

BELZONA REPAIRS A HYDROELECTRIC TURBINE

CUSTOMER

Hydroelectric Power Plant, France

APPLICATION DATE

February 2001

APPLICATION SITUATION

Francis Turbine

PROBLEM

Erosion, corrosion and cavitation of the stay vanes and the casing had induced vibration into the turbine and was also making the turbine run inefficiently.

PRODUCTS

Belzona® 1311 (Ceramic R-Metal)
Belzona® 1341 (Supermetalgilde)
Belzona® 5811 (Immersion Grade)

SUBSTRATE

Steel

APPLICATION METHOD

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

BELZONA FACTS

Once back in service the turbine once again achieved its maximum efficiency. The coatings were also chosen to protect the turbine from further damage. An inspection of the turbine following 7 years of service showed that the repair was in excellent condition with only minor damage to the leading edges, due to impact of solids, being observed. This was repaired using Belzona® 2000 series elastomers.

PICTURES

1. The Francis turbine
2. Inside the turbine
3. The extent of the damage
4. The completed application



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



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