

# BELZONA REPAIRS OIL COOLERS

ID: 4749

**Industry:** Steel & Metal Processing  
**Application:** HEX-Heat Exchangers  
**Substrate:** Brass, copper and gray iron.  
**Products:** \* Belzona 1311 (Ceramic R Metal) ,  
\* Belzona 1391 (Ceramic HT) ,

**Customer Location:** Ferronickel plant, Macedonia  
**Application Date:** August 2012

## Problem

Heat exchangers were suffering from electrochemical corrosion. Gaps occurred between tube sheet and tubes and cooling water and oil started to mix.



## Photograph Descriptions

- \* Heat exchanger ready for grit blasting ,
- \* The condition of end cover after blasting ,
- \* End cover repaired with Belzona 1311 and protected with Belzona 1391 ,
- \* Tube sheet repaired and protected ,

## Application Situation

Four Heat exchangers for cooling mill oil.

## Application Method

Application was carried out in accordance with Belzona Know-How System leaflets HEX-1 and HEX-3.

## Belzona Facts

The customer first tried to weld the tubesheets, but was not successful. After completing repairs with Belzona the customer was very satisfied and this year a further cooler has been repaired.

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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