TINY WOOD BOWL PROCESS ROUTER

Make a tiny wood bowl with the wood lathe! This is a great bown for rings or small trinkets!

Turning the Bowl

Process	Machine/Tool	Comments
Bandsaw and sand your blank into a roughly cylindrical shape	Vertical bandsaw, large tooth blade Orbital sander Belt Sander	Use a compass to trace the circle silhouette before sawing and sanding. The main emphasis is to round the corners to make it easier to turn on the lathe.
Mount blank onto lathe	Wood lathe, Drive centers 4 prong, Live Center	BEFORE fixturing, lower the speed of the lathe. (This is to make it less dangerous if it's wrongly fixtured) Mount the blank onto a wood lathe using the 4-prong center and the live center to secure it into place.
Turn a cylindrical shape	Wood lathe, bowl gouges, face shield, Drive centers 4 prong, Live Center	The bowl gouges will make uneven contact with the blank at first – make sure to grip the cutting tool tightly and move slowly along the pen body. Start at ~1200 RPM and speed up as the bowl becomes more cylindrical (Typically, the larger the bowl diameter the slower the RPM)
Turn lip for the contracting/expanding chuck	Wood lathe, skews, Carbide, face shield, Drive centers 4 prong, Live Center	For a protruding lip, turn the lip while fixtured between the prong and live center. For a recessed lip, mount the bowl with the contracting chuck and carve out a recessed hole. Ensure that the lip is deep enough for sufficient contact. Depending on how you turn the lip of the bowl will determine how you will fixture the bowl to turn the exterior.
Turn the exterior of bowl	Wood lathe, skews, Carbide bits, face shield, Drive centers 4 prong, Live Center, Contracting Chuck	For a protruding lip, turn the outside of the bowl while fixtured between the prong and live center. For a recessed lip, turn the bowl while fixtures with the contracting chuck. Make sure to carve out the lip to minimize effects of warping. The tool should rest at or above the centerline to avoid catches.
Sand outside of bowl	Wood lathe, 4-5 different grits of sandpaper	Make sure the tool rest is removed before any sanding operation Slow down lathe to ~300 RPM. Use a variety of ~4 inch strips of sandpaper & work up in grit.
Carve out bowl interior	Wood lathe, face shield, Gouge, scraper, carbide tools, expanding/contracting chuck	Mount the bowl using the lip and the expanding/contracting chuck. Carve out the interior of the bowl, making sure to work slowly. The tool should rest at or below the centerline to avoid catches.

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Sand bowl interior

Wood lathe, high friction wet polish, paper towel

Make sure the tool rest is removed before any sanding operation. Slow down lathe to ~300 RPM. Use a variety of ~4 inch strips of sandpaper & work up in grit.

Polish Wood lathe, high friction wet polish, mineral oil, finish, paper towel

Depending on how you want the bowl to look and if you want it to be food safe you can use: High friction polish - *Must apply while lathe is spinning. User paper towel with wet polish. Can repeat after 10 minutes.*

Food-Safe - Use mineral oil or walrus oil for a food safe finish. Coat heavily, allow to seep for a few hours, then wipe of excess. Repeat as needed Look into epoxy if you want to make it waterproof!