

Repair and Protection of Brine Water Vertical Pump

ID: 9126

Industry: Mining
Application: CEP-Centrifugal Pumps
Substrate: Cast Iron
Products: Belzona 1111 (Super Metal), Belzona 1341 (Supermetalgilde), Belzona 5811DW (DW Immersion Grade), Accessories, Belzona 9111 (Cleaner Degreaser), Salt-Away

Customer Location: Eastern Area

Application Date: May 2023

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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ISO 9001:2015
FS 695214
ISO 14001:2015
EMS 695213

Belzona products are
manufactured under an ISO
9000 Registered Quality
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products, at a cost that was very acceptable to them and with a very short lead time of only one week. The pump was ready for use within a week. Fast, reliable and affordable.

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