Stainless Steel Propeller Repair and Protection

ID: 9411

Industry: Marine Customer Location: Seattle
Application: SOS-Ships and Offshore Structures Application Date: May 2024

Substrate: Stainless-steel

Products: Belzona 1311 (Ceramic R-Metal), Belzona 1341 (Supermetalglide), Belzona 2141 (ACR-Fluid Elastomer), Belzona

2941 (Elastomer SP-Conditioner)

Problem

Areas of cavitation damage









Tips of blades grit blasted

1st coat applied was Belzona 1341

2nd coat applied was Belzona 2141

Vessel ready to return to service

Application Situation

Vessel owner was in a rush to get the vessel back in service. Removing the propellers for outside repairs would not fit the timeframe allowed. Based on previous case studies, the owner and shipyard agreed on the application.

Application Method

Tips of blades were grit blasted to a minimum of 3mils. Cavitation pockets were filled with Belzona 1311. For protection, Belzona 1341 was applied in a 10mil coat. Belzona 2941 surface conditioner was then applied followed by a 30mil coat of Belzona 2141.

Belzona Facts

Replacing the propellers was not an option based on availability. Repair by welding required removing the parts and sending them to an outside shop.

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.

