Your Miter Saw

Clever cabinet turns a job-site tool into a

SUPPORT FOR LONG PIECES



Each fence extends outward by 15 in. That's helpful when you want to set up the stop for extralong workpieces. A short shelf on each end supports those long boards (and cutoffs).

SMART STOP SYSTEM

The stand has a sliding stop system from Kreg Tool (www. kregtool.com). The tape measure makes it easy to set up an accurate cut. The stop also flips up to let you trim one end of a board and then cut it to final length without moving the stop.

SMALL FOOTPRINT

To make the stand compact, White designed folding side tables. When not in use, just pivot the support gussets out of the way to lower the hinged tables.



FULL MOBILITY

White added four casters to make the stand easy to roll around, a useful feature when the shop must give way to the family car. Available at Grizzly Industrial (www.grizzly.com; part No. H0693), the casters swivel and include a brake.

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Needs a Stand

full-featured woodworking machine

BY JOHN WHITE

These days, a miter saw in the workshop is about as common as a router. Woodworkers use the saw for everything from cutting up rough lumber to making perfect-fitting compoundmiter cuts for a cabinet crown molding. I designed this stand to take care of just about any demand your miter saw throws at you.

A good stand can make any miter saw sing a sweeter song. This one has five features that make it stand out from the rest, turning a portable carpentry tool into a safer and more accurate woodworking machine. One feature we don't point out at left is how easy this cabinet is to build, with just two sheets of ³/₄-in.-thick plywood and a box of drywall screws.

Start by making the base

The base supports the saw and holds the vacuum. It also serves as a platform for the tables and fences that are attached later.

I made the stand so the saw table would be at a height of $32^{1/2}$ in. That works for most people. But you can adjust the height to suit your needs.

Determine the base dimensions for your saw—The stand shown is designed to accept a Bosch 10-in. sliding compoundmiter saw, model 4410L. Depending on the size of your saw, the length and width of your base might be bigger or smaller.

For other saws, there's an easy way to determine the side-to-side (length) and front-to-back (depth) dimensions of the top of the base. With the saw on your workbench, swing the blade all the way to the left and mark the extreme left-hand location of the saw handle. Then, swing the saw all the way to the right and mark the extreme right-hand location of the handle. Measure the distance between the marks and add 2 in. This is the length of the top of the base.

To determine the depth of the base top, allow $9\frac{1}{2}$ in. from the front edge of the

AUTOMATIC DUST COLLECTION

The saw is attached to a dedicated shop vacuum. White put it inside the stand to minimize noise. A hardware-store-variety power strip with a 15-ft. cord, mounted to the inside of the base, holds a remote switch (www.rockler.com; part No. 20890) that turns the vacuum on and off with the saw.



The base is the foundation

SOFT EDGES ARE FRIENDLY EDGES





54 FINE WOODWORKING

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HOW TO MAKE SCREWS REALLY HOLD



Clearance hole first. Each screw requires a shank hole and a shallow countersink for the screw head.





Pilot hole next. Align the parts and drill pilot holes into the plywood edges below. This makes them much less likely to split.



No glue needed. Drywall screws provide plenty of holding power, so there's no need to fuss with glue.

top to the front face of the mitersaw fence. Then, at the back edge, add enough depth to ensure that all four of the miter saw's feet will end up on the surface.

Now you're ready to build. All of the base parts are joined with drywall screws. Drill an ¹¹/₆₄-in.-dia. shank hole and a ³/₃₂-in.-dia. pilot hole for each screw.

The back and front have a series of 2-in.-dia. holes for the vacuum hose and for airflow and power cords. The holes in the front panel also work as finger grips. I used a drill press and a Forstner bit to drill the holes, although a hole saw also can do the job.

Once the stand is assembled, mount the four casters. To avoid having a bolt run into the bottom edge of the front and back panels, I used only three bolts to mount each caster, not the normal four.

Make the two side tables

As with the base, the side tables are assembled with drywall screws. The support block in the center of each table is actually two pieces of stock face-glued together to make

a single 1¹/2-in.-thick piece. Cut the block to fit snugly between the front and back pieces of the tables. Add the stop, which positions the support gusset when it's under the table. Then, mount a support block to each table by driving screws through the table sides and into the ends of the blocks. For additional reinforcement, drive a couple of screws down through the top.

Now mount the hinges, made by National Manufacturing Co. (www.natman.com, part No. N128-512). I bought them at a local hardware store and used the same kind to mount the tables and the support gussets. Next, cut the support gussets to size. A lag screw in each gusset allows you to adjust the tables parallel with each other. Check that the lag screw hits the stop at about the front-to-back midpoint of the table.

To level the saw table with the side tables, install filler blocks on top of the

Add the side tables and fences

TABLES ARE SIMPLE

Assembly tip. A stop block clamped to the ends of the table makes it easier for White to establish the ½-in. inset for the front and back pieces.



base. Use solid stock so you can plane down the blocks until the miter-saw table is flush with the stand tables. Using filler blocks here gives you some room for height adjustment if you happen to replace your saw.

When bolting the saw in place, locate the holes so the miter-saw fence ends up $9\frac{1}{2}$ in. from, and parallel to, the front edge of the cabinet. Cut the bolt holes oversize so you can make adjustments to the saw location before locking it down.

The fences hold the stop blocks

The base of each fence has two grooves one long, one short—to accept the hanger bolts and knobs. These allow the fences to slide outward to support long boards. After assembling the fence parts, place a



fence on each table and mark the location of the hanger bolts. Drill 11/64-in.-dia. holes for the ¼-in. bolts. To better support the bolts, screw blocks under each one. When driving in the hanger bolts, use two nuts on each of them so you can drive them with a wrench. Add the washers and nuts and check the fences for a smooth sliding fit.

The Kreg track is next. Measure the fence, then use a hacksaw to cut the track to that length. Drill a few holes through the back of the track and use the supplied screws to mount it to the fence. Do the same on the other fence. Mount the measuring tape and the lift-up stop. Now you have the best chopsaw stand on the block.

John White, the former FWW shop manager, writes about woodworking in Rochester, Vt.



THE FENCES SLIDE

Cut the grooves. With a 1/2-in.-dia. straight bit in the router table and an outside fence acting like a featherboard, White makes the short endgroove cut first (left). To create the long stopped groove, the stock is slowly lowered into the bit from above, then fed forward or backward as needed to complete the groove.



57 TOOLS & SHOPS 2010

4¾ in.

31/2 in