

Obsession Bowl Segments

If you make the segments right
you can make the bowl

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It's all in the segments



Select # of Segments

- What is your Max. Board thickness? I used $\frac{3}{4}$ ".
- I used a 6" bowl with $\frac{1}{4}$ " of oversize = $6.25" * 3.1416" = 19.635"$, divide that by $.75"$ & you get 26.18 segments. Drop the $.18$ & use the 26 segments, your bowl will just be a hair smaller than 6" dia.
- You want to have square segments & an even number of segments.
- Tapered sides of bowl will not LOOK like a square but they are.
- There are 2 segments in each feature segment, 1 solid & 1 made up.
- You will need 13 solid & 13 made up segments.
- I will cover making 1 of the 13 made up segments per the 20 rings needed to make this bowl. Most of the larger rings will use the same segment size. Smaller rings require less length and thickness.

Make Segment pieces, $3/8+$ " x $3/4$ " x 24."
End grain will be on face of segment.



Sand or plane the strips to 3/8" x 3/4" x 24." They will need to be the same size for later construction. ("V" groove)



Glue –up strips
use a lot more clamps than I did here.



Cut a 45 deg. “V” grove
in the $\frac{3}{4}$ ”x $\frac{3}{4}$ ” x 24” strip, flip and cut
the 2nd $\frac{1}{2}$ of the “V” on the 24” long
glued-up strip.



Cut triangles

alternate cuts 45 to 90 deg. on a $\frac{3}{4}$ " x 24" dark board to get triangles.



Glue-up V groove
checking the fit first.

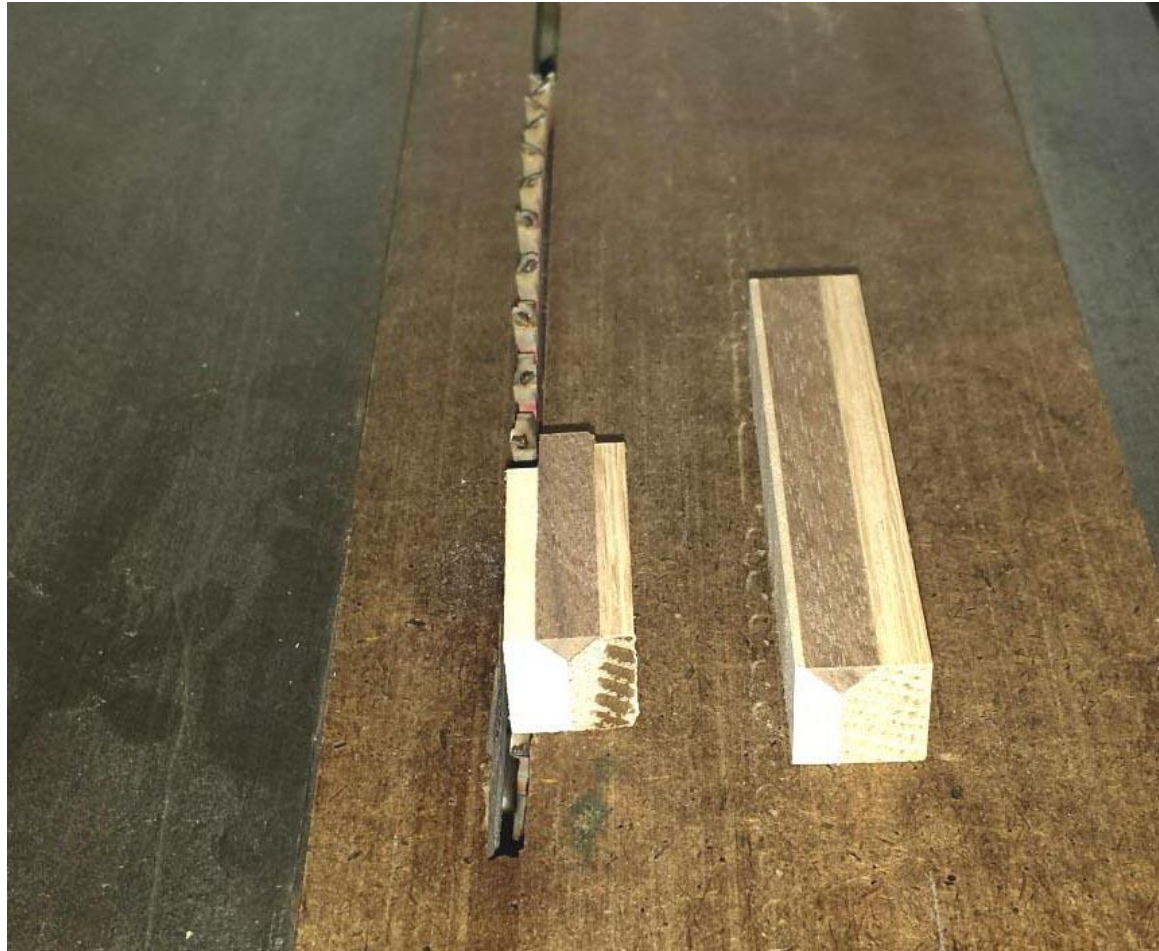


Trim dark side of 24" strip.

The cut dark strip is the height of the ring, this will change from ring to ring.
"V" point is the center of the segment.



Trim off lower waste on 24" strip
to 1/16" or less, all strips must be alike
for ring glue-up later.



Cut strips into segments.

Use seg-easy jig, set on center, using a 26 seg. wedge & using the same arm.



Cut segment tapers
using your made jig. Cut 13 segments
all on R. side, removing R. side waste.



This is what your segment should look like.



Check & Glue-up Ring

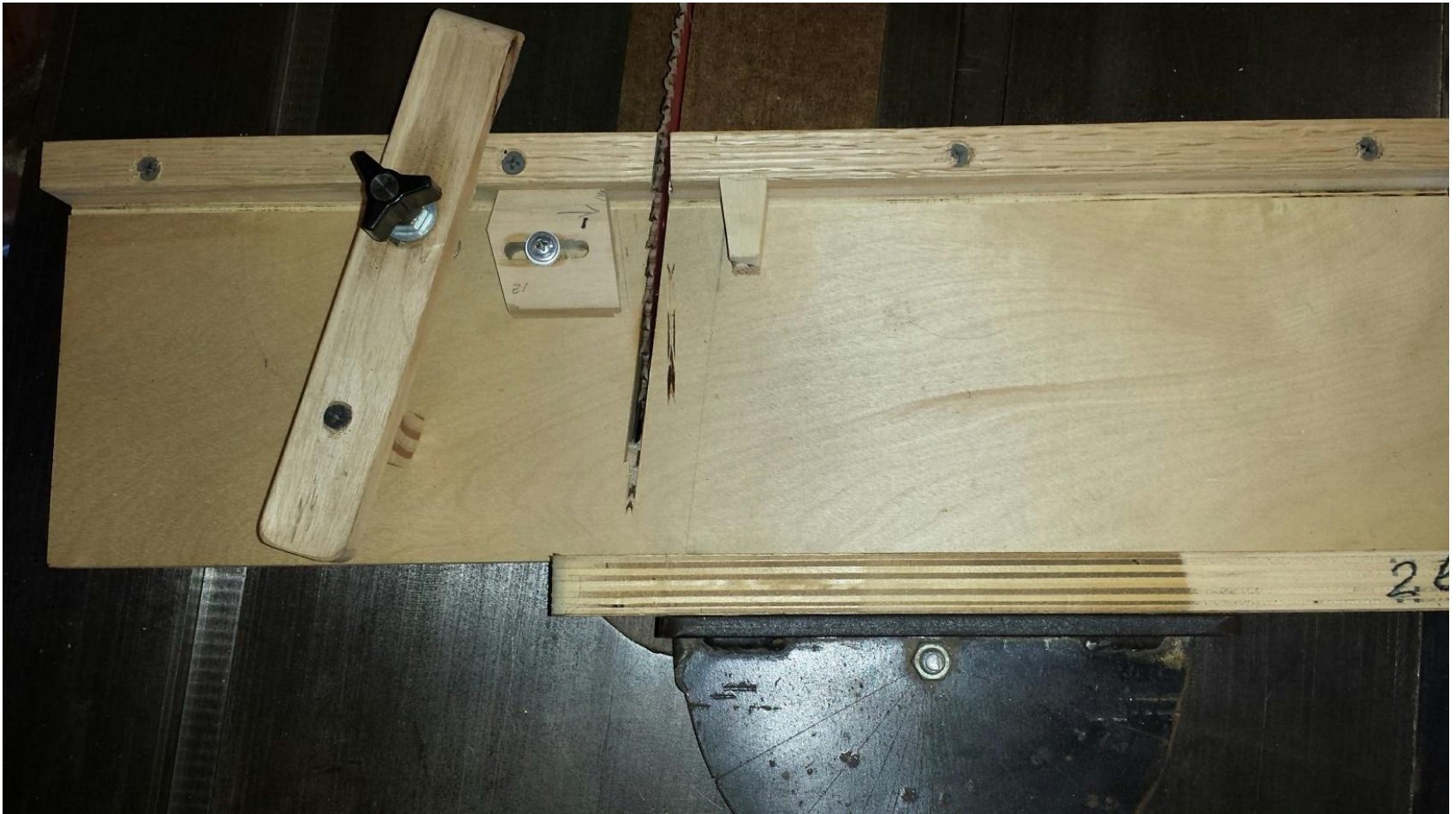
- Glue-up ring, double checking all the time.
- Remove bottom waste by belt or disc sander.
- Glue ring to lower ring. Center all rings on V point with laser level mounted on tail stock.
- Remove top waste using the lathe & rough turn ring to the bowl shape.
- Now you are ready to make the next ring.

Notes

- All smaller rings strips can be $5/16'' \times 3/4 \times 24''$ (less waste).
- Using this style segment you can make almost all your segments (with a lot of waste) by making the width greater & trimming off more to get a square segment length. This will change with the dia. Works better on smaller bowls.
- Cut as many pieces as you can on a setup, again it saves time.
- Think Ahead
- Double check every thing all the time it's easy to get off.

Segment cutting jig

I moved seg. to right of blade to show better, cut seg. was left of the blade



Use seg-easy with 26 seg. wedge to make the jig & the adjustable stop.



Hold Down Arm

make back stop & front of jig low enough so arm will swing 90 deg.

