



TUNNEL FEUERFELSEN / RENNBERG

COBURG OST (DE)

CLIENT

Deutsche Bahn AG, DE-99001 Erfurt

ENGINEER

DB ProjektBau GmbH, DE-04003 Leipzig

TIME OF COMPLETION

2010 - 2013

CONTRACT SUM

CHF 100 Mio.

EXECUTION OF THE WORKS

ARGE Tunnel Feuerfelsen Rennberg

CONSORTIUM PARTNERS

Marti Tunnelbau AG, CH-3302 Moosseedorf

Marti GmbH, DE-70567 Stuttgart

Johann Bunte Bauunternehmung GmbH & Co.KG,
DE-26871 Papenburg

LEAD COMPANY AND TECHNICAL LEAD

Marti Tunnelbau AG, CH-3302 Moosseedorf

COMMERCIAL LEAD

Johann Bunte Bauunternehmung GmbH & Co.KG,
DE-26871 Papenburg

TUNNEL FEUERFELSEN / RENNBERG

COBURG OST (DE)

SCOPE OF THE WORKS

Two-track railway tunnel. VDE 8.1 new railway section
Ebensfeld – Erfurt, BA 3121, VP Coburg Ost, NBS Bau-
km 19,1+30 – 24,8+95

ACTIVITIES

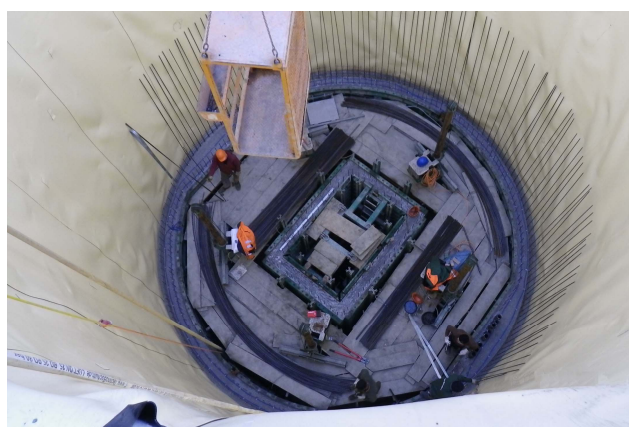
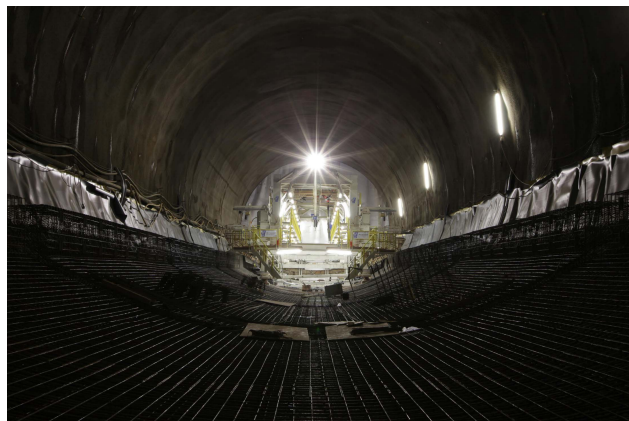
The road project Coburg East is part of the road traffic
master plan Deutsche Einheit Nr. 8.1, new highway
Nürnberg-Erfurt-Leipzig/Halle-Berlin.

The contract embraces a 5.8 km long stretch including
the tunnel Feuerfelsen 1'003 m, the tunnel Rennberg
1'032 m, five bridges, the roadwork and earthwork of
2.2 mill. cubic meter.

Execution and schedule :

The tunnels are realized with a two shell in-lining, being
the outer shell of shotcrete and the inner one of con-
crete. The tunnel section has 160 m² and both tunnels
are excavated simultaneously. The excavation is real-
ized applying the conventional NATM. Works started in
August 2010 with the excavation of the trench of the
Southern portal of the tunnel Feuerfelsen. The tunnel-
ing work started in January 2011. For the completion
of both tunnels a schedule of 21 months was set.

Length:	1 x 1'003 m 1 x 1'032 m
Excavation volume:	320'000 m ³
Shotcrete/concrete volume:	ca. 170'000 m ³
Arming steel inner shell:	ca. 8'000 t
Construction method:	NATM (D&B with heading, bench and bottom)
Pull length:	max. 2,2 m
Diameter of the tube:	12 m
Minimal covering:	10 m
Maximal covering:	25 m
Escape gallery	L = 150 m and escape shaft
Planned speed-limit:	300 km/h



21.01.2015

GEOLOGY

Both tunnels Feuerfelsen and Rennberg are driven on
their whole length through formations of coloured sand-
stone. The tunnels have a covering of 10 to 25 meters.
Due to ground water the construction is shielded with a
KDB insulation.



Marti AS

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