Tool holder for lathe tools

This version will hold 19 tools, use care when reaching across the holder. All the sharp ends are pointing your way. I made a smaller version that held 14 tools. My son seems to like it.

For this holder I used 2” central vac tubing. It cost about $10.00 for a 10 ft length. the amount you use depends on how long you make the tubes and how many tubes you add. The wooden portions are plywood, ¾” baltic birch (I had a piece laying around) and a piece of ¼” underlayment for the bottom, same as the birch, just a scrap piece. I tried using ¾” pine but the number of holes and their closeness compromised the strength, so I picked up the pieces and went to the plywood.

I used a round 9” lazy susan bearing from Lee Valley Item 12K0106, 9" Lazy Susan Bearings, ea. $9.30. To allow it to pivot, I think the 750 lb rating is lots for my tool collection. You can get square bearings too if you like, but I prefer the round. You can use a larger bearing for greater stability.

As per Lee Valley Description below

A snugly fitted race of 1/4" ball bearings provides strength and stability while giving smooth operation.

- The 9" bearing supports up to 750 lb and a turntable 18" to 36" in diameter.
- The 12" bearing supports up to 1000 lb and a turntable 20"+ in diameter.

Zinc plated to guard against rust or staining. Mounting instructions are included.

I laid out the holes with a protractor at 30-degree intervals and the inner row of holes between them. 12 holes along the perimeter and 6 in the inner circle and a single in the center. You can stack you upper and lower plywood discs for drilling if you like and if it won’t burn up your bit.

I found it is easier to drill the holes prior to cutting out the larger circles because the bit has lots of area for the lead to sit in and it will not wander and make messy holes. You will be drilling full holes nor patrial ones. Trust me on this one!

I used a 2“ Forstner bit to drill the holes. They are snug but the tubes can be coaxed into place with some care. A slight sanding to remove rough edges may help too. Everything is snug enough you will not likely need to fasten the plywood discs together.

The top plywood disc is 11”, while the lower one is 12-1/2”. The underlayment cover on the bottom is slightly smaller than the base. This makes it easier to glue on and not have overhang protruding.

The tubes are cut to length, 10”, 11-3/4”, and 14”. I cut the outer tubes with a 15-degree slope to allow easier access for the screws, and it looks cooler.

The lower holes encircle the tubes mostly, so no fasteners are required here. The lower platform is larger than the upper one, so this works fine. The upper holes are cut to allow the tubes to sit in place, so it is easier to assemble.

I set the longer tubes in the center and tapped the top disc into place, working it to the height I wanted to mount the outer ring of tubes. Set the outer ring of tubes in place and drill a clearance

hole in the top of the tube to drive the screw into the top plywood disc. I used a #6x ½” round headed screw, (Robertson head of course) in the back and top of each outer tube to secure it.

Mount the Lazy Susan as per directions and you are done.

I did apply two coats of spray lacquer to the wood only, prior to installing the tubes. It makes it easier to clean the dust off.

Figure 1Note the screw placement in the top of the tubes and the fact that the bottom of the tubes are "captured" in the plywood disc.

Figure 1This photo shows the relative sizing of the underlayment and the tube placement allowing dust to escape from the tubes. The center tubes will require a vacuum to clean them, if needed.