

Sanding On The Lathe

by Mike Schwing

Every woodturner likes to take advantage of the lathe to help with what is typically considered a chore, sanding. It is hard to resist the fact that you can spin the work and hold a piece of sandpaper against the work and the entire surface is quickly sanded. However the results from doing so are far from extraordinary. Circular scratches that scribe the entire diameter of the bowl from rim all the way down to the center are inevitable with this method. This type of sanding scratch is very difficult to remove and they are one of the telltale signs of a turner who does not have high standards for his work. These scratches result from the work surface spinning so quickly that the same tiny piece of sanding grit remains in contact with the work for several or many revolutions.

The problem can be minimized with hand sanding in a few ways, but rarely totally eliminated. If you are committed to hand sanding with the lathe running, the following tips may help you minimize these types of scratches.

1. Keep the sandpaper moving randomly over the surface. Never let it rest for even a moment on the spinning surface.
2. Run the lathe at a VERY low speed. This minimizes the length of a scratch as you move the sandpaper over the spinning surface.

3. Do both number 1 and 2 at the same time.
4. Do not skip grits.
5. When you have finished with one grit, stop the lathe, lock the spindle and go over the surface with that grit by hand, with the grain direction. You will normally be able to remove any circular scratches.
6. Wipe off the surface with a cloth to remove any lingering sanding grit. If you skip this step you will often have scratches reappear with the next grit used.

You will probably find that your surface appearance has improved quite a bit if you were not doing something like this before. One of the reasons is that hand sanding with the grain will reveal surface detail that cross grain or circular sanding cannot. This is due to the light reflection characteristics of the sanding scratches and not technique. Make sure your last few passes with the sandpaper go with the grain.

Power sanding A more productive method of sanding involves not only lathe rotation but sandpaper rotation as well. There are many *power sanders* available on the market. I will make only one recommendation based on what I use the *wave* sanding discs. (www.woodturnerscatalog.com) and their soft backing pads. This system is used in a hand held drill and produces excellent results. The method is exactly the same as above, except that you are not holding the paper by hand. The faster the drill speed the better, as is the slower the lathe speed the better. I use grits in the following order 80, 120, 180, 220, 320. I then move to Micro-Mesh sandpaper from 1500 to 12,000 grit if necessary. With a high drill speed, step number 5 above should take only 15 or 20 seconds per grit. Just go over the surface very quickly and lightly with the spindle locked. When you do it correctly all

scratches disappear. I power sand just about everything in this manner and have no fear of people critiquing my work up close for sanding scratches. The one area I still have to work on is sanding details like rim treatments or bottom ogees, etc.. It is hard to get up close to them without destroying the detail. I have found these little gems hard

I hope this helps some. Please feel free to contact me with questions. I am on a mission to rid the world of sanding scratches.