

Farb HPP, Replacement of Machine Group

Client

Elektrizitätswerk Altdorf (power utility)

Consultant and site supervision

IUB Engineering AG

Construction period

2014

Construction costs

CHF 25,000 (construction work excl. machine group)

Scope of services

- Execution
- Tendering
- Site supervision

Description

Farb Small HPP is located in the middle of the residential area of the municipality of Bürglen and is operated by Altdorf electricity utility. Water (0.75 m³/s) is turbed with a gross drop height of 14 m, providing a capacity of approx. 65 kW.

Due to signs of age-related wear the client decided to replace the entire machine group. The existing machine plinth as well as the ceiling between the central powerhouse and the tailrace channel were demolished. The new machine plinth was erected in a soundproof tank in accordance with the specifications of the machine supplier. While constructing the new ceiling the transition to the remaining structure was acoustically isolated to minimise the immissions for residents.

The main challenges during construction were space constraints, maintaining maximum outflow with temporary sealing of the tailrace channel as well as ensuring optimal sound insulation.

Main technical data

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|-----------------|------------------|
| - Concrete | 3 m ³ |
| - Reinforcement | 300 kg |

