Testing 12-in. Sliding Compound-Miter Saws

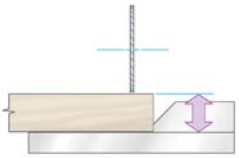
They're big and expensive, but versatile enough for framing, trim, siding, and cabinetry work

BY KIT CAMP

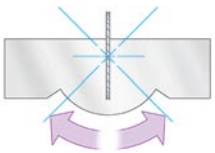
Twelve-inch sliding compound-miter saws are the go-to tool for carpenters who want it all in one package. These saws have the precision and accuracy to cut miles of trim one day, and the power to tackle a stack of framing lumber the next. This versatility makes them the standard for many job sites and home shops. But 12-in. sliders are bulkier, heavier, and more expensive than most job-site tools, which makes a side-by-side comparison especially important when choosing between models.

I gathered the newest top-of-the-line models from major manufacturers (DeWalt, Bosch, Makita, Hitachi, Ridgid, and Craftsman) and ran them through their paces. Over the course of my testing, I cut a large variety of common construction materials, from splintery red-oak crown molding and melamine-covered shelf stock to Douglas-fir 2x10s and wet pressure-treated posts.

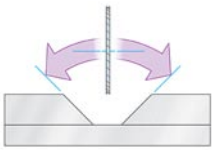
I examined fences, tried bevel and angle adjustments, and carried each tool to compare portability. I also assessed handles from right and left perspectives and checked out manuals for clear operating instructions. To keep testing fair, I tried each saw with both its stock blade and a full-kerf 80-tooth blade from CMT (www.cmtusa.com).



Vertical capacity
Distance between cutting table and underside of blade.



Miter range
Cutting angles left and right of 0° based on table swing.



Bevel range
Degree of blade tilt to left and right of vertical.

Despite myriad differences, the saws share some features and capabilities. Each model costs between $500 and $600, and weighs within 10 lb. of its competitors. Each saw can crosscut a 2x12 at 90° and cut a 2x10 with both the miter and bevel settings at 45°. Also, all but the DeWalt feature a laser. (DeWalt offers a laser as an extra at $70.)

Each model was evaluated based on its features, its weight, its power, its ergonomics, and its portability. No saw was better by leaps and bounds than its rivals, but none were equal performers either. Each model has its own method of miter and bevel adjustments, its own take on blade changes, its own approach to handle shape and blade guards, and its own strengths and shortcomings.

Choosing the best overall was a tough call, but in the end, the Makita edged out the rest of the competition. It was followed closely by the Bosch, the Ridgid (which is the best value), and the DeWalt. In real-life terms, you cannot go wrong with any one of these four compound-miter saws, but even the best of this group has some shortcomings.

Kit Camp is a finish carpenter in San Diego, Calif. Photos by Justin Fink, except where noted.

The **adjustable laser** is a step up from most saws' arbor-mounted versions. Located just above the blade guard, it turns on with a switch. The line can be moved to either side of the blade by turning a small knob.

The **main handle** works easily with either hand. But you can't thumb the guard up and work the trigger at the same time.

The **slide mechanism**, which can be locked and unlocked from the front of the saw, is exceptionally smooth with little side-to-side play.

Bevel and miter controls are easy to operate, though I'd like to see a little less wiggle room in the detents, especially on the bevel scale.

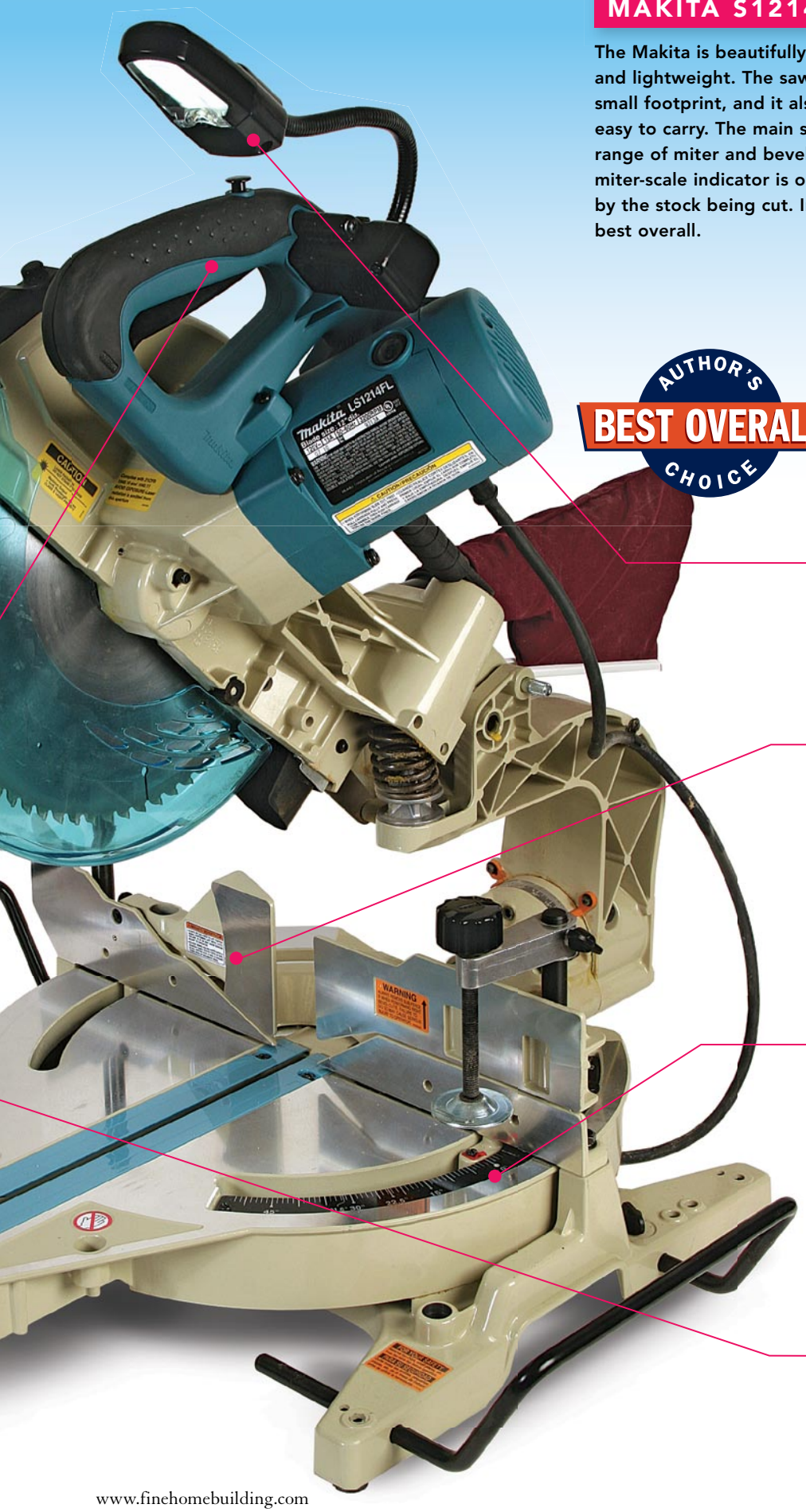
Saw photos: Krysta S. Doerfler. Drawings: Dan Thornton.

MAKITA S1214FL www.makita.com

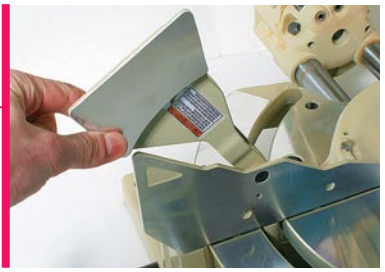
The Makita is beautifully engineered in every way, and it is relatively small and lightweight. The saw has the ideal combination of a large table and a small footprint, and it also has plenty of handholds to make it comparatively easy to carry. The main strike against this saw is that it has a more-limited range of miter and bevel angles than its competitors. Also, because the miter-scale indicator is on the surface of the cutting table, it's often covered by the stock being cut. In the end, the Makita narrowly beat the Bosch for best overall.

Street price – **$580**
Weight – **61 lb.**
Noise rating – **111 db.**
Vertical capacity – **5 in.**
Miter range – **53° left, 47° right**
Bevel range – **45° left and right**
Laser – **Under the blade guard**

AUTHOR'S BEST OVERALL CHOICE



An **LED lamp** isn't something that would make me buy a saw, but it is a nice feature. Worth noting, though, is the fact that turning on the lamp will activate a trigger-switched shop vacuum.



The **flip fence** to the left of the blade locks down securely, but still pivots easily when needed.

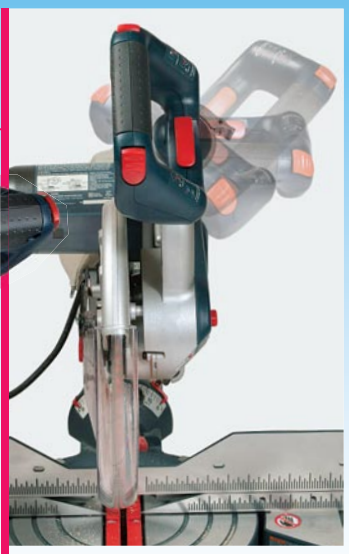
The **miter-scale indicator** is on the surface of the cutting table, where it's easily covered by the stock being cut.

An **onboard wrench** is the only tool necessary to make almost all the adjustments for this saw. The blade is not as easy to change as on many of the other models.

BOSCH 5412L www.boschtools.com

The Bosch is packed with innovative features, but the standout is excellent up-front controls for both bevels and miters. It was also the quietest saw I tested. Unfortunately, the model I tried out had some problems with accuracy. With the rails fully extended, I could push the head of the saw more than a full blade width either way from center. This is a flaw that can be overcome with practice and proper cutting technique, but I was disappointed. Also, the saw's miter setting would consistently creep to the right as the locking knob was tightened. The drifting can be overcome by applying quite a bit of pressure to the left while tightening the knob, but this shouldn't be necessary. It also makes accurate cuts more difficult. Hoping that these two flaws affected only the test model, we purchased a second saw to confirm the results. The new saw had little play in the head, but the miter-lock creep problem persisted. It's a shame because this saw is an otherwise beautifully engineered and well-thought-out tool that was in close contention for best overall.

Street price – **$590**
Weight – **65.5 lb.**
Noise rating – **99 db.**
Vertical capacity – **Not quite 5½ in.**
Miter range – **52° left, 60° right**
Bevel range – **47° left and right**
Laser – **Arbor-mounted**



The **multiposition handle** unlocks and pivots to four different positions to match your preference for vertical, horizontal, or diagonal grips.

The **sliding action** is smooth, the saw has plenty of power, and the stock 60-tooth blade cuts well.

The **up-front bevel and miter controls** are comfortable to operate, and the tables are smooth enough to be repositioned with one hand still on the main handle. When you are cutting trim, this can equate to hundreds of fewer movements in a workday, saving time and energy.

The quick-release **hold-down clamp** is powerful and easy to use. In fact, it is the only one I tested that I would actually use.

The slide-out **extension wings** on each end of the cutting table operate smoothly and are in perfect alignment with the table. They have no true equivalent in any other saw I tested.

RIDGID MS1290LZA www.ridgid.com

If I needed a saw to set up in my shop, I would buy the Ridgid in a heartbeat. Its fit and finish are second to none, and it's a solid performer in nearly every area. For the price, the Ridgid is clearly the best value. But because I have to pack up my tools every day and load them into a tightly organized compact pickup, I have to rule it out as a first choice because of its bulky footprint and somewhat unreliable lock-down function.

Street price – **$500**
Weight – **68 lb.**
Noise rating – **104 db.**
Vertical capacity – **5½ in.**
Miter range – **60° left, 60° right**
Bevel range – **50° left and right**
Laser – **Arbor-mounted**

AUTHOR'S BEST VALUE CHOICE

The Ridgid's **depth-setting system** doubles as a lock to hold down the head of the saw for transport. In use, I found the depth setting less functional than the more-typical flip type on other saws. More pressing is the fact that the head doesn't lock down securely. The spring-backed metal plate tends to pop out of the lock fairly easily, and that combined with the weight and large footprint of this substantial saw makes carrying it a nerve-wracking experience.

The stock blade cuts well, and the **slides** are smooth to operate and have little lateral flex (1⁄16 in.) when fully extended.

The **bevel lock** is operated with a large, easily accessible lever on the rear left of the saw. A spring-loaded pin locks the detents.

The **sliding fences** are tall, move freely, and have a built-in erasable writing surface handy for marking repetitive cuts.

One thing you notice right away about the Ridgid saw is its **impeccable machining**. All the worksurfaces are smooth to the touch, with none of the common circular flattening marks found on machined metal. The surfaces are easy to mark on and should be a breeze to keep clean.

The **miter table** operates effortlessly, and although I found the thumbwheel-style miter lock/detent-override control awkward at first, it didn't bother me after I used it a few times.

BEST-IN-CLASS FEATURES

Easiest to carry
DeWalt

Best stock blade
Makita

Smoothest slide action
Makita

Best bevel and miter controls
Bosch

Best fence
Ridgid

Greatest vertical cut
DeWalt (6½ in.)

Best laser
Makita

Easiest blade change
Hitachi

Best bonus feature
Hitachi (digital readout)

Best hold-down clamp
Bosch

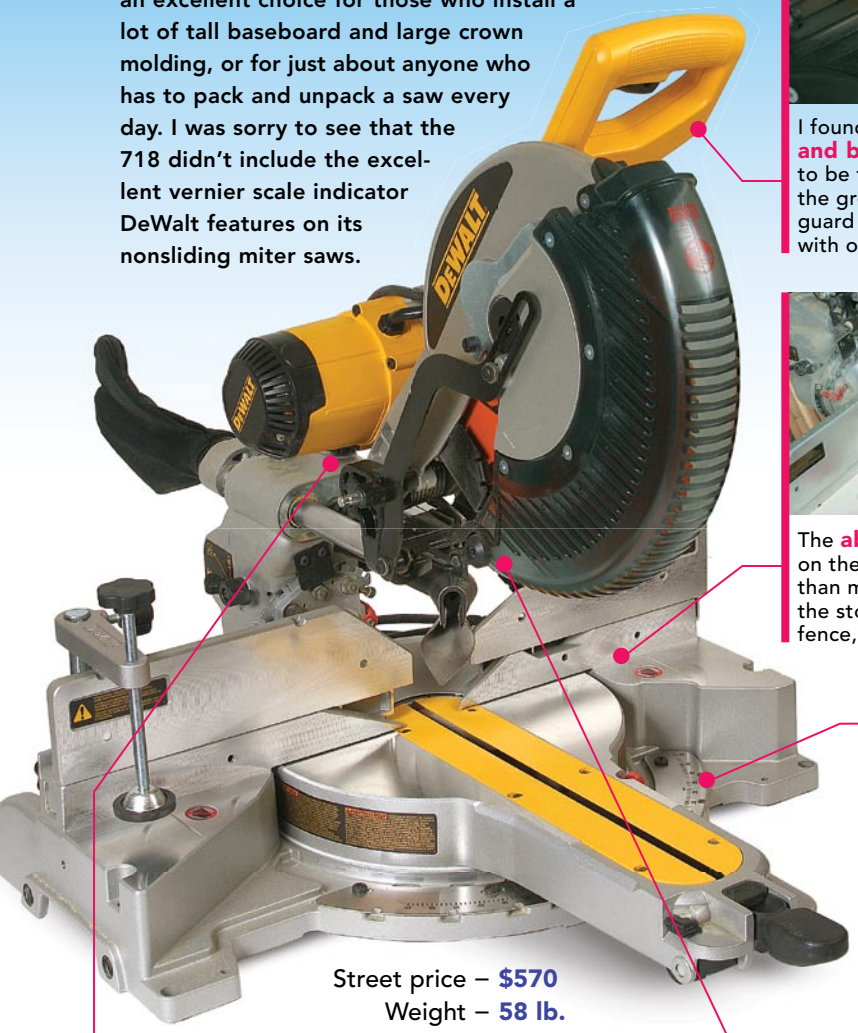
Biggest table
Ridgid

Best instruction manual
Craftsman

Quietest
Bosch

DeWALT DW718 www.dewalt.com

The DeWalt saw is the lightest, most compact of the bunch, and I found it the easiest to carry. This saw is an excellent choice for those who install a lot of tall baseboard and large crown molding, or for just about anyone who has to pack and unpack a saw every day. I was sorry to see that the 718 didn't include the excellent vernier scale indicator DeWalt features on its nonsliding miter saws.



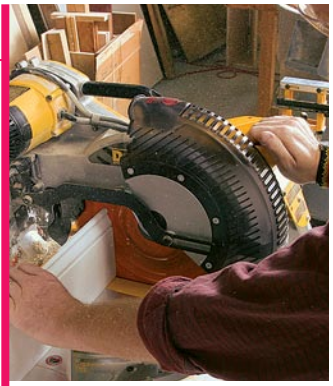
I found the DeWalt's **trigger and blade-guard** combination to be the most user-friendly in the group. It's easy to roll the guard up and trigger the saw with one hand.

The **ability to cut dadoes** on the DeWalt is more limited than most. You have to shim the stock out far from the fence, limiting capacity.

The **miter scale** is excellent, and the saw locks in to its detents with authority. The saw also has an easily operable override that allows the user to lock in miter settings slightly off the detents.

Street price – **$570**
Weight – **58 lb.**
Noise rating – **107 db.**
Vertical capacity – **6½ in.**
Miter range – **60° left, 51° right**
Bevel range – **50° left and right**
Laser – **Aftermarket accessory (about $70)**

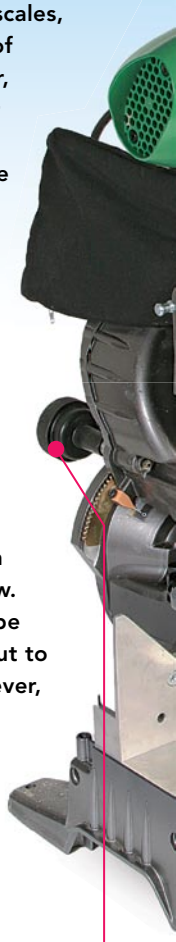
The **slide-lock knob** is smaller and more difficult to operate than on most saws.



The **large cutout** in the back of the blade housing gives this saw a huge 6½-in. vertical cutting capacity.

HITACHI C12LSH

Hitachi's saw certainly stands out from the crowd. It is huge, and I might even call it garish. Every passerby during our testing wanted to know about the saw, and it has some distinctive features to go along with its futuristic look. The most notable is the digital readout for the miter and bevel scales, which might point to the future of these tools. There were, however, some disappointing features. For instance, the stock blade cuts well, but there is more play in the slides than I would like (about 3/32 in.). Also, this was the only saw that arrived with fences out of square. Normally, that's not a big problem to fix. But the fences on this saw are separate castings on each side, and there is no mention of how to adjust them in the manual. Finally, the Hitachi saw touted an ability to lock the slide rails and have only the head of the saw move in similar fashion to a radial-arm saw. In theory, this allows the saw to be placed closer to a wall and still cut to its full capacity. In practice, however, the casting is so large that this provides little advantage. The DeWalt takes up far less space, even when set away from a wall.

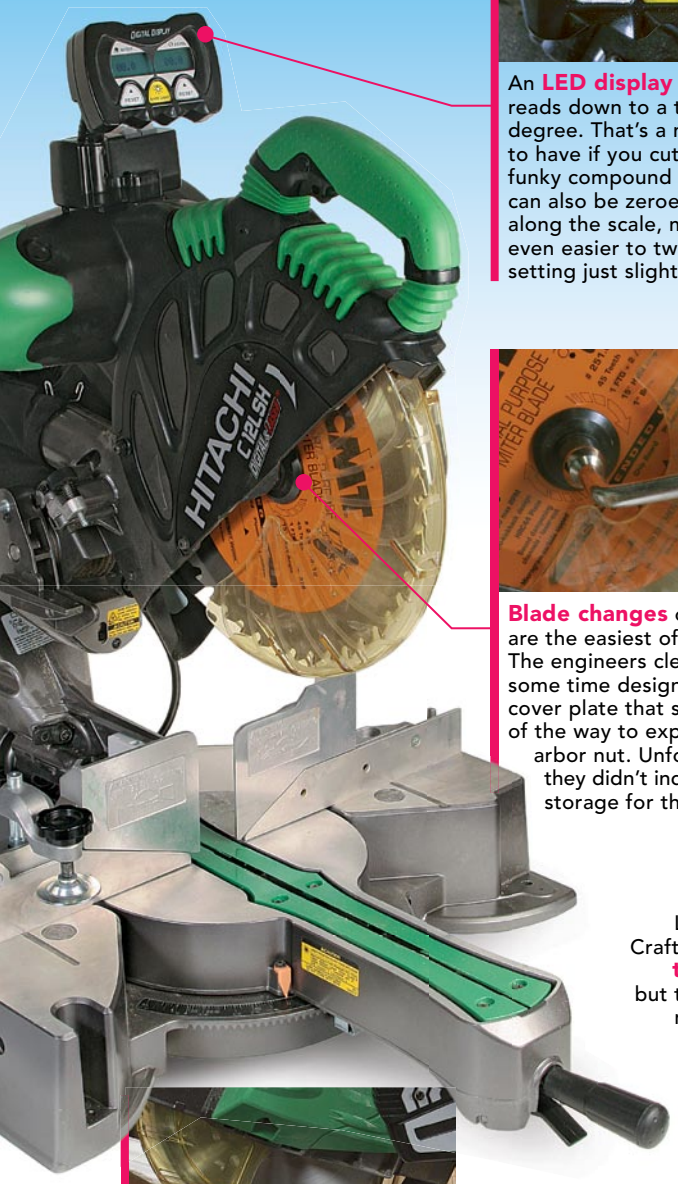


Street price – **$600**
Weight – **69.5 lb.**
Noise rating – **112 db.**
Vertical capacity – **4¾ in.**
Miter range – **45° left, 57° right**
Bevel range – **45° left and right**
Laser – **Yes; adjustable**

Bevel controls are on the rear of the body, but they are harder to reach on this saw due to the large casting that supports the slides. On the plus side, there is a knurled knob for microadjusting both bevel and miter settings.

FineHomebuilding.com

Look for the Magazine Extras section on our home page to see video demonstrations of each saw with author Kit Camp.



An **LED display** accurately reads down to a tenth of a degree. That's a nice feature to have if you cut a lot of funky compound angles. It can also be zeroed anywhere along the scale, making it even easier to tweak a "base" setting just slightly.

Blade changes on the Hitachi are the easiest of the bunch. The engineers clearly spent some time designing the large cover plate that swings out of the way to expose a beefy arbor nut. Unfortunately, they didn't include onboard storage for the wrench.

A **small table** and a large head assembly give the saw a top-heavy stance. Because 7-in. crown molding barely registers on the table, you'll probably need to mount an auxiliary table on good outboard supports for some applications.

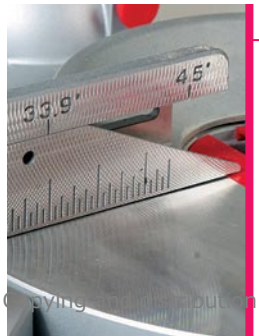
CRAFTSMAN 21206 www.craftsman.com

The Craftsman saw shares some features with the Bosch. It is relatively quiet and powerful, and it has a large, easily readable miter scale. It also has the same type of adjustable D-shaped handle as the Bosch, but it pivots to three positions rather than four (no vertical position). The quality of the stock blade is good, and the side-to-side play in the head is about average. The guard cannot be thumbed out of the way while your hand is on the trigger, and I found the sliding action to be a bit jerky. Still, in the end, this is a perfectly capable saw. The Craftsman doesn't do anything exceptionally well, however, and it is priced in line with the others, giving it no real advantage.

Street price – **$500**
Weight – **65.5 lb.**
Noise rating – **102 db.**
Vertical capacity – **5½ in.**
Miter range – **47° left, 60° right**
Bevel range – **45° left and right**
Laser – **Arbor-mounted**

Like the Bosch, the Craftsman has slide-out **table extensions**, but they don't function nearly as smoothly.

Changing blades on this saw is a standard affair, but the spring-metal clip used for **wrench storage** is weak and just about guarantees a lost wrench.



The table of this saw has a smoothly milled surface, but the fences have **deep machine marks** that make drawing accurate pencil marks nearly impossible.

Similar to the Bosch, the Craftsman has an **up-front bevel-setting release.** Unfortunately, after releasing the lock, you must reach to the back of the saw and hold out a spring-loaded pin, which makes the up-front release seem much less convenient.