

Tool Tote

This classic wooden tool tote is a great way to keep your tools organized and protected, whether you are working at your bench, or away from your shop.

The Beginning

- The body of the tote is made with $\frac{3}{4}$ " solid wood, the bottoms with $\frac{1}{4}$ " plywood and the handle, 1" dowel.
- Cut the ends (B) to width and length.
- Use a pencil to mark a centerline on the insides of the ends. Fold some paper the same size as the end in half.
- Make a template of the ends on some card stock, and trace the lines for the shoulder sections onto the ends. Alternatively, you could experiment with different slopes by folding some paper the same size as the end in half, and making one angled cut. Open it up and you will have a symmetrical template. When you have an end shape you like, transfer the pattern to the wood.
- Use a band saw or jigsaw to cut up to the line. Then use a belt sander to achieve a straight, smooth edge.
- Cut the material for the sides (A) to

width and length. As well, cut the bottom (C), tray bottom (D) and handle (E).

- Use your table saw to rip a couple of $\frac{1}{4}$ " strips off the edge of a $\frac{3}{4}$ " board for the tray's runners (F).

The Finish

- Sand all of parts through to 150 grit.
- Apply a coat of Watco Natural Oil to all of the pieces now. This helps avoid glue-related finishing issues later.

The Middle

- Cutting the grooves and dados for the bottom as well as the biscuit slots that hold the tote together after the finish is on will expose fresh wood for the glue to adhere to.
- Cut the dado for the bottom, and the recess for the handle. The dado for the bottom is stopped, and as such, can't be cut on the table saw. Mount a $\frac{1}{4}$ " spiral bit in

your router table and use a fence in combination with end stops to cut the dado. Make several shallow passes instead of one full-depth cut.

- Locate the centerpoint of the handle. Then, using a Forstner bit in a drill press, drill a $\frac{3}{8}$ " deep recess for the handle.
- Use the table saw to cut a groove, $\frac{1}{4}$ " wide and $\frac{1}{4}$ " up from the bottom, on the inside edge of each side with a couple of passes over a regular blade. The ends are concealed, so a perfectly flat bottom is not required.
- Use the same procedure to run another groove $\frac{1}{4}$ " down from the top on the inside edge of each side. These will receive the runners that support the tray.
- Cut the grooves and biscuit slots. Setting the sides in $\frac{1}{8}$ " from the edges gives a more refined look than flush sides would.

The End

• Using plywood for the bottom overcomes any seasonal expansion problems that solid wood bottoms would cause. It also allows the bottoms to be glued tightly in place, contributing to the overall strength of the box.

• Test fit everything and once you are satisfied with the fit, disassemble the tote and lay the parts out in preparation for gluing.

• Apply glue to the biscuit slots as well as

the dado and groove for the bottom.

• Assemble the parts, apply clamps and check the diagonals to be sure the assembly is square.

• When the glue has set, remove the clamps and glue the tray runners (F) into place in the upper grooves.

To Top It Off

• The addition of a tray and what size to make it are very much a matter of personal preference. A tray that covers about half

of the tote provides additional storage while still allowing access to tools below.

• Mill some lumber into $\frac{3}{8}$ " thick strips for the ends (G) and sides (H) of the tray perimeter.

• Cut these to length and screw them to the tray bottom from below.

• Add any additional dividers that you may require.

• Give everything a final wipe with a coat of Watco Oil and then a protective layer of wax. Fill it with your hand tools and you're ready for your next project.

Here's how to achieve foolproof alignment for these parts:

• Mark out the centerline of each of the eight biscuits on the sides and the ends. Then, place the sides on your table saw top, face down and cut the biscuit slots as you normally would.

• To cut the slots in the ends, begin by clamping the end to your table saw fence with the outer edge against the top. Place a piece of $\frac{1}{8}$ " hardboard on the table top under the biscuit joiner to establish the proper setback, and cut the biscuit slots.

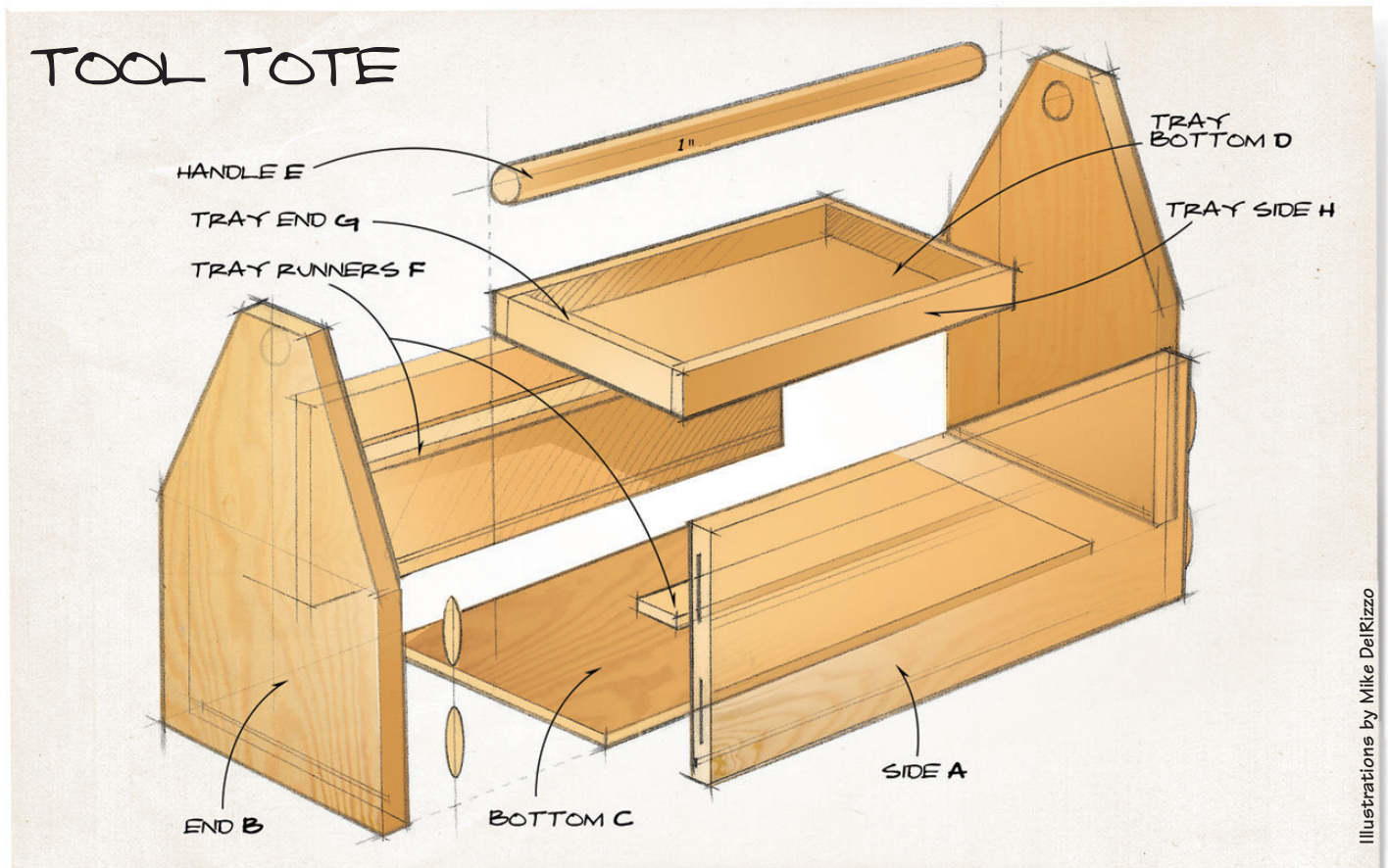
• Repeat this for all four corners.

MATERIALS LIST (All measurements in inches)

	Part	Qty	T	W	L
A	Sides (a)	2	$\frac{3}{4}$	$7 \frac{5}{8}$	$11 \frac{3}{4}$
B	Ends (w)	2	$\frac{3}{4}$	$5 \frac{5}{8}$	$15 \frac{3}{4}$
C	Bottom (tote) (bb)	1	$\frac{1}{4}$	$6 \frac{5}{8}$	$16 \frac{1}{2}$
D	Bottom (tray) (bb)	1	$\frac{1}{4}$	$5 \frac{5}{8}$	8
E	Handle (dowel) (wo)	1	1	1	$16 \frac{1}{2}$
F	Tray runners	2	$\frac{1}{4}$	$\frac{3}{4}$	$15 \frac{3}{4}$
G	Tray ends	2	$\frac{5}{8}$	$1 \frac{3}{8}$	$5 \frac{5}{8}$
H	Tray sides	2	$\frac{5}{8}$	$1 \frac{3}{8}$	$6 \frac{3}{4}$

Notes:

Stock is red oak except: (a) alder; (w) walnut; (bb) Baltic birch ply (wo) white oak
For a variation on this classic tote, See October/November 2004, Issue #32.



Illustrations by Mike DeRizzo