

# Belzona Superwrap System helps maintain cooling system of Naval Vessel engines

ID: 9272

Industry: *Marine* Customer Location: *Guam/Hawaii*  
Application: *VPF-Valves, Pipes and Fittings* Application Date: *August 2023*  
Substrate: *Bronze*  
Products: *Belzona 1161 (Super UW-Metal), Belzona 1982 (SuperWrap II)*

## Problem

*Bronze pipe system with cooling water was set going into the Naval Ship engine room. Pipes had sharp changes and angles causing internal erosion. The customer was worried that the erosion could cause thin wall and compromise the pipes. They needed a compliant pipe repair system that would insure them at least 2 years of life before the pipe would be replaced.*



Cabras Marine Site Guam



Bronze Alloy Pipes to be wrapped



Mixing and wetting of the Superwrap 2 inside the ship



Pipe wrapped and finished as per design with Belzona Superwrap 2 system

## Application Situation

The job had been specified from a distributor that worked with the navy in Virginia. The specification had established a 2 wrap system as per the Design. The Superwrap 2 system is ASME PCC-2 compliant and this was what the Navy needed. The distributor had already set a pre established kit for the repair. The repair could be done on the vessel anywhere in it needed to be done at port around the world with this kit in stock.

## Application Method

Some Rebuild had to be done around uneven geometry to leave a smooth area for the SW2 system to go on. Belzona 1161 was used for the rebuild. Surface preparation was done as per SSPC-11 Bare Metal Power tool Cleaning. Surface was cleaned with solvent cleaner and the Superwrap 2 system was applied using the 1982 resin system. A crew of four was used, 2 for mixing and 2 for wrapping. 12 Pipe sections were done in 4 days of work.

## Belzona Facts

Belzona established this repair on many Naval Vessels and they have the kit at hand to do these repairs around the world.

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FS 695214  
ISO 14001:2015  
EMS 695213

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