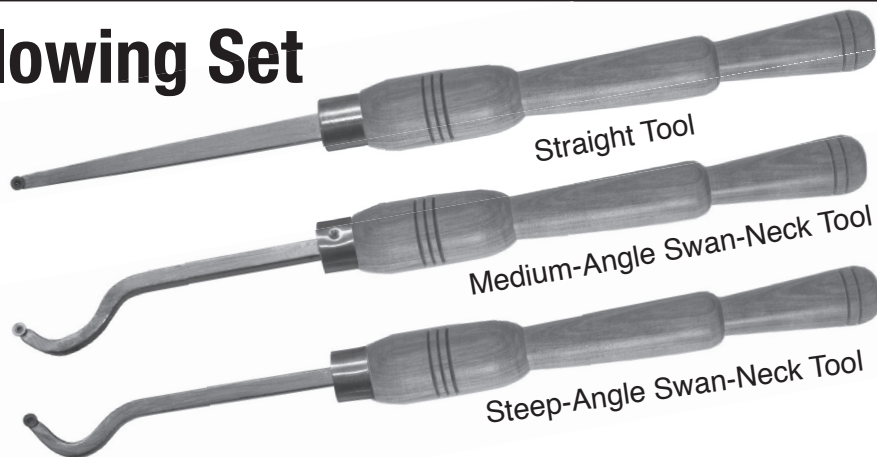


3 pc Carbide Mini Hollowing Set

Features:

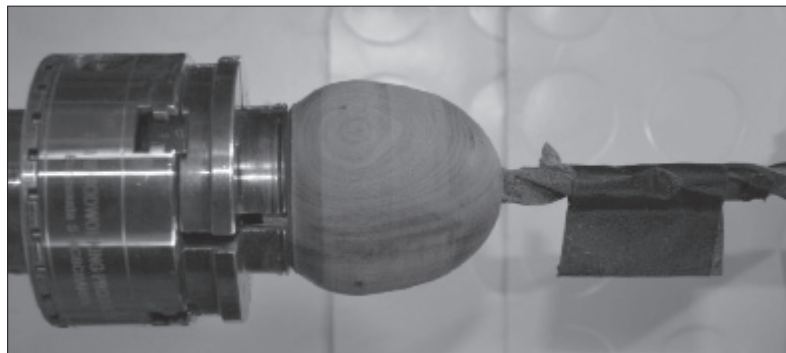
- 3 step quick & easy hollowing system
- Replacement carbide cutters
- Comfort designed 10" handles



Directions for Using the PSI Carbide Mini Hollowing Set

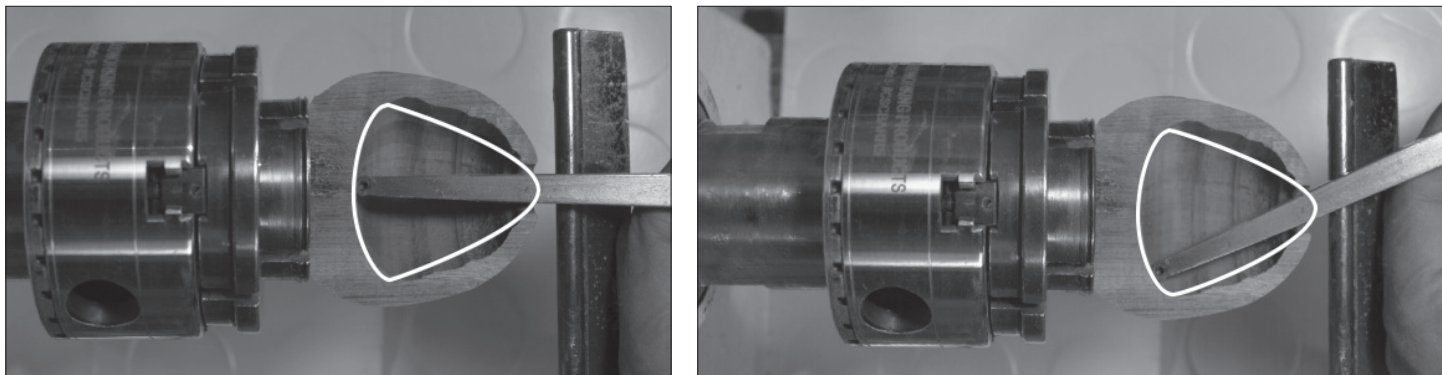
- Turn the outside of the vessel to shape.
- Drill a 1/2" hole or larger through what will be the top end of the vessel to the proper depth. Notice in **Figure 1** how we secured a piece of tape on the bit to ensure we didn't drill too deep. The hole should be less than the finished inside depth of the vessel as you'll want to clean up the bottom with the straight tool later. You can also use the straight tool to dig out the center of the vessel if you don't have the drilling setup.

Figure 1



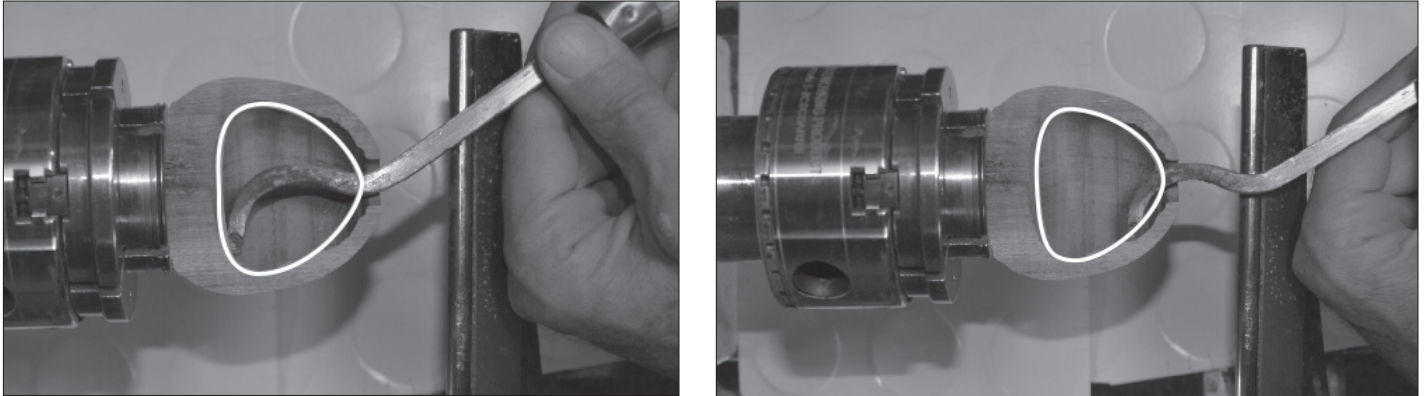
- Position the tool rest so the cutter is about 1/4" away from the centered hole and slightly above the center of the turning. These tools were specially designed with wide, flat bottoms for stability on the tool rest. The carbide cutters are razor sharp so start with light, slow, even cuts. With a bit of practice you'll be able to make cuts with minimal or no tear-out. Do not turn the tool shanks onto and edge to make cuts. Keep the tools flat against the tool rest.
- Using the straight tool scrape out the inside of the vessel where shown in **Figure 2**. Stop periodically to clean out the chips. An air hose works great for clearing shavings from the interior of a vessel. If you don't keep the vessel interior free of shavings, the shavings can build up and possibly bind around the turning tool and can even cause the tool to twist in your hand.

Figure 2



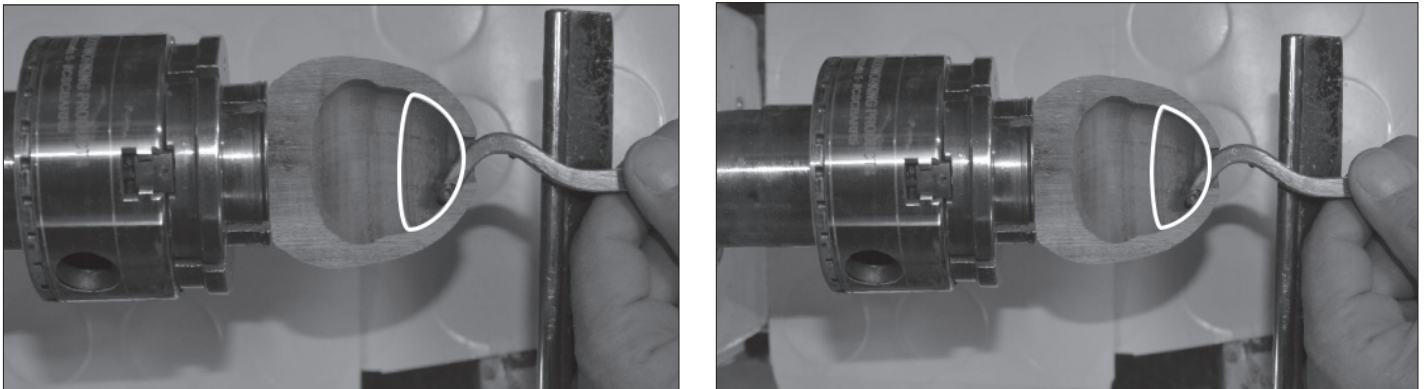
- Switch to the medium angle swan-neck tool to scrape out the interior of the vessel where shown in **Figure 3**. Notice the tool rest is moved away from **Figure 3** so the straighter part of the tool shank is on the tool rest, Periodically check the wall thickness with a caliper. For the finished vessel, you'll want an even wall thickness.

Figure 3



- Switch to the steep-angle swan-neck tool and continue to scrape the underside of the vessel top and rim where shown in **Figure 4**. Continue to check the wall thickness with a caliper for an even wall thickness. If the hole in your vessel is large enough, and with the lathe stopped, feel the inside and outside of the vessel for the wall thickness. You can also use a wide variety of calipers to verify the wall thickness.

Figure 4



- When a cutting edge on the carbide cutter becomes dull, use the hex wrench to loosen the set screw securing the cutter to the shaft. Rotate the cutter a quarter of a turn to expose a fresh cutting edge. When the entire cutter becomes dull, remove it from the tool shaft being careful to set the screw aside for easy retrieval later (they are easy to misplace). The edge of a sharp cutter should easily cut paper with minimal pressure. Clean the cutter with a bit of blade cleaner. Rub the top edge of the cutter on a 300/600 or 600/1,000 grit diamond card or stone and a few drops lapping fluid. Rub the cutter back and forth with minimal pressure being careful to keep the cutter flat against the diamond card.