

# Repair and Protection of the Intermediate & Tail Shaft of the BELEM Ship.

ID: 9050

Industry: *Marine*  
Application: *SOS-Ships and Offshore Structures*  
Substrate: *Carbon steel*  
Products: *Belzona 1111 (Super Metal), Belzona 5821*

Customer Location: *Saint Nazaire*  
Application Date: *February 2023*

## Problem

*The propeller shaft showed heavy wear due to seawater corrosion.*



The BELEM ship was first built in 1896.

The propeller shaft severely damaged by corrosion.

The propeller shaft was rebuilt using Belzona 1111 and the first coat of Belzona 5821.

Final application with the second coat of Belzona 5821 applied.

## Application Situation

Propeller shaft on a 1900th Century Naval Ship.

## Application Method

After grit-blasting and salt washing, reconstruction of the damaged propeller shaft was carried out using Belzona 1111. Two coats of Belzona 5821 were then applied to protect the shaft from future seawater corrosion. The application was carried out in accordance with Belzona System Leaflet SOS-06.

## Belzona Facts

The application of Belzona products allowed the original shaft to be retained, avoiding the costly replacement.

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

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