

NEW Tools FOR 2000

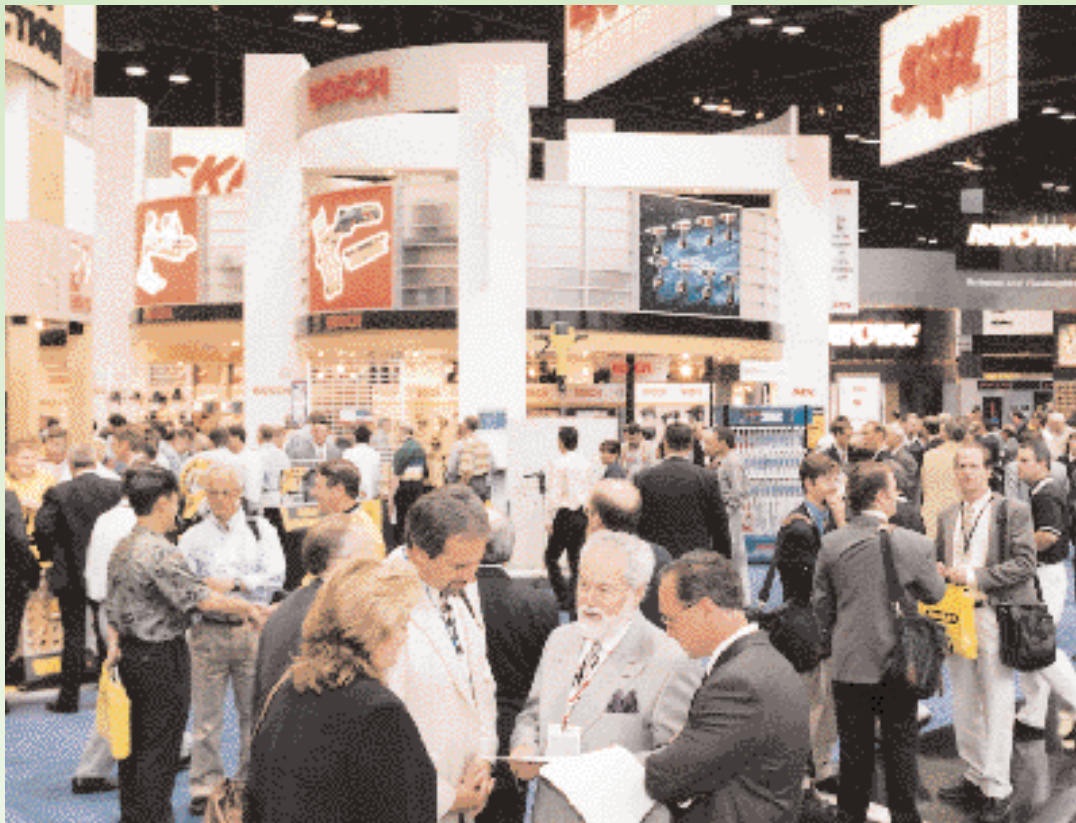
In recent years, the line between consumer-grade and professional-duty tools has been blurred, often by marketing hype that substitutes image and attitude for quality and integrity. Nowhere is this more

by Dave Crosby

evident than at the annual National Hardware Show in Chicago, where manufacturers introduce new tools to buyers for hardware stores and home centers as well as lumberyards and contractor supply houses.

At this year's show in August, I was reassured to find manufacturers who still understand the difference between consumers, for whom tools are often status symbols used occasionally, and tradespeople, for whom tools are essential to their livelihood. These companies continue not only to provide high-quality tools, but to promote them with the kind of accurate information and meaningful performance specs that construction pros need to make a well-informed decision. And be assured that your decisions count, and that you are voting with your wallet every time you buy.

Hundreds of new tools and new features were introduced this year. Throughout the coming year, I'll be taking a closer look at as many of these as possible. In the meantime, here's a brief look at some of the latest developments I found in the major tool categories.



**Our pick of cordless,
AC, and air tools
from the National
Hardware Show**



Figure 1. Makita's new blade-right 6½-inch 18-volt cordless circ saw (left) is joined by three dust-collection models made specifically for cutting wood, metal, and fiber-cement (shown here, far left).

Cordless Tools

A year ago, we were wondering if the extra power of the new 18-volt circular saws and drills would justify the added weight. Little did we know that the 24-volt tools that showed up at this year's show were already in development. While 24-volt technology shows promise, conflicting claims for battery runtime, cycle life, and usable power are still coming from all sides. And don't be fooled into thinking that more voltage automatically means a better tool. There are plenty of 14.4-volt tools, including some introduced just this year, that may turn out to be the best tool for the job.

At this year's show, we also saw more cordless "kits" at attractive prices. While these tool bundles reduce the number of battery brands and sizes you have to deal with, they also limit your ability to shop individual tools for price and performance. And unless you have an unlimited tool budget, kits may lock your company into a brand-based "platform" for cordless tools that may not meet future needs.

Cordless circ saws. Although the 6½-inch, 18-volt circular saws introduced last year have not met with wide acceptance yet, most manufacturers added to their lineups in the belief that it's just a matter of time before these tools find their way into the field.



Figure 2. Porter-Cable's line of 19.2-volt tools includes the 6½-inch Saw Boss circular saw, the Hammer Drill (right), the Driver/Drill (far right), and a Worklight.





Figure 3. The Bosch model 3960CFK 24-volt saw will be available in mid-November as part of a \$489 kit that includes a driver/drill, flashlight, two batteries, and a charger.



Figure 4. DeWalt's new 24-volt saw runs on either a battery or an AC/DC converter that plugs into a standard outlet. The converter can also be swapped with the battery in the company's new cordless 7/8-inch SDS rotary hammer, 1/2-inch hammer drill, and reciprocating saw.

Makita introduced four new models — a blade-right version of last year's saw, plus three special-purpose saws with dust collection (see Figure 1). Of these, the fiber-cement saw was most impressive to anybody who has ever cleaned up after cutting the stuff with a regular circular saw and a standard blade. Makita reps had both corded and cordless models hooked up to vacuums and were steadily cutting fiber-cement siding on the floor of the convention center without a speck of dust to be seen.

In my opinion, Porter-Cable nailed cordless saw ergonomics with its Saw Boss (Figure 2). The balance and handle position of this saw are so well designed that it will be just as comfortable for vertical and overhead cuts as it will for standard cuts on top of a work bench. It's part of a line of 19.2-volt tools that includes a driver/drill, hammer drill, and work light.

Bosch brought out a 24-volt 6 1/2-inch blade-left cordless saw that includes a dust port for vacuum attachment (Figure 3). This saw is part of a 24-volt kit that includes a driver/drill and flashlight, two batteries, and a charger.

AC converters. While more and more tools are showing up cordless, two manufacturers have put the cords back on to their cordless tools. DeWalt's new 24-volt line is equipped with both a battery and an AC/DC converter (Figure 4). The converter is the same size as a battery pack, but it plugs into the wall for unlimited runtime where AC power is available. Performance is said to be the same either way.

The homeowner line of Skil tools also includes an AC/DC converter. S-B opted to introduce this for the DIY market on the assumption that professionals use their cordless tools frequently enough that keeping the batteries charged is not a problem.

Recip saws. Here, it's the innovations in blade-clamp technology that are most welcome. In addition to wrenchless blade clamps and shoe adjustments, we now have auto-eject features so you don't have



Figure 5. Milwaukee's new 14.4-volt hammer drill (shown above) and T-handle driver/drill both use a reversible 2.4 Ah NiCad battery. Changing the battery orientation alters the tool's balance, making it more comfortable to use in various positions.



Figure 6. The improved torque of cordless impact drivers from Hitachi and Makita make them ideal for such tasks as driving screws or lag bolts into dense material.

to handle a hot blade. And while 18-volt models abound, Bosch and DeWalt now have 24-volt recips.

Driver/drills. The most eye-catching development in this category was the battery in Milwaukee's new 14.4-volt hammer-drill and T-handle driver/drill. Not only does the 2.4 Amp-hour NiCad offer substantially more runtime than earlier batteries, but it's also reversible (Figure 5, previous page). This feature enables the user to switch the position of the battery end for end, changing the balance of the drill for maximum comfort in different positions or confined areas. The reversible battery is also compatible with existing tools and chargers, and it only takes seconds to make the change. Speaking of fast changes, both tools include keyless chucks.

Impact drivers. Hitachi and Makita both introduced more compact, lighter 12-volt models with external brush holders and more torque — 868 and 870 inch-pounds respectively (Figure 6). Impact drivers may grow in popularity as tradespeople become aware that their capacity is more than double that of most driver/drills. They're the tool of choice for high-torque applications, such as driving screws



Figure 7. Makita has taken cordless technology into unknown territory, introducing a portable 18-volt cordless sliding compound miter saw, as well as a 12-volt cordless planer.





Figure 8. Bosch's new 10-inch portable table saw weighs in at 60 pounds and has a rip capacity of 24½ inches. The stationary 10-inch DeWalt has a 30-inch rip capacity, with an optional extension to 52 inches.

into dense material or setting lag bolts, and the wide variety of hex-drive accessories already available make these tools valuable for many other applications.

Cordless miter saw. In the believe-it-or-not category, Makita introduced an 18-volt cordless sliding compound miter saw (Figure 7). I tried this saw out briefly and was not disappointed. At about 23 pounds, this portable slider is well-constructed and appears to have enough power and capacity for its intended use.

Makita also offers a 12-volt, 2-inch cordless planer with a two-blade cutting head, a no-load speed of 9,000 rpm, and the capacity to plane up to 140 feet at a depth of 1/64 inch. (Hitachi has a prototype cordless planer, but no word on when it will be in production.)



Tools With Cords

There aren't as many new products here as with cordless tools, but the refinements are steady and noteworthy. It's hard to imagine a construction task for which a power tool hasn't been invented yet, and the good tools keep getting better.

Table saws. One pleasant surprise was a new 10-inch portable table saw from Bosch, featuring soft-start electronic speed control, an arbor-shaft (spindle) lock, a 15-amp motor, and a 24½-inch rip capacity

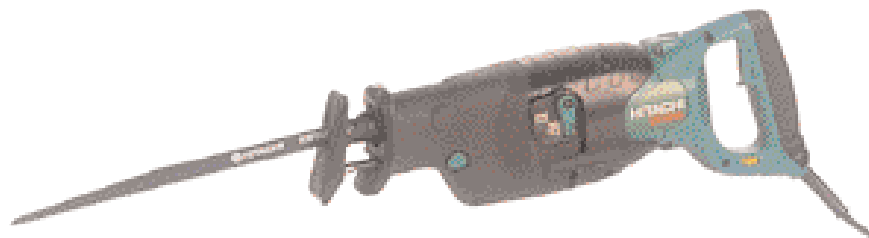


Figure 9. The "swing blade action" on Hitachi's new recip saw is said to increase cutting speed; blade removal requires no tools and can be done with one hand.



Figure 10. Pneumatic nailers continue to get more specialized. Both the Senco FramePro 650 (top left) and the Paslode Powermaster Plus (not shown) are designed with extra power for tough-to-nail engineered lumber. Both companies displayed guns for use with metal connectors, Paslode's Positive Placement Fastening System (top right) and Senco's Metal Connector Nailer (bottom right). Paslode also added the Impulse Utility Stapler (bottom left) to its line of hoseless air tools.



(Figure 8, previous page). The 60-pound saw should be going out the door for between \$450 and \$475. While the saw looks well made and includes many conveniences, the real test comes when you put the wood to it — which we will do the first chance we get.

DeWalt also introduced a new stationary 1³/₄ hp 10-inch table saw (#DW746) with a 30-inch rip capacity and an optional 52-inch fence rail system.

Reciprocating saws. Hitachi unveiled an 11-amp recip saw with a 1¹/₄-inch stroke, a new "swing blade action" designed to increase cutting speed, and a one-handed wrenchless blade clamp (Figure 9, previous page). In addition, the tool-less shoe adjustment, dial speed control, and oversized trigger switch were all welcome features.

One of the most impressive improvements found on Milwaukee's new Orbital Super Sawzall is in the blade clamp. To demonstrate the durability of the new design, a Milwaukee representative removed the blade and the shoe from a Sawzall and ran the clamp into a concrete block with the saw running at full speed. Although this demonstration continued for some time, I saw no damage to the clamp, which still accepted blades easily after this abuse.

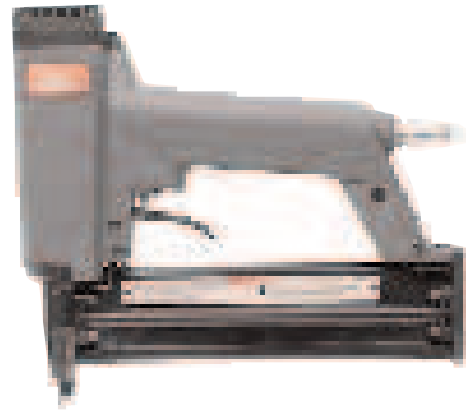


Figure 11. Senco's new line of hardwood flooring tools includes two manual cleat nailers and a tongue-and-groove stapler (above) designed for thinner hardwood and laminates.

Pneumatics

Highlights in this category came from Senco and Paslode, who both displayed nail guns specially designed to handle engineered lumber, along with pneumatic systems for driving fasteners into metal connectors (Figure 10). In addition, Paslode introduced the Impulse Utility Stapler to its hoseless tool line, while Senco unveiled a full line of manual and air-driven tools for hardwood flooring (Figure 11). Also for flooring, Stanley introduced its Mark III pneumatic cleat nailer, plus a kit to convert existing Mark III flooring nailers to cleat nailers.

Makita's new round-head and clipped-head nailers both fire 2- to 3¹/₂-inch nails, have adjustable depth of drive, and a switch for toggling the trigger between sequential and continuous fire mode. Makita also introduced the AN901 coil framing nailer, and the AG125 pneumatic nail driver, which drives single bulk nails from 2¹⁵/₁₆ inches to 4⁷/₈ inches (Figure 12).

Porter-Cable's new narrow-crown staplers both feature depth-of-drive adjustment, a non-marring tip, and a spring-loaded jam release mechanism that does not require tools.



Figure 12. For heavier nailing applications, Makita introduced a pneumatic nailer that drives single bulk nails from 2¹⁵/₁₆ inches to 4⁷/₈ inches in length.

Dave Crosby is tool editor at the Journal of Light Construction.