

# Belzona 1331 rebuilds Turbine Cover in the Hydro Power Industry

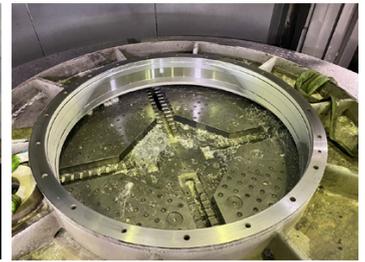
ID: 8543

Industry: Power  
Application: VPF-Valves, Pipes and Fittings  
Substrate: Steel  
Products: \* Belzona 1331 ,

Customer Location: Austria  
Application Date: March 2021

## 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  $\mu\text{m}$  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  $\mu\text{m}$  Build up the mating surfaces with a second layer of Belzona 1331 after approx. 3 hours - target layer thickness 1000  $\mu\text{m}$  Build up the mating surfaces with a third layer of Belzona 1331 after approx. 3 hours - target layer thickness 1000  $\mu\text{m}$  in accordance with Belzona 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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ISO 9001:2015  
FS 695214  
ISO 14001:2015  
EMS 695213

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