How to Use Inlay

Supplies Needed

1. Turned and sanded turning which has natural voids or shallow cavities or designs cut into the surface at least 1/16” to 1/8” deep. The necessary minimum depth is dependent on the coarseness of the inlay material, the required opaqueness of the design, as well as individual design considerations.

2. A resin filler such as a slow setting epoxy, or a gap filling (cyanoacrylate super glue).

3. Crushed material of suitable color and hardness such as coral, jet, mother-of-pearl, turquoise, or malachite. The crushed material must be soft enough to cut and polish with aluminum oxide or silicon carbide abrasives.

4. Sanding equipment such as Power-Lock discs in grits from 80 to 320. Silicon carbide abrasive sheets 400 and 600 grit for final hand sanding.

5. Polishing compound for final polishing of the inlay, either by hand against the spinning turning or with a polishing bluff held in a drill.

Mixing and Filling

1. Resin/hardener should be thoroughly mixed according to the manufacturers instructions. Once the mixing is complete, add crushed material and mix to form a fairly compact mass. Use the mixture to fill the cavities. Pack the mixture into the cavity with a pointed instrument to ensure the void is completely free of air pockets. Make sure when the void is filled that inlay material protrudes beyond the surface of the work piece. Set aside in an upright position until the mixture has set.

Sanding

1. Power sanding is recommended for leveling the inlay flush with the surface of the wood. This is best accomplished by putting the work back on the faceplate or chuck and installing the assembly onto the lathe. With the lathe stopped, carefully power sand the inlay almost to the surface of the wood. Use a 220 grit disc for the first sanding.

2. Install a 320 grit disc, turn the lathe on, and sand the inlay flush to the wood. Keep most of the sanding pressure on the inlay to prevent sanding the wood until it is below the inlay. The wood is softer than the inlay so sand carefully!

Hand Sanding

1. Fold a narrow piece of 400 grit silicon carbide paper until it is not quite as wide as the inlay. Turn the lathe on and sand until the 320 scratches are removed and the inlay starts to appear polished. Repeat the above step using 600 grit silicon carbide paper. For most items the final 600 grit sanding will leave a finished surface on the inlay.

Polishing

1. Polish the inlaid area with polishing compound and a soft cloth, or with a polishing bluff held in a drill.

Finishing

1. Final finishing of the inlaid turning is the same as finishing an all-wood piece. You may choose lacquer, oil, or wax, depending on your preference.

2. After the final finish has been applied, you may wish to apply a light coat of wax using 0000 steel wool. This will smooth the surface and leave a satin surface. Finally, use a soft clean flannel buff for polishing the surface.