## MASON JAR LID DEMO

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There are many ways to accomplish this project, but the one that I am using is the Drill Press Method. I will also use a 2 7/8 inch forstner bit to remove the area for the jar ring. This can also be done with a parting tool or however you would like to do it.

The material for the bottom that you use needs to be at least 1 inch thick although I prefer 2 inches. Grain direction doesn't matter although cross grain is much stronger for the finished project if it is dropped.

You will be drilling the dowel hole from the bottom of your piece and it needs to go all the way thru. I used a hardwood dowel so I drilled a 3/8 inch hole; if you are going to use a softer dowel a ½ inch hole is recommended. Be sure to use a scrap piece on the top of the blank in order to prevent blow out from the drill bit.

The top of the bottom piece needs to be flat in order to glue the handle blank on. In most cases this requires flattening the top of the blank. I use my 2 7/8 forstner bit to accomplish this when not using a flat piece of wood.

The handle blank needs to be a minimum 1 ½ inches square. A bigger piece can be used depending on how you are going to finish the project. You will need to drill a hole in the center of this blank at least 5/8 inches deep to accept the dowel, deeper if you will be doing much turning up on the bottom of the piece. This can be done on the lathe or drill press but it needs to be dead center.

Glue the dowel into the handle with Tight Bond glue and let dry a minimum of one hour to make sure it is set. Wipe away any excess glue from squeeze-out away from dowel tenon. This dowel needs to be long enough to accommodate the handle depth and go completely thru the bottom blank.

After the glue has set in the handle it's time to glue the handle assembly in to the bottom blank. When gluing this it is important that you not only apply glue to the dowel but also to the flat surface of the handle blank. This extra glue will give you the holding power required to drill and turn the bottom of the piece. Once you have glued all required surfaces and inserted it in to the bottom piece use a clamp to ensure that it is flat against the bottom with no gaps. Be sure to wipe away all squeeze out after you apply the clamp. I allow overnight for this portion to dry.

Mount the lid blank/knob in your scroll chuck (the knob material will act as a waste block for now). I have a Long Nose set of jaws for my chuck which gives better support for the drilling and turning of the assembly.

Trim the tenon flush with the bottom and scarp off any glue around the tenon on the inside of the blank where the ring will set.

Bring the Tail Stock up firmly against the lid blank assembly and begin lightly truing up the bottom of the lid blank. This step will save you time in finishing the piece.

Mount the 2 7/8 inch forstner bit securely in a Jacobs chuck and mount into the tail stock. Ensure that you bit is sharp and free of any debris.

Reduce the speed of your lathe to the lowest setting to ensure you have the torque to drill with the big forstner bit. Running RPM for drilling should be 300-500 rpm for this part of the work. You will need a 5/8 inch hole to accept the Mason Jar Ring properly. If you didn't true up the bottom of the piece you will need to go a bit deeper. Be sure to support the Jacobs chuck with your while drilling as it can get caught very easily. Be sure to have a jar ring close by so you can check the depth of the cut. After getting your desired depth remove the Jacobs chuck and forstner bit from the tail stock.

Clean up the inside where you just drilled. Be sure to leave a small ledge for the ring to sit on. Depending on the size of your bottom block you can reduce the interior even more at this point and sand and finish.

Carefully bring the lid blank to round without removing too much material. It is important that you have a thick enough wall after cutting the 2 7/8 inch hole to support the piece so it won't crack. I like to error on the heavy side and therefore leave a ¼ inch thickness of the outer wall around the ring.

Bring up the tail to support the piece as you work on turning the side and top towards your handle. I like to go ahead and begin to shape the handle at this point.

At this point you remove your piece from the jaws and turn it around in the compression possession gripping the part that you have drilled away from the bottom. Be careful not to put too much pressure on the piece as you could crack it. Bring up the tail stock for additional support while turning the rest of the handle. Once you have turned the handle part it off and remove the tail stock to finish the top of the handle. Be sure at this point that you take light cuts to ensure you don't have it come off your chuck. Sand the outside of the piece and apply your finish.

Finally last step glue in the ring to the piece. I use 100% clear silicone and some use Aileen's Tack Glue. Whatever you use make sure that it is glued in flat and secure.