

Metabo HPT MultiVolt Framing Nailer

BY MIKE WHALEN

Over my 30-year career in the trades, I've used many different air-powered and cordless nail guns, so I was excited to try Metabo HPT's new 36-volt MultiVolt 3 ½-inch cordless framer and see how it stacked up against the others. The first thing I noticed when I took the Metabo out of the box was the weight, which is almost 11 pounds with the battery installed in it. Though that's at the high end for battery-powered nailers, the tool felt balanced when I picked it up and held it for a little while. Pneumatic nailers are lighter, of course, and if they are coil-style instead of having a straight magazine like this one, they can sometimes feel lopsided when they are loaded with a full coil of nails. This nailer comes in both a round-head 21-degree version (model NR3690DR), which is the one we tested, and a clipped-head 30-degree version (model NR3690DC).

We were in the middle of framing a kitchen and had a triple LVL beam to install, so the timing was perfect to try out the tool. It took only eight minutes to bring the 36-volt battery up to a full charge, but with the MultiVolt system, we could have plugged the tool into an AC adapter and fired nails all day long, even with a discharged battery. The adapter doesn't come with the tool, though, so I appreciated having the four-bar battery life indicator on the back, which I checked from time to time to see how much charge was left. There is also a power button on the gun itself to turn it

on and off, which could serve as both a safety and a power-saving feature. The gun will automatically turn off when it hasn't been fired for a half-hour, and there is a lock button on the side of the handle that was easy to switch to the unlock position when I was ready to use it.

The framer will take nails as small as 2½ inches, but we were doing some wall and beam framing, so we used the bigger, 3½-in. x 0.131-in. plastic strip nails, which we picked up at our local lumberyard. The magazine on this gun has a 37-nail capacity (the magazine on the clipped-head version accepts up to 47 paper-collated nails). The nails slide in on the left side of the gun; after pulling back the pressure slide, we were good to go.

I started out nailing 2x4 studs up and was impressed with the power the gun had. For this kind of work, the weight of the gun is an advantage, as it helps to minimize any bounce or push back from the pressure. Another advantage of a battery-powered nailer over a pneumatic is that there is no air blowback. This is especially nice for inside work because

I don't end up having floor dust or ceiling insulation blown back in my face. The nail gun was easy to maneuver between a conventional stud layout, and it has the option for single fire or continued fire when the trigger is squeezed.

The biggest test was nailing up the three LVL members that we had to install for a structural beam. The nail gun had no problem sinking the $3\frac{1}{2}$ -inch round-head nails flush every time. I was even able to consistently countersink the nails about $\frac{1}{8}$ inch by adjusting the depth with the quick thread adjustment at the tip of the gun.

It's a pleasure to work in a smaller place without dragging a hose around or waiting for a compressor to catch up. We didn't have to wait for the motor to ramp up either and found that the ability to drive three nails per second was plenty fast enough for us.

According to Metabo, the included 2.5-Ah battery will drive 900 nails per charge. After a few weeks of using it inside to frame walls in a kitchen remodel and outside to frame a sunroom, it still has half a charge left.

The nailer comes with a pivoting belt hook and a nicely sized zippered storage bag, so we can easily take it along to our next framing job. Price: \$450. metabo-hpt.com

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Metabo HPT's MultiVolt cordless framing nailer has a brushless motor powered by a 36-volt battery (1). Both clipped-head and round-head versions are available; the author tested the round-head version (2).

Flex 24-Volt SDS-Plus Rotary Hammer Drill

BY MARK CLEMENT

I have something of a love-hate relationship with rotary hammers. On the one hand, most tools in the pro category are well-designed and get jobs done that need doing. On the other hand, those jobs that require the jackhammer-like pulverization that rotary hammers are uniquely designed to dish out aren't my favorite. But after using the new Flex side-handle 1-inch SDS-Plus rotary/chipping hammer to break up a wiremesh mud bed and a lot of tough circa-1950 ceramic tile during a kitchen remodel, free up a metric ton of plasterboard, drill holes in concrete for lags and shields, and remove trim, this rotary hammer has more than earned my appreciation because it makes those jobs easier. (Pro tip: A rotary hammer fitted with a 1½-inch spade iron and set to chip-only mode makes for a fantastic 24-volt pry bar.)

With a 5.0-amp-hour battery, this powerful tool is built to work all day and then some, but perhaps its best feature is that it comes with a quick-change three-jaw Jacobs-style chuck. Pull a collar back, remove the SDS bit holder, swap in the chuck, and you suddenly own a low-speed, high-torque cordless drill that you can use to mix mortar, thinset for tile, concrete in a bucket for a plumbing penetration repair, or joint compound. It's also great for drilling big holes.

As a test, I tried sinking a number of 5/16-in. x 6-in. structural screws. While I do that regularly with the impact driver, everything gets hot after a while. In drill mode and fitted with the Jacobs-style chuck, the Flex rotary hammer ran cool and smooth.

The battery swaps out easily, both from the tool and from the charger (I have some cordless tools for which it's a micro-wrestling match to get the battery out or back in, a headache I don't want). I'm not beholden to any particular battery platform, and I work alone, so I don't mind having a few different chargers, but I recognize the extra cost. The tool performed beyond well, and it's at least two tools in one—whether that's worth the financial outlay for another battery platform depends on the other tools you have and the kind of work you do.

The rotary hammer comes with a zippered ballistic nylon tool bag, which does what it's designed to do but manages to be both too much and not enough at the same time. I have never—not once—zipped one closed in my whole life. Thus, I have reassigned it as a lunch box and keep the tool and bits in an old-school rigger's bag. Price: \$300. flexpowertools.com

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While the Flex FX1551A rotary hammer is designed for SDS-Plus bits, its brushless high-torque, low-speed (0–980 rpm) motor is ideal for driving large drill bits through thick material. Here, the author is drilling a pilot hole through wall framing with a ship auger bit as part of a window retrofit project (1). The battery-powered tool comes with an adjustable side handle, built-in LED lighting, and both an SDS-Plus bit holder and a ½-inch metal chuck (2).

BY MATTHEW NAVEY

My father, John Carroll, and I specialize in small custom masonry projects and make our mortar in small batches. Adding just the right amount of water to the mix of sand and masonry cement—the key to producing a very good mortar with the right consistency—can be tricky, so recently we tested the Collomix AQiX Water Dosing Unit, a handheld battery-powered meter that connects to a hose, to see if it would help. Its buttons are reminiscent of a television remote: a pause and play button as its power button, plus and minus buttons for digitally scaling up and down the water you intend to let out, two memory preset buttons, and a function button. Being a German manufacturer, Collomix offers dosing in either liters or gallons. If you use gallons, as we did, the meter can be adjusted in tiny, hundredth-of-agallon increments.

Because the AQiX measures the water content precisely (the company claims that the device is accurate to 0.05 quart), the tool can be used to make higher-quality mortar or concrete. More importantly, it does this repeatedly; by putting in the same amount of water for every mix, you can have consistent quality. The trick is in the initial batches—finding the approximate amount of water for the result you want. I recommend using a hose with a splitter for this part; that way, you can attach the AQix to one short length of hose and use the other hose for cleaning up and adding small amounts of water to the first few batches if they aren't right.

Our normal batch consists of 2 gallons of masonry cement (around a quarter of a bag) to 5 gallons of sand. With dry sand, we found that 1.2 gallons of water mixed into the sand and masonry cement made very good mortar, and with the AqiX, we were able to achieve the same result with every subsequent batch. (For a full bag of masonry cement, you'd need to set the dosing meter to about 4.5 gallons of water.) Because the water was precisely metered, it sped things up, too.

On a recent job, we mixed up 30 bags of concrete, using the AQiX to precisely meter out 2.6 gallons of water for every two bags of concrete. Not having to manually measure out the proper amount of water for each batch saved us a lot of time, allowing us to complete the pour in about two hours. Metering the exact amount of water all at once is much quicker and easier than gradually adding water to each batch until it reaches the proper consistency, especially in larger builds when we make many batches in a day. Price: about \$250 online. collomix.us

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The Collomix AQiX delivers pre-selected dosing quantities from 0.3 to 99 quarts, in 0.1 quart increments. It connects to a garden hose with a standard ³/4-inch hose coupling (1) and has a battery-powered display (2). It comes with a metal bracket that can hook onto the mixing vessel (3).

DeWalt TStak and ToughSystem 2.0 Organizers

BY BARRETT SITES

When remodeling and doing home repairs, you never know what you're getting into or what you will need at the jobsite or at a client's house. And even when you have what you need, you might not be able to find it; I've searched my work van for fasteners or other supplies in vain, knowing that they were in there somewhere but being unable to locate them. It's frustrating to purchase a replacement only to find the item later when looking for something else. And it costs time: A trip to the local hardware or big-box store or lumberyard may take only 15 minutes, but those minutes quickly turn into an hour away from your project, not to mention the loss of momentum.

TStak. To solve this problem, I've recently been storing my fasteners, accessories, and tools in several DeWalt TStak storage boxes. The boxes are modular, so they can be stacked in different combinations, and they have latches, so they can be locked together. They can also be locked to a rolling mobile storage unit, a deep toolbox that has 7-inch wheels for going up stairs or over rough terrain and a retractable handle (also available in the TStak system is a cart and a luggage carrier-style trolley).

Some DeWalt tools, such as my DeWalt track saw, come with a TStak storage box; the boxes are available in different sizes to fit both small and large tools. For example, I keep my track saw in one TStak box and store an assortment of drill/drivers and batteries in another. The boxes come with plastic dividers, making it easy to customize them. DeWalt also sells foam inserts separately, and you

can find after-market solutions from other companies. In addition, I've used packaging foam, ½-inch plywood, and shop scraps to customize my boxes.

ToughSystem 2.0. I also acquired DeWalt's ToughSystem 2.0 DS100 organizer, which the company says is stronger and 20% bigger than the similar TStak box (and more expensive). The organizer has 12 removable cups—eight small cups and four larger ones—that lock into place with a water-sealing lid that gives the box an IP65 rating. It can be secured with a padlock and has new auto-connecting side latches that interlock with other ToughSystem toolboxes and with a workshop racking system. DeWalt also offers rack systems for standard-height trailers and vans and for Sprinter-style tall vans. The boxes have a rear center mount that allows them to be attached to the appliance cart-style DS Carrier.

ToughSystem 2.0 boxes are backward compatible with original ToughSystem boxes and range in size from 7 inches deep to almost a whopping 39 inches deep for the DS450 rolling toolbox. Along with various sizes and configurations of toolboxes, you can add a 27-quart cooler for drinks and lunch and a Bluetooth radio and charger to the system.

Though DeWalt does not have an adapter to connect the TStak and ToughSystem boxes together, I have found after-market connectors. dewalt.com

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DeWalt TStak storage boxes are available in various sizes and configurations and have side latches that allow them to be connected together as a unit. Here, several boxes are stacked on top of a wheeled storage box, which also has a handle (1). The organizer box has a clear lid and removable cups (2). ToughSystem 2.0 boxes are slightly larger and made with more robust materials but are based on the same concept. Both storage systems can be customized with foam inserts (3).