# BELZONA PROVEN CAVITATION PROTECTION TO FRANCIS TURBINE

#### **CUSTOMER**

Poland

#### APPLICATION DATE

2019

## **APPLICATION SITUATION**

The client required reconstruction of defects and chemical protection of the Francis Turbine Runner constructed in 1925 at the hydroelectric plant.

#### **PROBLEM**

Cavitation has caused erosion of the parent metal and loss of performance of the turbine.

#### **PRODUCTS**

Belzona 1221 (Super E-Metal) Belzona 2141 (ACR-Fluid Elastomer) Belzona 2941 (Elastomer SP-Conditioner)

### **SUBSTRATE**

Cast Iron

#### APPLICATION METHOD

The application was carried out in accordance with the Belzona Know-How System Leaflets CEP-3 and CEP-5. Firstly, metal loss was repaired with Belzona 1221. Once the damaged areas had been repaired, the turbine runners were completely coated with Belzona 2141.

#### **BELZONA FACTS**

Belzona was chosen to protect the turbine from the erosion and corrosion for its ability to increase the efficiency of the turbine. After the repair client expressed himself happy with the application and wanted to coat the other turbines.

#### **PICTURES**

- 1. Turbine after grit blasting
- 2. Repaired with Belzona 1221
- 3. In Progress
- 4. Coated with Belzona 2141



1.



2.



3.



For more examples of Belzona Know-How In Action, please visit http://khia.belzona.com