March 2020



MIGRATING CORROSION INHIBITORS FROM GREY TO GREEN

Cortec® MCI® utilizes environmentally responsible technologies to provide corrosion solutions that

Cortec® MCI® at World of Concrete 2020

In February, Cortec[®] MCI[®] joined approximately 54,000 registered professionals in the concrete and masonry industry for World of Concrete, the largest annual international event of its kind in Las Vegas, Nevada. The week started out by attending the ICRI (International Concrete Repair Institute) kickoff party Monday night at the Stratosphere, followed by a busy four days at the Cortec[®] MCI[®] booth.

The Cortec[®] team (Cliff Cracauer, Jessi Meyer, Ashraf Hasania, and Ana Costa)

had the opportunity to see many new and familiar faces throughout the week, with more than 30 people in attendance at the annual MCI® Rep/ Distributor meeting. Highlights of the lunch meeting included news about MCI®-309, MCI®-2061, MCI®-2020 Gel, and the recent SDS updates for all top MCI® products. This year's special social event was an outing for 32 on the High Roller Ferris Wheel, with fabulous views of the city from the giant gondolas.

World of Concrete was a good opportu-

nity to energize the Cortec[®] MCI[®] base of distributors across the globe, with representatives coming from the U.S. and as far as Canada, Brazil, Ecuador, South Africa, and Taiwan. We were happy to connect with so many of our Cortec[®] friends and family and look forward to following up on a variety of great new leads!



MCI[®] News

Three Exciting Days of Cortec[®] VpCl[®]/MCl[®] Training in Dubai!

Cortec[®] Middle East (CME) was pleased to host Cortec[®] friends and family from all over the MENA region at a three-day sales meeting January 21st-23rd in Dubai. The first day kicked off with a dynamic knowledge exchange session followed by major updates from CME's sales, technical, and service teams. Later, Usama Jacir, CME General Manager, acknowledged and awarded star achievers within the organization. The awards ceremony was followed by a rooftop dinner at the Media One Hotel.

The second day was centered around sales training for various VpCI[®] and MCI[®] Technologies and applications. CME distributors also had the chance to present and share their own case histories, which were very informative and useful to everyone in the room. The day wrapped up with a distributors' award ceremony before heading to the Dubai Auto-Drome for a team building activity that included go-kart racing and laser tag.

The final day focused on technical training, followed by hands-on experimentation in our lab at the American University of Dubai. To maximize learning outcomes, the team was split into smaller groups to rotate around six experimental stations with allocated instructors: Steel Wool, Surface Prep, Protective Coatings, Packaging, MCI® Testing, and VIA Testing/Detection. The event concluded with a roundtable session before Cortec® friends and family headed back home, energized to put their training into action!

Cortec[®] MCI[®]: Not Just Another Commodity at Dubai International Concrete Conference

Cortec[®] Middle East (CME) was pleased to once again be a Silver Sponsor of the annual International Concrete Technology Forum (ICTF), November 27th-28th in Dubai, UAE. During ICTF, the CME MCI[®] team had many good concrete durability conversations with authorities, consultants, ready-mix companies, and key supply chain personnel in the concrete industry. In addition to uncovering important leads and opportunities, CME was also able to give back to the industry by sharing expert insight into collaborating with concrete suppliers and contractors, along with tips on getting specified and certified by consultants and authorities.

Clients and engineers quickly became convinced about the advantages of Migrating Corrosion Inhibitors when CME shared the MCI[®] Technology cost/benefit model with them. The strong trend toward value engineering and cost reduction in the competitive GCC (Gulf Cooperation Council) market made it a more difficult case with contractors and concrete suppliers, who are not eager to add any cost at all to cement sand and aggregate. However, the cost/benefit of MCI[®] soon became clear to them when comparing MCI[®] to other corrosion inhibiting strategies such as epoxy coated rebar.

The CME team was also able to demonstrate a successful track record thanks to its diverse portfolio of MCI[®] projects throughout the GCC region. CME's Dubai Central Laboratory certification of product conformity to ASTM C1582 for the manufacture and supply of MCI[®] admixtures (MCI[®]-2005 and MCI[®]-2005 NS) gave an added boost to CME's reputation for quality. These evidences of expertise in concrete durability knowledge and corrosion mitigation helped brand Cortec[®] MCI[®] products as specialty technologies in the concrete industry—not just another basic commodity being touted at ICTF.





MCI[®] News

Recent Focus on 'Green' MCI® Technologies

January was Cortec's month to focus on "green" corrosion inhibiting technologies for good environmental stewardship and resource conservation. In connection to the topic, Cortec[®] published a release focusing on several environmental aspects of various Cortec[®] MCI[®] Technologies:

- Biobased concrete admixtures, such as MCI[®]-2005
- NSF Standard 61 certified products
- Water-based rebar coatings such as MCI[®] CorShield[®] and CorrVerter[®] MCI[®] Rust Primer

Together, these technologies provide green corrosion inhibiting strategies for every stage of concrete.

Learn more by reading the full press release: <u>https://www.cortecv-ci.com/whats_new/announcements/MCI-Green-PR.pdf</u>



New, Improved MCI®-309 Now Available!

Cortec's MCI[®]-309, which provides convenient corrosion protection for post-tension cables and other metals in void spaces, has been recently reformulated! The new, improved version no longer contains silica, a California Prop 65 component. Removal of silica did not impact the properties of MCI[®]-309 material as seen in our updated pull-out testing from American Engineering and Testing report #29-20452. Stay tuned for an updated product data sheet coming soon

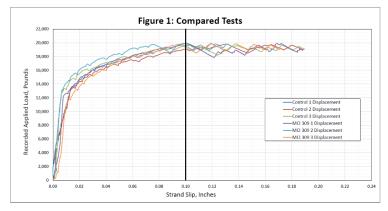


Figure 2: Applied Load at 0.1 Inches of Displacement

Lake Chemical at Bridges 2020

Special thanks to Lake Chemicals for sharing MCI® solutions at the recent BRIDGES conference, March 12th in Coventry, UK!







Case Histories

Power Plant Cooling Tower Restoration

Reinforced concrete cooling towers at a power plant in Israel were suffering sealing failure, corrosive rebar expansion, and concrete cracking due to 24/7 operation in a harsh environment. The old sealing and loose concrete were removed, and repairs were made with repair mortar comprising MCI[®]-2006 NS. MCI[®]-2020 was used to treat all internal concrete surfaces of the cooling towers, and polyurea sealing was applied over the repaired concrete. The use of MCI[®] to fortify the cooling tower repairs will help delay the recurrence of the corrosion problems and extend service life.

Read the full case history here: <u>https://www.corteccasehis-</u> tories.com/?s2member_file_download=access-s2memberlevel1/ch651.pdf



Repairing Potable Water Reservoirs at Airport

Three concrete potable water reservoirs were starting to delaminate and leak just 15 years after construction at an airport in Israel. A thorough repair was needed due to rebar corrosion. One reservoir at a time was repaired by draining, cleaning with a high-pressure water blast, and applying MCI®-2020 to the walls along with an MMA sealing and coating system from Plexicoat. MCI®-2020 was chosen because of its NSF Standard 61 certification for use in potable water applications and its superior efficiency to competing products. Using MCI® in conjunction with the MMA sealant and coating provided the best cost-effective means to extend the service life of the reservoirs.

https://www.corteccasehistories.com/?s2member_file_ download=access-s2member-level1/ch653.pdf



Cleaning Driveway Oil Spills with Biological Cleaner

A homeowner decided to try MCI®-2061 on his driveway oil stains to see for himself how well it worked. After a successful test run on two bricks, the homeowner decided to apply the biological cleaning material to his whole driveway, as well as the concrete gutter and asphalt road beyond. MCI®-2061 was effective on all three surface materials, giving the homeowner firsthand confidence in the product's performance!

Read the full case history here: <u>https://www.corteccasehis-</u> tories.com/?s2member_file_download=access-s2memberlevel1/ch654.pdf







Case Histories

Building Floodwater Culvert for 100-Year Service Life

The new Kidron Valley Culvert was constructed in a highly aggressive, hot, sulfate-rich environment near the Dead Sea in Israel. The culvert was designed for a 100-year service life during which it will serve to channel seasonal floods beneath Highway 90 without disturbing traffic above. MCI®-2005 was chosen as part of a performance-based design method that met the requirements of EN-206-1, article 5.3.3. and its equivalent IS-118, article 5.3.3. The use of MCI®-2005 admixture provided better and longer durability to the project without adding to project costs. It also provided additional built-in corrosion protection in case of common application errors.

Read the full case history here: <u>https://www.corteccasehis-</u> tories.com/?s2member_file_download=access-s2memberlevel1/ch659.pdf



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