



The Quick, Modern Way to a Polished Finish

Combine automotive finishing materials and power-buffing methods to work wonders on furniture

BY JEFF JEWITT

The basic concept of rubbing out a finish is easy: Abrade the surface with very fine sandpaper to remove surface defects and level it out, then polish to the sheen you want. The old-world approach is to do this work by hand, using pumice and rottenstone (*FWW* #119, pp. 46-49), which work well but are time-consuming and physically exhausting to carry out. Some modern products simplify and speed up this process considerably. Combined with power-sanding and buffing equipment, these products deliver an efficient system for rubbing out a finish.

I prefer to wet-sand small surfaces, such as table aprons and legs, by hand. But I switch to air-powered equipment for larger areas, such as tabletops. The best tools for wet-sanding have opposing, in-line pads that vibrate back and forth in a

straight-line motion, rather than making a circular scratch pattern. You can dry-sand some finishes, such as oil-based polyurethane and some lacquers, with an electric-powered random-orbit sander, as long as you use very fine (1,000-grit, or higher) stearated, or nonloading papers. Never use electric sanders when wet-sanding because of the risk of electric shock.

Start the process with the finest grit size that will remove the defects and level the finish. You can begin with 320-grit paper if the surface is badly orange-peeled or shows ridges from brush strokes. Or you can start with 800- or even 1,000-grit paper if you have only minimal surface problems and you're shooting for a gloss finish in the end. I usually start with 400- or 600-grit silicon-carbide wet-or-dry sandpaper, and I use mineral oil cut 50% with mineral spir-



Wet-sand with water or oil. Either lubricant levels a finish and removes brush strokes or small bits of dust and debris. The author prefers rubbing oil thinned with mineral spirits.

its as the lubricating medium for all of my oil- or lacquer-based finishes. I spray the mixture with a plant mister. Some people prefer to use water instead of oil. If you use water, add a small amount of dishwashing liquid as a lubricant.

I always work around the edges of a tabletop first, then move toward the center

CREATING A SATIN FINISH



What you'll need for a satin finish. After wet-sanding the surface by machine, the author accomplished the rest by hand, using 0000 steel-wool pads, Behlen's Wool-Lube and a little soapy water for lubrication. Then he rubbed the surface in long, even strokes to achieve a classic hand-rubbed finish.



STEEL-WOOL TIP

Improve the ergonomics of steel-wool pads. Unwrap 0000 steel-wool pads and refold them into quarters so that they will better fit your hand.

(this routine helps me keep track of where I am), working in sequence up to at least 600-grit paper. If you're aiming for a gloss finish, work up to at least 800- or 1,000-grit paper. Sanding to a higher grit will speed up the polishing procedure later on.

If you want a classic, hand-rubbed satin finish, you can achieve the best results using steel wool and Wool-Lube (a rubbing lubricant made by Behlen) or thinned wax (see the photos above). Squirt a couple of stripes of Wool-Lube on the surface, then mist it with soapy water. (I mix a capful of dishwashing liquid into a quart of water to clean up the mineral oil from the wet-sanding process.) Using moderate downward pressure, about 25 lbs. (you can

practice by pushing down on a bathroom scale), rub the surface in straight strokes with the pad, following the direction of the grain. Repeat this process several times, then switch to a clean part of the steel-wool pad and rub the whole surface down again. Wipe the slurry off to check your progress. If you've done it right, the surface should look like brushed metal when viewed in backlighting.

If you are going for gloss, automotive compounds, available from auto-supply stores, offer a real innovation for polishing furniture finishes. Compounds are simply abrasive powders in liquid suspensions, or pastes. Two manufacturers, Meguiar's and 3M, offer products that work very well on

wood finishes. They are used in stages to remove defects and scratches from wet-sanding. Some manufacturers sell a single product that breaks down into smaller grits as you use it, but I prefer using more than one compound. Because compound grit sizes vary, you should stick with products from a single manufacturer.

Beware—some buffing compounds create a whitish, hazy look on water-based lacquers. You may simply need to let the finish cure longer, but the haze is usually caused by solvents in the compound that soften the lacquer, making it hard to polish. If this happens, discontinue use of the compound and switch to a different one. (I've found that Meguiar's #10 plastic pol-



BUFFING TIP

Smear it on, then buff it out. Use the buffer pad first to spread out the liquid compound, then tilt the pad slightly as you move it slowly over the surface. After buffing the surface in two directions, a deep gloss emerges from the surface of the finish.



Use compounds in a sequence of grits. After wet-sanding the surface, the author buffed this table first with Meguiar's #1 medium-cut cleaner, then with #2 fine-cut cleaner. After that, he finished with #9 swirl remover to fill in the tiny hairline scratches left by the #2 cleaner.



ish works well as the final polish for water-based finishes.)

You can use most rubbing compounds by hand, but for a large surface such as a dining-room table, a power buffer is the way to go. The most popular buffers are right-angle sander/polishers. If you purchase one, get a variable-speed buffer or a two-speed tool (rated at a maximum speed of 3,800 rpm). A polishing bonnet of either cotton or synthetic foam is attached to the buffer with a locking nut. Any bonnet can be cleaned, but to ensure efficient polishing, purchase a separate bonnet for each grade of compound that you use.

Polish the furniture in an area where flying compound won't be a problem, and

wear an apron. Squirt a few stripes of compound across the surface, about 8 in. apart. With the buffer turned off, smear the compound all over the surface of the finish. Hold the buffer off the surface at a very slight angle, then turn it on and begin moving it slowly across the surface of the finish (see the photos above). Move the buffer about a foot every three to four seconds and work in sequence—edges first, then in toward the center. Work the buffer in smooth, confident strokes, and pay attention to the angle and rotation of the buffer when polishing edges: They may catch the pad and cause kickback.

The scratches from sanding disappear as you buff, and it's easy to see when you're

done with the compound. Good overhead lighting or backlighting will highlight errant scratches. Follow the first compound with finer grits until you see a deep gloss appear. Let the compound dry, then wipe it off with a soft cloth.

At this point, some finishers apply a glaze that contains silicone or some other type of oil or polymer emulsion, which fills in the tiny hairline scratches. But I usually finish up with the #9 swirl remover—first with the buffer set on slow speed, then by hand. I apply a little to a soft cloth and polish the surface manually. □

Jeff Jewitt is the author of Hand-Applied Finishes (The Taunton Press, 1997).