

# MIGRATING CORROSION INHIBITORS FROM GREY TO GREEN

**AUGUST 2024** 











# **Enjoying Spring & Summer with Cortec® MCI®**

Spring and fall are two important seasons for us to reconnect and recharge with the American Concrete Institute (ACI) and the International Concrete Repair Institute (ICRI). Summer is often busier with the construction season in full swing, but we still had some time to stop and enjoy what is a brief window of warmer weather for those of us in the north. Here's a look at some of our MCI® highlights from this spring and summer (plus some inspiration for the fall!).

# MCI® in the "Big Easy"

Ash Hasania (MCI® Technical Sales & Market Manager), Jessi Meyer (VP of Technical and Product Sales), and Colin Gardner (Product Development Chemist) represented MCI® this spring at the ACI Concrete Convention in the "Big Easy" (i.e., New Orleans). Cortec® sponsored the convention at the "Admixture" level, had good traffic at its booth, and made important contributions to the ACI 212 Chemical Admixtures Committee, with Jessi as a voting member and Ash as a consulting member. Our team also had the

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# MCI® News

opportunity to attend several other committee meetings to gather updates and catch up on new technologies. It was great to see many familiar faces and engage with a wide range of engineers, manufacturers, and researchers at this important networking event. We hope to see more of you at this formative industry gathering next fall in Philadelphia.

### **Boston ICRI Highlights**

In April, Jessi and Ash headed out to Boston, Massachusetts, and joined East Coast MCI® Regional Sales Manager Kevin Quan for the Spring ICRI Convention, where Cortec® sponsored the Wi-Fi and took part in four committee meetings. A special highlight for Jessi was the honor of presenting an ICRI Fellows award to MN ICRI Chapter member Marthe Brock, who mentored Jessi in her early days of ICRI involvement. Some of our team also had time to catch up on concrete chloride testing methods, enjoy a tour of Fenway Park, and take a Boston harbor cruise! Next stop: Fall ICRI Convention, Denver. Hope to see you there!

#### Take Me Out to the Ball Game with ICRI MI

Baseball is an iconic part of the American summer, so it's not surprising that an outing to the ball game found its way onto the summer calendar of the ICRI Michigan Chapter! As a member of the ICRI Michigan Chapter board and a frequent participant in chapter events, Ash joined in the fun pastime, spending a beautiful evening with engineers and industry specialists watching independent professional baseball at Jimmy John's Field in Utica, Michigan.

### Friendly Competition at ICRI MN Bags Tournament

As a PLATINUM Sponsor for the ICRI Minnesota Chapter, Cortec® got to send a team free of charge to the ICRI bags tournament June 13th in Fridley, Minnesota. Colin Gardner (Product Development Chemist) and Luke Stone (Technical Service Engineer) represented Cortec® in the cornhole competition and enjoyed getting to know contractors and other representatives from the industry. Ironically, they even played against some of Cortec's real-life competitors. Colin and Luke took a win and a couple of losses but most of all enjoyed getting to know some nice folks on a beautiful day!

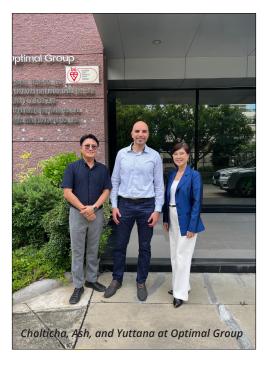
## **Training in Thailand, Touring Asia**

Compared to the long flight from Canada to Asia, it was a relatively short stay for Ash in June when he visited Optimal Tech in Thailand. After a three-day training with this eager Cortec® MCI® distributor, he headed to Singapore and Indonesia for a weekend exploring the overall Southeast Asia MCI® market. In general, he noticed a strong

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need for corrosion protection simply due to the typically hot, humid, coastal climate. We look forward to further collaboration with Cortec® distributors in the region to address this major need. Reach out to us to discuss possibilities: <a href="https://www.cortecmci.com/contact-us">www.cortecmci.com/contact-us</a>

#### Mark Your Calendars for the Cortec® World Sales Meeting!

Our big event of the season is just a few months away! Mark your calendars now and plan to join us for the Cortec® World Sales Meeting November 6<sup>th</sup>-8<sup>th</sup> near Cortec® World Headquarters in Saint Paul, Minnesota. A special highlight of the reunion this year is the celebration of Cortec® founder Boris Miksic's 50<sup>th</sup> anniversary in the corrosion control industry. We also plan to have a track of MCI® focused training for those of you in the construction industry who want to learn more about MCI®/concrete basics or specialty topics like how to sell and specify MCI®. Plan to join us for a fun and educational time with the Cortec® family this fall! Stay tuned for more details: www.cortecvci.com



# **MCI®** Articles

# 'Cracks and Carbonation Are Inevitable: What's Your Corrosion Mitigation Plan?' Building Enclosure July 2024

In this exclusive article written for *Building Enclosure*, we face the fact that cracks and carbonation are an inevitable part of the concrete life cycle. We then go on to examine environmental risk factors that increase this possibility and consider constraints and concerns that may come into play when selecting a method of corrosion mitigation. Finally, we discuss how MCI® puts corrosion protection "Within Everyone's Reach." This article would be great to save as a reference to share with engineers and clients new to the topic. Read the article here: <a href="www.buildingenclosureonline.com/articles/92714-cracks-and-carbonation-are-inevitable-whats-your-corrosion-mitigation-plan">www.buildingenclosureonline.com/articles/92714-cracks-and-carbonation-are-inevitable-whats-your-corrosion-mitigation-plan</a>

# 'Using migrating corrosion inhibitors for restoration and repair of reinforced concrete structures'

Concrete Engineering International August 2024

Did you know that MCI® Technology has been used in the KRK Bridge preservation project and the Severn Bridge? This article introduces the challenge of corrosion on embedded steel reinforcement prompted by environmental factors such as chlorides and carbonation. It gives an overview of how MCI® technology works and then goes on to share snapshots of the actions taken to mitigate corrosion on two very different bridge applications. Read the article here: <a href="https://www.cortecvci.com/wp-content/uploads/CEI-August-2024-pages-26-28.pdf">www.cortecvci.com/wp-content/uploads/CEI-August-2024-pages-26-28.pdf</a>



# **MCI®** Tips

## Life Hacks for the Construction Site

Sometimes, simple ways to make life easier are right in front of our eyes and we don't even see them. When we do adopt them, we may wonder why we never thought of them before. Ash recently shared these two simple ideas to help with common challenges on the construction site.



**Problem:** Extra rebar lying around the jobsite and getting rusty from exposure to air, water, humidity, and salt.

**Solution:** Wrap the metal rebars in MCI® Construction Film. This is not your normal plastic film that only creates a physical barrier to the elements. While it does that, it also introduces corrosion inhibitors to the mix. "Contact" corrosion inhibitors in the plastic protect the rebar from corrosion when in direct contact with the

metal, while Migrating Corrosion Inhibitors vaporize out of the sheeting and migrate through the air toward the metal wrapped inside the film, forming a protective molecular layer on the rebar surfaces as long as the package stays closed. MCI® Construction Film can also be used to wrap rebar in transit and to temporarily cover other tools and equipment on the construction site at the end of the day.

**Problem:** Spillage, overspray, or other damage to new doors, windows, and equipment on the jobsite.



**Solution:** MCI® Peel-Off Coating is a water-based paint that can be sprayed onto a variety of non-porous surfaces and peeled off later when it is dry and no longer needed. This can help protect against overspray or other spillages when doing painting and other work on the jobsite. An added benefit for metal surfaces is that it offers corrosion protection in the meantime.

Want to give these ideas a try? Contact Ash or another member of the MCI® team for assistance: www.cortecmci.com/contact-us



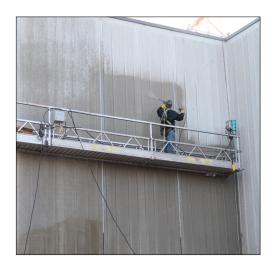
# **Are You Clients Suffering From Sticker Shock?**



A little MCI® goes a long way, whether it be an MCI® admixture in a concrete mix or an MCI® surface applied corrosion inhibitor (SACI) applied to an existing surface. Unfortunately, this point is easy for clients to overlook when comparing the price per gallon/liter of MCI® products versus competitor products.

Non-MCI® products often have a lower price when compared unit-to-unit with MCI® products, but these competitor chemistries also tend to have higher dosage rates. For example, MCI®-2005 is dosed at a

constant 1 pint per cubic yard (0.6 L/m³) independent of varying chloride levels; whereas calcium nitrite admixtures are dosed at 2-6 gallons per cubic yard (10-30 L/m³) depending on expected chloride levels.



So, for instance, if a CNI supplier is quoting the product at a few dollars less per gallon/liter than MCI®, they may initially look like they have a better deal until the full dose is calculated for the job. Similarly, MCI®-2020 offers a coverage rate of 150 square feet per gallon (3.68 m²/L), while a competing product has a coverage rate of 85 square feet per gallon (2.09 m²/L). When looking at price per unit, MCI®-2020 costs slightly more, but when looking at cost per square meter, the price of MCI® is less and adds up to significant savings when looking at treating areas of several thousand square feet (m²).

If you want a quick way to do a cost comparison on SACIs, be sure to download one of our worksheets under the sales tools page of our MCI® reps and distributors section: <a href="https://www.cortecmci.com/login">www.cortecmci.com/login</a>

# **Case History**

# **London City Hall Parking Garage Rehab**

In 2020, the entrance to the underground parking garage at London City Hall in Ontario had obvious corrosion damage in the soffit due to water and deicing salts leaking in from above. A patch repair was needed but the budget was limited. The contractor chipped away delaminated concrete from the spalled areas to expose the rebars, then used a wire brush to remove loose rust before rinsing the metal. The next step was to apply <a href="MCI® Rust Primer">CorrVerter® MCI® Rust Primer</a> to all sides of the rebar, taking care not to overapply. The CorrVerter® MCI® Rust

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# **Case History**

Primer was left to cure for 24 hours, by which time the rebars had changed from rusty red to glossy black. Repair mortars were used to patch the area with no adhesion issues.

It only took one day to apply CorrVerter® MCI® Rust Primer to provide the needed surface treatment. The engineer was happy with its performance and subsequently specified it in other projects.





# **Upcoming Events**

#### 2024 ICRI Fall Convention

October 22<sup>nd</sup>-25<sup>th</sup>, 2024 Sheraton Denver Downtown Denver, CO

www.icri.org/news-events/ 2024-icri-fall-convention



# **Cortec® World Sales Meeting**

November 6<sup>th</sup>-8<sup>th</sup>, 2024 Saint Paul Hotel Saint Paul, MN www.cortecvci.com

#### **ACI Concrete Convention**

November 3<sup>rd</sup>-6<sup>th</sup>, 2024 Philadelphia Marriott Downtown Philadelphia, PA www.concrete.org



#### **AMPP 2025**

April 6<sup>th</sup>-10<sup>th</sup>, 2025 Nashville Music City Center Nashville, TN Booth #1300 www.ampp.org



#### **World of Concrete 2025**

January 21<sup>st</sup>–23<sup>rd</sup>, 2025 Las Vegas Convention Center Las Vegas, NV Booth #S11711 www.worldofconcrete.com





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