

## Trabzon (Turkey): New Hydroelectric Power Plant Büyükdüz

### Bauherr

Ayen Energy Co. Inc., Ankara / Turkey

### Projektierung

IM Maggia Engineering Ltd

### Zeitraum

2008–2012

### Baukosten

€ 80 million

### Leistungen

Feasibility study, construction design, tender documents, realisation and project supervision, workshop tests, general site supervision

### Beschreibung

New construction of a hydroelectric power plant on the Elmali and Tasoba rivers in northeast Turkey (Trabzon region). Construction of two reservoirs for daily compensation with intakes and fish pass, connection galleries, surge tank and forebay, penstock, power house, switchyard and transmission line.

### Hauptdaten

- 2 reservoirs, intakes and desanders on the Elmali and Tasoba rivers with fish pass
- Gallery lengthtotal = 12 km, Ø 4 m
- Surge tank with forebay
- Penstock DN2000, L = 1690 m in welded steel
- Powerhouse:
  - QA = 16 m<sup>3</sup>/s
  - HN = 500 m
  - PA = 70 MW
- 2 6-jet vertical Pelton turbines
- 2 spherical valves DN1000, PN64
- 2 generators 35 MVA
- 2 closed circuit cooling water systems
- 2 transformer units
- Switchyard

