

Aquajet Extender

Aquajet announced the release of its Extender accessory. The Extender is a flexible addition to the Aqua Cutter 750 V that adapts to surfaces with height variations in overhead, below-grade, or constrained-space applications. The Extender comes with a hydraulic hose package for mounting on the robot, with no need for additional hydraulics or other equipment. Contractors can quickly and easily attach the Extender to the Aqua Cutter's tower to perform hydrodemolition on areas such as sloped roofs or roofs with varying heights up to 4 ft (1.2 m). Additionally, the Extender works in below-grade applications such as ditches or canals where the concrete surface requiring removal lies up to 3.3 ft (1.0 m) below grade level. With its full side shift capability, the Extender also enhances side operations between beams on structures like bridges and parking garages, extending up to 8.2 ft (2.4 m) to either side.

—Aquajet, <https://aquajet.se>



Advanced Tech Crete Binder Reducing Formula

Advanced Tech Crete, LLC (ATC) announced its Binder Reducing Formula (BRF), an additive that can currently decarbonize concrete by up to 50%. The product uses less cement, reduces carbon dioxide (CO₂), and maintains the mechanical strength of concrete. ATC's BRF is simply added to a typical concrete truck at the plant or on site, requiring no change in workflow. BRF offers a highly dispersed and suspended proprietary blend of nanoparticles in liquid that, when combined with the other typical materials of concrete, also eliminates the need for other admixtures and supplementary cementitious materials (SCMs). BRF works with portland Type I/II and Type IL cements.

—Advanced Tech Crete, www.advancedtechcrete.com

KEEN Utility Evanston

KEEN Utility announced the Evanston. This product offers the burly protection of a work boot with the athletic feel and flexibility of a sneaker. Product highlights include a responsive KEEN.ReGEN cushioning that provides up to 50% energy return with every step as well as carbon-fiber safety toes that are unobtrusive and 15% lighter than steel. Other features include a KEEN.DRY waterproof, breathable membrane and full-grain Barnyard Resistant leather upper to keep the wearer shielded from jobsite messes. The Evanston is available for both men and women. Blending a burly top-half with an energy-returning bottom-half, the Evanston is a safety boot with the best of KEEN's safety, performance, and comfort features.

—KEEN, www.keenfootwear.com



DAP HD Max Construction Adhesive

DAP introduced the HD Max Construction Adhesive, a hybrid formula with polyurethane strength that provides durability and adhesion in extreme temperatures. HD Max is available in a 28 fl oz (828 mL) cartridge, making it a value hybrid formula for professionals looking to accomplish larger jobs. HD Max bonds to several materials, from nonporous substrates such as aluminum and PVC to porous, textured materials, including brick, concrete, and drywall in both indoor and outdoor environments. HD Max has the ability to bond in extreme temperatures, as it can be gunned out and applied anywhere from 0 to 120°F (-18 to 49°C). Its low-odor formula also makes it ideal for interior use. HD Max delivers a solid and waterproof bond that's reliable and flexible.

—DAP, www.dap.com



Products & Practice

Brokk SmartPower+

Brokk has launched Brokk SmartPower+, a new generation of robots that are resistant to shock, temperature, and vibrations. All new robots and control boxes are dust- and water-protected to an Ingress Protection (IP) rating of IP65 equivalent and feature an 87% reduction in cables and connectors, reducing weak points while also facilitating servicing and troubleshooting, which in turn, increases the lifespan of the robot. SmartPower+ generation includes a lightweight control box with tilted joysticks, easier-to-reach features, and faster dual charging. Operators can perform the demolition task at hand without shifting their gaze from the machine between commands, and as such, without compromising performance or safety. Visual status updates through incremental light indicators allow the operator to focus their attention on the demolition work at hand while simultaneously monitoring the status of the machine. A two-way communication system communicates the status back to the operator in real time, while customized features enhance the operating experience. SmartPower+ also alerts the operator about any unwanted power supply or machine statuses, further contributing to an increase in uptime and reliability.



—Brokk, www.brokk.com

Sensera Systems TalkDown and SiteWatch PRO

Sensera Systems' TalkDown feature paired with SiteWatch PRO security cameras and professional security monitoring is a solution to quickly detect, deter, and address theft, vandalism, and insurance compliance. The system is easy to deploy and provides 24/7-monitoring and real-time alerts to mobile devices. SiteWatch PRO3 day/night cameras combine low light with IR illumination, video analytics, and 4G LTE communications in one integrated system. Live TalkDown allows the central station to communicate with an intruder and ask them to leave. It also includes a strobing blue light that is activated upon request and acts as a deterrent to an intruder. Using the Video Motion Detection (VMD) settings, the motion triggering area can be customized to ensure the most accurate detection possible.

—Sensera Systems, www.senserasytems.com

FleetWatcher Material Management Solution Updates

FleetWatcher announced new functionalities for its telematics platform, FleetWatcher Material Management Solution, a construction-specific wireless telematics product that provides complete visibility to all components used within the process. New features include unauthorized/untrained users alert, dynamic yield calculator, and bucket and attachment tracking. Each of the new functionalities was created to address specific customer concerns. The unauthorized/untrained user alert lets appropriate personnel know when an on- and off-road asset is being operated by someone not specifically authorized for that type of equipment. It is versatile enough to cover any assets within the fleet and all personnel. The functionality can also alert when a driver/operator is assigned to project-assigned equipment that they are not authorized for. FleetWatcher Unauthorized User Alerts enhance safety by raising visibility of who is trained on what equipment and activities they are engaged in.

—FleetWatcher, www.fleetwatcher.com



Book Notes

Stainless Steel Wires-Engineered Multifunctional Ultra-High Performance Concrete by Sufen Dong, Xinyue Wang, and Baoguo Han

The emergence and application of stainless steel wires-engineered multifunctional ultra-high-performance concrete advances the safety, durability, function/intelligence, resilience, and sustainability of infrastructure, thus prolonging service life and reducing maintenance to lower the life-cycle cost. This is the first reference work on this multifunctional concrete, which combines high performance with functional/smart properties, such as thermal, electrical, self-sensing, and electromagnetic properties, as well as a sustainable profile. *Stainless Steel Wires-Engineered Multifunctional Ultra-High Performance Concrete* delivers both fundamentals and applications about multifunctional concrete, covering basic principles, properties, mechanisms, engineering application cases, and future development challenges and strategies.

200 USD (hardback); 398 pp.; ISBN 9781032232362

—CRC Press, www.routledge.com



Web Notes

Selecting Head Protection for Construction Work

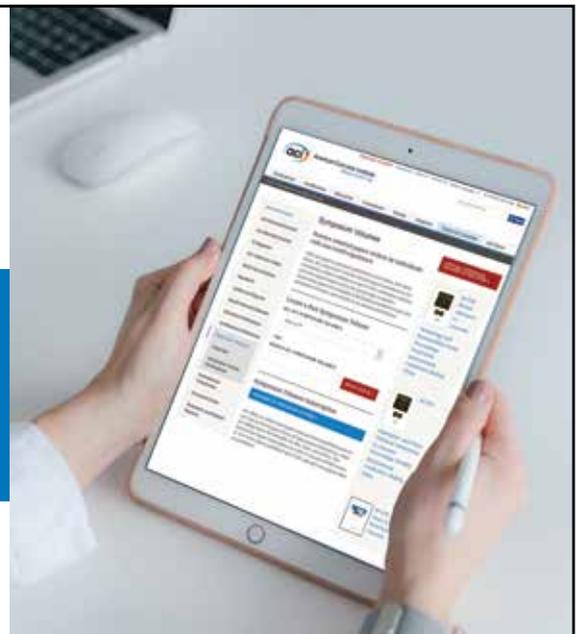
Wearing protective headgear, such as a hardhat or helmet, is essential for reducing the risk of a traumatic brain injury in construction. However, with new styles coming out, it can be difficult to know which type of head protection is best. With the help of a diverse Expert Evaluation Panel on Construction Headgear, The Center for Construction Research and Training (CPWR) has developed a handout that explains the different styles and protection levels of headgear and describes key factors that should be considered when purchasing.

—CPWR, www.cpwr.com/wp-content/uploads/FS-Selecting_Head_Protection.pdf

ACI Symposium Papers Digital Subscription

Annual access to over 6000 symposium papers

Gain unlimited access to new and archived papers from all ACI Symposium Publications, published since 1962, plus any new papers that are published.



Visit concrete.org

Thermal & Moisture Protection

Thermomass Insulation Systems

Leivat, a CRH company, manufactures and distributes a full line of Thermomass® insulation systems for use in plant precast, site-cast tilt-up, and cast-in-place projects. These insulated walls feature high-strength, low-conductivity, noncorrosive Thermomass connectors (shown in the photo) used to structurally tie two external layers of concrete together through an integral layer of rigid insulation. Known as “sandwich walls,” these assembled panels can store significant amounts of thermal energy and delay heat transfer through the building envelope. This moderates indoor temperature fluctuations during outdoor temperature swings, minimizes overall energy consumption, and lowers HVAC requirements. In concrete buildings of all sizes, Thermomass technology allows designers to create building envelopes that maximize energy efficiency and performance while mitigating moisture issues and maintenance concerns.

—Leivat, www.leviat.com



Dutch Boy Paints Porch and Floor Paint + Primer

Dutch Boy® Paints announced its next-generation Porch and Floor Paint + Primer. The new formulas are an evolution of Dutch Boy Paints’ previous Porch and Floor Paint + Primer products. Key upgrades include greater ability to prevent dirt pickup and increased mildew resistance on the surface of the paint finish. The Porch and Floor Paint + Primer line features both a standard porch and floor paint, as well as a skid-resistant option, providing added traction. The product line provides a consistent and appealing finish for indoor floors and outdoor surfaces alike, including concrete and wood, and is also ideal for covered porches, basements, floors, and concrete block walls. The Porch and Floor Paint + Primer features a 100% acrylic enamel formula, ensuring adhesion and strength. Designed to endure daily wear and tear, it offers protection against cracking, peeling, and scuffing, preserving the integrity of surfaces in high-traffic areas. Enhanced formulation shields surfaces from the elements, resisting fading and weathering to maintain vibrant colors. Dutch Boy Paints Porch and Floor Paint + Primer provides moisture protection and a mold- and mildew-resistant finish.

—Dutch Boy Paints, www.dutchboy.com

Cortec MCI-2005 and 2005 NS

Cortec® Migrating Corrosion Inhibitor™ (MCI) concrete admixtures help combat hot temperatures and challenges that come with warmer weather for placing and finishing concrete. The hotter the weather, the faster concrete sets. This can result in cold joints or problems with concrete placement and finishing. Cortec MCI-2005 slows down set time, while MCI-2005 NS is a normal-set version. Based on salts of amine carboxylates, these “mixed” inhibitors (anodic and cathodic protection) form a protective molecular layer on the surface of reinforcing steel, delaying time to corrosion and reducing corrosion rates once started. MCI admixtures require a much lower dose, independent of expected chloride loading. MCI products are also certified to meet NSF/ANSI Standard 61 for use in drinking water system components—a plus for users and the environment.

—Cortec, www.cortecmci.com

