

TIP 88 — Custom Boring Bar Holder/Sherline Products

Holding a 1/4" Shank Tool in a 3/8" Tool Holder

Some of our customers have tools with a 1/4" shank, like boring bars and threading tools. They want to use them in our tool posts, most of which are designed to hold tools with a 3/8" shank. If you want to use your 1/4" tools in our tool posts, here is a solution:

1. Purchase a sleeve bearing that has a 3/8" OD x 1/4" ID, or make your own. You will have to determine the proper length of the sleeve for your needs (see Figure 1). We would suggest buying one from McMaster-Carr (<https://www.mcmaster.com/#standard-sleeve-bearings/=1bu9qxy>).

Oil-Embedded Sleeve Bearings



Startup friction causes these porous bronze bearings to release a thin layer of oil on the bearing's surface. They are also known as Oilite® bearings.

Note: Dynamic load capacity is the maximum load a bearing can withstand at a given shaft speed. If your application's load and speed requirements are below the values listed, the bearing will work.

 For technical drawings and 3-D models, click on a part number.

SAE 841 Bronze Bearings

For Housing ID Lg.	Dynamic Radial Load Capacity	Lubrication	Lubricant	Temperature Range, °F	Each
For 1/4" Shaft Dia. 3/8" 1/2"	250 lbs. @ 120 rpm	Lubricated	SAE 30 Oil	-35° to 300°	6391K132 .67

Product Detail 

Oil-Embedded Sleeve Bearing for 1/4" Shaft Diameter, 3/8" OD, 1/2" Length Each

ADD TO ORDER

In stock

FIGURE 1— Here is one that is 3/8" OD x 1/4" ID x 1/2" long (cost—\$.67 each).

2. Make a saw cut down one side as represented by the dashed lines in Figure 2. The saw cut will allow the bushing sleeve to collapse on the tool when you tighten the locking screw(s) in the holder (Figure 3).

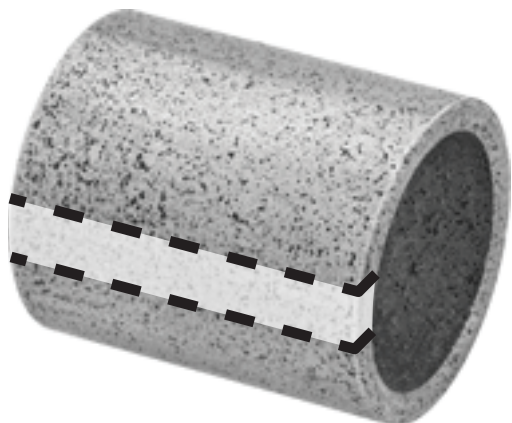


FIGURE 2

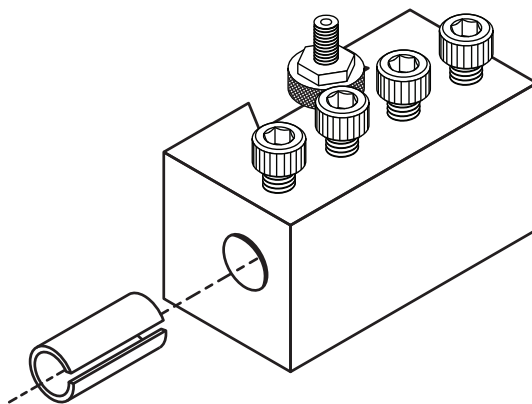


FIGURE 3— P/N 2285 Quick-Change 3/8" Boring Tool Holder shown for reference

Thank you,
Sherline Products Inc.