



Not Your

New circular saws are more lightweight, comfortable, convenient,

FIELD NOTES

Priced from \$99 to \$165, the 10 saws in this review all qualify as high-end professional models. Fifteen-amp motors, padded handles, and oversize levers for depth and bevel adjustments are a few of the characteristics that set these saws apart from light-duty models. Our field notes capture comments about individual saws.

BY RICK ARNOLD AND MIKE GUERTIN

When the circular saw first came out, it may have been as big a deal as cold beer, at least among carpenters. It was a noisy, metal-bodied beast that weighed 20 lb. or more, but it cut through lumber faster than any two hand-saws and didn't tire out. These days, circular saws sport lightweight, sleek, synthetic materials paired with beefy motors and smart platforms that all but cut the angles themselves. The best news is that dollar for dol-

lar, circular saws are one of the top tool values around: You can spend around \$120, and you'll be able to cut lumber all day long for 10 years or more. And here's a surprise: Twenty years ago, we paid the same prices that you can expect to pay today. So much for the cost of inflation.

We outfitted ten 7½-in., 15-amp sidewinder saws with the same blade and ran them through a series of tests on both framing and finish jobs. We also tested models equipped with an electric brake that stops the blade as soon as the trigger is released. Available on some saws, this option costs \$10 to \$20 extra and—in our opinion—isn't a must-have

HITACHI C7SB2

Good lines of sight; stable ribbed-aluminum baseplate; good sawdust control. Cuts 1½-in. stock at 55° maximum bevel. Poor guard retraction. Lightweight but not well balanced; depth adjustment is sloppy.



CRAFTSMAN 28060

Fair to good sawdust control and gloved-hand trigger access; little baseplate flex. Depth gauge is easily read. Front handle limits view of blade. Laser guide obscures cut-line. Laser line on test model was about ½° off from parallel with the blade.



Old Saw

and precise than ever before. Here's a close look at 10 top models.

safety feature. Without a brake, the blade stops spinning in seven to 10 seconds.

Ergonomics begins with a good handle

Operating a circular saw puts a lot of torque on your wrist, so the rear-handle position and the balance between the blade and the motor are very important. Most manufacturers opt for a neutral handle position, but the geometry changes depending on whether the blade is set at full depth or $\frac{1}{2}$ in. Milwaukee's Tilt-Lok handle system lets you rotate the rear handle higher or lower on the motor. By pressing the top-mounted lock button and

lifting a release lever in front of it, you can set your preference. Most of the time, we kept the handle in the neutral position, but when trimming rafter tails, it was easier to roll the handle forward. When crosscutting medium-density fiberboard (MDF) panels, we adjusted the handle all the way back.

Many saws have a rubber covering on the molded-plastic handles to improve the grip. All the triggers were smooth and didn't pinch or take undue effort to actuate. Our climate necessitates gloves in winter, and accessing the trigger slot and handle grip while wearing gloves was awkward on many saws. A gloved finger packed into a small trigger slot is a

recipe for accidental starts or slow trigger releases. The Makita, Milwaukee, and Ridgid saws had the most handle space and the best trigger-finger clearance.

Good sightlines are a must for a circular saw

When using any tool, it's crucial to be able to see what you're doing. This is especially true for circular saws. Cutting right-handed, the operator should have an unimpeded view of the blade and the cutline.

Some saw designs left us wishing we could see what we were cutting (see chart, pp. 72-73). The front handles were big offenders. Most

RIDGID R3200

Good lines of sight, gloved-hand access, and blade retraction. Blade wrench stows in handle. Poor saw-dust control; chips cover workpiece on blade side of saw. Lots of baseplate flex with shallow cuts. Bevel stop at 45° has plastic button release for bevels up to 51.5°.



DEWALT DW368

The line of sight is one of the best on any saw. Good dust control. Bevel detents for 22.5° and 45° settings with maximum of 56°; 1½-in. cutting depth at 53°. Ribbed-magnesium base helps to keep saw light, but at shallow depths, it has a lot of flex.



PERFORMANCE AND SPECS

While a saw's specifications (amperage, weight, etc.) are important, keep in mind the performance characteristics listed below and rated in this chart.



Ergonomics

The importance of a saw's balance and feel becomes apparent after using the tool all day. If you wear gloves in winter, it's a good idea to check the fit of your gloved hand. The Makita, Milwaukee, and Ridgid (pictured) all provide plenty of trigger room.



Sightlines

If you want accurate cuts, you have to be able to see the blade's leading edge as it slices along the line. But right-handed users often must peer around front handles on saws that obscure the view of the blade. The Milwaukee (shown here), Bosch, and DeWalt DW368 had the best sightlines.



Depth and bevel adjustments

Changing blade depth and degree of bevel makes a circular saw adaptable; the easier the adjustment, the easier the task. Easily read scales and quick-release levers on the DeWalt DW364 (shown here) and Bosch allow accurate depth-of-cut adjustment without a tape measure. Almost all saws offer bevel adjustments beyond 45° that are improved with levers and detents.



Base and blade guard

A saw is only as stable as its baseplate. Adjusted to a shallow cutting depth, some saw bases flex enough to throw off the blade's angle. Also, blade guards should retract automatically, even when cutting compound miters. Thanks to new designs, the DeWalt, Bosch, Milwaukee (shown here), and Porter-Cable guards performed flawlessly.

| Manufacturer/ model | Ergonomics | Sightlines |
|---|------------|------------|
| Bosch CS20 877-267-2499 www.boschtools.com | Excellent | Excellent |
| Craftsman 28060 800-349-4358 www.craftsman.com | Average | Poor |
| DeWalt DW364 800-433-9258 www.dewalt.com | Average | Poor |
| DeWalt DW368 | Average | Excellent |
| Hitachi C7SB2 800-706-7337 www.hitachipowertools.com | Average | Excellent |
| Makita 5007FAK 800-462-5482 www.makitatools.com | Average | Average |
| Makita 5007NHK | Average | Average |
| Milwaukee 6390-21 800-729-3878 www.milwaukeetool.com | Excellent | Excellent |
| Porter-Cable 324MAG 800-321-9443 www.porter-cable.com | Excellent | Excellent |
| Ridgid R3200 800-474-3443 www.ridgid.com | Average | Excellent |

FIELD NOTES CONTINUED

PORTER-CABLE 324MAG

Ribbed-magnesium baseplate and hinge/depth assembly are light but stiff. Good lines of sight and great dust control. Well-balanced. Cord clip at end of motor housing keeps cord out of harm's way.



MAKITA 5007NHK

New design for depth- and bevel-setting levers makes them easy to use. Bevel stop at 45° has an override switch to reach up to 50°.



| Depth and bevel adjustment | Base and blade guard | Weight | Bevel range | Price |
|----------------------------|----------------------|----------|-------------|-------|
| Excellent | Average | 10.4 lb. | 0°-56° | \$140 |
| Average | Average | 11.2 lb. | 0°-54.5° | \$110 |
| Excellent | Excellent | 12.3 lb. | 0°-50° | \$140 |
| Average | Average | 9.5 lb. | 0°-56° | \$119 |
| Poor | Average | 10.1 lb. | 0°-55° | \$99 |
| Poor | Average | 11.1 lb. | 0°-45° | \$165 |
| Average | Average | 10.1 lb. | 0°-50° | \$135 |
| Average | Excellent | 10.4 lb. | 0°-50° | \$139 |
| Average | Excellent | 9.6 lb. | 0°-50° | \$129 |
| Average | Average | 12 lb. | 0°-51.5° | \$119 |

saws have oblong front handles molded to or attached to the motor housing that didn't obstruct sightlines from the left, although we found that Craftsman's wide front bar handle obstructed the view of the blade. The DeWalt DW364 saw's front handle, which doubles as a depth-adjustment knob, also interfered with the view and forced the user into an awkward head-in-front-of-the-saw position. Milwaukee mounts its oblong handle in front of the bevel adjustment at a 45° angle. This position leaves the front of the motor clear and offered the best sightlines of any saw tested. The DeWalt DW368 has an extrawide window and an excellent view. On the Bosch, the front handle is pushed to the left, away from the blade, a location that also provided an excellent line of sight.

Keeping the dust where it belongs

Saws control dust in two ways: They direct the debris through a rear port in the blade housing, and they blow a stream of air forward to keep the cutline clear. All the saws were effective at the second task, but they were less consistent in routing chips through the blade housing. The Ridgid saw's housing let an annoying amount of chips escape and bounce back off the work and into our faces. The DeWalt saws both did an excellent job of moving dust out the rear port, as did the Porter-Cable 324MAG, which has an

DEWALT DW364

Heaviest saw tested, and the only rear-hinged baseplate. Front handle doubles as the blade-depth knob but interferes with the blade sightline. Good depth and bevel scales, but lacks a positive stop at 45°. Deepest bevel capacity: 1¼ in. at 51°.



MAKITA 5007FAK

Good balance and clearance for gloved hands; gaps on each side of the trigger can pinch small fingers. No bevel detents; bevel angle is limited to 45°. Blade brake is standard; a switch-activated LED light illuminates the cutline.



adjustable vacuum-attachment tube located in the blade housing.

Good baseplates give the saw a stable platform

Baseplates are made of rib-reinforced composites and magnesium, as well as flat aluminum. On all but one saw (the DeWalt DW364), the baseplates hinge at the front and drop in the rear to adjust depth of cut. To keep the sawblade perpendicular to the base, the base material and saw design, the hinge connection, and the depth-adjustment bar must work together as a unit.

Our experience with aluminum plates was mixed. Some bent easily, while others retained their shape. Ribbed baseplates improved glide



Top marks for dust control. The adjustable dust port on the Porter-Cable saw lets you blow sawdust in any direction, back into the blade housing, or into a shop-vacuum hose.

The truth is that all 10 of the saws have the power and quality to be classified as pro-level tools.

and accuracy when following a straight edge to rip stock. Flat plates sometimes snagged the straightedge or sneaked beneath and threw off the cut.

When downward pressure is applied to the saw, the depth-adjustment mechanism that connects the baseplate to the motor housing becomes the weak link, especially when it's fully extended for a shallow cut. Too much pressure distorts the mechanism and the blade's angle to the plate. The DeWalt DW368 saw's ribbed magnesium and the Bosch CS20 saw's ribbed composite plates flexed quite a bit, as did the Craftsman's flat aluminum plate. Ridgid's aluminum-plate system had the greatest amount of flex.

Unlike the rest of the pack, the DeWalt DW364 has a rear ball hinge, and the front of the aluminum plate drops. The plate operated

smoothly and produced one of the stiffest bases in the field.

Depth and bevel adjustments should be clear and simple to operate

Don't count on the precision of depth scales; they're mainly useful for gauging a setting close to stock thickness. Most of the saws' depth-of-cut scales are raised numbers or decals located at the rear of the blade housing or the depth-adjustment bar. The DeWalt

DW364 saw's scale on top of the housing was the easiest to read. The Bosch CS20 has a depth-detent system, but the set points were too weak to be effective.

The DeWalt DW364 and the Bosch both allow depth of cut to be adjusted without moving the right hand off the handle. Release mechanisms are not crammed between the rear handle and blade guard, and the Bosch has a large, easy-to-read, rear-facing gauge. This made depth changes fast and convenient.

All the front-hinging baseplate saws use a lever to lock in depth adjustments. Several saws have adjustable levers that permit resetting as the lock bolt wears. Bosch has the best; the plastic lever is spring-loaded. By pulling it away from the bolt shaft, you can rotate the lever about the hex head and release it in a new location.

All the saws tested reach beyond 45° bevels to between 50° and 56°, except for the Makita 5007FAK. Most can cut 2x stock at 50°, which is handy for beveling hip and jack rafters. We found levers easier to use than knobs for locking down positions. Some saws also have bevel detents; the DeWalt DW368 and Bosch CS20 have the best detent systems for quick sets at 22.5° and 45°. Their scales are easy to read in single-degree increments. However, the Bosch detent spring needed tweaking with a screwdriver from time to time to keep the detents strong (just bend the spring away from its seat). Ridgid uses a sliding plastic button to create a positive stop at 45°. The button was hard to move and seemed as if it would snap off easily. The Makita 5007NHH uses a positive-stop dial switch to set the stop at either 45° or 50°.

Blade guards retract smoothly

Most of the blade guards retracted very well, even when entering miters with the bevels set at maximum. We got the smoothest action from the DeWalt, Bosch, Milwaukee, and Porter-Cable saws. These models delivered smooth guard retraction on all cuts, including simple miters beginning from both the long and short points as well as compound miters, again from both directions. □

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Better than hunting for a wrench. Porter-Cable has simplified blade changes with its Quik-Change toolless system. A small spring-loaded wing slides from the cap of the bolt to loosen and tighten the bolt.



TWO AUTHORS, TWO CHOICES

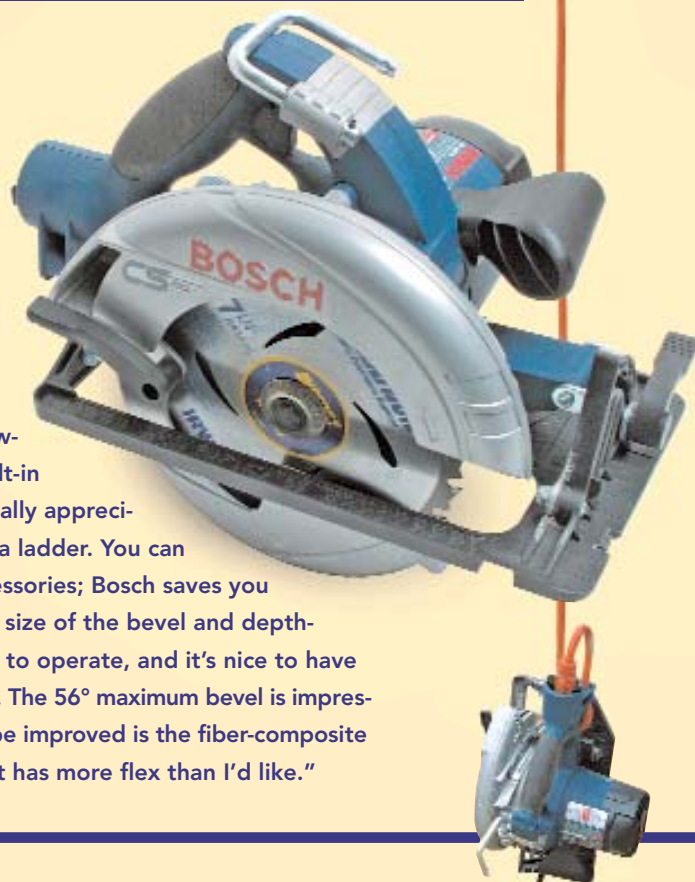
AUTHOR'S
BEST OVERALL
CHOICE

This showdown leaves two saws standing in the winner's circle, and that shouldn't surprise us, given the varied opinions that we encounter when talking about tools. The truth is that all 10 of the saws in this test have the power and quality to be classified as pro-level tools. The best circular saws you can buy are bargain-priced when you consider how much and how long they're designed to work. If you've got a different pick for best saw, drop us a line or log on to "Breaktime," *Fine Homebuilding's* online forum, when you visit www.finehomebuilding.com.



Rick's favorite: **THE BOSCH CS20**

"The Bosch saw has some unique features that turn out to be fairly useful. Its Direct-Connect setup makes it difficult to unplug the saw accidentally and eliminates the usual weak point where the power cord enters the tool. The built-in rafter hook is a feature that I really appreciate when I'm on the roof or on a ladder. You can buy these hooks as add-on accessories; Bosch saves you the trouble. I also like the large size of the bevel and depth-adjustment levers. They're easy to operate, and it's nice to have detents for 22.5° and 45° bevels. The 56° maximum bevel is impressive. The only thing that might be improved is the fiber-composite base. It's strong and light, but it has more flex than I'd like."



Mike likes: **THE MILWAUKEE 6390-21**

"The Tilt-Lok handle is the main reason I picked this saw as my favorite. In just a few seconds, I can adjust the position of the handle to be behind the blade, above the blade, or anywhere in between. This gives me a good shot at being comfortable and balanced, no matter what type of cutting needs to be done. It's easy to see the blade, and there's plenty of room in the padded grip for a gloved hand. The cushioned and contoured grip at the front of the saw gives me great control when I need it. The solid baseplate and easy-to-operate depth and bevel controls are other pluses. The only drawback is that there's no bevel stop or detent at 45°."

