

## Borgnone (TI): New construction of hydropower plant

### Bauherr

OFIMA - Officine Idroelettriche della Maggia SA

### Projektierung

IM Maggia Engineering Ltd

### Zeitraum

2016-2018

### Baukosten

CHF 17.0 Mio.

### Leistungen

For civil engineering, electromechanics and hydromechanics of the following SIA phases, general planner's mandate:

- 21 feasibility study
- 32 preliminary design
- 33 call for tenders
- 41 call for tender
- 51 construction design
- 52 construction and supervision
- 53 commissioning

### Beschreibung

New hydroelectric minicentral with Kaplan turbine of approx. 3.2 MW located at the exit of the Caveragno-Palagnedra supply tunnel. Flow rates between 5 and 30 m<sup>3</sup>/s and fall between 6-16 m.

### Hauptdaten

Main features of the project:

- External excavation in rock and loose ground up to 20 metres in height with gradual lowering of the lake (total excavation volume 8'500 m<sup>3</sup>).
- Excavation of new tunnels (access and supply) and caves
- Enlargement of existing tunnels
- Construction in concrete (approx. 3600 m<sup>3</sup>) h gradual raising of the lake

