

## ACEC/M Awards 2019 Firm of the Year Honors

The American Council of Engineering Companies of Michigan (ACEC/M) presented the 2019 Firm of the Year awards—the highest honor ACEC/M bestows to its member firms—on March 2, 2019, at the Engineering & Surveying Excellence Awards Gala in Detroit, MI. The awards recognized both a large firm (over 30 employees) and a small firm. Recognition is based on actions taken by a member firm to progressively develop its management practices and for assuming leadership roles in community outreach activities and ACEC/M programs that strengthen the profession for all members.

In the large firm category, ACEC/M member firm Fleis & VandenBrink Engineering, Inc., Grand Rapids, MI, took the honor. The employee-owned civil engineering and architecture firm, started in 1993, today has 200 employees and nine offices. Fleis & VandenBrink employees are involved in the community through organizations and programs such as Adopt-a-Highway, Habitat for Humanity, United Way, Toys for Tots, and 100,000 Thank Yous. Time and resources have been donated to the Cedar Marina Project, Manton Library, and Safe Water International Ministries.

The 2019 ACEC/M Firm of the Year award for a small business went to RS Engineering (RSE), LLC, Lansing, MI. Launched in 2003, RSE includes over 20 professionals. The firm has been purposeful in its efforts to advance the consulting design profession through the review of technical papers, consulting with university programs and capstone courses, mentoring engineers in training, attending conferences and workshops, and working alongside various organizations. The staff of RSE contributes their time, energy, professional expertise, and funds to multiple organizations across Michigan.

## School of PE Launches ARE 5.0 Exam Prep Course

Exam review course provider School of PE launched its ARE 5.0® exam review course. The ARE 5.0 exam is an architecture licensing examination that is developed and administered by the National Council of Architectural Registration Boards (NCARB). Before this launch, School of PE offered Fundamentals of Engineering, Principles and Practice of Engineering, Structural Engineering, and surveying review courses to help individuals prepare for engineering licensure exams. Now, School of PE can also help individuals in architecture achieve licensure.

## CMC Completes Gerdau Acquisition

Commercial Metals Company recently expanded its geographic footprint by completing the acquisition of

33 reinforcing bar fabrication facilities in the United States, as well as steel mills located in Knoxville, TN; Jacksonville, FL; Sayreville, NJ; and Rancho Cucamonga, CA, from Gerdau S.A., a producer of long and speciality steel products. This expansion of the company's network of fabrication locations improves its operational flexibility.

## Husqvarna Opens New Distribution Center

Husqvarna Construction Products, headquartered in Olathe, KS, opened a new 150,000 ft<sup>2</sup> (14,000 m<sup>2</sup>) distribution center in Lenexa, KS. The new building, which houses all the company's finished goods, is only a mile (1.6 km) from the company headquarters and will allow Husqvarna to provide timely management of order processing and product shipping. The size and layout of the new facility enables Husqvarna to process up to five times the amount of inbound inventory.



## TrueLook Hits 1,000,000,000 Images Stored

Construction camera company TrueLook recently saved its billionth image. The milestone image was taken with a TrueLook 1080p Pan-Tilt-Zoom camera and shows the Children's Wharf at Martin's Park in Boston, MA. Each TrueLook camera can provide live images and streaming video, unlimited custom time-lapse sequences, and 24/7 security recording. Users can access their video data from



anywhere through the company's cloud services. Earlier this year, Truelook reported that it saves pictures at a rate of four per second, adding up to 2.5 million per week.

## COMMANDbatch Named "Best Product in Show" at the UK Concrete Show

Command Alkon's COMMANDbatch was awarded the title "Best Product in Show" at the annual UK Concrete Show in Birmingham, England, UK. COMMANDbatch was chosen for its ability to alert staff members when a batched material is out of tolerance or when an operator has added too much water to the mixture and has exceeded the maximum allowable water-cementitious materials ratio (*w/cm*). With COMMANDbatch, owners, general managers, and operations managers can stay connected to their batch plants at any time in any location.

## Knife River Corporation Acquires Texas Aggregate Deposits

MDU Resources Group, Inc., announced that subsidiary Knife River Corporation acquired substantial additional aggregate deposits in Texas, which will augment existing company operations and enhance the company's ability to sell aggregates to third parties. Knife River Corporation mines aggregates and markets crushed stone, sand, gravel, and related construction materials, including ready mixed concrete, cement, and other products. The acquired land, purchased from Capitol Aggregates Inc., spans 570 acres (231 ha) and sits near Marble Falls, TX. The property has access to a major rail line, and Knife River anticipates adding a rail loading facility to the site to transport aggregates to existing company locations in Waco, Bryan, and Beaumont, TX, as well as to third parties.

## Petuum Industrial AI Delivers Supervised Autonomous Cement Plant Operations for CEMEX

Petuum and CEMEX entered into a global agreement under which CEMEX can implement Petuum Industrial AI Autopilot products with autosteer in all cement plants worldwide for autonomous cement plant operations. AI Autopilot is being deployed at select CEMEX USA and CEMEX Mexico plants and will continue to be rolled out across 2019.

Petuum Industrial AI Autopilot products offer real-time forecasts for key process variables, prescriptions for critical control variables, and supervised autosteer for all cement plant operations. This includes clinker cooler, preheater, rotary kiln, pyro process, ball mill, and vertical mill processes. Plants using AI Autopilot can reduce energy consumption and

increase throughput while maintaining stable operation and high product quality.

The joint CEMEX and Petuum teams achieved a supervised "autosteer mode" resembling cruise control, in which the AI Autopilot runs operations with full engage/disengage control available to an operator. CEMEX and Petuum will continue collaborating to deploy additional Autopilot use-cases for global cement plants, including emissions reduction, fuel-mix (alternative fuel) optimization, and preventive maintenance.

## 150 North Riverside Project Wins ASCE's Outstanding Civil Engineering Achievement Award

The American Society of Civil Engineers (ASCE) recognized the structural engineering design of 150 North Riverside, Chicago, IL, by awarding the project the Outstanding Civil Engineering Achievement Award. Magnusson Klemencic Associates, Inc., accepted the award on behalf of the entire design and construction team.

The building's design is noteworthy in that it features a razor-thin concrete core that makes its small footprint possible. The core, which is three times skinnier than that of a typical office building, was created using twin, balancing, four-story tall brackets on two sides of the building, reducing the building's base footprint by 80%. Eight massive steel transfer systems with top-level tension ties and lower-level compression struts were used to redirect the loads from the exterior columns, allowing for the tapered lines and elegant slope of the building.

The design includes the first use of a water tank damper on a thin-core building. Twelve water-filled tanks (160,000 gal. [606,000 L]) on top of the tower minimize wind sway through wave action. In addition, the 16 sloping columns at the brackets comprise the largest rolled steel sections in use in a high-rise building within the United States.

The building's notable design was developed to provide the community with a vibrant public space on a narrow site. A new 1.5 acre (0.6 ha) public park, a terraced amphitheater, pedestrian pathways, and retail venues offer refuge from the city's bustle.

