NEW SEMMERING BASE TUNNEL

Client:
Austrian Federal Railways

Country:
Austria, Gloggnitz - Mürzzuschlag

Duration:
from March 2006 to December 2024

Services:
Tunnel design in the alignment selection process, for environment impact assessment and for construction permission, tender design and final design of the tunnel, emergency station and shafts and as-built drawings, geotechnical consultancy during construction

Project objectives
The new Semmering base tunnel is an important section within a high-speed route of the Trans-European Network (TEN).

Project data
- Total length: c. 27.3 km
- Two single track tubes
- Max. overburden: 870 m
- Other construction works:
  - Emergency station with ventilation, 2 shafts (410 m / Ø c. 12 and 10 m)
  - Tmp. accesses Göstritz (1,040m), 75 m²
  - Tmp. shafts Göstritz (2 x 250 m / Ø 7 and 9 m)

Project specifics
The challenges of this tunnel project are the water bearing sections with large amounts of water and high water pressures of the carbonat rock areas Otterstock and Grassberg (300 l/s, 300 m water head) as well as squeezing sections of fault zones, such as the Grassberg-Schlagl fault system.

Services
- Alignment development in the alignment selection process
- Collaboration in the preparation of the documents for the environmental impact assessment and for obtaining construction permission
- Forecast of the production costs in the respective project phases

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