

BELZONA ANTI-CAVITATION SYSTEM PROTECTS NAVAL VESSEL

ID: 5795



PROBLEM

Due to the shape of the rudders, coupled with disturbed water flowing from the propeller, and the high manoeuvrability of the vessel, cavitation damage occurs leading to severe erosion corrosion pitting.

APPLICATION SITUATION

Naval vessel rudders.

APPLICATION METHOD

The application was carried out in accordance with Belzona Know-How System Leaflets SOS-1 & SOS-2. Rebuilding of the pitted areas was carried out using Belzona 1311. Belzona 1341 was used as the first coat to provide optimum adhesion and corrosion resistance. The Belzona 2141 system was applied as the top coating to provide cavitation resistance.

BELZONA FACTS

The Belzona 2141 system has been designed to resist the effects of cavitation and impact, as well as providing excellent corrosion protection. The Belzona application was inspected after 2 years and was mostly found to be in perfect condition with only minor damage in the local areas. The coating had overcome the major cavitation and erosion problems and was easily repaired with minimal downtime. The client was satisfied with the Belzona solution.

INDUSTRY

Marine

LOCATION

US Navy Base, Japan

APPLICATION DATE

2012

PRODUCTS

Belzona 1311 (Ceramic R-Metal)
Belzona 1341 (Supermetalgilde)
Belzona 2141 (ACR-Fluid Elastomer)

SUBSTRATE

Carbon Steel

PHOTOS

1. Overview of the rudders
2. Close-up view of a damaged area
3. Belzona 1341 applied as the first coat
4. Application completed with a coating of Belzona 2141

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

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