

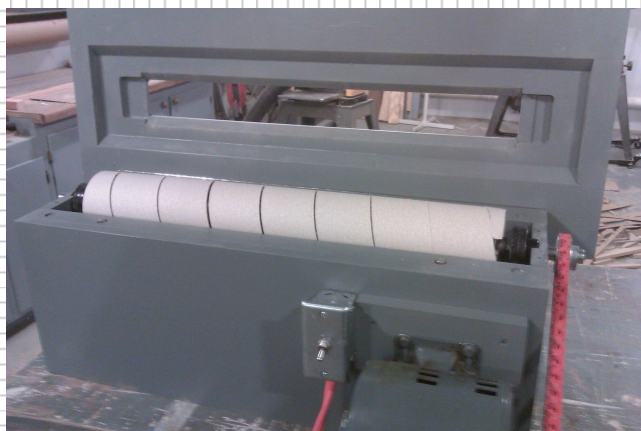
John Horne's Woodworking Projects

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Drum Sander



For sometime now I have needed some way to sand wide boards flat. I done some research on line and came up with several ideas. At first I considered building a drum sander with the drum on top with automatic feed. After some research I found the one that I constructed. The roller is positioned slightly below the table top. This means that when you slide your board over, the paper will be touching ever so slightly but not enough to sand the wood or turn the drum. When the sander is turned on, the paper will lift off due to centrifugal force and cause the drum to sand. Once you have this set up, you don't need to change the height adjustment again.



I started construction by cutting 4" diameter MDF blocks and gluing these on a 3/4" steel shaft. After the glue set, I mounted the drum on my wood lathe and trued the drum. I had a friend turned the drum on his metal lathe to gain a more precision drum. The drum was mounted in the cabinet using 3/4" pillow block bearings. The top was constructed using MDF and leftover laminate countertop. The drum was trued again after it was bolted in place by using a flat wood rasp on top of the table. 6" wide Velcro with adhesive backing was rolled onto the drum after two coats of oil based paint was applied to the drum.

The setup consisted of installing 3" wide loop sandpaper on the drum and adjusting the table height.

Materials:

- 1/2 sheet of MDF
- Laminate countertop
- Wood glue
- 1qt -Oil based gloss paint
- 2 - 3/4" pillow block bearing
- 36" -3/4 steel rod
- 6' -6" Velcro hook side with adhesive
- 3' wide sandpaper assorted grit (purchase in 10' rolls)
- 2 -2" pulleys (one 3/4" bore and the other 5/8")
- 1 -adjustable v-belt
- 1/2 hp electric motor
- 1 switch single pole
- 1 switch cover
- 1 switch box
- 2 -1/2 romex connectors
- 10' electrical extension cord #16
- Assorted screws, bolts and blind nuts

