

BELZONA REPAIRS WATER JET FLANGE AREA

CUSTOMER

Naval shipyard, Vaxholm, Sweden

APPLICATION DATE

December 2011

APPLICATION SITUATION

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

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.

PRODUCTS

Belzona® 1111 (Super Metal)

Belzona® 1341 (Super metalglide)

SUBSTRATE

Aluminium

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.

PICTURES

1. The damaged water jet unit
2. A close-up of the damage
3. Machining down the flange surface after rebuilding with Belzona® 1111
4. completed application after coating with Belzona® 1341



1.



2.



3.



4.

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



ISO 9001:2008
Q 09335
ISO 14001:2004
EMS 509612

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