

# Pneumatic Concrete Nailer

by Jason Buchanan

I recently had an opportunity to try out the Hitachi NC65AC Concrete Nailer (Hitachi Power Tools, 3950 Steve Reynolds Blvd., Norcross, GA 30093; 800/546-1666; [www.hitachi.com](http://www.hitachi.com)). The tool arrived at an opportune time, because we had just gotten underway with a condominium project in Keystone, Colo., that was designed to be a two-story wood building set atop an underground concrete parking structure. The job presented a myriad of wood-to-concrete connections.

I used the NC65AC for rough structural connections, such as fastening 1<sup>3</sup>/<sub>4</sub>-inch LVL balcony ledgers to pre-cast concrete retaining walls, and 2-by mud sills to concrete slabs. I also used

the tool for exposed connections where I had to secure cedar stair stringers to concrete walls.

## Reciprocating Piston Delivers Multiple Blows

The Hitachi uses a unique technique for driving concrete nails. Instead of punching the fastener home in one shot like powder-actuated tools (PATs), the Hitachi drives the pin with a series of sharp blows. This provides excellent control over the drive depth, which is invaluable when making finish connections or working with materials of varying thickness. You can go from nailing 2-by plates to a slab to fastening 3/4-inch furring strips to CMU and

never miss a beat — same pin, same air pressure. The only variable is the number of times you squeeze the trigger.

**Light and fast.** Weighing in at just over five pounds, the nailer is well designed and comfortable. It consistently provides fast, easy connections, even in applications where you have to shoot pins overhead into a concrete ceiling.

Another big plus is speed. You can set pins three times faster with the NC65AC than you can with a standard powder-actuated tool. Unlike a PAT, which must have the pin loaded into the barrel after every shot, the Hitachi uses a 54-pin coil feed. The hardened, galvanized nails are fed with the quick push of a button and, because the tool is air powered, there are no powder loads to worry about — just click and shoot.

The NC65AC has advantages over PATs when it comes to safety, too. PATs are considered a serious enough threat to life and limb that operators are required to be certified in the use of the tool. OSHA levies serious fines for failure to comply with this requirement. Furthermore, OSHA requires that not only the operator, but anyone in the immediate area of a PAT in use, be outfitted with hearing protection. I, for one, certainly did not miss the thundering explosion of the powder-actuated tool. If you have ever had the misfortune of using a PAT in a confined space, you will really understand the value of the blissfully quiet NC65AC.

I also liked the idea that I didn't have to breathe in all the smoke and gas from the PAT's powder charge. I've been on jobs with two or three guys



The Hitachi NC65AC nailer in action.



Galvanized and hardened nails from 1 inch to 2<sup>1</sup>/<sub>2</sub> inches are fed by pressing the orange button near the trigger. The manufacturer describes this tool as "a reciprocating piston multiple-blow drive system."

nailing up track for metal studs where I felt like a refugee from the Battle of Bull Run, what with all the smoke and the stench of gun powder. The exhaust from the NC65AC is just compressed air and maybe a little gun oil.

### Easy on the Operator

What I liked most about the Hitachi is that it is easy on the operator. With a PAT, you have to lean into the tool to depress it into the firing position. When the charge goes off, there is a great deal of energy expended. The concrete you're shooting into isn't going to move, so all that recoil comes up into your arm. Because the Hitachi drives pins with successive taps of the driver, each impact having no more recoil than a finish nailer, you don't feel the impact. It's a world of difference.

Another advantage of the NC65AC over a PAT is the maintenance required. A PAT is subject to serious carbon buildup, requiring regular brushing and cleaning. The Hitachi needs

only a clean air supply and a little sip of gun oil once in a while. I've had to replace a number of drivers and cracked nose housings on my PATs. I feel that the Hitachi is going to hold up to continued use far better.

### Is It Worth the Price?

If you're like me, you're probably wondering why everyone isn't using the NC65AC. The tool has been available in the States since 1990 but, because it's a specialized tool, Hitachi has not publicized it as much as they do their more widely used tools such as their framing nailers.

One possible reason is the price. An NC65AC will run you about \$760. It sounds a little steep but is actually a good value. A thousand 2<sup>1</sup>/<sub>2</sub>-inch pins are only \$75.00. Add this to the price of the tool, and you have an \$832 investment, or an installed cost of 83¢ per pin. Compare that with a Hilti DX350, which runs about \$550 for the tool and another \$257 for a thousand

2<sup>1</sup>/<sub>2</sub>-inch pins and red loads. This is an investment of \$812 or 81¢ per shot. Looks like a draw, but that's just the tool and fasteners. For the PAT, you have to factor in the cost of operator training and certification, plus the wear and tear on your elbow. Meanwhile, think about what tripling your nailing speed with the Hitachi will do for productivity.

There aren't very many tools I come across that really impress me, but this is one of them. As proof, I bought one.

I am not about to throw my PAT away; it will still come in handy when I need to shoot just a few pins and don't want to roll out the compressor. But for most of my work, I'll be happily tapping in Hitachi concrete pins while my peers are choking and banging away with their explosive charges. 

*Jason Buchanan is vice president of field operations with Framing Square Construction in Albuquerque, N.M.*

## TOOLBITS

### Shingle Cutter

Designed for fast, accurate, repeatable, and safe cuts through asphalt and fiberglass roofing materials, the *Model 1000 ShingleShark* cuts shingles face-up or face-down at any angle, including lengthwise cuts for the starter course. Granules and debris fall through the open deck, and the adjustable cutter blade is designed to minimize the buildup of tar, according to the manufacturer. The three-legged design with rubber feet helps to provide a stable base so the cutter can be used on any flat surface, including the roof, if you secure the tool with a roof bracket, a cleat or against a staging plank. The ShingleShark retails for about \$499. Contact: Qual-Craft, 1551 Central St., Stoughton, MA 02072; 781/344-1000; [www.qualcraft.com](http://www.qualcraft.com).



### Need More Air?

With an 11-horsepower gasoline engine and a 30-gallon tank on extra pneumatic tires, the *W11-30P* cranks out 17 cfm at 175 psi and is said to have easy portability and mobility. The compressor is available with a Briggs, Kohler or Honda engine. All of the 11-hp gas models come with electric start. A special heavy-duty 5-hp, 230-volt electric motor version is also available. Price varies.

Contact: EMGLO Air Compressors, 303 Industrial Park Rd., Johnstown, PA 15904; 888/883-6456; [www.emglo.com](http://www.emglo.com).