

# Belzona Brings New Life to an Alstom Sea Pump Turbine

ID: 8788

Industry: Power  
Application: PDP-Positive Displacement Pumps

Customer Location: Jorf Lasfar, Morocco  
Application Date: November 2020

Substrate: Cast Iron  
Products: \* Belzona 1311 (Ceramic R-Metal) ,  
\* Belzona 1321 (Ceramic S-Metal) ,

## Problem

The leading edges of the vanes were severely damaged due to erosion and corrosion, along with the bearing housing of the turbine.



## Photograph Descriptions

- \* 1). Original damaged state of the turbine. ,
- \* 2). Rebuilding of the leading edge on the vanes. ,
- \* 3). Rebalancing of the Turbine. ,
- \* 4). Completed application of the Turbine. ,

## Application Situation

Alstom sea pump turbine at a Thermal Power Plant.

## Application Method

The leading edges of the vanes were rebuilt using Belzona 1311 and the turbine was then rebalanced to ensure optimum operating efficiency without causing residual wear to any auxiliary equipment. These were then coated using Belzona 1321 to provide erosion-corrosion protection. The bearing was also repaired to its original profile to ensure a perfect fit with the turbine shaft. The

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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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application was carried out in accordance with Belzona System Leaflet PDP-03 & PDP-05.

**Belzona Facts**

The turbine is still in service today and is holding up well to it's operational environment - the customer therefore approves of the quality of the repairs and durability of the Belzona products used.

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