
# AMBERG'S PRECISE RAILWAY SURVEYING SYSTEMS FOR MORE SPEED AND SAFETY

***Amberg Technologie's efficient railway surveying systems are used worldwide and are known for its high precision. The Swiss company has just launched a new product with GNSS option.***

AMBERG TECHNOLOGIES

Whether it's the longest railway tunnel – Gotthard Base Tunnel in Switzerland –, a subway in London or a high-speed rail route in Germany – Amberg Technologies is the preferred system provider in projects of such magnitude. Also in India, the Swiss company is very active.

**In India**, Amberg Technologies is contributing with its products and expertise to the construction of the Western Dedicated Freight Corridor (WDFC), which will connect New Delhi to JNPT port in Mumbai, the largest container port of India. Amberg Technologies, which is the global leader in user-friendly and precise surveying solutions, is providing its GRP 1000 systems to L & T for executing the highly precise track surveying to the required tolerance parameters.

Amberg Technologies' cutting-edge systems are also involved in different metro projects in India. The GRP 3000 clearance system has been used by Alstom Transport India Ltd for its metro projects in Bangalore, Kochi and Lucknow. Amberg Group was also engaged in design & construction of underground sections of India's first metro in Kolkata and in sections of Twin-Tube tunnels of Delhi metro.

### Amberg's technology supports India's rail safety and growth

The Swiss company's latest technologies for track geometry and clearance measurement allow trains to speed up and still be safe, thus allowing a higher passenger throughput. The mobile track surveying solutions automatically measure track geometry and acquire the complete track environment with millimetre accuracy for ballast track, slab track high-speed lines and metro systems.
The Indian government have declared railway as the backbone of their fast growing economy. The government concept "Make in India" is appealing to Amberg Technologies as it provides both parties with mutual benefits leading to a sustainable development.





### Inertial measurement combined with GNSS – a novelty

Amberg's new IMS-family – operating with the highly sophisticated Inertial Measurement Unit – H surveying with high accuracy at a speed of up to 4 km per hour. Now the company has just launched its IMS GNSS option which allows track surveying without any given track design and control point data. The new IMS GNSS guarantees direct geo-referencing and thus makes the Amberg IMS systems fit for BIM (Building Information Modeling). Many customers trust in this new surveying technology, for example Network Rail in the UK as well as Deutsche Bahn in Germany. They have currently more than 30 Amberg IMS System in operation.

### Amberg Cloud Solution – one step further towards digitalization

All in all, the GNSS option enhances the Amberg IMS systems and is a further evolutionary step to even more possibilities and flexibility for railway surveyors. To complete its offer, Amberg has developed a cloud solution, which integrates 3D track geometry and point cloud data on a web-based platform accessible with any standard web browser. This allows the processing of data anywhere – on site with a mobile device or in the office with a laptop. The virtual inspection has become reality.


*Track survey in India with Amberg IMS-system: production speed of 4 kmh.*

### Swiss quality guaranteed in India

Amberg Technologies offers its products and services through a network of more than 30 sales partners in over 40 countries thus guaranteeing high Swiss quality. In India, its representative is Azure Biz in New Delhi with Mr. Sandeep Joshi assuring high-quality service. Our representative in India offers training, maintenance, first level support as well as adjustment and overhauling of all systems.

*As Indian Railways embarks on its modernisation programme, Amberg Technologies, Switzerland, is bringing its latest technology and system solutions for complete rail infrastructure analysis. The company is partnering the Indian Railways in its ventures and helps speeding up its development in ensuring safe tracks.*