# BELZONA REPAIRS LEAKING HEAT EXCHANGER TUBE SHEETS

ID: 1622

Industry: Marine Customer Location: Maritime repair agent, Bulgaria

Application: HEX-Heat Exchangers Application Date: December, 2010

Substrate: Steel & Copper

\* Belzona® 1311 (Ceramic R-Metal), \* Belzona® 1321 (Ceramic S-Metal),

#### **Problem**

Products:

Severe erosion and galvanic corrosion between copper tubes and steel tube sheet.









## **Photograph Descriptions**

- \* The severe damage clearly evident,
- \* After grit blasting, the eroded tube sheet was rebuilt with Belzona® 1311,
- \* The coolers after application of Belzona® 1321,
- \* Further air coolers were also repaired,

## **Application Situation**

Various oil & air coolers of marine vessel

## **Application Method**

Applications were carried out in accordance with Belzona Know-How System Leaflets HEX-1 and HEX-3.

### **Belzona Facts**

Customer chose the Belzona method because alternatives were either expensive replacement of the equipment or time consuming machining repair to replace the tube sheets. The repair with Belzona was completed in three days and almost ten times lower in cost than replacement.

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

ISO 9001:2015

Belzona products are
FS 695214

ISO 14001:2015

Belzona products are
manufactured under an ISO
9000 Registered Quality
EMS 695213

Management System.

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