# Belzona 1331 rebuilds Turbine Cover in the Hydro Power Industry

ID: 8543

Industry: Power Customer Location: Austria
Application: VPF-Valves, Pipes and Fittings Application Date: March 2021

Substrate: Steel

Products: \* Belzona 1331,

#### **Problem**

The turbine cover became oval due to welding work on the outer circumference. The fits on the inside diameter also warped. Since these surfaces already had their finished diameter, they should be built up with Belzona and then machined to the finished size.









## **Photograph Descriptions**

- \* Image 1: Turbine Cover,
- \* Image 2: Identifying the issues 1: Worn ring (traces of erosion from the water) 2: Mating surfaces were coated in 3 layers 3: The undercut was coated in a single layer,
- \* Image 3: The lid after applying the first coat of Belzona 1331,
- \* Image 4: Completed application after being machined.,

### **Application Situation**

An International Hydro Power client needed Belzona to rebuild an area of a turbine cover.

#### **Application Method**

Blasted to 110  $\mu$ m roughness according to Testex with blasting agent Sintox 0.2-1.4 and corundum F14 (mixed 2: 1) Cleaned and degreased surfaces Build up the surfaces with the first layer of Belzona 1331 - target layer thickness 1000  $\mu$ m Build up the mating surfaces with a second layer of Belzona 1331 after approx. 3 hours - target layer thickness 1000  $\mu$ m Build up the mating surfaces with a third layer of Belzona 1331 after approx. 3 hours - target layer thickness 1000  $\mu$ m in accordance with Belona System Leaflet VPF\_13

## **Belzona Facts**

The client had already used welding as a procedure which had failed and became oval on the outer circumference.

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

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