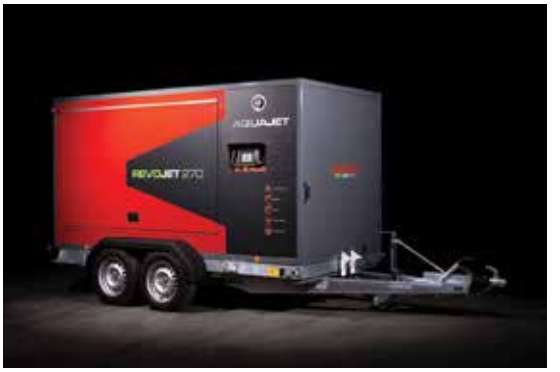
Aquajet Revojet 270



Aquajet introduced the Revojet 270 high-pressure pump. The Revojet is highly mobile and excels in smaller-scale hydrodemolition projects. Its features include closed-loop pressure control or revolutions per minute (RPM) control and smart pressure regulating that quickly finds the set pressure from the idle or auto-stop state. The Revojet 270 also has a mode that flushes the hoses without any nozzle mounted, along with RPM hold delay for hand lancing that minimizes delay when the high-pressure trigger is activated. Operators can easily set parameters on the graphic color display, with instructions available in multiple languages. Users can see information in real time or view a history of items, such as the alarm list and trip meters of fuel consumption. The system also automatically tracks service schedules to minimize downtime. The Revojet 270 trailer unit weighs 3500 kg (7716 lb), and a stationary unit is also available. The Revo remote comes standard with the Revojet 270, and to increase flexibility, operators can leave the remote in place on the unit or detach the remote and control the Revojet 270 up to 300 m (984 ft) away with extension cables.

—Aquajet, **https://aquajet.se**

Tindall Corporation T-SLAB

Tindall Corporation's Tindall Superior Lightweight All-Purpose Beam™ (T-SLAB) applies arch design principles by using super-lightweight concrete to serve as blocks over which structural concrete is placed, leveraging the arch effect translationally for load distribution while capitalizing on longitudinal prestressing for total span capability. Several slab thicknesses are available to achieve optimal spans in the range of 30 to 45 ft (9 to 14 m), supporting typical commercial and residential floor loads. The slabs provide fire resistance and sound insulation. The T-SLAB production process enables the inclusion of conduits, solid zones as may be structurally or functionally required, and holes for ducts and drains. When combined, these capabilities make T-SLAB a cost-effective and schedule-friendly system, ideal for mixed-use, dorm, multi-family residential, office, or hotel construction. At roughly three times the width of a typical hollow core and with greater span capability, set-out times are reduced, which further enhances the benefit of prefabrication.

—Tindall Corporation, **https://tindallcorp.com**

Georgia Boot DuraBlend Sport

The Georgia Boot DuraBlend Sport composite-toe waterproof work boots keep feet protected and supported without weighing the wearer down. The upper is crafted from full-grain leather and combines nonmetallic eyelet and hook hardware for a secure lace-up. The interior of these composite-toe work boots is lined with a high-performance mesh material and is equipped with the Georgia Waterproof System. The Quick Response Foam removable polyurethane insole provides responsive cushioning and shock absorption. The foundation of these brown 6 in. (152 mm) moc-toe work boots includes a fiberglass shank; an abrasion-resistant DuraBlend midsole; and a heat-, chemical-, abrasion-, and slip-resistant Carbo-Tec rubber outsole. These boots meet ASTM F2413 electrical hazard requirements.

—Georgia Boot, **www.georgiaboot.com**

Bosch 18V Brushless 1/2-In. Mid-Torque Impact Wrench with Pin Detent

Bosch Power Tools announced the 18V Brushless 1/2-In. Mid-Torque Impact Wrench with Pin Detent. A part of Bosch's CORE18V platform, this tool is designed to deliver skilled workers with enhanced efficiency on the jobsite. The Brushless Mid-Torque has an impact wrench design that delivers power and control for tightening lag bolts, concrete anchors, and lug nuts. This tool delivers 330 ft·lb (447 N·m) of maximum fastening torque and 590 ft·lb (800 N·m) of maximum breakaway torque. Its variable-speed power output controls maximum torque and speed with three settings.

—Bosch, **www.boschtools.com**

ONYX SXi Lithium-Ion Battery Powered High-Speed Burnisher

ONYX announced the SXi Lithium-Ion Battery Powered High-Speed Burnisher. Designed for use by decorative concrete contractors, building service contractors, and building maintenance and janitorial staff, the SXi delivers zero-emission, propane engine-like productivity performance while running at a whisper-quiet level. The SXi provides power and efficiency comparable to traditional propane-powered engine machines and can burnish up to 34,000 ft^2 (3160 m^2) per hour of flooring. The SXi is configurable, with a single battery producing a 2+ hour runtime or a dual battery pack producing a 4+ hour runtime. The head pressure can be adjusted in three different ways to optimize application-specific head pressure. The SXi's battery power management system ensures constant pad speed and pressure over varying floor conditions for consistent burnishing performance. The sleek, low-profile design has an LED lighting strip to illuminate the burnishing path for the operator. The SXi can be used to burnish a variety of different hard floor surfaces, including vinyl composition tile (VCT), terrazzo, and other decorative concrete floors.

—ONYX Systems, LLC, **www.onyxsolutions.com**

Hilti TE 50-22 Combi Hammer

The Hilti TE 50-22 Combi hammer with Active Vibration Reduction (AVR) and Active Torque Control (ATC) provides users with longer runtimes, greater safety and comfort, and broader versatility on the jobsite. When paired with Hilti's TE-YX drill bits, users can expect up to 30% faster drilling speeds. The TE 50-22 features best-in-class performance while weighing in at just over 12 lb (5 kg). This product is a part of Hilti's 22V Nuron battery platform and experiences greater performance and runtime than corded, gas-powered, or higher-voltage battery systems can deliver. All the batteries and chargers of the Nuron platform work under a single ecosystem, ultimately helping reduce the complexity of tool cribs.

—Hilti, **www.hilti.com**

Web Notes

Hycrete Embodied Carbon Reduction Calculator

Hycrete, Inc., announced the Embodied Carbon Reduction Calculator, which can be accessed for free on the Hycrete website. This tool gives users an easy way to estimate the environmental footprint of projects. With just a few clicks, the calculator shows how much users can save in terms of material use and overall cost through the use of hydrophobic admixtures. It also estimates the life-cycle extension of new construction built with Hycrete's chemically advanced waterproof concrete—a crucial measure of long-term return on investment (ROI). The Embodied Carbon Reduction Calculator provides information to assist the global construction industry in finding a more effective and eco-friendly way to build with better concrete materials.

—Hycrete, Inc., **https://hycrete.com**

Products&Service Literature&Videos

Adopting a Culture of Safety

by JLG Industries

JLG Industries, Inc., released a new white paper, "Adopting a Culture of Safety," that outlines six steps companies can take to create a safe, productive workplace. Topics addressed in the paper are how to adapt environmental, health, and safety (EH&S) programs to meet safety expectations, implement strategies for training, coordinate successful shift-to-shift handoffs, plan for emergencies, use signage to keep people informed, and regroup to prevent repeat mistakes. JLG builds on the concepts and strategies outlined in its earlier white paper, "10 Tips for Creating a Safety-Focused Work Culture," and offers immediate steps companies can take to adopt a safety culture within their organizations, making them a fundamental part of an organization's operations and a critical component of the company's long-term success. "Adopting a Culture of Safety" is available for download on JLG DirectAccess.

—JLG Industries, Inc., **www.jlg.com**

Performance-Based Earthquake Engineering Assessment Tool for Natural Gas Storage and Pipeline Systems, Validation Report

by Chris Bain, Jonathan D. Bray, Daniel Hutabarat, Thomas D. O'Rourke, Scott Lindvall, Barry Zheng, Preston Jordan, Tsubasa Sasaki, Keurfon Luu, Yingqi Zhang, William Foxall, Jonny Rutqvist, David McCallen, Sherif Elfass, Tara Hutchinson, and Elide Pantoli

The California Energy Commission has published "Performance-Based Earthquake Engineering Assessment Tool for Natural Gas Storage and Pipeline Systems, Validation Report." It was written by Chris Bain, Jonathan D. Bray, and Daniel Hutabarat, University of California, Berkeley, Berkeley, CA, USA; Thomas D. O'Rourke, Cornell University, Ithaca, NY, USA; Scott Lindvall, Lettis Consultants International, Inc.; Barry Zheng, Slate Geotechnical Consultants; Preston Jordan, Tsubasa Sasaki, Keurfon Luu, Yingqi Zhang, William Foxall, and Jonny Rutqvist, Lawrence Berkeley National Laboratory (LBNL); David McCallen and Sherif Elfass, University of Nevada, Reno, Reno, NV, USA; and Tara Hutchinson and Elide Pantoli, University of California San Diego, San Diego, CA. The publication is an interim project report for the OpenSRA project. OpenSRA is an open-source seismic risk assessment software tool that will enable users to strategically assess challenges posed by the risk from earthquakes. The analytical procedures used in OpenSRA were evaluated with selected validation cases at several representative existing gas pipeline and storage facilities. The software was validated by comparing the estimated performance with that observed during historical earthquakes, and it is shown to provide reliable estimates of the seismic performance of the natural gas systems examined on the demonstration sites. The benefit of site-specific, high-resolution data for risk assessments is also demonstrated.

—Pacific Earthquake Engineering Research Center, **https://peer.berkeley.edu/OpenSRA**

Product Showcase

Admixtures

NanoCONS W104

Gerdau Graphene announced NanoCONS W104, a water-based graphene nanoplate admixture that can be applied to cementitious matrixes, such as cement pastes, mortars, and concretes, to improve physical properties, including durability, mechanical strength, impermeability, and other desired performance attributes. NanoCONS W104 improves the compressive strength of concrete by up to 50% in industrial testing. As a result, reinforced precast concrete structures such as bridges and buildings can bear more weight and withstand more force. This product is dispersed in the mixing water during concrete production and can contribute to reducing water consumption by 10 to 20% while maintaining the same workability. NanoCONS W104 improves the microstructure of concrete by reducing its porosity and susceptibility to deleterious environments such as carbon dioxide (CO_2) or chloride ingress. NanoCONS W104 has also been shown to increase the speed of concrete setting time by an average of 30%. In industrial studies, setting time was reduced from 18 to 12 hours, enabling faster construction.

—Gerdau Graphene, **www.gerdaugraphene.com**

Penetron Antimicrobial Admixture

Penetron's antimicrobial admixture prevents microbial-induced corrosion (MIC) by using an electrophysical mechanism to destroy the cell walls of the thiobacillus bacteria, also known as acid-producing bacteria. Eliminating the bacterial growth on and in concrete consistently stops the formation of biogenic sulfuric acid, avoiding the damage caused by MIC. The antimicrobial properties of the admixture are permanent; it becomes part of the concrete matrix and is leach-resistant. Penetron's antimicrobial concrete admixture provided protection from corrosion for the new sanitary sewer lines, lift stations, and a pressure sewer at the Orchard Island sanitation sewer system in Bellefontaine, OH, USA. The repair and upgrade project helped the Logan County Water Pollution Control District meet the compliance schedule issued by the Ohio Environmental Protection Agency.

—Penetron, **www.penetron.com**

EnviroMixC-Clay

Saint-Gobain Construction Chemicals, with brands Chryso and GCP, introduced EnviroMix®C-Clay, a range of admixtures aimed at reducing carbon dioxide (CO_2) content in concrete by using calcined clay cements. This line broadens the company's EnviroMix range of low-carbon concrete admixtures. Chryso and GCP's research and development team has worked significantly on characterizing more than 30 calcined clays, originating from all over the world, using methodologies like the CHRYSO®Clear Test to determine the optimal formulation of EnviroMixC-Clay for each configuration. These new admixtures, meticulously engineered through years of research and development, overcome the technical challenges of using calcined clay, primarily due to its high water demand, enhancing both the workability of the concrete and its compressive strength.

—Saint-Gobain Construction Chemicals, **www.chryso.com**

MasterEase 5000

MasterEase 5000 is a water-reducing and conditioning admixture that improves concrete rheological properties, significantly facilitating its pumping, placing, consolidating, and finishing characteristics. Acting as a conditioner, MasterEase 5000 admixture facilitates shorter mixing time, lower pumping pressure, better flowability, and a superior finish with fewer trowel passes, improving project economics. Developed for versatile use, MasterEase 5000 is recommended for use in both ready mixed concrete and precast concrete, offering flexibility for varied applications, including paving, slabs-on-ground, high-rise structures, hollow-core slabs, and bridge girders. This product can be used in concrete mixtures at all slump levels, from dry cast to low slump to self-consolidating concrete. MasterEase 5000 is particularly beneficial in sustainable concrete mixtures, making them easier to produce and place. It can be used on its own or as a supplement to other water-reducing admixtures and meets ASTM C494/C494M requirements for Type A water-reducing admixtures.

—Master Builders Solutions, **https://master-builders-solutions.com**