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Senco AirFree 41 Cordless Finish Nailer by Ross Welsh

bought my first Paslode Impulse finish nailer about 10 years ago, after using a pneumatic trim nailer for many years. My crew and I immediately found the Impulse great for punch lists and repair work, and especially valuable for installing crown molding, where hoses can really get in the way. Paslode had the cordless market all to itself until recently, when a few new contenders have come along to grab a piece of the action. I tested the newest market entry, Senco's AirFree 41 cordless finish nailer.

The AirFree 41 is a 15-gauge angled finish nailer designed to handle nail lengths from $1^1/4$ to $2^1/2$ inches, the same fastener range as Senco's pneumatic SFN 40. The nail magazine, feeder shoe, and nose assembly on the AirFree 41 appear to be identical to those of the SFN 40 — a design that's proven to be sturdy and reliable. Beyond those similarities, the 41 is a completely different nailer.

Motor Drive

In contrast to Paslode's internal combustion and Porter-Cable's compressor-on-board technology, the AirFree 41 relies on a battery-powered motor to drive nails by converting rotary motion to linear motion. The depth-of-drive adjustment is actually an integral part of this process. This gun can be better understood if you think of the depth knob as a power setting. When it's set to drive deeper, the motor spins a little faster, delivering more power to drive longer nails into harder material.

The time it takes for the motor to get up to speed is noticeable, especially at the higher settings. To operate, you depress the safety element against the work, pull the trigger, and as the motor comes up to speed,

the gun fires. The delay between pulling the trigger and firing is described in the instruction manual as "a slight delay (milliseconds)," but it seems longer. It took me awhile to adjust my nailing rhythm to this slower cycle.

Tool Specs

At nearly $7^{1/2}$ pounds, this is a heavy finish nailer. Its pneumatic counterpart, the SFN 40, weighs just over 5 pounds, the Porter-Cable 18-gauge cordless nailer weighs nearly 8 pounds, and the Impulse angled 16-gauge nailer weighs only 4.9 pounds. Repeated overhead and out-of-position work becomes difficult with the 41 because of the weight. Although this tool is also rather bulky, that didn't bother me because it's well balanced and features a comfortable grip with a short palmto-trigger distance. At 13¹/4 inches tall, $4^{5}/8$ inches wide, and $12^{7}/8$ inches long, the 41 approaches the size of a typical coil-framing gun.

The depth adjustment knob is mounted on the driver housing, facing the operator. The depth control is easily adjusted, holds the setting well, and doesn't interfere with the visibility of the nosepiece.

Fastener capacity is listed at 104 nails, though I squeezed in 110. The nailer uses a 14-volt, 2-amp-hour rechargeable battery with a 500-nails-per-charge yield, according to the instruction manual, although one advance brochure I saw claimed a 750-nail capacity. I didn't keep track of the actual number in use, but my impression is that the depth-power setting has a lot to do with the number of nails each charge will handle. The charger will also charge other Senco batteries, from 9.6 volts to 24 volts.

Low noise. The instruction manual



Senco's new AirFree 41 finish nailer uses a flywheel to drive fasteners and does away with disposable fuel canisters. The large gun is well balanced and reliable but slower than Paslode's Impulse.

lists a noise level of 79 decibels for the gun, and it seems relatively quiet, although I've never seen sound ratings for other cordless tools. It's noticeably less noisy than Porter-Cable's new cordless brad nailer (*Toolbox*, 4/02).

Using the 41

Senco includes its standard belt hook, identical to the hook on the SFN 40, in the package. My crew members, who tend to be rough on their tools, have broken the SFN 40's hook more than once, but the hook on the AirFree 41 may last longer because it's somewhat protected by the battery housing.

Power. We typically fasten pine casing to MDF door jambs and install MDF trim over drywall. The AirFree 41 had enough power to countersink $2^1/2$ -inch nails in all our job-site situations, and we didn't experience any jams. The nailer was completely consistent and rarely misfired. Once the safety element is pushed against the work, the

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trigger must be pulled within three seconds or the tool won't operate.

To check out the tool's limitations, I set up a test in my shop. I made up two $2^1/2$ -inch-thick pieces of oak and MDF stock and, with the depth-power turned all the way up, shot varying-sized nails into the samples. While the gun performed slightly better in the oak, it failed to truly countersink $2^1/2$ -or 2-inch nails in the MDF. The $2^1/2$ -inch nails stood proud by about 1/16 inch, while the 2-inch nails set just barely below the surface. In oak, the shorter nails countersunk, but the $2^1/2$ nails consistently required more power to be driven home.

A Mixed Bag

Overall, I liked Senco's relatively simple approach to cordless nailing. We use Senco pneumatic nailers in our production finish carpentry business but for years have relied on the Impulse finish nailer for pickup work and quick repairs. In our experience, the Impulse tools have been somewhat temperamental and have required more maintenance than our pneumatic nailers. Given that, even though it's heavy and slow, my guess is that the AirFree 41 will be a steady and reliable challenger to Paslode's offerings. Neither manufacturer has developed the cordless technology to the point of seriously competing with the speed and reliability of pneumatic nailers, however.

Ultimately, I felt lukewarm about this tool. I liked the simplicity of operation compared to Paslode's cordless, but the slower firing rate required us to adjust our methods. One thing I do appreciate is the elimination of the fuel cell that powers the Impulse tools. The expense of the fuel cells adds up, but that doesn't bother me as much as the need to have them on hand. We've found that the fuel doesn't work as well when it sits around too long, so I can't stock as much as I'd like. But in spite of its shortcomings, I'll stick

with the Paslode for now.

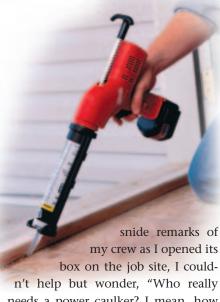
The AirFree 41 comes in a kit that includes two batteries, a charger, and a sturdy, usable case for \$369. In addition to the AirFree 41 finish nailer, Senco offers an 18-gauge brad nailer in its AirFree series and will soon introduce a 16-gauge straight finish nailer.

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Milwaukee Power Caulker

by Joe Harenski

As a residential carpenter primarily involved in renovation and restoration, I'll freely admit that I'm on the low point of the innovation curve when it comes to new tools. However, I wasn't alone in my initial reaction to Milwaukee's cordless power caulk and adhesive gun. Amid the chuckles and



n't help but wonder, "Who really needs a power caulker? I mean, how hard is it to pull the trigger on a conventional caulk gun?" While it does "reduce user fatigue," as claimed, the reason I'd consider adding this tool to my arsenal is the amount of time it saves.

One of the Family

Milwaukee's 6560 series power caulk gun nicely complements the company's other cordless tools. It uses the same 12-volt battery pack, so you won't have another charger monopolizing valuable outlets. Although it's heavier (7.3 pounds) than the average manually operated caulk gun, this tool is balanced well enough that its weight isn't an issue. It looks and operates much the same as a conventional gun, except for the obvious: When you depress the trigger, an electric motor drives the plunger rod forward, sparing you the hand-clenching action and fatigue. When the trigger is released, the plunger rod automatically retracts slightly to remove pressure on the tube — most of the time. The tool we tested was a quart-sized gun; however, with the wrench provided, the carriage frame can be easily changed out to fit smaller tubes.

In addition to the 12-volt battery provided, this gun can accommodate a 14-volt battery for extended run time, but I haven't found it necessary. If I start with a fully charged 12-volt battery, I don't have to recharge before day's end — usually after applying more than a case of construction adhesive. The gun is ruggedly constructed and looks like it should withstand the rigors of daily use.

Output Control

The best feature of this tool is how easily it applies a consistent bead of adhesive. It's an ideal tool for installing subfloors. You can count on using slightly more adhesive, but that's a plus if it guarantees a continuous bond and reduces the likelihood of floor squeaks.

The biggest drawback we found was a lack of control over the output. The sensitivity of the variable-speed trigger, which seemed to vary only from fast to faster, leaves something to be desired. The rate of application depends on how fast you move the gun. That may be okay for floor joists, where you have easy access, but ceilings are another story. Unless you enjoy singing in a rain of construction adhesive or find

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that your extra-hold hair gel just isn't working for you, I don't recommend this gun for gluing ceiling board.

Related to the issue of output control is the sensitivity of the auto-reverse feature. It works fine when the trigger is applied for more than a few seconds, but the plunger rod simply doesn't back off when you want to apply only a small dab of glue. Unless you manually draw back the plunger, you end up with an oozing mess of glue at the end of the tube. Given the remarkably even bead this tool produces, refining the issues of output would make it an excellent tool for caulking finish work.

Wish List

A reversing switch would greatly enhance this tool's versatility. As it is, I've used this gun primarily for bulk glue application.

While I have been persuaded of the advantages of a powered caulking gun, several minor adjustments would make this a better tool. The addition of a belt hook on the body of the gun would make sense. Because of its size, I frequently found that there was nowhere

convenient to set it down. Although there was some debate among the crew about this, I think an on-board poker to break the tube seal would enhance the concept of speedy application. I'd rather have to occasionally wipe the poker off on the underside of my nail pouch than waste time looking around for that elusive 4-inch screw or piece of wire to jam into the end of the tube. Finally, I'd like to see a storage clip of some sort for the wrench — perhaps something like the arbor wrench slot found on most circular saws. This tool doesn't come with a case, and it wouldn't take long for the wrench to disappear forever into that black hole in the back of my truck.

Minor drawbacks aside, this tool is a real time saver for anyone who installs subfloors or drywall on a regular basis. If I worked as a production framer, I'd consider it an essential piece of equipment. It sells for about \$220.

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