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"The Fine Art of Woodturning"

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# Natural Rim Hollow Vessel

## Part 1: Prepare the Blank:

- In this demonstration, my vessel is made from Maple Burl with Natural Edge at the opening.
- The size of my blank is about 6"/150mm diameter x 4"/100mm tall. Other sizes work fine, too, and this vessel can be made with a side grain natural edge, with or without bark.
- My blank has the burl or bark edge on the top of the blank.
- I cut the blank so that the top surface has the natural edge as close to level as possible in the area of the rim. If I do not want the bark left on, it helps with the leveling to remove it now.

## Part 2: Shape and Hollow the Vessel:

- Mount the blank between centers and begin by rounding the blank to a cylinder. The headstock (drive) center should be in the center of your intended opening and natural edge rim. The tailstock center starts in the center of the bottom, and can be moved to level the rim area if needed. Turn the top curve and shape of the opening, repositioning as needed between cuts. Proceed slowly so as not to lose more diameter than necessary.
- I like to hold the vessel in a chuck, so a chucking point is created to fit my jaws of choice. Note that it is not necessary to part off the chuck tenon at the end of the project. I usually plan to make the tenon larger than the bottom of the vessel and make use of all the wood in the chuck in shaping the piece. A faceplate can be used here, also, by flattening off the bottom of the blank and planning to have the screw hole pattern outside of the vessel shape (or planning to waste part of the blank for the screws).
- Shape the vessel once it's in the chuck. I prefer a vessel shape where the largest diameter point is either above or below the centerline. I also like for the opening to be a different size than the bottom footprint of the vessel. Keep plenty of mass at the headstock side to support the hollowing.
- Drill a depth hole smaller than the intended size of the opening, allowing for truing it up after drying if you are going to "twice turn" the vessel.
-Rough hollow the vessel, leaving a wall thickness that will allow for distortion during drying (if twice turning). That will vary according to the species of wood. Burls, typically, will not distort as much as straight grain wood. Thin walled roughouts will not allow for much shaping after drying, but will dry faster.
- Coat the outside of the vessel with endgrain sealer and allow to dry. Natural edge areas typically do not need to be coated. They are sealed naturally.
- Once it's dry, mount the rough hollowed vessel between centers and true up the shape and chucking tenon.
- Chuck on the tenon, shape and sand the top section of the vessel that is accessible while in the chuck.
- Hollow the vessel to desired finished wall thickness.

## Part 3: Reverse the Vessel to Shape the Bottom:

- Use a reversing fixture, vacuum chuck, or jam chuck, to hold the piece and turn away the chuck tenon.
- If I want to color the piece, I would either do the top section while in the chuck and the lower section on the reversing fixture, or I would do the whole vessel now on the reversing setup
- If I plan to put a pedestal or foot on the bottom I will create a small tenon on the vessel to mount it to. I like a tenon about 1/16"/1.5mm long and 1/2"/13mm in diameter.
- Sand the lower portion of the vessel.
- If I want a finished bottom, I will hold it firmly, or tape it on, and take away the tailstock after all the tooling and sanding is done. Option also to keep the tailstock up the whole time and sand away the middle of the bottom where the tailstock stub was, using a drill or lathe mounted sanding disk (or by hand).

## Part 4: Apply a Finish to the Vessel:

Many options exist for finishing this vessel.
- Penetrating oil finishes will “pop” the grain and give the wood a 3D quality, film finishes don’t do that.
- Oil based varnishes “pop” the grain, but to a lesser extent.
- Oil based finishes also tend to darken the wood somewhat.
- Most penetrating oil finishes can be topcoated with any film finish after letting them dry for 3 days or more.
- Some finishes are not compatible with others, and can’t be applied over them. Do a test first before applying something different to your vessel.
- Shellac is compatible with any finish, including wax. It is a good bridge between incompatible layers of finish.
- Film finishing, including spraying, can be done while holding the piece between centers on the lathe and turning it slowly while the finish dries.
- A tip for keeping penetrating oil from bleeding back from cracks or puddling in natural edge areas is to blow compressed air over those areas after wiping the wet oil off. Another wipe will be necessary to clean up any oil that blew out of the cracks/edges.

## Sources:

- Jaimeson Hollowing System - https://lylejamieson.com/
- Advanced Lathe Tools, Steve Sinner: http://advancedlathetools.com/
- Trent Bosch Tools: http://TrentBosch.com
- Small webcam for Hollowing - 45º lens, 720p - https://smile.amazon.com/gp/product/B01DRJX8JU/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1
- vMix software for capturing the camera’s video – http://www.vMix.com
- TransTint Dye, Woodcraft.com, Homestead Finishing Products
- StrongBore Drilling Fixture – Carter Products - http://www.carterproducts.com/turning-tools/strongbore?SID=d81d59cd9a055101de342f9755c2c828
- Digital Caliper – The Woodturning Tool Store - https://woodturningtoolstore.com/product/elio-dr-safe-drive-2-5/
- Bottom Finder and other calipers – http://www.premiergauges.com
- Steb Centers: Packard Woodworks, Craft Supplies USA
- Kirsten Kone – Oskar Kirsten - oskarkirs@yahoo.com
- Rubber Chucky – https://www.rubberchucky.com
- For more sources of supply, ask your good friend Google.

**For safety, Please wear eye and face protection at ALL TIMES**

**Oh, and be sure to HAVE FUN !!**