# **Belzona Repairs Rudder Housing**

ID: 7461

Industry: Marine Customer Location: Drydock, Greenock, Scotland

Application: SOS-Ships and Offshore Structures Application Date: March 2017

Substrate: Bronze/steel

Products: \* Belzona 1111 (Supermetal),

#### **Problem**

The normal repair method would involve shrink fitting the bush back into place. The erosion/corrosion on the housing & bush was too severe for this method to be used.









### **Photograph Descriptions**

- \* 1- Area to be repaired,
- \* 2- Bush showing large amounts of wear,
- \* 3- Housing before grit blasting,
- \* 4- Bush bonded in & aligned,

## **Application Situation**

Passenger ferry in dry dock. A becker rudder pintle bush had become loose due to galvanic corrosion. The bush had slipped down the rudder pin & had begun to wear on the housing itself.

### **Application Method**

The application was carried out in accordance with Belzona System Leaflet SOS-9. The bush was machined to give a 5mm clearance.

For more examples of Belzona Know - How In Action, please visit https://khia.belzona.com

ISO 9001:2015 Belzona products are
FS 695214 manufactured under an ISO
ISO 14001:2015 9000 Registered Quality
EMS 695213 Management System.

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The housing was grit blasted and Belzona 1111 applied to the two parts, then the bush was pressed into position. Care had to be taken to ensure the correct alignment of the piece.

#### **Belzona Facts**

The Belzona solution avoided the hotwork involved with the original solution, as well as ensuring a speedy return to service. Belzona 1111 ensures the original issue of galvanic corrosion will not reoccur, extending the service life.