

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
Realisation MFS: 2002 – 2006
Realisation Base Tunnel: 2002 – 2015

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)



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



Amberg Engineering Ltd.
Trockenloostrasse 21
CH-8105 Regensdorf
Switzerland

information@amberg.ch, www.amberg.ch