

# BELZONA REPAIRS AND COATS HYDROELECTRIC TURBINE PIPELINES AND VANES

ID: 5618

Industry: *Power*  
Application: *CEP-Centrifugal Pumps*  
Substrate: *Mild steel*  
Products: *\* Belzona 1311 (Ceramic R-Metal) ,*  
*\* Belzona 1321 (Ceramic S-Metal) ,*

Customer Location: *Hydroelectric Power Plant, Brazil*  
Application Date: *November 2008*

## Problem

*Wear caused by erosion and corrosion in the areas with high water turbulence.*



## Photograph Descriptions

- \* Internal surface of the damaged pipeline ,
- \* Damaged vanes ,
- \* Lower area of the pipeline coated with Belzona 1321 ,
- \* Vanes protected with Belzona 1321 ,

## Application Situation

Hydroelectric turbine pipelines and vanes.

## Application Method

The application was carried out in accordance with Belzona Know-How System Leaflet CEP-1. The surface was prepared with a dry abrasive blast and cleaned with a degreaser. The worn areas were repaired with Belzona 1311 and then coated with Belzona 1321 to protect against erosion and corrosion.

## Belzona Facts

As there was already a history with the successful use of Belzona products in a similar situation, the choice to apply Belzona 1311 and 1321 was once again made.

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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manufactured under an ISO  
9000 Registered Quality  
Management System.

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