

# CONDENSER TUBESHEET RESTORED WITH BELZONA

ID: 4872

Industry: Power  
Application: HEX-Heat Exchangers  
Substrate: Steel  
Products: \* Belzona 1311 (Ceramic R-Metal) ,  
\* Belzona 1331 ,  
\* Belzona 2211 (MP Hi-Build Elastomer) ,

Customer Location: Nuclear power station, Eastern Canada.  
Application Date: August 2013

## Problem

The tubesheet had suffered from bimetallic corrosion around the tubes and at the edges of the tubesheet as well as metal loss due to erosion.



## Photograph Descriptions

- \* Tubesheet and waterbox edges following thorough grit blasting ,
- \* Close up picture of the severe pitting along the water box edge ,
- \* Following application, the Belzona 1331 was dressed down around each tube ,
- \* Finished application. Also visible at the top of the image is the Belzona 2211 joint ,

## Application Situation

Main Condenser tubesheet at a nuclear power station

## Application Method

Application was carried out in accordance with Belzona System Leaflets HEX-1 & HEX-5. After grit blasting, the eroded areas were rebuilt using Belzona 1311. Once the substrate profile was restored, Belzona 1331 was applied as a two coat system to provide overall corrosion protection across the affected areas on the tubesheet and water box. Finally, a flexible joint was created between the waterbox and the tubesheet using the Belzona 2211 to allow for movement between these parts.

## Belzona Facts

Following the failure of the previous lining, the customer required a system which could be quickly applied and returned to service.

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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**BELZONA**  
Repair • Protect • Improve

Belzona 1331 was chosen for its ease of application and applicability even in confined spaces. Belzona products were able to provide the erosion and corrosion resistance required together with flexible solution for the tube sheet/waterbox junction.

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