



CLEARANCE ANALYSIS WITH IMS 5000

REALISTIC 3D SIMULATION OF A TRAIN RUN

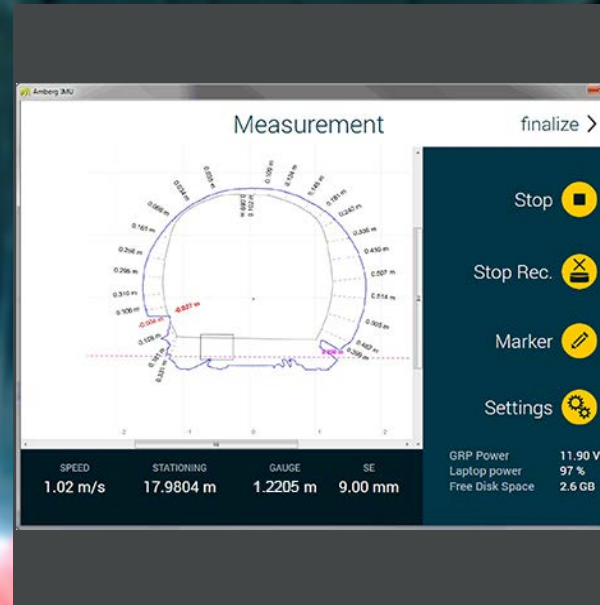
Glasgow Subway, Scotland

As of 2020 Glasgow Subway will operate with driverless trains. The companies Stadler and Ansaldo STS have been awarded the contract to build 17 new trains. After a transition period these new trains will allow a fully automated operation.

Amberg Technologies has been assigned to precisely determine the clearance of the existing network. This allows an optimised construction of the trains and will increase the capacity of the new system.

Using the new measurement system Amberg IMS 5000 it was possible to measure the complete railway network within just four short night shifts.

The precisely determined track geometry and 3D point clouds have been used for clearance analysis of the complete network.

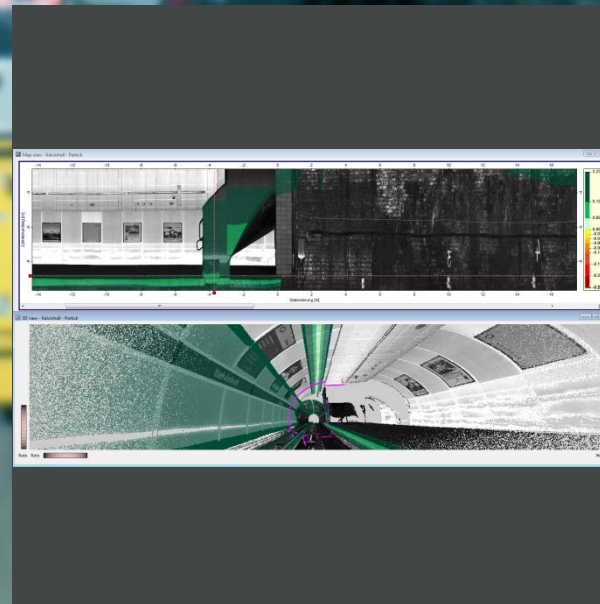


Object

The complete railway network of the Glasgow Subway

Our Service

- Data acquisition during non-required time
- Clearance analysis in respect of the determined track geometry and models of the planned rolling stock
- Documentation of the clearance violations



Optimisation of usage of existing infrastructure

Location

Glasgow, Scotland

General Information

The Glasgow Subway has been opened in 1896 and is one of the oldest subways in the world. It operates completely underground and consists of two parallel tunnels, which form a loop, and 15 stations. The tunnels with a total length of 21 km have a diameter of 3.35 m and are located closely below the surface.

Customer's Benefits

- High project security due to comprehensive and realistic 3D simulation of the train runs
- Cost savings because of the efficient data acquisition with the Amberg IMS 5000 system during non-required time without interference of the regular operation
- Maximised capacity of the trains and optimisation of the production thanks to comprehensive information and analysis

Client

Stadler Altenrhein AG



Amberg Technologies Ltd.
Trockenlootstrasse 21
CH-8105 Regensdorf

info@amberg.ch, www.amberg.ch/at