# NAWS ALIERT 

## Cortec ${ }^{\circledR}$ Post-Tension Corrosion Inhibitor Featured in Special Bridges and Highways Issue



In its November 2017 issue on bridge and highway corrosion, NACE International's Material's Performance magazine featured an excellent editorial on the use of Cortec ${ }^{\circledR}$ corrosion inhibitors in the new St. Croix Crossing. This bridge combines box girder and cable stay technology in a unique extradosed structure connecting the states of Minnesota and Wisconsin.

The crossing comprises approximately 1,000 precast boxlike segments connected with post-tension (PT) tendons that were tensioned and grouted in place. When grouting had to be delayed, as often happens in long-term projects or those exposed to cold winter temperatures, the PT strands had to be protected with a corrosion inhibitor.

The corrosion inhibiting powder chosen for the job ( $\mathrm{MCI}^{\circledR}-309$ ) was manufactured by Minnesota-based Cortec ${ }^{\circledR}$ Corporation. Little or no surface prep was required before the powder was fogged extensively through the ducts with a low pressure air hose. The inhibitor vapor formed a protective molecular layer on the metal tendon surfaces and did not need to be flushed out prior to grouting.

The article notes that the St. Croix Crossing cost $\$ 646$ million and contains more than 42 million pounds ( 19 million kg ) of concrete. It is one of only a handful of extradosed bridges built in the United States. The structure replaces the aging Stillwater Lift Bridge and carries eight lanes of vehicle traffic 110-150 feet (34-46 m) above the river.


MIGRATING CORROSION INHIBITORS
FROM GREY TO GREEN

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[^0]:    Cortec ${ }^{\oplus}$ Corporation is the global leader in innovative, environmentally responsible $\mathrm{VpCl}^{\oplus}$ and $\mathrm{MCl}^{\ominus}$ corrosion control technologies for the Packaging, Metalworking, Construction, Electronics, Water Treatment, Oil \& Gas, and other industries. Headquartered in St. Paul, Minnesota, Cortec ${ }^{\oplus}$ manufactures over 400 products distributed worldwide. ISO 9001 and ISO 14001 Certified, and ISO 17025 Accredited.

