

## Weigh In!

Want to test a new tool or share a tool-related testimonial, gripe, or technique? Contact us at [JLCtools@hanleywood.com](mailto:JLCtools@hanleywood.com) or 707.951.9471



# Milwaukee M18 Fuel 7 1/4-inch Circular Saw

BY JOHN SPIER

**My crew and I** evaluated the 18-volt Milwaukee M18 Fuel and 36-volt Makita 18V X2 LXT circular saws for the September 2014 issue of *JLC*. Cordless circular saws have proven their worth for intermittent tasks such as cutting soffits, rafter tails, and window openings. But ads claimed that the new 6 1/2-inch Milwaukee and the 7 1/4-inch Makita could also do serious production framing, from gang-cutting plywood to trimming LVLs. Although we were impressed by both saws, neither one will be replacing our speedy corded sidewinders for production framing.

Milwaukee has since introduced the 18-volt, 7 1/4-inch M18 Fuel, which is also supposed to handle the most demanding applications. After using it for a couple of months

and running some serious speed tests, we're comfortable with sharing our opinions.

## QUICK TOUR

The new 7 1/4-inch saw is clearly related to Milwaukee's 6 1/2-inch version. Both kits include the same 4-amp-hour batteries, which have built-in fuel gauges and take almost 1 1/2 hours to fully recharge. Both saws have the same brushless motor and identical gearing. And both saws have magnesium shoes and blade guards, easy-to-read depth and bevel scales, a well-designed pivoting rafter hook, an on-board blade wrench, and an LED headlight. But the 7 1/4-inch is a blade-right rather than a blade-left saw. And although both saws generate 5,000 no-load rpm, the larger blade circumference of the

new saw yields a faster speed at the cutting edge. Both saws use advanced electronics to protect against overloading, overheating, and overdischarging, but Milwaukee says it built a unique electronics package for each saw to achieve peak performance.

Like other cordless circular saws, the new 7 1/4-inch has a safety that you must press with your thumb before pulling the trigger. Cordless saws are often used in awkward positions where the extra thumb action is a pain, so I wish manufacturers would eliminate this feature.

## POWERING UP

We've been using this new sidewinder constantly for small jobs, and we love having it on our framing jobs as an extra saw that we can carry around for quick cuts without a cord. It's easy to adjust and comfortable to hold. The blade guard works well, although, like most, it gets hung up and needs a helping thumb on the lever when the saw is making a bevel cut at an acute angle. The saw bevels to a bit over 51 degrees and can cut through a 2-by at that angle. I've found the bright LED headlight to be a blessing for interior work. It has a 10-second afterglow when you release the trigger.

According to Milwaukee, the saw can crosscut 233 2x4s per charge under optimal testing conditions, which is similar to the performance of the Milwaukee 6 1/2-inch and Makita 7 1/4-inch cordless saws we tested a few months ago. Obviously, battery runtime is normally not an issue with these efficient new cordless saws. But my instincts have always told me that cordless saws just aren't as fast as their corded counterparts. With manufacturers now claiming equality for their new cordless offerings, I decided it was a good time to test this new 7 1/4-inch saw against our go-to corded framing sidewinders: a 15-amp, 7 1/4-inch Milwaukee Tilt-Lok and a 12-amp, 6 1/2-inch Ridgid Fuego. For good measure, I also tested the cordless 6 1/2-inch Milwaukee and 7 1/4-inch Makita.

Assisted by a helper with a stopwatch, I

EDITED BY BRUCE GREENLAW



Unlike some competing cordless models, this saw has a built-in rafter hook.



The author's speed testing revealed that the saw can compete with other top-of-the-line cordless models, but is still significantly slower than his corded framing sidewinders.

counted the number of freehand crosscuts I could make per minute with each saw through a well-seasoned, full-dimension 2x10 spruce staging plank with consistently scattered small knots, repeating the test several times for each saw and averaging the results. I equipped each saw with a new Diablo 24-tooth framing blade and fully charged all the batteries.

Among the cordless saws, the Milwaukee 7¼-incher cut 13 to 14 slices per minute, the Milwaukee 6½-incher cut 12 slices per minute, and the Makita 7¼-incher cut 15 to 16 slices. On the other hand, our corded Milwaukee 7¼-incher easily cut 30 slices per minute and our corded Ridgid 6½-incher cut 26, making it clear that corded saws still definitely rule for production framing.

### THE BOTTOM LINE

Despite the marketing hype for cordless tools, corded saws are still the best choice for production framing. The top corded models cut significantly faster than the latest cordless ones, and running a cord to a pile or a cutting station is at least as easy as setting up a charger and swapping batteries. But cordless saws have become indispensable for small jobs and for all those awkward

cuts that you need to make in place, and the 7¼-inch Milwaukee M18 Fuel is our new favorite. That's partly because I already own a fleet of Milwaukee M18 tools with compatible batteries and chargers. But more important, the saw resembles a traditional 7¼-inch corded sidewinder, can cut anything that our corded saws can, is very comfortable, and has a handy rafter hook and an LED headlight. The whole crew loves it.

We tested the two-battery kit, but you can also buy a one-battery kit for \$100 less or the bare tool for \$200 less.

### 2731-22 Specs

Blade diameter: 7¼ inches

RPM: 5,000

Weight (with blade and battery): 9.2 pounds

Cutting depth at 0°: 2½ inches

Cutting depth at 45°: 1⅞ inches

Cutting depth at 51°: 1<sup>11</sup>/<sub>16</sub> inches

Price: \$430

Included in kit: two 4-Ah batteries, charger, blade, blade wrench, tool bag

Warranty: tool, 5 years; battery, 3 years

*John Spier is a builder on Block Island, R.I.*

### SUPER-SMALL FLASHLIGHT

It's hard to imagine a simpler flashlight than the Pak-Lite. It's a plastic cap equipped with two LED bulbs and a toggle switch that snaps to a standard 9-volt battery, which serves as the handle. The whole thing is small enough to fit in the coin pocket of my pants, which is where I've packed one for the past seven years. It doesn't roll when I lay it down, and it can stand upright. I can even grip it with my mouth to free up both hands. I've dropped it on concrete and run it through a washing machine with no harm done.

My Pak-Lite Super has white LED bulbs rated to burn for 100,000 hours, a low/off/high switch designed to toggle 100,000 times, and a glow-in-the-dark cap. According to the Oregon-based manufacturer, the standard alkaline battery will power the low beam for 600+ hours and the high beam for 30+ hours. I haven't counted hours, but my alkalines have lasted more than two years. With a lithium battery, the figures jump to 1,200+ and 80+ hours, respectively. Depending on the battery, the Pak-Lite Super costs \$25 to \$30 plus shipping at 9voltlight.com. —Bruce Greenlaw is a contributing editor to JLC.





## Bosch Mortar Knives

BY JOHN CARROLL

**Whether you're repointing** cracked and crumbling mortar, adding a new window or door in a masonry wall, or joining a new masonry wall to an existing one, the first (and often most challenging) step is to grind and chip out the old mortar. This is particularly hard to do when you need to remove bricks or stones to “tooth in” the new work to the old pattern. Doing this without damaging the surrounding masonry units is a job that requires more than a hammer and a flat chisel.

For years, I've used a grinder or a circular saw equipped with a diamond blade, a rotary hammer, and a plugging chisel that I strike with a 2-pound hammer. The diamond blade takes care of the long, straight joints, but it doesn't fit into short joints, such as the head joints in brickwork. In those tight spots, I've used the rotary hammer to perforate the mortar, then used the plugging chisel to knock it out.

I've often wondered why tool manufacturers didn't offer a chisel shaped like my plugging chisel that I could use with my

SDS-plus rotary hammer set in chiseling mode. But I can stop wondering now that Bosch has introduced the SDS-plus Mortar Knife. It's available in convenient thicknesses of ¼ inch and ⅜ inch, and like my plugging chisel, it's designed to force the chipped mortar out the face of the joint rather than into the masonry units on both sides of the joint—lessening the possibility of breaking or damaging the unit.

So far, I've used the mortar knives to repair a stone wall and a brick staircase, and I would guess that they saved roughly 25 percent in labor time. At that rate, they can easily pay for themselves in one job.

The ¼-inch version (model HS1400) costs about \$18, and the ⅜-inch version (model HS1401) costs about \$20. I like having both sizes, but I could get by with just the smaller size—if necessary—because it fits into narrower joints but still works on the wider ones.

*John Carroll is a remodeling contractor in Durham, N.C.*



### DEWALT 14-OUNCE FRAMING HAMMER

In the February 2014 issue, I reported that I loved the new Stanley FatMax Anti-Vibe framing hammer and had started using it full-time for production framing. The head of this hammer weighs just 17 ounces, which is in line with the trend toward lighter steel heads designed to compete with costlier titanium ones. I had already incrementally moved from a 32-ounce hammer to a 22-ouncer to reduce my wear and tear, and I initially couldn't imagine framing with a 17-ouncer. But I discovered that the Stanley has all the driving power I need. I also liked the magnetic nail starter up top, which makes it easier to start nails with one hand. A few months ago, however, the head loosened and I needed to replace the hammer.

Sticking with the concept, I decided to try the welded-steel DeWalt model DWHT51138, which has an even lighter 14-ounce head and a magnetic nail starter. So far, I like this featherweight even better than the Stanley. It drives nails just as fast, has a comfortable grip, and feels perfectly balanced. It cost me \$50 at The Home Depot, which is a fair price for a good hammer. We'll see how it holds up in the long run. Regardless, I'll never return to a heavy framing hammer. —Terry Goodrich is a framing contractor in Scappoose, Ore.

Photo: top left, Judy Smith