



handraiLIT and Niche Lighting – Rosshäusern Tunnel Bern, Switzerland

Location: Switzerland
Client: BLS Netz AG
Construction period: 07/2017 - 03/2018
Services: The Rosshäusern Tunnel was equipped with 4.2 km of the all-in-one "handraiLIT" system, incorporating nearly 100,000 LEDs (1,900 LED strips) into a V4A stainless steel handrail, along with seven additional niche luminaires.

Executing companies: Rhomberg Sersa Rail AG
Contract value: CHF 400,000



The Rosshäusern Tunnel was equipped with 4.2 km of the all-in-one "handraiLIT" system, incorporating nearly 100,000 LEDs (1,900 LED strips) into a V4A stainless steel handrail, along with seven additional niche luminaires. The LED handrail provides emergency and orientation lighting in the event of an incident. During subsequent construction phases after commissioning, it was also used as supplementary site lighting.

The handrail system is powered by 48 control cabinets with 24 VDC and is designed to exceed the minimum required lighting intensity multiple times over—ensuring sufficient illumination even for minor maintenance tasks. The safety-relevant lighting level remains

compliant even in the unlikely event of a power unit failure, thanks to the redundant LED layout.

To ensure maximum reliability, any fault—such as a power unit failure—triggers an automatic error message to the rail operator, enabling immediate troubleshooting and minimizing maintenance costs.

If maintenance work is required in tunnel niches or on integrated systems, the additional niche lighting provides optimal illumination. This lighting is connected directly to the LED handrail system, eliminating the need for separate wiring.

Contact:

Philip Graf
philip.graf@rsrg.com
rhombberg-sersa.com



Read more: