Lacquer may just be the best all-round film-building finish on the planet. No matter how hard you look, you won’t find another finish that dries as fast, rubs out as easily, and imparts the same clarity and color. But despite these advantages, lacquer’s bad reputation for fumes, flammability, and finishing problems keeps it out of many shops. Now’s the time to put those fears aside and give lacquer a closer look.

For starters, look at the Finish Drying Time chart on page 34. Professional woodworkers needing to ship one project before starting the next know these numbers by heart. Even if your paycheck isn’t riding on the next project, lacquer’s super-fast drying time means less opportunity for dust damage, and faster finishing room turnarounds. Lacquered projects can be gift-ready when other finishes are still stuck in mid-cure.

Following is some basic advice for applying lacquer with a spray can, brush, and rag. With luck, applying the finish on your next project may take less time than reading about how it’s done.

Note: See the Convenience-Plus Buying Guide on page 35 for the products in this story.

**WHY THE MASK MATTERS**

Lacquer is at the upper end of the workshop-toxicity scale, but nearly every label—including the enviro-friendlies—lists some sobering safety notes. These warnings are based upon occupational (eight-hour day) exposure, but when facing potential liver, nervous system, and/or brain damage, there’s no point in quibbling over the fine print.

**When you spray, wear a mask.** Be sure that it’s NIOSH-approved for organic vapors and gases.

As a rule, replace the filter when you detect the first faint whiff of finish, but for backup, stick a piece of tape on the mask and make a tick mark every time you don your mask. By tracking the number of times a mask’s been used, you can be sure to have fresh filters ready before a big job, or make a preemptive filter switch before smelling anything on your side of the mask.

Note that charcoal, the active ingredient within the cartridge, absorbs chemicals whether or not it’s strapped to your face. To extend its service life, store your mask in a re-sealable plastic bag.
Stick with spraying for the small stuff

Spraying takes full advantage of lacquer’s fast-drying ability. Safe from dust in 15 minutes, lacquer competes with oils and wiping varnishes as a dust-dodger, but offers a great looking film. And since the solvents evaporate in less than week, lacquer is perfect for last-minute gifts.

Unfortunately, the fast-acting solvents also give lacquer its bad reputation. Spraying atomizes solvent and lacquer to create a serious health and fire risk. Good ventilation and a mask will protect you, but don’t think of using a HVLP system unless your shop’s equipped with a designated spray booth and explosion-proof fan. To be safe, reserve spraying for smaller projects, and stick with the can. Do your spray finishing outdoors or in the garage with the door wide open.

Better-quality spray cans armed with fan-shaped tips deliver finish as smoothly as you’d expect from a high-priced HVLP sprayer. But you will need to spray more coats for the same build. You’ll also pay more for the convenience of the spray can.

Spray-can finishing isn’t tough, but a few tips can help you achieve better-looking results:

Provide good light. Position your work so that you can see the reflection of a wet coat. This makes it easier to see what you’ve done and to make sure each coat overlaps the next.

Plan your moves. Develop a spraying strategy that starts with the least visible and ends with the most visible sections of your project. Make a practice run on a piece of cardboard to avoid first-timer puddles or runs on your project.

Keep the gun moving. To avoid drips and stops, depress the valve a few inches early, pass the can over the wood (6” to 8” away), then release it when the can’s a few inches past your piece. Repeat the process, overlapping each pass by about 50%.

Cover up when you’re done. Use a scrap of plywood, or cardboard box as a dust-umbrella to protect your freshly finished work for the first 15 minutes. Nothing’s worse than finding a speck of dust that decided to take a swan dive into a perfectly smooth surface.

Brushing best for big projects

Due to the past prejudices (lacquer is too tough to brush; fears of fumes and flammability) lacquer lags way behind polyurethane. This finish doesn’t deserve such a bad rap. Brushing lacquer isn’t any more difficult than brushing the fast-drying waterbornes and reformulated low-VOC finishes you’re already using. Open a window or two, and you’ll discover that lacquer’s attributes outweigh the solvent smell. A project can be recoated, rubbed out, and removed from your shop in about the same time it takes to lay on three coats of poly.

A few tips can help get you started down the road of faster finishing. For starters, use a better brush. Cheap won’t cut it; lacquer solvents dissolve

TO SEAL OR NOT TO SEAL?

In addition to sealing wood’s pores, sealer is supposed to raise the grain, and, with the help of zinc stearates, make the final sanding a little easier. Alas, here’s the rub: sealers are softer than lacquer. Too many coats can affect the durability of the topcoat. (If you’re using a waterborne, stay clear of sealers. Stearates can prevent the finish from getting a good grip.)

Many woodworkers use a light coat of lacquer instead of a sanding sealer. This solution works, but sanding sealers make smart sense in some instances. At the lathe, wiping on a generous sealer coat is faster than building a finish in mid-spin. For larger brushable projects, a spray-on sealer can save time. I find that the spraying evenly seals not only on the flat surfaces, but the corners and other crevices that might otherwise collect too much finish from a brush. The sprayed surface is ready to de-whisker almost as soon I put down the can. Following a few minutes of sanding, the sealed, smooth surface is easier to brush.

If you plan to rub out the finish, use a brush. A brushed-on coat is 2x thicker than what you’d get from a spray can. Plus, buying lacquer by the quart is cheaper.

Unlike shellac, lacquer doesn’t spoil. To restore the brushability of an old, half-used can, add lacquer thinner.

Substitute shellac for sanding sealer if there’s any chance of encountering silicone or other lacquer-ruining contaminants.
foam brushes and can bleed color onto your work from dyed bargain-basement bristles. At the other extreme, top-shelf brushes are a joy to work with, but since lacquer is self-leveling, you don’t need to do so much brushwork. Any good-quality natural bristle brush with flagged tips (flagged, or split, tips carry more finish and deliver it more evenly onto the workpiece) should do the trick.

Brushing is a simple three-step process: brush it on, tip it off, then leave it alone. The biggest trick is learning to work quickly, and buying into that last step.

Working with the grain, brush on a nice even coat. When the brush starts to drag, flip it over to transfer the lacquer clinging to the other side. Next, hold your brush at 90° to the surface and lightly graze (or tip) the surface with the ends of the bristles. Tipping knocks down brush marks and blends each pass with the last. Repeat the first two steps, barely overlapping each pass, until you’ve finished the surface.

Now walk away. You’ll soon discover most brush marks will self-level, or disappear when you brush on the next coat. Drips are the only exception to the rule. It’s OK to brush out a drip, as long as it’s caught immediately. If you find a drip that’s a few strokes old, leave it; you’ll only ruin the surrounding area with ugly brush marks. Refer to the sidebar below for a simple spot treatment.

Between coats, search and slice off bumps, then lightly sand the entire piece with 320-grit before applying the next coat. As you build the finish, and your technique improves, the surface should get progressively smoother. Each coat should require less touch-up. By the third or fourth coat, give the finish a day or two to harden then you’re ready to proceed to rub out.

### A PERFECT LACQUER PATCH IN 2 STEPS

Achieving a perfect finish straight from a sprayer or brush is nearly impossible, but with lacquer it doesn’t matter. Because each fresh coat melts into the previous ones, you don’t need to be too picky when applying the topcoat. This self-correcting quality also makes it easy to make seamless repairs years down the road.

To level out small drips or dust bumps, use a small sanding block with 400-grit sandpaper. For surgical precision, employ a razor blade scraper as shown at right. After scraping, spot-spray the patch using a paper shield. After giving the patch time to cure, rub out that area to even the sheen.

Use a fresh razor scraper-style to slice away dried imperfections. The scraper technique works equally well along or across the grain.

Spritzing lacquer through an opening in a paper shield puts more finish only where it’s needed to make blending easier.

### FINISH DRYING TIME

<table>
<thead>
<tr>
<th>Finish</th>
<th>Dry/Dust-safe</th>
<th>Recoatable</th>
<th>Rub out ready</th>
<th>Fully cured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oils</td>
<td>N/A</td>
<td>12-24 hours</td>
<td>N/A</td>
<td>Sometimes never</td>
</tr>
<tr>
<td>Wiping Varnish</td>
<td>N/A</td>
<td>12-24 hours</td>
<td>1-2 weeks</td>
<td>2 weeks</td>
</tr>
<tr>
<td>Polyurethane/ Varnish</td>
<td>1 hour or more</td>
<td>12-24 hours</td>
<td>2 weeks [easier to do if you wait longer]</td>
<td>2 weeks</td>
</tr>
<tr>
<td>Shellac</td>
<td>15 minutes</td>
<td>5-15 minutes</td>
<td>2 days</td>
<td></td>
</tr>
<tr>
<td>Waterborne Acrylic</td>
<td>15 minutes</td>
<td>2 hours</td>
<td>2 days</td>
<td>3-5 days</td>
</tr>
<tr>
<td>Lacquer</td>
<td>15 minutes</td>
<td>30 minutes</td>
<td>1-2 days</td>
<td>3-5 days</td>
</tr>
</tbody>
</table>

*Expect shorter times for spraying; longer times for brushing.*
Rub out for a soft shine

Lacquer is the easiest finish to polish to a high gloss, but because it’s easier to scratch, it’s tough to keep it that way. A high-satin look—similar to what you’d find in the furniture stores—is a nice compromise because it’s easy to obtain and maintain. The best thing is that you can use your sander to do most of the heavy lifting. Here’s how.

Give the finish a day or two to cure then lightly rub out with 0000 steel wool. Next, apply a dollop of Deluxing Compound, to a Surbuf pad, and put your random-orbit sander to work. To eliminate any risk of sanding tail marks, creep your sander across your work. When done, wipe off the remaining haze with a soft rag.

The abrasive wax makes minor repairs a no-brainer. When a surface loses its luster, treat it to a quick buffing.

The Acrylic Alternative

Waterbornes (more specifically, oxygen-cured, self-cross-linking acrylics) resemble solvent-style lacquer in terms of clarity, drying times and sandability, but with fewer health and safety hazards. In our side-by-side tests, we had a hard time telling the samples apart.

That said, acrylic isn’t a perfect substitute. Waterbornes won’t melt in; this makes finishing more time-consuming and repairs more difficult. You must scuff-sand each coat to ensure a good bond. Sand too soon and you’ll pull the finish. Fixing this mistake will take more time than you might have saved by jumping the gun.

Acrylic is great if you don’t mind the wait, but regular lacquer’s faster drying time and self-correcting ability justifies the inconvenience of outdoor finishing work.

LACQUER AT THE LATHE

Lacquer really shines at the lathe because the finishing process takes full advantage of lacquer’s lightning-fast drying time. Because you’re working on the piece as it spins, sags, brushmarks and drips are non-existent. Using a rag and applying the lacquer a few drops at a time keeps solvent exposure to a minimum.

To prepare your turning for lacquer, sand up to 400 grit to remove sealing exposed end grain. (If you want to add color at this point, try using alcohol-based dye while the wood is moving. The alcohol improves absorption and dries immediately.)

First, turn the lathe off and wipe on a generous coat of sanding sealer. (Trying to seal an object while it’s spinning would splash finish all over your shop.) The goal is to saturate the surface, completely sealing the pores and making an even base so that the topcoats can build up. When the piece dries to the touch—it should only take a few minutes—sand out rough patches with 600 grit.

Next, turn the lathe on and apply lacquer with a small lint-free rag. After wiping on a thin coat, slide the rag to the start of that section and firmly press it against the wood. The friction helps the finish dry faster and removes imperfections for a smoother, shiny film.

Apply extra sealer to end grain and other thirsty spots. Use paper to protect the lathe from drips.

Use a rag to lay on the lacquer, then as a burnisher to bring out the shine.
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