

# CAVITATION DAMAGE TO THIS TANKER PROPELLER REPAIRED WITH BELZONA

ID: 338

Industry: Marine  
Application: SOS-Ships and Offshore Structures

Customer Location: Oil tanker in Argentina, South America  
Application Date: April 1997

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

## Problem

The large difference in pressure on the edges of this bronze propeller caused cavitation bubbles that in turn damaged the metal substrate after imploding onto the surface.



## Photograph Descriptions

- \* Aft view of the tanker ,
- \* Surface preparation of the bronze propeller ,
- \* Close up view of grinding profile ,
- \* Finished application ,

## Application Situation

Cavitation damage to a 12-foot diameter tanker propeller.

## Application Method

The application was carried out in accordance with Belzona Know-How System Leaflet SOS-2.

## Belzona Facts

Any polymeric coating that is subject to cavitation will be sacrificial, however it is a lot more cost effective than welding and remachining. It is very time consuming to braze bronze and requires skill to rebuild significant metal loss.

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

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