

# BELZONA REPAIRS AND IMPROVES FRANCIS TURBINE RUNNER

ID: 707

Industry: *Power*Customer Location: *Hydroelectric Power Plant, Czech Republic*Application: *CEP-Centrifugal Pumps*Application Date: *September 2003*Substrate: *Steel*Products: *\* Belzona® 1111 (Super Metal) Belzona® 1341 (Supermetalgilde) ,*

## Problem

*The runner had suffered extensive damage from erosion, corrosion and mechanical damage.*



## Photograph Descriptions

\* Damaged and worn runner After grit blasting Rebuilding with Belzona® 1111 After coating with Belzona® 1341 ,

## Application Situation

Francis Turbine Runner

## Application Method

The application was carried out in accordance with Belzona® Know-How System Leaflets CEP-8 and CEP-10.

## Belzona Facts

After the repair and coating of both the runner and wicket gates a 10 - 15% increase in output was recorded and the turbines were able to run at a greater range of heads than were possible before, thus earning the customer many time more in profit than the cost of the repair. After one year operation the runner was inspected and was found to have only suffered minor damage due to impact with pieces of wood. A further inspection in 2006 showed runner still to be in excellent condition and in 2010 client expressed himself happy with the application.

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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manufactured under an ISO  
9000 Registered Quality  
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