

Zerust® Case Study > > >

TECHNOLOGY THAT PROTECTS METAL FROM CORROSION

Zerust® vs Desiccant-Barrier Packaging

An international crating company has been using Zerust® corrosion inhibiting products from Northern Technologies International Corporation (NTIC) for over a decade with great success. Prior to this, the company was using desiccants with sealed barrier packaging to try to reduce corrosion. Finding an effective corrosion protection solution was crucial to the company as their shipments may travel across the world to reach their destination. Worldwide shipments often pass through high temperature and high humidity locations and experience day to night temperature swings - elements that can accelerate the formation of corrosion. The company was unhappy with the desiccant-barrier packaging method for multiple reasons. One, desiccants become saturated quickly and have to be changed out at least every six months, increasing material and labor costs. Also, desiccant-barrier packaging essentially becomes ineffective when punctured during shipping and handling (which can easily occur) as this causes moisture to rapidly flood the pack and saturate the desiccant. And lastly, as desiccants become saturated, they actually became a source of corrosion by emitting moisture back into the package. The company had to find a better corrosion protection solution.

Zerust® systems have a long service life - typically up to five years. This is essential if there are long-term storage needs before or after ocean shipment, as was the situation in this case. The crating company's shipment consisted of five ISO 40' containers, fully loaded with conveyors, controllers and other factory equipment, that were to be shipped from a nearby port on the East Coast to the Middle East. The equipment had been packed in Zerust® and crated outside for over one year awaiting the order to load onto a ship. Each of the large cabinets and several other machines were enclosed in Zerust® ICT™510-C Ferrous Film, then heat-sealed and heat-shrunk to provide a tight enclosure for the equipment. Additional multimetal corrosion protection was provided to the inside of each piece of equipment by Zerust® VC6-1 Vapor Capsules. The Zerust® system was very effective; all machines arrived at their final destination free of corrosion. Comparing Zerust® to the desiccant-barrier packaging method, the company found that desiccant-barrier packs were more costly and less effective than using Zerust® materials for the protection of shipments. In fact, the company informed NTIC that the total cost of the Zerust® packaging was 57% less than the desiccant-barrier packaging method.

To order Zerust® ICT™510-C Ferrous Film or Zerust® Vapor Capsules, call 1-763-225-6600, fax +1 (763) 225-6645 or email sales@zerust.com.

Case Photos



Five ISO 40' containers loaded with conveyors, controllers and other factory equipment were protected by Zerust® ICT™510-C Ferrous Film and Vapor Capsules.



The view inside one container. A large electrical box and related motor and process controls protected externally by Zerust® ICT™510-C Ferrous Film and internally by Zerust® VC6-1 Vapor Capsules.

Zerust® reduced packaging costs by over 50%.

APPLICATION TYPE



EXPORT SHIPMENT



LONG-TERM STORAGE



INVENTORY STORAGE



WORK IN-PROGRESS

CORROSION PROTECTION FOR:



NORMAL ENVIRONMENT

AGGRESSIVE ENVIRONMENT

EXTREME ENVIRONMENT



OTHER PRODUCTS AVAILABLE

ICT™ 400 Series: Packaging Paper

Acid-free, pH neutral corrosion inhibiting paper and poly paper offer short-term corrosion protection for metal parts.

ICT™ 500 Series: Packaging Films

Our most widely used series of products. A variety of films offer short or long-term corrosion protection for parts and equipment during storage or shipment.



Most Zerust® paper and film products are recyclable.
Please consult your Zerust® Representative and Federal,
State and Local Regulations.

ICT™ 600 Series: Rust Removers

Highly effective rust removers for light to severe rust removal. All ICT™600 series rust removers are non-toxic, non-hazardous & non-corrosive.

ICT™ 700 Series: Liquid Additives and Coatings

Temporary corrosion protection for parts in-between production processes, during storage, or for added protection to the ICT™ 500 series products during ocean shipments.

ICT™ 800 Series: Diffusers

Self-contained, portable products that diffuse Zerust® ICT™ chemicals to protect metals within enclosures, such as tool boxes, electrical boxes, etc.

For more information about the various products listed above, please visit www.zerust.com or contact us at +1 (763) 225-6600.

Zerust® EXCOR®

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