Toolbox

Two New Cap Nailers

by Jeremy Hess

Several months ago, I tested cap nailers and staplers for a JLC tool test (see "Pneumatic Cap Nailers," 8/06). Shortly afterward, Bostitch came out with a whole new gun, and Spotnails updated the model I'd tested. For a follow-up article, my co-workers and I spent about three months using these two latest versions, mostly to install housewrap and roofing underlayments on various projects. Both guns can also be used to install foam sheathing and other types of rigid insulation.

Bostitch N66BC-1 Cap Nailer

The N66BC-1 is Bostitch's second cap nailer; its first was the SB-150SLBC-1 18-gauge cap stapler.

Other than sharing the same cap magazine, the two tools have little in common.

Bostitch introduced the nailer version for locations where code requires that felt paper and housewrap be fastened with nails. It's based on the company's N66 siding nailer and shoots 15-degree plastic or wire collated coil nails from $1^{1}/4$ to $2^{1}/2$ inches. Because of its ability to drive a $2^{1}/2$ -inch nail, the N66BC-1 would also be good



for installing 1-inch or $1^{1/2}$ -inch foam sheathing.

The first thing I noticed about the new nailer was its large size. It weighs almost 6 pounds, about a pound more than the stapler. Simply put, I didn't like this tool as much as the stapler, which was my favorite in the original test. My biggest beef is with the cap capacity. Since it holds only 100 caps, you end up reloading twice before you empty the 300-nail magazine.

Cap Nailer Specs									
Brand	Model	Street price	Weight (in pounds)	Fastener type	Fastener length (in inches)	Cap capacity	Fastener capacity	Cap collation	Toolless depth- of-drive?
Bostitch 800/556-6696 bostitch.com	N66BC-1	\$330	5.8	nails	1 ¹ /4 to 2 ¹ /2	100	300	strip	yes
Spotnails 800/873-2239 spotnails.com	TCS6832	\$225	4.88	staples	⁵ /8 and 1 ¹ /2	200	200	coil	no

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Still, the gun does have some nice features. The company includes the optional bump-fire trigger in the kit so you don't have to go scrounging for it later. The gun also has an effective depth of drive, adjusted by a simple thumb-wheel. And though it may not be that important on a tool like this, the adjustable exhaust is a nice feature, too.



The size difference between these two tools becomes obvious when they're placed side by side: Whereas the Spotnails is a medium-crown stapler, the Bostitch is essentially a siding nailer. The author prefers the smaller size and lighter weight of the Spotnails, but the Bostitch — which accepts up to a 2½-inch nail — is better-suited to installing thick layers of foam insulation.



Spotnails made revisions to its Crossfire stapler in response to user complaints. The biggest problem was the tape used to collate the caps. Plastic tabs now connect the caps and break reliably on every shot (above). The company also added a belt hook to the front of the housing (right).

The verdict. The N66BC-1 would not be my first choice for a cap gun; it's just too big and heavy compared with all the other offerings.

However, if your code specifies nails for roofing underlayment and housewrap, or if you need a gun for installing foam sheathing, this one could prove to be a worthwhile investment. We didn't experience any jams during our testing, and we found both of the tool's magazines well-designed and easy to load.

Spotnails Crossfire TCS6832

Though Spotnails didn't completely overhaul its Crossfire cap stapler, it definitely made some improvements. A new belt hook makes the small tool even nicer to use on steep roofs. At less than 5 pounds, the Crossfire is easy to handle, and — thanks to its rear-mounted magazine — well-balanced. It accepts staples from $^{5}/\!_{8}$ inch to $1^{1}/\!_{2}$ inches, so you can use it with thinner sheets of foam insulation.

In my original test, my major gripe was with the caps themselves. They were held together with a strip of clear tape that sometimes failed to tear, resulting in a string of caps being pulled out of the magazine when you repositioned the tool for the next shot. Spotnails has remedied this huge annoyance by connecting the caps with tabs of plastic instead of tape.

My other major complaint was with how the older caps were collated: All but the most careful handling resulted in a ball of tangled caps. The manufacturer solved that problem, too, by tightly winding the caps on a sturdy spool.

The verdict. We had no problems with the redesigned tool and caps. Depth of drive was consistent and there were no jams.



The gun holds a roll of 200 caps and 200 18-gauge staples, giving it the second-best magazine capacity in the cap nailer category. (The Hitachi NV50AP3 holds 350 of each.)

With the bugs worked out, this gun quickly became a crew favorite, and we ended up relegating our old cap nailer to the tool trailer for backup.

Jeremy Hess is a lead carpenter with Heisey Construction in Elizabethtown, Pa.

Toolbox

DeWalt D24000 Tile Saw

by Michael Byrne

a former machinist, I like nothing better than to assemble a new tool, get it aligned properly, and figure out ways to improve its operation. Usually I find that I have to make adjustments to improve accuracy, or file the rough edges on aluminum castings. So when I first opened the big box containing DeWalt's D24000 10-inch tile saw, I was excited on two counts: I was happy to have a new tool, and my inner gearhead was delighted at the prospect of spending several hours fine-tuning it.

The instruction manual is printed in three languages and is quite clear about how to assemble the saw, which for the most part is

preassembled and aligned at the factory. After familiarizing myself with all the parts, I put everything together in less than 15 minutes.

It was a four-step process. First, I connected the motor arm to the frame of the saw with four Allen bolts, using a factory-supplied wrench. Next, I loosened the blade cover and installed the diamond blade included with the saw, then set the depth with the blade stop located at the top of the motor arm. After that, I attached the sliding table to its supporting frame, which



All photos by Zoë Car

DeWalt D24000 Specs

Weight: 69 pounds

Capacity: 24 inches ripping; 18 inches diagonal

Water capacity: 5 gallons Street price: \$900

DeWalt 800/433-9258 www.dewalt.com didn't require any tools. The fourth and final step entailed connecting the water pump to the supply line and positioning it in the catch pan.

Once I'd checked that the saw rotated and that its pump supplied a reasonable amount of water to the blade, I put it into service by making cuts for three medium-sized bathroom projects. It performed well, so I took it back to my shop for a few accuracy tests.

Alignment and Adjustment

In my mind, a saw that cannot be aligned or adjusted is of little use to an installer. The D24000 has multiple adjustments that allow quick and precise adjustment.

For most cutting, a saw's blade should enter the tile vertically and leave a crisp 90-degree angle on the cut. To check on this with the D24000, I used a combination square to make sure the blade was square to the sliding table; then I loosened the bevel lock knob on the back of the saw, repositioned the cutting head at a 45-degree angle, set the locking knob, and checked the angle of the blade once again.

Toolbox | DeWalt D24000 Tile Saw





The author's D24000 proved accurate right out of the box. The blade was perpendicular to both the table and the crosscut fence, and the pointer for 45-degree and 221/2-degree beveled cuts was correctly adjusted.

To make sure that the saw would make parallel cuts, I checked that the blade was oriented 90 degrees to the sliding table fence and then used the square to check the adjustable fence.

There was nothing I needed to change on the DeWalt, but I was happy to see that it had adjustments for blade square, table square, 45-degree angle cuts, cutting depth, and rail height.

Part of this machine's appeal lies in its relatively light weight of 69 pounds; most professional tile saws are closer to 100 pounds. Unfortunately, lighter saws are more likely to vibrate. To test this on the DeWalt, I attached a dial indicator from the motor arm down to the saw frame, turned the machine on, and made a half-dozen cuts through ½-inch-thick hand-molded porcelain tiles. The indicator registered less than .011 inch of vibration movement during the cutting, which is comparable to other saws I've tested.

Initial Trials

I made test cuts with scrap ceramic and stone tiles, using the general-purpose blade supplied with the saw. I practiced with crisp-edged machine-made ceramic tiles as well as with irregular-edged handmolded tiles, and found the cutting action to be smooth and clean with no excessively flaked or spalled edges.

Next, using scrap tiles again and the supplied adjustable fence, I cut 10 narrow strips and measured their width with a 1-inch micrometer. I measured each cut strip at three places — at both ends and in the middle — for a total of 30 measurements.

In a perfect world, all 30 measurements would have been the same, but for this test, the measurements ranged from .521 inch to .534 inch. With a difference of less than $^{1}/_{64}$ inch between the largest and smallest measurements, the DeWalt did very well — especially since the manufacturing tolerance for ceramic tiles allows a size variance of up to 10 percent.

Special Features

I tend to focus strictly on a saw's cutting ability; based on that alone, the D24000 is a welcome addition to my tile-tool kit. However, it also has a number of perks that make it one of the most feature-packed saws you can buy.

In addition to outrigger pans and flaps that help contain spray, the saw sports a clip that holds the two tools needed for blade changes and adjustments; a blade location indicator and a slotted table for making 45-degree and $22^{1/2}$ -degree



miter cuts; an easy-to-use blade-tilt adjustment; an adjustable coolant nozzle; and an adjustable blade-depth stop. One of my favorite features is a plunge-cutting mechanism that allows the user to do safe inside cutting without holding the tile freehand.

Complaints

I give the D24000 very high marks — but before it could be the perfect tool, it would have to undergo a few minor changes.

First, DeWalt needs to fix the blade slots: They're too wide. An installer who wants to make rips of less than ½ inch wide will find gripping the offcut difficult. Also, with no undersupport, slender cuts tend to break during cutting. I plan to fill the slots on my machine

Toolbox | DeWalt D24000 Tile Saw









Among the clever features on DeWalt's first tile saw are on-board tool-holders (top left), adjustable coolant nozzles to reduce spray (top right), an adjustable indicator for angled cuts (above left), and a unique plunge-cut mechanism (above right).

with epoxy to overcome this problem.

Second, I would like to see a positive stop (with adjustment) for the $22^{1/2}$ -degree angle slot instead of the somewhat ineffectual indicator arrow located at the front of the saw.

Third, the adjustment screws for the blade-angle feature don't feel snug enough; in fact, they slipped a bit during use. Once I added some Loctite to the threads, the adjustment stayed put.

The Upshot

On its initial shakedown, the DeWalt tile saw worked fine, and the simple tests I performed verified the manufacturer's claims of accuracy and quality control. All tests were done using the generalpurpose blade supplied with the saw. Later, I got improved cutting action on porcelain tiles by fitting the saw with an MK Hot Dog blade.

The saw is relatively easy to set up and knock down, and its many features add to its usefulness. Happily, the additional features don't add significantly to the cost. At \$900, the D24000's price is comparable to that of other professional-quality wet saws.

Contributing editor **Michael Byrne** is a tile-setter and consultant in Los Olivos, Calif., and the moderator of JLC Online's tile forum.

Toolbox | Framing | by Patrick McCombe

Topnotch Saws. Makita circular saws have long been admired for their nearly bulletproof motors — I'm still using the hypoid saw I got as a college-graduation present in 1994. But now there's even more to like about these tools. The most recent versions have lightweight, heat-dissipating magnesium housings plus cushioned grips and adjustment levers. Additionally, Makita has boosted the bevel capacity to 51.5 degrees. The right-bladed sidewinder *Model 5007MG* (top) sells for about \$150. The left-blade hypoid *Model 5377MG* (bottom) costs about \$180. And did I mention that they look good, too?

Makita, 800/462-5482, www.makita.com.



Holey Timesaver. When it comes to framing houses, I've found that the first day of work often sets the pace for the rest of the project. I've also found that Bigfoot's *Bolt Hole Marker* is one of the easiest ways to save some time on this all-important day. The device works with 2x4 and 2x6 plates and with the five most common anchor bolt sizes. It comes in stand-up (\$38) and hand-held (\$26) models; in my opinion, either one pays for itself the first time out.

Big Foot Tools, 888/798-4499, www.bigfoottools.com.

A Better Toolbelt. Looking for the toughest, best-designed tool bag out there? Check out the offerings from Diamond Back. Designed by a professional carpenter as a way to alleviate his frequent back pain, this company's wide, comfortable belts pack roomy bags with tons of pockets to keep your stuff organized and within grasp. You can configure your own custom belt or opt for one of the standard rigs, like the *Ultimate Framers Outfit* (top; \$350) or the *Remodeler* (bottom; \$385). You may scoff at the prices, but keep in mind that these belts are made in the U.S. — and that you probably use your toolbelt more than any other job-site essential.

Diamond Back USA, 800/899-2358, www.toolbelts.com.



Toolbox | Safety Gear

Fall Arrest. Falls are still the single biggest killer of construction workers in the U.S. — which is a real pity, because preventing them is a lot easier than it used to be. Products like the *Protecta Self-Retracting Lifeline* (Model AD230AG) are easy to use and can make the difference between life and death. Weighing about 27 pounds, the Protecta line holds 100 feet of ³/16-inch galvanized cable. When a worker starts falling, centrifugal force activates the device's two-pawl braking system, stopping the fall after less than 2 feet. It sells for about \$900.

Capital Safety, 800/328-6146, www.capitalsafety.com.





Double Protection. I seldom see hard hats on residential construction sites, but that doesn't mean wearing one isn't a really good idea. One crack in your coconut could change your life forever. Once you've got that hard hat on, you can start protecting your eyes, too, by wearing Foresight Safety Glasses. These ANSI-approved specs won't slide down your nose or irritate your ears. With a hard hat, they cost between \$29 and \$34, depending on the lens. Foresight, 800/608-7978, www.foresightsafetyglasses.com.

Women's Wear. Even though women make up an ever-growing segment of the construction workforce, most manufacturers continue to make personal-protective equipment sized only for men. Fortunately, AOSafety has seen the light and is offering a line of safety gear designed specifically for women. The *Select* line includes eye, ear, and respiratory protection in smaller sizes. High-quality particle masks sell for about \$5; a five-pack of disposable earplugs goes for about \$3; safety glasses cost

AOSafety, 800/444-4774, www.aosafety.com/select.

between \$10 and \$14.