Turning Disks For Jewelry Ron Browning

Turning small items for use in jewelry making is hard and the shapes that lend themselves to use in jewelry are limited. It for these reasons that I never got into making jewelry. I happened on a YouTube video (<u>https://www.youtube.com/watch?v=vKHmByc-Tf4</u>) by Darrel Jones where he made a simple disk and used it to create a very nice necklace. I then started thinking about how to turn these disks easier than what he was doing. Making jewelry parts must be done quickly to be able to offer them for sale and make any money. Here is how I do it.

The first thing that you will need is soft jaws for your chuck. They are available on line and at your favorite woodworking stores.



\$26.99 at most of your favorite woodworking stores and on line. Then I found out that I wanted several sets but my wallet wouldn't stand for it. Only one thing left to do, make my own!

Make your own Soft Jaws

You will need a piece of 1 by hardwood that is about 2" wide and a way to cut it accurately to make 5 right triangles 2" from the 90-degree corner to the long edge. I use a chop saw after making sure it is cutting accurately. Maple makes fine soft jaws. You will also need 2 pieces of ¼" plywood that is wider than the thickness of the triangles you just made. I made my triangles out of 1 by hard

maple and cut the plywood to $1 \frac{1}{4}$ wide to fit the short sides of the triangle. Then a little glue on the short sides of one of the triangles and a couple of pin nails to hold it in place till the glue dries.

Next, using one jaw for your chuck and a drill press with a $\frac{1}{4}$ " bit, place the jaw into the pocket formed by plywood on the sides of your triangle. Now use the holes in the chuck jaw as a drilling guide and drill the triangle. You should now have a triangle with $2 - \frac{1}{4}$ " holes. Use this as a drilling guide for the other 4 triangles, except you will need to put the triangle being drilled on the drill press table with the drilling guide you just made on top allowing you to drill through the $\frac{1}{4}$ " holes previously drilled. Drill all 4 of the triangles that you made. Next you will need to use something to drill out the holes previously made to accept pan head 6 mm x 1 mm x 12 mm metric machine screws, available from Home Depot



(https://www.homedepot.com/p/Hillman-M6-1-00-x-12-mm-Internal-Hex-Button-Head-Cap-Screws-8-Pack-44479/204794682) 8 pack for \$3.84. I used my pen barrel trimmer in my drill press and drilled the relief to a depth that allowed 3 to 4 mm of the screw to come out of the wood. The chuck screw holes are blind bottomed, you may want to measure the depth of one of these holes to

determine the acceptable amount of threads the comes out of the bottom of the soft jaw.

Install the soft jaw blanks on the chuck and close the chuck all the way. If your saw was set accurately and you held the soft jaw blank in the drill guide in contact with both pieces of plywood then when you close the jaws, they will fit very good. If they don't fit exactly, don't worry about it but do put maintenance for your chop saw on your to do list. Put the chuck on the lathe with the soft jaws closed and drill a 3/8" hole in the center with the drill held in the tailstock. I have some plastic spacers that are a little larger than



3/8" that I will put into this hole later when cutting the soft jaws to hold the jewelry disk.

Making the Jewelry Disk

I started with an olivewood blank that was 1-1/2 x 1-1/2 x 3 inches, Woodcraft Item 826213, and turned a tendon on one end to fit my chuck. Then with the tailstock and live center in place turned this round. After removing the tailstock, I turned the end of the piece to form a slight rounded appearance and then sanded this to a very fine finish. Next, cut a dovetail type taper, larger diameter toward the finished face, about 3/32" long on the edge of the blank. I then squirted a little lacquer on the dovetail and face of the turning. For the final finish I used Hut Perfect Pen Polish High Gloss, available from Penn State Industries

(https://www.pennstateind.com/store/PK-

PF2.html?utm_source=Google_Shopping&utm_medium=organic&utm_campaign =&utm_term=PK-

PF2&gclid=EAIaIQobChMIz9 OxuCw9wIVPwaICR3d2g2jEAQYASABEgI7APD BwE). You apply the PPP while the lathe is running using a moderate amount of pressure, be sure to get the edge. Then use a doubled over 4 times paper towel and moderate pressure to melt the PPP into the wood then a fresh section of paper towel to bring to final gloss. Caution, the paper towel gets hot! Use a parting tool to almost part off the disk. Use a small saw to finish taking the disk off of the stock.

Cutting the Dove Tail Soft Jaws

Next you should measure, with calipers, the diameter of the disk and lock the calipers so that you can transfer this measurement to the soft jaws. I use a plastic round thing that is $\frac{1}{2}$ " in diameter and hold it in the jaws where I had drilled the 3/8" hole with it recessed from the face of the jaws about $\frac{1}{2}$ ". This causes the jaws to take up any slack between the jaws and the scroll, there has to be some slack or the jaws will not move. Now you can transfer the diameter of your disk onto the face of the soft jaws. You may want to hold the disk up to the mark to make sure the mark is the same size as the disk. With a parting tool cut a groove inside the mark to a depth of about 1/16". With the parting tool make grooves all the way to the center getting a little deeper with each smaller groove. With either a round nose scraper or spindle gouge refine the recess you just made to

account for the curve on the face of the disk. Cut a dovetail angle to accommodate the disk and remove the plastic insert.

Turning the Inside of the Disk

Place the disk in the soft jaws and tighten just enough to hold the disk from turning in the jaws. You can then make this face either concave or convex with a spindle gouge. Taking very light cuts, you can make a concave surface that is as thin as you like but not so thin as it only has one side! I think that earrings should be made with convex/concave sides to make them lighter while necklace pendants should be convex on both sides so that they hang on the necklace better. Finish as you did the front side



Findings

Jewelry parts are called *Findings*, I suppose that is because the name Fred was already in use... You can purchase inexpensive findings at Michael's and Hobby Lobby or go on line to purchase solid gold findings. One of these pictured here is \$20 in 18 kt gold! After you have either a bail or a jump ring in hand you should drill an appropriate

hole in the disk to accommodate one of them and then string on a necklace or put on a pair of the earring shepherd hook ear wires. When putting the hook on the disks you should make one left and one right so that the disk hand with the convex side out.



Sets of these make great gifts for all of the pretty girls in your life, wife included!