

Dennis Tholen's Polyurethane Varnish Protocol

1. Apply a wash coat of 2lb cut of shellac with aerosol spray can or wipe on with a soft cotton rag. Allow finish to dry for a couple of hours. Remove any dust nibs with 220 grit paper.
2. Apply 6 to 8 coats of Minwax Wipe- On Poly clear gloss (oil base) with a folded paper towel. You can also use Polyurethane out of the can by thinning with mineral spirits (do not use fast drying). Plan on about 4 hours drying time between coats. Use 220 grit paper after each coat to remove any dust nibs and runs. Always use a sanding block.
3. Carefully inspect the finish for any voids to ensure that the varnish has filled the grain. If not, continue applying coats until you are satisfied with the results.
4. Allow one month for the finish to completely dry. This type of finish contracts as the solvents evaporate, therefore, you do not want start the final sanding and polishing until the finish has cured.
5. Sand with P220 grit paper supported with a sanding block. Wipe the surface with mineral spirits and carefully inspect for any remaining surface defects. If necessary, apply another coat. Allow one week drying time and resand with P320.
6. Wet sand with P400-P800 Wetordry supported with sanding block. For a higher luster use P1500. Do not allow the paper to become dry.
7. Use polishing compounds and a cotton loose buff wheel with progressively finer compounds until you achieve desired gloss. Begin the polishing with Meguiar's #2 Fine Cut cleaner and complete with Meguiar's #9 Swirl remover.
8. Apply any quality car polish, not car wax. Allow to dry to haze and remove with a soft cotton rag or micro fiber towel.

Polyurethane is a choice of finish for turned projects. It produces a strong durable finish that is chip resistant. Poly can produce a finish from stain or gloss by controlling the sanding and polishing process. Compared to a lacquer finish, poly will change to color of light woods. On some projects this would not be acceptable. Highly polished polyurethane tends to produce a plastic look whereas lacquer will yield a mirror-like deep gloss finish. Any open grain wood, such as Oak, Ash and Mahogany requires the grain to be filled to achieve a gloss luster.