

# How to Buy a Miter Saw

Get one that fits your needs as precisely as the cuts you'll make with it.



The Bosch Glide saw has the crosscut capacity of a typical slider but requires a lot less space behind it.

**F**or quick, clean, spot-on crosscuts in everything from picture-frame stock to crown moldings, deck boards, and building rafters, nothing tops a miter saw. And though there's no mystery about its handiness, choosing the miter saw best suited to your needs can be confusing, given the many

options. To clear things up, let's take a close look at the different types of miter saws, as well as the essential features that will make you a happy woodworker.

## Decide to let it slide—or not

Miter saws with motor/blade assemblies that slide forward and back, as well as

arc up and down, known as "sliders," have grown in popularity over the past decade for one reason: increased cutting capacity. For example, a 12" sliding miter saw (12" refers to the diameter of its blade) will typically crosscut a 12"-wide  $\frac{3}{4}$ " board or a 2x12, whereas a 12" nonsliding miter saw will cut  $\frac{3}{4}$ "-thick

## SLIDERS EAT UP WOOD—AND SPACE



You'll need up to a couple feet of extra room behind a sliding miter saw to accommodate its sliding mechanism and dust bag. Consider that if you plan to place the saw against a wall.

stock up to only about 8" wide or a 2×8. Similarly, a 10" slider will crosscut a 12" board or 2×12, whereas a 10" nonslider's crosscut capacity maxes out at about 6" on a ¾" board or a 2×6.

Consider those capacities when thinking about the widest stock you'll ever crosscut. If you plan to cut wide stair treads, shelves, or baseboards, there's likely a sliding miter saw in your future.

Of course, sliders have a few downsides, so don't spend the extra money (often twice the cost of comparable nonsliders) unless you really need that extra capacity. Sliders weigh 25–50 percent more than nonsliders, and prove considerably more difficult to lug around. And their extra moving parts create more wear points, which can go out of adjustment over time.

Also, keep in mind that should you decide to mount a slider to a benchtop that backs to a wall, the saw will require at least an extra foot of bench depth compared to a nonslider. (See photo *above*.) Outfitted with a dust bag, a 12" slider can consume nearly 4' of benchtop depth, with a full 28" of space between the wall and saw fence. That said, one unique slider—the Bosch Glide, available in 10" and 12" versions—requires far less space in back because its motor/blade assembly moves forward and back on a hinge-like mechanism, as shown *left*, rather than on rods.

### Consider cutting angles

Nearly every miter saw—sliding or not—on today's market is a compound saw, meaning its blade will angle to the left

or right while simultaneously beveling (tilting from vertical) in one or two directions. Single-bevel compound saws tilt in only one direction (shown *bottom left*), but dual-bevel saws tilt left *and* right (shown *bottom right*). That ability to tilt in both directions increases your options for quickly positioning large workpieces without having to flip the material or reset the saw's angle. You can make any cut you need with a single-bevel saw, but doing so might require a little more time or effort when working with tricky trim, such as crown moldings, or wide roof rafters with complex end cuts.

There's another benefit to dual-bevel saws that few buyers consider: The blade can plunge deeper into cuts. That's because the motor—mounted above and to the back of the saw's blade arbor—doesn't interfere with cuts in either bevel direction. For example, a DeWalt 12" dual-bevel saw will enable you to cut a 45° miter in a 4×6, or crosscut a 10"-wide baseboard lying flat. With DeWalt's 12" single-bevel saw, those capacities go down to a 4×4 for the same miter cut, and an 8" board when crosscutting.

And before you plunk down your money for a saw, check how far it miteres both left and right. Better saws miter up to 52° left and 60° right. Those extra degrees prove mighty handy for complex framing cuts, or when wrapping trim around out-of-square walls. The extra range may save you from having to shim workpieces about to be cut, a practice that can be unsafe and lead to poor-quality results.

## DUAL-BEVEL DOUBLES YOUR PLEASURE



Most miter saws, like the one above, have a motor/blade head that tilts in one direction to provide compound-cutting action with the table/head rotated at an angle. Dual-bevel saws, like the one at right, tilt both left and right, making it easier to cut large and bulky workpieces with less repositioning.

## More miter-important points

► **Blade size and quality.** Most miter saws accommodate 10" or 12" blades, though a few sliders are designed for 7½" or 8½" blades. Here, too, your choice comes down to cut capacity. Our advice: Make a list of the largest workpieces you'll cut, and how you would orient them on the saw (horizontally, vertically, or at a spring angle). Then, go to the websites of the major miter saw manufacturers, where you will find listed cutting capacities for their machines. Buy a saw that meets or surpasses your needs.

Today's miter saws come with blades in a wide quality range. Some better-quality factory-supplied blades will make clean cuts, while others suffice for rough carpentry tasks only. Generally speaking, high-end saws come with better blades—something to keep in mind when weighing the value of a lower-price machine. If you get the saw home and discover you have to buy a \$100 blade to get sufficient-quality cuts, that saw may not be the bargain you imagined. Also, know that blades designed for sliders have teeth with a negative hook angle (see the illustrations at *right*) to reduce the blade's aggressiveness. Nonsliders work best with positive-hook-angle teeth.

► **Fence features.** If you plan to cut wide stock on edge, or crown molding at a spring (installed) angle to the fence, make sure the saw of your dreams has a fence tall enough to support the workpiece. (See middle photo on *next page*) Also, look for a fence that locks square to the table. And, choose a fence that slides inward to support crosscuts, and adjusts out of the way for beveled and mitered cuts.

### ► **Readable, easy-to-adjust**

Force from positive-hook blade lifts workpiece at fence.

Force from negative-hook blade pushes workpiece against fence.

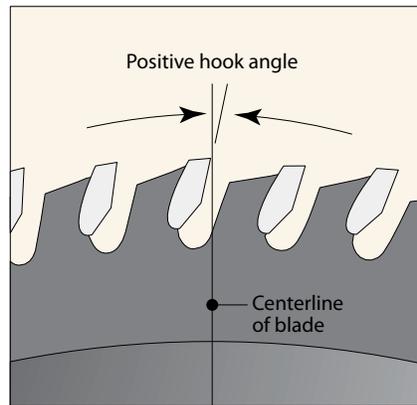
► **scales.** You'll rely heavily on a miter saw's scales, especially the one up front that indicates miter angle. Check its readability; if you need to squint to line up its angle marking with the hairline cursor, move on to another machine. That scale may have to be calibrated for accuracy—a procedure you might need to do repeatedly if the saw gets knocked around. The best miter scales slide back and forth for quick adjustments as shown *next page, top*. Some saws require you to angle the fence to the blade, or

adjust the saw head to a fixed fence. Both procedures require extra time and effort.

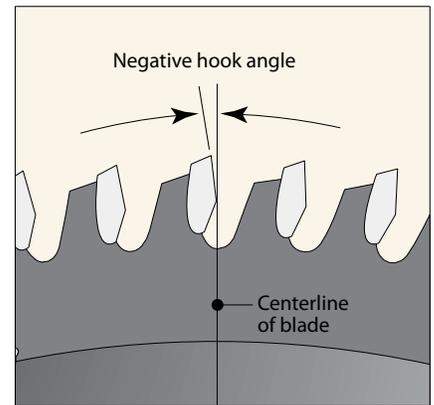
► **Options that help make the cut.** Miter saws require few accessories, but the ones you use frequently can make a big difference in the effectiveness and enjoyment you get from the machine. So choose a saw with a hold-down that gets out of your way with ease when necessary and applies ample force.

Good hold-downs don't just improve your margin of safety; they also enhance

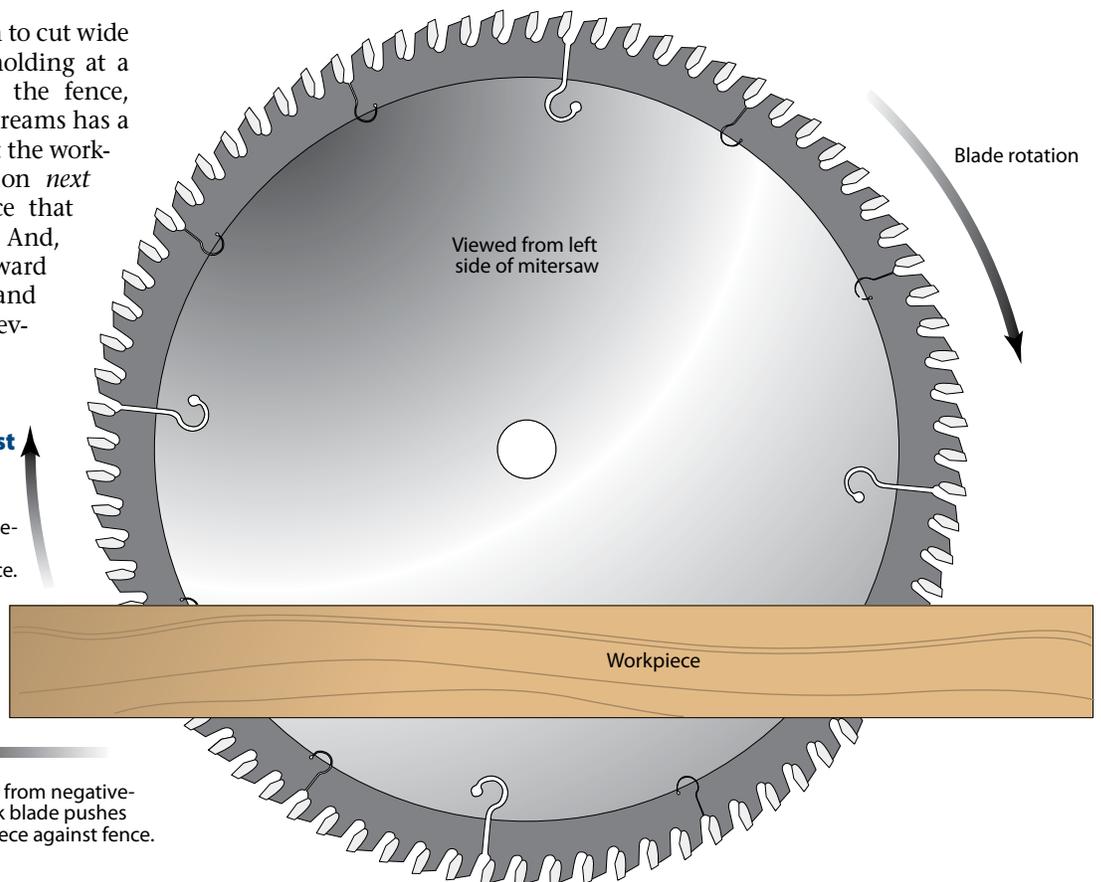
### GET A MITERSAW BLADE WITH THE CORRECT HOOK ANGLE



BEST FOR NONSLIDERS



BEST FOR SLIDERS



cut quality by holding workpieces much more solidly than by hand.

If you plan to cut crown-molding trim, the easiest way—in our opinion—is still the good, old-fashioned way: Prop the molding at a spring angle between the miter saw table and fence. Crown-molding stops help position the molding at the correct angle as shown at *right, middle photo*.

And no discussion of options would be complete without a mention of laser cutline indicators. They come standard on some machines and can be purchased as accessories for others. Put bluntly, we don't like them. Though lasers might be helpful in making fast rough-carpentry cuts, they just aren't accurate enough for fine woodworking or finish carpentry. For best results simply line up the blade with your cutline.

► **Plan for portability.** With added cutting capacity comes increased weight and bulk, so avoid the "bigger is better" mind-set unless you plan to mount the miter saw to a worksurface and leave it there. If possible, go to a store and pick up the saw you plan to buy. Imagine yourself wrestling it up stairs, through doorways, or in and out of a truck.

No matter the size of the saw, if you have a small shop or do your work on the go, it pays to invest in a fold-up mobile stand. Most unfold in no time and with little effort to give you a solid platform for making cuts at a comfortable working height, complete with work-support extensions for long stock. For the ultimate in convenience and space savings, look for a saw that stands up in its folded position and has wheels like the one at *right*.

► **Price matters.** You've probably seen the ads for miter saws with extremely low price tags, such as sliders under \$100. Tempting as these "bargains" may be, we recommend you resist the urge to save now—you'll surely pay later. Buy a low-dough saw and you'll likely wind up with a rough-cutting machine that doesn't stay in adjustment, bogs down in heavy cuts, and wears out prematurely. On the other hand, a professional-duty or high-end consumer saw will serve you faithfully for decades of occasional use. Top brands include Bosch, DeWalt, Hitachi, Makita, Milwaukee, and Ridgid. 🌲

Produced by **Bill Krier** with **Bob Hunter**  
Illustrations: **Roxanne LeMoine**

### LOOK FOR EASY-ADJUST SCALES



For the ultimate in convenience and spot-on accuracy, seek a saw—like this DeWalt—with a miter scale that adjusts by simply loosening a few screws with an onboard driver.

### A CROWNING ACHIEVEMENT IN STOPS



To quickly and reliably position crown molding at the correct spring (installed) angle, secure crown-molding stops like this one to the saw's hold-down attachment holes.

### BETTER STANDS MAKE YOUR SAW MOBILE AND STOWABLE



If you do remodeling or other work outside your shop, or are space challenged, get a mobile miter saw stand that folds up vertically and stays upright on its own for storing against a wall.