Veneering over a Solid-Wood Substrate

Thirty-year old rosewood gives life to a shapely coffee table

by Tage Frid

Ve been experimenting with veneering over solid woods for a while and have discovered some interesting design possibilities. One of them, which I've used on the table shown below, involves removing wood in such a way that I expose a graduated portion of the substrate along its edge. By first beveling the veneered tabletop and then bandsawing gentle curves along both sides and ends, the exposed maple seems thinner in the center and wider at the ends. The effect can be very dramatic or much more restrained. For this table, I wanted to maximize the contrast with the veneer—some prize rosewood I've been saving for 30 years so I chose maple for the substrate. Whether you're looking for a

subtle distinction or a loud contrast, the veneer adds an element to the design that would be impossible without it.

Some people think real woodworkers don't use veneers. This is small-minded thinking. Veneering has been around almost since man first started cutting trees. Indeed, some of the finest furniture ever made—fabulous 18th- and 19thcentury pieces from France and England—used veneers extensively and over solid wood. Many of those pieces have stood the test of time.

When veneering over solid wood, orient the veneer in the

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Graceful curves and beautiful veneer combine to give Tage Frid's most recent coffee-table design a classic, timeless look. The table, on display last fall at the Newport Art Museum, was one of several pieces by Frid in the Nine Rhode Island Masters of Modern Furniture show.



I designed the legs of the table to complement the top. Because they're curved, I made sure the grain runs full length, so there are no short-grain sections that could be vulnerable. After shaping, mortising and veneering the legs, I spokeshaved the corners to expose a little bit of the maple.

same direction as the substrate. I used a vacuum veneer press, but

clamps and cauls (wooden blocks to spread the clamping pres-

sure) can also be used. Although I normally use regular yellow

glue for veneering, I used plastic-resin glue for this table because

it works better with oily woods like rosewood. In either case, it's

essential that you spread the glue evenly and not too thickly. I use

a paint roller with a rough, woven (washable) pad, which is de-

signed for spreading contact cement. It's important to veneer both

the top and bottom of the tabletop so that the wood can exchange

moisture with the air evenly on both sides. I glued mahogany ve-

neer on the bottom of this table.

The table's finish is Watco Danish Oil Finish—the simplest to apply and the easiest to repair. That's important, especially if you put your feet up on the coffee table as much as I do.

Tage Frid is a contributing editor to Fine Woodworking.

Fig. 1: Rosewood-veneered coffee table

The most elegant designs are often the simplest. Tage Frid's most recent table design relies on fair curves, appropriate proportions and contrasting wood colors for its beauty.



Stretchers are screwed to tabletop at center and just inside of each leg. Half-lap joint where stretchers overlap allows them to move with the tabletop, preventing any wood movement problems.

To mark the tabletop's curves for cutting, Frid tacked small brads 1% in. in from each corner, sprung a batten (centered on the middle of the table's edges) and penciled a line.









1) Truing the edges of the veneers



2) Frid pins the veneers



5) Frid scrapes the package tape from the veneer



3) Gummed package tape holds the veneers in place



4) Eliminating air pockets

Veneer the tabletop, then shape its edges

1) Truing the edges of the veneers takes only a few seconds on the jointer. Frid aligns the veneers so that they're just barely protruding from a wooden sandwich, clamps the veneers between the two boards and then runs the clamped assembly over the jointer knives. Alternately, Frid could have used a hand plane, but the jointer is convenient and works as well or better.

2) Frid pins the veneers temporarily into place with small brads after carefully aligning the trued, book-matched sheets of veneer.

3) Gummed package tape holds the veneers in place while they're being transferred onto the substrate and into the vacuum bag. Frid doesn't use masking tape because its adhesive could tear the veneer's fibers or leave a residue that would interfere with finishing the table. Once he's taped the veneers together, Frid removes the brads he used to pin the veneers.

4) Eliminating air pockets that would interfere with even pressure on the tabletop, Frid presses the bag in at the comers. A sheet of plywood goes over the top of the



7) Bandsawing to a line drawn along a sprung batten



8) Frid tapers both sides of each leg



9) Frid cleans up the curves

piece being veneered, and extends just beyond its edges, to prevent the slightly oversized veneer from shearing on the edge of the substrate.

5) Frid scrapes the package tape from the veneer with a cabinet scraper after removing the veneered tabletop from the vacuum press.

6) Frid bevels the edge of the tabletop (see the top photo on p. 40) after he's ripped it to width and crosscut it to length. An auxiliary plywood fence, a firmly clamped, solid featherboard and the assistance of his apprentice (and grandson), Ben Randall, keep Frid safe and the bevel true.

7) Bandsawing to a line drawn along a sprung batten, Frid exposes a graduated section of the solid maple substrate from the center of each side to the ends; a few passes with a compass plane take care of any rough edges. The result is an interesting treatment achieved with simple means.

8) Frid tapers both sides of each leg by ⁵/₁₆ in.fromtoptobottom, cutting away the bulk of the taper on the bandsaw and then jointing to the line. He uses a shopmade push block to keep his hands safely away from the jointer knives.

9) Frid cleans up the curves with a spokeshave after veneering the jointed sides of the legs and marking and bandsawing the curves for the legs. A smooth surface is essential because these two faces are also veneered.

Editor takes video of Frid making table

Still photos and the written word don't always do justice to processoriented information. That's why I went back to Tage Frid's shop and shot video footage of him building an end table to match the coffee table featured in this article.

The result isn't a polished video. It's an experimental, no-frills, ten-minute companion piece to the article, showing highlights of Frid preparing substrate and veneers, using a vacuum veneer press and shaping the tabletop on the tablesaw and bandsaw. If you'd like a copy of the video (VHS only), it costs \$7. To order, call (203) 426-8171, or write FridVid 11030, The Taunton Press, P.O. Box 5506, Newtown, Conn. 06470.

—Vincent Laurence