



# Ultrasonic testing



## Mobile ultrasonic solid axle testing system

THE FLEXIBLE AND HANDY SOLUTION IS USED FOR AUTOMATIC ULTRASONIC DATA RECORDING AND EVALUATION OF WHEELSET SOLID AXLES ON MOUNTED AND DISMOUNTED WHEELSETS.

The ultrasonic testing device is a chain with several ultrasonic probes. The acquisition of the ultrasound data and their presentation as A, B or C images is automatic. The automatically generated test protocol is securely stored and can be called up at any time. The coupling gel is applied to the axle before testing.

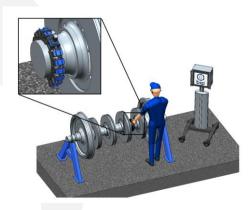
The test device is placed on the axle at various predefined positions.

### PLANT COMPONENTS

- Mobile recording unit with ultrasonic testing system
- Guide chain with ultrasonic probes
- Coupling agents (consumables)
- Evaluation unit and data storage

### SPECIAL ADVANTAGES OF THE TEST FACILITY

- Saving the test data on the PC for traceability
- automatic data recording and A, B and C image display
- Small investment costs
- Simple operation by a single person without hoist
- Extremely lightweight design
- Minimum time required for the inspection
- Low requirements for testing and free space
- Can be used on different types of wheelsets and shaft diameters for wheelsets with and without brake discs

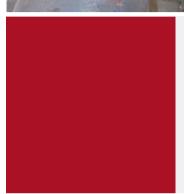


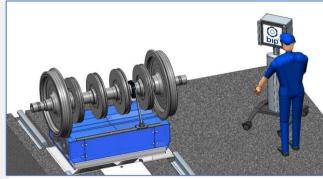


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### **TEST PRINCIPLE**

For axle inspection, the chain with the ultrasonic probes is placed in axial direction at the different positions that the operator sees on the monitor. Normally the operator turns the chain, otherwise the removed wheelset is driven by an optional roller stand. The contact areas are located in the accessible area of the wheelset shaft, usually preferably directly next to the wheel or brake disc seat.

#### TEST SENSITIVITY

Transverse flaw with 2 mm depth, 15 mm length.

### **EXAMINATION RESULTS**

An processing presentation of the entire axle or of individual areas with error and shape displays is formed. Each representation/scan has a continuous zoom function. After an evaluation, the test results are saved with C and A scans.

### TECHNICAL DATA

Test duration: approx. 5-8 min.

• Electrical connection: 230 Volt

Weight of testchain: 2,8kg

• Dimensions: Test chain L x W x H 800mm x 50mm x 80mm

Automatic evaluation and display of A, B and C images

Protocol generation with operator comment and data storage

