

Editorial Contact:  
Cortec® Advertising Agency:

Jeni Duddeck  
(651) 429-1100 Ext. 1114

[jduddeck@cortecvci.com](mailto:jduddeck@cortecvci.com)

Company Contact:  
Cortec® Corporation

Julie Holmquist  
(651) 429-1100 Ext. 1194

[jholmquist@cortecvci.com](mailto:jholmquist@cortecvci.com)

Technical Contact:  
Cortec® Corporation

Lisa Eischens  
(651) 429-1100 Ext. 1147

[leischens@cortecvci.com](mailto:leischens@cortecvci.com)



**Attention: Editor**  
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**PRESS RELEASE**



## **Get Ready for Winter PT Grouting Delays with MCI®-309!**

For better or worse, winter is on its way to the Northern Hemisphere. It will soon be time to pull out warmer coats, hats, and boots and rev up the snowblower. On the jobsite, it will be time to face inconvenient winter construction delays, including grouting delays for PT (ing) projects as the temperatures drop too low. Since state and federal requirements typically call for corrosion inhibitor application if the waiting period is two weeks or longer, it is important to be ready with the best option on the market for PT grouting delays: MCI®-309!



## Efficient Protection for PT Tendons

MCI<sup>®</sup>-309 from Cortec<sup>®</sup> Corporation is an extremely efficient method of protecting metals within an enclosed space. It comes in dry powder form and can easily be fogged through PT ducts with a low-pressure air hose before the duct is capped. Once applied, MCI<sup>®</sup>-309 vaporizes and travels throughout the PT duct, forming a protective molecular layer on the metal surfaces of the PT strands. This layer is self-replenishing if disturbed, as



new protective vapor continuously redeposits on the surface. MCI<sup>®</sup>-309 is considered an ambiodic (mixed) inhibitor that protects at both the anode and cathode of a corrosion cell.

## Why Choose MCI<sup>®</sup>-309?

There are several reasons MCI<sup>®</sup>-309 is ideal for PT grouting delays:

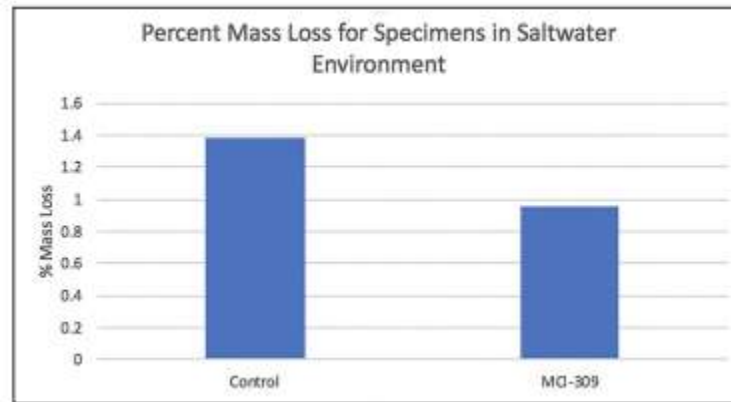
- 1) It reduces corrosion on PT tendons during a vulnerable pre-grouting period.
- 2) It is easy to apply. Little to no surface prep is required.
- 3) It protects hard to reach areas through vapor action.
- 4) It typically does not need to be flushed out prior to grouting, unlike oil-based inhibitors.



Another positive feature of MCI<sup>®</sup>-309 is that it does not contain silicates, phosphates, nitrites, or heavy metals. It does not increase the risk of hydrogen embrittlement for high tensile strength steel. Neither does it affect physical properties of concrete and grout (set time, strengths, etc.). Testing performed by American Engineering and Testing, Inc., confirmed that MCI<sup>®</sup>-309 does not affect strand pull-out strength compared to a

control. Furthermore, an approximately year long test at the Pennsylvania State University Grouting

Laboratory showed a positive reduction in corrosion on prestressing strands placed in PVC pipes containing a saltwater solution and treated with MCI<sup>®</sup>-309 (a worst-case scenario compared to dry conditions recommended for MCI<sup>®</sup>-309 PT duct application).



*Control from Saltwater after Cleaning (Middle)*



*MCI<sup>®</sup>-309 Treated Specimen from Saltwater after Cleaning (Middle)*

### **Recent Examples of MCI<sup>®</sup>-309**

MCI<sup>®</sup>-309 has been used for winter grouting delays in recent bridge projects of note. The St. Croix River Crossing was a monumental bridge opened in 2017 to alleviate constricted traffic flow between Minnesota and Wisconsin. Due to its unique location in the St. Croix National Scenic Riverway, the bridge was made with a special extradosed design (combination box girder and cable stay bridge) to minimize the visual impact on the



landscape. The pre-cast boxlike segments were connected by PT cables, which required corrosion protection during grouting delays in the notoriously harsh winter environment. MCI®-309 was chosen for the job.

MCI®-309 was also used during construction of the Samuel De Champlain Bridge, the world's widest two-plane cable stay bridge and one of the largest infrastructure projects in North America to date. MCI®-309 was chosen for winter PT grouting delays on the main structure and has seen continued use in the Réseau Express Métropolitain light rail system segment of the project.

### Do the Possible!

While it is impossible to stop the inevitable approach of winter and grouting delays, it is possible to minimize the negative effects by selecting an efficient method of corrosion protection. Contact Cortec® today to discuss MCI®-309 for easy PT strand protection in your next construction project:

<https://www.cortecmci.com/contact-us/>

Learn more about MCI®-309 here:

<https://www.cortecmci.com/product/mci-309/>



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