

Geotechnical track monitoring

Main station Ingolstadt, Germany (2018)



Amberg TrackControl monitors micro tunneling

Object

Under the track field in the Ingolstadt train station, a sewer tunnel is being built for the Stadtwerke Ingolstadt. To ensure safe operation of the railway system, the tracks are permanently monitored with Amberg TrackControl.

Project Description

The pipe jacking tunnel with a diameter of 1.40 m passes under 21 tracks of the freight station as well as 8 operation tracks in the train station in a depth of only 2 meters. Amberg TrackControl delivers results on superelevation, twist and vertical versine every minute in a high reliability and alerts the responsible authorities in the event of exceeded alarm values. The installation work was carried out on the freight tracks during the day and on the operation tracks at night during closing periods.

Instruments

Superelevation	Amberg TrackControl, 111 Sensors, interval 4.80 m
Longitudinal slope	Amberg TrackControl, 439 Sensors, interval 1.20 m
Central unit and Communication	Amberg GeoMonitoring-System

Evaluation

- Temperature adjustment directly in the sensors
- Database and processing with Amberg GEOvis
- Graphic display and alarming with Amberg GEOvis

Customer value

- Ensuring operational safety
- No dependency on weather conditions – no influence on the results due to snow, fog and rain
- One-minute measuring interval – 24 hours

Client

Stadtwerke Ingolstadt

Partner company

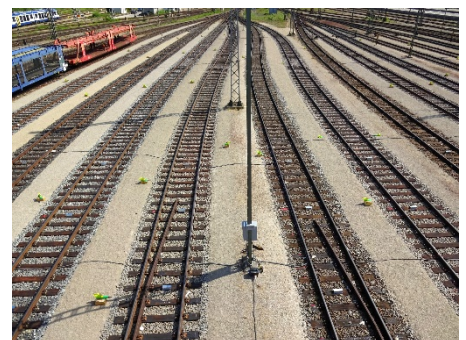
IngenieurTeam GEO, Karlsruhe

Contact

Amberg Technologies AG
Trockenloostrasse 21
CH-8105 Regensdorf
Telefon +41 44 870 92 22
geoengineering@amberg.ch
www.ambergtechnologies.com



Start shaft of the micro tunneling



Track field of the freight station