

## REBUILDING OF THE WICKET GATES IN THE TURBINE OF A HYDROPOWER STATION WITH BELZONA

### CUSTOMER

Ivory Coast

### APPLICATION DATE

Jun-21

### APPLICATION SITUATION

Re-profiling and coating of stay vanes inside of a blades inside the hydroelectric dam.

### PROBLEM

The blades suffered from damage from galvanic corrosion, which in some places reached great width. The leading edge of some blades were completely torn off.

### PRODUCTS

Belzona 1121 (Super XL-metal)

Belzona 1321 (Ceramic S-metal)

### SUBSTRATE

Steel

### APPLICATION METHOD

The blades were rebuilt on the leading edges, and the holes plugged and rebuilt on the sliding sides. The whole was protected in two layers with Belzona 1321.

### BELZONA FACTS

Very short downtime of the block and very short opening of the turbine, the only solution that does not require large installation and transport of heavy equipment is BELZONA. Ease of thickness recovery and reconstruction of leading edges. The BELZONA solution is more cost effective and faster than traditional methods such as welding and offers protection against corrosion.

### PICTURES

1. Diameter of the inlet penstock
2. Reconstruction of the leading edges of the blades
3. Blades reconstructed on the assemblies
4. Blades protected and finished



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

Belzona products are manufactured under an ISO 9000 Registered Quality Management System.

[www.belzona.com](http://www.belzona.com)

Copyright © Belzona International Limited 2021

  
**BELZONA**<sup>®</sup>  
Repair • Protect • Improve