

Tunnel Königshainer Berge (D) Rehabilitation

Country

Germany

Type

Motorway, Rehabilitation

Client

Autobahn GmbH

Main Contractor

Strabag

Execution of the work

Renesco GmbH

Designer
Construction Period

Müller+Hereth, Dr. Spang, Socotec

2024-2025

Project Description

Built in 1999, the 3,281-metre-long two-lane structure is one of the four longest motorway tunnels in Germany and runs through the picturesque Königshainer Mountains. It connects the Nieder Seifersdorf and Kodersdorf junctions on the A4 motorway near Görlitz.

In 2023, the retrofitting of the operational equipment began. The reasons for this are the age and condition of the systems, as well as increased requirements due to relevant guidelines. The goal is to guarantee the highest level of safety and to bring the technology up to current standards.

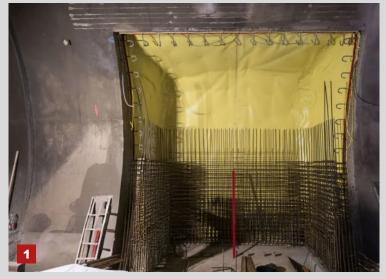
This will involve several construction phases, beginning with the upgrade of the two-way traffic flow. The two tunnel tubes will be worked on alternately: first the north tube in 2024, followed by the south tube the following year. During construction, all traffic will be routed through the currently unoccupied tube.

In the course of this, according to the current regulations, 20 enclosed emergency call cabins are to be installed in each of the two tunnel tubes. For this purpose, the existing tunnel shell must be opened on an area of about $4 \times 3m$, and a niche about 1.5m deep must be excavated in the surrounding rock.

Scope of Service

Supply & install of the sheet waterproofing membrane system for 40 emergency bays/niches in two construction/rehabilitation phases in the year 2024 and 2025.

- Protection geotextile, 500g/sqm, PP
- Drainage layer, 20mm, HDPE
- PVC-P, 2mm with signal layer acc. to ZTV-ING
- Termination via adhesive tape and epoxy resin
- Remedial Grout Pipe Assembly
- Remedial injection system
- Injection hoses
- Injection of cementitious grout
- Injection of Polyurethane (PUR) resin







- 1. Sealing works of a niche/bay
- 2. Surface cleaning/ substrate preparation by Hydrojet AG
- 3. Main tunnel tube