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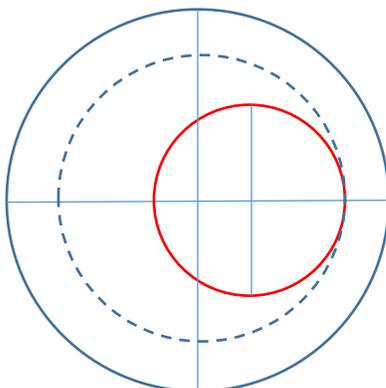
**Off Center Bowl Turning: March 2018 Demo By Rich Parker ([rddlparker@yahoo.com](mailto:rddlparker@yahoo.com))**

Use scroll chuck with a large and small jaw set. For the Super Nova 2 Teknatool chuck, the 100 mm jaws and the 50 mm jaws will work. Use a compass to layout the bowl mounting with the jaw sets chosen. This allows you to determine the maximum offset your chucks will allow. The 100 mm jaws will be close to their maximum diameter (118 mm) and the 50 mm jaws will be close to their minimum (42 mm). You need to allow the appropriate clamping movement so don't use the absolute maximum and minimum.

- a. Formula:  $\text{Max Offset} = \text{Max Large Jaw Radius} - \text{Min Small Jaw Radius} - \text{Large Jaw clearance (or skew clearance)}$

Layout the work:

1. Use an 8 to 10 inch diameter blank of an appropriate thickness... Suggest a 2 to 2.5" thick blank but a 1.5" will work too.
2. Drill a center hole for the wood worm screw. Choose an offset for your chuck combination. Suggest a 15 to 16 mm offset for these chuck jaws. Drill the wood worm screw at the offset desired.
3. Mount the blank in the center hole with the wood worm screw. Cut a groove for expansion mode chucking. Use a 54 mm radius and make the width about 13 mm. This needs to be wide enough to fit the 100 mm jaws into the groove. Don't go any wider than absolutely necessary. Rough turn the outside diameter of the bowl. **Make sure you mark the center of rotation with the tail stock or skew.**
4. Remount the blank with the 100 mm jaws of the scroll chuck and face the blank's top surface (what will be the top of the bowl). Re-true the outside diameter if necessary. Finish sand the face of the bowl. This is the only chance to do this. Also, finish the backside of the bowl as well.
5. Flip the blank and install into the scroll chuck's woodworm screw with the offset center location. Turn a spigot onto the blank. Be careful to be exact. You need a full circle for the spigot. A 25 mm radius works for these jaws sets with the 15mm offset. **Use a compass to mark a pencil line instead of scratching a line.**
6. Flip the blank one more time and mount into the 50 mm scroll jaw set. Turn the inside of the bowl. Test the diameter until the proportions look right for the diameter of the blank. Finish sanding the inside of the bowl.
7. Flip the bowl to finish turning the bottom. Using a large faceplate in conjunction with the tail stock is the easiest way to turn the bottom. I used a faceplate and my vacuum pump to do this. Turn the bottom foot of the bowl and sand to finish it.
8. Apply the finish of your choice.



Bottom of bowl with jaw circles offset by 15 mm. Red circle is a spigot and blue circle is a groove (dado).