BLUMENBECKER

WE DELIVER SOLUTIONS

AUTOMATION TECHNOLOGY ENGINEERING INDUSTRIAL TRADE INDUSTRIAL SERVICE **TECHNICS**

REFERENCE

Rolling Stock Maintenance | Elevated tracks

New measurement track for the ICE engineering workshops in Munich

CLIENT:

DB Fernverkehr AG
Landsberger Str. 158,
ICE-Bw
80687 München

PROJECT COMPLETED BY:

Blumenbecker Technik GmbH
Bahnhofstraße 11 b
06246 Bad Lauchstadt OT Schafstädt
T: +49 34636 714-0

COMMISSION:

200 metre-long measurement track for calibration according DIN 27202-10 for ICE4

Execution: End of 2018

SPECIAL SOLUTION FOR ROLLING STOCK MAINTENANCE

Blumenbecker has many years of experience in the planning and construction of workshop equipment for domestic and foreign railway companies. As a reliable partner, we maintain and inspect roof working platforms, elevated track systems, rolling access steps, lifting gear and crane equipment among other things. A special solution was required for the ICE plant in Munich. So the in-house development - the jumping jack - was used.

DB FERNVERKEHR AG

DB Fernverkehr AG is a subsidiary of Deutsche Bahn. It is a mobility provider of long-distance transport services with a focus on product and service quality to ensure comfortable and reliable operations for passengers. DB Fernverkehr AG provides national and international long-distance services on daily scheduled services. To this end, it operates a dense network of over 800 daily long-distance rail links in Germany.

THE COMMISSION

When it is time for an inspection, the entire ICE train is driven into the 450 metre-long workshop where it is serviced on three levels simultaneously: beneath the train, at boarding height and in the roof zone. Adjustment work on the railcar bodies is now carried out on the new 200 metre-long measurement track that was installed in November 2018 and which is also suitable for the new ICE4 models. This meant rebuilding the old test track. The aim was to create an absolutely flat railtrack with a height tolerance of less than 0.5 millimetres. The precise adjustment work needed between the railcar body and the bogie can only be undertaken when you have an absolutely level track.

»We are very happy about the fast and smooth Improvement of the measurement track, as each unused track costs us a lot of money.«

Andreas Sander, Project Manager DB Fernverkehr AG

PROJECT SCOPE

Upgrade and calibration in just four weeks.
There are eight workshops in Germany to ensure that the 230 ICEs of Deutsche Bahn are inspected in a correspondingly close network. In the ICE workshop in Munich, the deflection of the tracks had to be reduced to the minimum required for measuring tracks according to DIN 27202-10. When surveying the existing tracks, it was found that twice as many props were required as before.

However, the resulting reduction in the prop spacing interfered with the existing ventilation technology for the 200 metre-long working pit beneath the track. A particular challenge for which Blumenbecker Technik had a special solution ready. For another Deutsche Bahn project, Blumenbecker Technik had already developed props that could effectively absorb the resonance generated by the trains while at the same time directing used air out of the pit. The supports, which are similar in appearance to a child's plaything, were soon dubbed "jumping jacks."

In October 2018, 102 new props, 71 of which were jumping jacks, were assembled on site in Munich, and the old tracks were relaid and configured. Subsequently, the calibration was carried out in cooperation with the calibration centre of Deutsche Bahn. After a rebuild time of just four weeks the first high-speed train could be run onto the new test track for an inspection. The test track was finally put into servicen one day earlier than planned.

THE ADVANTAGES

With this project, Blumenbecker Technik was able to demonstrate its many years of experience and expertise in railway technology. The possibility of converting existing tracks instead of buying new ones was a major cost saving for Deutsche Bahn. The short conversion time of just four weeks also contributed to this. Particularly noteworthy is that the new „Jumping Jack" prop development can also be used for other railway projects.

200 m
measurement track

102
props

7.500
screws

WE LOOK FORWARD TO
HEARING FROM YOU.

Blumenbecker Technik GmbH, Bahnhofstraße 11 b, 06246 Bad Lauchstadt
T: +49 34636 714-0, bt@blumenbecker.com, www.bt.blumenbecker.com