

BELZONA REPAIRS KAPLAN TURBINE BLADES IN FRANCE

ID: 269



PROBLEM

Erosion-corrosion of the blades leading to large loss in efficiency. In particular, cavitation had caused deep erosion in localized areas.

APPLICATION SITUATION

Kaplan turbine hydroelectric power station on the Moselle River in France.

APPLICATION METHOD

The application was carried out in accordance with a modified version of Belzona Know-How System Leaflets CEP-1 and CEP-10. The blade edges were rebuilt using plastic formers to accurately restore the required profiles.

BELZONA FACTS

After one year in service, the Belzona System was inspected and was found in excellent condition. Although no accurate measure of efficiency was available, the Belzona System will restore the original efficiency and provide power production through its smooth, hydrophobic surface.

INDUSTRY

Power

LOCATION

Electric supply company in France

APPLICATION DATE

February 2000

PRODUCTS

Belzona 1111 (Super Metal)

Belzona 1341 (Supermetalgilde)

SUBSTRATE

Cast iron

PHOTOS

1. Cavitation-erosion damage present on the turbine blades
2. The blade edges were particularly badly eroded
3. Blade profiles being restored with Belzona 1111, using plastic strips to obtain edge detail
4. Completed application. Note the smooth surface obtained with Belzona 1341

For more examples of Belzona Know-How in Action, please visit khia.belzona.com

Belzona products are manufactured under an ISO 9001 Registered Quality Management System.

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