

# Pen Turning with Satellite City Super T by Emory Mclaughlin ©2007 Satellite City adhesives available at CAGlue.com and many fine distributors and retailers

I have finished many pens using Satellite City Super T medium gap-filling glue and the NCF Quick accelerator because these products give me consistent results. I am able to get a hi-build finish with three coats, giving the finished piece some depth. With these directions and a little practice you will be able to give your pens a very durable finish that maintains a high gloss after many years of use.

Sanding produces dust both from the wood and from the Super T. The Super T produces fumes while curing and can splatter and fly all over the place when the lathe is turning. Take some precautions. A dust mask will help with the dust. Proper ventilation will remove the fumes. A face shield and safety glasses will prevent glue from splattering in your face and eyes. It is also good to keep some US-1 Super Solvent debonder on hand just in case

you need to remove glue from a surface or your hands

## Sanding

After turning a pen to the final dimensions, start the sanding process. Cut little strips of sand paper in the following grits: 120, 220, 320, 400, 600, 800, and 1,200. Start sanding with the 120 grit and go up through 400 grit. Make sure to wipe the dust off the blanks before switching to a new piece of paper.

Applying the finish

It is very important to use the Super T medium gap-filling glue because the Hot Stuff original is very thin and will wick down into the bushings and glue them to the mandrel. Take a paper towel and fold it up into a small rectangle. With the lathe running slowly, hold the glue above and the paper towel underneath and touching the blank. Begin applying the glue with the paper towel catching the excess. Move both hands evenly; you want to apply a nice, smooth, even coat, and you only have about 5-10 seconds to make a pass back and forth on each blank. Then pull the paper towel and the glue bottle away from the blank. You can either let the glue dry naturally, which will take a couple of minutes, or you can spray it from 8-10 inches with a little of the NCF Quick Accelerator (let me emphasize LITTLE). If you spray too much or too closely the finish will cook off and turn white. Apply three coats using this method. The paper towels soak up a little of the Super T, but you end up with a very smooth surface.



Sanding the finish

Now sand the finished surface. Start with the 400 grit paper and wipe the blank between grits up through 1,200. On each step up in sandpaper look for an even white glaze on the Super T surface. Stop the lathe when you have finished sanding, you should have a nice, even surface with a dull whitish appearance. Repeat the application and sanding of the finish to achieve the depth desired. I recommend three coats.

Buffing and Polishing

To finish up the pen, use a two-step buffing and polishing procedure with a Red Rouge and White Diamond compound. These are available in sticks and are sold at hardware and woodworking stores. Run the lathe in reverse, leaving the blank mounted on the mandrel so it is easier to hold onto while buffing. Hold the mandrel at a 45 degree angle and rotate the blank while buffing. Buff with the Red Rouge first and then the White Diamond, using a separate buffing wheel for each compound. When you are finished, you should have a beautiful, smooth, high-gloss finish. If you do not, look below for the solution to common problems.



### Dull spots in finish

It is possible to sand through the finish which will cause dull spots. The way to fix this is to sand with 400 grit paper and then reapply the finish.

### White spots in finish

If you apply too much accelerator or spray from too close, it will cause the glue to turn white. Use less accelerator and spray from 8-10 inches away.

## Bumpiness

Bumps are usually caused by too much glue. Apply less glue as many light coats are better than one heavy coat. Sand the glue up to 400 grit and reapply the finish.

## Problems removing the bushings

The Super T will attach the bushings to the pen. Take a skew chisel and with the long point down, lightly score the joints between the blanks and bushings. Also make sure to use the Super T medium gap-filling glue because as mentioned previously, the Hot Stuff Original is designed to be very thin and will wick into the bushings, bonding them to the mandrel.

#### Fixing cracks in the blank

Take a bit of wood shavings and grind them up in the palm of our hand. Rub the dust into the crack and follow up with some Super T to seal the dust into the crack. You will have to go back through the sanding and polishing process again, but this is a better solution then scrapping the blank.

#### About the author

Emory Mclaughlin teaches classes at the Woodcraft Supply store in Jacksonville, FL. He has demonstrated at the national level and has been published in American Woodturner and Woodturning Design. To find out more, visit www.asthewoodturns.com