TURNING A LARGE VASE - FREEHAND

by

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A number of people have wondered how one turns a very large vase without using an arrested boring bar system. With the acquisition of a large Manitoba maple blank, I decided to do a pictorial on the steps I use.

I will admit, doing this can be a bit scary, and I've only started turning these after a LOT of practice with the Termite. I've only broken one cutter since I started doing this, and even though I don't think the ring cutter was designed to be held in a 35 pound steel shaft, Oneway replaced it for me. I've also been well bruised by a catch in an inattentive moment. The only time I've had a bad catch is when I am being too aggressive, or being careless in inserting or removing the chisel from the rotating piece. If the cutter contacts the moving interior when you are not expecting it and holding the chisel loosely, you are in for a surprise.

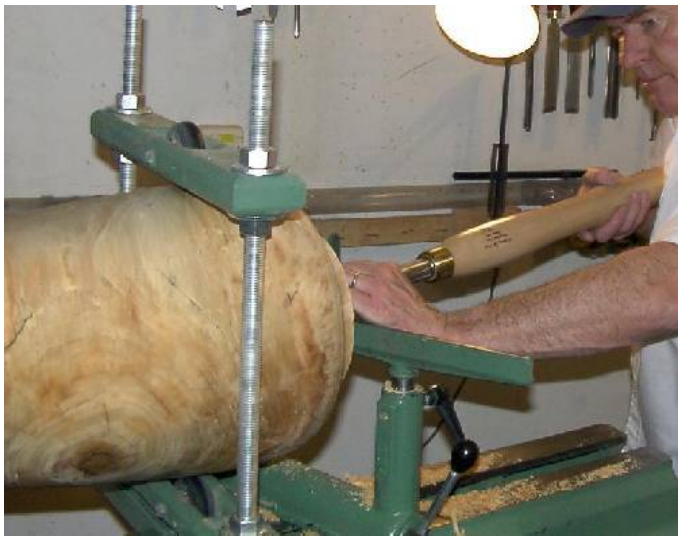
This is the box elder blank. Originally it was 16” square by 26” in height. I took the corners off and tapered it to reduce the weight as much as possible. After all, it had to go down into the basement. The blank, this way, weighed about 175 pounds.

	Blank mounted on the lathe between centers. Note the compass circle scribed on the end? The center point of the circle is where I drive home the spur center with a brass hammer to avoid damaging the center.
	Turned to rough outside shape with a tenon on the tailstock end.
	A view from the tailstock end.

	The tenon, about 4½" in diameter is for the #2 jaws for the Stronghold chuck.
	Mounted in the Stronghold and held by the tailstock.
	The tailstock center cone goes right into the hole left by the spur center. The reason for using the Stronghold and the tailstock is to turn the outside shape more precisely and to ensure it is perfectly round and centered where the wheels of the steady rest will run.

	In the steady rest. The rest was set up with the tailstock in place to ensure the piece will run dead true.
	With a piece like this you have to drill a hole. I use a Jacobs chuck in the tailstock and an auger bit. This one is 1” by 8” and when I get to the maximum depth with this I use a 1¼” by 18” auger bit. With the extension of the tailstock quill to it’s fullest extent I can drill down to about 23” with the auger. The auger bit would likely not work in dry hardwood, especially end grain.
	To leave a wet piece on the lathe overnight, I just put a bag around it. Have to in order to keep it from splitting. I suppose you could use Pentacryl or something like that too, but a bag is cheaper.

The tools of the trade. In my left hand is the “Big Bug” as Del Morrisette named it. It can handle down to 18” maximum, although I seldom go more than 14” or so with it. In my right hand is the “Bigger Bugger” a behemoth of 1½” diameter, telescopes from 48" to 60" overall and heavy - 35 pounds. Has to be to go to 24” depths. Both of these use the #3 Oneway Termite tip, a ring cutter.



“Big Bug” at work, held under my arm. This piece is being turned cross grain, and the Termite is best at end grain. I rarely get a plugged cutter on end grain, but this was a bit more difficult. The fine shavings from every revolution across the end grain tends to build up in the cutter when cutting this very wet wood.

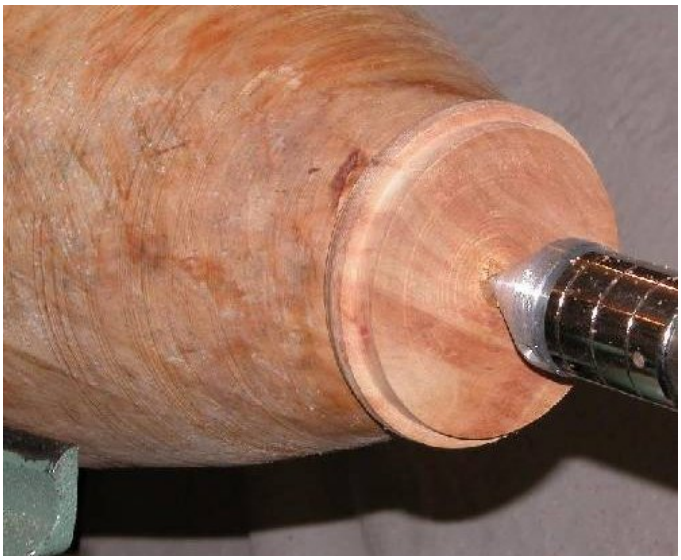
	"Bigger Bugger" at work, also held in the armpit. I've found that the secret to cutting comfortably with these tools is to design the handle for this grip. The lathe has to be the proper height for it to work well. Although the photos look like I am watching the cutter, I am not. I go by feel and sound. Watching the cutter is a back killer. After three hours I have no back aches at all. Also not a single catch the whole time.
	Rough turned and ready for waxing. The piece is about 1¼" thick and weighs 25 pounds. It is 23" deep on the inside. The rough blank was 26" and the piece is now 24½" and the largest diameter is still close to 16". I will coat it with sealer and set it aside – probably for a year or so before it is finished

	Now the clean up begins. There's just as many shavings behind the lathe, and this is the second time I've picked them up.
	Whew! That's what the lathe is saying. All cleaned up, the nicks and scratches repainted, the ways cleaned and oiled. Ready for the next one.

This was taken about 10 months later. You can see the piece was coated, outside only, with end sealer. The rough vase was in my garage all winter, where it was in below freezing temperatures.

The first thing I have to do is turn the tenon true again.

To re round the tenon, I make use of the #3 jaws in the Stronghold scroll chuck. I left a tiny ledge in the mouth of the rough vase in anticipation of this. The tailstock center is in the same center hole that was left when the piece was first turned between centers.

	This shows the tenon, all cleaned up and nice and round and square. In a later photo you will see how far the piece actually moved out of round.
	I didn't know what to call this, so I called it a jam center. It fits the mouth of the rough vase so I can turn the vase round and true before mounting the steady rest.
	Now the scroll chuck holds the trued up tenon firmly, while the jam center steadies the vase and centers the mouth. The piece has warped far out of round - it is actually oval, and it has to be round again before I can use the steady rest. This is how I set it up

This is how deep the cut is on one side, and the chisel had not yet contacted the other side. It was a half inch out of round. Of course, the inside of the vase was that far out of round as well. I had left the walls a bit over 3/4" thick, so at the very most, just turning the piece back round again would leave it 3/8" or so thick.

Now the piece is round and the steady rest is fitted into place so I can turn the inside.

The outside has been finish turned and rough sanded. You can see a little bit of glue by the top wheel, which I though would be prudent, since there was a rather large split along the growth ring. That will be shear scraped off later.

The vase sat for close to a month to complete its movement, and then was remounted and the outside trued up again.

Now it has been completed. The inside is finished with texture paint (pictures follow), and here the piece is mounted in the Cole jaws and the tailstock used to hold it firmly while the foot was turned. A jam chuck would work just as easily.

The piece has one coat of urethane finish on it in this photo.

	This is Krylon "Make it Stone" spray paint to finish the inside, just to be different. The vessel is masked off during the spraying, and it was the easiest just to leave it mounted in the lathe to paint it.
	As noted, I finished the interior with textured paint to contrast the wood.

This is the completed vessel, standing 24" tall and 12" in diameter. All in all, a rewarding venture.