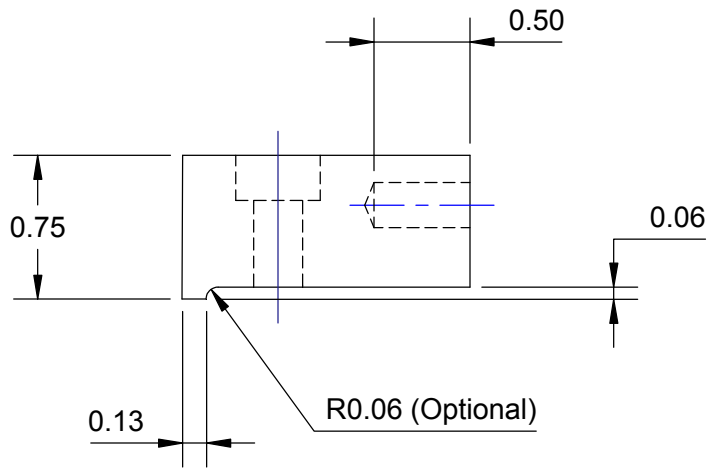


Steel rod

Steel Rod	
Dia A	Dia B
15/64 in	0.2505/0.2515 in
6 mm	6.013/6.039 mm



Assembled with steel rod



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2" Screwless Vise Clamp

Revision 0

Scale 1:1

Sheet 1 of 1

Clamp material: Cold finished steel
Rod material: Tool steel drill rod