Impulse Angled Finish Nailer

by Ross Welsh

as the new IM250A Trim Master Impulse angled finish nailer made pneumatic nailers obsolete? Probably not, but it has a place in the finish carpenter's toolbox. This new tool is the most refined yet in the Paslode line of cordless finish nailers.

The basic principle of the cordless Impulse gun is the use of an "engine" to drive nails. The gun uses a fuel cell with a "carburetor" to inject gas into a combustion chamber. A battery provides a spark to ignite the fuel and drive the nail. The piston returns to exhaust the gasses and a fan is used to both cool and aid in exhaust.

Paslode has been producing cordless finish and framing nailers for about ten years now. As a finish carpentry contractor, I just had to have one when they first came out. What was called the Type I was definitely unique back then. It was a little temperamental, but the lack of a hose and compressor made it worthwhile in certain situations.

History of improvements. There have been four generations of the finish nailer. The first and second generations were similar in function and appearance. The most notable change in the second generation, Type II, was more reliable electronics. Both used the standard 16-gauge straight finish nails and a long battery that ran along the nail magazine.

The third generation was a noticeable improvement. This orange tool was lighter and more compact. The battery was shorter, which allowed the nail magazine to be correspondingly shorter without sacrificing nail capacity. The overall reliability of this generation was much better.

The new fourth generation that is

now available, the IM250A, takes a big step forward in design and usability. The most noticeable difference is the use of a new 16-gauge angled nail. This allows the magazine to angle up out of the way like other angled nailers. It uses the smaller battery of the previous model, and has incorporated a much smaller fuel cell. This is the lightest and most compact Impulse finish gun yet (see Figure 1).

When other people in my crew first picked up these nailers, their comments were invariably about how they liked the grip. I initially liked the grip, too, but found in certain situations that my

Figure 1. The IM250A Trim Master angled finish nailer (at bottom) features many design improvements compared with the earlier generations.

hand was pushed too far forward and hit the fuel cell compartment, which angles back toward the grip. I was the only one who felt this way, and don't consider it much of a problem. The distance from the grip to the trigger is longer than that of most guns, but this didn't seem to bother anyone in our crew, including the two women who happen to have smaller hands.

Fast, light and convenient. As we test drove the new angled nailer we discovered that it was faster and lighter than the previous models. The nose has a lighter touch, requiring less pressure.

This allows you to nail faster and is less disruptive when positioning material. The new depth-of-drive feature is very welcome. It adjusts easily and stays in position.

The nails load from the rear of the magazine and slide into position fairly easily. There is a lock-out feature that prevents needless blank cycling, which can mar materials, waste fuel, and damage the tool. But ten nails are left in the magazine when the follower reaches the lock-out point — this is important to know if you are changing nail size.

As with all previous models, instead of turning the gun off, the battery should be removed when not in use for extended periods. I would like to see an on-off switch but I guess that would add to the complexity. I have found that the battery in the third-generation gun is very difficult to remove without the aid of a nail set, but the battery in the new gun comes out easily.

The tool case is sturdy and provides room for all accessories, including two boxes of nails. Although this new finish nailer seems to be sturdier than the previous ones, I recommend using the

case for storage and transport. The nose on the older nailers was a weak point. If bent, it made nailing difficult.

We have used the Impulse finish nailers for many years now. They are great for small jobs and pick up work. The ease of setup can't be beat. We regularly load them with 2-inch nails and hang exterior doors in production situations (Figure 2). It gives us the freedom to walk from house to house without moving larger equipment. We still favor pneumatic nailers when we are in one place for a period of time because pneumatic guns are faster and sturdier.

Need for ventilation. One consideration about the Impulse guns is the exhaust. They emit carbon monoxide which means they should be used only in well-ventilated areas. They also need periodic cleaning, something I have always managed to get my supplier to do. It doesn't look too difficult but requires a degreaser cleaner, Impulse oil, a lint-free rag, and some simple tools.

Stats. This new nailer weighs in at 4.9 pounds, and is $11^{1/2}$ inches high, $10^{3/4}$ inches long and $3^{1/4}$ inches wide. It holds one hundred smooth-shank 16-gauge galvanized finish nails from $1^{1/4}$ to $2^{1/2}$ inches long. It is rated for intermittent use at 2 to 3 nails per second, or continuous operation at up to one thousand nails per hour. The new small fuel cell will shoot 1,200 nails, and one battery charge handles 4,000 nails.

My experience indicates that the fuel and battery ratings are conservative. Rapid nailing at up to 3 nails per second had to be limited to bursts of about 15 nails. After a small break of just a few seconds, rapid nailing could resume. Keep in mind that this is pretty fast and satis-



Figure 2. Carpenter Cori VanDyck uses the newest Paslode cordless finish nailer to install a door jamb. This nailer's light weight, compact size, and the absence of a hose are clear advantages for small jobs and pick up work.

fies most of my needs. The limiting factor is the 1,000 nails per hour. Heat limits performance, so hot weather and rapid use will slow cycle rates.

Worth the price? The new IM250A is being sold for \$499 or less. The angled nails cost about 10% more than traditional straight 16-gauge nails. Fuel costs less than \$5 per cell. When considering costs, the lack of a compressor and hose offer savings to anyone who doesn't own or intend to buy one.

The Impulse series has come a long way, and I like all the refinements and improvements that make up the IM250A.

My crew and I operate four Impulse finish nailers as a supplement to pneumatic nailers. We think they are great in certain situations, and welcome the new IM250A to the family. This new model is certainly the best, but keep in mind that the previous model is very good and can be bought for \$399, and the fuel and nail costs are also a little lower.

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TOOLBITS

Expandable Level

As much as you might want a longer level sometimes, they can be cumbersome to carry around in the truck and expensive for the limited use you get out of them. Shorter levels are convenient if you can use them with a straightedge, but lumber being as it is these days sometimes a long level is just a necessity.

Designed to address this problem for about \$55, the ComPac 4 Expandable Level expands from 2 feet to 4 feet on a machined aluminum track, or for \$99 you can get the ComPac 8, which goes from 4 feet to 8 and a half feet. *Contact*: Straightway Tools, P.O. Box 4873, Vancouver, WA 98662; 800/435-9590; www.straightwaytools.com.

Battery Upgrade

If you really liked that old Makita 9.6-volt drill but are hesitant to buy new batteries because the run time isn't up to modern standards, here's good news. The Model DC1411K 9.6-volt, 2.2Ah Nickel-Metal Hydride (Ni-MH) Battery & Quad-Voltage Charger Upgrade Kit provides 70% longer run time than the old Ni-Cad stick-batteries, and the charger handles all Makita 7.2-, 9.6-, 12-, and 14.4-volt Ni-MH and Ni-Cad batteries. It sells for about \$89. Contact: Makita USA, 14930 Northam St., La Mirada, CA 90638; 800-462-5482; www. makitatools.com.