

BinMaster Guided Wave Radar-1000

BinMaster's Guided Wave Radar (GWR-1000) level sensor for measuring powders, bulk solids, and liquids in vessels up to 78 ft (24 m) provides accurate level measurement using time domain reflectometry (TDR) to continuously measure the distance, level, and volume of material contained in bins, tanks, and silos. It is immune to dust, humidity, temperature, pressure, and bulk density changes as well as noise when filling or emptying the vessel. The GWR-1000 features advanced two-wire TDR measurement technology with a low dead band (hysteresis) and accuracy of ± 0.2 in. (5 mm). The measurement data is converted to a 4-20 mA output with HART communication and can be viewed by the device's graphical display or a local display using the SAP-300 plug-in display unit. BinMaster offers standard models for process temperatures from -22 to 195°F (-30 to 90°C) and high temperature models for extreme temperatures from 22 to 392°F (-30 to 200°C).

—BinMaster, www.binmaster.com



Patchcrete

Kalmatron's® Patchcrete provides thin-layer technology for concrete restoration. The pre-packaged mixture is prepared by mixing Patchcrete with water. It can be used for industrial and residential applications such as heavily trafficked industrial floors, manholes, gas stations, sewers, septic systems, and garage floors. Patchcrete bonds to concrete and offers high 3-day compressive strength (50 MPa [7250 psi]), high tensile strength (8 MPa [1160 psi]), and 100% dampproofing. The minimum layer thickness is 8 mm (0.3 in.). Prior to application, concrete surfaces should be washed with water or primed with Kalmatron KF-G.

—Kalmatron, www.kalmatron.com



Humboldt Concrete Crack Detectors

Humboldt's HC-2955 and HC-2956 concrete crack detectors monitor crack movements and linear displacements in structures. Displacement and ambient temperature readings are stored in an integrated datalogger. The sampling period can be adjusted from 10 seconds to 91 hours, and up to 51,062 readings can be stored. Displacements are measured using a rotary potentiometer driven by the winding and unwinding of a stainless-steel cable with an 80 mm (3 in.) stroke. The cable can be extended for monitoring displacements over wider reaches or across areas that are not readily accessible.

—Humboldt, www.humboldtmg.com

RENOVATE

Euclid Chemical's Increte Systems RENOVATE is a two-part, cementitious micro-topping engineered to renovate and revitalize old worn concrete, either stamped or plain. This versatile product can be applied with a paint roller or a pump-up hand sprayer. It is ultra-thin and will not hide or distort the underlying pattern or texture of concrete. RENOVATE can be integrally colored and is formulated to accept Increte stains, including STAIN CRETE acid stain and the water-based stain STONE ESSENCE.

—Euclid Chemical, www.euclidchemical.com

Perma Patch VO

Dayton Superior's Perma Patch VO is a single-component, cement-based patching and repair mortar formulated for repair of vertical and overhead concrete applications. The high-bond-strength mortar can be used on bridge and parking structure columns, spandrel beams, concrete ceilings, tunnels, pipes, pilings, and other vertical repair applications where durability and strength is required. Perma Patch VO's rapid-setting, shrinkage-compensating formulation provides ease of application without the use of forms in interior and exterior applications. It also offers excellent resistance to freezing-and-thawing and deicing salts.

—Dayton Superior, www.daytonsuperior.com



STIHL AP 100 and 300 Lithium-Ion Batteries

STIHL's AP 100 and 300 Lithium-Ion batteries provide heavy-duty performance in lightweight, affordable packages. Weighing 1.8 lb (0.8 kg), the STIHL AP 100 has the same capacity and run times with 31% less battery weight than the previous model. The STIHL AP 300, the most powerful handheld lithium-ion battery in the STIHL lineup, has 28% more capacity while remaining the same weight as the previous model (3.8 lb [1.7 kg]). Both the AP 100 and 300 batteries are compatible with STIHL battery products, with no gradual drop in performance during use. A LED charge display allows users to monitor the power level. These batteries can be charged hundreds of times without any noticeable loss in capacity and feature an onboard circuit board to monitor voltage and temperature.

—STIHL, www.stihlusa.com



Brokk 280 Demolition Robot

The Brokk 280 features greater demolition power and more hardened parts than its predecessor. Maneuvering capabilities are also improved—the new design has smoother movements without sacrificing compactness, precision, or flexibility. Machine performance is optimized based on electrical and hydraulic system temperatures and power source. This allows the Brokk 280 to be operated efficiently in hot or cold environments, even using generators or unreliable power supplies. The Brokk 280 has a 20 ft (6.2 m) reach and weighs 6945 lb (3150 kg). End effectors include breakers, crushers, scabblers, buckets, grapples, drills, shotcrete nozzles, beam manipulators, and rock splitters.

—Brokk Inc., www.brokk.com

Concrete Crack Lock

Rhino Carbon Fiber's Concrete Crack Lock is installed by making a single-blade saw-cut in the concrete across the crack and then drilling two small holes at each end. The cut is then filled with Rhino High Strength Epoxy Paste, and the Concrete Crack Lock is inserted. The Concrete Crack Lock requires less concrete removal and epoxy, thus saving time on installation.

—Rhino Carbon Fiber, www.rhinocarbonfiber.com

Web Notes



Keystone On-Delivery Mobile App

GivenHansco launched its Keystone On-Delivery Mobile App that helps optimize ready mixed concrete truck operations. On-Delivery is compatible with most Android devices and can be tailored to producers' specific needs. Paired with Keystone Dispatch, producers can schedule and track deliveries with a single-screen display of truck routing, asset tracking, dispatch ticket information, pre-and-post trip data, and order status. Truck routing services include voice guidance and visual navigation to and from jobsites, routing based on dimensions and weight of the vehicle, automatic re-routing based on live traffic conditions, and audible warning when current speed limit is exceeded.

—GivenHansco, www.givenhansco.com

Book Notes

The Institute of Concrete Technology Yearbook: 2016-2017, 21st edition

The Institute of Concrete Technology (ICT) issued the 21st edition of its yearbook. The collection opens with a celebratory note by long-standing Editor Peter Hewlett, and includes two specially commissioned features. The first is an article on the current use of formwork systems, by former Concrete Society President Alasdair Stables. The second is an article on the life of Maj. Gen. Henry Scott, who, besides directing the construction of the Royal Albert Hall and South Kensington Museum, discovered the role of gypsum in cement making, developed Selenitic cement, and invented an innovative method of cement making from recycled sewage-treatment residues. The yearbook includes symposium papers on the theme "The Future of Precast" from the ICT's 44th annual convention. Topics include sustainability, CE Marking and off-site construction, smart railway sleepers, and the use of microwaves in curing. Also included is a paper, "In situ strength of concrete – the engineer's holy Grail," by the ICT President, Professor Mike Grantham. The Yearbook concludes with a summary of theses submitted in partial-fulfilment of the MSc in Advanced Concrete Technology at Queen's University Belfast. Copies can be purchased directly from the ICT, or individual papers can be downloaded at www.concretebookshop.com.

—The Institute of Concrete Technology, <http://ict.concrete.org.uk>



Products & Service Literature & Videos

Hyster Forklift Safety Posters

Hyster Company's two new safety posters are included with the company's Operator Training Program available through local Hyster® dealers. The "Forklift Safety Tips" and "Pedestrian Safety Tips" posters are available in English, Spanish, French Canadian, and Portuguese. Designed to be hung in materials-handling facilities, the posters show the "do's" and "don'ts" of operating a lift truck and provide tips for pedestrians working in environments shared with lift trucks. The Hyster Operator Training Program covers all five lift truck product classes and includes everything needed to conduct the classroom component of an OSHA-compliant operator training session for lift truck operators.

—Hyster Company, www.hyster.com

