

## **Drill Press Lathe**

by [Tool Using Animal](#) on February 26, 2008

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## intro: Drill Press Lathe

I think any wood worker will eventually gravitate towards wood turning. However wood lathes (good ones anyways) are expensive, this is my variant based on the ones from Grizzly, Vertilathe and Eccentric cubicle.



## step 1: Make a live center

The only thing you really need to do to create a lathe from your drill press is make a live center, and that's just a piece that holds the wood and rotates freely. Here's what I did.

I ripped apart an old battery drill, a cheap skil drill from the thrift store for a dollar, Out of the pieces you should be able to save a chuck with shaft and a thrust bushing.

Now bolt a scrap of hardwood to your drill press table and bore a hole through the wood slightly smaller than the shaft of the drill chuck. For example, the chuck shaft was slightly over 5/16th of an inch so I bored a 5/16ths inch hole. Here i'm using a scrap of Mahogany.





## step 2: Making a great fit

To ensure a good fit between the shaft of the chuck and the block of hardwood, we're going to use the shaft to burnish the wood to size. Use a hex shaft screw driver bit and chuck it into the drill press, now attach the chuck we're using as a center and with the drill press running slowly, very slowly feed the shaft of the chuck into the hole we bored into the hardwood.



**step 3: Almost done**

Now that you have the hole in the hardwood sized, pull out the chuck and slip the thrust bearing into place, add a couple of drops of light oil and you should find the live center turns very freely, Chuck a couple of countersinks to hold the work place and your are ready to start turning.





#### **step 4: Turning**

Because we don't yet have a tool rest we won't be using proper turning tools for shaping, instead we'll be using shurform blades and wood rasps.

Use a mallet to knock the drive countersink into the work piece and then slip the piece between the chucks and lift the table so the work piece is securely held. Turn the piece by hand a couple of times to make sure it's centered. Now take a deep breath and turn the drill press on at medium speed.

Provided the wood did not fly out you can start rounding it with the shurform blade, once it's round, shaping can be done with the rasps.

and yes I really want real lathe now.



**Image Notes**

1. mallet one countersink bit into the wood, chuck it into the top drill, then raise the table with the second countersink bit in it to hold the wood up



