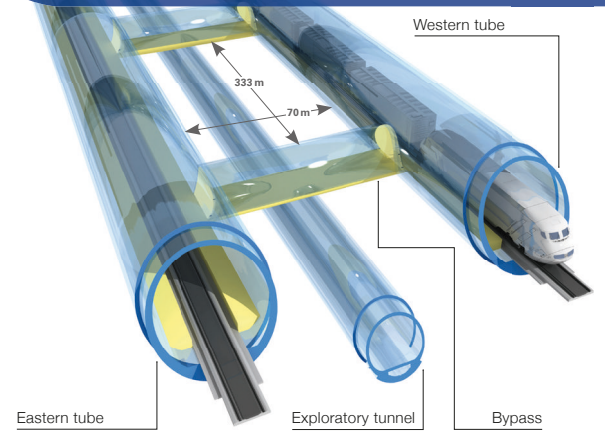


# BRENNER BASISTUNNEL GALLERIA DI BASE DEL BRENNERO



## The Brenner Base Tunnel on track

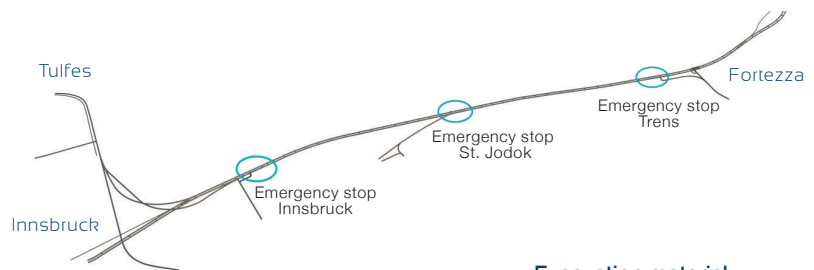


**The world's longest rail tunnel**  
upon completion

→ **64 km**  
Total length, including the existing rail bypass of Innsbruck

→ **55 km**  
Length between the tunnel portals in Fortezza and Innsbruck

**230 km** of tunnels to be built



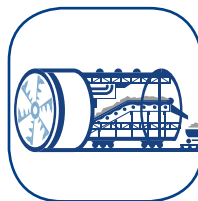
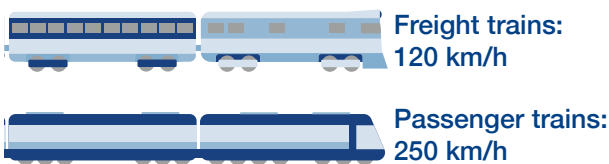
### Air temperature inside the tunnel Example: Mules construction site



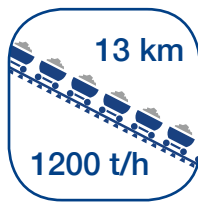
With increasing depth, air temperature rises on average 2.5°C every 100 m.

Moving towards Brennero with increasing overburdens, the air temperature increases, as heat losses decrease due to the bigger rock overburden. Hence the challenge for tunnel aeration systems to pump sufficient fresh air up to the excavation fronts.

### Operating speed:



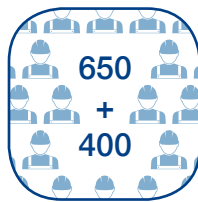
**70 %**  
excavated by TBM



**30 %**  
excavated by drill & blast

Currently there are 13 km of conveyor belt between Mules and the deposit at Hinterrigger.

The belt can carry up to 1200 tons of rock per hour, equivalent to 300 cubic metres or 20 truckloads.



At the time of writing, 650 workers are employed in construction on the Italian side of the project, 400 workers on the Austrian side.

### Excavation material:

According to the quality of the excavated rock, it is:

**ca. 25 %** reutilised as raw material on the construction site

**ca. 75 %** deposited, if the physical characteristics are too low for reutilisation

**21,5 Mio. m<sup>3</sup>**



Overall, 21,5 mio. m<sup>3</sup> are being deposited, equivalent to a cube with sides of 278 metres each.

