

# PROPELLER CAVITATION DAMAGE REPAIRED WITH BELZONA

ID: 1424

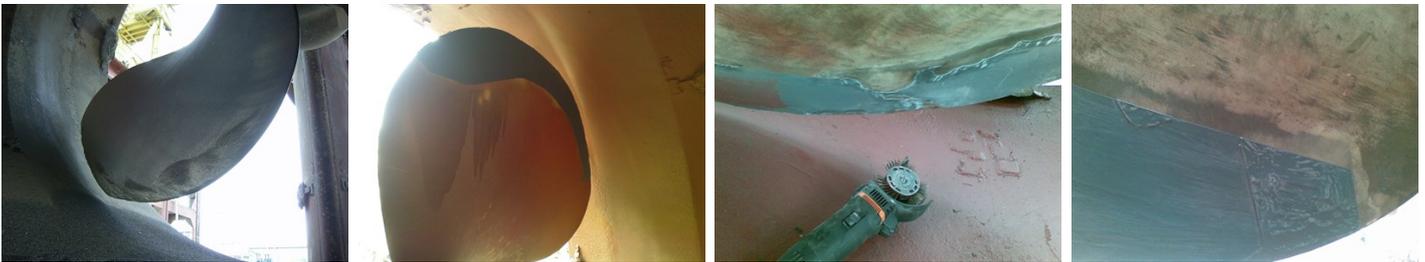
Industry: *Marine*  
 Application: *SOS-Ships and Offshore Structures*

Customer Location: *Ship Dockyard, Bulgaria*  
 Application Date: *June, 2008*

Substrate: *Bronze*  
 Products: *\* Belzona® 1311 (Ceramic R-Metal) ,*  
*\* Belzona® 1321 (Ceramic S-Metal) ,*

## Problem

*The cavitation damage close to the edges of the bronze propeller caused lower hydrodynamic efficiency and propulsion capabilities of the vessel.*



## Photograph Descriptions

- \* The general view of cavitation damages after grit blasting ,
- \* After rebuild with Belzona® 1311 two coats of Belzona® 1321 were applied ,
- \* Inspection one year after the repair found some small mostly mechanical damage that were prepared by Bristle blasting ,
- \* The damaged areas were corrected with Belzona® 1321 ,

## Application Situation

Bronze propeller of bulk carrier.

## Application Method

Application was carried out in accordance with Belzona Know-How System Leaflets SOS-1 and SOS-2.

## Belzona Facts

The rebuild of cavitation damages by conventional welding and remachining were considered as too time consuming and required special skills to restore significant metal losses. The Belzona repair, in spite of being sacrificial, was chosen as more cost effective and time saving. After 1 year minor damage, mainly mechanical was found and locally repaired with further Belzona using an MBX

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  
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**BELZONA**  
 Repair • Protect • Improve

Bristle Blaster for surface preparation.

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