

# OIL COOLERS PROTECTED WITH BELZONA

ID: 6039

Industry: Oil & Gas  
Application: HEX-Heat Exchangers  
Substrate: Carbon Steel  
Products: \* Belzona 1121 (Super XL-Metal) ,  
\* Belzona 1321 (Ceramic S-Metal) ,

Customer Location: Deer Park, TX, USA  
Application Date: March 2016

## Problem

The customer was getting cross contamination between process cooling water and process lubricating oil, due to the corrosion at the copper tube and carbon steel tube sheet interface.



## Photograph Descriptions

- \* Chillers derived with pitting on tube sheet face. ,
- \* Picture of end covers with pitting. ,
- \* Finished end covers with final coat of Belzona 1321. ,
- \* Repaired tube sheets with Belzona 1121 and Belzona 1321. ,

## Application Situation

The tube sheets and end covers of heat exchangers used for oil cooling were suffering from corrosion.

## Application Method

The application was carried out in accordance with Belzona Know-How System Leaflet HEX-1. First, all of the tubes were corked. Then the surface of tube sheets and end covers were blasted. The tube sheet was then rebuilt flush and the pitting on end covers were filled in with Belzona 1121. All surfaces were coated with 2 coats of Belzona 1121 as per IFU.

## Belzona Facts

Lead time for new coolers to meet exact specifications was 6-8 months out for the customer. The Belzona application method allowed the customer to return the equipment back to service within 2 weeks at 10% of the cost of new coolers. This is now the customer's preferred method versus buying new equipment.

For more examples of Belzona Know - How In Action, please visit <https://khia.belzona.com>

ISO 9001:2015  
FS 695214  
ISO 14001:2015  
EMS 695213

Belzona products are  
manufactured under an ISO  
9000 Registered Quality  
Management System.

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