

# Midi Lathe Stand

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## Midi Lathe Stand by Tom Hartranft aka Wdcrvr

I have a midi-lathe but not much space in my basement shop so I wound up building my own stand. Here's my original design of the finished stand with my old Delta lathe bolted to the top.



*Since the 2012 IAP post I made two changes to the stand.*

First, I upgraded from a Delta 46-460 midi-lathe which appears above to a Nova DVR/XP lathe. I added riser blocks to the top on each end of the lathe stand. This helps accommodate the Nova lathe and give me a good working height.

Second, I opted to install permanent stand casters from Rockler <http://www.rockler.com/workbench-caster-kit-4-pack>.



*The homemade casters that I originally described in my 2012 post turned out to not be as stable as I wanted, when moving the lathe in my shop. The Rockler casters are stable and easily adjust from stationary to rolling mode and back again.*

## My Requirements

I researched Saw Mill Creek and other online forums for a variety of stand ideas and settled on this link as the basis of my lathe stand [http://www.cranialstorage.com/wood/l...html#auto\\_top](http://www.cranialstorage.com/wood/l...html#auto_top) . It is Spartan in features, but compact and substantial in robustness. Plus, I liked the mortise and tenon joinery used.

I modified the above hyperlinked design to add some other features that were appealing to me:

- a. I used bench bolts to tie the vertical ends to the horizontal stretchers.
- b. I made the top 11" deep to give a 1" front and back overhang and the width plus 2" on each end.
- c. I recessed the plywood bottom and top between the bottom stretchers used to hide a weighted sand bag.
- d. I used metal L-angle brackets to support the plywood top and bottom.
- e. I used adjustable height swiveling leveling feet at bottom.
- f. I opted to install permanent stand casters.

If you are going to make a lot of shavings, you may not want to include drawers in your stand. It becomes a catch-all for your shavings.

## Let's Build a Stand

*These build instructions are based on the original Delta Lathe requirements.*

The stand is made of 2x10 dimensional pine, cut, glued, and planed to shape.

The finished stand top is 29 1/2" above the floor which includes 1/2" of leveler height. My midi-lathe is 14 1/2" from bottom to spindle centerline for a total floor-to-centerline height of 44", which is about elbow height for me. The bottom stretcher is 6 1/2" above the floor for ample toe room when working at the lathe. The vertical sides are 39" apart on their inside faces and measure 42" from outside to outside face. The top extends over the top stretcher by 1" front and back and extends 2" on each end.

Last thing I did with my design was to set the stand top length to 46". The lathe itself is ~31" long. It is centered on the top with ample room to each side, but not excessive since I have limited shop space.

If I ever find a good buy on a lathe extension, I'll buy another 2x10 and put a new top over the current one ... total length of lathe plus extension is ~59". So that'll be 6 1/2 inches of length cantilevered on each end of the current 46" top. I believe that'll be sufficiently stiff and substantial for the lathe with extension. Until then, I have a reasonably compact utility stand for my lathe work.

I finished the stand with a home brew of 1/3 equal parts of: BLO, Mineral Spirits, and Wipe on Poly.

Two views of the stand sitting on its leveling fixtures but without the casters are shown below.



And lastly, here is a picture of the 70 lb bag of tube sand bag inside the bottom stretcher (stretcher top removed for photo).



I am pleased with the solidness of the stand. I've estimated at 300 lb for the combined weight of the lathe, stand, and sand bag.

*I also built a tool holder and hung it on an adjacent wall 2x4 studs using cleats next to the lathe. The cleats enable quick pick up and move of the whole tool holder which can be repositioned to sit on any flat surface. I got the tool holder idea from another wood forum.*

