Products & Practice

Germann Instruments Merlin Kit

The Merlin Kit is used to measure the bulk electrical resistivity—or its inverse, the bulk electrical conductivity—of saturated specimens or cores according to ASTM C1876, "Standard Test Method for Bulk Electrical Resistivity or Bulk Conductivity of Concrete." The Merlin Kit can be used for multiple applications, including research and development to characterize the influence of new materials on the electrical resistivity of concrete; optimizing mixture proportions and blends of supplementary cementitious materials to increase concrete service life; on-site durability quality control and quality assurance; and evaluation of in-place concrete (using cores). Merlin uses the four-point measurement method for accurately measuring the specimen resistance to an electrical alternating current, minimizing the effects of the conductive sponges and the pressure applied to the electrodes. A voltmeter measures the voltage drop across the specimen, and an ammeter measures the current through the specimen. From the measured current (I) and voltage (V), the bulk resistivity, or its inverse conductivity, are calculated and displayed. Two versions are available depending on the size of specimens to be tested. The operation is simple, and a measurement is obtained within 2 seconds.

-Germann Instruments, www.germanninstruments.com

Eco Material Technologies RestoreAir and SorbSensor

Eco Material Technologies' RestoreAir® process uses a low dosage of liquid reagent to pre-treat fly ash by passivating the carbon surfaces and reducing their ability to absorb air-entraining admixtures (AEAs). This technology has been successfully demonstrated on Class C and F ashes containing the most common powder-activated carbons (PACs). RestoreAir systems can be customized to site-specific conditions and constraints. Power plant units with low PAC injection rates and manageable variability can deploy a basic system, for example, whereas swing-load units—those using aggressive PACs—may require the more robust and advanced features of the RestoreAir technology. ASTM C1827, "Standard Test Method for Determination of the Air-Entraining Admixture Demand of a Cementitious Mixture," is the traditional method used to quantify the PAC content in cementitious materials. The test method requires that an AEA is applied, one drop at a time, to a slurry of cement and fly ash. After each dosing of AEA, the mixture is mechanically agitated, and the stability of the resulting foam is observed.



The number of drops required to achieve a stable foam is recorded as the "foam index." Eco Material Technologies has also developed SorbSensor® as an alternative technology to this test. SorbSensor can detect PAC concentrations in ash by exposing AEA and ash solutions to ultraviolet light and evaluating the resulting intensity of fluorescence. Because AEAs fluoresce in proportion to the concentration of AEAs remaining in a solution, the instrument can be used for quality assurance or to determine RestoreAir treatment dosage.

-Eco Material Technologies, https://ecomaterial.com

Garon Products HY SPEED 500

Garon's HY SPEED 500[™] is a pourable concrete pothole filler. It sets in 1 hour and is three times stronger than concrete. HY SPEED 500 is a new development for Garon in the field of fast-setting, high-strength cements for resurfacing and patching concrete, bituminous, and brick surfaces. HY SPEED 500 can patch holes more than 3 in. (76 mm) deep. This select formulation of cementitious binders is specifically designed to provide properties not previously found in portland cement concrete, metallic compounds, or other proprietary concrete repair materials. It is easy to use; simply mix and place the filler, and it will be traffic-ready in an hour. Typical uses include loading docks, shipping or receiving platforms, warehouses, traffic lanes, or bridge decks.

-Garon Products, Inc., www.garonproducts.com

Products & Practice.

StoVentec Fiber Cement Rainscreen System

Sto Corp. launched the StoVentec[®] Fiber Cement Rainscreen[®] System, a complete ventilated rainscreen cladding system that blends sustainability, design freedom, and performance. The StoVentec Fiber Cement Rainscreen System provides thermal performance, fire protection, and weather resistance. Its features include non-combustible continuous insulation, a weather-tight air and water-resistive barrier, and high-density, non-combustible fiber cement panels. Engineered to minimize thermal bridging, the system enhances energy efficiency and occupant comfort. The StoVentec Fiber Cement Rainscreen System offers versatility, blending customizable dimensions with curated color collections to meet diverse architectural needs. Panels are available in sizes up to 4×10 ft (1×3 m) and thicknesses of 8 to 10 mm (0.3 to 0.4 in.) and can be cut into virtually any shape or size, providing design flexibility for both façades and interiors. Additionally, two distinct color collections are available. The Primara Line features a gray-bodied core with an opaque surface finish, offering a smooth texture with a light sanded grain. The Strata Line, designed with a pigmented core and an opaque finish, delivers a smooth texture with a delicate linear effect.

-Sto Corp., www.stocorp.com

HAVER & BOECKER RADIMAT-PATHFINDER

HAVER & BOECKER'S RADIMAT-PATHFINDER[®] Edition conveyor system transfers bags from RADIMAT[®]—a fully automatic empty bag separation and application device—to the ROTO-PACKER[®], a fully automatic packing machine. It overcomes space constraints, allows for full automation of the packing line, and improves health and safety. The PATHFINDER allows operations previously unable to accommodate a bag placer to install a RADIMAT automatic bag applicator. Operations can customize their setup to accommodate the available space by curving the PATHFINDER's route. With a total length of 20 m (66 ft), the PATHFINDER allows plants to position the RADIMAT and ROTO-PACKER in separate areas. An entirely automated line curates a safer, more productive work environment. The PATHFINDER efficiently and



accurately conveys each bag from the RADIMAT to a single-bag feeder at the end of the line, which then places each bag precisely onto the packing machine's filling spouts. The PATHFINDER Edition can also be implemented in a simplified version without the use of a RADIMAT. Rather than having to place the bag on the actual spout, operators simply feed the bags into the conveying system itself, which then applies the bag to the spout automatically.

-HAVER & BOECKER OHG, www.haverboecker.com

BCMI ProPilot for Concrete Dispatch

BCMI launched its ProPilot AI for BCMI Dispatch and voice commands and queries for mobile apps. BCMI's artificial intelligence (AI) tools handle time-consuming research, calculations, and repetitive tasks. With BCMI's cloud-based concrete dispatch, contractors can submit order requests from a phone, tablet, or desktop application. BCMI's AI-assisted order management tool interprets customer requests and prompts dispatchers to quickly make changes. Approved changes are automatically applied to orders and confirmed to customers with a single click. This can save dispatchers and their customers time, reduce errors, and track and store changes for future reference. Automated tasks and built-in translation tools help non-English speakers navigate the Material Now app. Spoken queries can generate data from dates, performance metrics, and other parameters.

-BCMI Corp., www.bcmicorp.com

Products & Practice

Jetstream Fluid End Conversion Kits

The Jetstream fluid end conversion kit allows operators to upgrade their existing pumps regardless of brand or manufacturer—to Jetstream's UNx[™] fluid end technology. This solution provides a supply of replacement parts and enables quick in-the-field maintenance and pressure range conversions. Jetstream's fluid end conversion kit includes an adapter plate that mounts directly to the pump and connects it to the new manifold, which features Jetstream's UNx fluid end technology. Operators can change the fluid end's packing in 5 minutes and replace the valve cartridges in 15 minutes without requiring the use of any special tools or equipment. The manifold swings down for easy access to the interchangeable parts, including durable solid carbide plungers, a single-piece high-lubricity packing ring, and pressure-bearing components that are precisionengineered from stainless steel. Jetstream's fluid ends offer long-lasting durability and performance at multiple pressures, with the ability to quickly change between operating pressures on the jobsite for versatility. The conversion kits are designed for easy installation at a contractor's facility, and Jetstream's support team is available to assist with setup and ongoing technical needs.



-Jetstream of Houston, LLP, https://waterblast.com

Mack MD7 Concrete Line Pump

The Mack MD7 concrete line pump is a medium-duty model with an Alliance JMP-90 pump that has an output of up to 90 m³/h (3178 ft³/h). The MD7 features the Mack-Air suspended driver's seat, a flat-bottomed steering wheel, and an Allison 3000 RDS six-speed transmission with sixth-generation controls. The truck also includes GEOTAB telematics for reliable fleet management and performance monitoring, making it an ideal choice for concrete line pump applications requiring a balance of power and maneuverability.

-Mack Trucks, www.macktrucks.com

Products&Service Literature&Videos

EFFC/DFI Carbon Reduction Guide and EFFC/DFI Circular Economy Guide

by the Deep Foundations Institute and the European Federation of Foundation Contractors

The Deep Foundation Institute's (DFI's) Sustainability Committee is working with the European Federation of Foundation Contractors (EFFC) Sustainability Working Group to develop guides that are intended to support geotechnical companies with practical suggestions for meeting some of the 17 Sustainable Development Goals (SDGs), which every member country in the United Nations has agreed to achieve by 2030. The guides are not minimum requirements or sector standards, but rather practical support guides sharing good practices. The *EFFC/DFI Sustainability Guide No. 1: Carbon Reduction* is the first guide in the series and focuses on carbon reduction, addressing SDG 13: Climate Action, and SDG 7: Affordable and Clean Energy. The *EFFC/DFI Sustainability Guide*



No. 2: Circular Economy is the second guide in the series. The guide focuses on the circular economy, related to SDG 12:
 Responsible Consumption and Production. Both guides are free and can be downloaded from the DFI Publications Store.
 —Deep Foundations Institute, https://dfi.org

Product Showcase_

Formwork & Accessories

Doka 360

Doka announced Doka 360, an integrated customer platform that digitally connects and streamlines key touchpoints—from planning and ordering to site operations and return logistics—along the formwork process. With Doka 360, the goal is to simplify access to digital services and accelerate and streamline the entire formwork process through a few clicks. What previously required multiple tools, manual coordination, or a phone can happen in one central platform. As soon as formwork is planned in Doka 360, a complete material list is automatically generated and cross-checked against the current inventory. The order can be placed directly in the system, and its progress and estimated delivery can be tracked in real time. Return processes can also be managed quickly and



easily without reliance on paperwork or opening hours. In addition, Doka's sensor solutions such as DokaXact or Concremote are fully integrated into the platform, delivering real-time insights directly to the dashboard. The initial rollout for Doka 360 is planned for 2026.

—Doka, www.doka.com

Topcon CR-H1

Topcon Positioning Systems has announced the CR-H1, a handheld solution that is one of the latest additions to the company's Capture Reality portfolio of mass data solutions. The system uses PIX4Dcatch, an application that runs on iPhone devices with integrated laser imaging, detection, and ranging (LiDAR) that collects images and employs photogrammetry to create detailed, full-color three-dimensional (3-D) point clouds. The iPhone connects to Topcon's HiPer CR receiver, enabling the application to collect georeferenced images. The receiver and iPhone are both mounted on a specialized handle designed and manufactured by Topcon, so users can easily capture point clouds without the need for a tripod.



The devices needed can be held in one hand for maximum mobility in the field. The CR-H1 marks the first product launch since Topcon and Pix4D established their strategic cooperation agreement. Topnet Live subscriptions are available for the CR-H1, providing real-time global navigation satellite system (GNSS) corrections that deliver higher-quality point clouds.

-Topcon Positioning Systems, www.topconpositioning.com

BrandSafway QuikDeck and Flexi Deck

The BrandSafway QuikDeck[®] Suspended Access System offers the advantage of safely working on an open, modular platform. Its patented configuration can adapt to fit most shapes and sizes, making it an ideal solution for a variety of projects, including tunnels, bridges, and stadiums.

Flexi Deck, available exclusively from Aluma Systems, is part of the BrandSafway family of companies, and is a new offering. Flexi Deck is an easy-touse slab formwork system that can be moved manually. The drophead system allows for the early dismantling of beams and planking used in the casting phase. It is both lightweight and robust, providing an optimal balance of strength and ease and ensuring maximum coverage with the minimal amount of equipment.

-BrandSafway, https://brandsafway.com



Product Showcase

PERI SKYFLEX and LEVO

PERI Formwork Systems, Inc., introduced two formwork solutions, SKYFLEX and LEVO.

SKYFLEX is an imperial 8 x 8 ft ($2.5 \times 2.5 \text{ m}$) grid beam formwork system that enables efficient and secure formwork operations while optimizing safety. SKYFLEX delivers flexibility and speed, and its grid design allows for larger bay sizes with fewer props, maximizing deck efficiency. The system's patented six-way drophead enables early striking and implementing safer practices such as workers operating primarily from the ground and within the slab interior, particularly at cantilevered edges.

LEVO is PERI's first fully imperial lightweight wall system, with a 9 x 3 ft (3 x 1 m) panel weight of only 6.6 lb/ft² (32 kg/m²). This results in easy handling and transportation. The system is designed and optimized for performance, durability, and safety for the U.S. market. LEVO simplifies assembly through vertical applications.

-PERI Formwork Systems, Inc., www.peri-usa.com

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