

Small Hollow Vessel instructions

1. Starting with two 6 - 8" diameter x 1 ½ - 2 ½" thick blanks that match, mark one as bottom the other as top. Mark each side for inside and outside, book marked grain patterns look nice.
2. Bandsaw or turn the blanks round.
3. **Mount the top** between centers with the outside side toward the tailstock, cut a tenon for your 4 jaw chuck on the outside of the top. Set the top aside for later.
4. **Mount the bottom** between centers with the inside toward the tailstock, cut a tenon for your 4 jaw chuck on the inside of the bottom.
5. Remount the bottom using your tenon, the outside now faces the tailstock.
6. Cut a recess in the bottom 3/16 - 1/4" deep and shape it to fit your 4 jaw chuck.
7. Clean up and sand the recess as this is part of the finished bowl. Cut a couple of decorative grooves in the recess if desired. (You can also do this step later if you use a vacuum chuck to shape the bottom.)
8. Mark the location of the mating joint on the perimeter about 3/8 - 1/2" from the left edge of the blank.
9. Rough shape the outside (on the right) leaving a foot if desired. Final shaping and sanding will come later.
10. Cut the left side mating edge down at the mating lip line drawn earlier to create a shoulder about 5/16" deep.
11. Remount the bottom using the recess you cut earlier in the outside surface.
12. Hollow out the inside removing the tenon, ¼" thick walls are ideal. Leave the mating tenon about 1/8 - 3/16" proud of the shoulder. This tenon needs to be far enough out of the way to allow shaping the top outside of the vessel later on without cutting into the tenon. Make sure the joint line is perfectly flat so mating will be invisible.
13. **Mount the top** using the tenon
14. Drill a 7/16" (or whatever size you want) hole through the top. (7/16" allows sandpaper wrapped around a 3/8" dowel to clean up the opening.)
15. Using calipers or a compass, mark the diameter of the mating lip and remove the inside material out to the mating edge so you can make the bottom fit. Make small cuts and test fit until the bottom just fits snugly onto the top. Make sure the joint line is perfectly flat so mating will be invisible. Finish hollowing the center leaving enough material so that you can shape the outside (blind) later on.
16. Remove material around the hole from the inside so the vessel will appear thin to anyone looking inside.
17. Remove some of the material from the top (left) side so there isn't much left to remove when the recess is holding it.
18. Mate the two pieces and rotate the bottom to get an appealing grain match. Glue the two pieces together using the tailstock to apply clamping pressure.
19. **Mount the glued up vessel** from the bottom using the recess.
20. Final shape the entire vessel aesthetically. Cut grooves or decorate as desired. Sand the accessible portions.
21. Optional: If you have a vacuum chucking system, you can remount using vacuum to hold it from the top while you shape, sand or decorate the bottom, otherwise, you should do these steps when the bottom is being held by the tenon earlier.
22. Sand and finish.

