

## An Oil Finish That Shines Like Lacquer

By Larry Genender

This article is something I wish I'd read many years ago. I like a high gloss shine on my bowls, but I have always found lacquer difficult to apply. Oil finish is difficult to get to shine evenly. Many years ago Brian Laing of the Houston club showed me how to get a good oil finish, and what follows is a description of his technique.

Let me first review the different finishes, which are classified as either surface or penetrating. Surface finishes are either lacquer and shellac-based. Shellac is used mainly as the friction polish we use for spindles. It is made of a mixture of shellac, alcohol and wax, plus some dryers etc., which vary between brands and are never listed on the can. They cure with the heat generated by the friction with which they are applied. Lacquer finishes are mainly nitrocellulose lacquer and a volatile solvent called lacquer thinner. Lacquer is applied as a spray, best done in multiple light coats which build up to yield the shine we desire. I find the lacquer difficult to spray evenly, and it melts easily with the heat of buffing. Lacquer is a soft, non-durable finish.

Penetrating finishes are based on either "boiled" linseed oil or, much less frequently, tung oil. They frequently are called "Danish Oil" Originally raw linseed oil was heated to partly polymerize it, nowadays the "boiling" is done chemically. In addition, the finish contains a varnish, an organic solvent, and other secret ingredients depending on the manufacturer. The oil penetrates into the fibers of the wood, giving depth and luster, and the varnish coats the surface. The oil/varnish polymerizes (cures), leaving a durable surface. Oil/varnish finishes all darken the wood – the amount of darkening varies amongst different brands.

A side-grained bowl has 4 surfaces, two side grained and two end grained. Oil applied to raw wood is absorbed at different rates – the end-grained sides soak up much more finish than do the side-grained. Even if you keep adding finish, it is, in my hands, impossible to “fill up” the end grain so that you end up with an uneven amount of shine, despite many coats and heavy buffing.

Brian avoids this problem with the use of sanding sealer, which partially fills up the side grain and minimizes darkening with the use of Liberon Finishing Oil. I tried his technique using the sanding sealer and the oil/varnish I already had in the shop, and the results were poor. I finally decided to follow his method to the letter, and I was able to duplicate his results. **If you decide to do this finish, do not deviate from what follows:**

You need to prepare Mylands Cellulose-based sanding sealer by diluting it 30% with acetone – mix 3 parts acetone with 7 parts sanding sealer (SS). Best to make a small batch at a time, rather than mixing the entire pint can of SS – it goes a long way. In addition, obtain a can of Liberon Finishing Oil (you get it at Rockler’s). This oil/varnish darkens the wood much less than any other. Now follow these steps exactly:

1] Sand your bowl on the lathe to 180 grit.

2] Apply a generous coat of the diluted SS, using a soft cloth. Keep applying to areas that soak up the SS. Allow to completely dry to the touch [10 – 15 min}.

3] Sand again with 180 grit. Go lightly, do not sand to bare wood. At all times, if the paper clogs, blow out the clogs with compressed air or replace the sandpaper. If you sand with clogged paper, you may scratch the surface.

4] Apply another coat of SS. It will take much less this time, and won't soak in as much. Again, let it dry completely to the touch.

5] Sand with 220 grit.

6] Apply a third coat of SS, let dry to touch, then sand again with 220 grit.

7] Depending on the wood, apply a fourth coat of SS. I use the 4<sup>th</sup> coat on open-grained woods, otherwise leave out the 4<sup>th</sup> coat. After a while, you'll know when you need it.

8] Then sand with 320, and then 400 then 600 grit. While it is optional to sand beyond 320 grit, I like to do it.

9] Remove from lathe and apply a generous coat of Liberon Finishing Oil with a soft cloth. Wait 10 minutes by the clock, then wipe as dry as you can. I use the blue paper towels sold by Home Depot. If you wait too long, the surface will become sticky and it will never dry properly. If this happens, wipe the finish off with mineral spirits and reapply the oil. If it became sticky after having applied several coats, don't worry, you'll only remove the last coat with solvent; you can't remove already-dried coats with solvent. If for some reason you want to remove all the oil coats, you'll have to sand them off. If you get down to bare wood, you'd best apply another coat of SS before oiling again. Lesson: Don't let the oil coat become sticky.

10] Allow to dry overnight. The next day, buff with the Beall buffing system using the Tripoli buff. Then apply another coat of oil, wait the 10 minutes and wipe dry again.

11] Repeat the oil/10 min wait/wipe dry/wait overnight/buff routine until you get the amount of shine you want. After a couple of cycles, I change to the white diamond buff. [I'm afraid that if I start with white diamond before enough built-up finish, the white abrasive may get into

the wood pores]. You will see an increasing shine with successive coats – I use at least 4 coats, more often 5 or 6.

12] After the final buff, use the carnuba wax buffing wheel, and you're done.

This sounds more tedious than it really is. Your piece will shine like you applied a lacquer finish, with the added depth and durability of an oil finish. It does not have the plastic-y look or feel that characterizes a straight varnish or polyurethane finish.