GBT – MULTIFUNCTION STATION FAIDO

Faido, Switzerland

Underground station for emergency stops, which is 1.7 km long, in the 57 km-long Gotthard Base Tunnel, with integrated main tunnel tubes, tunnel crossovers in direction, cross-passages, cross-cavern, emergency stop and waste-air extraction system for the event of an accident.
Railway Tunnel for High-speed Train Traffic

**Location**
Faido, Switzerland

**General Information**
Construction Costs (price base 1991)
- Gotthard Base Tunnel South: CHF 3'995 Mio.
- Multifunction Station Faido: CHF 525 Mio. (installations excluded)

**Project Stages**
- Design: since 1990

**Excavation Method**
Drill-and-blast excavation

**Geology**
Zone consisting of Penninic Gneiss, predominantly Leventina Gneisses. The multifunction station is crossed by a main fault zone. Max. overburden: 1’500 m

**Project Details**
Tunnel excavated from several intermediate accesses simultaneously posing high logistic challenges; single-shell shotcrete and two-shell lining, with umbrella waterproofing in some parts. Excavated cross-section of up to 330 m², partially in squeezing rock conditions with radial deformations of up to 1.6 m.

**Client and Contact Person**
AlpTransit Gotthard AG (ATG)
Dr. Renzo Simoni (director)

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**Project**
Tunnel section of the 57 km long base tunnel at the bottom of the access gallery comprising railway infrastructure caverns, tunnel crossovers and emergency gallery.

**Our services**
- Design in engineering joint-venture
- Construction supervision in engineering joint-venture