

BELZONA CRUISE SHIP CENTIFUGAL PUMP

CUSTOMER

Italian Cruise Ship in a Southern California Shipyard, U.S.A.

APPLICATION DATE

December, 1996

APPLICATION SITUATION

Main circulating water centrifugal pump

PROBLEM

Severe erosion/corrosion damage, evidenced by more than a dozen small holes, and one large hole completely through the casing as well as a loss of up to two inches of the cutwater. The wear ring seats were also eroded in the same area.

PRODUCTS

Belzona® 1311 (Ceramic R-Metal)

Belzona® 9411 (Release Agent)

SUBSTRATE

Bronze

APPLICATION METHOD

Application was carried out in accordance with modified versions of Belzona Know-How System Leaflets CEP-1, CEP-2, and CEP-6.

BELZONA FACTS

The ship was in process of being sold and without this quick repair (completed over a weekend), the multi-million dollar sale would have been cancelled. Replacement costs were approximately \$10,000, with extensive downtime.

PICTURES

1. The pump casing and cutwater after blasting and fitting with expanded metal mesh. Note the hole at the center of the cutwater.
2. Belzona® 1311 being pressed through the mesh and into the surface profile of the bronze.
3. The finished application. Repaired cutwater edge and casing holes. The seal area and rebuilt seating groove is on the right.



1.



2.



3.

For more examples of *Belzona Know-How In Action*, please visit <http://khia.belzona.com>



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