

Notes from the Shopsmith Woodworking Academy

Finishing Touches — PART 5 — Refinishing

The messiest, most dreaded job in all of wood finishing is refinishing – the stripping off of an ancient, ruined finish in preparation for the application of a new one.

Yet, believe it or not, when done properly, it can also be one of the most rewarding jobs in wood finishing. Somewhere under those 37 layers of cracked varnish and wrinkled paint is the *patina*... a thin layer of beautifully aged wood, just on the surface of your object. If you can carefully strip off the old finish without disturbing this delicate layer, your refinished project will take on a glow and warmth that only the passing years can bestow on the wood.

Two Methods

There are only two ways to strip old finishes from wood – chemically and mechanically. Each has its advantages and disadvantages.

Chemical stripping is the messiest of the two. With this method, the old finish is coated with a substance that softens it and turns it to a “goo”. Then, you usually remove this “goo” with a putty knife or scraper and try not to get it all over yourself in the process. It may not be “fun”, but chemical stripping is the best way to remove a finish without disturbing the “patina” of the wood. Only the finish comes off – not the wood.

Mechanical stripping with scrapers, sandpaper and sanders is a lot less messy and (if you use a belt sander) sometimes faster. However, you’ll have to be extremely careful not to scrape or sand into the patina of the wood. If you do get down to the wood and you find that it starts getting lighter and lighter in color as you go, **STOP!** When lighter wood shows, it means you’ve cut through the patina...and that’s not good!

By themselves, one method or the other is usually inadequate for most refinishing jobs. Most refinishers use both methods in varying degrees, depending on the project. Let’s look at each.

THE CHEMICAL STRIPPING PROCESS

Unless your project is heavily loaded with old paint and varnish, start out with chemicals. Remember that stripping chemicals are almost *always* harmful. Respect them as you would any other potentially dangerous woodworking tool – approach their use with caution. Avoid skin contact; wear rubber gloves and eye protection. Work outside or in a well ventilated area; pour chemicals very carefully to avoid splashing; clean everything up thoroughly after use.

There are two types of chemical strippers – caustic and solvent. Each is designed for a different use. Caustics have a water base. You spread them on the project, wait for them to work, then wash them off with soap and water. But water may raise the grains of some woods and ruin plywoods and veneers. That’s why you should use caustics only on solid, close-grained woods. On other materials, use solvent strippers. These typically have an alcohol or petroleum base and won’t harm your more delicate projects.

Since most chemical strippers are purchased ready-mixed, follow the manufacturer’s instruc-

tions **TO THE LETTER** when using them. Here's the general method of application:

Using an old, cheap brush, apply a liberal coat of stripper over the entire surface of the project. Reapply, this time, working the stripper into the finish with your brush. Let everything set for 5 to 15 minutes (according to instructions), or until the old finish has softened. Test the finish with a putty knife, and when it's soft enough, scrape it away. Reapply a third time to stubborn areas and scrape again. Finally, wash the project thoroughly – with soap and water if you're using a caustic stripper and with denatured alcohol if you're using a solvent type.

THE MECHANICAL STRIPPING PROCESS

Once you've removed as much of the old finish as you can with chemicals, you'll have to do some touch-up work mechanically. You'll need scrapers, sandpaper, steel wool, perhaps a vibrating sander of some sort – and a lot of muscle. Next to muscle, you'll find that the most useful tools in this bunch are your scrapers (518666). They'll remove the leftover finish cleanly without biting deeply into the wood. They're also much easier to control in this application than abrasives.

Scrape your project as you would normally, stopping as soon as you begin to get wood curls. Remember that paint dulls tools quickly, so you'll have to stop to sharpen your scrapers often. Sand those areas that you can't reach with your scrapers. Start with a cheap, open coat, medium grit flint paper and work your way up, step-by-step to a fine grit garnet paper. Then go over your entire surface with steel wool or a plastic wool product.

If you've used a caustic stripper and your grain's slightly raised, you may want to *lightly* sand the entire project. Use a vibrating pad sander and extra fine garnet paper. Avoid using belt sanders for this operation – they remove far too much wood in a single pass. The only time you'll find belt sanders useful in refinishing is when a project has been coated and recoated many times. In these cases, a medium-coarse, open coat belt will take off the finish faster and more economically than chemical strippers alone. Be sure to clean your belt often with an abrasive belt cleaner (753523) and be sure to stop sanding **BEFORE** you get down to the wood.

Coming up in the July/August issue — **PART SIX** — *Paints & Stains*