

Rebuild and Protection of Firewater Pumps using Belzona

ID: 10033

Industry: Marine
Application: CEP-Centrifugal Pumps
Substrate: Carbon steel
Products: Belzona 1311 (Ceramic R-Metal), Belzona 1321 (Ceramic S-Metal)

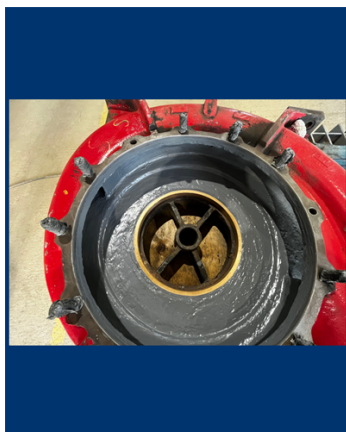
Customer Location: Pascagoula, Mississippi
Application Date: April 2025

Problem

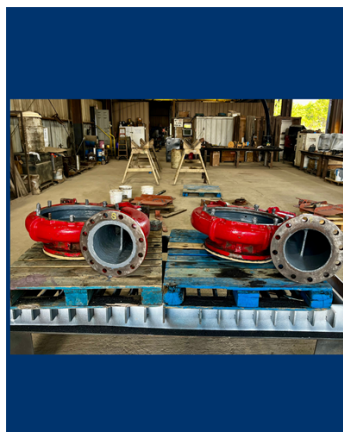
Our customer required restoration of metal loss to recover optimal flow rate and to protect the pump casing from ongoing damage caused by saltwater, sand, and debris.



Before Picture of the Pump Case



After Picture of the Pump Case



After picture of both Fire Water Pumps

Application Situation

Belzona 1311 (Ceramic R-Metal) and Belzona 1321 (Ceramic S-Metal) were utilized to repair two (2) fire water pumps. The total project consisted of Belzona 1311 /1321, consumables and two days of labor. Although the customer did not disclose the cost of purchasing two new fire water pumps, it is reasonable to conclude that the replacement cost and associated lead time would have been significantly higher, likely delaying the completion of the customer's vessel.

Application Method

Job Scope:

Belzona Mississippi, Inc. will mobilize on site after the Surface preparation (3 mil blast profile, Near white finish) has been completed by Signet Maritime Corporation (customer).

Belzona MS, Inc will clean pump casings with Acetone, tape off the area of repair, and start rebuilding the metal loss with Belzona 1311 R Metal.

Once The Belzona 1311 R Metal has cured enough to over coat with Belzona 1321 S Metal (Per IFU), the Technical Consultants will apply the first coat and then the second coat.

Then A machinist was present and checked the tolerance specifications and ensure proper fitment when the impeller/pump casing is reassembled.

For more examples of Belzona Know - How In Action, please visit <https://khia.belzona.com>

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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Repair • Protect • Improve

Belzona Facts

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Alternative:

Replacement with two (2) new pump casings.

Why Belzona?

Belzona Mississippi, Inc. has an established track record of success with this customer, providing long-term, proven solutions that extend the service life of both their equipment and their clients' assets. Although the customer did not disclose the cost of new pump casings, it is reasonable to conclude that replacement expenses and lead times would have been significantly higher—potentially delaying vessel completion and increasing overall project costs.

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