

Turn an Off-center Bowl

by Keith Zimmerman

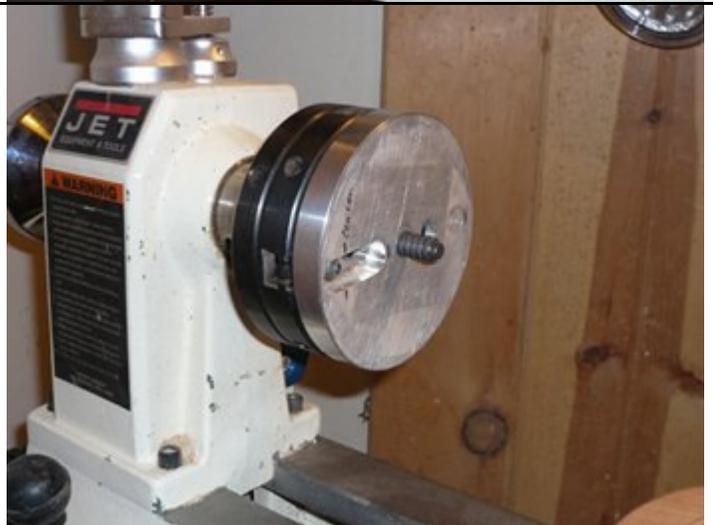
I have recently begun investigating a new interest in turning. That being off-center bowls. I found some plans on the Internet and designed a screw plate that would fit on an old Grizzly chuck I had. Following is the process I developed to turn an off-center bowl. I am still perfecting the process and am excited about the possibilities this could lead to.

Prepare the blank. I use CA glue to attach a 2"x2" block that has a 5/16" hole drilled in the center. This hole will attach the blank to the screw on my chuck.



This is the chuck I use to turn off-center bowls. It consists of an aluminum plate that has been drilled and counter bored to fit an old Grizzly chuck. One side has a hole for each screw hole and the other has a slot that will allow for an off-center adjustment of about a 1/2".

I start by adjusting the plate so the screw is running true on center.



Screw the blank on to the chuck and bring the tailstock up for extra stability. The first thing that gets done is to shape the outside of the bowl. This needs to be done so there is a way to gauge the thickness of the wall on the thin side of the bowl.



After completing the shaping of the outside, loosen the screw in the slot and move the plate to its off-center position. My chuck allows for an approximate 1/2" offset.



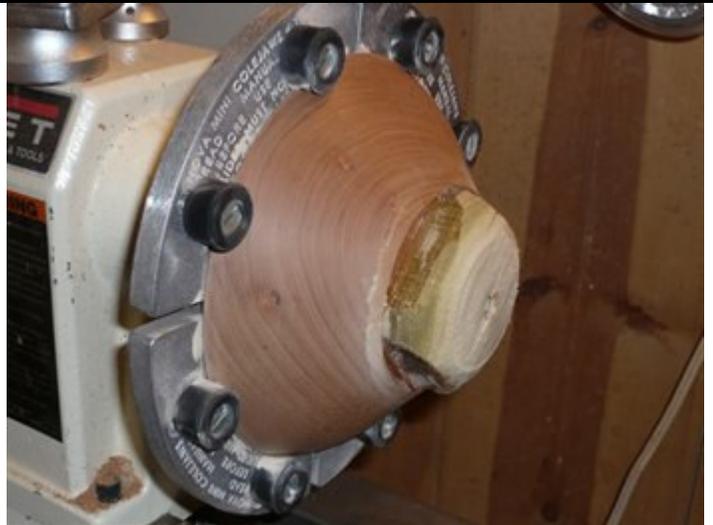
The inside of the bowl is hollowed out in exactly the same manner as any other bowl. The only differences are that there is an off-balance rotation and the wall does not have the same thickness all the way around. To handle the off-balance rotation, the speed of the lathe needs to be adjusted to ensure that the vibration doesn't cause problems.



After completing the hollowing of the bowl, the rim of the bowl is wider on one side than the other. Sand the inside of the bowl before readjusting the chuck back to center.



Reverse mount the bowl so the glue block can be turned off. I use a set of Nova Mini Cole Jaws to hold it. After the glue block is gone, the foot of the bowl can be finish turned and sanded.



The finished bowl. The bottom of the bowl has been sanded and the finish applied.

