Know-How*in Action*

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BELZONA PREVENTS GALVANIC AND CREVICE CORROSION ON RUDDER HORN

CUSTOMER
Oil shipping company

APPLICATION DATE
1988

APPLICATION SITUATION
Corrosion to internal of rudder horn of 280,000 Ton VLCC (Very Large Crude Carrier) required re-fixing of bearing.

PROBLEM
Corrosion to internal of rudder horn had allowed the press fitted bronze bearing to become free. Bearing was approximately 908-mm (36-inch) diameter and 1050-mm (41-inch) long.

PRODUCTS
Belzona® 1321 (Ceramic S-Metal)
Belzona® 1211 (E-Metal)

SUBSTRATE
Carbon Steel and Bronze

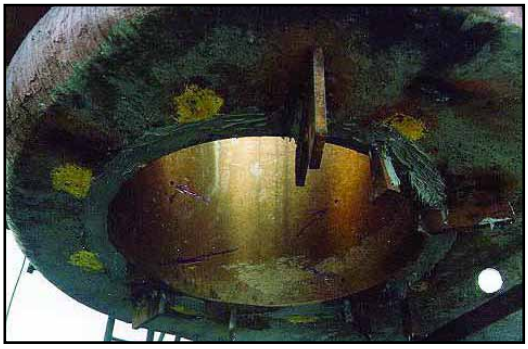
APPLICATION METHOD
The bearing was aligned and its position in the housing fixed using alignment bolts.The top and bottom of the housing were sealed using Belzona® 1211, then Belzona® 1321 was injected from below.

BELZONA FACTS
This method is used both in new-build and repair, and this example illustrates the ability to undertake this work while the vessel is afloat. Use of Belzona materials isolates and permanently fixes the bearing into position preventing galvanic and crevice corrosion.

PICTURES
1. Belzona materials and team prepared for application.
2. Internal shot of bearing. Note arrows for injection ports.
3. Bearing after injection and prior to cleaning up of the Belzona® 1211 seal.

1.


2.


3.


ISO 9001:2008
Q 09335
ISO 14001:2004
EMS 509612

Belzona products are manufactured under an ISO 9000 Registered Quality Management System.

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