

TURN A SPHERE... DOWN AND DIRTY!

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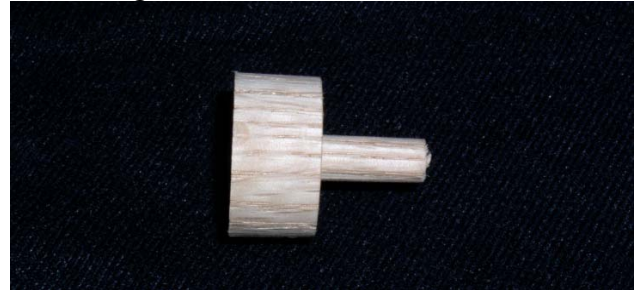
I really don't have an engineer's mind or temperament. I suppose that's why I turn bowls for a living! I was at the Folk School taking a class from Dale Larsen and he showed us how to turn a sphere. I thought it would be a great add on to my bowl sales. I have turned spheres up to 7" in diameter but practically speaking 2.5" – 4" are the easiest for the beginner.

Two simple shop made cup jigs are required. The first is a Morse taper #2 to fit your head stock (Figure 1). The second is a Morse taper to fit your revolving tail center. (Figure 2)

Figure 1



Figure 2



The jigs should be made from a very tight grained wood such as ebony or cocobolo otherwise the jig will shatter.

1. Begin with a work piece 0.5" longer than the maximum diameter, i.e. (3" square stock 3.5" long); turn to a cylinder using a traditional spur drive or steb center. Check the diameter you have achieved with a caliper. Using the 3" example, mark on the cylinder the center and two lines at either ends 3" apart leaving 0.25 at either end.
2. Part the ends down to 0.5" leaving your layout lines. Begin to round ends to make your sphere, (I use a 1/4 or 3/8 Bowl gouge), be careful to leave your center lines! When satisfied with your shape reduce your end tennon down to as small as you can.
3. Using your cup centers, rotate piece 90 degrees aligning the center line on the work piece with the center of the cup jig. SLOWLY start lathe checking for alignment then gradually speed up. Turn away tennon carefully! Stop and check piece for alignment cut marks on both ends should match. Begin to turn watch ghost image and turn it away. Again when satisfied with shape mark center of sphere, and rotate 90 degrees.
4. Align as in previous step and turn away ghost. The piece at this point should be very close to round. When satisfied begin sanding through 400 – 600 or finer if you chose. (I use a vacuum chuck at this point). Use your favorite finish I use Myland's high build friction polish.

