

# Belzona repair to corroded propeller shafts

ID: 8204

Industry: Marine  
Application: MPT-Mechanical Power Transmission

Customer Location: Durban South Africa  
Application Date: February 2020

Substrate: Stainless Steel  
Products: \* Belzona 1111 (Seper-Metal) ,  
\* Belzona 1341 (Supermetalgilde) ,

## Problem

Two propeller shafts on a port utility vessel were badly corroded from bimetallic corrosion and eroded due to wear from gland packing. If left untreated, significant structural damage would occur and replacement would be imminent. The cost of replacement is prohibitive, as well as down time required.



## Photograph Descriptions

\* 1. Damaged shafts showing corrosion damage 2. Grit blasted and machined shaft 3. Undercut rebuilt with Belzona 1111, ready for final machining. 4. Completed shafts, ready for fitment. ,

## Application Situation

Two propeller shafts on heavy utility vessel, 6.5m long and 100mm in diameter. Constantly submersed in sea water.

## Application Method

Applcation carried out in accordance with Belzona Know-How System Leaflet MPT-01. Once rebuilt and machined to original spec, a two coat system of 1341 was applied to protect the exposed shaft area from future corrosion.

## Belzona Facts

The customer wanted an alternative to welding and chroming, and to minimise down time as the vessel was in dry dock. Belzona repair and coating was more cost effective, less time consuming and a better long term solution than welding.

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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