Toolbox

Hilti Reciprocating Saws

by Victor Rasilla

As a full-time remodeler in Northern California, I'm constantly reaching for recip saws. I use them for demo and for opening walls to get at plumbing and electrical wiring. Recently I had the opportunity to try two totally new recip saws from Hilti (800/879-8000, www.us.hilti.com): the corded WSR 900-PE and the cordless WSR 650-A.

A Unique Configuration

Hilti's saws are tall and bulky looking because the motors are mounted vertically, perpendicular to the blade. In rare cases, the body design of these tools might make it harder to cut in tight spaces, but I never experienced that.

The height of the saws made me wonder if they would be any good for the kind of low-angle cutting it takes to remove drywall by going down the center of the stud or across the bay without penetrating far enough to hit pipes and wires. With the blade in the standard position, neither saw could cut at as low an angle as saws with in-line motors. But if I put the blade in upside down, Hilti's saws cut at a flatter angle than I could get with other models. The top of the saw is slightly arched, which allows you to hold the blade parallel to the work and plunge it in by rocking the tool forward. This feature was useful to me because I do a lot of selective drywall cutting.

I like the way these tools are balanced. They're easy to support because most of the weight is at the rear, close to your body. The front grip is smaller than average and covered with soft rubber, so it's comfortable to hold.

The handle and trigger are two of the best features on these saws. The trigger can be operated just as easily from the top of the handle gullet as from the rear. This means it's as comfortable to cut overhead as it is to cut down low. A safety lever in the center of the trigger prevents you from accidentally turning the tool on, and the large opening through the rear grip saved me some bending because I could hang the tool by hooking the handle over the scaffold leg.

The blade clamp and shoe operate without tools. The shoe release is a recessed button on the forward grip. The twist-action blade clamp is a knurled steel knob on the end of the shaft. The knob is equipped with a lever to make it easier to turn.

Power and Mechanics

The muscle of both these tools was very good, and they both had smooth power transfer with minimal vibration at the back end. The corded WSR 900-PE pulls about 8.5 amps and felt as powerful as the 11-amp model I'm used to. At 7.2 pounds, I consider this saw light for a tool of its power.

With the blade reversed, HIlti's WSR 900-PE and WSR 650-A cut at a flatter angle than other models the author has used. The cordless saw is shown here.

Both models have a large $1^1/_4$-inch stroke length and an orbital cutting mode. The corded model tops out at 2,700 strokes per minute (spm), the cordless version at 2,200 spm. The orbital selector is recessed into the top, just forward of the speed control dial. The corded model is less likely to bog down because the smart power feature maintains consistent cutting speed by automatically varying the power input. Both models have very sensitive speed controls within easy reach of your thumb.

Cordless Version

The WSR 650-A has excellent power and cutting speed for a battery-powered

tool. It operated like a corded tool, without the jerkiness and jittery starts of some other cordless recip saws I've used. The initial charge on the battery lasted a couple of days under moderate cutting loads of metal strap ties, green Douglas fir, and 1/2-inch drywall. I didn't use a timer, but I got approximately 2 1/2 to 3 hours of run time. The WSR 650-A weighs 9.5 pounds, 2.2 pounds of which is battery. It's noticeably heavier than the corded model, but the added weight seems like a reasonable tradeoff for not having to deal with a cord.

The saw comes with a high-tech fan-cooled charger. According to the manufacturer, the charger is designed to maximize the performance and life of the batteries. The saw has a 24-volt battery with 3.0 amp-hour cells. A 2.0 amp-hour battery is available at a lower cost.

Cases

Cases are important, if for no other reason than you need a place to store spare blades. Hilti's cases leave plenty of room for improvement. The corded saw is hard to fit into the case because there's no obvious place to store the cord. The case will close, but it's awkward to get the cord inside. With both saws, blades have to be removed every time you pack the tool. Additionally, Hilti uses an odd kind of catch. The catches on most cases latch from the bottom; Hilti's latch from the top. I try to keep this in mind when I open the case, because if I open the latches the "normal" way, the case is upside down and everything spills out.

The Bottom Line

The Hilti tools have everything you could look for in a professional-grade recip saw. They have power, speed, and responsive controls. They're shaped kind of funny, but they work very well. The corded version sells for $239, significantly more than you'd pay for a recip saw from a mainline tool company. Even so, I really liked it and would consider paying the extra cost to get one. I also liked the cordless saw, but at $492, it's just too expensive for me. For that kind of money I could get a kit that includes a charger, two batteries, and three cordless tools.

Victor Rasilla *is a lead carpenter for Sattler's Construction in Walnut Creek, Calif.*

Safer, Stiffer Pump Jacks

by Robert A. Augart

As a restoration carpenter in Boston, I do a lot of exterior work repairing soffits, siding, and trim. Many of the historic homes I work on have steep roofs and three-story elevations, so I'm regularly up more than 20 feet in the air. Working safely and efficiently at that height requires a scaffold.

When I started out on my own, money was tight, so I resorted to a pair of conventional pump jacks and wood poles. It's tough trusting your life to a couple of poles made from 2x4s spiked together — once you get up more than a couple of stories, they can get pretty wobbly. Diagonal bracing helps stiffen them, but you have to remove the bracing if you want to ride the staging plank back down.

After a few years, I got the chance to pick up a used set of Alum-A-Poles (800/421-2586; www.alumapole.com), and it's become one of the best investments I've made for my business. If you're unable or unwilling to spend the $2,000 it takes to buy a new pair of 24-foot Alum-A-Poles, along with matching pump jacks, roof brackets, and a couple of 24-foot stages, I encourage you to look around for a used set. The set I bought saw almost daily use for ten years, but

Alum-A-Pole pump jacks grip a rubber pad attached to the aluminum pole. The poles' uniform dimensions and the rubber pad provide a smoother descent without the annoying hangups common with wooden poles. The manufacturer includes safety chains that can be padlocked to prevent theft.

the components are well made, and it still has years of life left. Alum-A-Poles are OSHA approved to a shoulder height of 50 feet, and setup is much quicker and easier than with wooden pump jacks — I've even done it by myself on more than one occasion.

Whenever you're more than 10 feet in the air, OSHA requires a guardrail or fall-arrest system, so shortly after my initial purchase I invested in another Alum-A-Pole accessory, the Pro-Bench. It bolts to the top of the pump jack and provides a second set of brackets, so you can use another staging plank as a work surface and protective rail. They cost about $60 apiece and are well worth the cost. Even aluminum pump jacks have a tendency to sway a bit, and it's nice to have a guardrail to grab as you move around.

But the real beauty of the Pro-Bench is that it provides you with a really handy work surface. I've brought my chop saw, table saw, and even a metal brake onto the staging. It's even a great way to get a large window in place without dragging it through the customer's house. You just ride up the jacks with the window tied off to the guardrail. I recently added a couple of hanging brackets that hold a few bundles of cedar clapboard or shingles. By having the material on the stage, you can eliminate most trips up and down the ladder. But beware: If you have two guys on the stage, you need to pay attention to how much weight in materials and tools you're adding, so you don't exceed the system's 500-pound limit.

Working safely and efficiently two stories up requires plenty of room for workers, tools, and material. Alum-A-Pole's Pro-Bench provides a comfortable work table that doubles as a safety rail. The author added a small storage area below to hold a box or two of cedar shingles.

__Robert Augart__ is the owner of Augart Construction in Boston, Mass.

Turbo Sander

by Jeremy Hess

One of the dirtiest phases of a remodeling job comes when it's time to sand drywall. I thought we had tried everything to reduce the amount of dust, but while I was at the Remodelers' Show in Baltimore this past fall, I came across a drywall sander and vacuum that looked pretty promising. The manufacturer claims that the system captures most of the drywall dust created by sanding. After watching a demonstration at the show booth for a few minutes, I thought the tool showed enough merit to give it a try.

The Turbo Sander, by the Love-Less Ash Company (Price, Utah; 800/568-3949, www.lovelessash.com) has a sanding action similar to that of a conventional orbital sander, but the similarity ends there. Instead of an electric motor, the Turbo Sander uses the air flow created by a shop vacuum to power the sanding head. A turbo-shaped impeller mounted in ball bearings provides the sanding action, as well as the tool's name. With only one moving part, the tool is quiet and light (about 3 1/2 pounds).

The sander kit includes a 12-foot hose and a fiberglass pole that extends to 7 feet, so you can reach a 12-foot ceiling from the floor. You can also connect the sander directly to the hose for hand sanding. Hook-and-loop sandpaper is available in a variety of grits, and the 4x8-inch sanding head flexes to sand both flat walls and sloped ceilings.

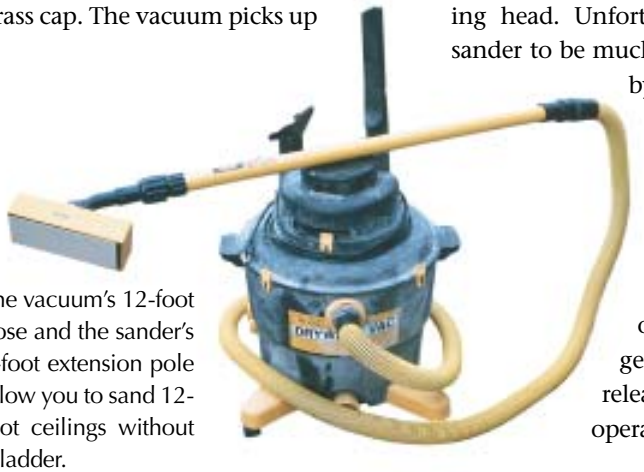
The Turbo Sander uses hook-and-loop sandpaper from 80 to 220 grit. The paper provided by the manufacturer is of good quality but costs almost $1 per sheet. Dust is collected along the edge of the sanding pad in a 3/16-inch groove.

Operation

The Turbo Sander sucks dust into a 3/16-inch groove surrounding the sandpaper — the dust travels through the hollow pole and ultimately into the vacuum. While the sander will work with just about any shop vacuum, the

company recommends its own 16-gallon wet-dry vacuum.

To prevent the cloth filter from becoming clogged, the vacuum includes a small agitator that knocks dust off the filter and into the tank. You don't have to open the housing to get to the filter; you gain access by unscrewing a brass cap. The vacuum picks up liquids without requiring you to swap or remove the filter, and it includes a drain with adjustable flow, so it's easier to hit a floor drain.



The vacuum's 12-foot hose and the sander's 7-foot extension pole allow you to sand 12-foot ceilings without a ladder.

The Verdict

I liked the extra reach provided by the extension pole and the swiveling sanding head. Unfortunately, I found the sander to be much slower than sanding by hand — in fact, I think it took at least twice as long as hand sanding. On the other hand, I estimate that the vacuum collected over 98% of the dust generated and never released even a puff in operation. The only times I saw any dust escape was when I ran over a window opening or pulled the sander away from the wall before the vacuum had a chance to inhale all the particles.

My only gripe besides the slower sanding is the connection between the sander and the hose. It's a friction fit, and after the tools were in use for a while, the hose would separate from the handle. This was easily fixed with a piece of duct tape, however. Overall, I found this sander easy to use, and it collected dust as claimed. The Turbo Sander is $170, and the vacuum runs about $200. At less than $400 — about half of what Porter-Cable's system costs — this set is a great deal for contractors in need of a cleaner way to sand drywall.

***Jeremy Hess** is a carpenter with D.E.R Construction Inc. in Bainbridge, Pa.*

THEFT PREVENTION

Black-Light Bar Code. Serial numbers and tracking badges are often the only means of proving that a power tool is hot, but removing or obliterating them is easy. The new *I.D.ology System* from ToolWatch uses identification fluid made from special ink. Even if the identifying badges are scraped or sanded off, the I.D.ology System's label will be visible under a black light. According to the manufacturer, the system is court-admissible as proof of ownership. Book 'em Danno! A starter kit with 500 labels, detection light, warning signs, and 60 ml of security fluid sells for $2,000.

ToolWatch, 800/676-4034, www.toolwatch.com.

Come Out With Your Hands Up! Vehicle and heavy-equipment theft is epidemic in this country, but the LoJack *Theft Prevention System* should help level the playing field. When a vehicle equipped with this system is reported stolen, the internal RF transmitter is remotely activated, providing police with a signal they can track to the vehicle's exact location. According to the manufacturer, the system has led police to sophisticated chop shops and shipping containers filled with stolen equipment. The tracking unit for vehicles sells for about $700; the unit for construction equipment costs $100 more. There are no monthly monitoring charges, and the manufacturer provides computer and tracking equipment (shown) to law enforcement free of charge. The system is available in most urban areas.

LoJack, 800/456-5225, www.lojack.com.

THEFT PREVENTION

Wireless Security System. A hard-wired security system installed on every job and inside your construction trailer might be a great way to reduce vandalism and theft, but installation is expensive and you need access to a phone line. The *Tattletale alarm* uses "cellemetry," a cellular signal that the maker claims is 20 times faster than regular cellular. When the alarm is activated, the device calls a monitoring station that alerts police and others of your choosing. The system includes some pretty cool wireless accessories that work with the alarm. One that's particularly useful for construction applications is *The Loop* ($125), a device similar to a cable bike lock, except that it activates the alarm when somebody tries to remove it. It seems perfect for securing ladders, building materials, and lock boxes. The alarm unit sells for $800, and monthly monitoring runs $30 per month.

Tattletale Alarms, 888/835-5668, www.tattletalealarms.com.

Computer-Assisted Tool Tracking. Once you have more than a couple of employees, locating tools and preventing theft and loss becomes a constant struggle, but *ToolWatch Express* is meant to help. Designed for construction companies with 20 to 50 employees, the system uses PC-based software and bar-coded stickers on your tools. Tools are scanned whenever they go in or out, so you have a constantly updated list of who has what. The manufacturer claims that company tools thought to be long gone often magically reappear when the system is introduced. Prices start at $1,000.

Bosch, 877/267-2499, www.boschtools.com.

Ladder Lockdown. You might think it would be tough stealing a 30- or 40-foot extension ladder in the middle of night or from an occupied construction site, but it happens every day. To prevent the loss of your expensive aerial equipment, you could try *Reliable Ladder Locks*. The easy-to-use shackles can be mounted on your ladder rack, in your shop, or on the job site. They're also good for keeping your ladders from coming off your truck or trailer during transport. They sell for $50 per pair.

Reliable Ladder Locks, 888/819-9444, www.reliableladderlocks.com.