

Products & Practice

COMMANDassurance

Data from COMMANDassurance truck-mounted sensors are uploaded to the cloud in real time, allowing continuous monitoring of slump, temperature, volume, water additions, water cement ratio (w/c), and drum speed. Soon, air-content data will also be available, giving complete visibility into concrete properties.

Real-time feedback about the amount of water added to the current load in transit allows for better decisions to be made when batching the next load. Post-production visibility into a full log of operations and load data history creates value for production operation improvements, as well as accurate information for pricing and bidding future work with appropriate margins.

—Command Alkon, www.commandalkon.com



FiberTech Outrigger Pads

FiberTech® outrigger pads combine multiple layers of continuous glass fibers and polyester resin, resulting in exceptional structural strength and stiffness. A 48 x 1 in. (1219 x 25 mm) FiberTech pad has a crush rating of 600 psi (4 MPa) and a working load limit of 170,000 lb (77,110 kg).

Because most trucks are dispatched with a single operator, outrigger pads need to be light enough for one person to deploy. To solve this issue, DICA's FiberTech pads were developed to be rollable and light. Although a 1 in. thick FiberTech pad weighs 25% less than a 3 in. (76 mm) thick SafetyTech® pad, it provides the same load distribution performance. In addition, FiberTech outrigger pads are equipped with DICA's patented TuffGrip® Handles to encourage safe lifting and minimize trip hazards. FiberTech pads are nonconductive, waterproof, and chemical resistant.

—DICA, www.dicausa.com



Stainless Steel Wall Ties and Bars

Thor Helical ties and bars offer an alternate solution to demolishing and rebuilding masonry façades. The Thor Helical repair methodology uses stainless steel helical wall ties and crack-stitching reinforcing bars. The helical wall ties are installed to reconnect masonry wythes or masonry veneer to a backup wall where the original anchors are corroded or missing. Due to its patented Twisted Technology, the installation results in a perfect interlock between the masonry façade and its substrate. A variation of the original wall ties can also be used to strengthen concrete walls and stucco walls.

—Thor Helical, www.thorhelicalusa.com



Products & Practice

Dry-Cut Masonry Saw

iQ Power Tools' iQ1550 can work on any jobsite. The iQ1550 is designed to capture dust, allowing workers to increase their efficiency and productivity while maintaining a safe work environment. Its 230V Super Duty 3 horsepower (2200 W) saw motor allows the iQ1550 to rapidly cut 8 in. (203 mm) concrete masonry units. The saw's 3 horsepower vacuum motor captures dust at the source, its integrated dust collection chamber holds up to 75 lb (34 kg) of dust, and its automatic filter cleaning system simplifies maintenance. Highly portable, the iQ1550 is equipped with high-floatation tires, forklift pockets, and a center lift point for easy transportation.

—iQ Power Tools, www.iqpowertools.com



Masonry Veneer Installation System

The LATICRETE Masonry Veneer Installation System (MVIS™) is designed to deliver long-term performance on thin-brick, manufactured stone, and natural stone veneers for interior and exterior applications. MVIS can provide a permanent, high-strength solution that is stable under cyclic freezing-and-thawing conditions and protects structures against water intrusion. In addition to offering a comprehensive quality-controlled installation system, MVIS allows for increased productivity using either traditional masonry installation techniques or the notched trowel method.

The complete system includes air and water barrier products, sealing tapes, various polymer-fortified adhesive mortars that provide nonsag performance, latex admixtures and epoxy adhesives, pointing mortar, sealants, and paver joint fillers.

—LATICRETE, www.laticrete.com



MasterLife CRA 007

Master Builders Solutions' MasterLife CRA 007 liquid admixture is formulated to reduce the magnitude of drying shrinkage and minimize the potential for cracking, leading to enhanced durability and extended service life of structures. MasterLife CRA 007 is recommended for use in liquid containment structures, bridge decks, applications requiring liquid tightness, and concrete elements where superior performance with respect to crack reduction, crack width, and overall durability is desired.

—Master Builders Solutions, www.master-builders-solutions.com/en-us



WORKSKIN Warm Weather Hardhat Liner

Milwaukee Tool introduced the WORKSKIN™ Warm Weather Hardhat Liner to its lineup of trade-dedicated workwear solutions. The custom-built fabric is engineered to be breathable and wick moisture away from the body. This fabric dries quickly and keeps users cool while working in warmer conditions. Constructed with flatlock seams and a four-way stretch fabric, the hardhat liner is designed for next-to-skin comfort. To prevent odor-causing bacteria, the liner features an anti-microbial technology and moisture-wicking layers. The WORKSKIN Warm Weather Hardhat Liner is optimized for use with hardhats and safety helmets.

—Milwaukee Tool, www.milwaukeetool.com



60V Cordless SDS MAX* Chipping Hammer and 60V Cordless Breaker Hammer

Designed for heavy-duty demolition, concrete, and masonry work, the DEWALT 60V MAX* 27 lb (12 kg) Cordless SDS MAX* Chipping Hammer (DCH911) quickly breaks down dense concrete with up to 27 J of impact energy. The hammer tackles horizontal and downward chipping for high performance in mid-to-lower wall and flooring tasks and is ideal for wall breaching, channel creation, bushing, and scarifying. With 1620 BPM, the hammer has a 1 to 5 in. (25 to 127 mm) chipping range. The 60V MAX* 38 lb (17 kg) Cordless 1-1/8 HEX Breaker Hammer (DCH966) delivers up to 40 J of impact energy for chipping in mid-to-lower wall and flooring tasks and applications including powered digging, channel creation, and slab demolition. The tool delivers 1080 BPM with a chipping range of 1 to 8 in. (25 to 203 mm). Both hammers are designed with wireless tool control and built-in SHOCKS® for vibration reduction for user safety.

—DEWALT, www.dewalt.com



Sika WT-240 P

Sika® WT-240 P is a powdered, crystalline-based permeability-reducing admixture for use in hydrostatic applications. The admixture contains moisture-activated compounds that produce insoluble crystalline deposits that form within the capillary system, thereby reducing the ability of concrete to conduct water flow. The crystalline formulations can reduce the size of capillary pores, and they can seal concrete cracks up to 0.016 in (0.40 mm).

Sika WT-240 P meets the requirements of ASTM C494/C494M Type S and is NSF/ANSI Standard 61 certified. Sika WT-240 P is added at the plant and can be used on applications such as tunnels, water/wastewater plants, parking garages, and bridges.

—Sika Corporation, www.usa.sika.com



Book Notes

Design Manual for RCC Spillways and Overtopping Protection by Portland Cement Association

The Portland Cement Association (PCA) released the second edition of *Design Manual for RCC Spillways and Overtopping Protection*. This edition provides the latest in design trends, mixture designs, control sections, and construction means and methods for roller-compacted concrete (RCC) spillways and overtopping protection. A new chapter on performance highlights the design criteria that should be used to construct RCC hydraulic structures that are durable and sustainable in all weather environments.

The second edition of *Design Manual for RCC Spillways and Overtopping Protection* is available for free download on the PCA website.

—Portland Cement Association, www.cement.org

112 pp.; ISBN: 978-0-89312-282-9



Project Management Tools

Spider Tracker

The CEMEX Spider Tracker monitors concrete during and after placement to measure its strength in real time. This allows builders to make informed decisions, including when to remove formwork or molds. These decisions can result in time and cost savings. But real-time information about concrete strength also enables reductions in the carbon footprint through reductions in cement. Through an optimized concrete composition, a specific jobsite, such as a tunnel or bridge, may potentially achieve a CO₂ reduction of up to 13%, for a given level of strength.

—CEMEX S.A.B. de C.V., www.cemex.com



Autodesk Construction Cloud

Autodesk, Inc., announced a suite of new capabilities across the Autodesk Construction Cloud, making it easier for construction project teams to use and maximize the value of building information modeling (BIM) from the office to the field. The enhancements provide stakeholders with immediate access to model data, empowering team members to simplify workflows and make faster critical decisions. Significant advancements have been made to schedule and cost management capabilities within Autodesk Build, the comprehensive construction management and field collaboration solution of Autodesk Construction Cloud.

—Autodesk, Inc., www.autodesk.com



Trimble Ri Robotic Total Station

The Trimble® Ri Robotic Total Station is easy to operate with extended layout capabilities, longer laser range, focusable electronic distance measurement (EDM), an eye-safe laser pointer, and improved target tracking. Leveraging Trimble FieldLink software on a tablet or FieldLink MR on a Trimble XR10 headset for mixed reality, users can control and automate their project workflow with improved accuracy and visibility. With Trimble VISION™ technology and integrated digital cameras, the total station can be controlled from anywhere on the jobsite and allows for quick and accurate target detection and lock. In addition, the self-calibration feature performs automatic calibrations as required and reduces the need to send the instrument in for service.

—Trimble, www.trimble.com



APEXX S4 Workstation

BOXX, a provider of computer workstations, rendering systems, and servers for engineering, product design, and architecture, announced an upgrade to its most expandable BOXX S-Class workstation—the APEXX S4. The APEXX S4 workstation features 13th Gen Intel® Core™ i7 and i9 processors. The new central processing units (CPUs) provide outstanding performance for computer-aided design (CAD), three-dimensional (3-D) design, motion media, and other professional software applications. With the latest Intel technology and the ability to support multiple CPU tasks, graphics processing unit (GPU) tasks, and complex rendering, this workstation can power the latest applications and maximize productivity.

—BOXX Technologies, www.boxx.com

