

# Axial Flow Pump Coating with Belzona

ID: 8435

Industry: Water / Wastewater

Customer Location: Water Authority, Scotland, UK

Application: CEP-Centrifugal Pumps

Application Date: July 2019

Substrate: Mild Steel

Products: \* Belzona 1311 (Ceramic R Metal) Belzona 1341 (Supermetalgilde) ,

## Problem

The diffuser vanes of the pump has suffered extensive damage from erosion. Due to the age of the pump spare parts were not available & a replacement diffuser would need to be fabricated from new (the cost would be approx. £40,000).



## Photograph Descriptions

\* Suction Bell Suction bell coated with Belzona 1341 Part coated with Belzona 1341 Part coated with Belzona 1341 ,

## Application Situation

An axial flow pump was suffering from erosion & corrosion in service. The metal loss was affecting the flow characteristics & efficiency of the pump. A solution that protected the equipment from further damage & increased the pumping efficiency was required.

## Application Method

The parts were grit blasted to SA2.5 & 75 microns. The diffuser vanes & other damaged parts were rebuilt using Belzona 1311 as per CEP-01. The area was then coated with Belzona 1341 as per CEP-03.

## Belzona Facts

By utilising a Belzona solution the existing parts were not only repaired but also improved from an erosion resistance & efficiency stand point. The full axial flow pump repairs were completed for less than half the cost of purchasing a new diffuser (only one part of the full pump).

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ISO 9001:2015

Belzona products are

FS 695214

manufactured under an ISO

ISO 14001:2015

9000 Registered Quality

EMS 695213

Management System.

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