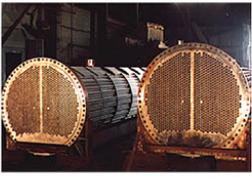




VpCI® ADDITIVES FOR WATER TREATMENT

CASE HISTORY SPOTLIGHT

Case History 352: VpCI® Replaces Nitrogen to Preserve Heat Exchanger Tube Bundles



CASE HISTORY
Preservation of Heat Exchanger Tube Bundles and Rotors

PROBLEM
GASCO had a large number of spare heat exchanger (HE) tube bundles and rotors in their warehouses. The HE bundles and rotors were being protected in canisters pressurized with nitrogen. They had a challenge maintaining nitrogen pressure, which requires diligent routine inspection. Also, long-term corrosion protection using nitrogen was proving not as effective as needed.

APPLICATION
Cortec® VpCI® technology was introduced to GASCO and a pilot was conducted on one of the spare HE tube bundles and a rotor in 2010.

The equipment was removed from their canisters for preservation with VpCI®. The HE tube bundle were cleaned by hydro-jetting with VpCI®-370 to remove superficial rust from surfaces. After drying, VpCI®-337 was sprayed on the internal and external surfaces. VpCI®-132 foam pads were applied to the exterior and the HE tube bundles were then sealed with MilCorr® VpCI® Shrink Film.

The rotor was preserved using VpCI®-309 Pouches. UV stable tags were installed on each piece of equipment to clearly identify the date of preservation and next inspection date. The equipment was placed back into the canister with VpCI®-111 Emitters and the nitrogen for preservation of above equipment was completely eliminated.

The successful result of this pilot was the subject of a GASCO presentation detailing their rationale to adopt VpCI® as opposed to nitrogen. The presentation concluded that VpCI® is a long lasting technique and cost effective technology for preservation. Based on these results, GASCO adopted VpCI® technology for their preservation needs instead of nitrogen.

In 2013, corrosion coupons from the original 2010 preservation program were inspected and found to be free of any corrosion.

CONCLUSION
The trial proved very effective and GASCO decided to use Cortec® products for their equipment preservation because their system provided a more effective, economical, and environmentally friendly corrosion protection method.

DATE
December 2010 & 2012

CORTEC® REPRESENTATIVE
The Kanoo Group / Cortec Middle East

CUSTOMER
Abu Dhabi Gas Industries LTD - GASCO

LOCATION
Abu Dhabi, UAE

PRODUCTS
VpCI®-111 Emitters
VpCI®-132 Foam Pads
VpCI®-309 Pouch
VpCI®-337
VpCI®-370
MilCorr® VpCI® Shrink Film

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A trial of VpCI® Technology showed one Middle East gas company how to effectively preserve spare heat exchanger (HE) tube bundles and rotors with VpCI® Technology instead of nitrogen. Previously, the company had stored the spare equipment in canisters pressurized with nitrogen. This was a challenge to maintain and was not as effective as desired.

The company conducted a pilot preservation project to evaluate the protection of VpCI® Technology on a spare HE bundle and rotor. Superficial rust was removed from the HE bundle, and VpCI®-337 was sprayed on the internal and external surfaces. VpCI®-132 foam pads were placed on the exterior, and the bundle was enclosed in MilCorr® VpCI® Shrink Film. The rotor was preserved with VpCI®-309 pouches and placed into a canister with VpCI®-111 emitters instead of nitrogen. The results were successful, convincing the company to eliminate nitrogen in favor of VpCI® Technology for long-lasting, cost effective preservation.

To learn more about the client's experience with VpCI® Technology, please visit the following link:

https://www.corteccasehistories.com/?s2member_file_download=access-s2member-level1/ch352.pdf

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