

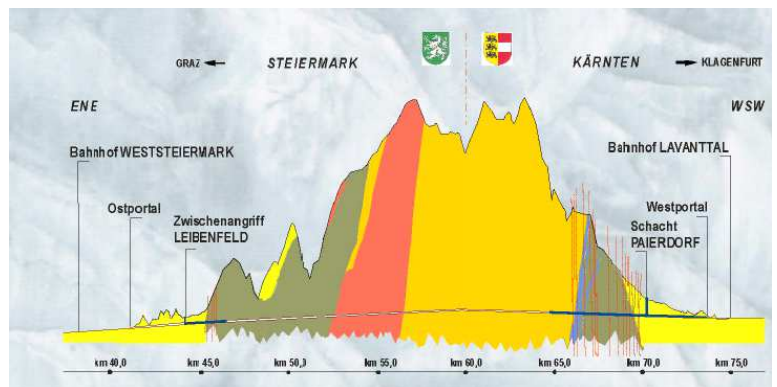
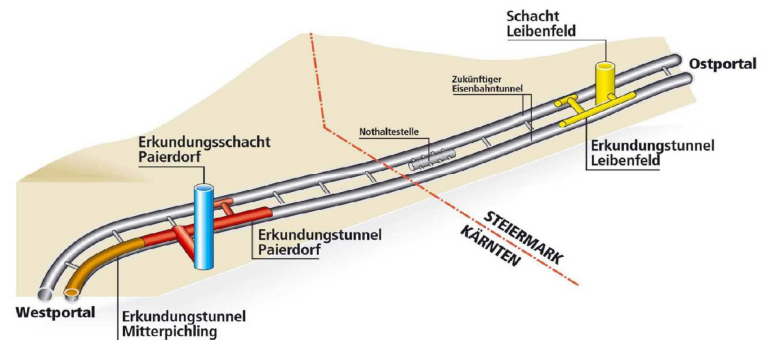
KORALMTUNNEL

Geological record of tunnel excavations

Country: Austria
Client: ÖBB Infrastruktur AG
Year: 2014 - now

PROJECT DESCRIPTION:

The Koralm tunnel will serve for the high-speed railway connection of Austrian towns Graz and Klagenfurt. The new track will be part of constructed Baltic-Adriatic railway corridor and will connect towns Gdansk – Warsaw - Vienna – Venice – Milano. The 32.8 km long tunnel has two tubes excavated by hard rock double shields (diameter 9.96 m) with a segmental tunnel lining. The running tunnels are connected with cross-passages with the spacing 500 m. The 900 m long emergency station is situated in the middle of the tunnel.



The lot KAT2 is 19 km long, the lot includes two running tunnels, cross-passages and emergency station. An access to the tunnel allows 60 m deep shaft. The lot KAT2 includes parts excavated by NATM (North tunnel 2.2 km and South tunnel 2.8 km) and by double-shields (North tunnel 15.6 km and South tunnel 17.1 km).

PROJECT CONTRIBUTION:

3G Consulting Engineers is responsible for evaluation of geological conditions of excavations on the lot KAT2 for the client (ÖBB). To investigate the rock mass conditions ahead of the tunnel, especially for identification of major fault zones, probe drilling (percussion drilling) in combination with geophysical measurements (Tunnel Seismic While Drilling) are applied systematically during excavations, they are based on the sequence of double-shields.

SERVICES PROVIDED:

3G Consulting Engineers provides the following services:

- Geological mapping of tunnel faces
- Evaluation of probe drilling
- Evaluations and predictions of geological conditions

