This is a how-to article for making BIG bowls with the Open Segmented Jig (OSJ) from Charles Hale, Texas Gadgets. Web site is www.texasgadgets.com. Use of the Woodturner Studio added in the design of the bowls. There are pictures here from both big bowl projects that I have made. Please enjoy this how-to article.

Marcia holding the second completed 23 1/2” Spiral Walnut, Maple and Cardinalwood bowl. The bowl has 751 pieces and is about 12 inches tall. Each ring has 50 segments except the top and 3rd rings having 100 pieces. The bottom of the bowl is one piece of solid walnut. (1)

Marcia is holding another big bowl having 651 pieces. Each ring has 50 segments except the top ring having 100 pieces and the bottom is a solid piece of Walnut.
Using the Tolly repeatable stop from Texas Gadgets, start by placing rule next to the saw blade.

Slide stop in to depth required from spreadsheet. Lock down the single thumbscrew, then slide rule back away from the saw blade.

With miter gage set, place board next to repeatable stop.
Start saw and cut the segment off.

Segment cut off, vacuum tube removes segment from saw blade keeping your fingers safely away from the spinning saw blade.

Segments are sucked into the peanut butter jar. Vacuum tube is rain down spout from Lowe's or Home Depot.
Vacuum tube clamped to table saw.

Complete setup, miter gage, repeatable hard stop and vacuum tube. Saw guard removed for clarity only.

Home made vacuum tube, brackets and clamps.

Vacuum tube and jar lid. Screen keeps very small segments from being sucked into the vacuum.
Homemade MDF adapter made for 2” vacuum hose.

100 segment index, 100 index marks equals 50 segments.
First row of 50 segments glued onto solid walnut. Segments are ready to be sanded smooth.

MDF sanding board with 60 & 100-grit paper glued on, 24” X 24” special order from Klingspor’s Woodworking shop 1-800-228-0000.

Sand row of segments smooth, this is done for each row of segments after glue has cured for at least 4 hours.
MDF disk used to compress glued on segments.

MDF disk compressing segments for a tight and even bond.

Second row of segments are being glued onto the first row.
Second row of 50 segments glued on ready to be clamped.

Second row of segments sanded smooth ready for another row.

Fifth row of 50 segments are being glued on.
Fifth row of segments are being compressed with MDF disk.

Here seven rows of segments are glued on.

Seventh row of segments are being sanded smooth.
This large bowl is taking on a final shape.

Row of segments being positioned using the platform assembly.

Top ring is assembled by gluing Cardinalwood spacer onto the segment next to it, then glue two together and so on.
First dry clamp 100 pieces of the top row for assembly. Glued together 2 by 2 clamping as you progress.

Continue to glue sections and clamp together.

All pieces are glued. When cured, sand one side smooth then clamp onto the top of the bowl as shown.

Top closed row is clamped to the open segments below.
This shows the spiral well on the big bowl. Second closed segment ring being glue on the top, numerous clamps used to insure a good glue bond across the bowl.

Bowl construction is completed and ready for turning.

This picture shows the spiral and how glue up was completed. Note the stair step of each row of segments down to the bottom.
Outside turning is done with a 1” round nose scraper. Note the angle of the round nose scraper, about 45 deg.

Light cuts are required at this stage of the project. MDF disk on the Oneway tailstock with the Tolly designed tailstock adapter provides additional support during turning of the outside.

The bowl outside will be turned to the bottom row of segments.

Arbortech woodcarver used to cut the inside of the big bowl. This could have also been completed on the lathe with a 1” scraper.

Note the cutting blade removing wood. Homemade support for the Arbortech cutter allows for smooth and controlled cutting.

Johnny’s steady rest used while sanding the inside of the bowl.
The inside has been sanded and finish sprayed.

It is finished with clear spray lacquer, spraying in 4 directions to get full coverage on all openings (in between the segments).

Vacuum drum chuck, extension is from [www.texasgadgets.com](http://www.texasgadgets.com), used to hold the inside of the large bowl to finish the bottom.
Here the Arbortech cutter is used for the bottom of the bowl. The Arbortech leaves a fairly smooth cut so little sanding is all that will be required to finish the bottom. Bowl bottom is almost finished, waste block is being cut away.

Bowl held with vacuum, and the bottom is now finished.
Grandson Jaxon, 14 weeks old, is in the first big bowl, this gives an indication of just how large the bowl is.

Completed second bowl, it has 751 pieces Cardinalwood, Maple, and Walnut. Bowl stands about 12 inches tall 23&1/2” wide.

The bowl has very nice color and nice spiral pattern.
Bowl bottom showing the relief and signature rings.

Completed big bowl project by Johnny W. Tolly. There are 751 pieces in this bowl. The woods are Cardinalwood, Maple and Walnut. Each ring has 50 segments except the top and 3rd ring, which have 100 pieces. The bottom is a piece of solid walnut.

I hope you have enjoyed this how to article as much as I have had constructing it for you.

Johnny & Marcia Tolly live near Austin Texas. They are both active with the local Central Texas Woodturners club. Johnny has served as the President and Marcia is the club’s Liberian. Questions may be directed by calling Johnny at 512-858-4471, home Cell 512-922-1241. Email johntolly@austin.rr.com