

Lattice Top Box



Tutorial by Jason Clark

Turning a lattice top box without any special tools or jigs.

Inspired by the works of Hans Weissflog and Hans Finsterwalder.



Starting with a 3 1/2" square blank, mark the center top and bottom. Mark a secondary center 3/4" from the first center, in same direction on both ends of piece.



Mount blank between centers and rough to 3 1/2" diameter. This diameter fits in my Supernova 2 with Powergrip jaws.



Mount the blank between centers, this time using the off center marks created earlier. Using a parting tool form a tenon on the bottom of the box. This tenon will be off center and is sized to fit a standard set of 50mm jaws.





Using the newly cut tenon the box is now mounted off center using a Supernova 2 and standard 50mm jaws. True the top face of the lid. A narrow parting tool will be used to cut the grooves on the top and the inside of the lid.



Begin cutting the grooves on the top of the box. Cutting the grooves to a consistent depth is crucial and will make things easier when we turn the inside. Grooves are spaced by eye. Using a skew laid on its side round over both edges of each groove. Sand the bottom of each groove and the top of each ridge.



Reverse the blank, using the Powergrip jaws to secure the blank, gripping the outside. Turn away the tenon, taking time now to clean up the bottom of the box will save time later. Part off of the bottom of the box using a narrow parting tool, leaving the lid in the chuck.





Measure the depth of the lid, leaving just enough material for the grooves on the inside. Hollow the lid to this depth.



Using the same technique as the top of the lid cut grooves on the inside. Stop often to check your depth of cut, cut a few and then round over the edges as before, always working from the inside out. Sand and finish the inside of the box.

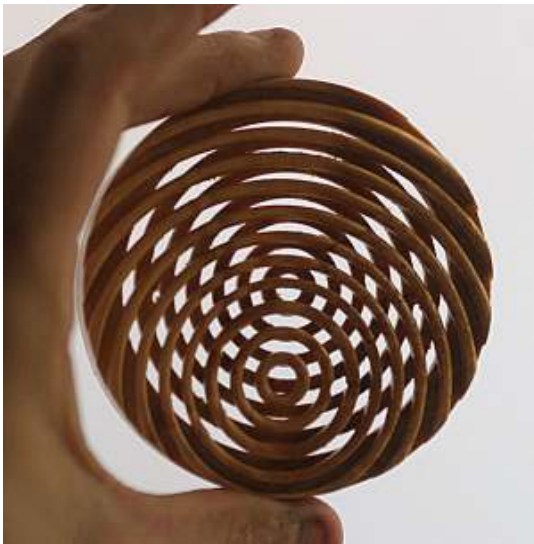


Remove the lid and chuck the bottom of the box and form a tenon to fit the lid. Place the lid on the box to true the outside, use slight pressure from the tailstock to hold the lid in place. Steel wool prevents marring the surface. Too much pressure will damage the lid. Sand and finish the outside of the lid.





Hollow the body of the box, sand and finish the inside. Reverse the body onto a jam chuck. Mine is a piece is Mesquite with layers of masking tape. Adding or removing layers to attain a tight fit. Turn the outside and the bottom, sand and finish.



The box is complete.

The lattice pattern on the lid is seen here, as is the finished box.



Materials used: 3 1/2" square X 2 1/2" thick Box Elder Burl, sandpaper, Danish Oil, 0000 steel wool, masking tape.

Tools used: 1" roughing gouge, 3/8" spindle gouge 1/2" round nose scraper, skew chisel, narrow parting tool, Supernova 2 w/ Powergrip jaws, Supernova 2 w/ 50mm jaws, calipers, jam chuck.