Slope Protection

ZAGREB-RIJEKA RAILWAY LINE - TUNNEL MEJA, HR
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Slope Protection

Project
Zagreb-Rijeka Railway Line - Tunnel Meja

Project number
150520-HR

Place
Meja

Country/Region
Croatia

Year of installation
2017

Customer
Croatian Railway

Engineering
Elektroprojekt d.d. Zagreb (Krešo Ivandić and Vanja Kovačević)

Contractor
Swietelsky d.o.o. Zagreb

Other participating companies
Octopus-Rijeka d.o.o. Rijeka

Initial situation
The revision works at the railway line no. M202 Zagreb-Rijeka were done together with the installation of a slope protection system. In the past, regularly occurring rock falls limited the speed of the trains.

Description
When designer Vanja Kovačević received data from the geologist, he chose TECCO® G65/4 for this slope protection. TECCO® G65/4 was combined with 4 meters long self-drilling nails (32/21 mm) and 6 to 14 meters long nails (51/34.3 mm).

This is the first TECCO® G65/4 installation in Croatia.

Protected object
Railway

Systems
TECCO® G65/4

Corrosion protection
GEOBRUGG SUPERCOATING®

Geology
Limestones covered by scree

Stabilized area
900 m²

Maximum slope height
23 m

Slope inclination
75 ° - 80 °

Exposition
North
Installation of the high tensile TECCO® G65/4 mesh on the slope - visible nail pattern and TECCO® SYSTEM³ spike plates.

Overview of the construction site - on the right the old solution with visible gabion mesh which turned out to be not sufficient for the conditions. TECCO® SYSTEM³ was designed to be placed over the old layer of mesh.

Drilling works were executed through the old layer of gabion mesh being already strongly fatigued.
TECCO® SYSTEM³ protecting slope - visible the pre-tensioning on some nails which allows following the morphology very tight.

TECCO® SYSTEM³ protecting slope along the railway line directly next to the Meja Tunnel.
For questions please contact our Gebrugg specialist at your side

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