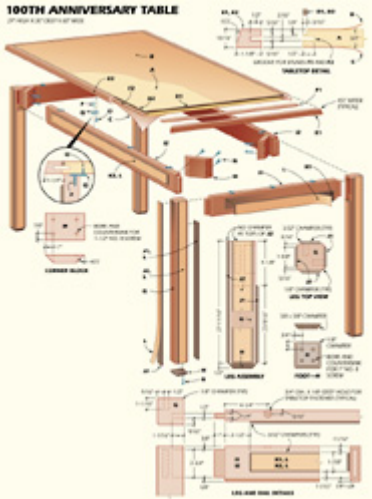
Anniversary Table

The second in our furniture series commemorating 100 years of PM.

In the February issue we introduced the first piece in the 100th anniversary furniture series--our elegant mahogany side chair. Now it's time to expand the theme with a project that's sure to capture your imagination--and everyone else's attention: a stunning table to match the chair.

Like our chair, the table is built of mahogany and features detailing in wenge--a dark, dense African wood. But what really sets this table apart are the magnificent surfaces of pomele sapele veneer. This highly figured veneer creates planes of light that appear to have a life of their own. The panels change appearance as you walk around the table to produce a sense of movement and depth that's truly

dazzling. This is a table that can serve as the centerpiece of a room or as an accent to an already established decor. If you use it as a dining table, it will comfortably seat four to six adults.



MATERIALS LIST--TABLE		
Key	**No.**	**Size and description (use)**
A	1	3/4 x 27-3/4 x 57-3/4" MDF (top core)
B	as reqd.	pomele sapele (top veneer)
C	as reqd.	mahogany (bottom veneer)
D1	2	3/16 x 9/32 x 27-3/8" wenge (inlay)
D2	2	3/16 x 9/32 x 57-3/4" wenge (inlay)
E1	2	13/16 x 1-1/8 x 30" mahogany (edge)
E2	2	13/16 x 1-1/8 x 60" mahogany (edge)
F1	2	3/16 x 1 x 26-3/4" hardwood (spline)
F2	2	3/16 x 1 x 58-3/4" hardwood (spline)
G	4	2-1/4 x 2-1/4 x 27-11/16" mahogany (leg)
H*	4	1/2 x 2-1/4 x 2-1/4" wenge (foot)
I1	2	1 x 3-1/2 x 25-5/8" mahogany (apron)
I2	2	1 x 3-1/2 x 55-5/8" mahogany (apron)
J1	8	3/16 x 1-5/8 x 23-9/16" wenge (decorative panel)
J2	8	3/16 x 1-5/8 x 27-11/16" wenge (decorative panel)
K1	2	3/16 x 1-7/8 x 18-5/8" wenge (decorative panel)
K2	2	3/16 x 1-7/8 x 48-5/8" wenge (decorative panel)
L	as reqd.	pomele sapele (decorative panel veneer)
M	4	1 x 3-1/2 x 5" maple (corner block)

N	16	1-1/2" No. 8 fh woodscrew
O	14	1/2" No. 8 fh woodscrew
P	14	3/4" No. 8 fh woodscrew
Q**	14	tabletop fastener
R	16	1" No. 8 fh woodscrew
Misc.: Veneer tape; plastic-resin glue; kraft paper; 120-, 220-, and 320-grit sandpaper; 4/0 steel wool; Waterlox Original Sealer/Finish (Waterlox Coatings Corp., 9808 Meech Ave., Cleveland, OH 44105).		
*Finished dimension. Cut oversize and trim after assembly.		
**No. 21650, available from Rockler Woodworking and Hardware, 4365 Willow Dr., Medina, MN55340.		

Wenge and pomele sapele veneers are available from various mail-order wood dealers. One such supplier is A&M Wood Specialty Inc., 358 Eagle St. N., Box 32040, Cambridge, Ontario, Canada N3H 5M2; 800-265-2759; www.amwoodinc.com. In addition to the figured veneer, you'll need a small amount of plain mahogany veneer for the bottom face of the table's top panel.

Stack all top veneer pieces and cut them at one time. Align the grain and use a straight board to guide the veneer saw.

Our figured veneer top is made up of several sheets placed edge to edge. You'll find that the individual pieces are sold in the sequence that they're cut from the log. This gives you control over the repetitive pattern created by the assembled veneer sheets. On our tabletop, we used a book match pattern, in which every other sheet of veneer is flipped over to create a mirror image of the adjacent sheet.

Join adjacent sheets of veneer with lengths of veneer tape across seam. Add tape along seam to hold joint tight.

Top Construction

Begin by cutting the 3/4-in. MDF (medium-density fiberboard) core stock to size for the top panel. Cut the core a few inches longer and wider than finished dimensions. We used four sheets of veneer, with the grain running across the tabletop, to cover our panel. Whether you choose to run it across or parallel to the length of the top, position a seam at the center with an equal number of pieces to either side.

Prepare to cut the sheets to uniform size by placing them in a stack. Arrange the pieces so that the grain pattern is aligned, and mark the outline of the cuts on the top sheet.

Use a veneer saw to cut the stack (Photo 1). Guide the flat side of the saw along a straight piece of 3/4-in. hardwood or plywood. Make light passes to keep from tearing the delicate edges. Make the crossgrain cuts first, followed by cuts along the grain that will determine the seams. Use the same technique to cut the mahogany veneer for the bottom face.

Lay out the sheets and check that each seam is tight. If necessary, adjust the edges with a block plane. Use perforated paper veneer tape to hold the sheets together. Moisten 6-in. lengths of tape with a damp sponge and place them across the first seam, spaced about 4 to 6 in. apart. Next, place a strip of tape along the length of the seam (Photo 2). Tape the remaining seams. If splits occur, use veneer tape to repair them. Prepare the bottom veneer using the same technique.

Use a foam roller to spread glue on the core. Then, carefully invert the core onto the bottom veneer face.

Use battens spaced about 6 in. apart to apply pressure across the veneer assembly. Clamp from the center out.

Trim the top panel to size and use a router to cut the inlay rabbet around the perimeter.

Apply glue to the rabbet and use masking tape to clamp the inlay to the panel. Sand the inlay flush to the top.

To glue the veneer to the core, you'll need two cauls of 3/4-in. plywood that are the same size as the panel core. You'll also need 22 straight 2 x 4 battens--one pair every 6 in.--to span across the core on the top and bottom, and some kraft paper or newspaper to place between the cauls and veneer faces.

Prepare for veneering by placing straight 2 x 4 support rails between two sawhorses, and laying the bottom row of battens along the rails.

Position a 2-in. veneer shim in the center of each batten, and then place the bottom plywood caul over the battens. The veneer shims ensure adequate pressure at the center of the panel. Spread paper over the caul and place the mahogany bottom veneer face, tape side down, over the paper.

We used plastic-resin glue for our panel because it has a long open time. Use a foam roller to evenly spread glue onto one face of the core (Photo 3). Invert the core onto the bottom veneer face and align the edges. Roll glue onto the top of the core and position the top veneer face, tape side up. Cover the veneer with paper and the top caul, and then add the battens. Place a veneer shim under the center of each batten and, starting at the center of the panel, clamp each pair of battens at both ends (Photo 4).

Let the glue set overnight before removing the clamps. Peel off as much paper as possible and use a cabinet scraper or finish sander to complete

After routing spline grooves and cutting mahogany edge strips, test fit splines. Then glue edging one piece at a time.

Install wenge feet with screws and glue. Cut feet about 1/16 in. oversize and sand flush after installation.

the job. Don't use a belt sander--one slip could cause you to damage the veneer.

Trim the panel to size and use a router and edge guide to cut the rabbet for the wenge inlay that will go around the panel edges (Photo 5). Cut inlay strips 1/32 in. thicker than the rabbet depth. Spread glue in the rabbet on one panel edge and clamp the inlay with strips of masking tape spaced every 2 in. (Photo 6). Repeat for each inlay. When the glue has set, remove the tape and sand the strips flush. Scrape off any excess glue.

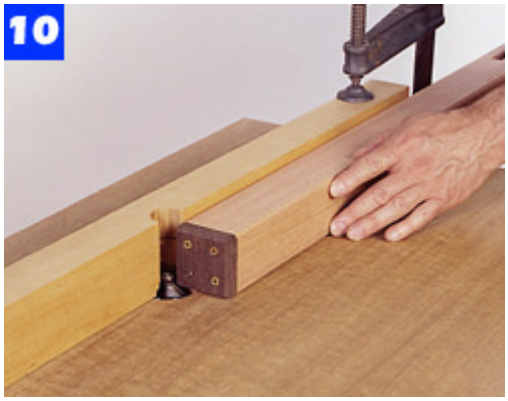
The panel edging is ripped from a single 13/16-in. mahogany board that's at least 5 in. wide and a few inches longer than the table length. Use a slot cutter and router to cut the spline groove in the panel edge, and then rout the same groove in the edge of the mahogany stock. Rip the first piece of edging off the board, and repeat the slotting and ripping to make the remaining edge pieces. Cut the strips to length with 45° miters at the corners.

Cut hardwood splines and test the fit in the grooves (Photo 7). Then, apply glue to the grooves and edges of one strip and panel edge, insert the spline and clamp the edging in place. Work your way around the panel until all the edging is installed. Mark a line around the top of the panel to indicate the finished edge angle, and use a sharp block plane to trim to the line.

Making The Base

Rip and crosscut the legs to size. Cut blocks of 1/2-in.-thick wenge for the table feet about 1/16 in. larger than the leg dimensions. Bore screwholes for securing each foot. Apply glue to the bottom of each table leg, position each foot, and fasten with four 1-in. No. 8 screws (Photo 8). When the glue is dry, sand the foot edges flush with the sides of the legs and add the chamfer with a plane or chisel.

Use a spiral up-cutting bit to rout the leg mortises. Make the cut in several passes to ease the load on the router.



After cutting and squaring the mortises, mount a chamfer bit in the router table to cut the bevel along the legs.

Use a dado blade in the table saw to cut the apron tenons. Clamp a stopblock to the table to ensure uniform cuts.

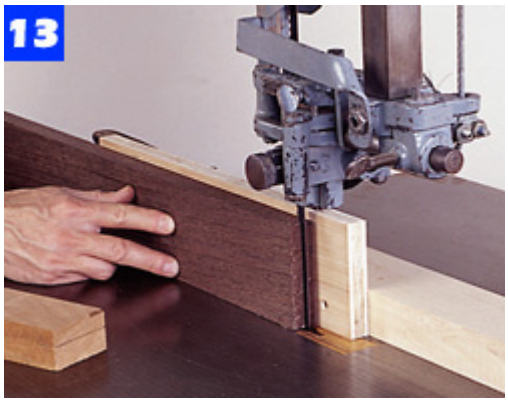
Clamp a fence to the drill press table to help position the aprons when cutting the tabletop fastener mortises.

Lay out the locations of the mortises in the table legs and rout them with a spiral up-cutting bit (Photo 9). Finish the mortises by chopping the ends square. Install a chamfer bit in the router table and cut the small bevel along the edges of the table legs (Photo 10).

Rip and crosscut 1-in.-thick stock to size for the table aprons. Use a dado blade in the table saw to cut the tenons. A stopblock clamped to the saw table ensures uniform tenon shoulders. Readjust the blade height and hold the aprons on edge to cut the shoulders at the top and bottom edges of each tenon (Photo 11). Then, test fit the apron tenons in the leg mortises.

Mark the location of each tabletop fastener on the table aprons. Clamp a fence to the drill press and bore a 3/4-in.-dia. recess for each fastener (Photo 12). Use the router table to cut the bevel along the bottom edge of each apron.

The decorative panels for the legs and aprons are made of wenge with pomele sapele veneer faces. Since these panels are very narrow, make blanks wide enough so you can rip two panels from each piece. First, resaw the wenge panels (Photo 13) and plane them to finished thickness. Cut the veneer sheets to the same size as the wenge blanks. Since the panels are small, you can apply veneer to more than one piece at a time, then stack and clamp them together. Place the stack between 3/4-in.-thick cauls and apply clamps (Photo 14). Repeat the process for all decorative panels. When the glue has set, cut the panels to



Resaw the wenge decorative panel stock on the band saw. Use a tall fence to hold the work parallel to the blade.

Assemble veneer and wenge in a stack. Separate each panel with paper and use 3/4-in. plywood cauls.

finished dimension and rout the bevels as shown in the drawing.

Hold a panel in place on one of the aprons and lightly mark its outline with a pencil. Spread glue on the back of the panel, place it onto the apron and apply clamps (Photo 15). Repeat this process with the remaining panels on each apron and leg.

To assemble the base, first spread glue onto the tenons of a long apron (Photo 16). Use a shim to spread glue in the mating mortises, join the parts, clamp, and check that the assembly is square. Repeat for the opposite side. Complete the base by joining the short aprons to the legs.

Cut and install the corner blocks as shown in the drawing (Photo 17). Next, bore pilot holes and install the tabletop fasteners (Photo 18).

Finishing
For a simple wipe-on application, we used Waterlox Original Sealer/Finish. Apply three coats following the manufacturer's instructions, with light sanding between coats. Then, polish with 4/0 steel wool.

To assemble the base and top, invert the top on a padded surface and place the base upside down over it. Adjust the base to provide an even overhang, then bore pilot holes and attach the top with screws.

After trimming and beveling the panels, lightly spread glue on each and clamp in place until the glue sets.

Use a small brush to apply glue to the table-apron tenons. Apply glue to mortises, join parts, and clamp.

Cut corner blocks to size with 45° angles at each end. Countersink screwholes in the blocks and secure to the aprons.

Install tabletop fasteners to the top edges of the table aprons. Use 3/4-in. No. 8 fh woodscrews for the job.

100TH ANNIVERSARY TABLE

29" HIGH X 30" DEEP X 60" WIDE