

## BELZONA® REBUILDS OVERSIZE PINTLE HOUSINGS

### CUSTOMER

International Shipping Company  
Victoria, BC

### APPLICATION DATE

November 2009

### PROBLEM

Both upper and lower pintle housings were oversized and miss- aligned by more than 13mm

### PRODUCTS

Belzona® 1221 Super E Metal  
Belzona® 1321 Ceramic S Metal

### SUBSTRATE

Mild Steel casting

### APPLICATION METHOD

Application carried out in accordance with Belzona® Know-How Leaflet SOS-3

### BELZONA FACTS

The use of Belzona1321 Ceramic S Metal allowed the shipyard to reset the new bearings in place and eliminating the need for lengthy welding and line boring procedures which would have kept the vessel in dry dock for many more days. Once the decision had been made to use the Belzona® method the new bores were positioned and centralized. They were then set in place by encasing them in the Belzona® material. This entire application was completed in a single shift. A total of 170kg of material was used, filling a gap of more than 72,000cc

### PHOTOGRAPHS

1. View of application site.
2. View of the vessel showing the size of the pintle housings and rudder horn. Main pintle had height of 530mm and diameter of 450mm. The upper pintle was 30% smaller
3. View of the upper pintle housing before it had been blasted and the new housing set in place.
4. After sealing off the bottom of the housing with Belzona® 1221 Super E Metal so that the material could not leak out, Belzona® 1321 Ceramic S Metal was injected into the void.
5. Application completed in approximately 4 hours.

