“Eccentric look” vase turned between centers

By John Calver

Many turners believe that eccentric turning is high-level turning because the turning is off balance and that turning “air” is difficult and somewhat dangerous.

The vase, pictured here, was turned entirely between centers and could be turned on any size of lathe, even on our club’s mini-max General!

Photo 2 shows three blanks of wood, which were used to laminate a blank for the project. The two outside blanks will form the “eccentric” turning. The center blank is used as a filler while the vase is turned.

My two project blanks measured 1.5” square and 9” in length. The center filler blank was 1” by 1 ½ by 9”. The faces of the blanks should be milled true and square. The center blank should be a softer wood than the two project blanks. I used beech for the project wood and soft maple for the filler.

Step two of the project is to glue the three blanks together. (Photo3). I used Titebond 2 and craft paper. I do not suggest that regular 20-pound paper be used to glue the blanks together. The craft paper is inserted between the two project blanks and the filler blank. I spread an even film of glue on the 4 wood faces to be joined, but did not spread any glue on the craft paper. My glue joints were strong enough to complete the turning but I was able to separate the blanks after they were turned.

Now the fun begins.

Mark the center point at each end of the filler blank and mount between centers on your lathe. Turn the blank to a cylinder.
Photo 5 shows that I have mounted the blank in my stronghold chuck and have done some shaping of the vase. I have also marked where I will part the vase after I finished turning.

Photo 6 shows the beginning of the “hollowing” process. I used a saw-toothed Forstner bit about ½” smaller than the diameter of the open end of the vase. I drilled down to within ½” of the base of the vase. Leave some wood at the base to add weight. The small oval base of the vase needs some extra stability,

A cone has been inserted into the open end of the vase to give me greater stability as I finish shaping the vase. I kept the lines of the vase simple – just a gentle curve from base to top. Now is a good time to sand and finish the outside of the vase.

The finished blank has been parted off the lathe. The blanks must now be split away from the center filler. Notice that I am using a 6” steel spatula to split the pieces. A sharp, thin knife or chisel could also be used. I used a mallet and split down one glue line 2 - 3” and then did the same to the other glue line. I alternated the process until I had separated both pieces from the center filler. There was some minor tear out along the glue line, but it was torn from the softer maple and easily sanded smooth. This is the reason to use a softwood filler.
The next task is to sand the glue edges of each blank. I clamped a length of 100 grit paper to a flat surface and then was able to sand the glue faces.

The next task is to sand, seal and finish the inside surface of each vase half. Be careful not to change the shape of the inside curve – especially as you sand around the opening of the vase. I used black acrylic paint to paint the inside of the vase. Black makes sanding marks harder to see.

I strongly urge you to complete all of the finishing steps (sand, seal, paint and glue up) in the same session. If you put the two turned blanks aside for a day or two, you will find that the blanks will have moved enough to make a good glue-up impossible.

I used surgical tubing as a clamp after spreading glue on both halves of the vase. You could use heavy twine in place of the tubing. Make sure that the edges of the vase line up as you wind the tubing around the vase.

I gave the glue 24 hours before removing the “clamps”. Some additional hand sanding will be necessary to clean up the edges.

As you can see, I textured and painted part of the outside of my vase. I found that the beech wood lack interesting grain, so I added some texture and colour. If you use cherry, walnut or other wood with “character”, you need not texture the outside.

If you wish to try this project, but do not have the woodworking tools to mill the wood, I would be glad to assist you with the milling.

The idea for this project came during a brainstorming session with our internationally famous turner and author – Gary Miller.