BELZONA REBUILDS AND PROTECTS TURBINE RUNNER

ID: 6071


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PROBLEM
Constant use had damaged the vulnerable cast iron substrate of the impellers. The client needed a quick, long-term solution to avoid downtime to their plant.

APPLICATION SITUATION
Two impeller runner blades had suffered severe cavitation and erosion damage.

APPLICATION METHOD
Application was carried out in accordance with Belzona Know-How System Leaflets CEP-1 and CEP-3. Surfaces were grit blasted prior to rebuilding with Belzona 1311 to restore profiles and coating with Belzona 1321 to provide long-term protection.

BELZONA FACTS
The Belzona solution is cold-applied and simple to use, which meant that repairs and the application could be performed in-situ, avoiding costly disassembly work which would force a long downtime period. Force curing Belzona allowed the plant to return to operational status as quickly as possible, whilst the Belzona application offers a long-term, durable solution.

INDUSTRY
Power

LOCATION
Hydroelectric Plant, Jokkmokk, Sweden

APPLICATION DATE
2014

PRODUCTS
Belzona 1311 (Ceramic R-Metal)
Belzona 1321 (Ceramic S-Metal)

SUBSTRATE
Cast iron

PHOTOS
1. Turbine housing entrance
2. Cavitation damage to the runner
3. Close-up of the damage
4. Completed application