## BELZONA REBUILDS STERN TUBE BEARING SUPPORTS IN MINIMUM TIME

ID: 129

Industry: Marine Customer Location: U.S. Coast Guard Ice Breaker, Seattle

Application: SOS-Ships and Offshore Structures Application Date: July 1995

Substrate: High strength steel alloy (HY80)
Products: \* Belzona® 1111 (Super Metal),

\* Belzona® 1321 (Ceramic S- Metal),

#### **Problem**

Erosion caused the bearings to become loose. This caused the shaft alignment to be lost, which imposed damaging loads on the shafts, bearings, reduction gearing and controllable pitch propeller systems.







### **Photograph Descriptions**

- \* It takes a stalwart crew to mix 300kg of Belzona® 1111 in only a few hours ,
- \* Great care was taken to ensure the substrate was correctly prepared prior to the application of Belzona products ,
- \* Application of Belzona® 1111 to rebuild the bearing retaining lands,

### **Application Situation**

300 ton stern casting containing the bearings supporting the 36" diameter shafts

# **Application Method**

Application was carried out in accordance with Belzona Know-How Leaflets SOS-9 and MPT-6. Belzona® 1111 was applied at an average thickness of  $\frac{1}{2}$ " (12.5mm). When cured, the stern tube lands were bored to the desired step dimensions.

### **Belzona Facts**

Application was completed in six working days. There was no practical alternative as other methods would have required between 15-60 days and docking time was strictly limited. The estimated savings to the customer were between \$100,000 and \$450,000.

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.

BELZONA®
Repair • Protect • Improve