

A lot of people have used a rose engine to cut a simple rose pattern on a box lid, then wondered “what can I do next?” I suppose a rose pattern in the middle, with a quadrant cut around the edge of the work, is the commonest answer. The transition from rose turned shape to cylinder generally looks good. The cut around the edge turns the top into a rose-shaped piece, rather than a plain piece with rose turned decoration.

You could carry the rose shaping down the cylinder by cutting another scoop below the quadrant, phasing the rosette $\frac{1}{2}$ a wave, and repeating till you get to the bottom. I'm sure there are hundreds of wonderful patterns to be found, but my attempts are ugly. I've only been using a 6 wave rosette, and I suspect 18 or 24 waves would be a better starting point. (Since writing this I've seen similar patterns in the Holtzapffel collection. They look awful too.)

You can use the linear action of the slide rest to carry the cut down the cylinder (30 to 50 cuts per inch), producing rose turned fluting. If the rosette's an interesting shape, and you can get a really clean cut, the results look quite nice. Straight fluting is easy to sand, but apart from that I've never been convinced it was worth the effort.

It's much more fun cheating a spiral shape. Set the cutter at a gentle angle, and feed it in as you rotate the work, then move the cutter 1mm along, and turn the work in the chuck so that the cutter lines-up with the previous cut. Rotate the work, cutting to the same depth, and repeat the process till you come to the end of the cylinder. A large radius cutter will minimise the curvature of each cut. The cutter must be at centre height (if you can work out exactly what that is). When you're lining-up the cutter with the previous cut, remember that they have to line-up at full depth. This isn't necessarily the same as lining-up on the surface, particularly if you didn't get the centre height right. Ash is a good cheap timber to practice this kind of work, and it sands really well.

That's the second time I've mentioned sanding. It's not the sort of thing an SOT member likes to admit. Of course we all get a perfect finish, with no need for the “multi-faceted cutting tool”! The truth is that rose turned work can be tidied up with abrasives (OT work has to come straight from the tool). I find that Lignum Vitae and Ash are the best timbers if you're intending to use sandpaper. Abrasives tend to tear-out bits of grain from African Blackwood, unless you use pastewax as lubrication. Abranet works well on Lignum, Hermes RB406 is best for Ash. If you have to go coarser than 180 grit, it might be better to try for a cleaner final cut. I'm sure that time spent learning how to get cutters sharp isn't wasted. With coarser grits, I always follow the tool striations. When I've worked down to 400 grit, I tend to follow the grain. Micro mesh sticks are the key to a tidy finish (the ones with 4 grades on the stick). You have to work carefully by hand, and avoid sanding-off high points. When you're cleaning up a coarsely cut piece of work, it can be difficult to get the bottom of plunge cuts tidy. Sandvik Sandplates used to be the answer, made of thin springy steel with an abrasive pattern etched on. Sadly, they were so durable that Sandvik didn't make money and discontinued them. Needle files or jeweller's rifflers are possibly the solution.

Rose turned shapes really come into their own when you can carry the concave cut from the fly cutter around a convex curve, producing a bi-convex lobe on the work. It's been suggested that it's the resemblance to rounded voluptuous body shapes that makes them so visually appealing. You can make them in 2 ways, spherical turning or cheating.

An ornamental turner's spherical sliderest is an expensive piece of kit. A rotary table is heavy and cumbersome, but it's cheapish and readily available. My sliderests tend to be too big to go on a rotary table, so I sit the indexer headstock on it instead. It can be entertaining positioning the work relative to the centre of rotation to get the curvature you want, in the position you want. The relatively large radius of the cutter makes it more complicated, particularly if you're trying to carry the cut around a tight radius. A very small adjustment often has a large effect on the shape. Taking a

final cut to clean the surface sometimes ruins the shape you've been struggling to achieve.

You have to experiment: try to set up a shape and see what happens when you cut it. You can make minor adjustments as you gradually deepen the cut, but you'll probably end up with some curiously shaped pieces of wood. You may be able to use them for something or other, if you can re-chuck them for hollowing etc. If you're cutting 6 lobed shapes, and you have 4 jaw woodturning chucks, you'll have to make a collet or a cup chuck. The important thing when experimenting is to try to understand why the machine isn't doing what you expect.

I rotate the work by hand on my machines. I like to keep the process as manual as possible. This is a problem when you're attempting long slow shaping cuts. It's easy for your hands to tense-up, and there's a natural tendency to get into a routine where your hands are constantly making the same movements. To avoid RSI or tendonitis, it's essential to keep your hands relaxed, and change the way you grip and turn the work.

In theory, the more steps you take around the curve, the better the finish you'll get. I find that there's very little difference between ½ degree and 2 degree steps on my machine, probably because of free play in the system. A perfectionist would mechanise the process, using very low speeds for rotation of the work, and the spherical rotation.

Cheating a curve is sometimes as simple as sanding off a sharp corner on each lobe. Perhaps sanding isn't quite the word. You're more likely to be using a needle file, and taking care that each lobe is the same shape.

A broader curve has to be worked in stages. You generally know where the ends of the cut should be, so you can do them. You probably know where you want the largest diameter to be, so you can cut that. Next, try to make intermediate cuts to the right depth, and continue trimming the projecting lines between cuts. Eventually, you have the shape you want, with only minor irregularities to sand away. I'd try to get the surface good enough to start sanding with 240 grit or finer. Unfortunately, it's awfully easy to go too deep on the final cuts, and end up having to re-cut the whole curve to match, without making the same mistake again. When you first try, you'll probably find it a frustrating process, unless you have a very good eye and a light touch with the sliderest.

I've found that cutting a convex curve, as a series of bold convex scoops, can be very effective. See Claws (photo and article)

I frequently don't know the precise shape I want until I can see what's happening in the wood. It's possible to experiment with variations as you deepen the cuts. It's particularly important on wood with a strong grain to be able to respond to what you're seeing, and bring out the best of the grain. I'm very drawn to the grotesque shapes that early rose turners did so well. These often rely on non-circular curves. You might produce them with some kind of curvilinear apparatus. They were originally done with form cutters. You might reproduce them with an oval sliderest, but there aren't many of them around. Cheating the curves is the easiest solution.

A lot of OTs would be horrified by working in such a sloppy way. The tradition is that shapes should be produced from perfectly shaped rosettes, and you should aim for a perfect finish from the tool, without any "striations". Traditionalists get very worried about striations or fine parallel tool marks. I think they add an interesting surface texture, but I wish I could get them more even.