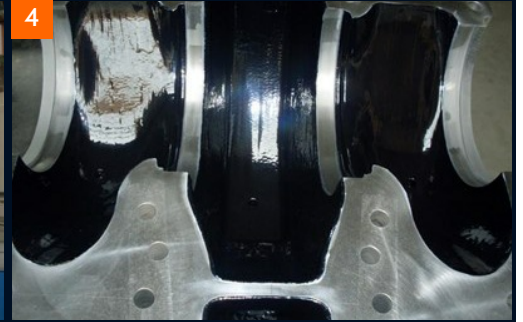
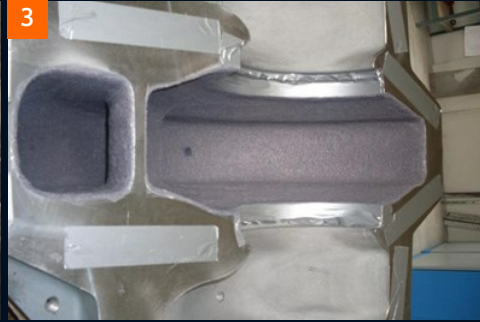


SERVICE LIFE OF DREDGING FLUSH WATER PUMP EXTENDED WITH BELZONA

ID: 4287



PROBLEM

Extensive cavitation damage near impeller and high pressure areas. Cavitation and erosion had led to the pump casing's rubber lining being partly eroded. Further erosion damage was found on the casing.

APPLICATION SITUATION

Rubber-lined KSB flush water pump on North Sea dredger.

APPLICATION METHOD

The application was carried out in accordance with modified versions of the Belzona Know-How System Leaflets CEP-3 & 5. After surface preparation, Belzona 1812 was used to rebuild damaged areas. Belzona® 1311 was then used to smooth the surface before applying the Belzona® 2141 Elastomer system. to give maximum resistance to cavitation erosion.

BELZONA FACTS

Medium pumped is seawater with high solids content (mud/sand). The pumps are working at their limit, i.e. at a flow rate of up to 40m/s leading to the cavitation risk. Service life of the pump prior to the repair was three months, after rebuilding and protection with Belzona a minimum 18 months continuous service was achieved.

INDUSTRY

Marine

LOCATION

Drydock, Bremen, Germany

APPLICATION DATE

October 2008

PRODUCTS

Belzona 1311 (Ceramic R-Metal)
Belzona 1812 (Ceramic Carbide FP)
Belzona 2141 (ACR-Fluid Elastomer)

SUBSTRATE

Cast iron

PHOTOS

1. Damaged rubber-lined pump
2. Close-up of one of the damaged areas
3. Damage rebuilt with Belzona 1812
4. Completed application with Belzona 2141 Elastomer applied

For more examples of Belzona Know-How in Action, please visit khia.belzona.com

Belzona products are manufactured
under an ISO 9001 Registered
Quality Management System.

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