LAC AUTOMATIC ULTRASONIC INSPECTION
SYSTEM FOR DISASSEMBLED WHEEL SETS

TECHNICAL SPECIFICATIONS

- Inspection time < 5 minutes per wheel set
- Ultrasonic probe sensitivity ≥ φ 2mm FBH
- Defects on reference wheel set
  - Wheel rim: φ 3 x 100mm SDH
  - Transverse crack at journal: ≥0.5mm depth (EDM notch)
  - Transverse crack at wheel seat and brake seat: ≥1mm depth (EDM notch)
  - Full axle penetrating detecting for material checking

Chengdu Lead Science & Technology Co., Ltd.
KEY FEATURES

- Wheel and axle ultrasonic inspection
- Fully automatic inspection
- High efficiency
- High precision and repeatability
- Phased array ultrasonic testing
- Suitable for all types of high-speed train, rolling stocks, locomotive and metro wheel set

Installed on the wheel set maintenance line in high-speed EMUs maintenance centres, rolling stock and locomotive depots or factories, the combination of phased array ultrasonic and conventional ultrasonic inspection technology is applied for the inspection of defects in the wheel and axle.

With periodic ultrasonic inspection with the LAC System, wheel set quality is monitored to achieve high fleet availability and safety performance.

MAIN FUNCTIONS

- Automatic inspection for fatigue defects and volume defects in wheel and axle.
- Automatic reporting defects size and position over limits.
- Automatic positioning ultrasonic probes.
- Real-time monitoring of ultrasonic coupling condition.
- Automatic alarming and reporting.
- A Scan real time display, and A/B/C Scan data storage, display and review.
- The management of inspection data and results is available.
- The system is compatible for different type of wheel set.
- The standard platform gantry is designed for three configuration, such as wheel, axle or in one unit.
- System self-diagnosis and remote diagnosis.