



Vibration Protection for Gaziray

Gaziantep (TR)

Gaziray is one of the biggest railway construction projects in Southeast Turkey. Once completed, the line will carry over 35 million passengers per year. Sound and vibration protection is extremely important for this project.

Special measures were required in some sections of the tunnels to protect neighbouring residents from vibrations and noise. For this reason, sections with mass-spring systems were installed.

The installation of the Sylomer® mass-spring system was carried out by the construction company Kalyon ASL TİÇ. Two different types of the mass-spring system with different thickness were installed.

To ensure the required vibration mitigation in the slab track superstructure, 20.500 m² of Sylomer® mass-spring system was installed. In addition, Under Sleeper Pads were installed in the transition zones from ballasted track to slab track.

Advantages

- Maintenance-free
- Effective protection against vibrations and structure-borne noise
- Better living and working conditions for residents
- A defined elasticity in the slab track superstructure
- Simple installation
- High efficiency & long term stability
- Easy and cost-effective installation

An unprecedented project

Gaziray is the name of a new west-east rail link being constructed across Gaziantep. The entire project comprises 4 lines with a total track length of 25.5 kilometers and 15 stations. Four stations and 5 track kilometers of the project were built underground. With an estimated cost of around 2 billion euros, the new route will go into service in 2023.

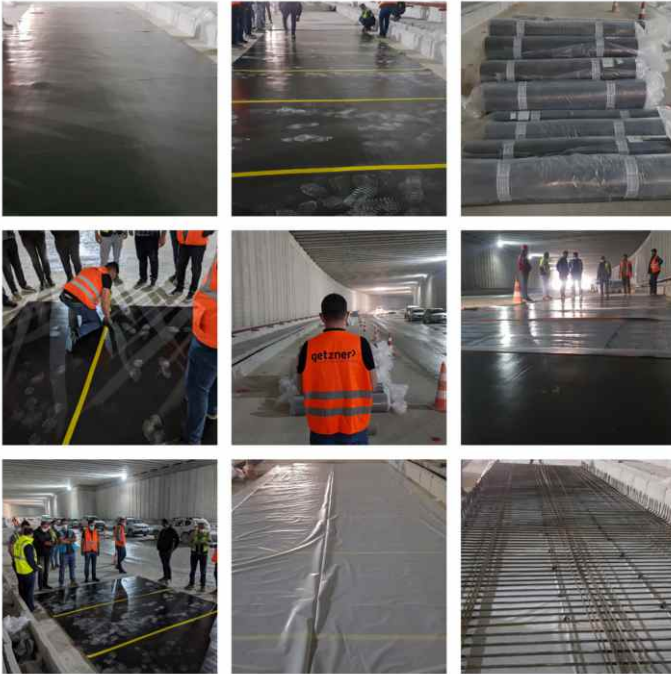


Fig. 1: Supervision from Getzner on site
Source: Getzner Werkstoffe



Fig. 3: Slab Track on Getzner high-tech PUR
Source: Getzner Werkstoffe



Fig 2: Mass-spring system
Source: Getzner Werkstoffe



Fig. 4: Slab Track with Sylomer® mass-spring system
Source: Getzner Werkstoffe

Fact box:

Scope of the order: 20.500 m² Sylomer® mass-spring system
 Client: Kalyon Gaziray ASL Adi Ortaklığı
 Operator: Turkish State Railway TCDD
 Getzner Project Manager: Ismail Bayrak
 Completion: 2021