MIXING PADDLES COMPLETELY BLEND WET AND DRY COMPONENTS

CS Unitec’s High-Viscosity Mixing Paddles are designed to thoroughly blend robust materials such as finished mortar, finished plaster, floor compounds, refractory cements, insulating materials, and quartz-filled epoxy resin. The helical blade design mixes the product from the bottom up, eliminating the injection of air and completely blending wet and dry components together. The MG series of stirring paddles are 24 in. (600 mm) long and are available in diameters of 4.5, 5.6, 6.25, and 9.25 in. (114, 142, 159, and 235 mm). Constructed of welded steel and galvanized for protection against corrosion and resistance to abrasion, these paddles are ideal for continuous, professional use. Extensions are available in 9 or 15 in. (229 or 381 mm) lengths.

—CS Unitec, Inc.
www.csunitec.com

UNIQUE VIBRATOR DESIGNED SPECIFICALLY FOR ICFs

The Wallbrator is a unique vibrator designed specifically for use with insulating concrete form walls. This durable tool attaches to any 1/2 in. (13 mm) electric or cordless drill. Combining high speed and low-impact vibration, it ensures good consolidation of concrete with one pass. With a weight of less than 3 lb (1.3 kg) and a length of 7 in. (178 mm), this tool is lightweight and compact. The grip design offers installers a comfortable nonslip feel when operating under any weather conditions.

—LiteForm Technologies
www.liteform.com

WATERPROOFING SYSTEM WORKS ON HORIZONTAL SURFACES

Leaks in the horizontal surfaces of structures can quickly and dependably be repaired with the Turbo-Seal R Injection Waterproofing System. Its watertight integrity, flexibility, adhesiveness, and self-healing characteristics make it perfect for repairing and restoring damaged waterproofing membrane systems. It’s a flexible gel that bonds to any surface to create an impervious waterproofing membrane. Consisting of a highly elastomeric polymer rubber (comprising more than 25% post-consumer recycled content) infused with special adhesives, Turbo-Seal absorbs movement, minimizes damage and separation, and is resistant to wide temperature fluctuations. In fact, the properties of this product are so unique that it never fully cures. It requires no mixing of chemicals; it’s simply cold-applied by injecting through to the positive side of a horizontal substrate, either from drilling above or below the substrate. Applications include leaking plaza decks, leaking floor slabs, floor slabs with vapor transference, leaking concrete roof decks, and leaking below-grade ceilings.

—OCM, Inc.
www.ocm-inc.com
SAW FEATURES POWERFUL ENGINE

The 14 in. (325 mm) walk-behind CX3 Concrete Saw features a 7-hp engine. The wet- or dry-cutting saw is built with an all-aluminum frame construction that makes it lightweight and portable. The folding handlebar makes it compact for easy transportation and storage. The 1 in. (25 mm) diameter blade shaft and self-aligning pillow bearings provide accurate cutting, and the saw is designed with easy access to the control panel. The built-in water distribution system supplies water to both sides of the blade, and the blade guard can be positioned for left- or right-hand cutting. Powered by the new Kohler CH270 7-hp horizontal-shaft Command PRO® engine, this saw will rival any in its class. The engine’s patented Quad-Clean™ technology is a four-stage air-cleaning system that keeps the engine free from debris, minimizing maintenance and cleaning efforts.

—MK Diamond Products, Inc.
www.mkdiamond.com

RELEASE AGENT ALSO INHIBITS CORROSION

MCI® Creteskin™ is an industrial-strength release agent that contains Cortec’s Migratory Corrosion Inhibitors (MCI). This clear protective coating inhibits the adhesion of concrete, other cementitious materials, salts, and abrasives to painted and unpainted metal surfaces. It also provides corrosion protection to the underlying substrate, enabling continued use and a longer lifespan. Once cured, MCI Creteskin provides an extremely durable and resistant surface that will stand up to high-pressure and hot water washes typically used when cleaning concrete trucks and mixers. The coating allows easy cleaning with high-pressure water as an alternative to abrasive blasting or acids. Typical applications include concrete trucks, drum mixers, batching plants, construction equipment, concrete forms and molds, and travel towers.

—Cortec Corp.
www.cortecmci.com

HEARING PROTECTION THAT WON’T GET LOST

The Zip-Outs™ line of hearing protection solutions allows workers to easily meet OSHA and ANSI requirements for hearing protection. The zip-out/zip-in tethering system guarantees that earplugs are always available to the hard hat wearer. The unique earplug delivery and retention system attaches Noise Reduction Rating-rated earplugs directly to all types of hard hats. Hard and soft plugs are available, providing users a comfortable and convenient defense against hearing-related injuries. Zip-Outs are designed to allow simple earplug removal for replacement and cleaning. A line of ball caps with a similar tethered hearing protection delivery system is also available.

—StreamWorks Products Group, Inc.
www.streamworksproducts.com
PIER TABLES HELP KEEP RAIL LINES OPEN DURING BRIDGE CONSTRUCTION

For the last 2 years, the Colorado Department of Transportation (CDOT) has been constructing a new 4th Street Bridge on State Highway 96A in Pueblo. The new structure, which is being built next to the original bridge, features twin 1140 ft (347 m) concrete segmental bridges consisting of cast-in-place, post-tensioned segmental box girders built from above in balanced cantilever with form travelers. Additionally, all piers are supported on two drilled shafts, providing flexibility—minimizing the bridge’s footprint—and greatly reducing the number of construction operations. This approach will allow for 28 rail tracks underneath the bridge to remain active during construction.

Ensuring the rail yard can remain open during construction is a real challenge. The bridges have five spans, the longest of which is 378 ft (115 m) over the tracks. To accomplish this feat, Doka USA was hired to provide formwork engineering and technology. To begin, Doka recommended the use of pier tables. The four tables—two for each side—were placed on top of the piers, creating the starting point for segmental construction of the bridge. The tables overcame the large out-of-balance forces induced from the balanced cantilever construction, ensuring the required railroad clearances were maintained.

An additional challenge was each bridge segment’s different geometric shape, requiring continuous formwork changes on each segment. In response to this challenge, approximately 4060 ft² (377 m²) of Doka’s Top 50 formwork is being used in conjunction with custom support walers. The Top 50 system can be configured for fast and safe stripping of the formwork, after which the interior forms can be immediately reconfigured and rapidly reset into the next casting. This ease of maneuverability is critical as the bridge’s shape and forming needs will consistently change during the construction process.

—Doka
www.dokausa.com

LASERS CAN BE USED FOR A VARIETY OF TASKS

The rugged Spectra Precision® GL512 and GL522 Grade Lasers can perform three types of jobs for the construction contractor—level, grade, and vertical alignment with plumb. The GL512 (single-grade) and GL522 (dual-grade) lasers offer fast and easy horizontal level, grade, and vertical plumb setup with no manual leveling. They send a continuous, self-leveled 360-degree laser reference over an entire work area and feature a wide grade range of –10 to +15%, so they can be used for a variety of slope applications. Both lasers feature a two-way full-function remote control with a built-in backlit grade display, allowing the contractor to do everything with the remote control that can be done with the laser keypad, up to 100 m (330 ft) away from the laser. The lasers also self-plumb in the vertical position to accommodate an even wider range of applications—such as anchor bolt installation—plus plumbing of formwork, tilt-up walls, and curtain walls.

—Trimble
www.trimble.com
Information on the items reported in “Products & Practice” is furnished by the product manufacturers, suppliers, or developers who are responsible for the accuracy of the information. Also, the descriptions of these items do not represent endorsement by this magazine, by the American Concrete Institute, or any of its staff. They are published here simply as a service to our readers.

SITE DETAILS CONCRETE COUNTERTOPS

Concrete countertops continue to offer new options for consumers looking for alternatives to traditional countertop materials. Concrete-Countertops.org has outlined concrete’s ability to perform as a practical countertop material by looking at five key factors: stain, heat, and scratch resistance; susceptibility to cracking; and maintenance. Covering each topic in detail, the site offers consumers information that can be used to compare concrete countertops with other materials. It covers the role sealers play in countertop performance and reveals common causes of cracks and tips on how to prevent them. The site also offers simple guidelines on how to care for and maintain concrete countertops.

MANUAL COVERS MOISTURE CONTROL

A new edition of Manual 18, Moisture Control in Buildings: The Key Factor in Mold Prevention, is now available from ASTM International. This one-of-a-kind publication provides the latest and most important information relating to moisture problems in buildings. Written by Heinz R. Trechsel, H.R. Trechsel Associates, and Mark Bomberg, Syracuse University, this second edition contains 28 comprehensive chapters that focus on the major issues involved in moisture-resistive construction. Four sections cover fundamentals, application, construction principles, and recommendations and implementation. In addition, three new chapters have been added: Details and Practice, Quality Management in Design and Construction, and Development of Methods for Assessment of Moisture-Originated Damage. Also available is a companion CD-ROM that includes more than 100 ASTM standards referenced or discussed and provides even more value to the printed manual.

For more information or to order, contact ASTM Customer Service, telephone: (610) 832-9585; fax: (610) 832-9555; e-mail: service@astm.org; Web site: www.astm.org.

LEADING WITH MARKETING

by Brian Gallagher and Kimberly Kayler

Written by long-time architecture/engineering/construction (AEC) industry veterans, Leading with Marketing is a comprehensive resource for creating, building, and managing successful AEC marketing programs. Based on years of actual experience with a diverse variety of companies and associations in the AEC industry, the authors’ intent is to bridge the gap between traditional marketing concepts and emerging marketing trends, while providing a contextual link to the construction business. This is not another book about how to write a marketing plan; rather, its mission is to help change the way those in the industry think about marketing so firms can select the right target audiences, communicate with them effectively, and create profitable opportunities. It’s designed specifically as a tool for professionals in the AEC fields who are providing leadership to the marketing efforts, with a complete overview of the marketing process, tools, systems, and best practices. Companies that market architecture, engineering, and construction services—as well as companies that sell materials, systems, and other products used in construction—will find the marketing principles outlined in this book to be beneficial.

For more information or to order, visit ACI’s bookstore at www.concrete.org or contact Member Services at (248) 848-3800.