EDITED BY BRUCE GREENLAW

Milwaukee M18 Fuel 1-Inch SDS Plus Rotary Hammer

BY SIM AYERS

We've been doing seismic retrofits on northern California homes, where anchoring a sill to a foundation often requires us to squeeze into a crawlspace to drill a bunch of holes in concrete to accommodate anchors or epoxied threaded rods. We usually use a corded Bosch 1-inch SDS Plus Bulldog Xtreme rotary hammer for these holes, but dragging a cord can be a hassle when you're working on your hands and knees.

When *JLC* asked us to try Milwaukee's new M18 Fuel 18-volt 1-inch SDS Plus rotary hammer, we were starting a new retrofit and were curious to see if the tool could drill the holes as quickly as our corded Bosch while delivering ample runtime per charge.

FEATURES AND PERFORMANCE

Like Milwaukee's other M18 Fuel tools, the new rotary hammer can be powered by any M18 battery, has an efficient brushless motor, and has protective electronics. The 4-amp-hour batteries included in the 2712-22 kit we tried have built-in fuel gauges and take almost 1½ hours to fully recharge. Other features include rotary-only and hammer-only modes, anti-vibe components, an LED headlight with a 10-second afterglow, and a depth gauge with a convenient release button.

Although 1-inch rotary hammers can drill 1-inch-diameter bits through concrete, they don't have the power to do it quickly. According to Milwaukee, to estimate the optimal capacity of a rotary hammer, divide the maximum capacity in half and add ⅛ inch; by that formula, we expected Milwaukee's new one-incher to easily handle ½-inch and ⅝-inch anchor holes. We weren't disappointed. According to Milwaukee, the M18 Fuel can drill fifty ½-inch-by-2 ½-inch holes in concrete per charge under optimal test conditions. It's impossible to get consistent test results when you're squatting or kneeling, but for the record, we drilled nineteen ½-inch-by-4 ½-inch holes on the first battery charge, and in one timed trial it took 33 to 52 seconds to drill each hole. To compare, we timed our corded Bosch Bulldog Xtreme, which took 30 to 45 seconds *longer* per hole.

We also used the M18 Fuel to drill ten ⅝-inch-by-7-inch holes in the same crawlspace. The tool had plenty of power to handle this more demanding application, but drilled only seven and a half holes before we had to swap batteries. During our trials, the M18 Fuel got warm, but it never got hot.

THE BOTTOM LINE

The M18 Fuel rotary hammer easily drilled our ½-inch and ⅝-inch holes in concrete, and in one timed trial, exceeded the speed of our corded 1-inch Bosch rotary hammer. We will definitely add one to our tool arsenal for doing seismic retrofits and other jobs. As with many of the latest cordless tools designed to compete with corded models, though, battery runtime can be an issue for the most demanding applications. For those, we will still use our corded Bosch.

2712 Specs

Motor type: brushless
Weight with battery: 8.5 pounds
Modes: rotary-hammer, rotary-only, hammer-only
Rpm: 0 to 1,400
Impact energy: 1.7 foot-pounds
Blows per minute: 0 to 4,900
Maximum spiral-bit capacity in concrete: 1 inch
Optimal spiral-bit capacity in concrete: ⅝ inch
Maximum thin-wall-core-bit capacity in concrete: 2 ½ inches
Price: $300 for 2712-20 bare tool, $500 for 2712-22 kit, $600 for 2712-22DE kit with dust extractor
Warranty: 5 years tool, 3 years batteries

Sim Ayers owns SBE Builders, in Discovery Bay, Calif.

SawStop Jobsite Table Saw

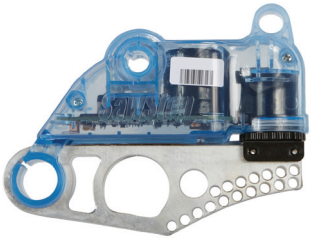
BY MATT RISINGER

I reviewed our SawStop 10-inch Contractor Saw in the January 2014 issue of *JLC.* It's precise, stable, and almost vibration-free, and if you touch the whirling blade with a good electrical conductor, such as a finger or an arm, the blade barely nicks the surface before a spring-loaded blade brake (see photo, below), stops it cold. However, the Contractor model, outfitted with an integrated base and a Biesemeyer-style fence, weighs over 300 pounds. It takes four guys to carry it, so it isn't always practical to bring onsite.

We do own Bosch and DeWalt portable table saws, which can be better suited to the jobsite. But a former employee cut his thumb on one of those, so the SawStop safety feature would be our first choice. Naturally, when SawStop unveiled its Jobsite Saw, with the same finger-saving blade brake, I jumped at the chance to review it.

The new Jobsite Saw weighs just 108 pounds, including its mobile stand. It has tons going for it. The user guide is fantastic, and the saw was easy to set up. The accessories, including a spare blade and a spare brake cartridge, store conveniently on board. A separate brake cartridge is available for use with an 8-inch dado set.

The blade can be fully raised or lowered with a single rotation of the handwheel. To change the tilt angle, you just squeeze the handwheel's backplate, swing the handwheel to the desired position, and let go. Once you're in the ballpark, you can fine-tune the tilt angle by turning a micro-adjustment knob—a great feature. The large paddle switch can be turned off with a thigh bump. Green and red lights under the switch indicate the status of the saw and the SawStop safety system, and are clearly explained on a chart located near the switch. The rolling stand sets up and breaks down easily.



SawStop replacement brake cartridge

On site, my crew was impressed with the saw's power. We used it mostly for back-beveling 1x6 poplar baseboard so we could easily scribe it to the finish flooring. But we also used it for ripping 2-by pine, 2-by white oak, 1-by ipe, and equivalent materials, slowing our feed rate when necessary to prevent the saw from bogging down. When we hooked our vacuum to the saw, it efficiently collected most of the sawdust.

Unlike our other portables, this is a belt-drive rather than a direct-drive saw. The belt significantly helps reduce vibration.

FENCE LIMITATION

One concern I have about this saw is the fence. The T-style rip fence clamps only to the front rail of the saw, instead of gripping the front and the back of the table. Exerting pressure against the fence can push the rear of the fence out of parallel, resulting in inaccurate rips. We noticed this in the first few rip cuts we made. And the problem was worse when we used a feather board.

The SawStop Jobsite Saw I tested might be fine for rough cuts or decking work, but it does not deliver the same accuracy for finish work that our larger Contractor Saw does. It's an otherwise awesome portable table saw with important safety features. But SawStop needs to rethink and redesign the fence.

Jobsite Saw Specs

Blade: 10 inches; 5/8-inch arbor
Amps: 15
RPM: 4,000
Cutting depth at 0 degrees: 3 1/8 inches
Cutting depth at 45 degrees: 2 1/8 inches
Maximum rip: 25 1/2 inches
Weight with stand: 108 pounds
Price: $1,300
Replacement standard brake cartridge: $69
Included with saw: mobile stand, 40-tooth combination blade
Warranty: 1 year

Matt Risinger owns Risinger Homes, in Austin, Texas. See his video blog at JLConline.com.

Kreg Foreman Pocket-Hole Machine

BY BRIAN CAMPBELL

It's hard to beat the simplicity of pocket-screw joinery for assembling many of the butt joints required for woodwork and finish carpentry. Using a special stepped drill bit and a pocket-hole jig or machine, you bore steeply angled countersunk pilot holes (or "pockets") at the end of one of the two adjoining workpieces, clamp the joint into alignment, and then drive a self-tapping pocket screw into each pocket to complete the joinery. Where pockets will be exposed, you can finish them by installing plastic or wood pocket-hole plugs.

The Kreg Tool Co. offers several jigs and kits that make it easy to drill perfect pockets with a hand-held drill. Jig prices range from $22 to $150. Kreg also makes a range of electric and pneumatic machines that significantly speed the work, with prices running all the way up to $10,900. I own a couple of the jigs for jobsite work and have used one of Kreg's stationary pneumatic machines in a shared shop.

Until recently, Kreg's most affordable portable electric machine was the 40-pound, 110-volt Foreman DB110, which cost $850. To drill a pocket, you position your stock against a fence and pull the handle. The single pull starts the motor, clamps the stock against the tabletop, and plunges the drill bit into the workpiece from below. Most of these machines are being used in serious cabinet and woodworking shops, while carpenters in the field or those who only occasionally construct cabinets or built-ins have typically been using a jig and a hand-held drill.

But Kreg has now replaced the Foreman DB110 with the Foreman DB210, which costs $400 and weighs just 20 pounds. After using the DB210 twice on jobsites and once in the workshop, I think it's a game changer.

PERFORMANCE

When the new Foreman arrived, I installed the included vacuum port, shroud, and hose inside the base so I could hook it to a vacuum. The machine accommodates materials from ½ inch to 1½ inches thick. You need to follow a simple, three-step procedure to adjust for the thickness of the stock and the length of your screws. One caution: If you don't adjust it properly, you can drill right through the fence when you pull the handle (don't ask how I know that).

So far, I've used the new Foreman to splice 1x8 baseboards, join window and door casings, and build cabinets. It drilled the pockets cleanly and accurately, and the dust collection worked great when I hooked it to my Fein vacuum. The base has rubberized feet and grips surfaces well, but you can also clamp or bolt it down.

I do have minor complaints. The handle, which contains the trigger and lockout button, is awkward to use left-handed. Although I'm a righty, work flow sometimes requires holding material with my right hand, and it would be helpful to be able to easily operate the handle with my left hand.

Also, although the fence has adjustable and retractable stops for repetitive drilling, they're small pieces of plastic that slip into a T-slot and are secured with socket-head screws. Small plastic parts are seldom durable enough to stand up to rigors of shop and jobsite work, and the screw heads are so close to the tabletop that turning a hex key to loosen or tighten them is a bother.

The DB210 has a 5-amp motor versus the 8-amp one on its pricier predecessor, so I would use an especially sharp bit with hardwoods.

Criticisms aside, this new Foreman performed well. It's not designed to replace the industrial machines used in production shops, but I expect it to become a popular tool on jobsites and in small shops.

Foreman DB210 Specs

Amps: 5
Weight: 20 pounds
Material thickness range: ½ inch to 1½ inches
Drill-bit options: Kreg standard, Micro-Pocket, and HD
Price: $400
Warranty: 1 year

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