



Walter's 4 1/2-inch Mini grinder is AC/DC capable and features the redesigned Walter anti-vibration handle. It also comes with the Quick-R release system for fast, tool-free wheel changes.

# GRINDERS AND SANDERS



TOUGH MATERIALS DEMAND MORE POWER; USERS DEMAND SMOOTHER, FASTER OPERATION

As the materials workers must cut and grind become harder to work, power tools must become more powerful to work them. The results, as these leading manufacturers' products show, are pushing tool technology to new levels of both productivity and operator safety — an amazing feat of engineering.

### WALTER SURFACE TECHNOLOGIES

This past summer, Walter Surface Technologies unleashed its next generation of corded grinders — eight redesigned models and one new tool, the Pro 5. Built to optimize Walter's world-class line of abrasives, these grinders maximize productivity and provide optimal power in cutting, grinding, sanding and cleaning applications.

The redesigned grinders feature an ergonomic, anti-vibration side handle, a tool-free guard and an exclusive safety clutch that neutralizes momentum and eliminates dangerous backlash.



DRAINVILLE

"The Walter Mini-Grinder and Super 5 small angle grinders are specifically designed for work in smaller metalworking and MRO shops," explains Stéphane Drainville,

product manager for tooling and power tools. "Both the Mini-Grinder and the Super 5 feature improved power and improved ergonomics."

Both models are AC/DC compatible, and come with Walter's Quick-R release system which allows fast, tool-free wheel changes.

"The Mini-Plus, Walter's most versatile 'do-it-all' grinder eliminates the need for multiple tools," Drainville adds. "The Mini-Plus includes all of Walter's latest features, including Powerguard overload protection, Dynamax rpm monitoring, variable Dialspeed and more."

The Mini-Plus is specifically designed for the person working on various applications throughout the facility. The Mini-Plus also features Stabilizer technology, which adds comfort and increases the life of the tool up to 30 percent and that of its grinding or sanding discs up to 200 percent.

"Walter's Big 6 and Pro 5 are built to withstand constant heavy-duty applications and long periods of use," Drainville says. "There is no comparable 5-inch grinder on the market when looking at removal rates or cutting

CONTINUED ON PAGE 66



# AQUA SHIELD™

FIRE RETARDANT + DUST-FREE SURFACE PROTECTION



Used for covering any surface during the manufacturing, building and repair processes. With its quadruple duty protection, Aqua Shield is fire retardant, leakproof, slip resistant and durable. It also provides dust-free protection and can be recycled once you're finished with it.



www.trimaco.com | 800.325.7356

Bosch's deep lineup of grinders includes the model AG60-125, which features an upgraded 12.5-amp motor with direct motor cooling and more air vents for longer tool life and cooler operation.



time. It's really in a class of its own — especially if you pair it with our abrasives; that's when you'll really see the difference."

Walter's Maximum Safety grinders offer just that — maximum safety — without compromising performance. The Mini PS, Super 5-PS and Big 6-PS all feature a double-action, non-locking paddle switch which ensures that the grinder will stop when the switch is released. In addition, the Super 5-PS has Powerguard overheat protection, Dynamax, soft start and safety restart to ensure that it will not turn on accidentally if plugged in while turned on.

"The Big 6-PS includes all of these safety features, but with an exclusive mechanical brake system that allows it to stop within two seconds of the trigger being released, making it the safest grinder on the market," Drainville claims. "It's also equipped with the Stabilizer feature."

**BOSCH**

The key trend in most construction segments is dust collection," states Mike Iezzi, product manager, concrete products, Robert Bosch Tool Corporation. "The new OSHA standard that limits worker exposure to silica dust



goes into effect on June 23, 2017, which is driving high interest in this area. Due to strong existing regulation for dust management in Europe, Bosch has taken a leadership position in developing tools, attachments and HEPA dust extractors that work as a system and are available in North America. Bosch hand-held grinder shrouds and guards play a key role in effective dust management."

Another important element is a dust extractor that incorporates high cfm, auto-cleaning and a HEPA filter. HEPA filtration has become the measure of protection against dust. Forceful air movement based on a vacuum's high cfm capacity is important to dust extraction because it drives more particles into the filter system. And with more dust and particulates on the filter, it's important that the system have the capacity to clean the filters automatically.

Dust management systems, used in conjunction with individual worker respiration equipment, are part of an

overall program designed to reach OSHA compliance.

"The U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) ruling reduces worker exposure to respirable silica dust in an eight-hour period from 250 micrograms per cubic meter of air to 50 micrograms," Iezzi says. "After June 23, 2017, employers will be subject to OSHA review and penalty for non-compliance.

"Crystalline silica is a component of concrete that becomes breathable when drilling, sawing, polishing, cutting or crushing concrete, brick, block, rock or stone," he adds. "Respirable crystalline silica is capable of crippling and killing workers by causing a range of lung diseases, from silicosis and lung cancer to emphysema, plus kidney disease. According to OSHA, an estimated 2.3 million U.S. workers are exposed to respirable silica dust at work each year."

**HITACHI POWER TOOLS**

"Hitachi is again at the forefront of technology with useful and innovative ways to improve the end-user experience while working on the job site," begins Chris Harris, product manager for Hitachi Power Tools. "This is evident with the introduction of the new commercial grade model G12VE 4 1/2-inch AC brushless variable-speed angle grinder. Due to its ultra-efficient AC brushless motor, the G12VE grinder has a small grip diameter for a more comfortable hold and better control."



Thanks to its brushless design, the brand new Hitachi new model G12VE 4 1/2-inch AC brushless variable-speed angle grinder has a small grip diameter for a more comfortable hold.

CONTINUED ON PAGE 68



IBS Booth W7039



Everything great starts with imagination.

At BECK, we're driven by an endless passion for creating new fastening products and systems. With over 110 years of expertise, we stay young at heart through the continued use of imagination, supplying the solutions you need today and envisioning what you'll need tomorrow.



Get professionally connected by visiting [www.fascoamerica.com](http://www.fascoamerica.com) or call 800-239-8665.

BECK Fastener Group®, FASCO America® are registered trademarks of the BECK Fastener Group.

[www.fascoamerica.com](http://www.fascoamerica.com)



Makita's 18V LXT brushless 4 1/2-inch paddle switch angle grinder with electric brake (XAG10M) combines a full feature set with consistent industrial performance.



FERNANDEZ

wheel in two seconds or less upon release of the switch, the XAG10M features electronic torque control, a no lock-on flush-mount paddle switch with two stage lock-off, and an anti-restart function. It's powered by a Makita brushless motor for longer run time, increased power and speed, and longer tool life. For the most demanding applications, Makita's Automatic Speed Change Technology adjusts speed and torque during operation for optimal performance.

"Makita is a leader in vibration reduction technology, and is applying it to the grinder category with SJS II, a leaf spring and cam gear drive mechanism engineered to reduce vibration," states David Fernandez, product manager, metal working and concrete products for Makita

USA. "It works by transferring the vibration generated by the application through the wheel accessory spindle and onto a CAM component. The vibration causes the cam to press against the leaf spring and absorb the vibration that would otherwise be transferred to the user's hands if SJS II were not present. The result: Reduced operator downtime and increased operator comfort. SJS II grinders are available in 4 1/2- and 5-inch models, as well as two 5-inch models with Tuck Point Guards."

Makita is also improving grinder durability. The new 7-inch model GA7060 angle grinder has a redesigned motor with greater armature stability and larger commutator bars for three times longer life compared to previous models. Motor protection features including zig-zag epoxy on the armature coil and powder coated field are engineered for longer motor life, and the labyrinth construction seals and protects the motor from dust and debris. **CS**

The DTS 400 REQ and RTS 400 REQ are designed for one-handed use for fine finishing and have step-less variable speed from 6,000 to 12,000 rpm with a sanding stroke of 2 millimeters.

"Stepping up in size and power, Festool Rotex sanders have dual modes: a gear-driven aggressive rotary mode for rapid stock removal or polishing and a random orbital mode designed for finish or detail sanding," explains says Steve Rangoussis, chief sales and marketing officer for Festool USA. "Rotex multi-mode sanders also provide virtually dust-free performance."

The Rotex line includes the models RO 150 FEQ, RO 125 FEQ and the RO 90 DX. The 6-inch, 720-watt model RO 150 FEQ weighs five pounds. It possesses minimal vibration and superior ergonomics and includes a Multi-Jetstream dust extraction design that delivers highly efficient dust removal, resulting in cleaner air, better finishes and longer abrasive and pad life. The gearbox is completely enclosed and impervious to dust, making the RO 150 extremely reliable, even in the most demanding environments.

The 5-inch Rotex RO 125 FEQ has 500 watts of power and weighs just 4.4 pounds. It also includes the Jetstream dust extraction design. This is a compact, yet extremely powerful, multi-mode sander. The 4-inch, 400-watt Rotex RO 90 DX multi-mode sander weighs just 3.3 pounds and allows users to switch from a circular pad to a delta-shaped pad in seconds with no tools required.

## MAKITA

Contractors are demanding grinders with more features, improved performance and extended durability. Makita is meeting demand with an expanding lineup of corded and cordless industrial grinders.

On the cordless side, the 18V LXT brushless angle grinder, model XAG10M, combines a full feature set with consistent industrial performance. In addition to the electric brake, which stops the grinding or cut-off



The model DWE6423 variable-speed random orbit sander from DEWALT has a three-amp motor and operates from 8,000 to 12,000 opm. A counterweight reduces vibration and a rubber overmold grip enhances comfort.

The DEWALT model DW6421 5-inch single-speed random orbit sander with hook and loop pad is the second in a new line of sanders from the professional power tool brand. The sander weighs only 2.9 pounds and stands at 140mm, allowing the user to get close to the sanding surface. The powerful three-amp tool delivers 12,000 opm on a 3/32-inch orbit.

The DW6421 and its counterpart, the model DWE6423 variable-speed random orbit sander are part of the DEWALT Perform & Protect line of power tools. DEWALT Perform & Protect tools are designed to provide a high level of one or more of the following: control, dust containment, or low vibration, without sacrificing performance.

## FESTOOL

Two of Festool's newest tools are 250-watt orbital sanders, the DTS 400 REQ corner sander and the RTS 400 REQ rectangular sander. At 2.5 pounds, the DTS 400 REQ and RTS 400 REQ are compact, lightweight and feature a 25-percent increase in power over previous models. They also feature Festool's MMC electronics, a pad protector designed for minimizing pad damage and protecting adjacent surfaces, a rubberized over-grip for comfort, a bayonet-style dust port connection and an optional, reusable long-life filter bag with quick release.

Festool's ultra-premium sander family includes the 250-watt DTS (shown) and RTS 400 REQ sanders. The larger Rotex line ranges from 400 to 720 watts in 4- to 6-inch models.



The AC Brushless motor allows the tool to be used with long extension cords where a power source is not close at hand. This grinder incorporates an internal inverter circuit, which regulates an uneven power supply and allows it to be powered by a generator. Additionally, the AC Brushless motor extends product life and eliminates the maintenance of armatures and carbon brushes.

Variable speed allows the end-user to adjust the grinder's speed to the application; up for cutting or down to prevent gouging or burning when polishing stone.

The G12VE is also packed with features such as electronic overload protection to protect the internal components, soft start to protect the work piece, anti-kickback protection and zero-voltage restarts to protect the end-user.

"The G12VE is the ideal tool for a concrete finisher, a stone counter top builder/installer or a professional welder who needs a grinder to run on a generator at the job site," Harris states. "The G12VE AC brushless grinder is another example that demonstrates Hitachi's focus on building safe, durable and innovative tools for the job site."

## DEWALT

A leading trend that DEWALT continues to see is the increased importance of ergonomics and lower vibration in sanding. Reducing vibration in a tool like a sander allows users to sand for longer periods of time more comfortably. Designing tools that are more ergonomic and are shorter, bringing the user closer to the work surface, provide additional comfort for users while sanding, and help create a smooth finish.

Another trend in sanding is improved dust control and containment. The ability to remove excess dust from job sites and shops not only keeps job sites cleaner but it limits the airborne dust exposure to users while sanding.

"As DEWALT continues to introduce new sanders to our lineup we will continue to strive for comfortable ergonomics and minimal vibration as well as superior dust control," says Maurice LaPointe, product manager. "Our DEWALT 5-inch random orbit sanders, launched in 2015 for example, feature a separate counterweight design to reduce vibration. They are shorter than previous DEWALT sanders, bringing the user closer to the work surface. They feature ergonomic rubber over-mold grips to provide comfortable sanding.

"Additionally, they feature a one-handed locking dust bag that is easy to use but also can be removed to allow the sanders to hook up directly to DEWALT dust collectors."