## **Turning Wood Stem Glassware**

by Dale Nish

Your favorite wine or champagne will taste even better in a beautiful handcrafted glass.

Creating your own custom glassware is especially satisfying as it can be enjoyed every day. By following the step-by-step instructions below, you will be able to successfully create stunning glassware that reflects your personal style. Be sure to review these instructions entirely before getting started.

Good luck and enjoy.



## The following items were used to complete this project:

3/4" Roughing Gouge 1/2" Skew Chisel Diamond Parting Tool 1/2" Spindle Gouge Drill Chuck 7/16" Drill Bit



**1.** Select a block 3" x 3" x 4" long. A close-grained wood with straight grain through the stem is recommended. Mount the blank between centers on the lathe and turn it until round using a roughing gouge.



**2.** Square both ends of the blank using the long point of skew chisel flat on its side.



**3.** Cut a 1 3/4" diameter tenon 1/4" to 3/8" long on the end of the blank. The tenon should be slightly tapered so it will fit securely in the chuck jaws. Mount the blank in a chuck.



**4.** Using a drill chuck mounted in the tailstock, drill a 7/16" diameter hole, 3/4" deep in the blank. The hole may need to be slightly larger or deeper, as the glass is hand blown and each stem may be slightly different in size.

Hint- Use masking tape on the drill bit to mark the desired hole depth.



**5.** Cut a 3/4" diameter by 1/4" long shoulder around the drilled opening. Make a 3/4" deep part on the base of the piece approximately 3 3/8" from the drilled end. This indicates the overall length of the stem.



**6.** Rough out the basic shape of the stem, then use a 3/8" spindle gouge to flare the top of the stem to accept the glass. Make light cuts and check the fit frequently, as a good fit is critical for alignment and appearance. The wood should fit tight against the glass.

Hint- Round the outer edge of the flared area to soften the appearance of the top of the stem.



**7.** Using a spindle gouge, shape the stem making light cuts. The stem should not be smaller than 3/8" diameter at the narrowest point. Reduce the base of the stem to 2 3/4" diameter.

**8.** Sand the stem through 600 grit. Be sure all the scratches are removed before moving up to the finer grit. Stop the lathe and sand with the grain as needed to remove sanding scratches.



**9.** Using a parting tool, separate the base from the block. Make the cut slightly concave, using a sharp parting tool and remove stock until only 1/2" or so remains. At this point, stop the lathe and saw the rest of the way, or continue grasping the stem and part the rest of the way off.



**10.** Use a piece of scrap wood, turn it round and mount it in a chuck. Turn a tenon about 3/4" long and approximately 7/16" in diameter on the blank. Turn or sand the tenon so that it fits snug inside the opening at the top of the stem.

Hint- check for fit frequently to avoid an undersize tenon.



**11.** Turn the bottom of the stem until it's clean and smooth. Sand the base.



**12.** Using a wood dowel to hold the stem, apply a coat of Masters Magic (or similar) lacquer, wait a few minutes and apply a second coat.

Hint- Lightly sand between coats for a superior finish.



**13.** With the stem set aside to dry, turn a jig that will align and hold the glass in place while the adhesive cures. To do this, turn a cylinder 3 1/2" diameter by 4" long between centers. Drill a hole in one end of the cylinder to fit over the revolving center. Turn a tenon on the opposite end of the cylinder to fit snug inside the goblet opening (see figure A).



**14.** Apply epoxy to the hole and tapered opening of the wood base, spread evenly.



**15.** Mount the goblet base in the chuck and tighten the jaws until they lightly contact the rim. Do Not Over Tighten- as the jaws may mark the wood.

Hint- Place a rag over the jaws before chucking the base to prevent marking.

**16.** Slide the wood cylinder over the revolving center and register the block against the interior rim of the glass. Gently apply pressure to center the glass in the wood stem. Hold the stem with your hand and gently rotate the glass to distribute the epoxy around the complete contact area. Set aside to allow the epoxy to set and you're finished.

If you have any questions or require assistance, please give us a call at 1-800-551-8876.

