

Project tunnel

Guadarrama Tunnel Sierra de Guadarrama (Spain)



Customer:	UTE Energia Noroeste C/ Agustin de Foxá, 25 2°B 28036 Madrid Spain
Type:	Railway tunnel
Length:	28300 m
Year of manufacture:	2006

In the Guadarrama tunnel the high-speed line Madrid-Valladolid undercrosses the central Spanish mountains Sierra de Guadarrama. The construction of the longest tunnel in Spain in the course of the 198 km long AVA-connection Madrid-Segovia-Valladolid started in 2002, the putting into service of this high-speed line was in December 2007. The south entrance is located near the village of Miraflores de la Sierra, about 50 km north of Madrid, in 998 m height.

From there, the tunnel rises by 15 per mill rise to a crown height of 1200 m, and then drop again to 1114 m at the northern entrance, near Segovia. Each of the two direction tracks runs in a separate tube with an outer diameter of 9,45 m and an 8,50 m inside diameter. At 30 m dimension between axes, the west tube is 28407,70 m and the eastern tube 28418,66 m long. Every 250 meters connecting tunnels have been built between the tunnels. These can be ventilated and are able to serve as emergency rescue facilities.

Products:



- **System:** Sliding door
- **Fire protection:** RF 120 / EI 120
- **Suction/Pressure:** ± 10 kPa
- **Dimension:** 4,0 m x 3,0 m
- **Material:** Steel galvanized
- **Colour:** Coated in C3
- **Wall and upper part:** yes
- **Quantity:** 300 units

