

Tools of the Trade

Weigh In! Want to test a new tool or share a tool-related testimonial, gripe, or technique? Contact us at jlc.tools@zondahome.com.

Makita 16 5/16-Inch Cordless Circular Saw

by **TIM UHLER**

Remember when cordless tools seemed like toys? Today, my crew runs 100% cordless. And Makita recently raised the bar with the XGT GSH06T, a cordless 16 5/16-inch circular saw that can cut 6-by lumber. Makita claims it's the world's largest cordless circular saw.

On the Job

I don't like blade-right saws. I'm right-handed and grew up using worm-drive saws, which have the blade on the left side, where it is easier to see. Because I can see the left side of the blade on this Makita, I can use it as I would a worm drive.

On a big saw like this, a brake is a must-have, and this one works well. I appreciate the soft start, too. You don't get that torque kick that the old worm drives had.

Cutting LVL, glulam, and 6x10 or 6x12 Doug fir is a breeze for this saw. LVL is the toughest, because it wants to close on the blade, but that's true with all saws.

Makita claims the saw can "deliver up to 75 cuts per charge in 6x12 lumber with the 5.0-Ah battery." Battery life isn't an issue for me; I have a lot of Makita batteries. And I physically couldn't make 75 repetitive cuts with a saw this large. But the point is, the saw will last as long you need it to.

Features

The saw has a cutting depth of 6 1/4 inches for straight cuts and 4 13/16 inches at a 45-degree angle and has both an electronic brake and soft start to improve handling. Not surprising, it tips the scales at a hefty 29.21 pounds with the 5-amp battery (for comparison, a corded Skil 16-inch comes in at 32.4 pounds). An included dust port allows for attachment to a vacuum. The unit is also compatible with Makita's auto-start Bluetooth dust-extractor system.

This saw is expensive. Is it worth buying? It isn't a necessity on our framing sites because we can use a 10 1/4-inch saw and make an extra cut with a lighter saw. But if you cut a lot of 6-by or 45-degree angles on 4-by stock, and the bigger saw would speed up your workflow or improve the quality of your work, then it could be worth the investment.

The kit with saw, battery, and charger costs \$1,400; the bare tool, \$1,000. makitatools.com

Tim Uhler is a lead carpenter for Pioneer Builders in Port Orchard, Wash., and a contributing editor to JLC. Follow him on Instagram at @awesomeframers, subscribe to his YouTube channel, or visit his website at awesomeframers.com.



The author found the Makita XGT GSH06T saw to be easy to control thanks to its soft start and well-distributed weight (1). The size and cost of this cordless 16 5/16-inch saw are both substantial, but if you regularly cut oversized material, this tool could help speed up your workflow (2).

PHOTOS: TIM UHLER



DeWalt Cordless 7 1/4-Inch Sliding Miter Saw

by MARC FORGET

I used to cut a lot of trim. A 12-inch miter saw (and stand) was usually one of the first tools out of the van. However, on many jobs, the size and cutting capacity of the 12-inch beast were overkill. On other, large jobs with my partners, it was clear that a second saw would reduce the time we wasted moving around on site and taking turns to make a cut. My solution was a DeWalt 7 1/4-inch sliding miter saw (DCS361M1).

The saw runs on 20-volt batteries, so I didn't need an outlet nearby to use it. A 4-amp battery lasted three-quarters of a day—plenty of time to charge a backup. The 7 1/4-inch blades are much less expensive than 12-inch ones, so a new, sharp blade didn't break the bank. With the saw's smaller size and weight (31 pounds), I could carry it one-handed and haul it upstairs or onto tight balconies when a larger saw would have been a chore. The built-in light illuminates the cutting area and can be left on when the saw's not in use.

Cutting capacity is 8 inches for straight cuts and 5 3/4 inches at 45 degrees. Usually, this was enough for casing and baseboard or window jamb extensions. For shoe molding or small applique, the saw really stood out. I could move from floor to floor or even room to room much quicker than with a larger saw.

I purchased the DeWalt as a backup saw, for which purpose it worked perfectly. It does not replace my larger saw. One reason is that the smaller saw bevels in only one direction. This was once standard, but if you are accustomed to a double-bevel saw, it takes a moment to orient the material.

I also found that the blade doesn't have a high rate of spin, so on hardwood trim or some larger pine, I have gotten tear-out on the back. Chipping has been an issue with laminate flooring, melamine, and finish plywood, too. In those cases, I needed to score or back-cut the material to ensure a clean finish.

This is a smaller, lightweight saw for smaller, lighter-weight work, which it does well. I've worked this saw for a few years and have not had any issues with reliability (unlike my larger unit, which I've needed to replace brushes on and regularly check for square). As a light, portable, and reliable saw to get through occasional trim or to backstop my main miter saw, this unit has earned its cost for me.

The DCS361M1 kit with battery and charger costs \$440; the DCS361B (bare tool) costs \$350. dewalt.com

Marc Forget is an associate editor at JLC.



The DeWalt DCS361M1, with its open side grips and a top handle, is easy to move around a jobsite (1). Note the difference between the 7 1/4- and 12-inch saws (2). Not every job needs the biggest tool.

Makita Oil-Impulse Driver

by RICH KRAMER

I appreciated Marc Forget's article, "Job Site Physical Fitness," in the July/August issue. Taking care of our bodies should be as important as putting our tools under cover when it starts raining. I believe that care includes not only exercising and resting, but also choosing tools that are gentler and easier to use. Switching to a lightweight, cordless circular saw from my old 13-pound plug-in beast, for instance, was a massive improvement. Replacing my impact driver was another.

Most carpenters are familiar with modern impact drivers. But many carpenters don't know that there's a quieter, gentler version, the oil-impulse driver. Several years ago, I was suffering from tennis elbow due to the repetitive strain of my work, including, I believe, using an impact driver to install floors. I did various kinds of physical therapy, then I discovered oil-impulse drivers. I bought one made by Makita, model XST01Z, and I credit it with rescuing my carpentry career.

Benefits

The Makita has made a tremendous difference as I work through a day. My arm does not hurt after a day of driving screws because the tool doesn't pass the impact or vibration

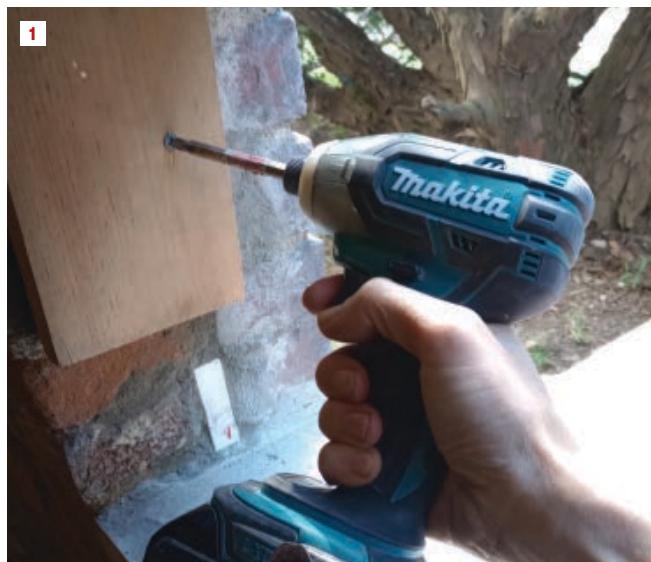
to my hand, and my ears get a break from the loud noise of a traditional impact driver.

Another benefit of the Makita driver is that it has three speed settings for driving screws, from delicate small screws to heavy ledger bolt fasteners. I use level 2 power for just about all my work. But if I need a super-boost for a 12-inch TimberLok, I can notch up to level 3 and get all the power I need.

For power, I use a 3-amp-hour battery, which lasts the whole day for me. If the battery runs down, that's a sign to pack up and go home! With the 3-Ah battery, the tool is well-balanced in my hand. The built-in light has an independent on/off switch for lighting the work area and can stay on even after the trigger is released.

Be careful when researching this tool online, since a web search might bring up just a couple of sites with oil-impulse drivers and a number of others with traditional impact drivers. The price is now about \$240 (bare tool) for the Makita XST01Z. Compared with taking time off for physical therapy, the price is worth it. makitatools.com

Rich Kramer is the owner of Wood is Good in Berlin, Mass.



The author reports that the XST01Z 18-volt oil-impulse driver (1, 2) performs as well as the standard impact drivers most carpenters are more familiar with. He also found it quieter and easier on his body, thanks to its low transfer of energy to the operator's wrist when in use, regardless of speed setting.

PHOTOS: RICH KRAMER

The Splurge

Have you ever splurged on a tool upgrade?
You're not alone.

by MARC FORGET

My name is Marc and I am a tool guy. One aspect of the trade that I have always enjoyed is discovering, discussing, buying, and using tools. I confess, I have taken on jobs to justify the purchase of a new piece of equipment. That urge to buy the new and shiny is tempered, however, by financial reality and practicality. I know that the \$400 hammer with custom colors and space-age materials won't drive nails that much quicker than my old Estwing, so I resist. The same goes for a new rafter square with micro laser etching and hi-vis finish for my tool pouch. My over-20-year-old one can still mark a line or scrape ice off a 2x4 just fine. So I resist.

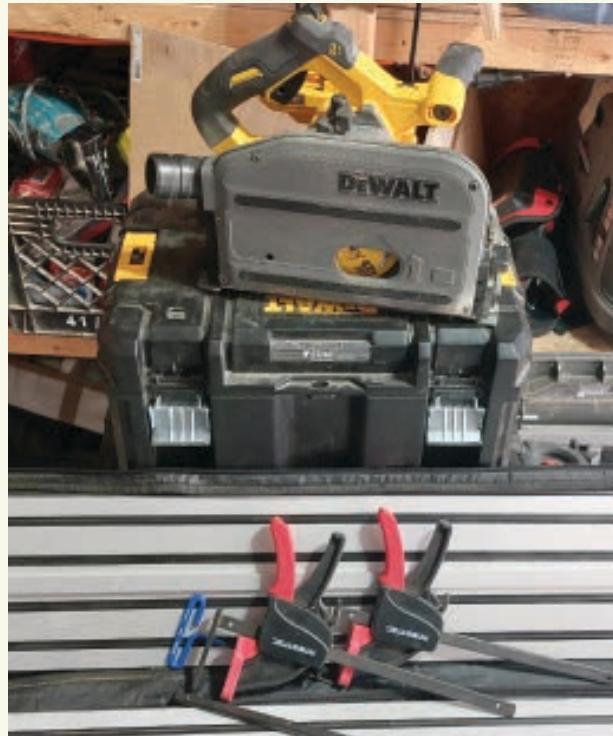
But every now and again, something will end up in the shopping cart. Before I commit to the purchase, two restraints keep me (mostly) from having an apologetic conversation with my wife. First and most important is it needs to be efficient: Is this tool an improvement over what I have, or will it help me do a job better and faster? If so, then it makes sense. Having the right tool to do a job correctly is satisfying, especially if you've had to make do for a time with what was on hand.

My next restraint is that it needs to be a good deal. I hunt for a sale like some people hunt big game. I have tracked a price for a targeted item across time and geography looking for just the right spot to make the shot. Full price or without free add-ons does not taste as sweet.

Even with those points satisfied, the tool may still be right at the pain threshold or "scold" threshold for cost. (Your situation may vary.) That is what makes it a splurge purchase. I could get something similar for less, but I stretched to buy what I liked and thought would be a better quality tool.

My splurge was a cordless track saw, a DeWalt DCS520ST1 with the tracks, clamps, and carrying cases. Several colleagues owned track saws, so I had the opportunity to try out a number of different brands. The saws all delivered as promised, able to break down finished panels, sheet goods, or prefinished doors with a clean, dead-straight cut. The cost with the needed track and such was in the \$1,000-plus range—not an impulse buy.

Then a job came along to renovate a restaurant. I would be building shelving, a bar, booths, and more, all on site, with a lot of finish-grade plywood. Most of this work I would be doing alone, so being able to create all of it safely, cleanly, and accurately was vital. The search for a sale began, and I am happy to report



The DCS520ST1 with all its accessories was a financial stretch for the author, but it facilitated one project and led to success on many others.

that the tool was just what was required for the job. Having had a heated physical disagreement with a table saw in the past, I look on my track saw as a real savior for doing accurate work on sheet goods.

In that spirit, I reached out to a few frequent JLC contributors to see what tools they splurged on. I also asked about the reasoning behind the purchase and if it was worth it, because not all tools we buy end up being what we hoped they would, as I know too well. It's one of the reasons my garage has never seen, and will never see, a vehicle.

Marc Forget is an associate editor at JLC.





↑ **Aron Jones**, co-founder of Big Dog Construction on Grand Manan Island, New Brunswick

My first gut-wrencher of a purchase was a hammer. I purchased a Dead On titanium-head hammer (I think in 1999, for around \$220). It was a splurge at the time. I was experiencing occasional elbow pain and decided to go for it. It changed the way I look at tools. It didn't necessarily make me more productive in the short term, but it brought a little bit of joy to the day. I would now argue that it gave me long-term productivity, or at least started me thinking about longevity.

↓ **John Carroll**, author of *Working Alone* and builder in Durham, N.C.

I generally go for the equivalent of a Honda or Toyota when I buy tools. I want a safe, reliable, and durable tool but don't care about mahogany handles, electronics, and so forth.

I sometimes splurge on masonry tools and equipment, though. The Europeans know a thing or two about masonry. They practice it far more extensively than we do, and they've been doing it for a lot longer—over 2,000 years longer. I recently bought a small concrete mixer from Imer, an Italian company. I could have gotten one the same size for about \$300, but I paid \$900 for the Imer.

It was well worth it. We can take the Imer off its stand in a minute or two. We can then easily load up the two parts in the back of my small pickup truck. This makes it easy to transport and then set up close to our work. It's well-designed, and it's a pleasure to work with. And, I'm pretty sure it will last for decades.

PHOTOS: ARON JONES (HAMMER); MATT NAVAY (MIXER)



→ **Emanuel Silva**, owner of Silva Lightning Builders in North Andover, Mass.

The one “splurge” I can think of is the Caravan pop-up canopy my wife bought me years ago. I told her I wouldn’t use it and, if I set it up on site, people would drive by and think it was ridiculous or ask when the hot dogs would be ready. She spent around \$200, but that was at the end of the season and over 20 years ago. I thought it was nuts, but I put it in the van to make her happy.

One day, I did set it up, and now I can’t live without one. Rain or shine, it is one of the first things that I take out of the truck when I am working. With all the days it has made it possible for me to work in bad weather, it has paid for itself. Good-quality canopies last 5 to 7 years with lots of use. If one wears out, I make sure to get another one right away.



Worth it!

Mark Clement, author of *The Carpenters Notebook* and remodeler in Ambler, Pa.

In the late '90s, I decided to get a fancy drill for all the deck work I was doing. I spent extra money to buy a Panasonic 12-volt cordless drill kit with two batteries and charger. I had to special order it, and it cost about \$400. It was okay at first, but once I dropped it into the mud, chuck first, it never worked right afterward. Then I went and spent more money to try to have it fixed, but it still wasn't right. What a waste. It was a tool that would have been better for a shop where it would've been kept safe, away from the cruel world. Not worth it! Still makes me mad thinking about it.

Not worth it!

Toolbits

by MARC FORGET

At JLC, we continually receive press releases about new or evolving tools. I also go out into the wild and find out what tools people are talking about on site and what is on offer at local stores or online. While we can't review every tool we hear about, we decided to highlight a few that have caught our eye and put them out there for you to think about. Here is a small assortment of such tools, a couple from small companies leveraging 3D printing to solve problems and the others from larger companies trying to build a better mousetrap for the tradesperson.



At a tool expo this past summer, I came across a Crescent Tool Siterunner three-shelf folding job cart. I like to keep my sites well organized, and a rolling shelf that can hold supplies or act as a job cart while I'm working would help me do that. In addition, it folds up, making it easy to transport and store. Features include a T-channel accessory rail to hang tools from and 5-inch casters, two of which lock and two swivel. The cart can hold 100 pounds per shelf but weighs a manageable 43 pounds empty. It costs \$300. crescenttool.com



When I installed cabinets, I sometimes needed to drill holes for shelf pins, cabinet hinges, or hidden push-to-open pins for cabinet doors, on site. There is no chance for a redo, so accuracy is vital. Festool has come up with the MB40 mobile drilling attachment to solve this problem. The company promotes the attachment for use both on the jobsite and in the shop for drilling 90-degree holes up to 2 inches wide in panels or on the edges of cabinet boxes.

If you've done this work more than once and think you'll do it again, this accessory might be worth a look. The MB40 comes packaged in its own Systainer case with 3mil and 5mil bits and base and guide rails. Cost is \$270. festoolusa.com



All the major tool manufacturers sell toolbox systems for storing equipment and transporting it to the site. With a few exceptions, these are all open boxes that we pile our drills, guns, and so forth into, along with their accessories. We then rummage through the boxes to find what we need (or not) and then dump everything back in at the end of day.

10-Spot Tools looked at this and created 3D-printed inserts that fit into the boxes to keep tools and bits organized and accessible. These inserts are available for most types of storage systems and for the more common tool groups, with more options added regularly. Prices vary depending on the insert. 10spottools.com



A colleague had this tool on site for a job we worked on together some time ago. Miter clamps that pin together miters have been around a long time, but they can be expensive and leave too large a mark on a workpiece. His clamps were different, though. They sported Dark Horse Design replacement pads, which fit onto spring clamps made by some common brands. The pins that hold the workpiece make a mark no bigger than a nail and are replaceable as they wear. At \$15 a pair, the pads are not hard on the wallet.

The company is pivoting to selling 3D printing plans instead of the product as international shipping has become more complicated. It's another example of what 3D printing and a bit of creativity can provide for us on site. darkhorsedesign.ca