# **Repair Marine Seawater Cooling Pump**

Industry: Marine Application: **CEP-Centrifugal Pumps** Substrate: Cast Iron Products: Belzona 1111 (Super Metal), Belzona 1212 Customer Location: Victoria, BC, Canada Application Date: May 2024

#### Problem

The casing for the seawater cooling pump was terribly corroded from age and over use. Replacement would be too long to allow the ship to resume operations on time.



This pump casing was extremely corroded and eroded corrosion and erosion creating an unacceptable efficiency.



The pump casing shows more



Belzona 1111 and Belzona 1212 The completed pump casing were used to build up corroded was successfully rebuilt with and eroded surfaces.



Belzona 1111 and Belzona 1212 then sanded by hand to create a consistent annular surface suitable for reassembly with the impeller and the mating casing.

### **Application Situation**

The pump casing was repaired entirely with Belzona 1111 and Belzona 1212, then finished by hand filing and sanding. The alternative to this Belzona repair would be ordering a new pump, waiting weeks or months for arrival, then re-configuring electrical and piping to receive the new pump. This was unacceptable both by time and cost. It also would have negatively affected the ship's operational schedule. The Belzona repair required a small fraction of a replacement option and was completed in one week. The ship's schedule was met.

## **Application Method**

The Belzona products were applied efficiently by hand in several coats to rebuild the casing. The resultant rebuild was filed and shaped by hand and sanded to achieve a suitable mating surface.

### **Belzona Facts**

Belzona solution was superior to the replacement alternative. The Belzona cost was far lower and the repair was far shorter than a replacement pump.

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

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