# CONSTRUCTI



## **Cover Story:**

Qatar orbital highway and truck route

### Features:

Construction of roads in Bellary, India LiuGong battery electric vehicles Sandvik DT1132i tunnelling jumbo





B00TH: S12050

#### **CORTEC CORPORATION**

Cortec Corporation will present its line of Migrating Corrosion Inhibitor (MCI) technology for post-tensioning (PT) applications. These solutions form a protective corrosion inhibiting layer on metal surfaces such as rebar and PT cables. Their effectiveness, convenience, and low environmental impact make them suitable for corrosion protection in concrete construction applications.

The MCI-309 is a user-friendly corrosion inhibitor option to protect bridge PT tendons from corrosion before grouting. This is especially important during construction delays, such as those in cold winter climates where grouting must be postponed until the weather gets warmer.

The MCI-309 comes in powder form and is easy to fog through PT ducts using a low-pressure air hose and sandblast cup. The inhibitor migrates through the duct space and forms a molecular layer on the metal PT strands for up to 24 months of continuous corrosion protection. According to Cortec, little or no surface preparation is required, and the MCI does not need to be flushed out of the systems before grouting.

The MCI Mini Grenades can be added to grouting materials for additional corrosion protection after grouting. They are small water-soluble pouches full of MCIs that dissolve when they are mixed into concrete repair mortars or grouts. The MCIs disperse throughout the mix and, when applied, migrate towards nearby PT strands and rebar to provide corrosion protection.

The MCI CorShield is a water-based corrosion inhibitor coating for protecting loads of rebar lying in open storage at the construction site. The product leaves a



MCI-309 is easy to apply to PT ducts and does not need to be flushed out before grouting.

clear coat that cures to a soft non-tacky film and eventually hardens. The MCI CorShield does not need to be removed prior to embedding rebar in concrete, said Cortec. Depending on conditions, this solution is recommended for up to five years of indoor protection and 6-24 months of unsheltered outdoor protection.

The PTC Emitters are an efficient dry method of protecting metals, such as PT cables, within an enclosed space. They were developed more than 10 years ago to fight corrosion in the suspension cables of the Severn bridge to make up for deficiencies and shutdown periods of the bridge's dehumidification system.



PTC Emitters are an efficient dry method of corrosion protection for metals, such as PT cables, in void spaces.



MCI Mini Grenades are a convenient way to add corrosion protection to grout or repair mortars.

The PTC Emitters contain MCIs that vaporise out of the breathable pouch material and migrate throughout the enclosed void, forming a self-replenishing protective layer on all exposed ferrous and non-ferrous metals in recessed areas, interior cavities, and voids. Protected surfaces do not have to be cleaned prior to concrete or grout placement, and PTC Emitters do not affect physical properties of concrete or grout (e.g., set time, strengths, etc.). Cortec said they are good for any enclosed void areas in bridges or other structures where exposed metals need protection.

Website: www.cortecmci.com

BOOTH: N1656

#### AMERICAN TIME AND LABOR COMPANY

The Pacific Timecard Application from American Time and Labor Company is a robust mobile time and attendance application with GPS tracking, designed for managing construction companies' off-site field workers. By leveraging this technology and platform, the application allows mobile workers to document in real time such things as time worked, activities, job costing, mobile forms, lunch periods, rest breaks, mileage and GPS location.

Pacific Timecard also has features like team clock in/out (designed for construction crews), photo capture and digital signature signoff, GPS location, over 35 real-time reports and seamless integration from punch to payroll). This gives employers a real birds-eye view on their mobile workers and real time information needed to run any business more efficiently. All data is held in a secured cloud- based environment provided by Amazon Web Services (AWS).

Website: www.americantimeandlaborcompany.com



The Pacific Timecard Application.