

# Woodturning Evolution Segmenting Style

Art Bodwell

A couple of years back I made a few vessels inspired by a book entitled "Woodturning Evolution" by Nick Agar and David Springett. Their pieces are from solid wood, but of course I thought it could be done segmented. They came out pretty well and actually weren't that difficult.



I've been wanting to do something like this using rings, but never got around to it until recently. I've done projects with rings before, but they always involved circles or straight sections. This one involved various



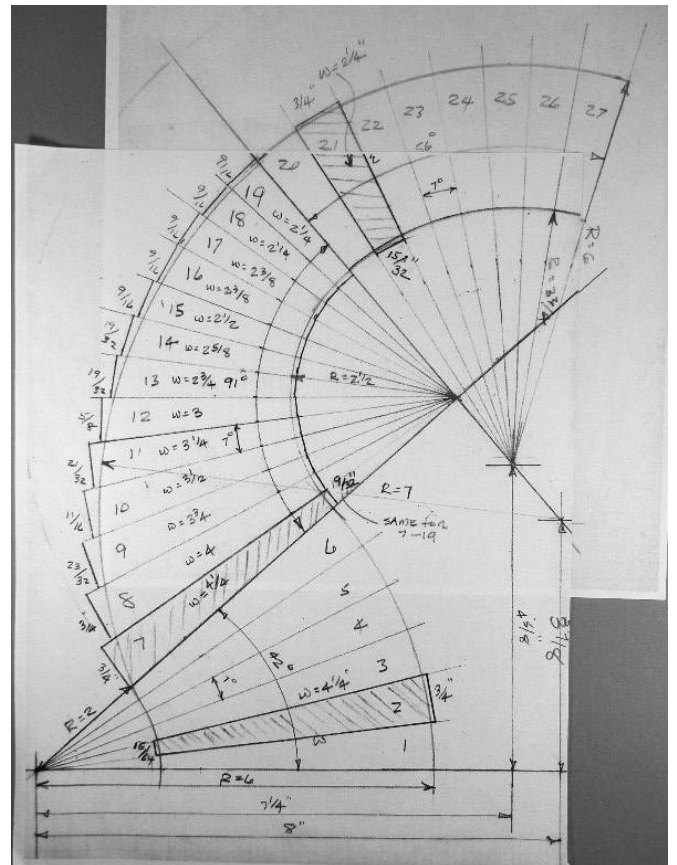
curves and changing diameters which complicated the process.

The first thing I did was sketch out what I thought I wanted it to look like and then created a design to accomplish it. I did this all by hand because the final vessel to the left involves three different curve centers and involved a little trial and error to find the centers that would give me the result I wanted.



The shape I wanted had 3 sections, with a reverse curve and a tapering section. The lower section pieces 1-6, the middle section pieces 7-19 and the top section pieces 20-27. The original design had three different wedge angles, one for each section, meaning three different sleds to achieve these angles. So I redesigned it to have all the wedge angles the same, in this case 7 degrees so I needed only one sled size. Sections 1 and 3 have different ring sizes, but the same diameter within each section. The middle section all the rings are a different diameter which created another issue when positioning these on the sled which I'll explain later.

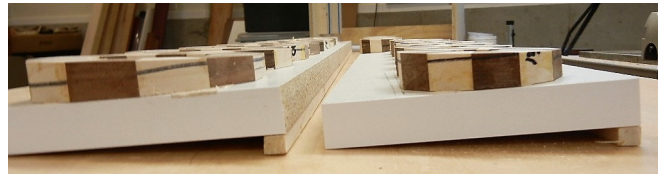
The rings all had 12 segments per ring and were designed in the conventional manner you are familiar with.



Once designed, the rest of the project was typical tube construction with a few twists I've eluded to.



Rings ready. Notice rings in right foreground are offset at different distances to account for varying diameters in the middle section. Also each ring is rotated a half segment to maintain the swirl pattern. Each piece must be numbered and marked with the low and high spot for glue up. If you lose the marks it's a nightmare to get the rings in the correct order



Sled set for 3.5 degrees for 1st pass thru drum sander



Sled set for 7 degrees for 2nd pass



Ready for glue up. Notice I rounded the rings by eye on the disk sander to reduce the amount of shaping after glue up



Gluing pairs



Pairs glued into bigger sections



Notice I did some more rough shaping between each glue up to help minimize final shaping



Ready for final shaping  
Mostly with hand held right angle sander



Here you can see reverse angle and taper. Added ends and yellow finial for for a little whimsy