

# BELZONA PROTECTS MAIN CIRCULATION PUMP IN NUCLEAR POWER STATION

ID: 125

Industry: Power  
Application: CEP-Centrifugal Pumps  
Substrate: Cast Iron  
Products: \* Belzona® 1311(Ceramic R-Metal) ,  
\* Belzona® 1321(Ceramic S-Metal) ,  
\* Belzona® 6111(Liquid Anode) ,  
\* Belzona® 5811(Immersion Grade) ,

Customer Location: Nuclear Power Plant in Mexico  
Application Date: September 1991

## Problem

All the pump components suffered from erosion/corrosion due to the use of sea water as the cooling medium. The effects were exacerbated by entrainment, cavitation and bimetallic corrosion.



## Photograph Descriptions

- \* Surface of pump prior to application of Belzona® 1311 showing damage ,
- \* Applying Belzona® 1311 ,
- \* Components of pump ready for reassembly, external surfaces protected with Belzona® 5811 ,

## Application Situation

Main cooling water circulation pump

## Application Method

In accordance with Belzona Know-How Leaflets CEP-5, CEP-3 and CEP-4.

## Belzona Facts

Using the Belzona repair method cost the customer 30% more than using the conventional repair materials. Whereas the usual repairs lasted no more than a year before maintenance, this repair, completed nearly five years, ago is still intact. The saving to the customer, after the initial outlay of £60,000, is £45,000 and five days of downtime every year.

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)

  
**BELZONA®**  
Repair • Protect • Improve

---

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)

*Copyright © Belzona International Limited 2024*

