

# BELZONA PROTECTS POWER PLANT CONDENSERS

ID: 5241

**Industry:** Power  
**Application:** HEX-Heat Exchangers  
**Substrate:** Carbon Steel  
**Products:** \* Belzona® 1321 (Ceramic S-Metal) ,  
\* Belzona® 1341 (Supermetalgilde) ,

**Customer Location:** Power Plant, Bulgaria  
**Application Date:** March-June,2014

## Problem

*Corrosion/erosion on the turbine condensers (heat exchangers) after years of operation. Originally un-lined, extensive bimetallic corrosion had occurred between brass tubes and carbon steel tube sheets.*



## Photograph Descriptions

\* 1. Surface preparation of tube sheet by blast cleaning 2. Coating of tube sheet with Belzona® 1321 3. Application of first coat of Belzona® 1341 to water box 4. Completed application to tube sheet and water box ,

## Application Situation

Water boxes and tube sheets of two power plant condensers.

## Application Method

Application was carried out in accordance with Belzona Know-How Leaflet HEX-3. Belzona® 1321 was used to protect tube sheets from bimetallic corrosion and erosion from entrapped particles in the cooling water. Belzona® 1341 was used to protect the water boxes.

## Belzona Facts

Belzona application has been done separately for each condenser thus providing uninterrupted operation of the power plant. Coating of tube sheet surface with Belzona 1321 was completed in one day. Then the water boxes and covers were coated with Belzona® 1341 over two days. Complete application done within a week thus the equipment has been put in service with minimum delay. Belzona application provides power plant with long term erosion/corrosion protection of both condensers.

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

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9000 Registered Quality  
Management System.

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