CORTEC CORPORATION

Environmentally Safe VpCI® /MCI® Technologies

ADVANCED PROTECTIVE COATINGS

High-Performance Solutions for Corrosion Control

ADVANCED PROTECTIVE COATINGS

Tested corrosion protection for metal assets at every stage of their life cycle.

Cortec® protective coatings are engineered to safeguard metals from corrosion during storage, shipment, and in-service exposure. Designed for demanding industrial environments, these coatings combine durable barrier protection with advanced corrosion-inhibiting technology to help extend asset life, reduce maintenance, and lower total cost of ownership.

From short-term preservation to long-term structural protection, Cortec® coatings deliver reliable performance across a wide range of applications, industries, and environmental conditions.

WHY CORTEC® COATINGS

Active Corrosion Protection

Formulated with corrosion inhibitors that provide protection beyond the visible coating layer.

Temporary & Permanent Solutions

Options available for removable, transitional, or long-term protection needs.

Versatile Application Methods

Brush, spray, or dip application compatible with existing processes.

Indoor & Outdoor Performance

Choose from a range of durability levels, from indoor protection to coatings for high humidity or harsh environments.

Multi-Metal Compatibility

Effective on carbon steel, stainless steel, aluminum, cast iron, and more.

More than a barrier—engineered corrosion protection.

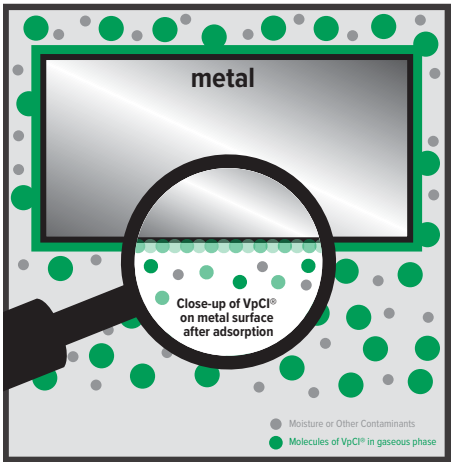
Cortec® protective coatings are designed to address corrosion challenges throughout a metal asset's life cycle. Applied by spray, brush, or dip, these coatings provide fast, economical protection while helping reduce corrosion-related losses associated with repairs, rework, and asset degradation.

HOW CORTEC® COATINGS WORK

Cortec® Vapor phase Corrosion Inhibitors (VpCI®) protect metals through a combination of direct-contact and vapor-phase mechanisms.

Protection is achieved by:

- Forming a thin, molecular protective barrier on the metal surface
- Creating a physical bond that shields against moisture, oxygen, and corrosive contaminants
- Extending protection beyond visible surfaces to edges, seams, and recessed areas



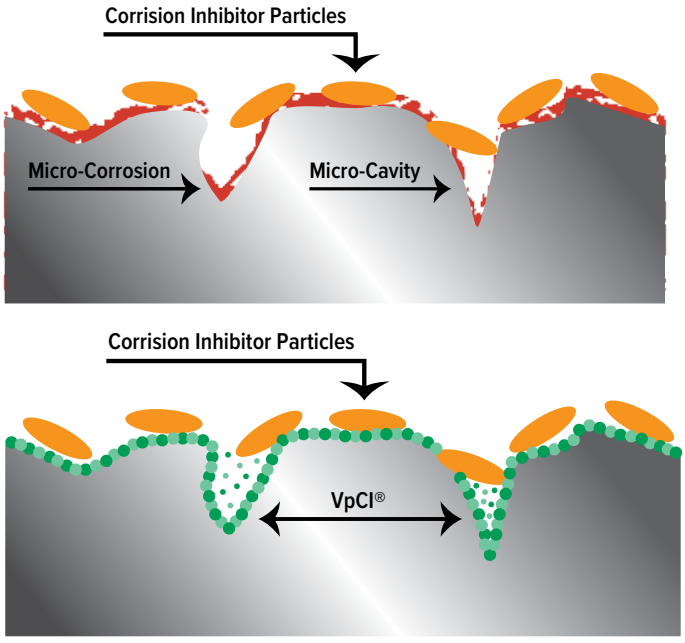
VPCI® TECHNOLOGY ADVANTAGE

VpCI® technology delivers corrosion protection where traditional coatings fall short.

Beyond Traditional Coatings

Cortec® uses a carefully selected combination of corrosion inhibitors (including VpCI® blends) and coatings chemistry for synergistic performance and the lowest possible impact on environmental health and safety, often including lower VOC levels than traditional industrial paints.

Where traditional chemistries leave microscopic gaps for corrosives to enter, Cortec's unique chemistry package tightens the barrier, making it possible for even water-based coatings to offer significant corrosion protection.

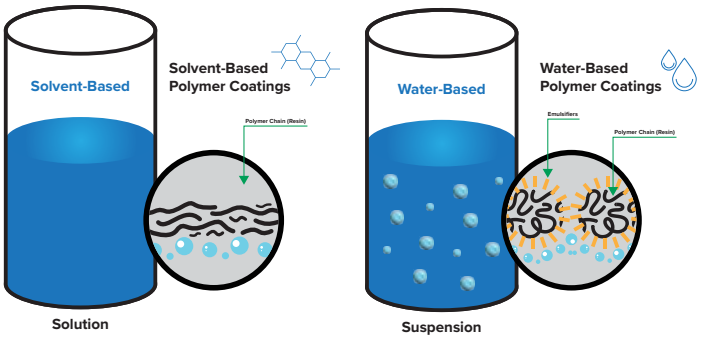


FLEXIBLE FORMULATION OPTIONS

VpCI® can be used in combination with a wide range of coating systems to meet application and environmental requirements.

Available options include:

- Water-based and solvent-based formulations
- Temporary and permanent protection systems
- Functional enhancements such as:
  - Thermal stability
  - Customizable finishes and colors
  - Tailored wet properties



COATING SOLUTIONS BY PROTECTION TYPE

The right level of corrosion protection—temporary or permanent.

Cortec® coatings are designed to meet corrosion protection needs across a wide range of applications and environments. All coatings fall into one of two protection categories—temporary or permanent—allowing users to select a solution based on protection duration, exposure conditions, and end-use requirements.

TEMPORARY COATINGS

Cortec® temporary coatings provide effective corrosion protection during processing, storage, shipment, and equipment layup. Most of these coatings leave a translucent protective layer that resists corrosion and can be removed when protection is no longer needed.

Key characteristics:

- Short- to long-term corrosion protection
- Removable with water-based cleaners
- In many applications, removal is not required
- Safer and more advanced than traditional oil-based rust preventatives
- Remains effective in aggressive environments

Common applications include:

- Parts storage and processing protection
- Overseas shipping and export
- Maintenance and repair operations
- Equipment layup and preservation

PERMANENT & LONG-TERM COATINGS

Cortec® permanent coatings are designed for long-term corrosion protection in harsh service environments. These coatings take advantage of barrier protection and VpCI® technology to help prevent corrosion even when the coating is scratched or damaged.

Performance features include:

- Long-term corrosion resistance for indoor and outdoor exposure
- Excellent adhesion to metal substrates
- UV resistance
- Gloss and color retention when aesthetics are important
- Availability in a wide range of standard or customized colors

Permanent coatings are commonly used for OEM components, structural steel, and assets exposed to corrosive industrial, marine, or tropical environments.

APPLICATIONS & INDUSTRIES

Corrosion protection where and when it matters most.

Cortec® coating solutions are used across a wide range of industries to protect metal assets throughout processing, storage, shipment, and long-term service. Whether the application requires temporary preservation or permanent protection, Cortec® coatings are engineered to perform in real-world conditions where the corrosion risk is high.

TYPICAL APPLICATIONS

Cortec® temporary and permanent coatings are commonly used to protect metal products and equipment in applications such as:

- In-plant processing and work-in-progress protection
- Parts storage and inventory preservation
- Overseas shipping and export packaging
- Equipment layup, mothballing, and maintenance
- Structural steel and exposed metal components
- Field service and long-term asset protection

These coatings help reduce corrosion-related damage, rework, and downtime at every stage of the asset life cycle.

INDUSTRIES SERVED

Cortec® coatings are trusted in demanding industries where corrosion control is critical to safety, performance, and cost management:

- Manufacturing & fabrication
- Oil & gas
- Power generation
- Marine & offshore
- Infrastructure & construction
- Military & government
- Heavy equipment & OEMs

Cortec® is here to help users select a coatings solution that is tailored to the environmental, operational, and exposure requirements unique to each industry.

Designed for Challenging Environments

Cortec® coatings perform reliably in aggressive environments, including industrial, tropical, and high-humidity conditions. VpCI® Technology enhances protection by actively safeguarding edges, seams, and recessed areas that traditional coatings often leave vulnerable.

Our coatings experts bring decades of experience partnering with industries worldwide to solve real-world corrosion challenges. Leveraging innovative VpCI® (Vapor phase Corrosion Inhibitor) technology, we design and implement proven coating and preservation strategies tailored to demanding environments and complex assets. These case histories demonstrate how VpCI® coating systems have been used in the field—protecting steel, equipment, and infrastructure during long-term storage, shipping, operational standby, and layup. Each example highlights practical solutions that deliver dependable corrosion protection, reduced maintenance, and cost savings.

CORROSION PROTECTION OF RAILWAY ELECTRICAL PIERS

THE PROBLEM: Corrosion on 200 electrical support pillars required rust treatment and long-term protection.

THE APPLICATION: Loose rust was removed, followed by application of **CorrVerter**® primer and a **VpCI**®**-396** topcoat to protect the steel.

THE CONCLUSION: The Cortec® coating system provided a cost-effective solution with predicted service life of up to 15 years.

MILITARY EQUIPMENT PRESERVATION

THE PROBLEM: Extreme humidity and salt exposure caused rapid corrosion on Airfield Damage Repair (ADR) vehicles, leading to early repainting and extensive body repairs within a few years of service.

THE APPLICATION: Protective coatings were applied to vehicles stored outdoors for long periods. **VpCI**®**-391** was used on engine compartments and wheel wells, while **VpCI**®**-372** peelable coating protected high-wear areas such as dump beds and blades. All exterior painted surfaces were coated with **VpCI**®**-386** (clear matte version) for comprehensive corrosion protection.

THE CONCLUSION: The coating system significantly reduced corrosion risk in a highly aggressive environment, helping preserve vehicle condition and reduce long-term maintenance costs. Its ease of application and effectiveness drove interest in expanding the program to additional locations.

PROTECTION OF WIND TOWER BASE BOLTS & TRANSFORMER BOX

THE PROBLEM: Severe corrosion was affecting wind tower base components and electrical hardware within transformer boxes, requiring a durable maintenance solution.

THE APPLICATION: Flange faces were coated with **VpCI**®**-396** and **VpCI**®**-384** as part of an ongoing corrosion maintenance plan. Corroded transformer box clamps were removed, cleaned, treated with **ElectriCorr**™ **VpCI**®**-239**, and reinstalled. **VpCI**®**-396** and **VpCI**®**-386** were used for external protection.

THE CONCLUSION: The use of these Cortec® products will significantly extend the service life of wind tower base components and internal electrical hardware in a severe environment.

RESTORATION & PROTECTION OF DOWNHOLE CASING PIPES

THE PROBLEM: Severely rusted casing joints required corrosion protection, but frequent reapplication of temporary coatings was costly and inefficient.

THE APPLICATION: Loose rust was removed using VpCI®-416, followed by application of **CorrVerter**® primer. **VpCI**®**-396** was used for splash-zone exposure, while **VpCI**®**-386** was applied to joints installed downhole.

THE CONCLUSION: The coating system provided a safe, effective, and long-lasting solution that eliminated repeated maintenance. Its success led to continued use of the same procedure more than eight years later.

Product Selection Guide

	Product	System Type	Resin	Exterior Durability	Chemical Resistance	Corrosion Protection	VOC	Finish	Pot Life	Shelf Life
PERMANENT COATINGS										
PRIMERS										
1K	**VpCI®-373**	Water	Acrylic	Short-Term	Limited	Light	Low	Low Gloss	-	1 Yr.
1K	**CorrVerter®**	Water	PVC	Short-Term	High	High	Low	Low Gloss/Matte	-	1 Yr.
2K	**VpCI®-395**	Water	Epoxy	Short-Term	High	High	Low	Low Gloss	2-3 Hrs.	1 Yr.
TOPCOATS										
1K	**VpCI®-396**	Solvent	Urethane	Moderate	Moderate	High	High	Medium Gloss	-	1 Yr.
2K	**VpCI®-384**	Solvent	Urethane	Moderate	High	Moderate	High	High Gloss	2-3 Hrs.	1 Yr.
2K	**VpCI®-2026**	100% Solids	Novolac Epoxy	Short-Term	High	High	Low	Medium Gloss	20-25 Mins.	1 Yr.
DTM (DIRECT-TO-METAL)										
	EcoShield® VpCI®-386	Water	Acrylic	Moderate	Limited	High	Low	High Gloss	-	1 Yr.
	EcoLine® 3860	Water	Acrylic	Long-Term	Limited	Light	Low	High Gloss	-	1 Yr.
	VpCI®-280	Solvent	Alkyd	Moderate	Limited	Light	High	High Gloss	-	1 Yr.
	VpCI®-371	Solvent	Silicone	Long-Term	Moderate	Moderate	High	High Gloss	-	1 Yr.
	VpCI®-375	Water	Acrylic	Moderate	Moderate	High	Low	Medium Gloss	-	1 Yr.
	VpCI®-383	Water	Acrylic	Short-Term	Limited	Light	Low	High Gloss	-	1 Yr.
	VpCI®-386	Water	Acrylic	Moderate	Limited	Moderate	Low	High Gloss	-	2 Yrs.
	VpCI®-387	Water	Acrylic	Moderate	Limited	Moderate	Low	High Gloss	-	1 Yr.
	VpCI®-392	Water	Urethane/Acrylic	Moderate	High	Moderate	Low	High Gloss	-	1 Yr.
TEMPORARY COATINGS										
	Product	**System Type**	**Resin**	**Exterior Durability**	**Chemical Resistance**	**Corrosion Protection**	**VOC**	**Finish**	**Pot Life**	**Shelf Life**
	VpCI®-368	Solvent	Wax/Petrolatum	Moderate	Low	High	High	Matte/Waxy Film	-	2 Yrs.
	VpCI®-369	Oil	Oil/Petrolatum	Short-Term	Low	High	Low	Oily/Wet Film	-	2 Yrs.
	VpCI®-372	Water	Elastomeric	Short-Term	Low	Light	Low	Non-Gloss Film	-	1 Yr.
	VpCI®-389	Water	Polymer	Moderate	Low	Moderate	Low	Non-Gloss Film	-	2 Yrs.
	VpCI®-391	Water	Polymer	Moderate	Low	Light	Low	Non-Gloss/Hazy Film	-	2 Yrs.

LEGEND & DEFINITIONS

1K (Single-Component) – Ready to use; no mixing required before application. **2K (Two-Component)** – Requires mixing components prior to application to cure properly. **Primer** – Base layer applied to the substrate to promote adhesion and corrosion protection. Requires a topcoat for UV resistance, durability, and completed system performance. **Topcoat** – Final layer that provides durability, UV resistance, and appearance. Requires a compatible primer beneath it to achieve full performance. **Direct to Metal (DTM)** – Hybrid coating that functions as both primer and topcoat in a single layer.

Exterior Durability (UV / Outdoor Exposure): Short-Term – Best for interior or short-term exterior exposure. Moderate – Suitable for general outdoor exposure. Long-Term – Designed for long-term outdoor exposure and UV resistance.

Chemical Resistance: Limited – Not intended for chemical exposure. Moderate – Resists occasional or mild chemical contact. High – Suitable for frequent or aggressive chemical exposure.

VOC: Low – Complies with most environmental regulations. Restricted – Regional compliance should be verified. High – Restricted in regulated areas.

Corrosion Protection: Light – Passes 1-3 weeks of salt spray testing. Good for use in indoor/outdoor minimally-aggressive environments. Moderate – Passes 3-5 weeks of salt spray testing. Good for use in high humidity, moderately aggressive industrial or coastal environments. High – Passes 6 or more weeks of salt spray testing. Good for use in extreme humidity, aggressive industrial/offshore environments. See technical data sheets for specific salt spray results by coating.

VpCI®-372 Peelable Coating

Cortec® Corporation is a global leader in innovative, environmentally responsible corrosion control technologies, specializing in VpCI® (Vapor phase Corrosion Inhibitors) and MCI® (Migrating Corrosion Inhibitors) systems. Since our founding in 1977, Cortec® has demonstrated a commitment to innovation, developing over 500 products and securing more than 60 patents in corrosion prevention.

With over 45 years of experience, we have helped industries worldwide implement effective, economical asset preservation strategies, protecting equipment, structures, and materials from corrosion throughout their life cycle. Our VpCI® and MCI® preservation systems have been successfully applied across a diverse range of industries—from automotive manufacturing and aerospace to oil and gas, military, construction, and beyond—demonstrating the versatility and reliability of our technologies.

Cortec's expertise spans every stage of manufacturing, construction, and storage. By implementing a proactive, strategic preservation process, owners and operators can ensure that all equipment, machinery, and components remain ready-to-use whenever needed, reducing downtime, extending asset life, and lowering maintenance costs. Our integrated preservation approach not only protects assets in challenging environments but also contributes to operational efficiency and sustainability, making Cortec® a trusted partner for businesses committed to long-term performance.

See Corrosion Protection in Action – Subscribe to Cortec® on YouTube!

QUALITY EXCELLENCE®

CORTEC CORPORATION

Environmentally Safe VpCI®/MCI® Technologies

Distributed by:

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.

ISO 9001 CERTIFIED | ISO 14001 CERTIFIED | Cortec Laboratories®, Inc. ISO/IEC 17025:2017 ACCREDITED

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