# **Tunnelling Technologies**

The course is designed for both staff involved in the foundation sector for civil engineering industry and those without any direct experience. The course provides general knowledge about the technologies related to soil improvement finalized to tunnel excavation and also the various kinds of machines used.

## Course topics

### General topics:

- Definition of application field
- Overview of related technologies
- Soil and rock classifications and characteristics, Soil investigation
- Equipment and ancillaries
- Introduction to Jobsite Safety
- Main quality controls Process and Product tests
- Case histories

## Specific topics:

- Forepoling
- Jet grouting
- Fiberglass and Drainage bars
- Cement and chemical grouting



#### Duration

3 days

#### Languages

English, Italian or any other language upon client's request

#### Location

Cesena (FC) - Italy or any customer's site

#### Audience

Site Managers; Field Engineers; Foremen; Sales Agents.

#### Prerequisites

Geotechnical knowledge preferred but not essential

#### Learning objectives

To acquire a technical knowledge about soil improvements;

To learn the construction phases of the applicable technologies;

To learn the various kinds of drilling rigs;

To have an introduction to safety and quality concepts focused on this jobfield.