



Brenner Base Tunnel, Lot H53 (AT) Waterproofing

Country	Austria
Type	Transit, Railway
Client	BBT (Galleria di Base del Brennero - Brenner Basistunnel BBT SE)
Main Contractor	Porr Bau GmbH, Marti GmbH, Marti Tunnel AG
Execution of the work	ATA-H53 (Renesco 50%, IAT 50%)
Designer	PG BBTN (Amberg Engineering, Lombardi, müller+hereth, Obermeyer, hbpm)
Construction Period	2024-2029

Project Description

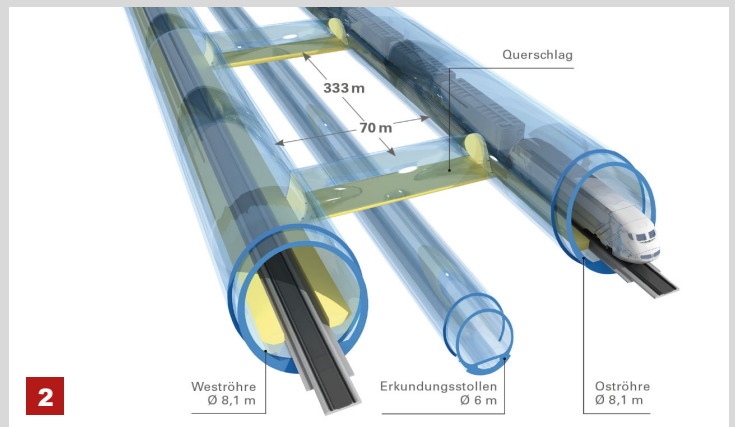
The construction lot "H53 Pfnons–Brenner" includes two single-track main tunnel tubes with a total length of 25.2km, which will be driven between the municipality of Pfnons and the national border at the Brenner Pass.

The consortium will use two tunnel boring machines (TBMs) as well as blasting. The TBMs have an excavation diameter of 10.37m, allowing them to cover a distance of up to 30m per day. In addition to the main tunnels, another 3.6km of exploration and cross-cut tunnels are planned.

Scope of Service

Supply and install of the waterproofing system according to the OEBV guideline (Austrian standard) and the BBT project specification with a design lifetime expectation of >100 years at high permanent temperatures.

- Sealing of the tunnels, caverns and cross-passages
- Around 1 Mio. sqm of surface to be sealed
- Umbrella seal (270°, crown and sidewall), drained
- Sheet waterproofing, 2.1mm PVC-P, with signal layer
- Protection geotextile, 900g/sqm polypropylene (PP)
- Termination tapes/strips, glued with epoxy resin
- Water barriers, water stops and compression seals/ profiles
- Drainage system including drainage profiles
- Injection hose system



1. Installation of the waterproofing system onto shotcrete
2. Scheme of the construction
3. Sheet Waterproofing of the blasted area, formwork