

# BELZONA REPAIRS WATER JET FLANGE AREA

ID: 2930

**Industry:** Marine  
**Application:** VPF-Valves, Pipes and Fittings  
**Substrate:** Aluminium  
**Products:** \* Belzona® 1111 (Super Metal) ,  
\* Belzona® 1341 (Super metalglide) ,

**Customer Location:** Naval shipyard, Vaxholm, Sweden  
**Application Date:** December 2011

## Problem

The water jet tunnel was suffering from cavitation and corrosion the flange holding the impeller housing in place. The most severe damages were found on the flange face and extended 20 cm inwards. Additionally the flange face was found to be distorted.



## Photograph Descriptions

- \* The damaged water jet unit ,
- \* A close-up of the damage ,
- \* Machining down the flange surface after rebuilding with Belzona® 1111 ,
- \* completed application after coating with Belzona® 1341 ,

## Application Situation

Rolls Royce water jet propulsion unit on combat boat built 2002. Total time in water almost 6 years.

## Application Method

Application was carried out in accordance with Belzona Know-How system Leaflets VPF-1 & 2. Flange face and cavitation erosion was rebuilt with Belzona® 1111. critical clearances were machined before applying Belzona® 1341 for overall erosion corrosion protection.

## Belzona Facts

This ship yard has previously used the same method for repairs on water jet propulsion units with great success. Belzona avoids hot work that could create further distortion and provides excellent corrosion and cavitation protection in water jet propulsion systems.

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

ISO 9001:2015  
FS 695214  
ISO 14001:2015  
EMS 695213

Belzona products are  
manufactured under an ISO  
9000 Registered Quality  
Management System.

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