



Mission: Corrosion Impossible

Cortec[®] World Sales Meeting 2013 was a Great Success!

Cortec[®] World Sales Meeting (WSM) 2013 "Mission: Corrosion Impossible" became Mission Possible for its agents and representatives attending from around the world. The kick off started with the general session, which brought together 160 of our partners from a record 69 countries to share the Cortec[®] vision and goals for the upcoming year. The theme of this event was one of the highlights for all. Agent 126 Blue aka (Boris Miksic) and his 2 assistants (Ines Miksic & Munchkin) captured everyone's attention with a live introduction to the creative spy themed video.

During the general session Cortec[®] recognized an elite few for a job well done. Customer Service presented their "Customer Appreciation Awards" and the "Cortec[®] "Rusty" Top 10 Distributor Awards" in sales were awarded; with Metals Preservation Group USA winning as top distributor.

The remaining days of the event were full of lively sessions, presentations, and social gatherings that gave us the opportunity to get together in person, share strategies and best practices, learn from each other, and have fun. Here are just a few quotes from the many letting us know that it was an immense success:

"It was my first sales meeting and I thought Cortec[®] did a first class job. I look forward to selling more Cortec[®] products in the near future." – **Todd Starnes, Pack IQ**

"Best world sales meeting, ever." - Lars Hellberg, Tribotec AB

"Very informative sessions. I've learned so much about different Cortec® products." – Terry Overcash, Dura-site Construction

Cortec[®] wishes to say "Thank You" to the attendees for their participation. See you again in Minnesota in 2015. Until then, your mission, should you choose to accept it, is to aid our agents in the global battle against corrosion!





New Products

New Addition to the EcoLine® Family of Products

EcoLine[®] 3680

Everyone using our EcoLine[®] products know that the names are created based on the similarities in the functionality based on hydrocarbons. For example, EcoLine[®] 3220 is similar in application to VpCI[®]-322, and EcoLine[®] 3690, to VpCI[®]-369. In the same way, our new product EcoLine[®] 3680 is a bio-based substitute for VpCI[®]-368.

EcoLine[®] 3680 is a temporary coating, which leaves a waxy, semidry, off-white film on the metal surface and provides good protection for in-door and out-door applications. Developed with food approved ingredients, this product can be used on machinery where incidental contact with food is possible(NSF International approval is pending). As a temporary coating, EcoLine[®] 3680 is easy to remove by using an alkaline cleaner, for example VpCl[®]-414.



New Generations of Industrial Coatings

VpCI®-392

A self cross linking dispersion of modified aliphatic polyurethane in water. Designed as a top-coat for our primers VpCI®-375, 395, and 396. VpCI®-392 provides excellent chemical resistance, UV stability, excellent gloss and clarity. An additional benefit of VpCI®-392 is its great adhesion to many different materials including concrete and wood as well as "difficult" metal substrates such as aluminum, brass, copper, galvanized steel, and stainless steel.

Available in many colors; VpCI®-392 dries to touch in 30 minute, providing full durability and performance in about one week. Very low VOC; gloss and hardness makes this coating suitable for various industrial applications.



CorrBarrier

CorrBarrier is a water-based coating which exhibits excellent properties over various substrates. It is primarily designed for the automotive under-body/under-hood market. Also, it has applications for industrial maintenance, railcar, truck/trailer, and heavy machinery.

Designed as a clear primer, CorrBarrier has excellent chip resistance and a fast dry time. This coating is heavy metal free, has good early water resistance, excellent salt fog resistance, and very low VOC content.



VpCI®-398

VpCI®-398 is a coating that provides excellent protection to metal substrates exposed to harsh outdoor conditions. It is a soft, tack free, pliable, self-healing, durable undercoat suitable for trucks and automobiles. Protects against abrasion, salt, and other corrosive elements.

FEATURES

- Flexible
- Excellent salt spray protection
- Excellent outdoor protection
- Multimetal protection
- UV resistance
- Moisture displacing

Cortec's Additives for Drinking Water

Cortec® HC 2060

This is an all purpose product which provides excellent sequestering control of iron and manganese while also providing excellent corrosion control. Cortec[®] HC 2060 meets NSF/ANSI standard 60 for drinking water. Additives for drinking water are used in small concentration (about 2.2 gallons per million gallons of water), which make it difficult to show corrosion protection.

Cortec's accredited Laboratory found a way to show the protection ability of a small concentration of Cortec[®] HC 2060 using a electrochemical study.

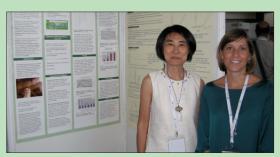


Time in solution	Corr. Rate, mpy in tap water with HC 2060/con- centration of HC 2060	Corr. Rate, mpy in tap water (Control)	Z, % of Corrosion Pro- tection	Simulated stage
45 min	1.49 / 100ppm	20.91	92.9	Conditioning at 100 ppm
20 hours	0.43 / 100ppm	5.95	92.8	Conditioning at 100 ppm
6 hours	0.46 / 3ppm	6.16	92.5	Working concentration 3 ppm
24 hours	1.05 / 3ppm	9.21	88.6	Working concentration 3 ppm

Left steel electrode is tested in water (control) Right steel electrode is tested in HC 2060

EuroCorr 2013

At EuroCorr 2013, held in Portugal in September, R&D Engineer Ming Shen made an oral and poster presentation titled "Detection of MCI® Migration Depth in Concrete Using UV Spectrometry". She demonstrated that inhibitor MCI®-2020 was detected at 3" below a topically treated surface 5 weeks after the treatment. She also demonstrated that between week 4 and 5, the amount of inhibitor at 2" below a treated surface increased about 60%. Proving the inhibitor presence in the depth of concrete helps our understanding of the effectiveness of MCI® and its applications. This paper has also been accepted for publication in the November issue of Material Performance.



Ming Shen and Ivana Radic at EuroCorr 2013 Poster Presentation

Technical Service Section

The primary role of Cortec[®] Technical Service is assisting with product selection for new applications and troubleshooting of existing applications. We prefer to always be contacted prior to implementing any products, so we can discuss the application fully. This helps not only the end user, but also our sales and distributor network to understand what the best approach is and why.

When we receive an e-mail or phone call in Technical Service, we will always ask a series of questions to help us narrow down the best solution. Keep these questions handy, so you can discuss them with end users. That way, the answers will be ready when we review the application. If we have all (or at least most) of the info below, we will be able to recommend the correct Cortec product(s) to use 9 out of 10 times.

The questions we always ask are as follows:

1) Metal type and condition

a. What type of metal(s) are we trying to protect? Please note all potential metal types. While most of our products protect multimetal, we have certain products that work better for cast iron or steel, as well as products designed for yellow metals (copper, brass, etc). b. Is there any contamination on the metal? This could be rust, dirt, or oil, but it could also be a process fluid, such as cutting oil. Alternatively, was the metal washed just prior to our product implementation?

2) Protection length/conditions

a. How long does the metal need to be protected? This information is critical, and can vary from a few hours to 10 + years. **b.** What environmental conditions will the metal be in? Conditions will vary from a temperature controlled, indoor warehouse to overseas shipment to direct salt water immersion and beyond. We need to know what conditions the metals will see. c. Along these lines, will the metal need to be protected during shipment, storage, or both? And during all stages, what will the conditions be? Shipment may be from building to building within the same city, might be state to state (domestic), and might be international. The shipping process might take 2 hours or 2 months.

d. Once the part/equipment arrives at its final destination, will it sit at a port for an extended period of time or will it be shipped directly to the end user? At the end user, will it be stored inside or outside? During shipment, will it be in a container, directly on the ship deck, in a trailer, or something else?

e. One final note would be about the end use of the part/component. We try to make the metal surface as ready to use as possible. The ideal solution is packaging, but this is not always possible. If the customer wants any type of temporary coating, please verify if there is removal needed and what sort of process they employ at the end user location.

There are a few more things worth noting. If there are already product(s) being used, please provide any and all information about them. We can cross reference them to previous testing or applications we may have. Alternatively, you can send product samples (and the customer's parts, if possible) and we can run a comparative test with similar Cortec products.

There may end up being more questions than this, but we always start with this information. Please, don't hesitate to contact Technical Services with any questions, no matter how simple they might seem.



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