Support Stands

When working with large or heavy stock, these shop helpers increase safety and accuracy

BY MARK SCHOFIELD

Lacking an outfeed table for my tablesaw, I carefully coached my wife where to stand and how to hold the wood being ripped for the large bookcase I was building. The cut was almost completed when my wife brought the two cut sections back together again, trapping the blade. Voice communication was impossible over the screaming blade and earmuffs, and both my hands were full, which ruled out hand signals. Desperate head movements finally got the message across, and the cut was completed without too much damage. I realized, however, that avoiding strain on my marriage as well as on the tablesaw depended on finding another method for supporting long boards.

The range of work-support stands is bewildering. Some stands fold away when not in use, height ranges vary, and prices run from under $30 to nearly $100. Surfaces that contact the wood include single or multiple rollers, medium or large ball bearings, and pivoting or stable skid tops. I bought a selection of stands, tested each one, and discovered that none are perfect, but all have virtues. If you choose to make your own, John White, *Fine Woodworking*'s shop manager, has built a stand that combines the best features of the commercial ones (see p. 61).

Support for tablesaw ripping and crosscutting

It often is impractical to have permanent extension and outfeed tables around a tablesaw. But cutting long pieces requires some means of safely supporting the stock. When ripping a long piece, it helps to have

Moving around. *Ball-bearing supports allow the workpiece to be moved in any direction, as when cutting curves on the bandsaw.*

Rolling crosscut. *Multiroller stands with their wide surfaces offer the best support when crosscutting on the tablesaw.*

Photos, except where noted: Michael Pekovich

HTC HRT-18 ROLLER STAND

Height range 26 in. to 40 in.

Rating Fair

Price $99.99

The HRT-18 is an industrial-strength stand with a 500-lb. capacity that felt solid enough to jump on. The tapered post and angled screw handle made height adjustment a breeze. It's too short for most bandsaws, but otherwise it's a great stand. Too bad the price is so high.

HTC HPR-18 ROLLER STAND

Height range 25¼ in. to 43¾ in.

Rating Poor

Price $29.99

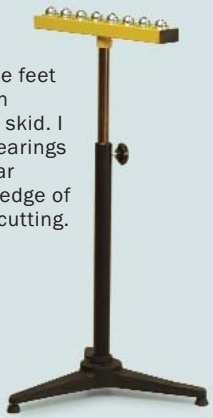
The best thing about this lightweight, 150-lb.-capacity stand is the totally nonslip rubber feet. The square post made height adjustment relatively easy, and the roller seemed robust. The feet are too close together to provide adequate side-to-side stability, especially with the stand raised.

LEE VALLEY ROLLER-BALL STAND

Height range 27 in. to 46 in.

Rating Poor

Price $34.95



A sturdy enough stand, but the round post made height adjustment tricky. The feet cannot be adjusted in height and tended to skid. I found that the ball bearings in the head are too far apart to support the edge of a board during crosscutting.

RIDGID FLIP-TOP STAND

Height range 27 in. to 44½ in.

Rating Good

Price $30

There is much to like about this stand. The wide stance of the nonskid feet made it secure, while height adjustment of the square post was easy because the top is so light. The stand is only 3 in. deep when folded. My only quibble is that to set the height accurately, the top must be locked in the horizontal position, then unlocked for use.

WHAT TO LOOK FOR IN A SUPPORT STAND

Before selecting a support stand, decide what machines you will use it with and how great a weight you expect it to bear. If you plan to use it mostly with the bandsaw, make sure the support has enough height and is stable when fully raised.

To test stands for stability, I slid an 8/4 board onto them off a flat surface. Stands that were unable to lift the board ½ in. and instead skidded across the floor or were pushed over got a poor rating. Success at ½ in. rated fair, and success at 1 in. rated good.

ROCKLER FLIP-TOP STAND

Height range 29 in. to 47½ in. as a roller stand; 30 in. to 48½ in. as a ball-bearing stand

Rating
Good as a roller stand; Fair as a ball-bearing stand

Price $69.99

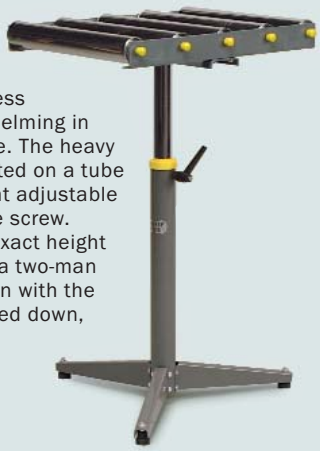
This massive stand can support 440 lb. Its legs fold together when not in use, but were prone to doing the same thing when in use. The tapered post has two screws for height adjustment. That seems like overkill, yet adjustments were easy.

SHOP FOX 5 ROLLER STAND

Height range 27½ in. to 44 in.

Rating Fair

Price
$59.95



This large stand was less than overwhelming in performance. The heavy top is mounted on a tube that is height adjustable with a single screw. Getting an exact height was almost a two-man job, and even with the screw cranked down, the top still pivoted.

SHOP FOX TILTING ROLLER STAND

Height range 27 in. to 43½ in.

Rating Poor

Price $39.95

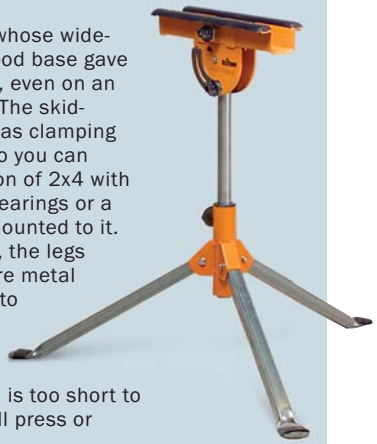
This stand is designed to support both flat and round objects such as pipes (rollers may be angled upward). When it was set for flat stock, I found it difficult to make sure the workpiece hit the roller and didn't fall in between. The height-adjustment screw felt flimsy. This is one stand to avoid.

TRITON MULTISTAND

Height range 25½ in. to 37½ in.

Rating Poor

Price $59.35



A nice stand whose wide-spreading tripod base gave great stability, even on an uneven floor. The skid-plated head has clamping jaws inside, so you can insert a section of 2x4 with either roller bearings or a roller stand mounted to it. Unfortunately, the legs come with bare metal feet, so I had to wrap antiskid material around them, and the stand is too short to use with a drill press or bandsaw.

Photos, this page: Mark Schofield

support both on the infeed and outfeed sides of the saw. To test height and placement of the two stands, make a dry run. The actual height doesn't have to be smack on. The supports should be placed so that the weight of the board is borne by the tablesaw and a support stand both before and after the cut.

If you use a roller support on the outfeed side when ripping, angle it 2° or 3° toward the fence to help keep the workpiece tight against the fence. Angling the stand has no beneficial effects on board travel when using stands with skid tops or ball bearings.

However, skid- and bearing-style stands are ideal for supporting stock when crosscutting because the stand may be turned 90° to use the long axis of the top. With their wide surfaces, multiroller stands work best during crosscutting. Be sure to set the height of a side support even to or slightly lower than the tablesaw to prevent the workpiece from binding on the blade.

When jointing long lumber, stands provide stability

Long, heavy boards are difficult to pass over a jointer without tipping. Infeed and outfeed supports should be at the same height as the corresponding beds of the jointer. If they are too high or too low, an uneven cut can result. The only exception would be if you are milling a long, thin board prone to sagging. In this case, if the outfeed support is far away, the sagging board may be too low to be picked up by the roller. Test the height and location with a dry run.

Support stands help reduce snipe when thickness planing

As benchtop planers come down in price and improve in quality, more woodworkers are planing rough-cut lumber to thickness. One problem is that the planers' small infeed and outfeed tables can't handle very long boards, and the result is snipe at the beginning and end of the board. Setting the supports even with (or 1/16 in. above) the planer bed will alleviate this problem.

Other uses around the workshop

After acquiring one or more support stands, you will wonder how you ever managed without them. For instance, it often is easier to crosscut a board on a miter or chopsaw than on a tablesaw. The key to doing this is to support the board safely on one or both ends. Be sure to have the supports even with the saw table, or you will bind the wood on the blade when making the cut.

Most bandsaws are equipped with tiny tables, so cutting even moderate-size wood requires external support. The challenge is to find a feed support that can match the height of the saw table and remain steady. When resawing a board, it is best not to use a bearing support because the edge of the board could drop down between the bearings. However, if you are working with the flat side of the board down, and the cut involves moving the workpiece a lot, then bearing rollers are the way to go. □

Mark Schofield is an associate editor.

Features at a glance

Expose the roller. *The Rockler stand comes with both a ball-bearing surface and a roller. Switching between the two requires readjusting the stand's height.*

Watch it on the Web

For video tips on using support stands, go to www.finewoodworking.com.

Made for uneven floors. *The top of the Triton stand can be moved through 90°. This is useful for those workshops with uneven or sloping floors.*

Height adjustment. *The feet on the Rockler combination stand can be rotated to raise or lower the leg by up to 3/8 in. for slightly uneven floors.*

Hit the top and flip it up. *As the board hits the Ridgid flip top, it pushes the top flat, then rides across the surface. A board can ride up at least an inch if the stand is set too high.*

Make your own stand

BY JOHN WHITE

After studying the roller stands tested, Mark Schofield and I agreed that it should be possible to create one that is quick and easy to build, economical, and combines the best features of various commercial stands. My design appears unorthodox; however, it is stable, fine-tuning the height is a breeze, and I can use a variety of support surfaces.

You will need 12 ft. of 2x6 Douglas fir. After the boards have been flattened and squared, the final working dimensions will be around 1⅜ in. thick and 5 in. wide.

The stand is assembled with simple butt joints held by drywall screws. For added strength, the front leg is set into a ⅜-in.-deep mortise in the crosspiece.

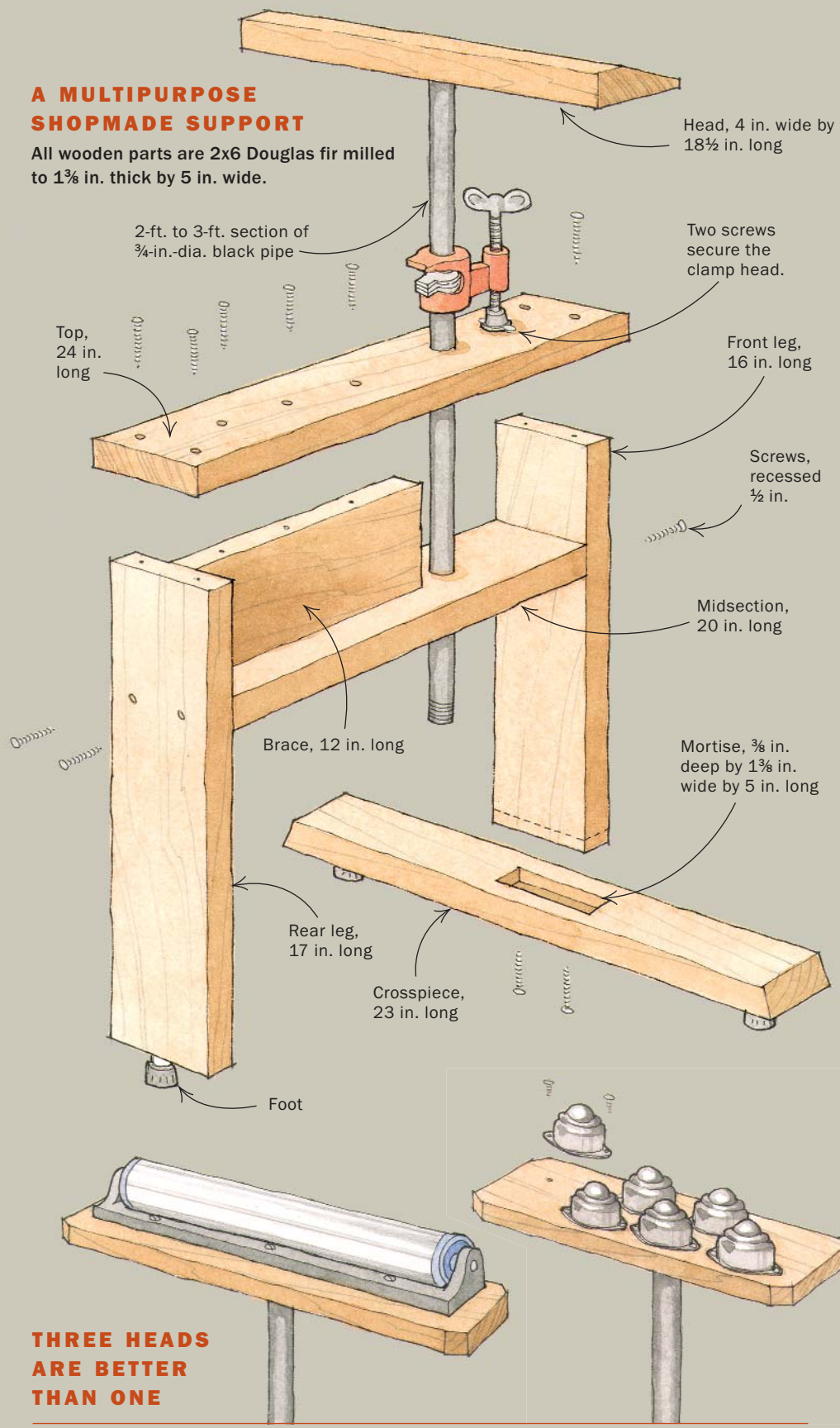
The stand uses a #56 Pony brand pipe clamp sold in hardware stores. A 2-ft. length of ¾-in.-dia. black pipe may be sufficient, but for tools with higher tables, such as bandsaws and drill presses, you may need a 3-ft. length of pipe. If the bed height of your tools ranges from 33 in. to 45 in., a single 30-in. section of pipe will cover all of your needs.

The base sits on three rubber crutch tips to prevent it from sliding. The tips are slipped over 1¼-in. O.D. plastic plumbing pipe caps, which are screwed to the bottom of the stand. □

John White is* Fine Woodworking*'s shop manager.

A MULTIPURPOSE SHOPMADE SUPPORT

All wooden parts are 2x6 Douglas fir milled to 1⅜ in. thick by 5 in. wide.



THREE HEADS ARE BETTER THAN ONE

The beauty of this shopmade stand is its interchangeable head design. All three heads illustrated here mount to the threaded pipe via pipe flanges screwed to the bottom of each head. Use your own head to determine which one is best for the task at hand.

Photo, this page: Mark Schofield; drawings: Jim Richey