

Hinterrhein (GR): Overall renovation of power stations

Bauherr

KHR - Kraftwerke Hinterrhein AG, Thusis

Projektierung

Consortium LI-IM, Thusis (Laymeyer International GmbH and IM Maggia Engineering Ltd)

Zeitraum

2007–2017

Baukosten

CHF 300 million

Leistungen

Following stages in accordance with Swiss SIA standards:

- Preliminary design
- Tender documentation
- Detailed design
- Application design
- Construction supervision
- Overall construction management

Beschreibung

Total refurbishment of KHR Hinterrhein's HPPs

Hauptdaten

- 3-stage group of power plants with installed power of 650 MW and pumping capacity of 90 MW
- 4 powerhouses with Francis turbines:

◦ Ferrera	3 x 63 MW
◦ Bärenburg	4 x 55 MW
◦ Sils i.D.	4 x 60 MW
◦ Thusis	2 x 20 MW
- Hydromechanical equipment:
 - Spillway, bottom outlet, intake gates
- Water transportation:

◦ Pressure tunnel	30 km
◦ Pressure shafts	1.7 km
◦ Supply tunnels	16 km
◦ Access tunnels	1.3 km
◦ Water intakes	13
- Reservoirs:
 - Preda Reservoir
 - Valle di Lei Reservoir
 - Ferrera Reservoir
 - Sufers Reservoir
 - Bärenburg Reservoir
- Switchyards
 - in Ferrera and Bärenburg
 - controlled by Sils powerhouse

