

Bosch HD18-2 Two-Speed Hammer Drill

The Bosch HD18-2 Hammer Drill can be used in concrete, masonry, wood, and metal. The drill's first gear is for high-torque applications and its second speed is for high-speed drilling. An integral slip clutch disengages torque transmission if the bit gets into a bind. A rotating brush plate provides equal power in reverse for backing out bound-up bits. The HD18-2 can be used in impact mode for drilling into brick and block and, depending on the hole diameter and drilling depth, in concrete. The drilling-only mode can be used for drilling into wood and metal. A metal gear housing ensures durability and an auxiliary handle enhances control.

—Robert Bosch Tool Corporation, www.boschtools.com



STRUX Macrofibers

GCP Applied Technologies' STRUX® polypropylene/polyethylene macrofibers provide reinforcement for resisting and controlling temperature and shrinkage cracking in concrete. GCP offers three STRUX fiber types for various applications; STRUX 90/40 and STRUX 85/50 macrofibers are intended for projects requiring dosages ranging from 3 to 7 lb/yd³ (1 to 3 kg/m³), such as slabs on composite metal decks, slabs-on-ground, shotcrete applications, and precast products. STRUX BT50 fibers are intended for projects requiring dosages of 7 to 15 lb/yd³ (3 to 7 kg/m³), such as heavy industrial floors and shotcrete.

—GCP Applied Technologies, www.gcpat.com



Athena Impact Estimator for Buildings Version 5.2

The complimentary Athena Impact Estimator for Buildings was updated to simplify life cycle assessment (LCA) for building designers and sustainability consultants. The Impact Estimator helps designers earn LCA-based credits in LEED® and Green Globes®, meet the embodied carbon imperative of the Living Building Challenge™, and take the LCA paths per the International Green Construction Code and the California Green Building Standards Code. Version 5.2 includes a faster internal engine; improved reporting for the LEED v4 LCA credit; assembly mapping for “extra basic materials”; and updated life cycle data for precast and ready mixed concrete, concrete block, and cement.

—Athena Sustainable Materials Institute, www.athenasmi.org

SeaShield Series 500

Denso North America's SeaShield Series 500 System is comprised of a fiberglass reinforced polymer pile jacket and a grout comprising epoxy resin and aggregate. The grout can be placed above or below the water with pumping equipment or it can be poured. The Series 500 System is durable and provides protection to steel, concrete, and timber piles. Jackets are fabricated in thicknesses of 1/8 and 3/16 in. (3 and 5 mm) and are provided with a vertical closure. Noncorrosive standoffs (grout spacers) can be used inside the jacket to maintain proper spacing around the piling when applying the system's epoxy grout.

—Denso North America, www.densona.com

Products & Practice

Superior Concrete Products Superior Ballistics

Superior Concrete Products manufactures precast fence and barrier products. Its fence products can be customized by height, color, and finish. Composed of a proprietary post and panel system, the company's fences are designed to flex during extreme events such as hurricane-force winds and earthquakes. Superior Concrete Products also offers Superior Ballistics, an enhanced fencing product with a proprietary membrane that makes the company's fences durable enough to withstand the impact of high-caliber ammunition.

—Superior Concrete Products, www.concretefence.com

18V LXT Sub-Compact Brushless Driver Drill and Impact Driver

Makita's® 18V LXT drill and impact driver tools have the performance, power, and compatibility of 18V tools, but they have the size and handling of 12V tools. At 6-3/8 in. (162 mm) and 2.8 lb (1.3 kg), the drill (XFD11ZB) has a mechanical variable two-speed transmission (0 to 500 and 0 to 1700 rpm) and dual LED lights to illuminate the work area. The 18V LXT impact driver (XDT15ZB) also has two speed settings and provides 1240 in.-lb (140 N·m) maximum torque. The impact driver's Assist Mode setting helps eliminate "screw cam-out" and "cross threading" by driving at low speed until tightening begins, and it is ideal for driving longer fasteners. At 5-5/16 in. (135 mm) and 2.6 lb (1.2 kg), the impact driver is an ultra-compact solution for a range of fastening applications.

—Makita, www.makitatools.com



Phoenix Mapper UAV

The Phoenix Mapper UAV fixed-wing unmanned aircraft system (UAS) can be used for a variety of inspection and site mapping applications. The company's UAS allows users to collect jobsite images and review progress via composite photos. Weighing 4 lb (0.5 kg), the Phoenix Mapper UAV features easy hand-launch deployment, intuitive flight-planning process, expansive land coverage in single flight, and precision landing capability. The 4.5 ft (1.4 m) wingspan UAS can be in flight up to 59 minutes. It has a line-of-sight range of up to 1 mile (1.6 km) and a maximum operating altitude of 18,000 ft (5500 m) above mean sea level.

—GeoShack, www.geoshack.com

Web Notes

AutoCAD 360 app

AutoCAD 360 allows users to view, create, edit, and share AutoCAD drawings using mobile devices. With the free app, users can upload and open two-dimensional DWG drawings from e-mail or external storage and view all aspects, including external references, layers, and image underlays. Users can purchase AutoCAD 360 Pro to enable editing and drawing tools, working online or offline, in the office or in the field.

—Autodesk Inc., www.autodesk.com

Nomaflex Concrete Expansion Joint

Nomaco's Nomaflex® is a closed-cell polypropylene foam expansion joint filler and form. The product line includes 30 plank sizes in thicknesses ranging from 1/2 to 1 in. (13 to 25 mm) and widths from 3-1/2 to 8 in. (89 to 203 mm). Nomaflex can be used as a filler for full-depth expansion joints in sidewalks, streets, driveways, highways, and airport runways. While it's rigid enough to be used as a form and tough enough to be used multiple times, it's flexible enough to be bent to only a 6 in. (150 mm) radius. The polypropylene foam will not absorb water and can resist oils, gas, salts, acetone, and other chemicals.

—Nomaco, www.nomaco.com



Book Notes

Design of Prestressed Concrete to Eurocode 2, Second Edition

by Raymond Ian Gilbert, Neil Colin Mickleborough, and Gianluca Ranzi

This textbook describes and explains the behavior of prestressed concrete members and structures, both at service loads and at ultimate loads, and it provides a comprehensive guide to structural design using worked examples. While much of the text is based on first principles, code-specific design requirements are focused on the provisions of “Eurocode 2: Design of Concrete Structures.”

—CRC Press, www.crcpress.com

Price: \$99.95; 665 pp.; ISBN: 9781466573109

Products & Service Literature & Videos

Mortar Net Solutions Quick Tips Video Series

Mortar Net Solutions™ introduced “Quick Tips,” a series of instructional videos to help users be more productive. Each video features text detailing each step, with narration and demonstration from Mortar Net's Engineering and Construction Manager, Steven Fehino. Viewers can learn how to install the company's BlockFlash™ product, use the EZ Twig dual-ended line-holder, install metal drip edge on an inside corner, and more.

—Mortar Net Solutions, www.mortarnet.com

