

BELZONA PROVEN CAVITATION PROTECTION TO FRANCIS TURBINE

CUSTOMER

Hydroelectric plant, Slovakia

APPLICATION DATE

2004 and 2007

APPLICATION SITUATION

Francis turbine runner

PROBLEM

Cavitation had caused erosion of the metal and loss of turbine performance. Belzona® 1311 and Belzona® 1341 had been applied in 2004, but had suffered further cavitation, so system upgraded by applying more cavitation resistant Belzona® 2141.

PRODUCTS

Belzona® 1311 (Ceramic R Metal)

Belzona® 1341 (Supermetalgilde)

Belzona® 2141 (ACR Elastomer)

SUBSTRATE

Cast Iron

APPLICATION METHOD

Application was carried out in accordance with Belzona Know-How System Leaflets CEP-3 and CEP-10

BELZONA FACTS

Inspection of the Belzona Ceramic coating in 2006 showed damage from cavitation, so specification was changed to Belzona® 2141. Further inspection after 2 years showed no damage on the turbine runner.

PICTURES

1. Cavitation damage to turbine runner
2. Belzona® 1341 showing some cavitation damage
3. Belzona® 2141 being applied to the runner
4. After 24 months service Belzona® 2141, inspection shows no further cavitation damage



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



ISO 9001:2008
Q 09335
ISO 14001:2004
EMS 509612

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