

12-in. Compound-Miter Saws

With a host of innovative features,
one saw rises to the top

BY PAUL JOHNSON

Tool
Test



For some projects, I really appreciate my sliding miter saw's huge crosscut capacity. For others, especially installing typical crown, casing, and baseboard, as well as sizing stock for built-ins, I prefer a nonsliding miter saw. Nonsliders are less expensive and easier to carry, and their simple plunge mechanism makes them better at handling job-site bumps without going out of alignment.

I had been in the market for a new 12-in. miter saw for a few months, so I tested seven models from major manufacturers. I decided on 12-in. saws instead of 10-in. mod-

els because I want greater depth of cut for cutting crown molding in a "nested" position and baseboard standing up against the fence. A 12-in. nonslider is also my go-to saw for cutting deck boards, wall studs, and stair parts.

How we tested

To level the playing field, I first replaced all of the stock blades with Freud Diablo 80-tooth blades. I then used the saws for four weeks to cut lumber for an outdoor porch entry, ipé decking for a small deck, and trim for an extensive kitchen remodel. After using them on the job, I brought the saws back to my

shop and cut wide boards, different pieces of crown molding, and larger timbers to check their capacity. I judged their power under heavy load by cutting 4x4 ipé posts, and I abused them by letting their heads spring up with full force after cuts and by pulling on the heads to see how much flex I could get.

While all the saws can get the job done, Bosch's standout features help it rise above the others. It has an expanding table for supporting long stock, an easy-to-use bevel lock, and effective dust collection—and it costs the same or less than the others.

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A CLEAR-CUT WINNER

BOSCH CM12

PRICE \$330

WEIGHT 43 lb.

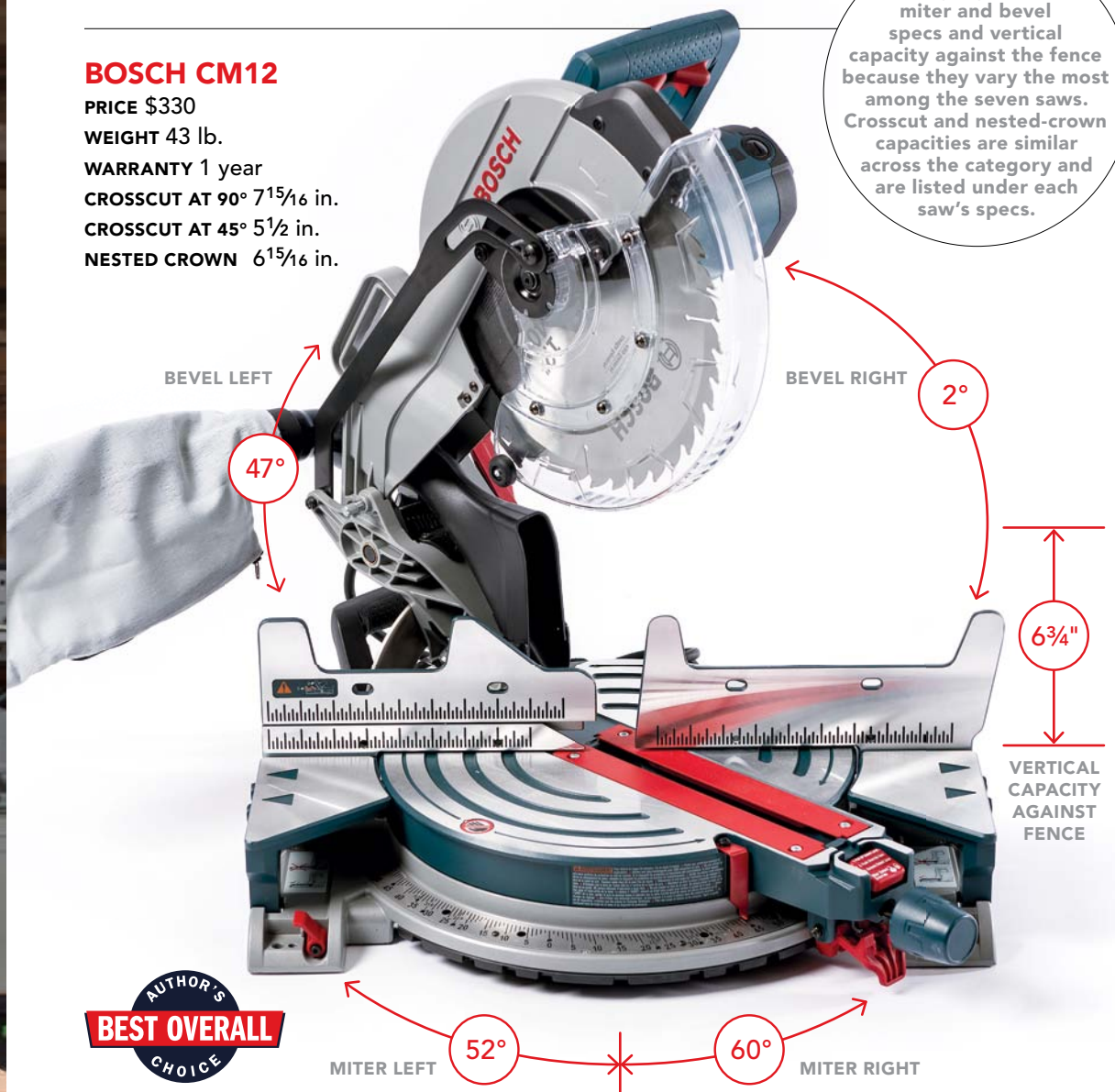
WARRANTY 1 year

CROSSCUT AT 90° 7¹⁵/₁₆ in.

CROSSCUT AT 45° 5¹/₂ in.

NESTED CROWN 6¹⁵/₁₆ in.

We've highlighted miter and bevel specs and vertical capacity against the fence because they vary the most among the seven saws. Crosscut and nested-crown capacities are similar across the category and are listed under each saw's specs.



FEATURES The Bosch made perfect cuts out of the box without any adjustments. Instead of auxiliary extension wings, two portions of the saw table extend out and act as supports for longer stock. I like that when the supports are retracted, the saw's footprint is smaller, which makes carrying the saw and storing it easier than with some of the other models.

The Bosch has a rear handle, so you can carry it like a briefcase, which prevents scraped knuckles when you're moving the saw through narrow doorways, and it frees your opposite hand for carrying other stuff.

Unlike any of the other saws, the Bosch's bevel lock is on the side of the saw arm, allowing you to change the bevel setting without reaching behind the tool. The detent override is also placed thoughtfully above the miter adjustment. Dust collection on the Bosch is noticeably better than on all the other saws. This saw collects about 75% of the sawdust without being connected to a vacuum and removes even more with a vac hooked up.

FLAWS This saw is louder than other models, and the design of the blade guard makes it hard to see a pencil mark on your stock.

BOTTOM LINE While I wish the saw were dual-bevel and quieter, these minor annoyances were overcome by its dust collection, perfectly placed controls, and easy blade changes.

FEATURES THAT MATTER

With the cutting capacities so evenly matched, choosing the best saw in this group boiled down to identifying the model with the best features. Compared to the Bosch, all the other miter saws are playing catch-up.



Miter detents stop the saw table at common settings, but it's sometimes necessary to turn off the feature for miters that land close to but not quite at a detent position. The Bosch's detent override is right above the miter lock, where it's easy to use. On other saws, the override is harder to use. On the Craftsman (above), for example, the override scrapes your knuckles when you rotate the saw table.



The Bosch's work supports are perfectly aligned with the saw table and fully retract for transporting the saw. A large flat surface on top of the supports allows you to clamp a stop block for repeat cuts. The Makita's supports (below) are options, and they lack the flat surface for a stop. The other saws don't have supports at all.





DUST COLLECTION



Built with a plastic duct that helps direct dust into the on-board bag, the Bosch saw is 75% effective at dust collection and gets even better when a vacuum is attached. The other saws, such as the Skil (left), have poor dust collection in comparison, even with an attached vacuum.



BEVEL LOCK

Mounted on the saw arm and facing the user, the Bosch's bevel lock can be reached without a stretch. The bevel locks on the other saws, such as the DeWalt (above), are at the very back. To change the setting, you need to reach around behind the saw arm, which is less convenient.

SIX GOOD SAWS, BUT A STEP BEHIND



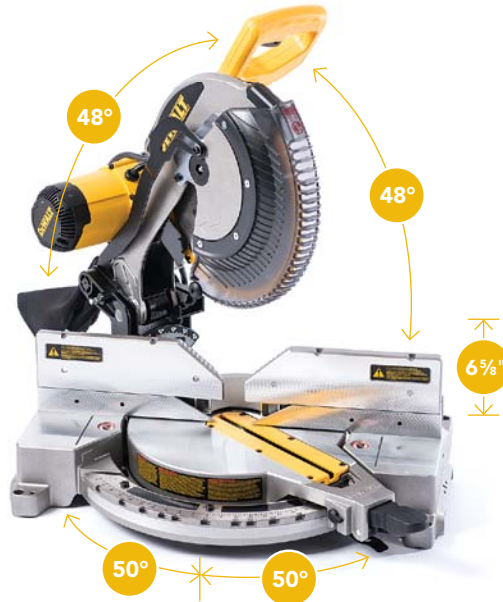
CRAFTSMAN 937564

PRICE \$300
WEIGHT 41 lb.
WARRANTY 1 year
CROSSCUT AT 90° 8¹/₁₆ in.
CROSSCUT AT 45° 5⁵/₈ in.
NESTED CROWN 6¹/₄ in.

FEATURES The Craftsman bevels in both directions, and the controls are intuitive. It is also surprisingly quiet.

FLAWS Every time I used this saw, I hurt my hand or fingers: The handholds are so short that I pinched my fingers when I set the saw down. The miter lock is springy and hit my thumb upon release. The detent override lever is so low that I scraped my knuckles when I used it. Ergonomics aside, the most egregious problem was a poorly machined arbor that had the blade spinning almost 1/16 in. out of true. The poor machining also showed up as a grinding noise when adjusting the miter angle. Finally, the saw had the smallest vertical capacity of any saw tested.

BOTTOM LINE This saw needs better machining to be a serious contender.



DeWALT DW716

PRICE \$350
WEIGHT 44 lb.
WARRANTY 3 years
CROSSCUT AT 90° 8¹/₁₆ in.
CROSSCUT AT 45° 5¹¹/₁₆ in.
NESTED CROWN 6⁵/₈ in.

FEATURES With the exception of the bevel stop, the DeWalt's settings were tuned perfectly out of the box. The normal cut capacity is similar to that of the others, but when the auxiliary fences are removed and a 2x10 is placed on the saw table, you can use the "back fence" for extrawide cutting (a 2x10 at 90° and a 2x8 at 45°). This saw can handle the tallest baseboard (6 1/2 in.) as well. The saw arm and the miter table have smooth actions, and the wide perforations in the blade guard make it easy to see a pencil line on the stock you're cutting.

FLAWS The DeWalt is slow when cutting heavy, dense material, and dust collection is only fair.

BOTTOM LINE This saw is solid and quiet and has the best cutting capacity of all the saws tested.



HITACHI C12FDH

PRICE \$315
WEIGHT 46 lb.
WARRANTY 5 years
CROSSCUT AT 90° 8 in.
CROSSCUT AT 45° 5⁵/₈ in.
NESTED CROWN 6¹⁵/₁₆ in.

FEATURES Quiet and powerful, the Hitachi is my second-favorite saw. It arrived with the fence, blade, and table perfectly straight and square right out of the box. Bevel settings are easy to adjust, and I was able to tweak miter angles to within one-tenth of a degree. This saw doesn't come with extension wings, but the table is 4 1/2 in. tall, so a stack of three pieces of 2x material can act as a support.

FLAWS The Hitachi is big and heavy, and it's the only saw with the bevel scale on the side of the saw arm instead of the front, which makes the scale difficult to see. The dust collection was marginal with just the dust bag, but it improved when a vacuum was attached.

BOTTOM LINE This is my second-favorite saw and a great choice for a shop.

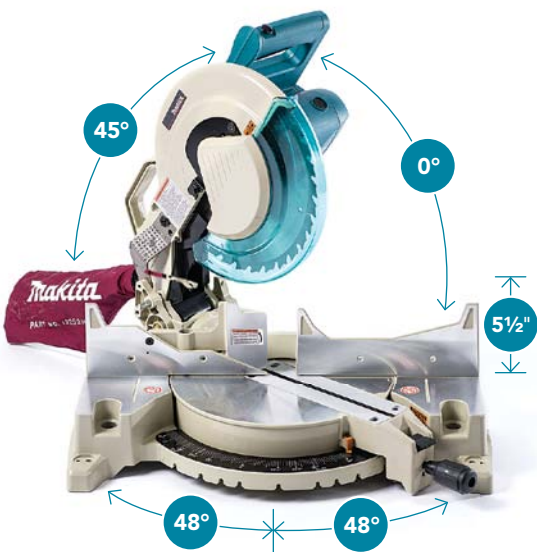
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Similar design but different features

All of the compound-miter saws share the same basic design: The head of the saw plunges straight down into the cut; the turntable rotates, allowing for miters in both directions; and the arm-and-head unit tilts for bevel cuts. For supporting tall material, all of the saws have an auxiliary fence on top of the main fence that can be slid out of the way for bevel cuts. Beyond these basic features, each saw has its own attributes that set it apart from its competitors.

The Bosch, Craftsman, and Skil saws include supports that extend the saw table to help stabilize long material, and all but the DeWalt have clamps to keep the material steady. When you're using the saw without a miter-saw stand, the outfeed supports and clamp make cutting longer material safer and more controlled.

To deal with longer stock, the Hitachi and the DeWalt saw tables are 4 1/2 in. and 3 1/2 in. tall, respectively, so you can use standard framing lumber as work supports. Cutting longer stock on the other models requires stacking up odd materials to match the saw table's height.



MAKITA LS1221

PRICE \$315
WEIGHT 37 lb.
WARRANTY 1 year
CROSSCUT AT 90° 7¹⁵/₁₆ in.
CROSSCUT AT 45° 5⁵/₈ in.
NESTED CROWN 6¹/₄ in.

FEATURES As the lightest saw, the Makita is easy to move around, and its small footprint makes reaching the rear-mounted bevel lock easy. Both the miter and bevel scales are well placed and easy to read.

FLAWS The one-piece fence was slightly out of plane between the left and right sides. I was able to bring it in line with a fair amount of force, but I was disappointed that the machining was not more accurate. I also found that the miter setting shifted slightly to the right when I tightened the miter knob. Finally, with the dust bag attached, dust flew out from both sides of the guard.

BOTTOM LINE Aside from the fence issue, this saw is square and straight, and it cut even the hardest woods flawlessly. At 37 lb., it's the easiest to carry.



RIDGID R4122

PRICE \$300
WEIGHT 43 lb.
WARRANTY 3 years
CROSSCUT AT 90° 8¹/₈ in.
CROSSCUT AT 45° 5¹¹/₁₆ in.
NESTED CROWN 6¹⁵/₁₆ in.

FEATURES The Ridgid came out of the box perfectly tuned. It has a paddle-style miter lock, which I like, plus an easily accessed detent-override button. The saw's nicest feature is a miter scale that's up near the surface of the table where it's easy to see.

FLAWS Dust collection was nonexistent with the dust bag, though it was better with a vacuum attached. I found an excessive amount of play (1¹/₁₆ in.) in the saw head. Part of this looseness was caused by the miter table moving even when locked. The saw doesn't come with auxiliary supports, and the 3¹¹/₁₆-in.-high table makes it difficult to find stock material to serve as supports.

BOTTOM LINE I really like the easy-to-see miter scale, but excessive play in the miter table would keep me away from this saw.



SKIL 3821-01

PRICE \$220
WEIGHT 43 lb.
WARRANTY 3 years
CROSSCUT AT 90° 8³/₁₆ in.
CROSSCUT AT 45° 5³/₄ in.
NESTED CROWN 6¹⁵/₁₆ in.

FEATURES Although this saw wasn't accurate out of the box, it didn't take me long to get it trued up and making straight cuts. It had plenty of power and handled most tasks without any problems. The included extension wings are longer than most, and one side has a small table attached for further support.

FLAWS This saw is loud, even with earplugs, and it's also the dustiest of the models I tested. The electric brake took 6¹/₂ seconds to stop the blade after I released the trigger, more than 2 seconds longer than the brakes on the other saws. I also found that tightening down the miter-lock knob shifted the miter angle slightly, a major annoyance for precise cuts.

BOTTOM LINE For \$80 more, you can get a model that performs much better.

The Hitachi, Ridgid, Craftsman, and Skil saws all come with a laser to help align stock for accurate cuts. Having found such lasers to be finicky, though, I have yet to fully embrace them. Easily my favorite feature on all the saws is Bosch's forward-facing bevel lock, which eliminates the need to reach behind the saw to adjust the bevel angle.

Best overall

Before testing, I would not have guessed that a single-bevel saw would be my favorite, but the Bosch proved me wrong. A double-

bevel saw is more versatile, but not having to reach behind the saw for bevel adjustments ended up being more important to me than having the ability to cut bevels in both directions. I also really like the built-in stock supports and the dust collection. Prices were so close that I didn't choose a best-value model, but the Hitachi is a great runner-up to the Bosch. □

Paul Johnson is a remodeler in Portland, Ore. Photos by Nina Johnson.