

# BELZONA PROTECTS PUMP IMPELLER FROM CAVITATION

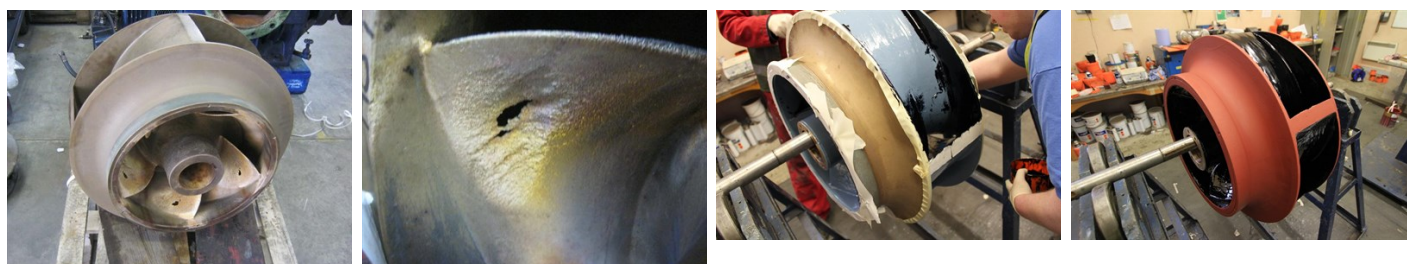
ID: 7542

**Industry:** Fluid Flow  
**Application:** CEP-Centrifugal Pumps  
**Substrate:** Brass  
**Products:** \* Belzona 1311 (Ceramic R-Metal) ,  
\* Belzona 1341 (Supermetalgilde) ,  
\* Belzona 2141 (ACR Elastomer) ,

**Customer Location:** Chemical Plant, Scotland, UK  
**Application Date:** June 2013

## Problem

A pump impeller was found to be suffering heavily from cavitation whilst in service. Characteristic cavitation damage was found on the impeller vanes. The cause of the cavitation issue could not be eliminated from the pump.



## Photograph Descriptions

- \* 1. Damage apparent over the impeller vanes ,
- \* 2. Close up of cavitating areas ,
- \* 3. Belzona coatings being applied ,
- \* 4. Finished application ,

## Application Situation

A pump impeller

## Application Method

The application was carried out in accordance with Belzona System Leaflets CEP-1 and CEP-3. The impeller was first grit blasted, then the damaged areas of the vanes were rebuilt using Belzona 1311. The impeller was then coated using Belzona 1341 and Belzona 2141 to protect from future damage.

## Belzona Facts

The alternatives were weld repairs or replacement. Both would experience the same effects and become damaged as before. The Belzona 2141 system has excellent resistance to cavitation damage, avoiding costly replacement and extending the life of the current impeller.

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

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