

Products & Practice

MasterSeal SL 100

BASF MasterSeal® SL is designed to expedite construction project schedules and keep horizontal joints weathertight, even in demanding conditions. Its hybrid technology permits application to freshly placed (green) concrete as soon as 24 hours after forms are removed. The sealant can also be placed on damp concrete to help minimize the impact of rain on project schedules.

MasterSeal SL 100 can adhere to substrates such as concrete, metal, and stone. Recommended uses include plaza decks, parking structures, balconies, industrial floors, driveways and garages, sidewalks, and other horizontal joint applications.

—BASF, www.master-builders-solutions.basf.us



Schwing Tier IV Engine SP 500 Stationary Pump

Schwing SP 500 stationary concrete pump is equipped with a Tier IV compliant Caterpillar diesel engine. The CAT® C3.4B diesel is rated at 74.5 hp and provides durability and fuel efficiency. The SP 500 is a versatile machine with up to 45 yd³/h (34 m³/h) output and 1100 psi (8 MPa) maximum pressure on the material. The machine pumps grout or concrete. The twin-cylinder, all-hydraulic pump handles up to 1.5 in. (38 mm) aggregate with its 6 in. (152 mm) diameter pumping cylinders operating through a 39 in. (991 mm) stroke. Dual shifting cylinders provide positive valve actuation for smooth discharge. The open loop hydraulic system combines with the CAT® engine to provide all-day economy from the 20 gal. (76 L) fuel tank. Schwing SP models are available as skid, truck, or trailer-mounted units.

—Schwing, www.schwing.com

Jabra Steel Headset

An industrial strength headset made for trade workers, the Jabra Steel is rugged to resist shock, dust, dirt, grime, and water. Whether on site and covered in dirt, or on a scaffold in high winds, Jabra Steel keeps users connected with clients in rough work environments. With the accompanying Jabra Assist app, users can set-up text messages to read out loud and customize the audio quality and spoken language. The Jabra Steel headset is available exclusively at Radio Shack and comes with a 5-year warranty.

—Jabra, www.jabra.com

—Radio Shack, www.radioshack.com





GRANUMAT 4.0 Color Synthesizer

The Pigments & Additives division of Huntsman launched GRANUMAT™ 4.0 Color Synthesizer, an advanced pigment metering solution. The synthesizer simultaneously weighs and dispenses up to 10 colors at high speed and serves four mixers and cyclone holding hoppers either randomly or at the same time. Purchasers of the GRANUMAT™ 4.0 Color Synthesizer can choose between personal computer or touch panel control systems. Both options use a smart Ethernet connection to relay information between the metering machine and the batching plant's control system. This smart technology enables digital start and feedback signals to be easily exchanged. A smart function that enables the system to automatically adjust weighing and conveying parameters is also available. The synthesizer is compact in size at 4.55 m (15 ft) tall. Using the GRANUMAT 4.0 Color Synthesizer, users can create their own shades from primary colors by additive weighing and also use special colors such as carbon black, white, or green.

—Huntsman, www.huntsman.com



ZIPPKOOL Cooling Jacket

The ZIPPKOOL™ Cooling Jacket with thick cotton fabric provides protection and a constant cool breeze. Manufactured by SFT Laboratory Co. Ltd. in Japan, the jackets' specially designed fabric combined with patented super-lightweight fans allow up to 5 gal. (19 L) of air per second to enter/circulate the jacket. The circulation of air evaporates sweat, allowing a cool and comfortable feeling while lowering temperature around the user's body. The jackets are powered by special lithium-ion batteries, allowing for 20 hours of use in one charge.

—ZIPPKOOL INC., www.zippkool.com

CINTEC Dissipative Wall Anchor

CINTEC International's dissipative wall anchors protect heritage buildings in earthquake-prone parts of the world. This product is designed for use with Cintec's wall anchor system. For buildings subject to regular seismic activity, there is a possibility of pullout damage at the anchorage head. The dissipative wall anchor allows for small amounts of movement through a sliding mechanism. The anchor consists of a set of stainless steel plates to which four bolts apply pressure, creating friction to an adjustable degree. There are built-in stops to restrict the sliding motion and connectors that link to Cintec's standard anchor rods. The anchor allows a controlled and repairable drift for the walls, managing the amount of seismic energy fed into the structure and therefore minimizing damage to the building.

—CINTEC International, www.cintec.com

Cortec's MCI HPRS

Cortec's High Performance Repair System (HPRS®) can reduce corrosion rate and extend the service life of structures. The process begins with base surface preparation to remove all spalled, loose, and deteriorated concrete. Rust on exposed reinforcing bars is eliminated with VpCI®-426 rust remover or treated with CorrVerter® Rust Primer. Two coats of Migrating Corrosion Inhibitor (MCI®) grout are recommended to be applied on any exposed reinforcing bar or metal, followed by the application of various MCI® repair mortars to the concrete structure. Once the repair mortar is cured, MCI®-2020's formula is sprayed, brushed, or rolled on so the migrating inhibitors can penetrate through concrete and attach to and protect the surface of embedded reinforcing steel. After sufficient absorption, other materials such as coatings or water repellents may be applied on top.

—Cortec Corporation, www.cortecvci.com

Earth Shield Stainless Steel Waterstop

Earth Shield® Stainless Steel Waterstop is used as a fluid-tight diaphragm, embedded in concrete, across and along construction joints, for primary and secondary containment structures. The waterstop resists the attack of corrosive fluids, even at severely elevated temperatures. A variety of metals, grades, and gauges are available, but the standard material is 20 gauge 316 low carbon stainless steel, providing broad spectrum corrosion resistance to aggressive media. The waterstop is available in many standard shapes and sizes including profiles for new construction and retrofit. All change of direction fabrications can be premanufactured, leaving only straight butt welding.

—Earth Shield, www.earthshield.com

Web Notes

Lenovo Phab 2 Smartphone Includes Tango

The Lenovo Phab 2 Pro is a smartphone that includes Tango—a new technology from Google that enables augmented reality (AR) gaming and utilities. The user looks through Phab 2 Pro and sees objects and information overlaid onto the real world. Current apps include Tango MeasureIt, which allows the measurement of objects with the phone. Available apps also include Tango Constructor, which allows the construction of three-dimensional (3-D) scans.

—Lenovo, <http://shop.lenovo.com/us/en/tango/index.html>

Book Notes

Civil Engineering Materials

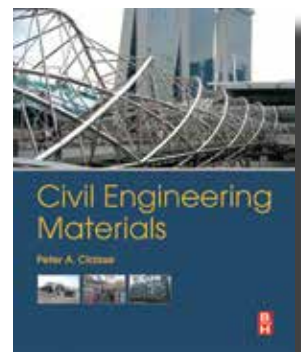
By Peter A. Claisse

Civil Engineering Materials explains why construction materials behave the way they do. It covers the construction materials content for undergraduate courses in civil engineering and related subjects and serves as a reference for professionals working in the construction industry. The book concentrates on demonstrating methods to obtain, analyze, and use information. The topics are relevant to all the different stages of a course, starting with basic properties of materials and leading to more complex areas such as the theory of concrete durability and corrosion of steel. The text is supported by a large number of worked examples of exam-style questions in both MKS and US customary units.

—The Butterworth-Heinemann Imprint of Elsevier, <http://store.elsevier.com/>

Butterworth-heinemann/IMP_30

520 pp.; ISBN: 9780081002759



Products & Service Literature & Videos

fib Bulletin 77: Corrugated-steel-web bridges

fib Bulletin 77 offers the global engineering community an overview of corrugated-steel-web bridges. The book covers numerous examples of bridges in Japan and France, as well as an in-depth case study and analysis of a large corrugated-steel-web bridge in Germany. This publication provides designers, proprietors, contractors, and architects alike relevant technical and theoretical information on construction processes, along with ideas for future development.

—*fib*, www.fib-international.org

