A.REQUIRED TOOLS AND ACCESSORIES

* 2-7⁄8 " Forstner bit
* 2-1⁄8 " Forstner bits (STB-218)
* Four-jaw lathe chuck with 50mm jaws
* 2 part epoxy glue or CA super glue (cyanoacrylate)
* Wood or acrylic blank, minimum size 3-5/8 " x 3-5/8 " x 7 "
* Sanding and finishing supplies

B. PREPARING THE BLANKS

Turning The Mug Sleeve on any material. You can drill out of the blank will simplify the hollowing process. This step is easiest with 2-7⁄8 " and 2-1⁄8 " Forstner bits. If you don’t have these bits, drill the largest hole you can and hollow the rest with a lathe chisel.

1. Mount the 2-7⁄8 " Forstner bit in a drill chuck in the tailstock. Be certain to reduce the speed of the lathe to an rpm suitable for the bit.

2. Bore 1-1⁄4 " into the end of the blank. Take it easy feed the bit in. Drilling end grain especially with this large bit, builds up heat. Excess heat could destroy your bit and your blank.

3. Switch to the 2-1⁄8 " bit. Drill a hole 6" deep from the end of the blank, 4-3⁄4 " beyond the bottom of the first hole.

4. Slide the tailstock out of the way. You now have two hole stepped, inside the blank.

5. Hollow the blank by connecting the step at the bottom of the 2-7⁄8" hole to the bottom of the 2-1⁄8" hole. Use a round-nose scraper or similar hollowing tool. Stop the lathe frequently to check the fit between the mug insert and the hole. The insert must slip in all the way up to the rolled over lip on the mug insert.

6. When the insert slides all the way into the blank, make a mark 3/8" down from the end of the blank. Use a parting tool cut a rabbet up to this line, making a lip that will fit under the rolled over lip on the mug insert. Be conservative with your cuts, doing frequent fit tests. If the insert won’t set all the way in, make certain it’s not being restricted by the hole inside the blank before removing too much material from the rabbet.

C. TURNING THE BLANKS

7. When the insert fully seats into the blank, mark out the bottom of the turning. Do this by accurate measuring the depth of the hole in the blank, add 3/8", and place a parting line on the blank at this point. Part to the left of this line define the bottom of the mug.

8. Use a parting tool and calipers set to 2-5⁄8" to establish the outside diameter of the base of the mug.

9. Shape the outside of the blank. Turn the top so it transitions nicely into the stainless steel insert lip. Gently taper the blank from top to bottom and add beads and coves as you like. Be aware of the wall thickness so you don’t cut through.

10. Sand and finish the turning. Polyurethane is an excellent choice of finish for this project, as it holds up to damp environments.

11. Part the blank from the lathe.

12. With a bead of CA glue inside the lip of the insert, push the wooden blank in place. Allow the glue to dry.

13. If you use a stave constructed blank, you can leave the hole in the bottom of the blank, fill the hole with epoxy, or turn a plug to fill the hole. a solid blank you’ll have a solid bottom if you accurately located the parting location in Step 7.