# **Belzona Impeller Repair**

ID: 8086

Industry: Fluid Flow Customer Location: Wrexham, United Kingdom

Application: CEP-Centrifugal Pumps Application Date: February 2019

Substrate: Steel

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

\* Belzona 4311 (Magma CR1) ,

\* Belzona 9111 (Cleaner Degreaser),

#### **Problem**

The pump and impeller were corroded due to contact with sulfuric acid at approximately 20% concentration, caused by back feed into the system, with the primary contact of waste or rinse water.









## **Photograph Descriptions**

- \* Damaged impeller with corrosion after being exposed to sulfuric acid and water. ,
- \* Impeller profile restored using Belzona 1311 (Ceramic R-Metal).,
- \* Belzona 4311 (Magma CR1) coated impeller.,
- \* Side-view of the finished coated and rebuild impeller. ,

### **Application Situation**

Corroded pump impeller.

## **Application Method**

Application carried out as per Belzona Know-How System Leaflets CEP-1 & CEP-3. Surface contamination was removed and degreased with Belzona 9111, then blasted the surface to achieve SA 2 ½. The impeller was then rebuilt to profile using Belzona 1311 and reinforcing materials. Two coats of Belzona 4311 was then applied to protect against further chemical attack.

## **Belzona Facts**

Belzona was chosen to rebuild the impeller as a cost-effective and efficient option rather than replacement. Belzona also offers protection against any further corrosion with the coating. This application was carried out by Belzona, specialist applicators of

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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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Belzona in the UK. They were selected d	ue to their extensive exper	rience in these type of wo	orkshop applications.	
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