

RAIL MEASURING TECHNOLOGY
WHEN ACCURATE MEASUREMENTS MATTER



RDD

RM-RDD (UT) Rail Defect Detection
*Rail internal crack detection trolley based on
UT technology (Ultrasonic wheelprobe with
5 sensors per rail).*

Product description:

Internal rail defects can cause serious safety hazards and potential rail breaks. It is therefore important that such defects are detected and sized in an early stage. To ensure safety in rail transport, rails must be tested regularly. The RDD portable rail defect detection trolley is easy to carry and set up and is suitable for detecting internal rail cracks with length and depth measurement.

Applications:

- Detection of internal rail defects with length and depth measurement
- For post-location and regular inspections on shorter sections, in points, crossings, level crossings, stations

Main characteristics:

- Detects identifiable near-surface irregularities, and volume defects in head, web, and rail foot
- Real-time display of test results in the form of A-scan, B-scan, A-scan + B-scan
- Verify mode thus allowing for hand testing and sizing of suspects via B-scan to be completed
- User-friendly software for the acquisition and review of measurement data
- Full record of data (irrespective of whether defects are found)
- Close investigation by verifying and sizing possible flaws
- Suitable for any track gauge
- Operation through notebook or tablet-pc
- Robust yet lightweight design
- Easy and quick to bring on or off the track
- Extensive product support



TECHNICAL DATA RDD UT trolley

# Probes / Sensors	Single rail: 1 Ultrasonic wheel probe (5 sensors per wheel probe)
Couplant tank volume	5 liters
Operating temperature range	-5 to +63 degrees Celsius
Probe type and frequency	1x 0° - 2 MHz 2x 40° forward and backward - 2 MHz 2x 70° forward and backward - 2 MHz
Detection and sizing depth range	Rail head, web and foot Gauge and field side
Typical measuring speed	Operation speeds up to 8.9 kph
Track gauge	Any track gauge
Dimensions	800mm x 400mm x 1000mm
Weight	20kg without 5 liters of coupling water
Reporting output	Crack location, depth and classification A-Scan, B-Scan, A-Scan+B-Scan combined, Verify
Method	Pulsed-echo method