#### **COLLATED SCREWDRIVERS**

**High-Speed Cordless.** According to the maker, the *SF 4000-A* is the first cordless screwdriver with the power, speed, and endurance to rival corded models. The 4,000-rpm tool can be fitted with a 50-screw magazine (\$100) to speed production even further. Battery power comes from a 2–amp-hour nicad battery or an optional 3–amp-hour NiMH battery. With an adapter (\$35), you can mount either pack on your belt, making the tool noticeably lighter. The molded knuckle guard protects hands from metal framing and directs cooling air to the front, so you get less drywall dust blowing in your face. The tool sells for \$349, with two nicad batteries. **Hilti**, 800/879-8000, www.us.hilti.com.

Jack of All Trades. It's hard to get bored doing remodeling work: One day you're hanging drywall and the next you're building a deck. If you're looking for a collated screwdriver you can use on all your projects, check out the Senco *DS275-18v*. This 18-volt tool has an adjustable depth-of-drive, accepts screws from 1 to 3 inches long, and spins at 3,000 rpm. It sells for about \$200, including two batteries.

Senco, 800/543-4596, www.senco.com.

**Stand-Up Deck Driver.** Screwing down deck boards may be a great way to prevent cupping and donkey tracks, but all that kneeling can be tough on your knees and back. The *P13 autofeed screwdriver* from Pam offers a more comfortable way to screw decking and subflooring. Powered by a Milwaukee drill, it can accept fasteners from 1 to 3 inches long. In addition to standard galvanized deck screws, the company offers screws for fiber-composite decking that are meant to eliminate mushrooming around the screw head. The composite deck screws are available in red, green, tan, and stainless. The P13 with stand-up extension has a list price of \$360. The coated deck fasteners sell for \$69 per 1,000; stainless versions go for \$187 per 1,000.

Pam Fastening, 800/699-2674, www.pamfast.com.



#### FLOORING TOOLS \_

Floor Jack. Installing the last row of strip flooring or fighting a bowed board can be a real pain. While improvised solutions like wedges and flat bars sometimes work well enough, there is a better method: the Powerjack. The tool's ratcheting action makes it easy to get a tight fit between boards. And, unlike a flat bar, the Powerjack frees both of your hands for fastening. There are two versions: Model 200 (left) has a plate that's screwed to the floor and is designed primarily for straightening a bowed board in the field. Model 100

Powernail, 800/323-1653, www.powernail.com.

(right) is more versatile. It's meant to be braced against a

wall for tightening up that last row or two, but you can

also use it in the field by placing it against a temporary

cleat screwed to the floor. I found the jacks on the Web

**Moisture Management.** There's only one way to know for sure whether subfloors and slabs are dry enough for finish flooring: Use a moisture meter. Unlike cheaper alternatives, the Delmhorst *BD-2100* can test a variety of

materials in addition to wood, including gypsum, insulation, and concrete. Prices start around \$280. The optional probe (model 21E) for deeper tests adds another \$50. Given increased concerns about mold and moisture damage, this is one tool every contractor should consider buying.



Delmhorst Instrument,

877/335-6467, www.delmhorst.com.

**Out of a Jamb.** Slipping finished flooring under door jambs can be faster than other methods, and the results often look better. But conventional handsaws scrape your hands against the subfloor, and electric jamb saws may be too expensive if you're not a full-time flooring contractor. Here's a happy medium: the *Hand Undercut Saw.* It cuts efficiently on both the pull and the push stroke, and the offset handle keeps your knuckles

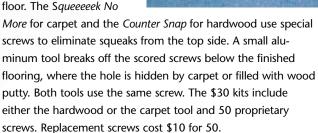
Mortensen Industries, 800/811-4325, www.jam sawman.com.

about \$22.

from dragging. The saw sells for

for \$218 each.

**Squeak-Stopping Screws.** Few things irritate new-home buyers more than floor squeaks, but solutions aren't always easy — especially when squeaks are on the second



O'Berry Enterprises, 800/459-8428, www.squeaknomore.com.



# DeWalt 433 Belt Sander by Derrell Day

Belt sanders are the tool of choice for smoothing rough wood or flattening out mismatched glue joints. Their ability to quickly remove large amounts of material with just a few passes makes them indispensable timesavers. But what renders them so effective can also make them dangerous, as anyone who's ever gouged a workpiece with a belt sander knows.

Most belt sanders use two similarly sized rollers mounted fore and aft with a flat surface (platen) for the belt to ride against. The motor is mounted above or behind the roller assembly. The design is simple and generally effective, but it's also a little top-heavy. In the hands of a novice, the tool's shortcomings can ruin the work. Even in the hands of a pro, the tool can be prone to tipping, which can spell disaster. That's what DeWalt's new tool is designed to prevent.

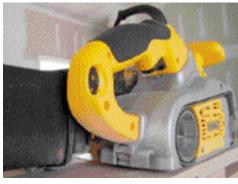
#### What's Different?

Lowering the center of gravity in racecars and sailboats gives them greater stability, and the same is true of belt sanders.

In an effort to make the new DW433 more stable, DeWalt's engineers have lowered the tool's center of gravity by putting the motor just above the platen. They did this by adding a third roller to the front of the machine so the belt can travel over the motor. The position of the two front rollers allows the sander to get much closer to vertical obstructions like walls and cabinets.

The designers also kept the right side of the sander free of any protrusions that would prevent the user from sanding right up next to a wall or other vertical surface. Taken together, these features reduce the need for touch-ups with another sanding tool.





With an extra front roller and an obstruction-free right side, the DeWalt 433 can get closer to walls and other vertical surfaces than other belt sanders. Even the dust bag, on the left side below the trigger handle, is tucked out of the way. Belt speed is adjusted with a rotary dial mounted on the rear handle. Electronic circuitry maintains the setting under load.

### **Pros and Cons**

The trigger handle is rubber-coated for reduced vibration and a better grip. The front grip is removable and can be placed either on top or in front of the housing. The 433 has electronically controlled variable speed from 850 to 1,450 feet per minute. The speed control uses a rotating dial mounted on the rear handle. It can be adjusted under load, and the electronic control keeps the belt turning at a steady speed even when additional pressure is applied to the tool.

The platen is generously sized and is machined completely flat, a feature that sets the DW433 apart from its competition. Combined with the low center of gravity, this gives the sander a smooth and stable feel. I never detected even the slightest tendency for this machine to tip, even when sanding at a 10-degree angle against the grain, as I often do.

Dust control on most belt sanders is

hopeful at best, but the DW433 has this problem pretty well licked: I found dust pickup to be excellent. When you don't want the dust bag attached, there's a sliding valve to close the dust port, which keeps dust from blowing into your face. The dust bag is easily detached and emptied, and it didn't hinder me in any way while in place.

Belt replacement is quick and easy with a large thumb-lever release located on the front wheel assembly. The tracking adjustment located below the release made adjustments easy, but I did notice that the adjustment knob on the tool I tested seemed to be a little looser than it should have been. While the loose knob concerned me, I didn't need to make any further tracking adjustments after the initial setting, and the belts stayed true throughout the test.

Weight a factor. If you use this belt sander a lot, you can probably cancel your gym membership, because it's



heavy. It weighs in at about 11<sup>1</sup>/<sub>2</sub> pounds. Everyone on the crew who tried this tool remarked immediately about its weight. I'm sure the sander's metal housing contributes to this. While the weight was advantageous for sanding on a flat surface and actually contributed to the solid feel, vertical surfaces were another matter.

**Nose dives.** We had another gripe: Every time we finished sanding and set the sander down on its nose, it fell over. Belt sanders should be designed so they



can be placed upright on their nose, the most natural position for putting the tool down and grabbing it again. Everyone who used this sander set it on its nose, only to watch it tumble over.

The kit I tested comes with a frame that allows the sander to be benchmounted, but the setup was time-consuming. The frame works well enough, but it won't replace the sanding station An optional sanding frame converts the tool from ordinary hand-held use to a bench-mounted sanding station. It's included in a kit version of the tool and adds about \$30 to the cost.

in your shop.

Overall, I liked the DW433; it represents a major breakthrough in belt-sander design. I'd love to see it produced in a 4-by-21-inch model for large surfaces like stair treads and countertops. Its dead-flat platen, low center of gravity, and significant weight would all be pluses for leveling large areas.

The sander (without the frame) sells for \$190 on the Web. A kit that includes the sanding frame sells for about \$30 more.

**Derrell Day** is a finish carpenter and general contractor in Panama City, Fla.