

SEGMENTED TURNING BASICS

This section is about a few basic enhancements.

Building faceplate/glue blocks

Floating feet

Thin rings

Using veneers

There is a lot more to learn and explore. Follow the daily posts to continue your learning.



BUILD VESSEL ON TWO FACE PLATES



FACEPLATE CONSIDERATIONS



Glue your base to the glue block on one faceplate and the top portion to another.

For most stable and aligned construction, use two faceplates.



PRE-DRILL THE GLUE BLOCK

To assure a flat fastening,
pre-drill glue block to
maintain a flat attachment.

Only use cross-grain
hardwoods (never plywood)



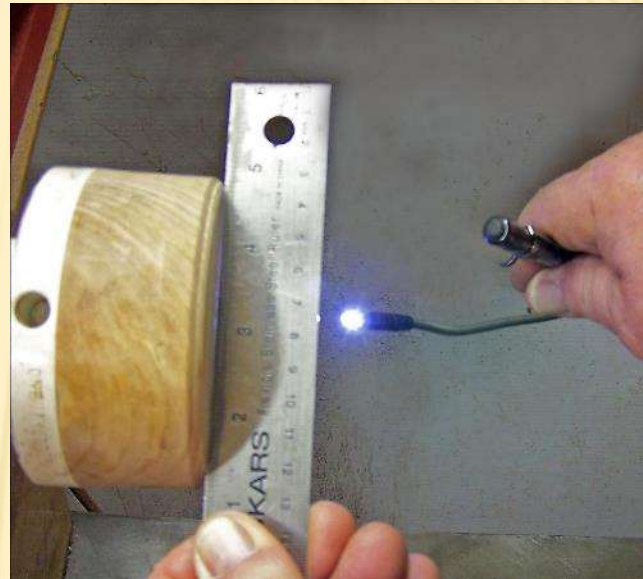
What happens when NOT
pre-drilled

COMPLETING THE GLUE BLOCK ASSEMBLY

Always check the flatness before attaching the base or top ring

A bright light behind a straight edge is necessary to see small errors.

Build a sanding stick to complete flattening each level (80 grit will be fine).



FOOT PROBLEMS – SOLID BASES

- ❑ SMALL SOLID BASES OK
 - ❑ KEEP UNDER 4-5 INCHES IN DIAMETER
 - ❑ ADD VENEERS BETWEEN BASE AND FIRST RING TO INCREASE “SLIPPAGE”

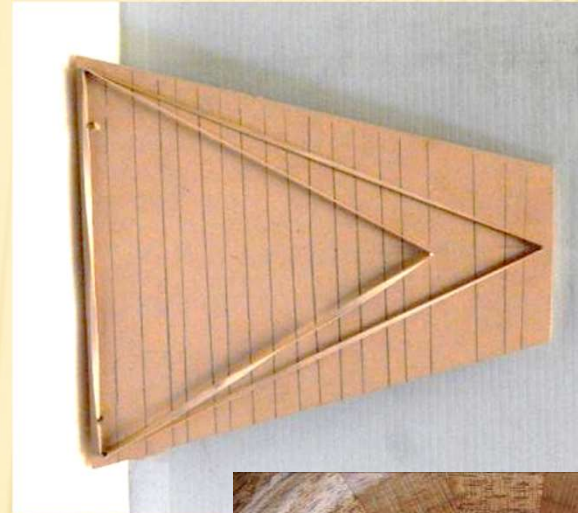


LARGER SOLID BASES

- ❑ ABSOLUTE MOVEMENT IS LARGER
 - ❑ CAUSES LARGER STRESSES
 - ❑ BASE RING “STRETCHED”
 - ❑ EXCESSIVE AMOUNT OF MOVEMENT MAY LEAD TO SEPARATION/SPLITTING
 - ❑ ALIGNMENT OF BASE AND BOTTOM RING CHANGES

FOOT PROBLEMS – “PIE SHAPED” FEET

- ❑ DIFFICULT TO CONSTRUCT PERFECTLY
- ❑ AS WOOD SHRINKS
 - ❑ INCLUDED ANGLE INCREASES
 - ❑ JOINTS MAY OPEN DUE TO STRESS

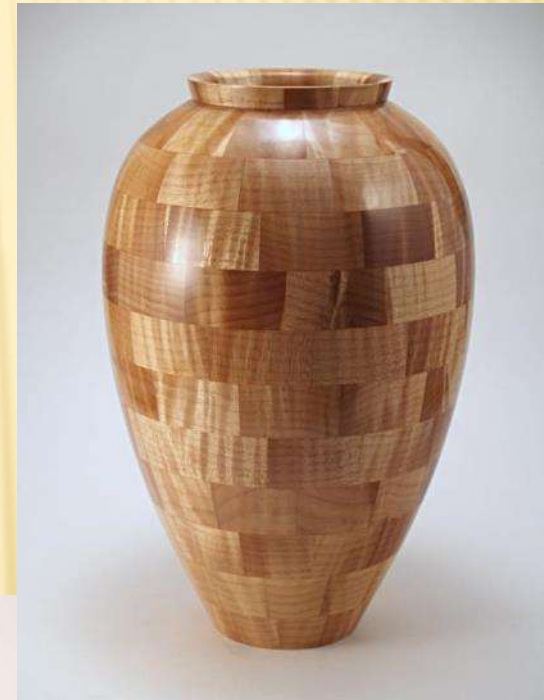


FOOT PROBLEMS – “PLUGGED PIE SHAPE” FEET

- ❑ ADDITION OF A “PLUG” DEGRADES THE FOOT FURTHER
 - ❑ SOLID PLUG PRESSES AGAINST THE BASE SEGMENTS
 - ❑ MOVEMENT MAY FORCE JOINT OPEN

WHY USE THE INSET (FLOATING) FOOT?

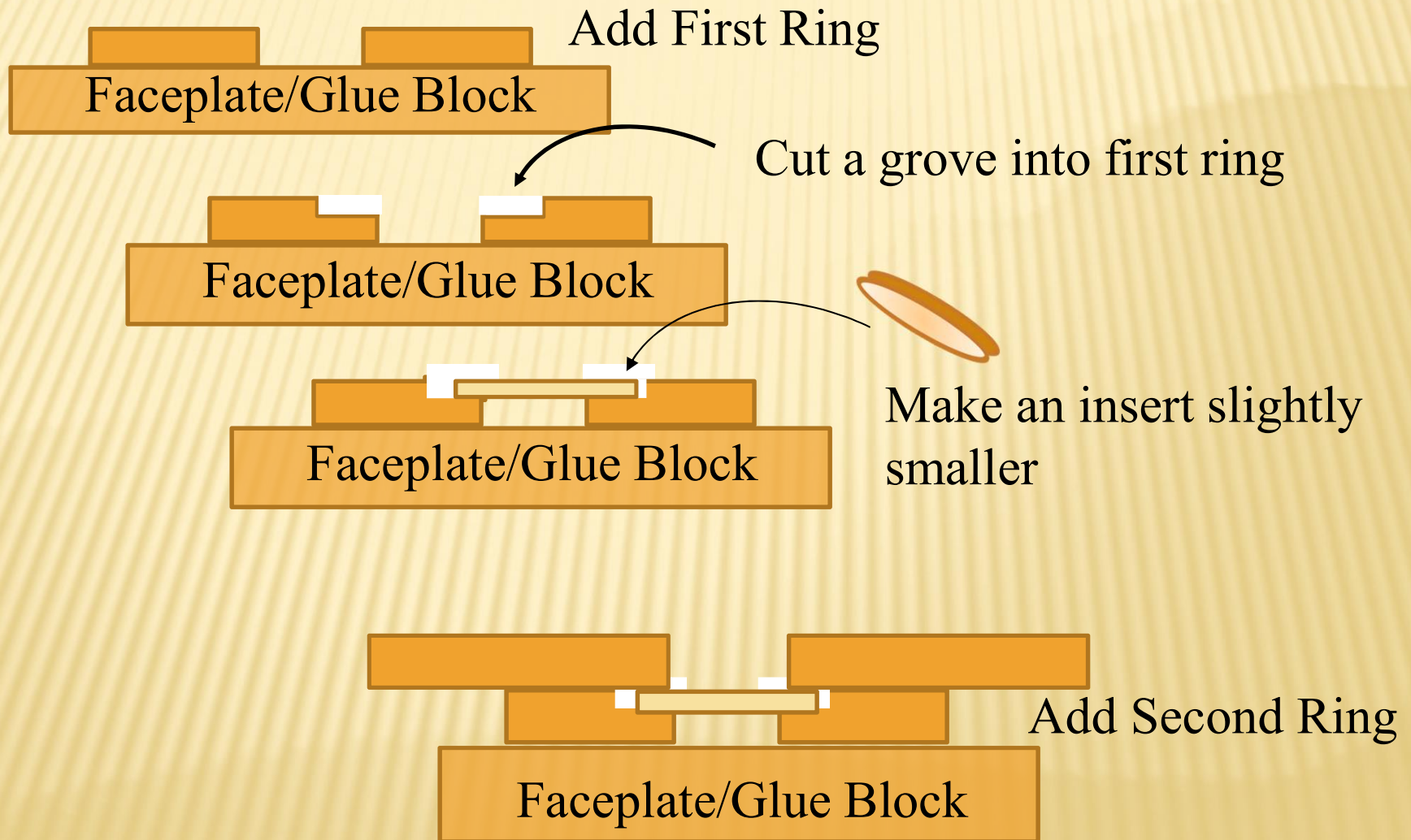
- ❑ ELIMINATES SPLITTING OF BASE
- ❑ MAY BE ESTHETICALLY DESIRABLE
- ❑ SIMPLIFIES PROJECT COMPLETION



WHAT THEY LOOK LIKE FROM THE BOTTOM



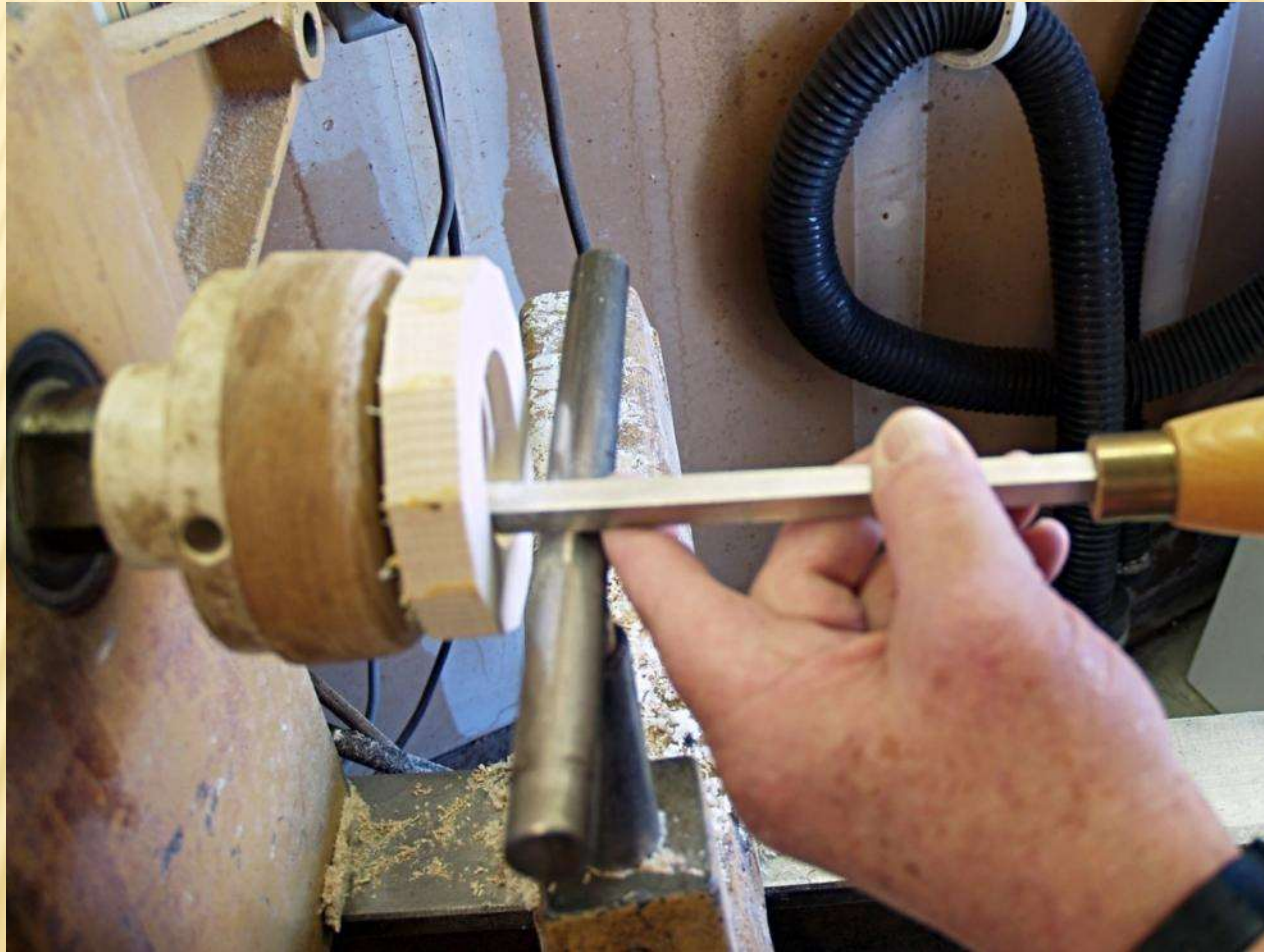
BUILDING A FLOATING FOOT



GLUE ON FIRST RING (FLOATING FOOT METHOD)



CREATE A RECESS IN FIRST RING



MUST BE SQUARE AND FLAT



BUILD A BASE INSERT DISC



TRANSFER RECESS DIAMETER TO INSERT



COMPLETE THE INSERT

Insert must be a loose fit to the recess

Sand and decorate the bottom of the insert

Add glue only to the end grain areas



GLUE INSERT INTO BASE RING



RE-FLATTEN BASE WITH INSERT IN PLACE



ADD SECOND RING



BUILDING A THIN RING

Many projects require rings
too thin to band clamp

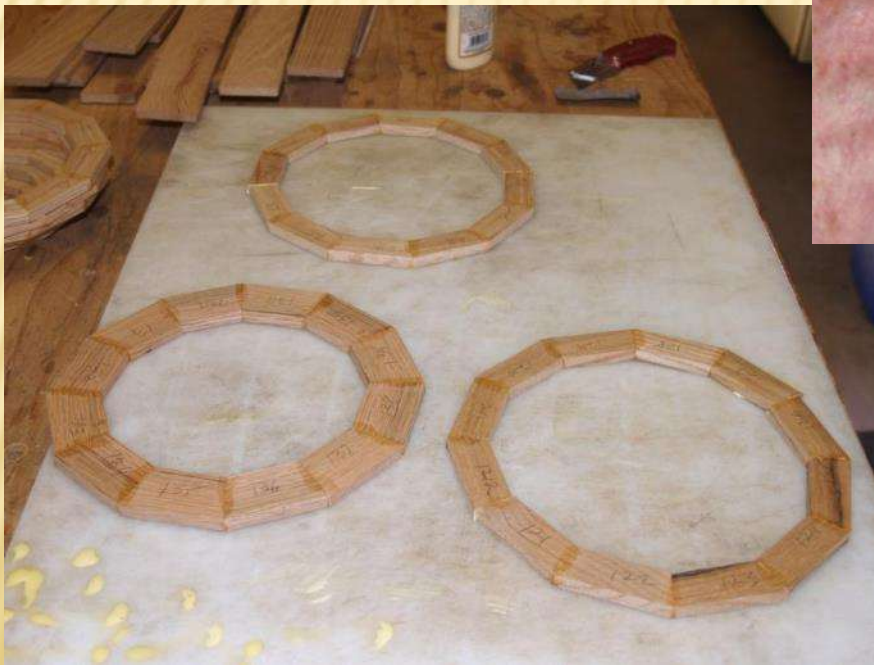
Use a rub joint to join
segments into quarter rings

Assembly quarter rings into
half rings



COMPLETE THIS RINGS

Sand the half rings to correct

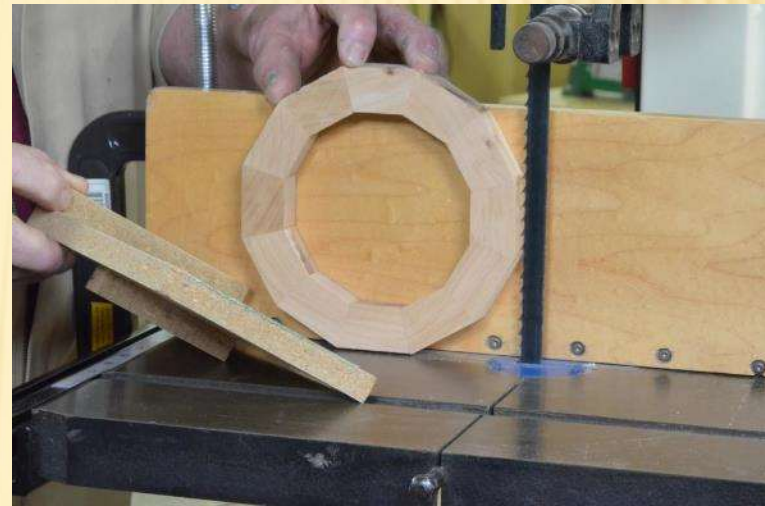


Glue half rings together

SPLITTING A RING ON A BAND SAW

Thicker rings can be split if safety precautions are observed

Requires a resaw fence and a 1/2" or wider BS blade



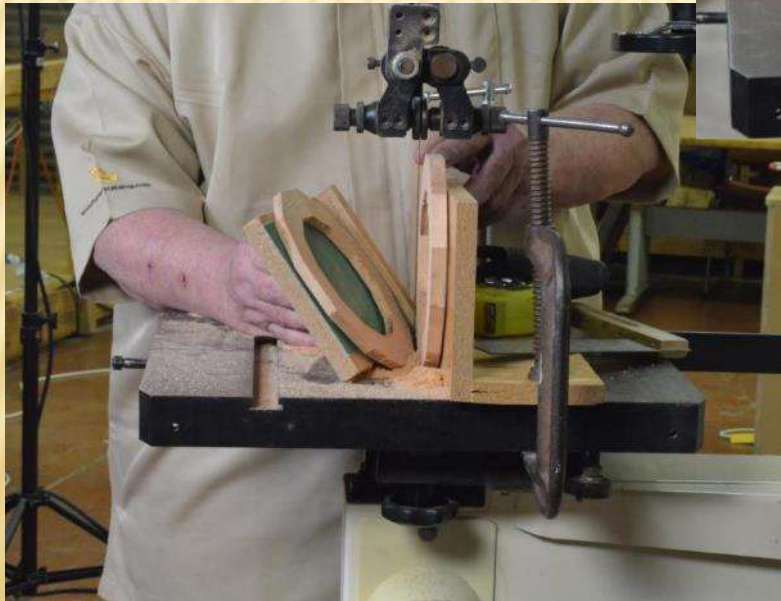
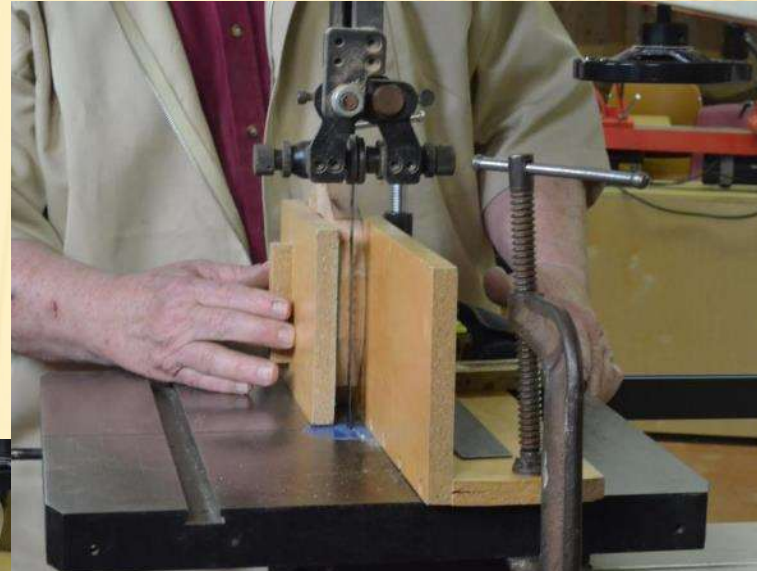
A safety push block must be used

Sandpaper interior to maintain pressure on the ring

USING THE SAFETY PUSH BLOCK

Maintain a steady, slow cutting motion

Keep pressure against fence



Be cautious and slow at the beginning end end of the cut

BUILDING WITH VENEERS

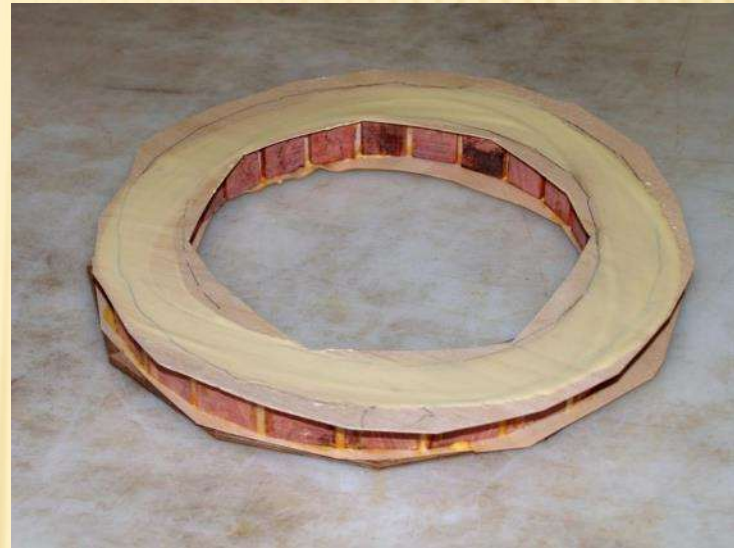
Why veneers?

- Used to add separation between color of woods
- Added detail in your designs
- Allow for some movement between many components due to increased glue areas



ISSUES TO CONSIDER

- Thin, flexible, and delicate to work with
- Cutting require very sharp knives
- Are hydroscopic absorbing moisture from the glue
 - Will warp and buckle if not securely clamped while drying
 - Drying time should be extended over segment gluing



A VENEER PRESS

You will need to build veneer press to maintain pressure while the glue dries.



AN ALTERNATE “GLUE PRESS”



WHAT ELSE CAN WE DO?



Transitional vessels



Curt Theobald



Jim Romick



Tea With A Twist - Bill Smith



Malcolm Tibbitts



Jerry Bennett

OPEN SEGMENT CONSTRUCTION

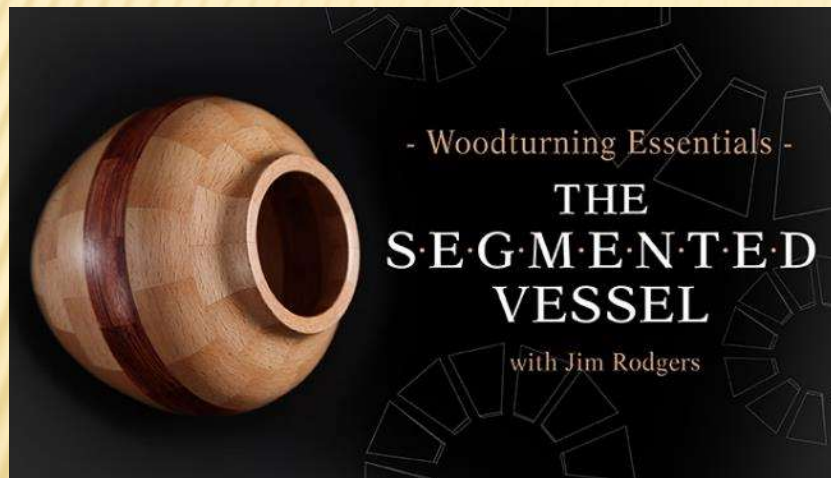
- Ring contain “gaps” and are not glued to each other
- Segments must be placed individually requiring precise indexing



Bill Smith

RESOURCES FOR LEARNING

WWW.CRAFTSY.COM



Video lesson on
segmented woodturning by
Jim Rodgers



BOOKS

- ❑ **WOODTURNING WITH RAY ALLEN, RAY ALLEN & DALE NISH, FOX CHAPEL PUBLISHING, 2004**
- ❑ **THE ART OF SEGMENTED WOOD TURNING, MALCOLM TIBBETTS, LINDEN PUBLISHING, 2005**
- ❑ **SEGMENTED TURNING, DENNIS KEELING, THE TAUTON PRESS, 2012**
- ❑ **THE FUNDAMENTALS OF SEGMENTED WOODTURNING, JIM RODGERS, LINDEN PUBLISHING, 2016**

OTHER RESOURCES

- ❑ WWW.JLRODGERS.COM
- ❑ WWW.TURNEDWOOD.COM
- ❑ WWW.SEGMENTEDTURNING.COM
- ❑ WWW.WOODTURNERPRO.COM
- ❑ WWW.SEGEASY.COM