

THIS MONTH: IMPACT OF  
CORROSION ON THE ENVIRONMENT

FEBRUARY 2022  
VOL. 61, NO. 2

# **MMP** MATERIALS PERFORMANCE

CORROSION PREVENTION AND CONTROL WORLDWIDE

[www.materialsperformance.com](http://www.materialsperformance.com)

## PROTECTING REINFORCED CONCRETE AND MASONRY STRUCTURES

Cathodic Protection of  
an Iconic Building

Atmospheric Corrosion  
Behavior of Zinc and  
Zinc Alloys

Optimizing Corrosion  
Mitigation Costs with  
Failure Analysis

## New Anticorrosion Slip Coating for Electrical Conduits

Cortec Corp. (St. Paul, Minnesota, USA) has developed a new product, EcoShield VpCI-386 HT Slip Coating, that is designed to keep the insides of electrical conduits from rusting while providing enough slip for electrical wires to pass through. This product is a unique, high-heat resistant, water-based, direct-to-



metal coating that offers improved surface slip, excellent outdoor weathering, and thermal heat protection. It significantly slows down the reaction of metal ionization and repels water, thus protecting surfaces against corrosive electrolytes and aggressive environments. Along with resisting sagging and running, this thixotropic coating is thermally stable when dried in ambient temperatures up to approximately 500 °F (260 °C), depending on color choice. EcoShield VpCI-386 HT Slip Coating offers extended protection in sheltered, unsheltered, indoor, or outdoor conditions and is ultraviolet resistant to prevent cracking or chipping due to prolonged exposure to sunlight. When combined with Cortec VpCI corrosion inhibitors, this slip coating helps electrical conduit manufacturers and users tackle two challenges at once: reducing the coefficient of friction on the inside of pipes and easing the ability to push electrical wiring through tubes when they are installed. Tel: 1 800-426-7832, web site: [www.cortecvci.com](http://www.cortecvci.com).

## Corrosion Protection Solution for Universal Application



DENSO Group Germany (Leverkusen, Germany) has unveiled SEALID All-in-1 Tape, which provides unprecedented protection against corrosion, as well as mechanical loads, in a single step without the need for additional primer or other devices. This first-of-its-kind universal application solution satisfies the increasingly stringent requirements in pipeline construction, including fulfilling International Organization for

Standardization (ISO) and European Norm (EN) standards. A single wrap is enough to fulfill the requirements of ISO 21809-3 at operating temperatures of up to 158 °F (70 °C), as well as the requirements for EN 12068 and DIN 30673 for class C50. The simple application of SEALID All-in-1 ensures sustainability with significant work, time, and cost savings. As a universal solution for new construction and rehabilitation, it is ideal for a range of applications, including weld seam protection, whole-pipe wrapping, pipe bends, and T-pieces. It is easily and quickly applied by hand or using DENSOMAT wrapping devices, thereby eliminating the need for hazardous and harmful substances or heavy equipment. “The flexible and easy application makes SEALID All-in-1 the universal solution for corrosion protection of pipelines,” says Thomas Kaiser,

managing director for DENSO Group Germany. Tel: +49 214 2602-301, web site: [www.denso-group.com](http://www.denso-group.com).

## 3D Printing Platform with D2 Tool Steel for Additive Manufacturing



Desktop Metal (Burlington, Massachusetts, USA) announced that it has qualified D2 tool steel for the

Studio System 2, an accessible metal 3D printing platform that manufactures high-performance metal parts in low volumes for pre-production and end-use applications. Desktop Metal is the first company to offer D2—a versatile, high-carbon, high-chromium air-hardening tool steel—in a two-step bound metal additive manufacturing process. With this tool steel, which is characterized by its high hardness and compressive strength after heat treatment, customers can leverage a simple, nearly hands-free process to produce parts for high-strength D2 applications such as cold work metal forming tools, dies, punches, and injection molds with conformal cooling channels. This tool steel offers extremely high wear resistance properties, dimensional stability, and corrosion resistance in the hardened condition—a key benefit for conformal cooling applications. “D2 tool steel has traditionally been a challenging and expensive material to work with,” says Jonah Myerberg, co-founder and chief technology officer of Desktop Metal. “With this material now available on the Studio System 2, we’ve streamlined production of D2 parts to just two simple steps for improved affordability and accessibility. We are excited to be able to offer our customers this new material with higher hardness after heat treatment than all of the other Studio System materials qualified to date, unlocking new applications that require tooling material grade strength.” Tel: +1 978-224-1244, web site: [ir.desktopmetal.com](http://ir.desktopmetal.com).