Great-looking veneer and hardwood plus a few interesting woodworking techniques add up to a memorable project.

A keepsake box is something that just about everyone appreciates. And an elegant design like the one shown above is suitable for any occasion. On top of that, you can enjoy trying out a few interesting woodworking techniques that go into making the box.

Splined mitres and contoured sides are the focal points of the basic box. The hinged lid not only has an interesting profile, but it features a veneered centre panel trimmed with thin, inlaid banding. I used an easy and reliable method to veneer the panel without using an expensive vacuum press or any special tools.

The best thing about this project is that you can find most of the material you’ll need to build it in the scrap bin. Any solid wood will do just fine. (I chose mahogany.) You can change the look of the box by choosing matching material for the splines, or use a contrasting wood, like I did. And since it only requires a small piece of veneer, you can look for an interesting piece without spending a fortune.

It’s hard to imagine a better use for off-cuts than to craft them into beautiful boxes and give them away as presents.
BUILDING THE MITRED BOX

In spite of the contoured finished appearance of the keepsake box, it begins as a very straightforward, rectangular assembly. Later, you'll add splines in the corners and taper the outside.

MILL THE STOCK. The front, back and sides of the box are all 16mm thick. So I started by planing some 19mm-thick stock to this thickness. Then I cut the pieces to final width and rough length.

GROOVE. The box below shows how I used a standard blade to cut the groove for the bottom. By moving the rip fence slightly between passes you can sneak up on the correct width to match the thickness of the plywood.

**CUTTING PERFECT MITRES.** Since you'll shape the sides of the box, it's very important that the mitre joints are as close to perfect as possible.

You can start by tilting the saw blade 45°. Here, you'll want to take the time to set this angle accurately. Then attach an auxiliary fence to the mitre gauge. The auxiliary fence backs up the cut, and stops it from tearing out on the back side. I also attached adhesive-backed sandpaper to the fence to prevent the workpiece from slipping during the cut.

Now you can cut one end of each piece. The right drawing below shows how I used a stop block to keep the length of opposite sides exactly the same. This step is critical to assembling tight mitre joints.

ASSEMBLY. To assemble the box, lay out all four pieces against a straightedge with their inside faces down and tape across each joint. Then, cut the plywood bottom and dry fit the assembly. Finally, add glue to the mitres, insert the bottom in the groove and bring the pieces together, taping the final corner.

HOW-TO: PREPARE THE FRONT, BACK & SIDES

**Groove.** First, cut the upper edge of the groove. Then bump the rip fence in to sneak up on a good fit for the bottom.

**Mitre to Length.** With an auxiliary fence on the mitre gauge and the blade set to 45°, start by cutting one end of each workpiece. Then set up a stop block to cut the opposite end to final length.
COMPLETING THE BOX

With the box assembled, the next order of business is to cut slots in the corners and add the splines. As you can see in the box below, I use a simple, homemade jig to hold the box at the proper angle to cut the slots. You can find the plans for making the jig on page 61.

**CUT THE SLOTS.** Using the jig is a reliable way to accurately cut the slots. But there are a couple of things to set up first. Start by setting the blade height to cut through the jig to the correct depth on the corners. You can see what I mean in detail ‘b’ above. Make test cuts through the jig and measure the blade height to get it set properly. Since the jig rides against the rip fence, all you need to do is set the fence to the correct spacing for each slot. Detail ‘a’ shows the positions of the slots.

**MAKE THE SPLINES.** The centre drawing below shows an easy way to cut splines from a piece of contrasting stock (I used blackwood). Plane or sand the splines for a snug fit. They should not be so tight they need to be pounded in place. After applying glue, I used a piece of scrap with bevelled edges as a clamping aid, as you see in the margin photo at left.

A flush-cutting saw makes short work of trimming waste from the splines. Then, a little sanding is all it takes to smooth out the sides of the box. And since subsequent operations rely on the sides riding against the fence on the table saw

HOW-TO: CREATE SLOTS & SPLINES

**Cutting the Spline Slots.** Hold the box firmly in position in the jig as you cut the slots for the splines.

**Ripping Spline Stock.** Set the rip fence and cut (detail ‘a’), then flip the workpiece over and repeat. Cut the splines free as in detail ‘b.’

**Trimming.** Using a flush-cutting saw, carefully trim the waste to avoid breaking off the splines.
and router table, having the sides flat is important for getting consistent, even cuts.

**HINGE MORTISE.** The lid is connected to the box with a continuous (piano) hinge. To get a good fit for the lid, the hinge needs to be mortised into the back edge of the box. The depth of the mortise equals the full thickness of the hinge. (The lid isn’t mortised.)

The edge of the box is too narrow to support the router during this cut. And there’s a risk of tearout if you try this on the router table. I came up with an easier plan to rout the mortise.

I simply sandwiched the back of the box between a couple of support blocks. With the blocks taped in place, there’s plenty of surface area to safely rout away most of the waste for the hinge mortise (left drawing, below). Then I squared up the ends of the mortise with a chisel.

**ROUTING THE BOTTOM EDGES.** Next, I used a roundover bit to add a visual detail to the lower edge of the box. The drawing below shows how this profile creates a small foot on the base.

**BEVELLING THE SIDES.** The bevelled sides provide a very distinctive look for the box. The bevel gives the illusion that the splines are each a different size. You can safely make this bevel cut by installing a rip blade and tilting the blade 11°. The right drawing below has the details.

It’s not unusual to get a little bit of burning here, so be sure to use a sharp, clean blade. Finish up with a good sanding.
**MAKING THE VENEERED LID**

A hinged lid completes the look of the box. The bevelled edge of the lid complements the tapered sides of the box. But the veneered panel and inlaid border really make the box stand out.

**START WITH THE PANEL.** After finding a special piece of figured veneer, I prepared a slightly oversize plywood panel to use as a substrate. Since this is a very small panel, you can glue the veneer to the substrate using only clamps and some cauls. The cauls are just a couple of 19mm-thick flat panels slightly larger than the lid panel.

I applied glue and attached veneer to both sides of the panel. Next, I sandwiched the panel between two cauls with waxed paper in between to prevent the panel from sticking to the cauls. Then, just place several clamps around the assembly. For this kind of glue-up, I like to let the panel stay under clamping pressure longer than normal to ensure a good bond. So after letting the glue set up overnight, you can remove it from the clamps and cauls and trim it to final size.

**REBATE & RECESS.** As you can see in detail ‘c’ above, you’ll need to rebate the edges of the panel to fit into the frame. In addition, you’ll also need to cut a very shallow recess for the inlay banding. Then glue the banding in place in the shallow groove. The box below shows all three operations.

**LID FRAME.** To hold the veneered panel, I made a mitred frame. Of course, it will become the lid of the box, but you’ll go through the same sort of process as you would...

**HOW-TO: CREATE THE VENEERED LID & INLAY**

**Rebate.** With an auxiliary fence installed, bury the dado blade and cut the rebate on the outside edges of the panel.

**Rout Channel for Inlay.** Using a straight bit, rout the very shallow channel to hold the narrow inlay banding.

**Install the Inlay.** Fit each piece of inlay one at a time, mitring the corners with a sharp chisel or plane iron.
for making a picture frame. The step-by-step instructions at right break down what looks to be a complicated task into easier, single cuts.

After selecting the stock and milling it to final size, head over to the table saw and cut a groove to fit the tongue on the panel. Then tilt the saw blade 30° and cut the bevel on the lower inside edge, as shown in Step 2.

ASSEMBLY. At this point, you can mitre the frame pieces using the same techniques as before. Then, install the panel and assemble the frame. The remaining steps to create the profile are completed after assembly.

COMPLETING THE PROFILE. Now, cut the shallow notch shown in Step 3 to create the shoulder of the “raised panel” profile. The final bevel cut (Step 4) should just meet the edge of the notch, as shown in the detail.

In the final two steps, you’ll rout a shallow rebate on the underside of the frame and round over the edge, as well. The rebate you rout in Step 5 creates a lip for the lid to rest on the upper edge of the box. After completing the rebate, install a roundover bit and rout the profile to soften the appearance of the lid (Step 6).

FINAL DETAILS. By now, you’ve got a good fit for the lid. There are just a few final details to complete.

After cutting the hinge to length with a hacksaw, I used double-sided tape to hold it in position while installing the screws. Now you can apply your favourite finish to the box before you install the chain and anchors. Finally, glue a felt lining in the bottom of the box.

The result of your effort is sure to gain a prominent spot in the home and a lot of admiration from your friends and family.

Materials & Supplies and Cutting Diagram

<table>
<thead>
<tr>
<th>Material/Supplies</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Front/Back (2)</td>
<td>300 x 68 x 16</td>
</tr>
<tr>
<td>B Sides (2)</td>
<td>200 x 68 x 16</td>
</tr>
<tr>
<td>C Bottom (1)</td>
<td>274 x 174 x 6 ply</td>
</tr>
<tr>
<td>D Splines (12)</td>
<td>50 x 25 x 3.2</td>
</tr>
<tr>
<td>E Lid Panel (1)</td>
<td>230 x 130 x 6 ply</td>
</tr>
<tr>
<td>F Lid Front/Back (2)</td>
<td>294 x 38 x 19</td>
</tr>
<tr>
<td>G Lid Sides (2)</td>
<td>194 x 38 x 19</td>
</tr>
</tbody>
</table>

600 x 300 x 6mm ply  
1200 x 130 x 19mm Mahogany

• (1) 16mm x 800mm Continuous Brass Hinge
• (10) 1g x 9.5mm c/s Brass Woodscrews
• (1) 3g Ball Chain
• (2) 3g Chain End Anchors
• (2) 4g x 9.5mm Rh Brass Screws
• (1) 268 x 168 Felt
• (1) 300 x 150mm Veneer
• (1) 900mm Inlay Banding

ALSO NEEDED: Contrasting wood for splines