

RAILWAY TECHNOLOGY

Mobile Ultrasonic-Underfloor Testing Device



The in the track area mobile ultrasonic testing device enables to test automatically all wheelsets under mounted state on the stationary train. In accordance to the general state testing requirements will be the results displayed or stored. From the testing of individual areas, such as outer running surface or rim, longitudinal, transverse and volume error can be detected and the forthcoming maintenance arrangements can be defined.



The device makes it possible to test various wheelset types in the depot. The entire data acquisition and processing takes place on the device. The online results are displayed on the associated computer outside the system. The data is transmitted via W-LAN, omitting the need for a complex cable connection.



Plant process

The plant process is based on the normative requirements (ISO, EN, IEC, UIC) and is additionally adapted to the contents of the maintenance guidelines of DB AG.

Testing sensitivity

Surface defects: depth > 1-2 mm
length > 10 mm

Volume Error: KSR 2 mm, 2 mm depth

Test frequency: 2 – 6 MHz

Probes:

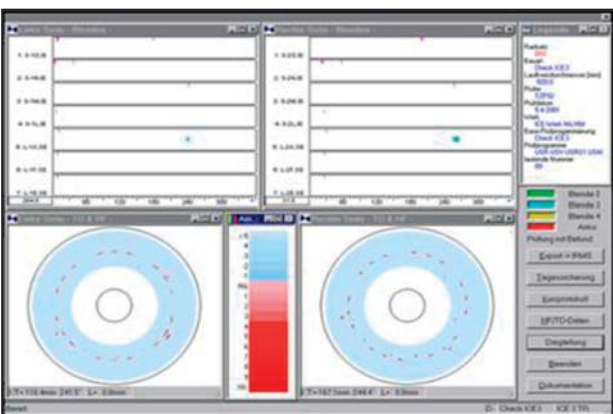
Send receive probe 4 MHz

Angle-probes 70 ° 4 MHz or 2 MHz



Testing Results

The test results are displayed graphically or in tabular form on a display. Deviations are highlighted or marked in color. Selection menus can be used to switch between the A, B and C data. The determined data are stored and can be exported via various interfaces.



Technical Data

Max. axle load 250 kN

Testing time 15 min

Operation with 2 workers

Wheel diameter: 600-1200 mm

Track gauge: customary

Wheel profile: diverse

Status as of 09/2022