

Products & Practice

HammerTek Smart Elbow

Conventional sweep elbows at ready mixed plants can blow out as a wear point develops from abrasive materials impacting the elbow wall, but the Smart Elbow® from Hammertek features a teardrop-shaped chamber that protrudes partially beyond the intended 45- or 90-degree flow path of material. This causes a sphere of material-in-air to rotate in the same direction as the air stream that powers it, gently deflecting incoming material around the bend. Abrasive materials are therefore prevented from impacting the elbow wall, extending elbow life.

—HammerTek Corporation, www.hammertek.com

Roadware 10 Minute Concrete Mender

Roadware 10 Minute Concrete Mender™ can be used to repair full-depth hairline cracks without cutting. It can repair cracks as small as 20 mil (0.5 mm). Users drill a 3/8 in. (10 mm) hole into the crack and push the Concrete Mender into the crack using only a cartridge of Concrete Mender, a manual application gun, and a Roadware Easy Injection mixer. Concrete Mender initially has a low viscosity that allows it to penetrate and repair concrete from the inside out. It then thickens and cures about 5 minutes after application. It is a structural polyurethane designed to restore aggregate interlock and deflect with the concrete under heavy traffic and loading, and it will not become brittle over time.

—Roadware Inc., www.concretemender.com



Topcon Delta Link

Delta Link provides communications support for Topcon autonomous construction and structural health monitoring in the field. Communications options include Ethernet, Wi-Fi, and a globally approved integrated cellular modem. The system manages each power source, maximizing system availability, and it can operate in a wide range of temperatures—from -40° to 85°C (-40° to 185°F)—making it suitable for a variety of climates. Delta Link is part of Topcon's Delta Solutions system, which also includes Topcon Delta Log and Topcon Delta Watch.

—Topcon Positioning Systems, Inc., www.topconpositioning.com

LATICRETE SPARTACOTE FLEX XPL

SPARTACOTE™ FLEX XPL is a high-solids, low-VOC, minimal-odor resinous floor coating for both decorative and protective applications. Its chemical makeup, which retains low viscosity, allows contractors an extended working time of 20 to 25 minutes. It features an improved setting time that allows for a fast return-to-service with foot traffic permitted in 3 to 4 hours and vehicular traffic after 24 hours. SPARTACOTE FLEX XPL can be used within resinous floor coating systems as a primer, mid coat, or clear top coat sealer. It is UV-resistant, preventing discoloration. Applications include residential garages, commercial and industrial flooring, and other high-traffic interior and exterior applications.

—LATICRETE, www.laticrete.com



Products & Practice

BeBop Forte Data Gloves

BeBop Forte Data Gloves have been designed to enhance virtual-reality (VR) systems used for training or design. The gloves' sensors and haptic actuators allow users to grab and manipulate digital objects as if they exist in real life. The flexible sensors are embedded in the fabric of Forte gloves, so they can accurately track a wearer's hands for replication of a wearer's movements. Sensors are located along each finger as well as in the palm, and haptic actuators located in the fingertips give wearers a sense of touch. The haptic actuators, designed and built by BeBop, use a library of "waveforms" that enable different sensations depending on the application/environment. BeBop's OEM customers can add to the library and customize the haptic output for each application. Traditional haptic actuators provide a single frequency, but the ones in these gloves provide a variety of different outputs. Traditional haptic actuators also tend to be bulky and heavy, but these actuators are lightweight and low-profile, disappearing within the Forte Data Gloves.



—BeBop Sensors, www.bebopsensors.com

Raken Production Tracking

Raken's Production Tracking is an easy-to-use tool to track employee time and materials. Production Tracking allows users to record the quantity of materials installed each day along with employee and crew time; automatically calculate the actual quantities of materials installed and compare those with the amounts budgeted; monitor progress and identify risks early with real-time data; and bid more accurately on future projects based on historical production data.

—Raken, www.rakenapp.com

Autodesk BIM 360 Design and Civil 3D

The recently expanded Autodesk BIM 360 Design is a cloud solution that now includes Autodesk Civil 3D. This enables teams to collaborate in real time on complex projects with horizontal and vertical structures, nearly anytime and anywhere in a single connected cloud platform. BIM 360 Design and Civil 3D subscribers collaborate using streamlined workflows on a unified platform, and they perform their data management activities in the same place. Additional benefits include connected data throughout the project life cycle, so project team stakeholders can collaborate to improve project outcomes; the ability to visualize design changes; and savings on IT maintenance.

—Autodesk, Inc., www.autodesk.com

Polycor Hardscapes & Masonry Product Line

Polycor's Hardscapes & Masonry product line offers durable natural stone that is easy to install. The line includes pavers, pool coping, steps and treads, veneers, walls and caps, edging, accents, posts, and ornamentals. Polycor Hardscapes & Masonry products are 100% natural stone that has been sourced responsibly and manufactured in the United States. The products resist freezing-and-thawing cycles, withstand the scorching heat of summer, and maintain a natural and unique appearance.

—Polycor, <https://hardscapes.polycor.com>



Book Notes

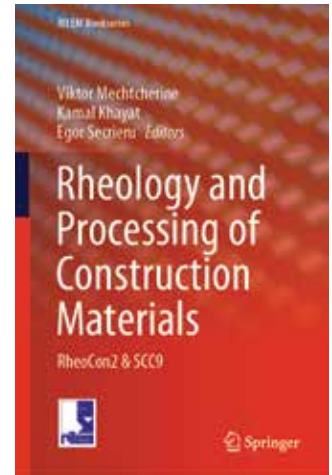
Rheology and Processing of Construction Materials

edited by Viktor Mechtcherine, Kamal Khayat, and Egor Secrieru

This book gathers peer-reviewed contributions presented at two parallel, closely interconnected events on advanced construction materials and processes: the 2nd International RILEM Conference on Rheology and Processing of Construction Materials (RheoCon2) and the 9th International RILEM Symposium on Self-Compacting Concrete (SCC9), held in Dresden, Germany, on September 8-11, 2019. The papers discuss various aspects of research on the development, testing, and applications of cement-based and other building materials, including rheological properties relevant to the fast-growing fields of additive manufacturing and self-compacting concrete. Topics include production, properties and characterization, chemical admixtures, effect of binders (including geopolymers and calcined clay), mixture design, rheological testing, constitutive models, flow modeling, and numerical simulations. Case studies are also provided. This book will be of interest to researchers, graduate students, and industry specialists, including materials suppliers, consultants, and construction experts.

\$299.99 (hardcover); 663 pp.; ISBN 978-3-030-22565-0

—Springer, www.springer.com



Products & Service Literature & Videos

ASCC Pre-Construction Checklist for Safety Policies & Procedures

The Safety & Risk Management Council, a specialty council of the American Society of Concrete Contractors (ASCC), offers a Pre-Construction Checklist for Safety Policies & Procedures. The purpose of the document is to stimulate discussion of job-specific safety protocol and procedures with all pertinent parties prior to starting a project. The document covers general information such as contact information for significant persons, safety goals and planning, reporting, discipline, and quality of life. The checklist also covers specific issues such as silica, crane activities, heat, and evacuation plans. The safety checklist is free to ASCC members and costs \$20 for nonmembers.

—American Society of Concrete Contractors, www.asconline.org

Web Notes

Traliant Online Training

Traliant, a provider of online sexual harassment training, offers the training course “Preventing Discrimination and Harassment for Construction.” With separate versions tailored for employees and managers working in the construction industry, the interactive training covers sexual harassment, discrimination, bystander intervention, diversity and inclusion, and other relevant workplace topics in a modern, video-driven format. The course is optimized for jobsite access on laptops, smartphones, and tablets. Organizations can also choose state-specific versions that comply with sexual harassment training requirements in California, New York, Illinois, Connecticut, Delaware, and Maine. The course includes concise episodes, realistic video scenarios, and interactive assessments to reinforce learning objectives.

—Traliant, www.traliant.com