

Training session 'Mechanized Tunnelling'

23-24 March 2015

Venue: to be precised

Santiago – Chile

Objective: this course aims to provide general information to young engineers & to update tunnelling professionals on topics related to Mechanised Tunnelling. The course topics are presented in such a way to build the basic concepts of Mechanized Tunnelling necessary for professionals.

Tentative Programme

Monday 23 March 2015 – Session 1: Introduction & Overview

- 09.00 – 09.15: Welcome & Opening
- 09.15 – 09.45: Situation of Mechanised Tunnelling in Chile
- 09.45 – 10.30: Advantages & disadvantages of Mechanized Tunnelling
- 10.30 – 11.00: Coffee break
- 11.00 – 11.45: State of the Art by ITA WG14 animateur
- 11.45 – 12.30: Selection criteria for TBMs in Long Rock Tunnels Conditions
- 12.30 – 14.00: Lunch break

Session 2: Improvement & Support systems

- 14.00 – 14.45: Segmental Lining
- 14.45 – 15.30: Backfilling Grouting
- 15.30 – 16.00: Coffee break
- 16.00 – 16.45: Ground Improvement
- 16.45 – 17.30: Soil Conditioning & Slurry Operation
- 17.30 – 18.00: Precast Tunnel Segments with Fiber Reinforced Concrete
- 18.00 – 18.30: Questions & Answers

24 March 2015 – Session 3: Operation

- 09.00 – 09.45: Cutting tools
- 09.45 – 10.30: Face support & Compressed air work
- 10.30 – 11.00: Coffee break
- 11.00 – 11.45: Risk & Safety Management
- 11.45 – 12.30: Environment: Mucking, Water, Chemistry & Noise
- 12.30 – 14.00: Lunch break

Session 4 : Management & Examples

- 14.00 – 14.45: Tunnel & Site logistics
- 14.45 – 15.30: Selection of TBMs – Case histories
- 15.30 – 16.00: Coffee break
- 16.00 – 16.45: Example 1: Rock tunnelling
- 16.45 – 17.30: Example 2: Soft Ground tunnelling for Subway
- 17.30 – 18.00: Questions & Answers – Closing remarks