

# REPAIR, REBUILDING AND PROTECTION OF IMPELLER IMPELLER WITH BELZONA TECHNOLOGY

ID: 9132

Industry: Food & Drink  
Application: CEP-Centrifugal Pumps  
Substrate: Cast Iron  
Products: Belzona 1311 (Ceramic R-Metal), Belzona 1391T

Customer Location: SANTA CRUZ, BOLIVIA

Application Date: September 2022

## Problem

The impeller showed generalized wear, exhibiting the most damage on the vanes and on the trailing edges. This situation generated a loss of efficiency of the pump, the solution due to the damage of the part was to decide between rebuilding or replacing it.



Equipment to be repaired



Sandblasted Impeller.



Rebuilding Stage.



Completed Application.

## Application Situation

It was an emergency repair that was carried out on Friday and we delivered the equipment on Sunday because the brewery had to start up on Monday, due to the age of the equipment they could not find a spare part.

## Application Method

- Surface preparation with abrasive pressure blasting according to SSPC SP10, using sand as abrasive.
- Immersion of the Super Fox to completely remove the rust on the impeller surface.
- Rinsing with demineralized water.
- Degreasing of the surface with ethyl acetate.
- Measurement of environmental conditions prior to application.
- Measurement of reinforcement mesh to recover lost metal on blades.
- Recovery of lost metal with Belzona 1311 Ceramic R-Metal cold welding.
- Application of Belzona 1391T first layer coating
- Belzona 1391T second layer coating application

## Belzona Facts

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  
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Thanks to the success of this repair, a week after the distributorship repaired another similar impeller.

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