

# Belzona Keeps US Navy Fire Pump Ready to Run

ID: 7675

Industry: Marine  
Application: CEP-Centrifugal Pumps  
Substrate: Brass  
Products: \* Belzona 1111 (Super Metal) ,  
\* Belzona 1341 (Supermetalglide) ,

Customer Location: Washington, USA  
Application Date: February 2017

## Problem

Due to lack of frequent use, this fire pump onboard a US Navy ship sits for extended amounts of time with sea water inside of it causing severe corrosion. This makes the fire pump potentially unreliable in case of an emergency.



## Photograph Descriptions

- \* 1. Original condition of the impeller. ,
- \* 2. Belzona 1111 applied to rebuild the damage. First coat of Belzona 1341 applied ,
- \* 3. Belzona 1111 rebuilding the wear rings. ,
- \* 4. Completed application, ready for re-assembly. ,

## Application Situation

Fire pump impeller on-board a US Navy ship.

## Application Method

Grit blasted to achieve a 3-5 mil profile, and coated with Belzona 1111 to fill in and rebuild the pitting and damage to a smooth clean finish. Allowed to firm up, and then overcoated with the first coat of Belzona 1341. The impeller wear ring was also heavily corroded and was machined down to a rough thread pattern and overbuilt with Belzona 1111 at this time. While waiting for the wear ring application to solidify, the second coat of Belzona 1341 was applied. Finally, the wear ring surface was machined back to the original specifications.

## Belzona Facts

This impeller would have had to be replaced, but with Belzona materials being used, repairing it only cost a couple hundred US

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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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dollars without risking heat distortion by welding on it. The added bonus is an increase in efficiency whenever the pump is operated.

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