

Metro Tunnel

TEHRAN LINE 3 – LOT 4 Project

Tehran, IRAN

Project description

Line 3: Azadegan depot (South) to Ozgol (North), Total Length (km): 35.5, Tunnel length (km): 24, No. of stations: 30 (underground: 23), No. of trains: 20 trains each 8 wagons, No. of power stations: 2, No. of depot: 2

Construction Costs

Total cost of the line: approx. USD 1'027 million

Project Schedule

Design: from 2009
Construction: 2009-2012

Project Description, Construction Lot 4

Javadieh Station to Nofel Lechateu Shaft, circular profile, Single tube-Double track tunnel

Length: 7000 m
Inner diameter of segmental lining: 8.15 m
Outer diameter: 8.85 m

Method of Excavation

EPB TBM (Herrenknecht) \varnothing 9.19 m
Simultaneous installation of final slab by TBM
Mucking system: Belt conveyor (H+E) + Multi Service Vehicle (MSV made by Technimetal)

Geology

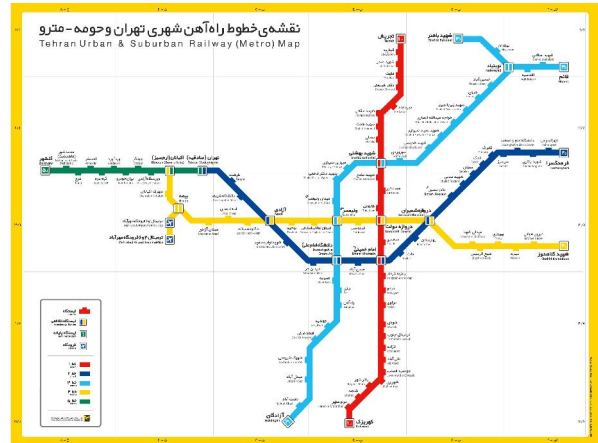
Silt, clay, sand and gravel
Max. overburden: 30 m

Our Services

Complete package of Planning and detail design, including:
Method statement, TBM selection, preparation of TBM specifications
Segmental lining design (geometrical and structural design)
Design of site installation
Design of all technical services like transport, electricity, ventilation, drainage, water supply
Face pressure calculations
TBM passing through already-built station
Preparation of Risk Management Plan
Settlement prediction
Backfill grouting
Monitoring plan
TBM Entrance shaft
Segment factory
Site arrangement

Client and Contact Person

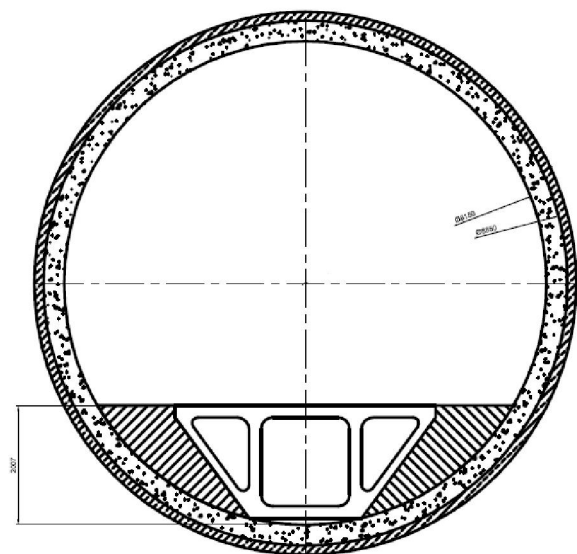
Rah-Tarh Consulting Co.
Mr. Gharebaghi (Member of the board)



Tehran Urban Railway Map – Line 3 shown by light blue



The last breakthrough of the machine



8+1key segment erection+Backfilling+Final slab installation+ Side filling all done by TBM