Two-Piece Hollow Form Turning "Hollowing Without the Hassle"

Mark Mazzo
Finger Lakes Woodturners
January 17, 2013

Hollow Turning

- Usually turning a closed or semi-closed form through a small opening
 - Can be done using a scraping technique through a small opening
 - Can also be done with cutting techniques and specialized tools there are more issues with clearing shavings
- I will show a method to hollow in two pieces, re-assembling with a concealed joint line
- This technique can be done with an end-grain or face-grain orientation of the wood
- Material & Approach
 - Can use green or dry wood
 - Can turn to final thickness in one setting and allow to dry and move
 - Can turn to rough thickness, allow to dry and then re-turn to round
 - Much like a twice-turned bowl
 - I will turn a green piece start to finish in end-grain orientation

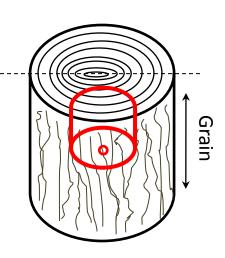
Face Grain and End Grain Orientation

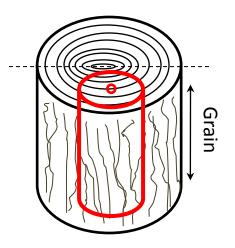
Face Grain

- Grain orientation on the lathe is perpendicular to the lathe ways
- Vessel will dry slightly oval

End Grain

- Grain orientation on the lathe is parallel to the lathe ways
- Vessel will dry more round (especially if centered on pith)





End Grain Orientation



Step #1:

- Start roughing between centers
- Rough turn a cylinder



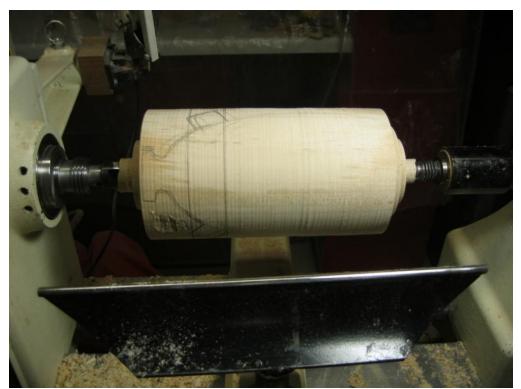
1b





1c

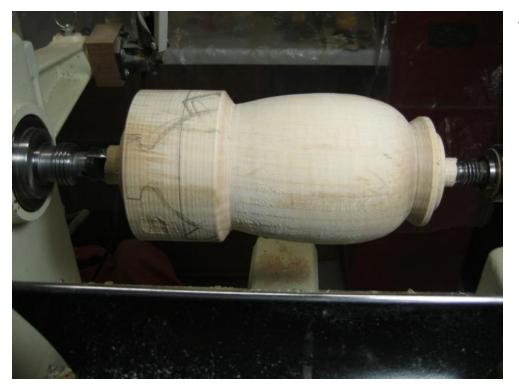
End Grain Orientation



Step #2:

- Create a tenon on each end of the piece for chucking later
- Pencil in the general shape of turning an a location for the splitting cut as a guide if desired
- Rough turn general shape

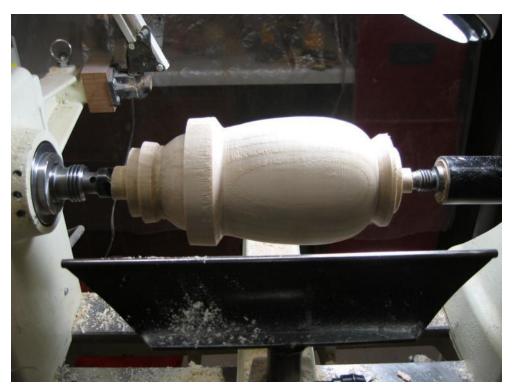
End Grain Orientation



Step #3:

- Turn lower half of piece
- Leave some material at the base to stabilize on the chuck and for the bottom to be turned later

End Grain Orientation



Step #4:

- Rough top of form
- Leave a band for handles or other embellishment if desired to conceal the joint

End Grain Orientation



Step #5:

- Reverse onto chuck
- True outside shape

End Grain Orientation



Step #6:

- Cut the piece at the desired joint line
- I use a pull saw for a thin kerf
- Joint line adjacent to the band works well



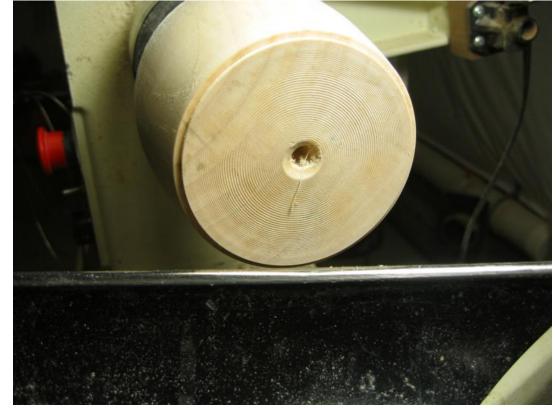
End Grain Orientation





Step #7:

 True the face the bottom piece create a shallow tenon and drill a depth hole

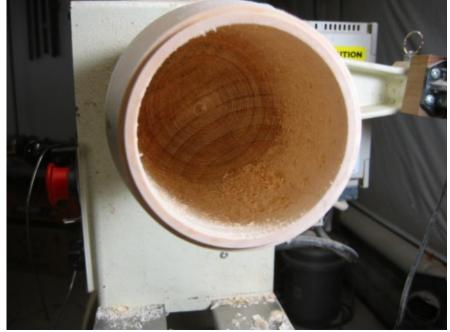


End Grain Orientation



Step #8:

- Start hollowing leaving a tenon with desired wall thickness
- Complete the hollowing down to depth



End Grain Orientation



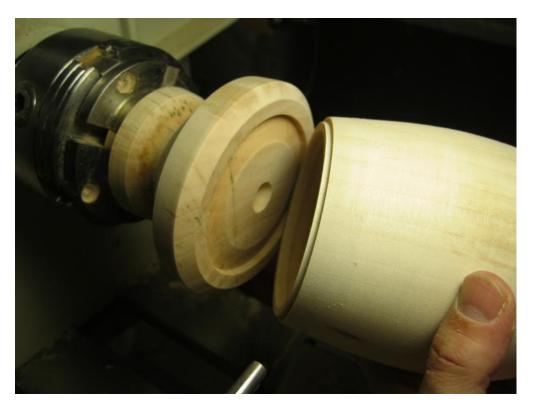


Step #9:

- Chuck the top piece
- Drill a depth hole
- Create a shallow mortise close to the diameter of the tenon on bottom

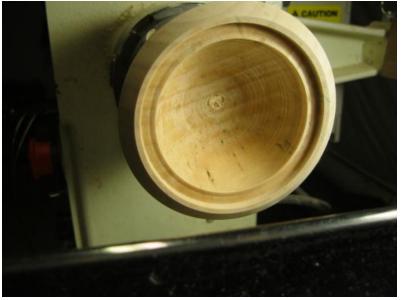


End Grain Orientation



Step #10:

- Fit the mortise to the tenon
- Complete the hollowing to depth



End Grain Orientation



Step #11:

- Glue the joint (Medium CA, or 5 minute epoxy for green wood)
- Clamp between centers



End Grain Orientation





Step #12:

- Reverse piece in the chuck
- Shape top so that line flows into bottom
- Drill through the top



End Grain Orientation

Step #13:

- If you have no need for substantial chuck holding while doing embellishment then:
 - Mount piece between centers with opening toward headstock and centered on jam chuck with tenon to fit into opening
 - Turn base of piece leaving just a nub with center point intact
 - Remove from lathe to dry
- If you do need for substantial chuck holding while doing embellishment then:
 - Turn away just enough of the base to minimize drying stresses and leave chuck tenon in place
 - Remove from the lathe to dry

End Grain Orientation

Step #14:

- Once dry, sand, embellish as desired
- Finish turn the bottom as necessary

- This piece styled after the handled pots done by Mark Gardner
- No need to always put handles on the pieces
- Be creative with how you conceal the joint!

