

CORTEC*Vision*

March, 2019



**Cortec's Global
Impact and Environmental
Consciousness Continue**



Countdown to the 2019 World Sales Meeting in October!

Cortec's World Sales Meeting is a special event that takes place once every two years. It is an opportunity for Cortec® reps, distributors, and affiliates from around the world to gather in one place for a time of learning, networking, awards, and enjoyment!

In addition to corporate updates, awards, and educational presentations, Cortec® will again be hosting an Oktoberfest celebration at the Gasthaus Bavarian Hunter and a fantastic riverboat cruise down the Mighty Mississippi.

The World Sales Meeting will take place October 2nd-4th, 2019, at the beautiful Saint Paul Hotel in downtown Saint Paul, Minnesota. We look forward to seeing you there! Stay tuned to the World Sales Meeting website for updates: <http://www.cortecwsm.com/>.

EcoCortec® Expansion and Grand Opening

The year 2018 was especially noteworthy for EcoCortec® as it finalized its plant expansion and started numerous projects. The grand opening of the new 2000 square meter (2,392 yard) facility, which includes a new production hall, was held October 12th during the Cortec® European Sales & Strategy meeting. It was attended by Cortec® friends and family, media, and local government. Cortec® CEO, Boris Miksic, cut the ribbon together with his mother Nina. The new production hall will boost the plant's manufacturing capabilities and help EcoCortec® staff respond even more promptly to everyday market challenges.

Along with the recent expansion, EcoCortec® has purchased a new state-of-the-art extrusion line, E5, which increases the plant's production capacity even further. Some of the E5 production capabilities are as follows:

- 6.1 meter (20 ft) wide film
- Bags on a roll
- Perforated sheets

The new line will allow EcoCortec® to produce more film and shorten lead time by being able to make and offer stock and custom sizes of VpCl®-126 HP UV, VpCl®-126 Shrink Film, and MilCorr®.

With excellent logistics, a brand-new facility, a larger warehousing capacity, and a growing team, EcoCortec® is one of the most productive plants in the industry in Europe.



Cortec® Celebrates 21st Year of ISO 14001 Environmental Compliance

Cortec® Corporation was notified on February 5th, 2019, that it passed all requirements and remains in compliance with the ISO 14001 standard. Cortec® takes pride in being one of the first companies in Minnesota to have been certified back in 1998 and is now pleased to celebrate its 21st year of compliance with the ISO 14001 Environmental Management System (EMS).

The recent audit found Cortec® to be in compliance (with no non-conformities) by the external accreditation company American Global Standards, LLC. The audit consisted of evaluating the capability of the Environmental Management System to comply with the standard. Some highlighted areas include compliance with relevant statutory, regulatory, and contractual agreements; meeting specified objectives; and operational control of processes including internal audits and management review.

Cortec's EMS Committee has set its sights high for 2019 objectives and targets, with ongoing goals to reduce hazardous waste amounts and increase production and sales of renewable and biodegradable materials!



Cortec® Announces Opening of Southeast Asia Regional Office

Cortec® Corporation is pleased to announce the formation of Cortec® Southeast Asia Corrosion Technologies (Cortec® SEA), which will support the growth and development of Cortec's markets in Singapore, Malaysia, Thailand, Brunei, and Indonesia out of its newly formed regional office based in Singapore. Cortec® SEA will be managed by Philip Horsford, who previously held the role of Regional Manager for Cortec® Middle East. With this recent development, Cortec® is excited to increase the penetration of corrosion solutions into the Southeast Asia market, providing a solid base for users and distributors in the region.



Concrete Durability Research Using MCI® at Historic Chinese Bridge

Cortec® Laboratories has been working in conjunction with a Chinese civil engineering research institute to study concrete durability enhancement using MCI® at the historic Nanjing Yangtze River Bridge in the past two years. Three flagship MCI® products—MCI®-2005, MCI®-2020, and MCI®-2018—were selected to participate in the durability research in the recent full-scale restoration of this first Chinese-designed and constructed bridge over the mighty Yangtze River. After 50 years in service, the bridge is showing signs of deterioration, such as cracks in supporting beams, corrosion of rebar, and spalling of concrete cover. Extensive evaluation concluded that carbonation was the main cause for the concrete deterioration.

Cortec® Laboratories worked closely together with the Chinese researcher counterparts to design the best durability study strategy on the bridge. In 2016, Ming Shen (current Director of Innovations and New Technologies) and Jessi Meyer (VP MCI® Sales) traveled to the bridge to survey the site selection, and shared MCI® Technology with the research institute involved. In 2017, Cortec® Laboratories returned to the bridge again to gather baseline corrosion data at the selected study sites with the Chinese researchers. Just recently in 2018, all three chosen MCI® products were applied to the bridge.

Following this first phase of baseline testing and MCI® application, researchers and engineers will periodically measure the corrosion rates at the structures with MCI® products applied and those without MCI® treatment (the controls). In due time in the coming years, corrosion characteristics in these testing areas will be monitored and evaluated. Stay tuned!

To learn more about the project, please visit: <https://www.cortecmci.com/wp-content/uploads/2018/11/Chinese-Bridge-NA.pdf>



OUT AND ABOUT

Cortec's network of reps, sales offices, and distributors reaches around the world. Here's a snapshot of where and how this network has been involved internationally in numerous industries.



EcoCortec® Debut at Fach-Pack 2018!

EcoCortec® was pleased to host its first booth at FachPack during the September 25th-27th show in Nuremberg, Germany. While VpCI® packaging solutions have been and continue to be well-represented to the German audience by Corpac, the presence of EcoCortec® gave more than 12,000 visitors from outside Germany the chance to connect directly with Cortec's European-based producer of VpCI® films for corrosion protection. FachPack is Europe's largest packaging show, attracting over 44,000 visitors from 86 countries in 2018.

Cortec® Middle East—Gold Sponsors of Middle East Corrosion Conference

Cortec® Middle East (CME) was a Gold Sponsor and exhibitor at the 17th Middle East Corrosion Conference and Exhibition (MECC) September 30th-October 3rd at the Bahrain International Exhibition Center in the Kingdom of Bahrain. The event was organized

by the NACE Dhahran Saudi Arabia Section, the NACE West Asia and Africa Area, and the Bahrain Society of Engineers.

The team especially put forth their effort to demonstrate proper corrosion management during their technical paper presentations. Khalil Abed presented a paper on "Amine Carboxylate Based Volatile Corrosion Inhibitor Gel for Proactive Control of Corrosion inside Cased Pipeline Crossings." Another technical paper featured "Novel Detection Methods for Vapor Corrosion Inhibitors (VCI)" and was delivered by Philip Horsford.

MCI® Technology Impresses Visitors at 60th Brazilian Concrete Congress

Cortec® Brazilian distributor, Corr Solutions, had the pleasure of introducing MCI® Technology to a welcoming audience at the 60th Brazilian Concrete Congress, held September 17th-21st in Foz do Iguaçu, Brazil. The team of four from Corr Solutions—Matheus Rocha da Silva, Adalberto Thiel, Fer-

nando Chacorowski, and Luiz Flores—were able to share MCI® Technology with many professors, high level engineers, and consultants who are eager to learn about the concrete corrosion inhibitor technology. MCI® Technology is relatively new in Brazil, and visitors to the Corr Solutions booth were impressed at how the technology works to increase concrete durability and service life by protecting concrete from corrosion at the level of the rebar.

European Sales and Strategy Meeting

Cortec® and EcoCortec® hosted a European Sales Meeting in Croatia, welcoming more than 90 attendees! We are thrilled that Cortec® friends and family participated in such a large number and we made sure that they spent a few unforgettable days in beautiful Croatia. This sales meeting was definitely a special one, as our guests participated in a grand opening and ribbon cutting ceremony for the new EcoCortec® plant. During these few days, on October 11th, our CEO, Boris Miksic, also celebrated his 70th birthday and threw a big party for

guests in Zagreb's legendary restaurant Lagvic.

Cortec® Strengthens Global Connections at Pack Expo

Pack Expo 2018 was a time for Cortec® to strengthen connections with new and existing customers, rise to challenges for the future, and present an improved image with a sharp new trade show display. Throughout the course of the October 14th-17th conference at McCormick Place in Chicago, Cortec® was pleased to see a number of distributors stop by to say hello to their regional sales managers and thank them for their good support. The team of four from Cortec® was able to greet visitors with a freshly updated booth design that included a welcoming meeting space and the opportunity to see wide format samples of VpCI® film and paper in person. Cortec® was also able to reassure customers of Cortec's readiness to support them globally as they expand internationally.



Cortec® Sponsors Corrosion Education in Chile

Cortec® Corporation, in conjunction with Ferrimex Chile, was pleased to sponsor the "One Day Corrosion" event organized in Santiago, Chile, on October 19th, 2018, by the University of Santiago and NACE International—Chile Section.

The seminar was entirely devoted to the theme of corrosion costs. As pointed out by the host of the seminar, Dr. Alberto Monsalve, Director of the

Metallurgic Engineering Department (of the University of Santiago), Chile is still lacking a comprehensive assessment of the cost of corrosion in its different industrial sectors.

Over 100 people attended the all-day seminar and had the opportunity to listen to 16 speakers, who, through a variety of presentations on industrial "best practices" or R&D, described their cost-impact viewpoint on protection options. These ranged from coatings and cathodic protection, to surface preparation, CUI strategies, galvanized surfaces, etc. Dario Dell'Orto, Cortec® VP of International Sales, presented the use of VpCI® corrosion inhibitors related to "Temporary Coatings in Process and Storage Applications," which are somewhat new and unique compared to traditional permanent coatings.

"GROWING TOGETHER": Cortec's Latin America Sales & Strategy Meeting

Buenos Aires, Argentina's historic and glamorous capital, was the ideal site for Cortec's October 25th-27th Latin America 2018 Sales & Strategy Meeting, where Cortec® celebrated significant achievements. Our full team of distributors from the region was present, representing Argentina, Brazil, Chile, Colombia, Costa Rica, Ecuador, Mexico, Panama, Peru, Uruguay, and Venezuela; Cortec® USA was represented by Cliff Cracauer, Dario Dell'Orto, and Spencer Taylor.

Without a doubt, the cohesion of Latin America's Cortec® team has significantly increased and improved both qualitatively and quantitatively in terms of communication throughout the years. The meeting clearly showed the strength of the whole team and the solid link and loyalty between Cortec® headquarters and management in the various countries of Latin America. This in itself demonstrated the reason of the year's great sales achievement and fuels additional energy, inspira-

tion, and motivation to continue on this path in the same manner...**GROWING TOGETHER!!**



Cortec® Gets a Grip on the Natural Gas Industry

Cortec's participation in the 8th Gas Power Conference, November 7th-8th in Philadelphia, PA, was a time to get a better grip on the natural gas industry both in terms of understanding and reaching the market. The conference was a way to stay abreast of changes in the natural gas market as power generation shifts more and more toward solar, hydro, and wind energy. Natural gas production will not go away but will eventually focus on other uses besides energy.

During the conference, Cortec® Director of Energy & Engineered Solutions, Jim Holden, participated in a panel that discussed major hurdles to natural gas production and use in the future, one of them being corrosion. Holden also gave his own presentation on "The Forgotten Assets" and the importance of properly protecting them from corrosion.

Cortec® Makes Important Contributions to FALL ICRI Concrete Resiliency Convention

Cortec® was once again a major participant in the Fall ICRI (International Concrete Repair Institute) Convention held November 7th-9th in Omaha, Nebraska. In addition to sponsoring the WiFi, Cortec® played an important role

in preparing the new ICRI logo that was unveiled at the convention. The positive reception of the new logo was testimony to the significant thought and labor of the ICRI Marketing Committee, headed by Cortec® VP of MCI® Sales, Jessi Meyer.

Although Meyer was not able to attend this convention, Ashraf Hasania (MCI® Technical Sales & Market Manager, Canada) represented Cortec® MCI® in her absence. He gave his first ICRI presentation on *"Repair of Concrete Utility Poles with the Use of Migrating Corrosion Inhibitors"* to a full audience representing a large percentage of conference attendees. The presentation featured a unique project where MCI® was trialed on prestressed utility poles in Canada.

Asia-Pacific Sales & Strategy Meeting Generates Excitement, Insight

The 2018 Asia-Pacific Sales & Strategy meeting was a time of energy and insight as Cortec® distributors from a dozen countries around the Asia-Pacific and beyond gathered together November 8th-9th in Shanghai, China. In addition to communicating updates to distributors, Cortec® saw the gathering as an important time to learn from regional distributors and enable regional distributors to learn from each other. As usual, Cortec® also presented awards to the top 10 distributors in the region based on sales since the last Asia-Pacific Sales Meeting in 2016.

The gathering was not without sight-seeing enjoyment as the group took a boat tour Friday evening on the Pujiang River. Thanks to the first ever China International Import Expo occurring simultaneously, the skyline was brilliantly lit, providing a fantastic vista for tour participants. The week concluded with an excursion to the traditional village of old Shanghai on Saturday.

Positive Impression at ADIPEC

Cortec® Middle East (CME) welcomed many professionals from the oil and gas industry to its impressive booth near the hall entrance at the November 12th-15th ADIPEC (Abu Dhabi International Petroleum Exhibition & Conference) show. Once again, CME's open and welcoming booth design grabbed the attention of attendees such as petroleum engineers, corrosion inspectors, buyers, process and pipeline engineers, and directors from different oil and gas sectors. Visitors to the booth kept CME representatives busy answering questions about corrosion protection technologies and other different preservation applications.

Cortec® Stands Out at Managing Aging Plants Conference

Cortec® stood out as a unique exhibitor at the November 13th-14th Managing Aging Plants conference in Houston, Texas. In contrast to the many displays focusing on specialty metal alloys industries such as titanium and stainless steel, Cortec® offered lower cost alternatives for corrosion protection on existing metal components.

Although overall convention traffic was low, Cortec® appeared to have approximately ten times more interest than any of the other exhibitors on Cortec's aisle. *"We were kind of a novelty there, because we were so different from anybody else that was there,"* recalled Jim Holden, Cortec® Director of Energy and Engineered Solutions, who also gave a compelling presentation during the show.

Cortec® Increases Visibility at Caterpillar-India Corrosion Conference

Cortec® was thrilled to join PK Mathew November 15th-16th at the invitation-only Caterpillar-India Corrosion Engineering and Plating Conference

in Bengaluru, India. About half of the 137 attendees were Caterpillar India employees, while the other half were suppliers from across India.

The event was very successful and prompted post-conference discussions about having more of these events around the world. In Mathew's own words, "This event increased Cortec®-India's visibility and helped by making good connections and openings with CAT engineers and suppliers alike, the results of which are bound to follow."

POWER-GEN

POWER-GEN 2018, December 4th-6th in Orlando, Florida, was a dual time to gather insights on the growing renewable energy market and share new solutions with industries that use old school corrosion protection or need corrosion help. Period.

During the conference, one biomass power plant connected with Jim Holden to ask for some seriously needed help. Their three-year-old plant, which is located on the coast next to a paper mill, already looks like a thirty-year-old plant thanks to the combined forces of salt spray and corrosive industrial gases. The utility set up a time for Holden to walk through the plant and offer solutions to not only improve that location but also to develop a good corrosion prevention plan for other new plants they build in the future.

Members of the Cortec® team also took time to educate themselves by attending presentations on the changing renewable energy landscape.



NEW ONLINE AND PRINT RESOURCES

Cortec® has been busy rolling out a variety of new and updated resources on Cortec® corrosion solutions!

CorrVerter® Rust Converter Video

A new Cortec® video shows how to easily turn a rusted metal surface into a passivated, protected layer using CorrVerter® Rust Converter Primer! View the video at: <https://www.corteccoatings.com/videos/>.

New Packaging Website and Brochure

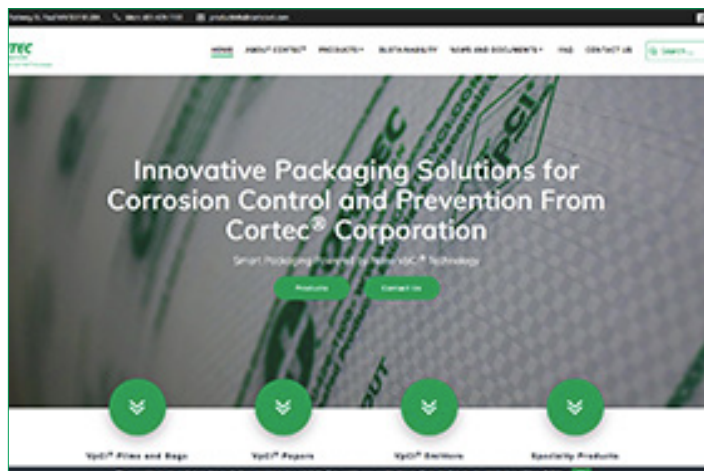
A completely revamped VpCI® Packaging website offers an improved user experience for browsing Cortec's innovative corrosion control packaging solutions. The options can be browsed according to product type (VpCI® Film and Bags, VpCI® Papers, VpCI® Emitters, Specialty Products) and format (e.g., roll stock, tubing, top-seal bags, small package emitters, etc.). An updated brochure has also been created to mirror the website.

View the website at: <https://www.cortecpackaging.com/>.
View the brochure at: https://www.cortecpackaging.com/wp-content/uploads/2018/09/Packaging_Brochure_09-18.pdf

Fresh Look to Coatings Website

Cortec® has updated its VpCI® coatings website with a completely fresh appearance and design that offers better navigation and user experience. The website includes answers to frequently asked questions, along with news, technical papers, and the official VpCI® Micro-Corrosion Inhibiting Coatings™ brochure.

View the website at: <https://www.corteccoatings.com/>



New Wastewater Treatment Plant Brochure for Corrosion and Odor Problems

Cortec's completely new brochure, "Cortec® VpCI® and MCI® Technologies for Corrosion Protection of Wastewater Treatment Plants," offers practical solutions for minimizing corrosion in wastewater treatment plants, where conditions are particularly harsh. The brochure also includes a section on enhancing the efficiency of wastewater treatment through the use of a quality range of specialized micro-organisms and nutrients from Bionetix® International (a subsidiary of Cortec® Canada).

View the full brochure: http://cortecwastewatertreatment.com/wp-content/uploads/2018/12/VpCIMCI_Tech_Wastewater_Treatment_12-18.pdf

Coatings Information Sheets

Cortec® has released several new handy one-page information sheets on Cortec® coatings. The first one includes an overview of Cortec® removable coatings, which are easy to apply and remove for corrosion protection. The second focuses in on VpCI®-391, an especially popular water-based removable coating that delivers exceptional corrosion protection for indoor and outdoor applications. A third info sheet presents CorrVerter® Rust Primer, a water-based primer that offers an easy to use alternative to sandblasting!

View the info sheets at the links below!

Removable Coatings: https://www.corteccoatings.com/wp-content/uploads/2018/10/Removable_Coatings_Sell_Sheet_09-2018.pdf

VpCI®-391: https://www.corteccoatings.com/wp-content/uploads/2018/11/VpCI-391_Coating_Sell_Sheet_11-2018.pdf

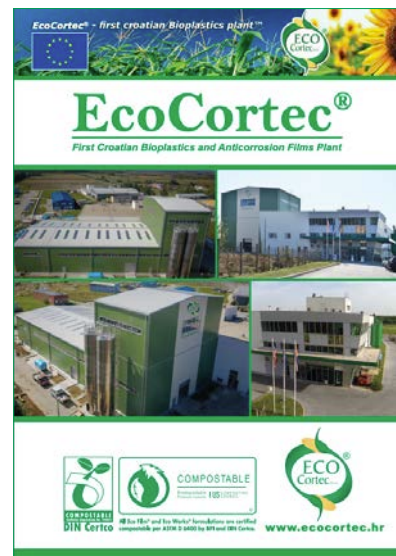
CorrVerter® Rust Primer: https://www.corteccoatings.com/wp-content/uploads/2019/01/CorrVerter_Sell_Sheet_01-19.pdf



Updated EcoCortec® Brochure

A refreshed EcoCortec® brochure reflects the plant's recent expansion with images of the new production hall.

View the brochure: http://www.ecocortec.hr/docs/brochures/EcoCortec_brochure.pdf



CORTEC® CASE HISTORIES

Cortec's Case History library continues to grow, with a number of important additions in the last six months. The following are some highlights of the many ways Cortec® solutions continue to be used in a variety of different industrial applications.

Coating Refrigerator Coils

In **Case History 616**, Cortec® was able to replace a solvent-based paint system with Cortec's water-based VpCI®-386 to coat refrigerator coils. The workers were unhappy with the smell of the solvent-based system, which was also not providing the long-term corrosion performance desired. Cortec® was able to provide better corrosion performance and reduce the manufacturer's VOCs by supplying VpCI®-386 as an alternative to the original solvent-based paint.

Read more:

https://www.corteccasehistories.com/?s2member_file_download=access-s2member-level1/ch616.pdf



MCI® Technology in New Bridges

Two new case histories cover the use of MCI®-309 to protect post-tensioning (PT) cables from corrosion on bridges prior to grouting. **Case History 613** describes the protection of the new Tagliamento River Viaduct in Italy, designed with a 1.5 km (0.9 mile) dual carriageway and constructed with precast, post-tensioned concrete segments. MCI®-309 was chosen for fogging through the PT ducts. **Case History 615** shares how MCI®-309 was used in the construction of the new Roskilde Fjordforbindelsen Frederikssund 8 kilometer (5 mile) dual-carriageway highway bridge in Denmark. MCI®-309 was applied during the casting of PT bridge sections in Poland to provide corrosion protection of the PT cables as the design requested.

Read more:

Case History 613

https://www.corteccasehistories.com/?s2member_file_download=access-s2member-level1/ch613.pdf



Case History 615

https://www.corteccasehistories.com/?s2member_file_download=access-s2member-level1/ch615.pdf



Photo Courtesy of: Rizzani de Eccher

Wind Power Corrosion Control

Case Histories 617 and 619 share how Cortec® corrosion solutions were applied to a variety of corrosion issues at a new wind farm in Brazil. The wind farm was subject to extremely harsh conditions of strong wind and blowing sand near the ocean. Corrosion was occurring on wind tower

base bolts, on clamps inside individual transformer boxes next to the tower bases, and on powerline clamps at a wind power transfer station.

To protect against future corrosion, the base bolts were cleaned with VpCI®-418 and coated with VpCI®-368 prior to capping them off with a rubber gasket. Any severe rust on the base bolts or base flange faces would be passivated with CorrVerter® Rust Converter Primer. The flange faces would also be top-coated with VpCI®-396 and VpCI®-384 as the customer worked through its corrosion maintenance plan one wind tower at a time.

Inside the transformer box, the corroded clamps were unbolted (after the power was turned off) and cleaned with VpCI®-418, dried, and bolted back into place. They were primed with VpCI®-396 and top-coated with EcoShield® 386 for future protection.

At the transfer station, power was turned off before work started. Clamps were taken down and mechanically abraded to remove a majority of the corrosion. They were then cleaned using VpCI®-418, dried, and reinstalled. VpCI®-396 was applied as a primer coat and allowed to dry for two to three hours. VpCI®-384 was applied as a topcoat. In addition, the sections of wire on both sides of the clamps were coated with VpCI®-396 to protect the wire from further ingress of contaminants.



Locomotive Engine Protection

Case History 623 shares how a locomotive engine producer needed a way to protect locomotive engine cooling systems from corrosion during the two years when they would be stored in harsh outdoor conditions after being shipped to a variety of locations around the world including Kazakhstan. Based on the success of a large engine producer who had used a similar water-based rust preventative from Cortec®, the locomotive engine producer adopted

the use of VpCI®-377 in March 2011 and continues to use it in 2019.

Read more:

https://www.corteccasehistories.com/?s2member_file_download=access-s2member-level1/ch622.pdf



Mould Tooling Protection

In the world of industrial water treatment, protecting off-line equipment from corrosion can be a big challenge, typically requiring continuous circulation to be effective. Cortec® **Case History 624** shows a successful solution for some of the most difficult off-line equipment: injection mold units. The customer was having corrosion problems on their tooling when it was offline or in storage. This caused a lot of maintenance and downtime to make sure the tooling was fit for use. The problem was solved by adding VpCI®-649 BD at 0.5% to the tanks that contain the cooling water for the tooling.

Read more:

https://www.corteccasehistories.com/?s2member_file_download=access-s2member-level1/ch624.pdf



PRODUCT NEWS & HIGHLIGHTS

EcoLine® Fifth Wheel Grease is premium quality bio-degradable grease formulated from vegetable oils and a lithium-based thickener. It offers an excellent biobased, biodegradable alternative to conventional all-purpose greases for lubricating metal-to-metal contact areas such as fifth wheels. Its superior lubricity and advanced extreme pressure additives promote longer equipment life by reducing friction and wear. The grease shows good adhesion to resist water washout and has a wide range of operating temperatures.

Learn more: https://www.cortecvci.com/whats_new/announcements/EcoLine-Fifth-Wheel-Grease.pdf

EcoLine® 4320 and 4330 are heavy-duty, green chemistry paint strippers designed to remove coatings, inks, and resins from metals, concrete, and wood surfaces. They do not contain any EPA-listed cancer-causing compounds or any California Prop 65 components that cause cancer, birth defects, or other reproductive harm. The products are formulated with renewable materials and recycled solvent. They contain 50% USDA certified biobased content and are qualified products under the mandatory federal purchasing initiative of the USDA BioPreferred® Program (for more information, go to <http://www.biopreferred.gov>).

Learn more: https://www.cortecvci.com/whats_new/announcements/EcoLine-4320-4330-PR.pdf

Cortec's **M-531 T** is an oil-based package of ashless corrosion inhibitors that can be added to petroleum and synthetic lubricants in turbine systems during layup. Using M-531 T in turbine oil and a wide variety of industrial lubricant applications protects systems (e.g., gear boxes and generators) from the rust that could otherwise lead to equipment failure. M-531 T is also good for applications that require water resistance.

Learn more: https://www.cortecvci.com/whats_new/announcements/M531T.pdf



EcoLine® Biobased Rubber Revitalizer is a soy-based product designed for cleaning and protecting genuine and synthetic rubber against the damaging effects of drying and sun damage. It is formulated with renewable material and contains 68% USDA certified biobased content. It is also a qualified product under the mandatory federal purchasing initiative of the USDA BioPreferred® Program (www.biopreferred.gov). It is an excellent companion solution for revitalizing rubber parts that frequently come into play when preserving metal equipment.

Learn more: https://www.cortecvci.com/whats_new/announcements/EcoLine-Rubber-Revitalizer-PR.pdf

CLP (clean, lubricate, protect) products are traditionally made of hazardous mineral oils and other petro-based solvents. Cortec® offers an excellent environmentally responsible alternative in the form of **EcoAir® Biobased CLP**, a biobased product in an air-powered spray can. Utilizing a canola oil base, EcoAir® Biobased CLP contains 89% USDA certified biobased content. It provides excellent penetrating, lubricating, and rust preventing action for industrial, shop, and home use. It can be used for many functions such as loosening rusted parts and protecting equipment components from wear and corrosion.

Learn more: https://www.cortecvci.com/whats_new/announcements/EcoAir-Biobased-CLP-PR.pdf

Formulators looking to enhance the corrosion protection of increasingly popular water-based coatings systems can now use Cortec's **M-120**, a water-based corrosion inhibitor additive that does not contain heavy metals. M-120 can be used alone or in conjunction with other inhibitors to increase the corrosion protection abilities of both water-based and solvent-based systems. It is recommended for use in acrylic and alkyd resin systems. M-120 protects both carbon steel and aluminum.

Learn more: https://www.cortecvci.com/whats_new/announcements/M-120-PR.pdf

VpCI®-707 is the next generation of VpCI® fuel additives for more potent corrosion protection of fuel systems. It has been specially formulated to protect fuel tanks and systems from corrosion and sludge formation without damaging copper and aluminum. It is a powerful option for keeping new and existing fuel tanks and systems in good condition during day-to-day operation and especially during vulnerable times such as intermittent operation, storage, or shipment. VpCI®-707 effectively provides contact-phase and vapor-phase action, protecting metal surfaces above and below the surface of the treated fuel.

Learn more: https://www.cortecvci.com/whats_new/announcements/VpCI-707-PR.pdf



CORTEC® PUBLISHED ARTICLES

Corrosion Protection for Cost Savings on Pacific Bases *DSIAC Journal, Fall 2018*

This article tells the story of applying a Cortec® corrosion protection system to Airfield Damage Repair vehicles at the Kadena Air Force base in Okinawa. The new plan was estimated to potentially save over \$20 million and extend equipment service life 5-7 years.

Read the full article: https://www.cortecvci.com/whats_new/announcements/DSIAC-Article.pdf

Corrosion Prevention for Historical Preservation *CoatingsTech*

A publication of the American Coatings Association recently published an article on how coatings can be used to protect historical structures from corrosion. It shared how the historically significant Vukovar water tower in Croatia is being restored as a memorial to the 1991-1995 Croatian war for independence. Cortec® is donating materials to assist in preservation, and CorrVerter® MCI® Rust Converter Primer is being used to help preserve rusted rebar.

Read the full article: <https://www.paint.org/article/corrosion-prevention-historical-preservation/>

Minimizing the Risk of Corrosion During Repairs and Layup *Process Cooling, January 2019*

Process Cooling magazine published a Cortec® article this winter describing strategies for protecting cooling towers and chillers from corrosion during hydrostatic testing, shipment, and layup. It also includes ideas for protecting electrical compartments and concrete structures.



Source: Senior Airman Omari Bernard, 18th Wing Public Affairs. Does not imply endorsement of any product or service by the DoD.)

Read more: <https://www.process-cooling.com/articles/89584-minimizing-the-risk-of-corrosion-during-repairs-and-layup>



Cortec® VpCI® Corrosion Protection Strategies for Valuable Mining Assets *Espacios.com*

This article relates a variety of Cortec® corrosion solutions that can be used for electronics or electricals, drawing operations, and equipment layup in the mining industry.

Read the full article: <https://www.espacios.com/news/2019/02/19/cortec-vpci-corrosion-protection-strategies-valuable-mining-assets/>

Concrete Surface Treatment *Construction Review Online*

An online construction publication from Africa compiled concrete surface treatment recommendations from a variety of companies. The article includes insights from Cortec® Corporation on selecting an MCI® surface treatment based on factors such as budget, corrosion protection, and water repellency.

Read the full article: <https://constructionreviewonline.com/2017/02/concrete-surface-treatment/>

Protección anticorrosiva de productos electrónicos y electrónica *Megavattios, October 2018*

A Cortec® article translated into Spanish describes practical ways to protect electronics and electricals from corrosion. It also includes several photos comparing the results of RAM sticks protected with Cortec® product versus those that were unprotected in 90 hours of ASTM B117 salt spray testing.

Read the full article on page 95: <http://www.>

edigarnet.com/e_revistas/webmagazine/index.php?pub=megavattios&num=450.

Migrating Corrosion Inhibitors: A Positive Invasion Against Corrosion *ASPIRE, Winter 2019*

A quarterly magazine on concrete bridges published an article discussing the use of Migrating Corrosion Inhibitors for new bridges as well as repairs and maintenance.

Read the full article: <http://aspirebridge.com/magazine/2019Winter/CBP-MigratingCorrosionInhibitors.pdf>

Fortifying New Concrete with Migrating Corrosion Inhibitor Admixtures *Construction Executive, February 10, 2019*

This article surveys some of the advantages of Migrating Corrosion Inhibitors over calcium nitrite admixtures. It also includes advice on certain environments that are especially good candidates for including Migrating Corrosion Inhibitor admixtures.

Read the full article: <https://www.constructionexec.com/article/fortifying-new-concrete-with-migrating-corrosion-inhibitor-admixtures>

Expansion, Acquisition & Safety... *SPRAY, March 2019*

In a March 2019 article, SPRAY magazine shared facility, product, and personnel updates from a variety of contract fillers. The article included a large section about several biobased spray can product offerings that Cortec® officially released in 2018: EcoAir® Bioclean, EcoAir® Biobased CLP, and EcoLine® ELP.

Read the full article: http://www.industry-publications.com/digitalissues/Spray_March_2019/page_17.html



UPCOMING EVENTS



NACE Corrosion Conference & Expo 2019

March 24th-28th, 2019

Music City Center

Nashville, TN

USA

Booth # 1500

<http://nacecorrosion.org/>

ICRI 2019 Spring Convention

April 8th-10th, 2019

Omni Hotel & Resorts Jacksonville

Jacksonville, FL

USA

<http://www.icri.org/>

Offshore Technology Conference 2019

May 6th-9th, 2019

NRG Park

Houston, TX

USA

Booth # 279

<http://2019.otcnet.org/welcome>

AWT Annual Convention & Expo

September 11th-14th, 2019

Palm Springs Convention Center

Palm Springs

USA

Booth # 163

<http://www.awt.org>

EuroCorr

September 8th-13th, 2019

Seville

Spain

<http://www.eurocorr2019.org>



FachPack

September 24th-26th, 2019

Nuremberg

Germany

<https://www.fachpack.de/en>

Cortec® World Sales Meeting

October 2nd-4th, 2019

Saint Paul, Minnesota

<http://www.cortecwsm.com/>

ICRI 2019 Fall Convention

November 11th-13th, 2019

Doubletree Hilton Philadelphia Center City

Philadelphia, PA

USA

<https://www.icri.org>

FABTECH 2019

November 11th-14th, 2019

McCormick Place

Chicago, IL

USA

Booth # B10033

<https://www.fabtechexpo.com/>

Power-Gen International 2019

November 19th-21st, 2019

Ernest N. Morial Convention Center

New Orleans, LA

USA

Booth # 4128

<https://www.power-gen.com>

International WorkBoat Show

December 4th-6th, 2019

Morial Convention Center

New Orleans, LA

Booth # 3905

<http://www.workboatshow.com>

Cortec® Corporation



Quality Management System (ISO 9001 Certified)

World Class Product Offerings

An innovative producer of leading edge products.

World Class Customer Service

A positive, long-lasting impression through every link of our company.

World Class Environmental Commitment

Cortec® commits to continued development of processes and products that are useful, non-hazardous to the environment, and recyclable whenever possible.

An Ethical and Respectful Company Culture

Respect and treat our colleagues, customers, and vendors as we would our own family members.



Environmental Management System (ISO 14001 Certified)

Cortec's strong environmental concern is demonstrated in the design and manufacturing of products that protect materials of all kinds from environmental degradation. A strong commitment to produce recyclable products made from sustainable resources has been and will be our future policy. This brochure can be recycled.



Laboratory Accreditation (ISO/IEC 17025)

Cortec® Laboratories, Inc. is the only lab in our industry that has received ISO/IEC 17025 Certification, which ensures quality in recording and reporting data, as well as calibrating equipment within the laboratory.



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