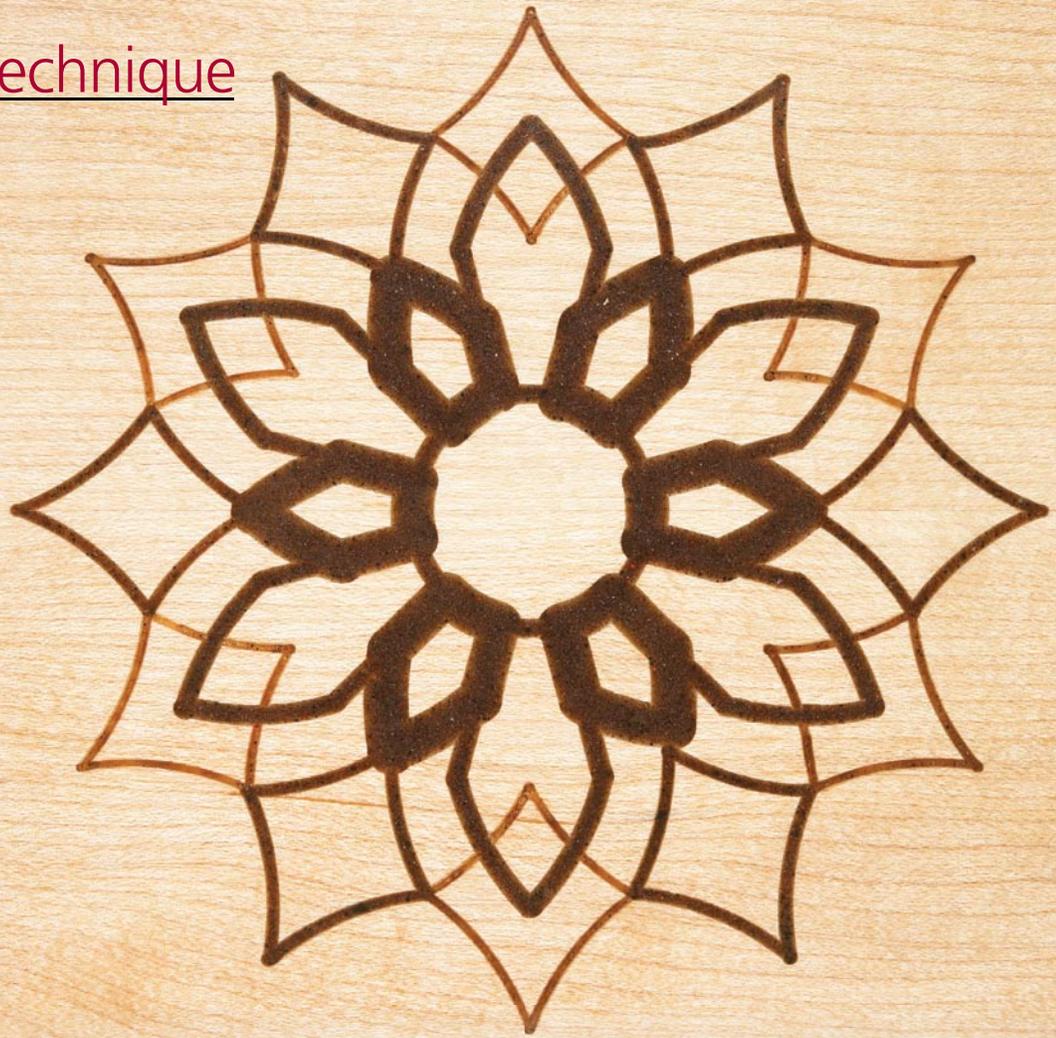


adding an Epoxy Inlay

Give your *Spirocrafter* projects an eye-catching inlay with colored epoxy.



Traditional wood inlays are a great way to dress up the appearance of a project. The problem is cutting and fitting small, oddly shaped inlay pieces can be both difficult and time-consuming. An easy alternative is to use colored epoxy instead of wood. Epoxy will flow into just about any shape,



▲ Test the color mixes on a sample board to find the shade you want for your project.

saving a lot of time and effort over conventional wood inlays.

For example, the photo above and most of the photos in the *Spirocrafter* article on page 14 feature epoxy in the routed patterns. Inlaying wood into such an intricate pattern would be very difficult.

But you can get a similar effect by simply mixing up a batch of epoxy and adding a little color. Then you just apply the mixture into a shallow recess cut in the shape of your choice. With this technique, I was able to add a great-looking design detail without a lot of trouble.

GETTING STARTED. Like any inlay, the place to begin is by creating a recess. For the *Spirocrafter* projects, I used a router with a v-groove bit to cut the design. And to vary the width of the line, I changed depth from $\frac{1}{16}$ " to nearly $\frac{3}{16}$ " for the cuts.

PREPARING THE WOOD. After you cut the recess for the inlay, there's

just one more step before mixing the epoxy. To prevent the epoxy from bleeding into the grain, it's a good idea to seal the wood first by spraying on a coat of lacquer. And to make it easier to remove any excess epoxy, rub a coat of wax on the surface of the wood.

MIX EPOXY AND COLOR. With the surface prepared, the next step is to choose an epoxy. I've found most brands work fine, but it's best to use a slow-setting epoxy. This way, you'll have plenty of time to get it in place before it starts to harden.

You can use just about any kind of coloring in epoxy, from aniline dyes to the black furniture powder I used on the table top. You'll just want to avoid colors that are soluble in the type of finish you'll be adding to the piece. For instance, if you're planning to use a water-based finish, stay away from water-soluble colors or they will

bleed when you apply the finish, even after the epoxy cures.

It's a good idea to mix up a few batches and test them on scrap pieces first. Then you'll get a feel for how well the epoxy works into the grooves. You can also experiment with different coloring agents to find the right mixture for the inlay. Aniline dyes, powdered artist colors, or *TransTint* colors work well for this technique.

APPLYING EPOXY. When you've found the shade you like, you're ready to start filling in the inlay. You can see the step-by-step process in the box at right. If the epoxy mixture is thin enough, you can draw it into a syringe and then simply squeeze it into the recess. I like this method because it gives me better control. And it also makes cleaning up the excess a lot less hassle.

If the mixture is too thick for a syringe, you can press it into the recess using a thin piece of scrap wood or plastic. Just be sure to add enough so the epoxy remains slightly proud of the surface.

CLEANING UP. Since you waxed the surface, the overflow will come off pretty easily with a sharp chisel. The bottom two photos at right show you how to clean up the epoxy and fill in any exposed air bubbles. You can remove the wax with mineral spirits. Then, after a final sanding to remove the sealer coat of lacquer, you're ready to add a finish. Using this simple technique, you'll find even the most intricate inlays are possible. **W**



▲ To make removing the excess epoxy easier, first apply a coat of lacquer to seal the grain and then rub on a coat of wax.

How-To: Working with Epoxy

There are a couple things to keep in mind when working with epoxy. First, it will bond to just about anything, including your skin. So I always wear rubber gloves when mixing and applying epoxy. Second, the resins not only smell bad, but can cause

allergic reactions in some people. So it's a good idea to work in a well-ventilated area. The same rule applies for sanding the hardened epoxy. The dust can be a real irritant, so use a good dust collector on your sander and wear a mask.

Start by mixing the epoxy according to the manufacturer's instructions (usually, equal amounts of resin and hardener). Then mix in the color. Stir the epoxy gently to minimize air bubbles.



A disposable plastic syringe makes it easy to apply the epoxy. You can cut the plastic tip to fit the size of the groove. Make sure to overfill the groove a little bit to allow for some shrinkage.



After about an hour, use a chisel to remove most of the overflow. At this point, the epoxy is rubbery. After it's cured (usually 8 hours) move on to a hand scraper, then sand the inlay smooth.



Holes caused by air bubbles in the inlay are almost unavoidable. But you can fill them using a drop of epoxy on a paperclip or toothpick. Then just sand again after the repairs are dry.

