

W.S. Werkstoff Service GmbH – Our Competence

Accredited testing laboratory (EN ISO/IEC 17025)

- Non-destructive testing
- Mechanical-technological testing
- Metallography and spectrometry

Accredited inspection body (EN ISO/IEC 17020)

- Expert analyses
- Performance of failures analyses
- Creation of legally watertight expert reports

Certified training centre (DIN EN ISO 9001, DIN EN ISO 9712)

- Approved training centre of the Germany society of NDT (DGZfP)
- Seminars for materials testing and materials engineering

NDT-Competence body for railway (DIN 27201-7)

- Creation and approval of NDT inspection instructions
- Development and validation of NDT testing systems

Certification body for railway (acc. to ISO/IEC 17065)

- Supervision of NDT activity of railway maintenance workshops
- NDT services throughout Germany and Europe



WS3 – Next generation wheel set scanning

Semi-automated inspection system for freight wagon wheel sets based on Phased Array Ultrasonic testing

- Shortening of entire inspection process
- Increase of testing speed
- Improvement of testing reproducibility and precision
- Complete recording of the testing data
- Computer-based reporting and documentation



WS3 – Wheel Set Scan System

Acceleration of testing processes

Save up to 50% of testing time compared to conventional testing methods, e.g. by reducing the number of req. testing steps.

Simple, future-proof concept

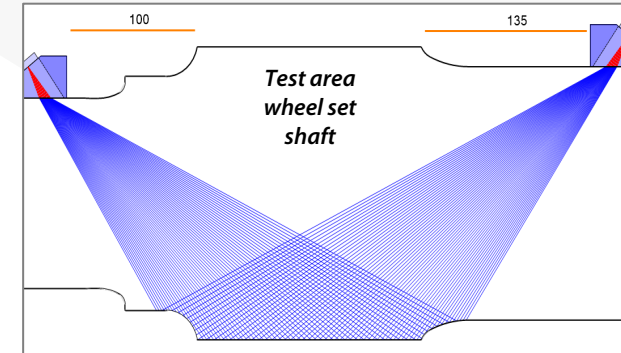
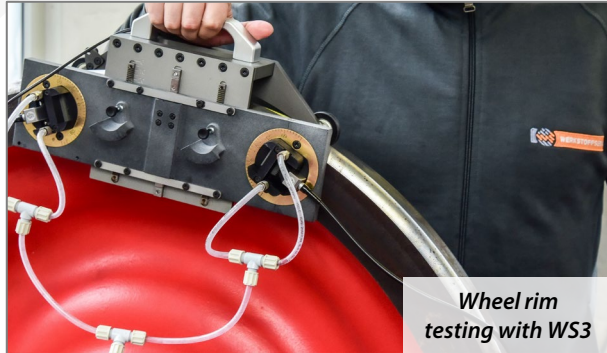
No proprietary „custom solution“, but standard equipment – which can be used for other and future applications as well.

Improved testing parameters ...

High reproducibility via flowing water coupling and probe position being constant in space and time.

... and verifiable results

Constant saving of raw data and permanent coupling control allow further and repeated evaluation at a later date.



Complete and secure testing

All relevant areas are captured precisely and reliably – with increased probability of detection (POD).

Minimal setup times

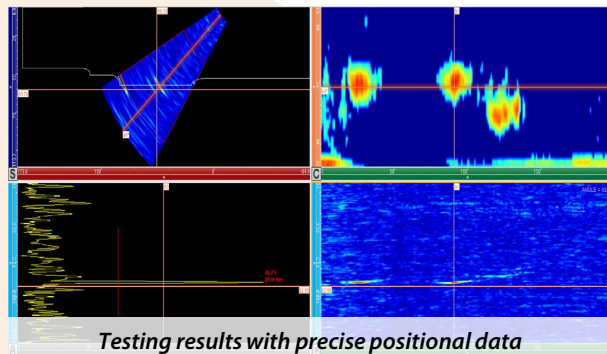
Minimal effort required for setups via bespoke scanning equipment for wheel + shaft and pre-configured sensors.

Comfort and conformity while testing

Simple to use and state of the art testing equipment acc. to VPI-EMG 09, DIN 27201-7, EN 16910.

Simple digital documentation

Locally precise capture and saving of testing data. Digitally assisted creation of testing reports.



Maximum flexibility while testing ...

Mobile testing device with battery or line operation. Comfortable testing with a single operator.

... and during evaluation

Testing data can be transmitted via WLAN. Testing and evaluation can be separated and performed at different times.

Qualification of personnel included

Application oriented training of testing personnel and training certificates are included in the WS3 package.

More than just the testing instrument ...

Reference blocks for calibration as well as testing instructions for wheel and shaft are included in the WS3 package.