Tool Test

Cordless

These tools free you from the tangle of an air hose and let you go right to work with little setup

BY PATRICK McCOMBE

It's tough to beat the speed and reliability of a pneumatic finish nailer, but when you have only a few pieces of trim to nail, dragging out a compressor and rolling out an air hose can take more time than nailing by hand. Even if you have the time, dragging a dirty hose around furniture and over carpet is unlikely to earn you a repeat customer.

It's these situations where cordless finish nailers really shine. They're also ideal for overhead work because you're freed from the constant tug of an air hose.

I recently put thirteen 15- and 16-ga. models to the test to see which had the most power, the best ergonomics, and the greatest nail-driving reliability (see "How we tested," p. 48).

Most people who buy one of these high-cost cordless nailers already have pneumatic nailers and aim to use the cordless version for smaller jobs. So I limited the test to 15- and 16-ga. models, which I believe are more versatile than 18-ga. brad nailers. The tools I tested can handle virtually any finish-carpentry task, and the wide range of nail sizes they accept (1¼ in. to 2½ in.) further demonstrates their utility.

For me, the choice came down to two nailers: the Hitachi NT65GB and the Paslode IM250A. The Paslode has a better depth-of-drive control, and its fuel is widely available, making it my top pick. At $220, the Hitachi is an easy choice for best value. If you're dead set on a 15-ga. model, I suggest the Bostitch GFN1564K, as its FN-style nails work best in hard material.

Patrick McCombe is an associate editor. Photos by Rodney Diaz.

ANGLED VS. STRAIGHT: WHICH MAGAZINE IS BETTER?

I prefer angled magazines because they provide a better line of sight to the business end of the nailer. This is especially noticeable when you're working overhead or in tight locations. One advantage of straight magazines is that the nails are less expensive. This might not be a consideration for most projects, however, as the difference between 2-in. angled and 2-in. straight nails is only about $2 per 1000. The difference becomes significant with stainless-steel nails, though. Angled versions cost $45 per 1000 nails versus $27 per 1000 for straight.

Drawings: Dan Thornton

Finish Nailers

ROAD MAP TO THE RIGHT NAILER

4 NAIL OPTIONS

NAIL SIZES

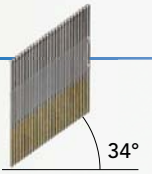
All the tools in this test use one of two sizes of nails: 15 ga. or 16 ga. Because 16-ga. nails are smaller in diameter than 15-ga. nails, some carpenters argue that they aren't as suitable for heavy-duty work like hanging interior doors and securing stair treads, but I disagree. I find that 16-ga. nails, with their thinner cross section, minimize splitting and countersink more reliably than 15-ga. nails.

Some unscientific withdrawal tests revealed no obvious differences in holding power between the two nails. Not surprisingly, however, I found that the thinner nails bend more easily. Critics might suggest that this is a problem for door hanging, but a quality installation requires at least one long screw through each hinge and into the framing anyway, which I think negates any advantage of thicker nails.

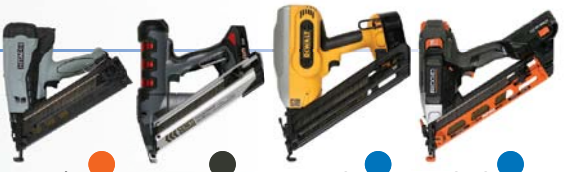
15 GAUGE

NAIL ANGLES

Both types of 15-ga. nail are angled, although the Senco-style (DA) collation angle is 34° versus 25° for Bostitch (FN). As a result, the nails are not interchangeable.

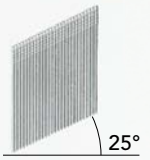


15 ga. DA



Hitachi NT65GA ● Senco FN65DA ● DeWalt DC628 ● Ridgid R250AF18

OR



15 ga. FN

Bostitch GFN1564K ●

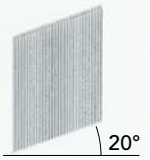
COMPATIBLE MODELS

Although the other 15-ga. models use DA-style nails, the 15-ga. Bostitch tool requires the company's chisel-tipped FN-style nail, which drove more easily than competitive DA-style nails.

OR

16 GAUGE

The 16-ga. angled nails all had the same collation angle (20°), and I was able to use all the angled tools with any of the four brands of angled nails I tried. The same is true of the straight-magazine 16-ga. nailers.

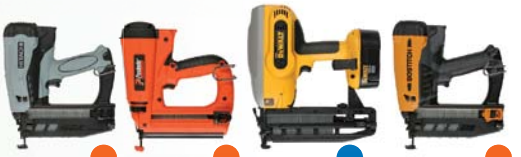


16 ga.

Hitachi NT65GB ● Paslode IM250A ● DeWalt DC618 ● Bosch FNH180-16

OR

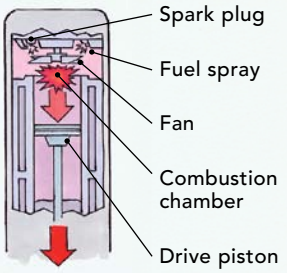
16 ga.



Hitachi NT65GS ● Paslode IM250S ● DeWalt DC616 ● Bostitch GFN1664K ●

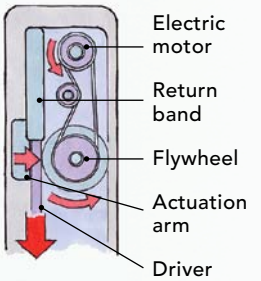
3 DRIVER OPTIONS

INTERNAL COMBUSTION ●



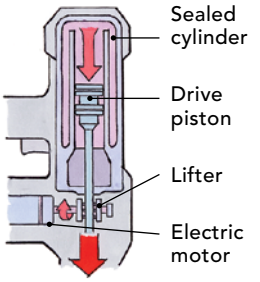
The Paslode, Bostitch, and Hitachi nailers all use internal-combustion engines powered by small canisters of compressed hydrocarbon fuel (see **"How It Works,"** pp. 20-21). These tools are light (4 lb. to 5 lb.) and drive the nail as soon as you pull the trigger. Unfortunately, you always need a supply of fuel ($7), which can drive about 1200 nails, and a charged battery. These nailers also need regular cleaning and maintenance.

MECHANICAL FLYWHEEL ●



The Bosch, DeWalt, and Ridgid nailers use the inertia from a spinning flywheel to drive nails. The flywheel is powered by an electric motor, which relies on a rechargeable battery pack. The advantage here is the elimination of the fuel, its associated expense and acrid exhaust, and the lack of regular maintenance. The drawbacks are a slight delay in firing and the need for a larger, heavier battery pack.

SEALED COMPRESSION ●



Senco's design is the first of a new category. A charge of continuously recycled nitrogen pushes a piston, which drives the nail. A battery-powered electric motor cycles the piston for the next nail. There are no fuel cartridges, no exhaust, and no delay between shots. Unfortunately, the tool is almost as heavy as the flywheel nailers.

HOW WE TESTED

To gauge nailer power, I made a test sandwich of 5/4 white oak, ½-in. drywall, and 2x4 studs—Douglas fir under one half and LSL (laminated strand lumber) under the other half. LSL is an increasingly common stringer and header material, and it's among the hardest materials a finish nailer is likely to encounter. I used a piece of pegboard as a template to mark where to drive the nails. The pegboard ensured that the nails would be evenly spaced and allowed me to judge how easy it is to put a nail in a specific spot. To test visibility and the likelihood of splitting material, I mocked up sections of white-pine crown molding and drove nails along the top and bottom edges. Finally, I milled strips of pine and white oak in thicknesses from ⅛ in. to 5⁄16 in., about the thinnest material these nailers can fasten, and used them as a means to assess the sensitivity and adjustment of each nailer's depth of drive. Ideally, the nails would be countersunk without the heads blowing through the stock.

A note on fuel cells. *They look similar, but these three fuel cells aren't all cross compatible. Bostitch and Hitachi fuel cells are interchangeable, each working in the other brand of nailer. By altering the top cap, they can both also be used in Paslode nailers. Paslode fuel cells, however, fit only in Paslode nailers.*

Hitachi NT65GB
16 ga. angled
3.8 lb. **$220**

Hitachi's cordless finish nailers are superlight and comfortable to use. Interestingly, the 15-ga. model doesn't drive nails into hard material as reliably as its Bostitch twin and tends to jam when pushed to the limit. My guess is that the sharper Bostitch-style nails make the difference because the 16-ga. versions drive nails into the densest material without a problem. On the plus side, the **HITACHI** versions cost less than the comparable Bostitch models. As on the Bostitch nailers, the depth of drive is somewhat finicky. Also, the battery charger includes power cables for 12v DC and 110v AC, so the tools can be charged in my truck if necessary.

Hitachi NT65GA
15 ga. DA-style
4.2 lb. **$300**

Hitachi NT65GS
16 ga. straight
3.8 lb. **$205**

PASLODE has had 25 years to perfect its cordless nailers, now in their third generation, and it shows. Both versions can easily handle the densest materials used in my testing. The depth of drive is consistent and sensitive, making it the best countersinking tool in the group. This isn't the lightest nailer, yet it's well-balanced and easy to handle. I also really liked that Paslode fuel is available at every lumberyard and home center I checked. The straight-nail version accepts the widest range of fasteners (¾ in. to 2½ in.), making it the most versatile tool, too.

Paslode IM250S
16 ga. straight
4.8 lb. **$320**

Paslode IM250A
16 ga. angled
4.8 lb. **$330**

Senco FN65DA
15 ga. DA-style
6.4 lb. **$400**

I like that Senco's Fusion doesn't use fuel, is free of exhaust, and has no windup when you pull the trigger. The battery pack has a clever fuel gauge, and the depth of drive is as easy to adjust as it is consistent. Unfortunately, the hard-plastic U-shaped nosepiece tends to slide around on curved surfaces like crown molding, making it tough to place a nail with precision. The **SENCO** is also the only tool with an on/off switch, which will leave you with a dead battery if you don't switch the tool off after use. Still, if you want a finish nailer free of fuel cells and don't mind paying for cutting-edge technology, this is your best bet.

The Bostitch and Hitachi nailers appear to be exactly the same tool with different magazines. In fact, I used Bostitch and Hitachi fuel cells and batteries interchangeably during testing. The 15-ga. **BOSTITCH** did better at the power test than the Hitachi version, likely because the Bostitch nail is sharper than the Senco-style (DA) nails used in the Hitachi. The low weight, excellent balance, and comfortable grips make the Bostitch tools (and their Hitachi clones) the most comfortable to use. The depth of drive is fine once set, but getting the correct countersink is somewhat finicky. I like that you can use the battery charger with both 12v DC and 110v AC by swapping the cord.

Bostitch GFN1664K
16 ga. straight
4 lb. **$245**

Bostitch GFN1564K
15 ga. FN-style
4.2 lb. **$285**

HOW WE TESTED continued

Ridgid R250AF18
15 ga. DA-style
6.8 lb. **$300**

A nose-heavy feel makes Ridgid's nailer more tiring to use than all but the DeWalt models. I also found the depth of drive to be inconsistent, sometimes leaving nails fully seated, other times leaving them proud. This nailer also had the greatest tendency to split material, even when compared to the other 15-ga. nailers in the test. Like the Bosch nailer, the **RIDGID** is compatible with two different-size battery packs; I used the thinner of the packs when weighing the tool because this is the battery that comes with the kit.

DeWalt DC616K
16 ga. straight
8.6 lb. **$275**

My biggest problem with all three of the **DEWALT** tools is their weight, which makes them as heavy as a modern pneumatic framing nailer. I also find the six-position depth of drive to be problematic and imprecise. Even when adjusted to its minimum drive, it blows nails right through thin moldings. On the plus side, the DeWalt nailers have faster cycle times between shots than any of the other flywheel tools.

This recently introduced **BOSCH** nailer has the most precise depth of drive of the flywheel models. It also has good balance, which makes it feel lighter than it is. A unique locator on the nosepiece shows exact nail placement, which is handy for ensuring that nails are in spots that are easy for the painter to fill. The 18v Li-ion battery is available in two styles: a "fat pack" for longer run-time and a "slim pack" for less weight. The larger pack, which comes with the tool, was used for weighing. Although it didn't seem to affect operation, my test tool made a somewhat annoying ringing sound after each nail was driven.

Bosch FNH180-16
16 ga. angled
7.8 lb. **$445**

DeWalt DC618K
16 ga. angled
8.6 lb. **$275**

DeWalt DC628K
15 ga. DA-style
8.8 lb. **$342**