

Geissbrunnen and Kammri Fresh Water Power Stations, Saxeten Valley

Client

IBI Industrielle Betriebe Interlaken

Consultant

IUB Engineering AG
 Hydraulic Engineering Department

Construction

1997–1998

Construction costs

CHF 11.6 million

Fees

CHF 590,000 design and construction supervision

Scope of services

- Planning study for energy production in the drinking water catchments in Saxeten Valley
- Preliminary project / concession project
- Construction project
- Tendering and bid evaluation
 - Construction
 - Hydraulic steelwork
 - Turbine, generator
- Execution:
 - Overall project management
 - Execution project for construction and electro-mechanical works

Description

The drinking water supply operated by Industriellen Betrieben Interlaken (IBI) in Saxeten Valley was developed around 1900. The energy policy situation in Switzerland and the pending rehabilitation measures led IBI to construct two fresh water power stations, which were developed in two spatially separated levels. The upper level starts at the Stalden reservoir tunnel. The drinking water is turbined in the Geissbrunnen powerhouse using a Pelton turbine and a water flow of 230 l/s and a capacity of 430 kW. In Geissbrunnen (top picture) the existing spring intakes are fed to Leubuchen Reservoir. This is where the lower level starts to Kammri power house with a capacity of 750 kW and a water flow of 250 l/s. The two power plants produce on average 5.9 GWh per year.

Main technical data

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| – Stalden Reservoir | V = 1,500 m ³ |
| – Pressure pipe Stalden – Geissbrunnen | DN 400, L = 1,300 m |
| – Geissbrunnen powerhouse | 430 kW |
| – Leubuchen Reservoir | V = 150 m ³ |
| – Pressure pipe Leubuchen – Kammri | DN 400, L = 1,200 m |
| – Kammri powerhouse | 750 kW |

