Segment Turning

- Select the woods for construction of the segments.
- Determine the circumference of the vessel to be turned and the number of pieces within the circle.
- Use the attached page from Woodturning with Ray Allen determine the segment length and the correct angle to be cut. You will also need to determine the thickness of the pieces (1/4 inch is a good starting place).
- Cut the wood into strips of the desired width and thickness.
- At the table saw set the angle on the table saw miter gauge or the set the angle on the angle-cutting sled.
- With a stop block secured on the table saw fence, move the fence to set the cut length for segments.
- Place the strips against the miter gauge or on the sled and cut the strips into the segments. **Be careful with the table saw cutting the strips into the segment pieces.**
- Use sand paper on a flat surface to cleanup the edges of the segmented pieces.
- On a flat surface dry fit the pieces in a circle.
- You will need a hose clamp to hold the segmented pieces in place.
- Apply wood glue to the sides of the segmented pieces and place them on a flat surface covered with a piece of wax paper. If you are gluing up woods that may resist gluing, wipe down with acetone to aid in the process.
- Place the hose clamp over the ring of segmented pieces tightening just enough to pull everything into place.
- Allow drying overnight. Remove the hose clamp.

Presenter: Bill Bartoswicz
South Coast Woodturners
1/12/13

- Gently sand the top and bottom of the ring(s) to ensure the ring(s) is flat. Ensure that all surfaces mating with the rings are also completely flat.

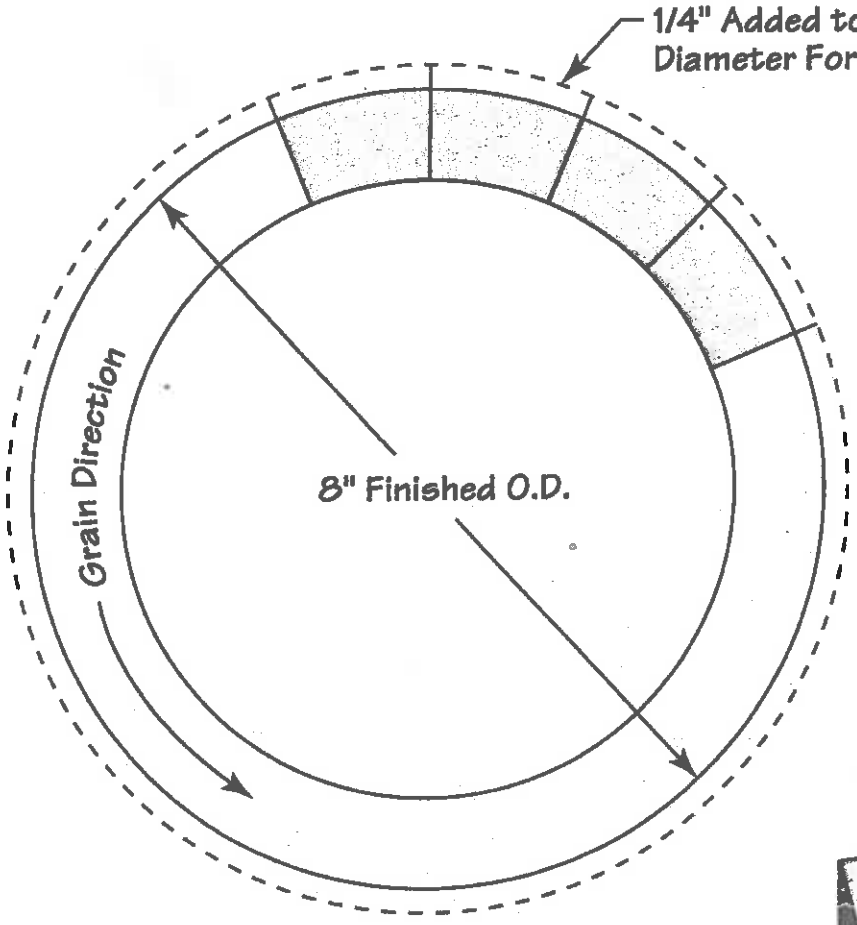
- With glue in place on all of the appropriate surfaces mount the segmented ring(s) in place and clamp.

- After overnight drying mount the piece on the lathe and finish.

Presenter: Bill Bartoswicz
South Coast Woodturners
1/12/13

SEGMENT LENGTH & MITER ANGLE

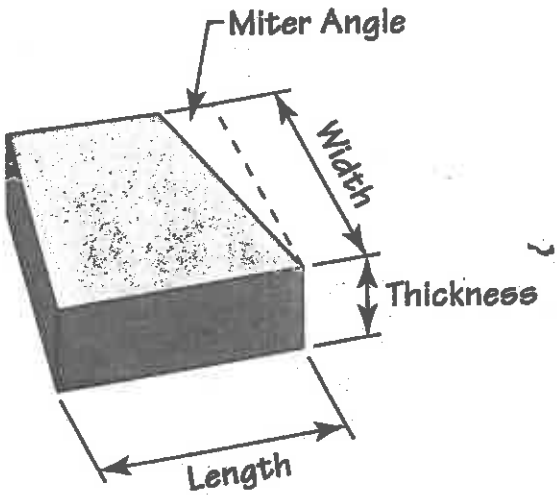
Segment Length = Diameter X 3.1416 = Circumference
Circumference ÷ No. of Segments = Length of Segments



8.25" X 3.1416 = 25.91" ÷ 16 = 1.610"
Length of Segment = 1.610"

1786

SEGMENT



360° ÷ 16 = 22.5°
22.5° ÷ 2 = 11.25°
Miter Angle = 11.25°

Project Handout
Segmented Accent Ring Glue-Up

Overview: This is the step-by-step process for adding a 5 inch segmented ring of 12 pieces to a vessel. The provided package contains 6 pieces of myrtle, 3 pieces of redwood, and 3 pieces of purple heart.

1. Use sandpaper on a flat surface to cleanup the edges of the segmented pieces.

2. On a flat surface dry fit the pieces in a circle.

3. You will need a 6-inch hose clamp to hold the segmented pieces in place.

4. Apply wood glue to the sides of the segmented pieces and place them on a flat surface covered with a piece of wax paper.

5. Place the hose clamp over the ring of segmented pieces tightening just enough to pull everything into place.

6. Allow to dry overnight. Remove the hose clamp.

7. Gently sand the top and bottom of the ring to ensure the ring is flat.

8. On your vessel determine the location of the accent ring.

9. Be sure the vessel components that will mate to the accent ring are absolutely flat.

10. Apply glue to the surfaces of the vessel and the accent ring. Clamp the pieces and allow overnight drying.

11. Mount on the lathe and work to a finished piece.

Presenter: Bill Bartoswicz
South Coast Woodturners
1/12/13