

# BELZONA REPAIR TO DIAPHRAGMS IN STEAM TURBINE

ID: 126

Industry: Power  
Application: CEP-Centrifugal Pumps  
Substrate: Cast Iron  
Products: \* Belzona® 1311(Ceramic R-Metal) ,  
\* Belzona® 1391 ,

Customer Location: Power Plant in Indianapolis  
Application Date: February 1995

## Problem

Severe erosion/ corrosion of the turbine diaphragms in the the latter stages of the low pressure side of the steam turbine. This had been caused by many years exposure to saturated steam and had resulted in a decrease in efficiency in the turbine.



## Photograph Descriptions

- \* Erosion damage on the diaphragm ,
- \* Application of Belzona® 1311 to restore profiles ,
- \* Application of Belzona® 1391 underway ,

## Application Situation

Diaphragms in steam turbine

## Application Method

Modified versions of Belzona Know-How Leaflets CEP-5 and CEP-3. Belzona® 1311 was used to rebuild the damaged areas. Sites rebuilt were then treated with two coats of Belzona® 1391.

## Belzona Facts

Welding was considered as an alternative method of repair. Downtime would have increased from three days, utilising Belzona, to three weeks if welding had been chosen.

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  
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