

Amberg Control

Profit from profile measurement



Amberg Control creates meaningful reports with ease



Today, the recording of profile measurement data is integrated directly into the process of tunnel construction as standard procedure for all tunneling projects. The main requirements for profile measurement include easy operation of the instruments by the surveyor or the tunnel team and simple, relevant analysis functions. After the profile data has been recorded in the tunnel, they need to be managed and refined. Amberg Control transforms your surveying data into simple, meaningful and relevant reports – regardless of the instrument used for data collection.

Amberg Control – Profit from profile measurement

It has never been easier to transform tunnel measurements into reports. The Amberg Control office software is able to transform the measurements from total stations into reports tailored to meet your needs. A seamless workflow is guaranteed by using Amberg Navigator or Amberg Applications for making the measurements. This ensures trouble-free data transfer of measurements from the tunnel into the office, but also vice versa (e.g. for layer thickness analysis).



Tablet with a self-explanatory user interface

Tunnel product portfolio

Amberg Control complements the Amberg Tunnel product portfolio ideally and guarantees trouble-free exchange of data with existing Amberg products.

Why Amberg Control?

- The software package is tailored to your needs in terms of profile analysis
- Quick results for surveying and frequently repeated tasks
- Full 3D calculations also support complex projects such as power plant and power station construction
- Flexible report generation for project-specific requirements

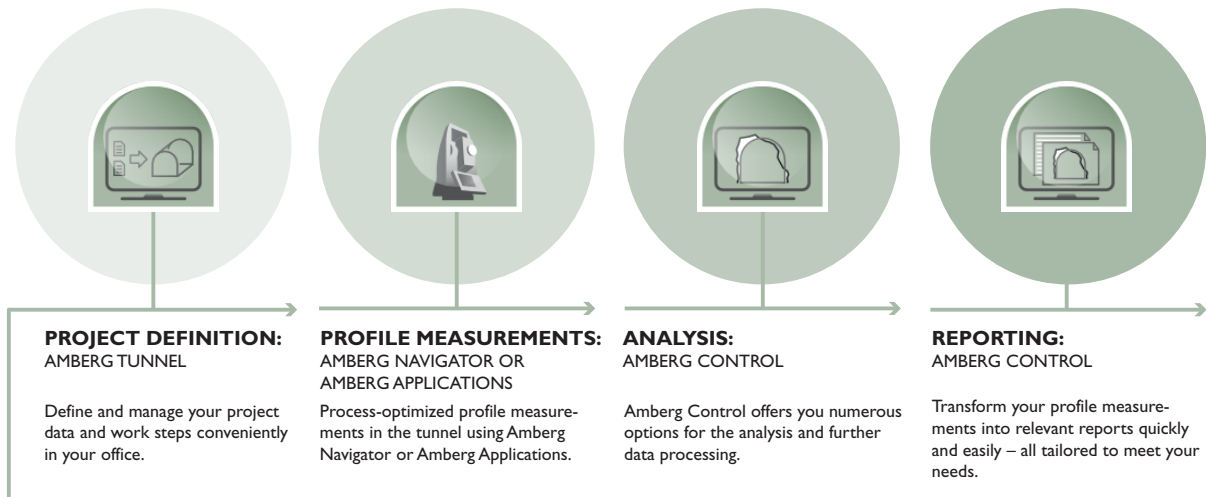
Operative benefits for the client

- Fully integrated work procedure and data flow with Amberg Navigator and Amberg Applications
- Independent from the instrument thanks to a flexible interface and the support of many standard import formats
- Use of the design data for numerous other Amberg applications
- Generation of reports, such as with TMS ProFit, for a software changeover during a currently running project

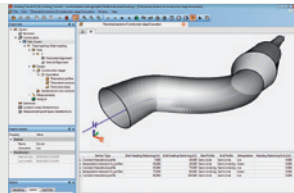
Economic benefits for the client

- The use of Amberg Control reduces the number of software packages involved in the work procedure, which brings cost savings for licenses and a reduction in the amount of training that is required
- The simplified data flow significantly reduces the effort and processing time required between the measurement and the delivery to the client

Amberg Control – For effortless analysis

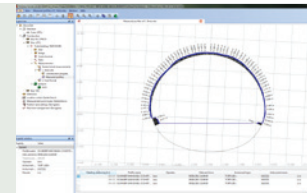


Project definition: Amberg Tunnel



- Fast and easy definition of complex tunnel geometries with direct graphical feedback
- Flexible data transfer from Amberg TMS and third-party suppliers
- Export to Amberg Applications 6.0 for fully integrated 3D analysis

Analysis: Amberg Control



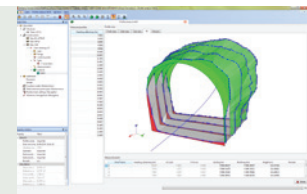
- Data import of absolute coordinates is independent of the manufacturer thanks to a flexible ASCII import feature
- Analysis of profile measurement data for as-built comparisons (e.g. recording the actual state)
- Analysis of profile measurement data for meas. vs. meas. comparisons (e.g. layer thickness measurements)

Profile measurements: Amberg Navigator or Amberg Applications



- Measuring with Amberg Applications 6.0 as an onboard total station solution requires no additional hardware
- Measurement with Amberg Navigator on a tablet with intuitive operation
- Every task can be called up by the tunneling crew at the tap of a finger

Reporting: Amberg Control



- Visualization of the results in 3D for fast interpretation
- Flexible report generation based on project-specific requirements
- Comprehensive graphical and numerical analysis options

Analysis has never been so easy!



- Visualization of the results in 3D for fast interpretation



- Flexible report generation based on project-specific requirements



- Independent of the measurement instrument thanks to a flexible interface and the support of many import/export standard formats

- Fully integrated work procedure and data flow with Amberg Navigator and Amberg Applications



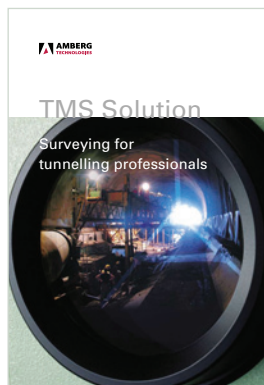
- The software package is tailored to your needs in terms of profile analysis for tunnel construction



- Transforms profile measurements into relevant reports, quickly and easily

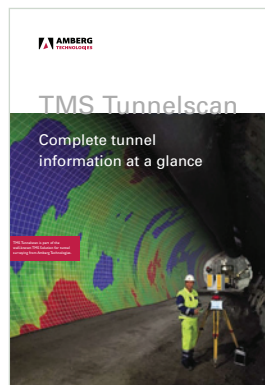


Amberg Tunnel Solutions



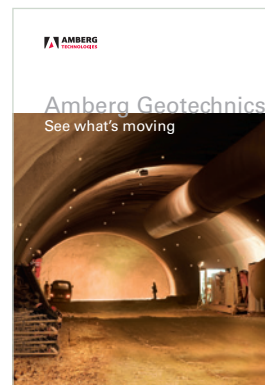
TMS Solution

- Motorised laser for automatic setting out of excavation profile, blast pattern, rock bolting and pipe umbrella
- Automatic positioning of steel arches
- Automatic 3D profile verification in real time
- Profile documentation including calculation of surface area and volume



TMS Tunnelscan

- Powerful acquisition and analysis software for laser scanner measurements in underground construction
- Excellent surveying performance using APM™ (Amberg Positioning Method)
- External dimension determination for exact project invoicing



Amberg Geotechnics

- Comprehensive software solution for observation of deformations
- Clear and relevant geotechnical analyses
- Import of surveying data independent of manufacturer
- Recognize risks and hazard potentials quickly, clearly and comprehensively



Amberg Navigator

- Increased tunneling performance through minimization of idle time.
- Every task can be called up by the tunneling crew at the tap of a finger
- A tablet with a modern, intuitive handling concept
- One tablet for the control and verification of an entire tunnel project

Amberg Technologies has developed specialized system solutions for the infrastructure industry for more than 30 years. The unique combination of systems development experience and industry know-how results in measurement systems characterized by precision instruments, practical system design and powerful software. Last but not least, Amberg Technologies' products have gained the trust and recognition of tunneling and railway industry experts thanks to a worldwide service and support network.