finish line

Get top results with a foam brush

BY THOMAS R. SCHRUNK



here are two ways to obtain the finest brushed-varnish finish: You can pay \$50 or more for a top-quality natural-bristle brush, clean it thoroughly after each use, wrap it carefully to prevent dust buildup, and hang it to prevent bristle damage. Or you can use foam brushes that cost around a dollar, are widely available, and, best of all, do not shed bristles and are discarded after use.

Foam brushes work best with varnishes, both solvent- and water-based. In fact, foam is the brush of choice for water-based finishes because bristle brushes tend to leave more bubbles in the finish. However, avoid using foam brushes to apply solvent-based lacquer or shellac, as lacquer thinner and alcohol can soften and even dissolve the foam. If in doubt, test the brush in the finish you're going to use; if it starts to swell, don't use it.

Before you apply any finish, get properly set up. Begin with a clean, clear wood surface: Sand with up to P180- or P220-grit sandpaper and then vacuum the dust. On open-grained wood such as walnut, mahogany, or oak, it's a good idea to blow the pores clear with compressed air. Finally, lightly run a tack cloth over the wood to pick up any remaining dust. Skip this step if you're using a water-based finish because residue from the tack cloth can interfere with the finish.

One of the best ways to improve the quality of your finishing is to use good lighting that will display problems immediately. Ideally, the light source should be directly in front of the workpiece with the light hitting it at about a 45° angle.

Check the label on the can of finish to ensure that you're within the temperature guidelines. If you have a choice, the ideal situation is to brush on

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Distinguish one side with a mark. Only one side of the brush should ever touch the surface. This way any dust on the workpiece will collect on the contact side and not flow back onto the surface.

Three steps before brushing



Dip, don't dunk. It is easy to overload a foam brush, so submerge it only a quarter of an inch for a second or two.



Avoid creating bubbles. Dragging the brush across the rim of the container generates bubbles. Instead, gently press it against the side of the container to release excess finish.

Horizontal surfaces

Do the edges first. This will prevent uneven penetration later if you accidentally let finish dribble over the edge while working on the top. At the end, come back and even out any runs on the edges.



horizontal surfaces at the lower end of the accepted temperature range, which will give the finish more time to flow out and will help control lap marks. I prefer brushing vertical surfaces at a warmer temperature, because the initial evaporation of the solvent can help prevent sags.

Another essential finishing technique is to work from a smaller container, known as a cutting pot. I transfer some finish to a cutting pot with a turkey baster (buy one dedicated to finishing and keep it out of the kitchen). A cutting pot offers several advantages: You can reseal the can of finish immediately to prevent further evaporation; it prevents dust picked up on the brush from contaminating the finish in the can; and you can add solvent to the finish in the cutting pot without altering the bulk of the finish.

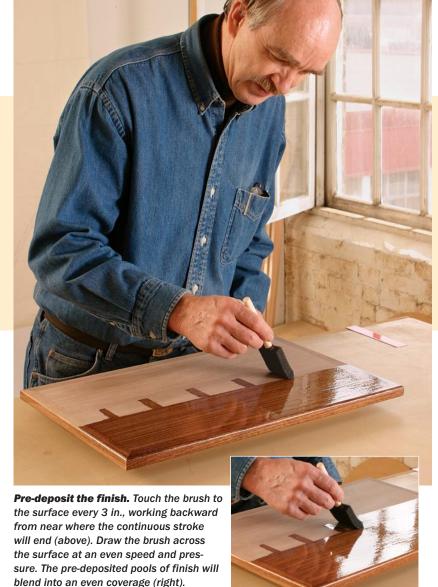
Because solvent begins evaporating as soon as you add finish to the cutting pot, try to work quickly. A larger brush lets you cover ground more rapidly. I normally use a 3-in. foam brush unless I'm doing table legs, where I use a 2-in. brush.

The leading edge of the brush will pick up dust from the surface. Turning the brush over will allow the dust to flow back out of the brush on the next stroke. To avoid this, I mark one side of the handle and make sure that side is face up at all times.

Don't overload the brush

One of the biggest errors when using foam brushes is to overload them with finish. Don't plunge the brush into the varnish; instead, dip in the tip about 1/4 in. and let it drink in the finish. The amount of finish picked up depends on how long you leave in the tip, so vary it according to the length of brush stroke you will use. If you need to add just a small amount of varnish for a touch-up, dip in only a corner. The finish will quickly wick to the entire edge.

If you do load too much finish, never drag the brush over the edge of the cutting pot, as this



Troubleshooting problem finishes

There are two things to watch for: bubbles and visible transition lines. Bubbles on the first and second coats are all but inevitable: as the finish displaces air in the pores of the wood, the air comes up through the freshly applied varnish. If you see bubbles on subsequent coats (below left), they indicate that you're dragging the brush over the edge of the container or going too fast over the surface; check your technique, and ease up a bit. You can eliminate the bubbles by touching them with the corner of your brush.

Visible transition lines between strokes (below right) indicate you don't have enough solvent for the strokes to evenly flow together. Add a bit of solvent to the cutting pot, or increase your work speed.





finish line continued

Vertical surfaces



Finishing board for legs. To hold legs vertical while being finished, screw the tops to a piece of MDF. Keep one corner pointed forward so that you have access to two sides of the leg at a time.



Pre-deposit finish on vertical surfaces, too. Deposit finish working from top to bottom, then apply a continuous stroke in the reverse direction (left).



Drink up any surplus finish. Some finish will collect at the bottom of vertical surfaces. Instead of brushing it away, hold the tip of the empty brush against the surface and let the foam absorb the finish (above).

generates bubbles. Instead, touch the brush gently to the inside edge of the cutting pot.

Tips for brushing horizontal surfaces

Horizontal surfaces are easier to finish, so my best tip is to finish as many parts as possible horizontally before final assembly, carefully taping off glue joints as needed.

If you're finishing a tabletop, do the edges first. If you start with the top, the accidental drips pulled over the edges will dry unevenly. Wet the edges with finish first, and then come back and even them out as the last step.

To achieve an even application, pre-deposit finish along the length of the intended stroke, beginning near the end. Touch the loaded brush to the surface, leaving some finish, then move several inches closer to the start and touch again, repeating three to five times. Using this technique, I can lay down enough varnish to cover a 24-in. stroke. For larger pieces, I pre-deposit two or more times, always working toward the starting point of the stroke.

On the full stroke, maintain an even speed, letting the remaining finish flow from the brush and evenly spreading the pre-deposited finish. Always go in the same direction; back-and-forth motion leaves an inconsistent thickness, generates bubbles, and deposits dust picked up by the brush onto the surface of the workpiece.

Finally, give the edges a final stroke with a fairly dry brush to even out the runs that almost inevitably occur. Move slowly to soak up excess finish and keep it from building up on the lower side.

Jig makes finishing vertical surfaces easier

Vertical surfaces are tricky because the finish wants to run, but for items such as legs there is no practical alternative. To make the process easier, I use a legfinishing board. Cut a piece of 34-in.-thick plywood or medium-density fiberboard 4 in. to 6 in. wide by 24 in. to 30 in. long. Drill four evenly spaced screw holes large enough for the screws to slip through without biting. Countersink the underside of the holes to ensure that the assembly doesn't rock. You'll need a spacer between the board and each leg so that the finish doesn't glue things together. The spacer can be any ½-in.-thick material, slightly smaller than the top of the leg with a generous hole in the center. Drill smaller holes in the center top of each leg to receive the screws. Tighten the screws with the leg sides at a 45° angle to the sides of the board to allow easy access to two sides of each leg at a time.

Brush on the finish with the same technique as the horizontal application, pre-depositing finish from the foot of the leg downward, then finishing with a full upward stroke, ending at the foot of the leg.

For vertical work, you'll probably want to load the brush with less finish to prevent dripping. Inevitably, some finish will collect at the bottom of the workpiece, but an advantage of foam brushes is that you simply can touch the tip of an empty brush to the finish to soak up the surplus.



No cleanup. The best part of using foam brushes is that you don't have to clean them. Just throw them away.