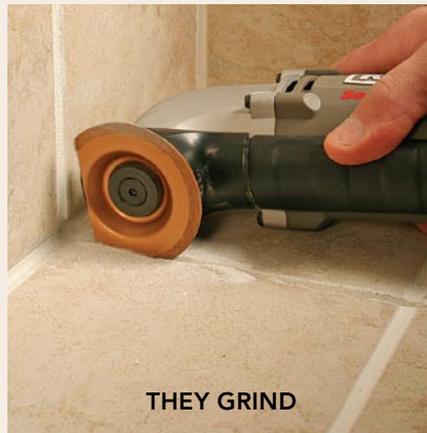
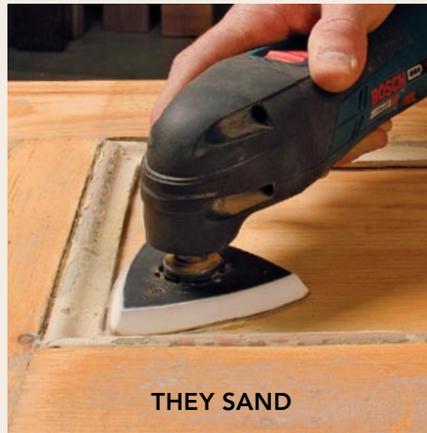


Oscillating Multitools



Fein dominated the market for decades, but their patent has expired. With competitors on the move, just how do the new tools stack up?

BY BRENT BENNER

A couple of years ago, I was installing interior trim on a new home when a heated discussion between the general contractor and the electrician spilled over into my workspace. It seemed that the rough wiring was in place for some exterior lights, but nobody had asked the siding crew to install the necessary cedar mounting blocks. The siding crew had finished months ago, and the electrician argued that it wasn't in his contract to spend hours cutting the dozen or so mounting blocks into the cedar with a utility knife and a Japanese saw. The general contractor argued that the siding crew was not coming back. There was an awkward silence as they both looked at me to take sides. I said, "You're both right. Why don't you borrow my MultiMaster?"

Oscillating multitools are a fairly unconventional category of power tools. Although they cut, sand, and grind, they won't replace your jigsaw, reciprocating saw, circular saw, orbital sander, or angle grinder. They're also not made to cut and prepare new stock for installation. To create a departure from the typical spinning sawblade, Fein engineered the tool to oscillate an attached accessory a few degrees left to right about 20,000 times per minute. This minimal blade movement makes an oscillating multitool an excellent choice for working on materials that are fixed in place, especially in tight quarters where other tools are impossible to use.

I tested each of the five tools in this review based on its performance in a wide variety of remodeling tasks, its ergonomics and ease of use, and my best assumption of its long-term durability. I was also critical of the carrying case included with each tool. In my opinion, any tool with this many small accessories demands functional storage.

There were clear winners in each category, but I found that it was impossible to do a true head-to-head comparison for a number of reasons. Some of these tools are corded, and others are cordless. Some are designed for light use around the house, and others are built for professional use on demanding job sites. Instead, I reported what I like and dislike about each tool, with enough detail that I hope you can decide which tool fits your needs and budget.

Brent Benner is a finish carpenter and cabinetmaker in Roxbury, Conn. His Web site is www.roxburycabinet.com. Photos by Justin Fink, except where noted.

Fein rules the corded competitors



DREMEL MULTI-MAX Despite having a smaller motor than the other tools in this review (1.5 amp/hr vs. 2.3 amp/hr), the Dremel never felt underpowered. It tackled the same plunge cuts and rigorous grinding as the larger tools. I noticed that the tool heated up quickly, though, perhaps because vents for the motor are easy to cover with your hand accidentally during use. The Multi-Max is shorter than the other models, and the smaller size makes it the best choice for working in tight spaces. I liked the soft-start feature, which eased me into the 85-db whine of the motor. (This was the loudest tool I tested.) I am a bit disappointed with the cord; even though it was only 5 ft. long, it still managed to tangle itself constantly. I also was discouraged to find that this tool is not compatible with other manufacturers' blades. The case, which is made of molded plastic and offers accessory organization, is average fare. If I were looking to spend around \$100 for a multitool, I'd most likely pass by this tool in favor of the only slightly more expensive Rockwell SoniCrafter kit.

FEIN FMM 250Q This tool is a dream for contractors and a nightmare for their accountants. The MultiMaster is a well-built, German-engineered workhorse, but it's the most expensive tool of the bunch and has the most expensive accessories. It cut oak and maple, sanded wood, scraped caulk and glazing, and removed grout for hours without excessive heat or noise. The tool has a soft-start motor, and its 16-ft. cord is supple enough never to be a bother. Similar to the Rockwell, Fein includes vacuum collection in the form of a modified plastic hose that clips to the bottom of the tool. But the Fein port is larger, which allows it to draw more suction. Also like the SoniCrafter, the MultiMaster feels sort of like holding the fat end of a baseball bat. Clearly, two decades' worth of research and development have paid off because unlike the other tools, which rely on a hex wrench and bolt to hold the accessories in place, Fein offers a quick-change system. By lifting a lever on the top of the tool, a pin is released on the bottom, allowing accessories to be inserted and removed. The quick-release system starts with the FMM 250Q Basic kit at \$270, and if you've ever fumbled with a hex wrench and a small bolt, it's easily worth the extra \$60 over the \$210 FMM 250 Start kit. Fein also makes a cordless tool (MSx 315) but plans to discontinue it in the near future. The best overall is the FMM 250Q Top, which includes the quick-change setup, a vacuum attachment, an excellent case, and accessories.

ROCKWELL SONICRAFTER Pick up the SoniCrafter, and two words come to mind: solid and durable. I made repeated cuts in hardwood, sanded in tight corners, and used the tool for grout removal; it was powerful in every test. I wish it accepted Fein blades, though, because the wood-cutting blades included in the kit wore out quickly compared to the competition. I appreciate the idea of a vacuum attachment, but it seems like more of an afterthought on this tool because the port was too small to be effective and because the fan from the motor blew away more dust than was collected. The canvas carrying case tied for last place, offering little organization and making me search for accessories at the bottom of the bag. I think the price of any of the three Rockwell kits is within reason, but I thought the 20-piece kit (RK5100K; \$120) was the best value in the review. If I were a homeowner looking for a reasonably priced oscillating multitool to remove a shower's worth of grout joints, this would be the tool.

BEST OVERALL

AUTHOR'S
CHOICE

BEST VALUE

AUTHOR'S
CHOICE

The cordless models come up short

BOSCH MULTI-X

www.boschtools.com

PS50-2B: \$220

The first thing I noticed when I picked up this tool was how well balanced and comfortable it felt. I remember thinking, "This is nice—a cordless model that's easy to control with one hand and still has enough power." And then the battery died. In my testing, the battery lasted about 8½ minutes when sanding, and about 5 minutes when cutting wood or removing grout. As you would expect with power that drains quickly, the batteries tend to get pretty warm during use, and they need 15 minutes to cool down before accepting a 30-minute charge. On the positive side, the Bosch case is one of the best in this group, with plenty of room for the tool, the batteries, and the charger, as well as a separate compartment for accessories. The included adapter enables this tool to accept both Dremel and Fein accessories, which expands your options when shopping for replacement blades—a definite plus. Despite its short run-time during heavy cuts and prolonged grinding, this tool is powerful, and perfect for small projects. It wouldn't be my choice for longer sanding or grinding applications, however. For this price, I'd likely leave it on the shelf and pick up the \$210 Fein Start instead.



CRAFTSMAN MULTI-TOOL

www.craftsman.com

Model 17438: \$100

This tool has a lot going for it. It's cordless, affordable, capable enough to make plunge cuts into ¾-in. oak flooring without whining, and compatible with Fein replacement blades. It has a built-in dust-collection port and a useful work light, but it's the only tool in the test without variable-speed control. Perhaps it's because the Craftsman operates at fewer oscillations per minute than the Bosch model (15,000 vs. 20,000), but the battery lasted a bit longer, averaging 11 minutes when sanding and about 7 minutes when cutting wood or removing grout. Unfortunately, the kit includes only one battery pack, which limits its functionality severely, and the motor heats up during use, sometimes to the point of being uncomfortable. This heat combined with the tool's mostly plastic construction left me feeling unsure about its long-term durability. Finally, I needed to remove the accessories to put the tool in the case, a pet peeve of mine that tipped the scales enough for me to pass on this model.



The quality of the tool is measured in large part by the quality of its attachments

Oscillating multitools offer a selection of accessories that allow the tools to adapt to different applications. With different accessories, these tools remove grout, sand inside corners, and scrape adhesive. They are ideal for flush cuts and plunge cuts, and they don't mind if the material is wood, metal, plastic, or drywall. What I like best about these tools is their ability to get you out of a sticky situation.

Unfortunately, the number-one complaint about oscillating multitools seems to be the cost of replacement accessories, which ranges from reasonable to ridiculous. There is a bit of cross-compatibility among brands, but for the most part, each manufacturer has engineered a unique attachment system (see below). When choosing a tool, both the quality and price of replacement blades, scrapers, and sanding pads becomes a definite consideration.

Quality is crucial when choosing cutting blades, which are most likely to need frequent replacement. Blades come in two basic shapes: circular cut and end cut (often called "e-cut"). The life span of the blade depends on what you are cutting and the type of metal used to make the blade. The blades are often labeled HCS (high-carbon steel, used to cut soft wood and plastics), HSS (high-speed steel, used to cut wood, drywall, and nonferrous metals), or BIM (bimetal, used to cut wood with embedded nails, sheet metal, and drywall).

A single, standard end-cut blade ranges from \$7 (Craftsman) to \$18 (Fein), circular-cut blades range from \$9 (Dremel) to \$37 (Fein), and carbide grout-removal blades cost from about \$15 (Craftsman) up to a whopping \$56 (Fein). It doesn't take long to spend more on accessories than you paid for the tool itself. As a result, aftermarket-blade manufacturers have popped up. Online retailers such as www.multiblades.com and www.imperialblades.com offer blades to fit a variety of oscillating tools.



DREMEL

FEIN

ROCKWELL

BOSCH

CRAFTSMAN

Each tool's proprietary arbor pattern limits cross-compatibility among brands.



CUTTING BLADES

Available in circular and end-cut designs, cutting blades have the most options in terms of metal. Bimetal (BIM) blades are the best balance of cost and longevity, and typically last twice as long as high-speed steel (HSS) blades and about 10 times longer than high-carbon steel (HCS) blades. Be careful what you're cutting, though, because even an expensive blade will be ruined in a hurry if you accidentally encounter a nail. Also, pay attention to the type of teeth on the blade. Some are aggressive like a Japanese pull saw, and others are closer to a hacksaw. Match the blade to the task and to the material being cut, and set the tool to a high speed.



Precise cuts. Long, thin, end-cut blades allow for controlled plunge cuts in everything from drywall to flooring.

SCRAPING BLADES

The ideal choice for removing old layers of adhesive, bonded carpet, window glazing, or caulk, scraping accessories are available in rigid and flexible designs. Use the rigid version for quick removal of stiff material, and put the flexible accessory to use around more delicate surfaces and on softer materials, such as putty or silicone caulk. Set the tool to a medium/high speed, using wide scrapers for large-area removal and narrow scrapers for more precise work.



Flexibility is a plus. Rigid scrapers have their place, but flexible attachments are great when working on delicate surfaces like this divided-lite window.

SANDING PADS

Each manufacturer offers sanding pads of differing shapes and sizes, but most are triangular and use hook-and-loop pads to attach sandpaper of varying grits. Narrow sanding pads are ideal for detail work on inside corners, and larger pads are better for working on more open areas. Some manufacturers also offer felt polishing pads that can be combined with abrasive paste for use on metal or stone. For

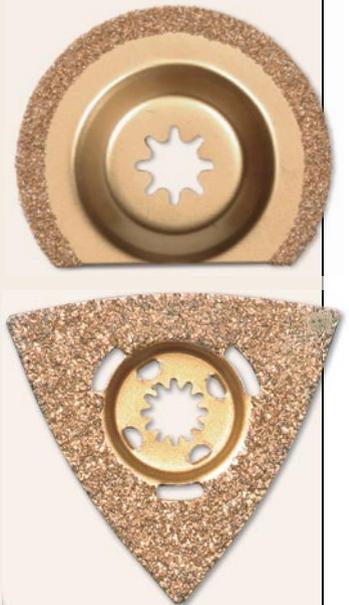


sanding applications, the tool should be set to a low or medium speed.

All-access sanding. Triangular and spear-shaped sanding pads of different sizes work effectively on narrow surfaces and in tight corners.

GRINDING ATTACHMENTS

Designed to cut through cement board, soft tile, fiberglass, and other abrasive materials, grinding accessories are coated with bits of carbide for durability. Choose a circular blade for doing close-quarters work on grout joints or for cuts in wallboard. To remove hardened thinset or to strip off layers of old paint quickly on a flat surface, flat rasp accessories are ideal.



Creative grinding. Flat rasp accessories are ideal for chewing through layers of old paint before sanding to a finer finish.