Implenia

Reference

Franzensfeste-Waidbruck, Baulos 1, Brenner









SHORT DESCRIPTION

Construction lot 1 from Franzensfeste to Waidbuck will run almost entirely as a tunnel and reach a length of approx. 22.5 km. The challenging construction project includes the construction of two new rail tunnel sections as well as a viaduct connecting the two tunnel sections.

THE PROJECT

Construction works on the railroad line will be carried out in two phases.

The first phase includes:

- Planning
- Preparatory works, regulating and enabling access and temporary detour of the affected sections of the line.

The second phase includes:

- Two main tunnels with double tube and single track, called "Scaleres" with a length of about 15.4 km and

"Gardena" with a length of about 6.3 km.

- A new railroad bridge between the two tunnels over the Valle Isarco, consisting of two viaducts with a span of 220 m
- Forch, Albes, Funes and Chiusa emergency access tunnels
- Works necessary for the creation of emergency areas at the entrances of the main tunnels and the access tunnels, as well as the corresponding access roads
- Two single-track tunnels to connect the new line with the existing line at Ponte Gardena station.
- Infrastructure works at Ponte Gardena station to reduce noise, which will be carried out during the operational phase.
- The components of the power supply system of Lot 1, including the new electrical substation of Ponte Gardena.

Consorzio Dolomiti (ARGE)

- 51% Webuild Italia SpA
- 49% Implenia Construction

GmbH

CHALLENGES

- Processing and storage of large quantities of rock during tunnel excavation
- Use of the existing Hinterrigger segment mill

SUSTAINABILITY

Various measures were taken for the construction of the new tunnel to minimize the impact on the environment. Measuring stations are used for close monitoring in order to detect any changes in the ecosystem as quickly as possible and to act accordingly. The protection of people and nature also plays a central role. For example, measures such as noise barriers are used to reduce noise.

FURTHER INFORMATION

Project website

FACTS

Location	Franzensfeste , Italy
Status	Under construction
Construction volume (value of our services)	1.07 B EUR
Start of construction	June 2021
Completion	May 2031
Contracting entity	RFI SpA – Rete Ferroviaria Italiana
ARGE	✓
Length	21500 m
TBM Tunnelling	✓

Blasting method	✓
Civil engineer	SWS Engineering SpA SWS Systa (Designer)

SERVICES

Tunnelling

Bridge construction