



FOR SEAMLESS MONITORING OF YOUR RAILWAY TRACKS

A new level of safety

- Data acquisition takes place reliably once every minute
- The system works independently of weather-related restrictions such as rain, snow or fog.
- Even standing or passing trains cause no problems for the geotechnical sensors.
- Highest safety for railway operation due to high measurement accuracy, reliability and application of advanced methods of analysis.
- Low personnel and maintenance costs thanks to simple and compact design.
- With the GEOvis 4.0 platform, real-time measurement data can be retrieved, visualised and analysed at any time and from anywhere.
- The integrated alarm function informs you in real time by email or SMS.

A modular system tailored to your project

- Scalable, modular system, implementing the swiss guideline (SBB I-50009 with 4.8 m cross section interval) and several european guidlines with 3.0 m cross section interval).
- Increased efficiency thanks to innovative magnetic sensor mounting solution.
- Quick and easy installation, extension and deinstallation without obstructing railway operations.
- Measurement of absolute and/or relative track deformations using georeferencing of sensors.

The essential information in real time

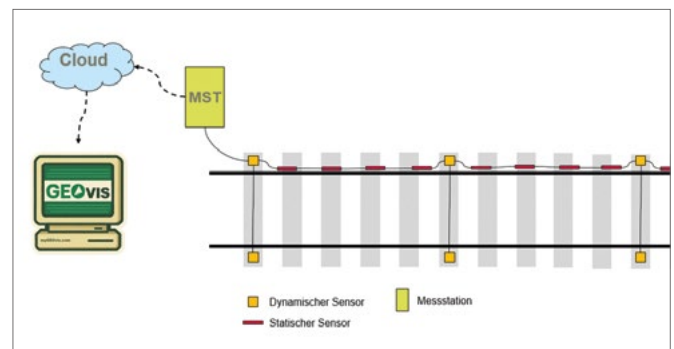
- TrackControl Pro reliably measures track distortions, cant, versine vertical and settlement.

The system is suitable for the following areas of application:

- For construction sites close to railway tracks.
- For underpassing construction measures (pipe jacking, tunnels, underpasses, etc.).
- When using auxiliary bridges.

An internationally proven system

- Amberg TrackControl Pro is successfully used in projects in Switzerland and other European countries.
- With our international partner network, we guarantee a reliable customer support.



Layout Amberg TrackControl Pro



Picture above: Twist [‰]

Picture below: Vertical versine [mm]

TECHNICAL DATA & VISUAL EXAMPLES

Data acquisition

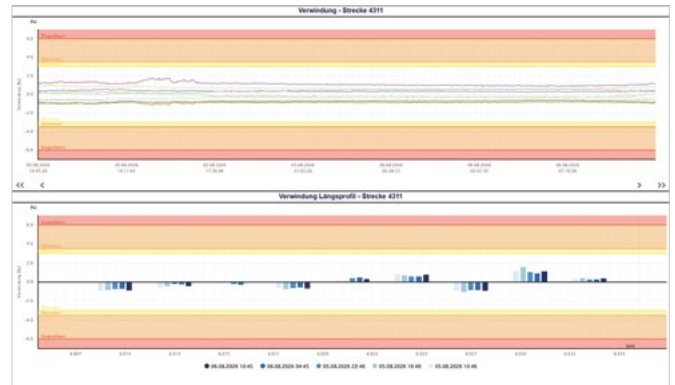
	Accuracy
Superelevations	+/- 1.0 mm
Twist	+/- 0.2 ‰
Vertical versine	+/- 1.0 mm
Vertical settlement	+/- 3.5 mm
Temperature limitations	-20° C to +80° C
Measurement frequency	1x per minute (For special applications, shorter measurement intervals are possible)

Data visualization

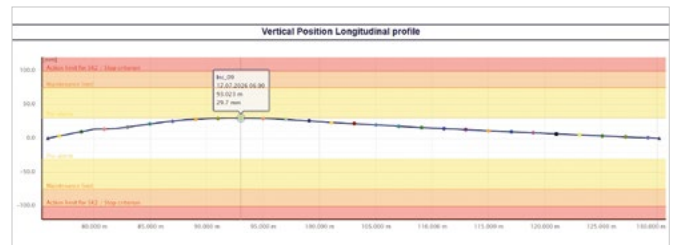
- Overview maps
- Sensor status profiles
- Track deformation curves
(twist, vertical versine, settlement deformations)
- Temperature-time curves

References

Amberg TrackControl Pro is a proven track monitoring system, which is successfully used in projects of national and private railway companies in Switzerland, Germany and France. The reliable alarming during past failures proves the high functionality of the system. With TrackControl, you always have your track movements under control and increase the safety of your railway infrastructure.



Example of a twist profile diagram



Example of a longitudinal profile diagram



Application example: Real-time monitoring during press pipe driving below operating tracks.



Efficient installation with the latest generation of sensors! Amberg TrackControl Pro with flexible plug connections and innovative magnet fastening.