

Spring 2005 Edition

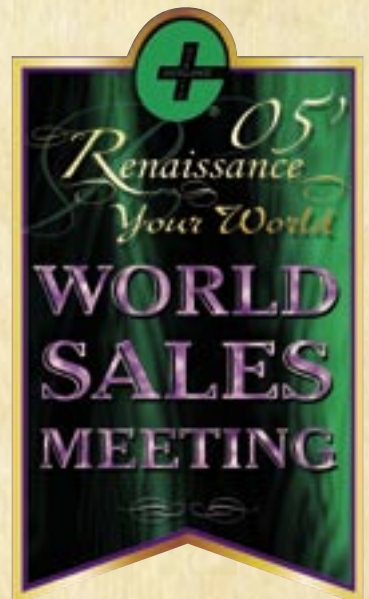


# CORTEC Vision

World Sales Meeting 2005

Cortec's Vision is to go  
the distance

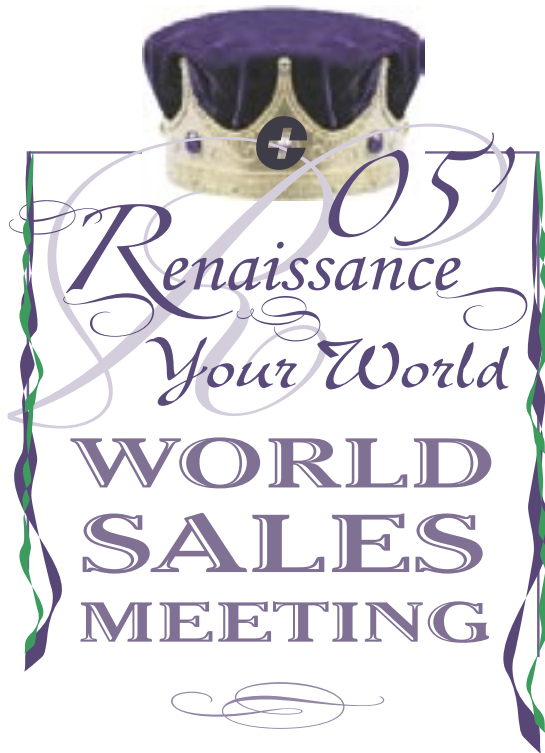
Major U.S. Auto  
Manufacturer Chooses  
Cortec



In this Issue...



- 1 World Sales Meeting Announcement
- 1 Cortec® Record Sales
- 2 Cortec® Vision: Going the Distance
- 2 How Cortec® VpCI's Cut Cost
- 3 Cortec® News Alerts
- 3 Case History Abstracts
- 4 Nace 2005
- 5 Major U.S. Auto Manufacturer Chooses Cortec® VpCI's
- 6 EcoLine®: A Seed for Thought
- 7 Cortec® Products from Sustainable Resources



Prepare yourself, it's that time again! Cortec's World Sales Meeting 2005 is almost upon us, set for June 23rd-24th in St.

Paul, MN. The festivities will start off at the historic St. Paul hotel, where seminars and parties will be held. Later, tours of Cortec Headquarters along with Advanced Films Division, Spray Technologies Division and Cortec's Coated Products Division will be given.

This year's theme is the Renaissance, a period of rebirth and achievement. The Renaissance was a period of intellectual and ideological change. We are now living in a new era, where rust no longer has a strangle hold on business. Cortec® Corporation invites you to come be enlightened and have some fun.



## Cortec® Record Sales

Cortec® reports sixth consecutive record-setting sales month leaving others in the dust!

For the sixth consecutive month, sales of Cortec's VpCI™ products have exceeded the 20% growth goal by considerable margin, in the highly competitive market of corrosion control. Cortec® has held to its original strategy of outperforming and out-servicing the competition by investing in research and development, personnel and global expansion. Even the recent downturn in the manufacturing sectors did not slow down Cortec's investment in the future.

Within the past two years, Cortec® has invested well over \$3 Million to increase production capacity and has opened direct regional offices to support the exponential growth from its network of distributors. Boris Miksic states, "We have focused on the key areas of customer service and quality of products and always try to anticipate the needs of our customers. Without shareholders to respond to in the short-term, we have been able to remain focused on our successful future."

At the same time Cortec® is on a record setting sales pace, the value of Northern Technologies International, (AMEX: NTI) a major competitor in packaging, common stock dropped 16.55% in a single day (January 14, 2005). Source: [www.bigcharts.com](http://www.bigcharts.com)



## Going the Distance

We here at Cortec® have been going the extra mile to ensure our customers' needs are being met. Our goal is to deliver seemingly impossibly high customer support standards and yet make our efforts feel routine. We know that strengthening customer relations is the key to future success, so our employees are working hard to not only meet your expectations, but exceed them. We believe that extra personal service is of utmost importance. Our employees rush to the aid of customers, doing everything in their power to provide the best products and service on time, every time. We also pride ourself on our technical support. Our knowledgeable team of Lab support strive hard to respond to questions as soon as they receive them.

Customer service is without a doubt the most important part of any business these days. We no longer live in a world where a few clever companies have made customer service synonymous with their names. No business of any size can afford to take customers for granted, because it's without



question a buyer's market and becoming more so every day.

To be a successful company, we must give our customers what they want. And since you never know who may eventually become a customer, we must provide courteous, friendly service to our suppliers and everyone else with whom we come in contact, as well as current customers. If you want to keep customers coming back for more, practicing the Golden Rule (do unto others as you would have them do unto you) makes perfect business sense.

### CONGRATULATIONS TO THE HAPPY COUPLE!

Greg Hocking (our new Technical Sales Representative for Water Treatment, Additives, and Lay-up ) and fiancée Jill Dobis have officially announced their engagement. The Wedding is planned for October 14th, 2006. The future looks bright for both of them and everyone here at Cortec wishes them the very best!



### How Cortec® VpCI's Cut Cost

- Multifunctional products.
- More effective protection.
- Efficient delivery systems that make it economical to treat hard-to-protect items.
- Easy application.
- Improved health, safety and pollution control.
- Elimination of extra processing steps, as there is no need to remove (in most cases) VpCI™ (Vapor phase Corrosion Inhibitor) protection.
- Extension of equipment life.
- Immediate use

Use Cortec® systems in every stage of a product's life, starting from the production of metal stock to actual use in the field. When properly applied, Cortec® VpCIs substantially cut time and costs throughout the entire product life cycle: in manufacturing, storage, shipment and field service.

Cortec® VpCIs eliminate many extra processing steps such as cleaning, degreasing, rust removal, pickling, sandblasting and reprotecting. You have less re-work, fewer rejects, improved quality, reduced rust claims and extended equipment life.

## PRESS RELEASES

### Cortec® News Alerts Cortec Becomes First U.S. Manufacturer to Receive "Din Certco" Approval

In completing the Din Certco application and review process, consumers around the world can rest assured that their EcoFilm™ and Eco Works® products will meet ASTM D 6400 standards for commercial compostability. By receiving the approval, Cortec became the first (and currently the only) U.S. Manufacturer to prove scientifically to a review panel in Germany that both Eco Film™ and Eco Works® met internationally-accepted standards for biodegradability—including rapid disintegration, biodegradability, and non-toxicity. Eco Film™ and Eco Works® products have incorporated the "compostable" logo/mark shown below.



### A New Technology

Cortec® was recently awarded a STTR research grant by the US Army. In cooperation with the University of California, Irvine, Cortec is developing a new method of controlling corrosion. The grant is to investigate the use of a bacterial biofilm capable of providing corrosion protection to the metal surface of aircraft and other military equipment.

The research grant was activated on October 1st and lasts six months and as the year ends we are halfway

through the project. At Cortec® we are investigating adhesive films as carriers for the biofilm bacteria. Dr. Peggy Arps at the University of California (Irvine) is screening bacteria for activity and corrosion inhibition on aluminum. The most effective bacteria will be incorporated into adhesives and aerosols as a means of imparting corrosion protecting biofilms to aluminum. This STTR project enables the laboratory to acquire new technology to be used in the development of corrosion control products.

### Cortec® Paint Store

Cortec has recently purchased a computerized machine which enables us to color match water based coatings more rapidly. It has just recently gone online, allowing us to fill your request in a shorter amount of time. Just supply us with a paint chip or an RAL # and we'll take care of the rest.

### Cortec® Honored as "Company of the Month"

The Network News, a Tri-State monthly manufacturers newsletter, applauds the efforts of Cortec® and its founder Boris Miksic and has named us its March Company of the Month. The article gives a rundown of several of the Cortec product lines as well as a "tour" of Cortec World Headquarters with a broad description of daily company operations.

### Case History Abstracts

#### Building Facade Restoration (ch249)



MCI® 2020 V/O was the product of choice for the specifying engineer because of its environmentally friendliness. This particular building has

exterior air conditioning units, so any product that is to be applied must be non-hazardous and cannot affect any of the building occupants in case the units were turned on during the application. There were also concerns over the windows and new landscaping around the building. MCI® 2020 did not etch the glass, nor did it have any detrimental effects on landscaping. The contractor on the job was also pleased that MCI® 2020 V/O could be applied in a single coat. This provided large savings in labor versus the competition, which required 2-5 coats.

#### Preservation of Weaponry (ch262)



The Croatian Army was looking for solution to corrosion protection of weaponry during storage. These storage conditions were in different climates—continental, mountain and Mediterranean climates. The Croatian Army used VpCI™ technology to preserve weaponry for over 10 years. VpCI™ use is effective in protecting the safety of military personnel, eliminating hazardous waste disposal, reducing labor cost, and preserving war readiness.

#### Restoration of Marquette Manor (ch257)

The existing coating failed and was subsequently stripped off to absolute virgin concrete. All delaminations were patched with a polymer modified mortar. The structure was then treated with MCI®-2020 V/O and coated with an elastomeric coating.

Cortec® was chosen because of its past success with the manufacturer and the distributor.

### Upcoming Trade Shows

**World Sales Meeting**  
June 23-24 2005  
St. Paul MN

**EuroCorr 2005**  
September 4th-8th  
Lisbon, Portugal

**AWT 2005**  
September 21st-24th  
Palm Springs, CA

### Repair of Condo Balconies (ch253)



A condominium complex needed their balconies repaired. Overhead patching and caulking was completed, and followed by a sealer treatment. The owner wanted a product that was a corrosion inhibitor and water repellent that could be applied in one step, so MCI®-2019 was chosen. After, MCI®-2019 was applied as a water repellent containing Cortec's Migrating Corrosion Inhibitors.

The owner stated that they were very

pleased with the MCI®-2019 application and performance during the course of the project.

### VpCI-326™ for Mothballing of Aircraft Engines (ch254)



Customer wanted to store his restored 1965, PA18-150 amphibian prop plane during the winter months. The original engine was replaced with a 180 horse power Lycoming engine which is equipped with an after-market oil filter. Lycoming suggests the use Cortec® VpCI-326™ along with a lubricating oil. The procedure used was specified in a Lycoming Service letter (L180B), and has been found to be a very effective way in protecting engines during storage.

### Protection of Private Yacht (ch251)

Customer wanted to protect their boat from corrosion since it would be laid up for the long winter months, exposed to the harsh weather. Various VpCI™ products and shrink wrapping the boat in MilCorr® Shrink Film will protect the craft from corrosion unlike other products and shrink films, which just cover the boat. MilCorr® covers and protects with it's



VpCI™ technology.

The customer is very happy with the performance of the film and uses MilCorr® Shrink film every year for protection of his yacht from snow, ice, other elements and corrosion. Each year when unwrapped, the boat was well protected from damage and rust free.

### High Rise Building Restoration (ch255)



Horizontal concrete precast at floor levels supports brick in fill. Lack of proper flashing details along with a highly porous concrete is allowing water to enter matrix and interior. All repairs have been proven successful. Cores were extracted and tested to prove migration of MCI®-2020 V/O.

### NACE Corrosion 2005



**Boris Miksic, Dr. Behzad Bavarian, Ivan Rogan, Prof. Ivan Juraga**

NACE International recently concluded Corrosion 2005 in Houston, Texas. This annual conference set another record year with more than 6,000 corrosion professionals from 50 countries attending. This year's conference offered a program featuring 36 technical symposia and 413 paper presentations covering all aspects of corrosion control.

Cortec® was, once again, involved in many areas of the conference. The company participated in NACEExpo/2005, the largest and most comprehensive corrosion technology exposition in the world.

One special event included a Front Page Issues session on the Johnson Space Center's Saturn V Rocket assessment and treatment program. Cortec is very proud to be one of the suppliers of corrosion preventatives for this project and the company was recognized during this presentation.

Employees of Cortec® also participated as symposium chairmen, presenters and technical support to presenters.

The next NACE Annual Conference will be held in San Diego, California March 12 – 16, 2006.

# MAJOR AUTOMOTIVE MANUFACTURER USES RUSTPROOFING TECHNOLOGY ENGINEERED BY CORTEC

## Cortec's Long Term Rust Proofing Strategy Creates a New Market for VpCI™ Products

Automotive manufacturer's change or eliminate models to increase sales, enter new markets or improve technology. These changes create the need to maintain obsolete parts for service and remanufacturing. Traditionally a short term supply of these parts is manufactured and must be supplemented with short productions runs of parts for up to 15 years. This is a costly proposition which is disliked by both the auto maker and its vendors.



A 15 year build-ahead program was spearheaded by the Cortec® Midwest office and coordinated with representatives in St. Paul, and Europe (France and Belgium). A major U.S. Auto manufacturer has decided to use Cortec's advanced corrosion protection technology to protect transmission components for up to 15 years. They chose Cortec® technology because of our extensive automotive successes and our reputation for innovation.

The transmission in question was phased out of production in November 2004. The goal of the transmission Buildout Program was to obtain lifetime requirements for both service parts and remanufacturing. The lifetime requirements extend over 15 years and encompass nearly 1,500,000 parts.

The acquisition of these requirements began in December '04 and will continue into 2005. Due to the uniqueness of this transmission and components, preservation has been a major focus of the packaging strategy. The Manufacturer has specified CorrLam packaging and CorPak 1-MUL pouch produced by Cortec® Corporation. The CorrLam packaging consists of a cross-laminated PET film, a foil middle layer and an interior layer of VpCI™ -126 polyethylene film. The CorrLam packaging will be used along with our patented CorPak 1-MUL pouch. The 1-MUL pouch is 2.5 in<sup>2</sup> and emits a vapor corrosion inhibitor. The 1-MUL pouch(es) is inserted in the CorrLam bag and the bag is heat-sealed for maximum corrosion protection.

The use of Cortec® products allows mass production of parts that are scheduled to become obsolete due to model/design changes due to our long term corrosion prevention technology. In addition, our packaging allows customers to use lower cost warehousing with little or no climate control systems. Unlike other long term storage techniques that require a coating to be applied and removed at a later point,

Cortec® VpCI™ packaging eliminates coatings all together and its possible negative impact on the operation of the transmission.



Cortec's long term corrosion prevention system will allow the Manufacturer to eliminate significant costs associated with obsolete service parts. These costs include storage and maintaining of tooling at vendors world wide. Substantial "set up" fees are associated with small production runs. Elimination of costs to set up a production line and change tooling can save the Manufacturer tens of thousands of dollars, regardless of the number of parts to be produced. And best of all, an automotive part that costs \$1 to produce today could easily cost up to \$50 to make 5-15 years from now. The raw materials for the service parts are purchased at today's costs vs. inflated prices 5-15 years in the future.



These factor's, coupled with the low cost per part to package with Cortec® technology, made for an easy decision to produce nearly 1,500,000 transmission parts for future needs and protect them with Cortec® VpCI™ technology.

# FOODS



## EcoLine® Metalworking Fluids: Seed for Thought

Cortec® originally developed our line of bio-based lubricants and functional fluids to increase our use of environmentally preferable raw materials. However, recent political, environmental and market changes have shed light on several other critically important factors when customers think about their metalworking fluids.

Metalworking fluids in general function by controlling temperature (cooling typically) and providing lubrication between the tool and the part being manufactured. This is why customers most often ask about machinability (both aspects), tool life (lubrication) and "process" conditions such as rpm's (heat related). Although many metalworking fluids can offer solutions for cooling and lubricity, recent changes have allowed customers to demand much more from their fluids than these basic properties.

Customers, as well as communities (local regulations), federal mandates and general ecologically-sensitive manufacturing practices (think ISO 14001) now must ask several additional questions:

- Is the price of this product stable, allowing us to compete on long-term contracts?
- How does this product **affect our ecosystem** upon disposal?
- Does the use of this fluid require use of a **secondary fluid** (i.e. rust preventative, defoamer, biocide)?
- Are there incremental disposal costs when using a "non" friendly product?
- How does this product **affect our workers** and the general work environment?
- Are there **complementary properties** that can increase cost effectiveness?

Cortec's full line of high-performance, biobased metalworking fluids expand on the basic needs of cooling and lubricity, but add several key properties and attributes that answer the above questions.

First, EcoLine® is based on annually-renewable soybean methyl esters—the price of which is NOT determined solely on the cost of petroleum. As petroleum prices skyrocket, many historically "cheap" products are becoming more and more expensive.

Second, EcoLine® products are readily biodegradable in many ecosystems and are safer to work with than petroleum-based fluids. This creates a cleaner, safer and healthier environment for workers, neighbors and the ecosystem surrounding a factory.

Thirdly, the base fluids used in EcoLine® actually have SUPERIOR lubricity, thin film strength and higher flash points than many other fluids on the market.

Lastly, the EcoLine® functional fluids come prepackaged with microbial reducers (prevents bacterial growth),

### EcoLine® Heavy Duty Soy-based Biodegradable Grease Protects Railroad Crossing (ch251)

Salt Water mixtures used to control ice have caused failure of rail, rail plates, spikes and clips in as few as 6 to 8 years. Scheduling repairs for crossings are expensive and involve federal, state and city personnel.

The rail crossing was repaired and treated with Soy-based EcoLine® Heavy Duty Grease. The application of grease is inexpensive with minimal charge in labor. Since road and pedestrian crossings require diverting train traffic during repair, the expense impacts federal, state and city budgets. EcoLine® Heavy Duty Grease will protect the crossings for additional years, saving time and money.

VpCI™ corrosion inhibitor and oftentimes cause less foam than competitive products. This allows an overall reduction in products used as biocide and defoamer use is reduced or eliminated, no secondary rust-preventative is required and parts are cleaner, drier and more readily machined.

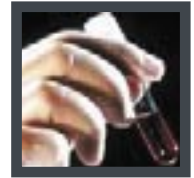
Over the past 18 months, Cortec has worked closely with ISU CIRAS (Iowa State University Center for Industrial Research and Service) to have our

biobased products, including EcoLine®, tested for biobased content. This program is part of the federal “Buy Bio” program that was implemented under the Farm Bill 2002. Already several Cortec® products have been listed by the USDA (US Department of Agriculture) and should receive preferential purchasing shortly. The chart below details several Cortec® products’ results from this testing:

<b>Product</b>	<b>Biobased Content (%)</b>
<b>EcoClean® Dispersant 600</b>	<b>81 %</b>
<b>EcoLine® Bearing, Chain &amp; Roller Lube</b>	<b>86 %</b>
<b>EcoLine® Heavy Duty Grease</b>	<b>96 %</b>
<b>EcoLine® Cutting Fluid</b>	<b>67 %</b>
<b>EcoLine® Food Machinery Grease</b>	<b>62 %</b>
<b>EcoLine® All Purpose Lubricant</b>	<b>91 %</b>
<b>EcoLine® Surface Cleaner &amp; Degreaser</b>	<b>61 %</b>
<b>EcoLine® Long Term Rust Preventative</b>	<b>85 %</b>

Overall, EcoLine® functional fluids offer a very unique combination of performance and environmental preference. The seeds of revolution begin with an idea and flourish under the right conditions—the time is NOW.

## CORTEC® PRODUCTS DERIVED FROM SUSTAINABLE RESOURCES



*Cortec® proudly and ambitiously develops products from sustainable resources to provide a better world for future generations.*

*We take the responsibility in conserving our natural resources seriously—we develop Cortec® products from annually renewable materials such as herbaceous plants from soybeans to the coconut fruit of the palm tree species*

### SOYBEAN



- ◆ EcoLine® All Purpose Lubricant
- ◆ EcoLine® Cutting Fluid
- ◆ EcoLine® Rust Preventative
- ◆ EcoLine® Bearing Chain and Roller Lubricant
- ◆ EcoLine® Cleaner/Degreaser
- ◆ EcoLine® Food Machinery Lubricating Grease
- ◆ VpCI-629 Bio
- ◆ VpCI-705 Bio
- ◆ S-14 Bio
- ◆ BioCorr RP
- ◆ MCI® EcoCure

### CORN



- ◆ EcoWorks™
- ◆ EcoClean® Dispersant 600

### ORANGE PEEL



- ◆ VpCI - 411™

### SUGAR BEET



- ◆ MCI® 2005
- ◆ MCI® 2005 NS
- ◆ MCI® 2006
- ◆ MCI® 2006 NS
- ◆ VpCI - 422™

### COCONUT OIL



- ◆ BioClean - 610™



Environmental Safe VpCI™/MCI® Technologies

4119 White Bear Parkway, St. Paul, MN 55110 USA  
 651-429-1100 • fax 651-429-1122 • 800-4-Cortec  
 E-mail: info@cortecvci.com  
 www.cortecvci.com

Cortec Corporation service marks and trademarks in this publication are registered trademarks of the Cortec Corporation. All other company trademark and product names are trademarks of the company or manufacturer respectively. For more information about Cortec and it's products please call 1-800-4-Cortec or e-mail to info@cortecvci.com.

Send your address corrections to: Cortec Corporation, 4119 White Bear Parkway, St. Paul, MN 55110 USA. Any ideas or need reprints? Fax your requests to: 651-429-1122.

© Copyright 2005 Cortec Corporation.  
 All rights reserved.

