



Project

- Sleeper replacement B 70 Berlin-Hamburg
- Around 81,200 m of sleepers replaced, of which around 64,800 m were single sleepers
- Total order volume € 12 million (€ 100,000 of this for surveying services)


Special feature

Parallel use of two Amberg Technologies' GRP 3000 systems

Task

- Tamping surveying of around 50,000 m of line in front of tamping machine 09-32-3X
- At speeds of 1,000 m/h

Contractor

 DB Bahnbau Gruppe GmbH
www.bahnbaugruppe.com

Duration

March to June 2009

Up to 70 percent lower costs Efficient Tamping Surveying

DB Bahnbau Gruppe replaced the sleepers of the B 70 Berlin-Hamburg line. Using mechanised renewal methods the experts replaced around 81,200 m of sleepers. Around 64,800 m of this were single sleepers. At times, up to three track renewal trains were in use at once.

DB Bahnbau Gruppe GmbH was responsible for the implementation of the entire refurbishment project, estimated at € 12 million. Amberg Technologies was the experienced tamping surveying technology partner.

The team were able to successfully carry out a tamping survey on around 50 km of track with the aid of two powerful GRP 3000 tamping surveying systems in conjunction with GRP-TSC and the Amberg Rail Software – with a lead of only one hour on the tamping machine. The tamping surveying solution achieved high-quality results at a speed of 1,000 m/h. Moreover, the mobile systems allowed short track possessions – a considerable cost advantage.

»We not only achieved the targets we staked out, but also contributed seamless documentation of all measurements made on site. Follow-up surveying for the purpose of quality control documentation using GRP was also uniform, clear and complete«, Jürgen Borchert, from DB Bahnbau Gruppe, summarises his experience. When replacing single sleepers, in particular, high measurement density and speed are crucial.



»Using the GRP system means we are deploying the most modern and innovative technology available. We are in a position to complete any surveying task in the field of track installation«.

Jürgen Borchert
Machine pool
DB Bahnbaugruppe GmbH

Product benefits for DB Bahnbaugruppe GmbH

- Tamping surveying system approved for track operations by DB
- Tamping surveying at 1,000 m/h including data evaluation
- Can be operated by trained track operatives instead of engineers
- Good ergonomics and support
- Well produced, robust hardware
- Use of existing standard tachymeter
- One permanent contact person

Amberg Technologies tamping surveying system used, consisting of:

- GRP 3000 track and control point surveying system
- GRP-TSC tachymeter surveying trolley
- Amberg Rail Software - Tamping Plus

Amberg Technologies

Heiko Barthold
Amberg Technologies AG
Trodenloostrasse 21
8105 Regensdorf-Watt
Switzerland
hbarthold@amberg.ch

Up to 70 percent lower costs Efficient Tamping Surveying

DB Bahnbaugruppe, as a wholly-owned subsidiary of Deutsche Bahn AG (DB), is Europe's largest provider of track maintenance services and general contractor for new tracks and track renewal. »Our job is to guarantee comprehensive surveying to DB Guideline 824.0520 in front of the tamping machine. This is the only way to achieve long life coupled with journey comfort on railway routes. By using Amberg products we are in a position to meet the highest quality demands in very competitive times; that is, with only short track possessions«, Jürgen Borchert underlines the importance of Amberg solutions to DB Bahnbaugruppe. Thanks to improved performance and better data quality the costs for tamping surveying can be reduced by at least 40 and up to 70 per cent.

The fruits of productive cooperation

»Amberg has succeeded in creating an innovative surveying system, which more than meets the needs of today's market. Compared to other solutions available on the market Amberg's evaluation software is easier to use, more ergonomic and more robust«, Jürgen Borchert outlines the success factors. Heiko Barthold, Product Manager at Amberg, is the personal contact for DB Bahnbaugruppe: »Another challenge lies in the ability to link a surveyor's thought and working processes to the practical aptitudes of a track operative.«



Sleeper replacement B 70 Berlin-Hamburg

On the B 70 Berlin-Hamburg route the experts replaced around 81,200 m of sleepers using mechanised renewal methods. Around 64,800 m of this were single sleepers. At times, up to three track renewal trains were in use at once.

»Deploying Amberg products puts us in a position to meet the highest quality demands in very competitive times.«

»The systems from Amberg Technologies support us in adhering to all DB guidelines by monitoring conformity with those guidelines when specifying rise and alignment values«, says Jürgen Borchert.

Support before, during and after the project

»Support and service before, during and after surveying are especially important to us – they all fit with Amberg. The team was always there for support if we had questions or unexpected problems and they reacted quickly. My permanent contact always understands our special needs. This close cooperation was a major factor in the smooth surveying process«, summarises Jürgen Borchert.



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