



New 15-Gauge Finish Nailers

What to look for in your next nail gun

I recently had the chance to try out nine different 15-gauge finish nailers. The big advantage of this size gun, which for years was made only by Senco and Bostich, is the nails. Before the introduction of 15-gauge nails, carpenters had to choose between nailing by hand or using lighter 16-gauge fasteners, which often bent when they were driven in hardwood and had small heads that

by David Frane

The heavier 15-gauge fasteners are popular because they're similar to hand-driven finish nails — they're stiff enough to go through hardwood, and the heads are big enough to hold in softwood. The nails are also collated at an angle, so the nailers have magazines that slant up and away from the work. As a result, you can come at trim from any angle and the magazine will not get in the way.

I tested the new guns on a variety of carpentry tasks, and lent some of them to other carpenters to get their opinions. Most 15-gauge finish nailers drive 1¹/₄- to 2¹/₂-inch nails. To gauge relative power, I loaded the guns with the longest nails they would accept and drove them into a 3-inch-thick piece of poplar. It wasn't a rigorously scientific test, but it gave me some indication of how the nailers performed under stress. Many of the tools had trouble fully setting nails in the thick wood unless I held them very firmly against the stock. That told me the problem had more to do with recoil than lack of power.

I also drove 2-inch nails into 1¹/₂-inch-thick pine. This was a more realistic test, because nails normally have to penetrate about 1¹/₂ inches of softwood when used to case windows and doors or to install base molding.

Modern Features

Many of the features I found on these new finish nailers were unheard of just a few years ago.

Depth-of-drive. One of the best new features is a mechanism that allows you to adjust the depth-of-drive at the gun. (Formerly, the only way to control depth was to change the pressure setting on the air compressor.) The mechanism changes the length of the safety linkage: Shortening the linkage increases depth-of-set by bringing the driver closer to the stock; lengthening the linkage has the opposite effect.

Adjustable exhaust. Many of the newer guns also have adjustable exhaust ports. This may not seem like a big deal, but if you've ever caught a face full of drywall dust while nailing baseboard, you'll appreciate being able to redirect the exhaust.

Magazine and tip. In addition, about half of the guns have magazines that are offset to the right, which makes it easier for right-handers to nail close to the floor or in corners. As a lefty, I prefer a magazine that's in line with the handle.

The guns I tried also have plastic tip protectors, an improvement over the bare metal tips on older nailers, which often marred the stock.

Clearing jams. Although 15-gauge nails don't bend as often as thinner fasteners, jams do occur. In the past, you had to disassemble the front of the gun to clear jams. Now, you can usually do it by popping a latch similar to the type found on a suitcase and opening a door on the nose of the gun. Most of the time, the damaged fastener will fall right out.

Bounce-nailing. Most of these nailers are configured for contact trip; that is, they can be bounce-fired. Although most pneumatic tool manufacturers publish cautions about the safety hazard of bounce-firing, framers like the speed of this method for nailing sheathing or underlayment. But what kind of finish carpenter installs trim that way? A sequential-trip nailer — one set up for single shots — is safer and less likely to double-fire than one set up for contact trip. You can probably work a little faster with contact trip, but accuracy will suffer.

Nail types. Most of these guns use something called a DA nail. A number of companies make this kind of fastener, but carpenters most often associate them with Senco because Senco has been making them longer than anyone else. A few of the 15-gauge nailers take what many carpenters refer to as "a Bostich nail." Bostich and DA fasteners aren't interchangeable because they're collated at slightly different angles. In addition, Bostich fasteners are made from wire that's thicker and squarer than the wire used to make DA nails. I

happen to prefer DA nails because the heads are rounder and look more like hand-driven fasteners.

DA nails are available as bright, galvanized, or stainless steel; Bostich nails come in bright, galvanized, or aluminum.

Power and weight. Finally, I paid attention to the issue of power and weight. No one will notice if you add 5 pounds to the weight of a table saw, but add 5 ounces to the weight of a finish nailer and the difference will be obvious. Light nailers are easier to handle and cause less fatigue over the course of a workday.

Airy AHB0566C

For just over \$200, you can't expect to get a nailer with all the bells and whistles. The AHB0566C has a painted metal grip, a fixed exhaust port, and no way to adjust the depth-of-drive. It has a latch-operated nosepiece for clearing jams, but the latch was so stiff I needed a screwdriver to pry it open. The Airy gun had no trouble driving 1½-inch nails into softwood, but it double-fired and

refused to drive long nails home in thick hardwood.

Bostich N60FN-2

The N60FN has been around since the mid-1980s, but every few years, Bostich issues an upgraded version. The current model, the N60FN-2, has all the features you'd expect from a professional-grade finish nailer. Hidden under a protective cover on the nose is a wheel for adjusting depth-of-drive. It hasn't got a suitcase latch, but there's a door on the front end that gives access to jammed nails. I needed a screwdriver to pry open the door, which is held shut by a pair of spring-loaded pins. While this may not be the most elegant way to clear jams, the lack of a latch makes for a clean, uncluttered nose on the nailer.

The Bostich nailer exhausts through a pivoting disk-shaped port on top of the piston housing, so you can aim the blast in any direction. The gun is light and well balanced, and comes with a comfortable rubber grip. The model I tested

has a sequential-trip trigger. I'm used to bounce-firing contact-trip framing guns (the Bostich finish nailer can also be configured for contact trip), but I came to appreciate the fact that the single-shot setup almost never double-fired. This nailer is reasonably powerful, though I had to hold it very firmly against thick poplar to get it to set long nails.

Duo-Fast DAFN-6480

Duo-Fast has a reputation for making durable industrial-quality tools. The DAFN-6480 is the company's first 15-gauge finish nailer, and it has all the bells and whistles. It comes with a fully adjustable exhaust port, a cushioned grip, a tip protector, and a nose that pops open so you can remove jammed nails. The wheel for adjusting depth-of-drive is large and easy to get at, and it clicks into indexed stops so you can change depth in preset increments. While testing the gun, I turned the wheel so far toward a deep set that the gun wouldn't fire at all, but after I backed it off a bit the gun worked fine.



Airy AHB0566C

Weight: 5.1 pounds
Width of Head: 3¼ inches
Tip Protector: 1-inch plastic button
Depth-of-Drive Mechanism: No
Nail Type: DA
Street Price: \$230
Made in Taiwan

Comments: You get what you pay for. This stripped-down gun works fine on softwood but has a tough time on thick hardwood.
Contact: Airy Sales Corp, 14545 Valley View Ave., Suite D, Santa Fe Springs, CA 90670; 562/926-6192.



Bostich N60FN-2

Weight: 4.4 pounds
Width of Head: 3 inches
Tip Protector: 1-inch plastic button
Depth-of-Drive Mechanism: Yes
Nail Type: Bostich
Street Price: \$370
Made in USA

Comments: Sleek, light, and well designed. A long-time Senco competitor, Bostich is one of the few companies whose 15-gauge finish guns don't take DA nails.
Contact: Stanley Fastening Systems, Route 2, East Greenwich, RI 02818; 401/884-2500.



Duo-Fast DAFN-6480

Weight: 5.4 pounds
Width of Head: 3½ inches
Tip Protector: 1-inch plastic button
Depth-of-Drive Mechanism: Yes
Nail Type: DA
Street Price: \$350 to \$429
Made in Taiwan

Comments: A solid gun with a nice array of features. It's well balanced and comfortable in your hand, though I wish it were a half-pound lighter.
Contact: Duo-Fast Corporation, 13951 S Quality Dr., Huntley, IL 60142-6700; 847/669-7300.

The Duo-Fast nailer feels heavy, but at 5.4 pounds, its weight is actually midrange. It has a solid feel and drove nails with as much power as any gun I tested.

Fasco R4 BA-65 CT

Fasco's R4 BA-65 CT may not be the heaviest finish gun I've ever used, but it's certainly close. Considering the price (\$360), it has very ordinary features: a fixed exhaust vent, a metal grip, and no mechanical depth-of-drive adjustment. What's more, the manual, which covers a number of different pneumatic fastening tools, makes it hard to figure out exactly how to use the nailer.

The Fasco nailer has an unusual magazine that slides open like a drawer and uses a magnetic strip to hold the nails in place. It makes loading and unloading fasteners a breeze, but unfortunately, it's made from steel and adds a lot of weight to the gun. On the plus side, this gun has a lot of power and jams are easy to clear because opening the magazine provides access to the back of the nose.

Hitachi NT65AA

Hitachi's first 15-gauge finish nailer, the NT65AA, has all the latest features: a depth-setting mechanism, a padded handle, a latch on the nose, and an exhaust port with 360 degrees of adjustment. Clearly, Hitachi went all-out to produce a gun that's both light and powerful. It's the lightest nailer that will shoot 2 $\frac{1}{2}$ -inch nails, and the manufacturer claims that lab tests prove it's more powerful than comparable Senco or Bostich nailers.

Unfortunately, carpenters work in the real world, not in laboratories. The NT65AA may indeed hit harder than the competition, but it's so light that it tends to recoil when driving long nails into hardwood. Otherwise, however, this nailer worked fine for standard finish applications.

Line-of-sight is excellent because the piston housing is narrower than on other nailers; the tip, although button-shaped, has aiming marks on it, which also improve accuracy. A large thumb-wheel with indexed stops makes it easy

to change depth and use repeat setups. Cutouts on either side of the magazine not only enable you to see which size fasteners are loaded, but they make it easier to remove nails from the gun by allowing you to grip them while they're still inside.

My only complaint about the NT65AA is that it's loud and takes an odd-sized air fitting ($\frac{3}{8}$ -inch npt, not the standard $\frac{1}{4}$ -inch npt).

Makita AF631

The best feature of the AF631 is that it won't fire when empty, so you can't accidentally punch any useless holes in trim; its worst feature is the fixed exhaust port. The depth-setting mechanism consists of a post that bottoms out on a stepped wheel. The steps are numbered, so it's easy to duplicate earlier settings. The gun handled pine and thinner hardwood with no problems, but had trouble driving long nails in solid poplar. When I removed the tip protector, however, it set long nails just fine, which led me to conclude that the gun would work better if



Fasco R4 BA-65 CT

Weight: 6.4 pounds
Width of Head: $\frac{31}{8}$ inches
Tip Protector: 1-inch plastic disk
Depth-of-Drive Mechanism: No
Nail Type: DA
Street Price: \$360
Made in Italy

Comments: Considering how heavy it is, you'd think this gun would have all the bells and whistles. Instead, it's heavy and stripped down at the same time.

Contact: Fasco America Inc., P.O. Box 2389, Muscle Shoals, AL 35662; 205/381-6364.



Hitachi NT65AA

Weight: 4.2 pounds
Width of Head: $\frac{31}{8}$ inches
Tip Protector: 1-inch rubber disk with index marks
Depth-of-Drive Mechanism: Yes
Nail Type: DA
Street Price: \$399
Made in Japan

Comments: Extremely light and compact, with all of the latest features, but it's loud. It tends to recoil when driving long fasteners into thick hardwood, but it's fine for standard carpentry tasks.

Contact: Hitachi Koki USA, 3950 Steve Reynolds Blvd., Norcross, GA 30093; 770/925-1774.



Makita AF631

Weight: 5.5 pounds
Width of Head: $\frac{37}{16}$ inches
Tip Protector: 1-inch plastic button
Depth-of-Drive Mechanism: Yes
Nail Type: Bostich
Street Price: \$280
Made in Japan

Comments: Unique as the only finish nailer that won't fire when it's empty. It's compact and has an especially nice depth-of-drive mechanism.

Contact: Makita USA, 14930 Northam St., La Mirada, CA 90638; 800/462-5482.



Max NF510

Weight: 4.0 pounds
Width of Head: 3¹/₈ inches
Tip Protector: 1-inch plastic button
Depth-of-Drive Mechanism: Yes
Nail Type: Bostich
Street Price: not available; list price is \$530
Made in Japan
Comments: The lightest 15-gauge finish nailer on the market. It fires both single and multiple shots, but won't take nails over 2 inches long.
Contact: Max Co. Ltd, 585 Commercial Ave., Garden City, NY 11530; 516/222-2184.



Porter-Cable DA250A

Weight: 6.0 pounds
Width of Head: 3⁵/₈ inches
Tip Protector: Flexible plastic sleeve with aiming marks
Depth-of-Drive Mechanism: Yes
Nail Type: DA
Street Price: \$260
Made in Taiwan
Comments: Has a lot of nice features for a gun in this price range. It has good power, but is far heavier than I think a finish nailer should be.
Contact: Porter-Cable, P.O. Box 2468, Jackson, TN 38302; 901/668-8600.



Senco SFN40

Weight: 4.7 pounds
Width of Head: 3¹/₂ inches
Tip Protector: Flexible plastic sleeve with aiming marks
Depth-of-Drive Mechanism: Yes
Nail Type: DA
Street Price: \$390
Made in USA
Comments: The only oilless gun in the test. It's sleek, relatively light, and extremely reliable. Its only shortcoming is a difficult-to-adjust exhaust port.
Contact: Senco Products, 8485 Broadwell Rd., Cincinnati, OH 45244; 513/388-2000.

the depth mechanism had more throw.

The AF631 has a comfortable rubber grip, a nose that swings open to clear jams, and a pin on the side of the trigger that switches between single-shot and continuous-fire modes. The rubber bumpers on the sides of this nailer, which on Makita's pneumatic coil and framing nailers keep the tool from sliding off sloped surfaces, are a nice touch, but don't get much use in finish work.

Max NF510

Unlike the other nailers I tested, the NF510 doesn't accept fasteners over 2 inches long, but I included it because it's the lightest 15-gauge finish gun on the market. The NF510 has a wheel under the trigger for adjusting depth-of-set, but the exhaust port is fixed, and the grip is not padded. The nailer has a door on the nose for clearing jams, but unfortunately you have to remove two bolts to get the door open. When set to contact trip, I found the NF510 prone to double firing; but when I changed over to sequential trip, the gun worked fine. Switching between firing modes is a simple matter of flipping a lever on top of the trigger.

Porter-Cable DA250A


Porter-Cable has been in the pneumatic tool business for a couple of years now. The DA250A is an improved version of their original 15-gauge finish nailer, and it has all of the features a professional expects: a rubber grip, an adjustable exhaust vent, a depth-adjusting wheel, and a latch that opens the nose to clear jams. The DA250A has an especially nice tip: Instead of a button that might block your view, this nailer has a compact wire bale protected by a rubber sleeve. Aiming marks on the sides make it easy to place fasteners accurately. On the downside, the DA250A weighs 6 pounds, almost as much as the lightest framing guns.

Senco SFN40

Senco developed the SFN40 as a replacement for the older SFN1 and SFN2. It's the first gun I know of to introduce mechanical depth-of-drive and a nose that can be opened without tools. It's also the only finish nailer I tested that doesn't need to be oiled. This may seem like a minor detail, but if you've ever spilled oil on an unfinished wood

floor or had a gun with worn O-rings spray oil on the wall, you'll appreciate the value of this feature.

The original SFN40 came with a leather grip that was held in place by Velcro. I much prefer the current model's synthetic suede grip, because it doesn't slide around on the gun. Senco was the first company to use a thin rubber sleeve as a tip protector. Visibility and maneuverability are so much better with this kind of tip that I can't imagine why more companies don't use them. This gun is sleek, though not quite as light or compact as Hitachi's.

The SFN40 had no trouble driving or setting nails in any material I put in front of it. My only complaint has to do with the exhaust port, which can be redirected only by repositioning plastic plugs on the sides of the piston housing. Since the position of the nailer with respect to the work changes so frequently, I'd much rather be able to redirect exhaust by twisting an adjustable vent. 

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