# **Repair and Protection of Brine Water Vertical Pump**

ID: 9126

Industry:Mining & QuarryingCustomer Location: Eastern AreaApplication:CEP-Centrifugal PumpsApplication Date: May 2023

Substrate: Cast Iron

Products: Belzona 1111 (Super Metal), Belzona 1341 (Supermetalglide), Belzona 5811DW (DW Immersion Grade),

Accessories, Belzona 9111 (Cleaner Degreaser), Salt-Away

#### **Problem**

The pump casing was suffering from erosion and corrosion due to the salt water medium. The pump internal body was pitted and the external body was suffering from general corrosion. The customer requested a solution that would restore the pump's original profile and protect it for years to come.









Before application: internal pitting damage

Before application: external corrosion

After application: internal surface coated for protection

After application: external surface coated for protection

## **Application Situation**

The cost of such a pump is very high and the availability of spare parts is also very expensive and time consuming. The pump is immersed for long periods of time and left unprotected can be expensive to maintain and replace – Belzona is the only solution that can keep such a pump immersed for years without problems and return them to their original profile more efficiently, and past cases have proven this.

## **Application Method**

The pump components were entirely blasted to reach the Belzona recommended 75 micron profile and salt tested to ensure that salt levels were minimal. Following surface preparation, Belzona 1111 was mixed according to the IFU to pit fill the damaged surfaces. After curing, the surface of Belzona 1111 was sweep blasted to receive protective coatings. Two coats of Belzona 1341 were applied internally and two coats of Belzona 5811 were applied externally at the recommended thicknesses indicated in the IFU.

#### **Belzona Facts**

Belzona has a proven track record on these problems - the cost of spare parts is too high and waiting for spare parts is tremendous. Replacing parts does not solve the problem and erosion-corrosion continues. The customer solved all problems with three Belzona

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