

# Refurbishment of exchangers

ID: 9438

Industry: Power

Application: HEX-Heat Exchangers

Substrate: Carbon steel

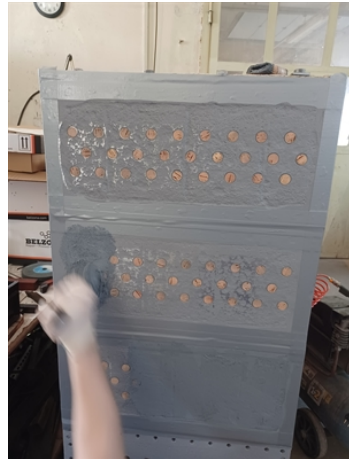
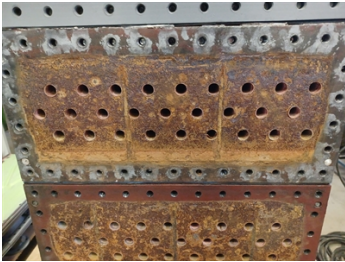
Products: Belzona 1111 (Super Metal), Belzona 4311 (Magma CR1)

Customer Location: Mochovce Slovakia

Application Date: May 2022

## Problem

Damage to the exchanger tube - corrosion, leakage, poor cooling effect of heat exchangers.



Damage to the exchanger tube. Repair using cork plugs.

Repair of the cover partition

Application of the second layer of Belzona 4311 product.

## Application Situation

Creating a solid uniform surface where BELZONA 1111 does not shrink or expand as it solidifies, thus creating tight joints around the tubes. BELZONA 4311 has excellent protection against the effects of abrasion, shock, vibration and chemical influences.

## Application Method

Blasting of the front surfaces of the tube and lid (including covers from the inside) to the required parameters (Sa 2.5, min. roughness 75µm). Desalination and re-blasting. Alignment of protruding pipes. Pipe plugging. Sealing of damaged parts of pipe fronts and baffle lids (including flanges on the inside, welding of auxiliary guide rails, disassembly after sealing) with Belzona 1111, 3 to 5 mm thick. Sanding and double-sided dismantling of plugs from pipes. Machine machining and alignment of the tube face and sealing surface of the lids, easy blasting of the tube heads. Application of Belzona 4311 sequentially in two layers of 2 x 250 µm thickness to the surface of the tubing and lids (including flanges from the inside).

## Belzona Facts

Repair with Belzona 1111 and Belzona 4311 products is fast. The product Belzona 4311 has excellent chemical resistance to acids.

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.

[www.belzona.com](http://www.belzona.com)

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