# HIGH SPEED FERRY PROPELLER CAVITATION DAMAGE REPAIR

ID: 8145

Industry: Marine Customer Location: Tuzla, ISTANBUL, TURKEY

Application: VPF-Valves, Pipes and Fittings Application Date: April 2019

Substrate: Bronze

Products: \* Belzona 1311 (Ceramic R-Metal),

\* Belzona 9111 (Cleaner & Degreaser),

#### **Problem**

Cavitation damage on ferry propellers causing lower hydrodynamic efficiency and less propulsion capabilities.









## **Photograph Descriptions**

- \* Cavitation damage on the propeller. ,
- \* After surface preparation. ,
- \* Application Belzona 1311 (Ceramic R-Metal). ,
- \* The surface faired after Belzona application. ,

## **Application Situation**

Cavitation damage on both propellers of high speed ferry. The damage is more intense on the blade leading edges. The damaged propellers causing ferry two operate with some vibration and less hydrodynamic efficiency.

#### **Application Method**

Application was carried out in accordance with Belzona Know-How System Leaflet SOS-01. Propeller surface blasted in blasting cabin. Surface was cleaned with Belzona 9111 (Cleaner & Degreaser) after blasting. Immediately following surface preparation Belzona 1311 (Ceramic R-Metal) is applied on the surface. After the product is cured, the surface was grinded and faired to achieve smooth surface.

### **Belzona Facts**

Propeller replacement would be very costly too time consuming. Low cost and parmanent solution with Belzona.

For more examples of Belzona Know - How In Action, please visit https://khia.belzona.com

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FS 695214 manufactured under an ISO
ISO 14001:2015 9000 Registered Quality
EMS 695213 Management System.

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