

**EloRail WPG D320 – D340**

***We bring eddy currents to the rail!***

- **Carbon-Fiber Inspection Trolley (CFK) - Ultralight**
- **Small On Weight - Big On Manageability**
- **Requires Just One Operator**
- **For Rails And Switches**



### **ROHMANN GmbH - We bring eddy currents to the rail!**

*Railroad rails are subject to great stress: they are stressed by increasing traffic (load alternations), increasing axle loads and increasing speeds, especially in high-speed sections. Therefore rails must be tested very carefully based on their load profile. It is therefore the job of a modern eddy-current test instrument to detect and evaluate defects such as headchecks, squats and other cracks, even in weld seams. The ROHMANN-inspection trolley is made from ultra-lightweight carbon fiber and is easily handled by just one operator. The trolley can be assembled and disassembled without tools within a matter of minutes. The trolley is versatile and may be equipped with a variety of eddy-current test instruments depending on the inspection at hand. The trolley is guided with a new and patented magnetic holder that enables an extremely smooth running and precise inspection of the entire rail head.*

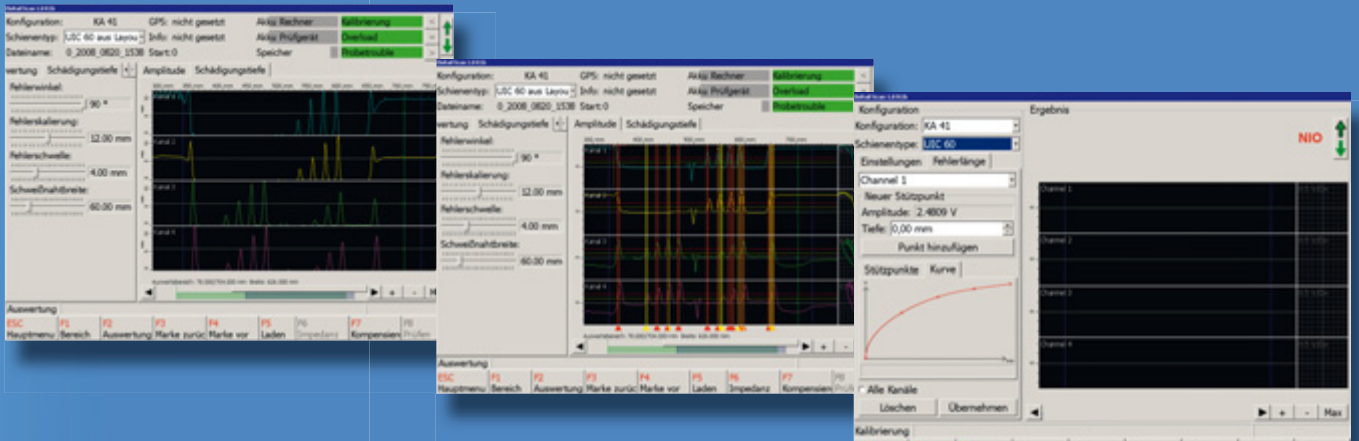
*The trolley is solely guided along the running edge by magnetic force (adjustable) and is completely suitable for switches. The probes have a ceramic protection against wear and tear and can be guided contactless or in a sliding fashion.*



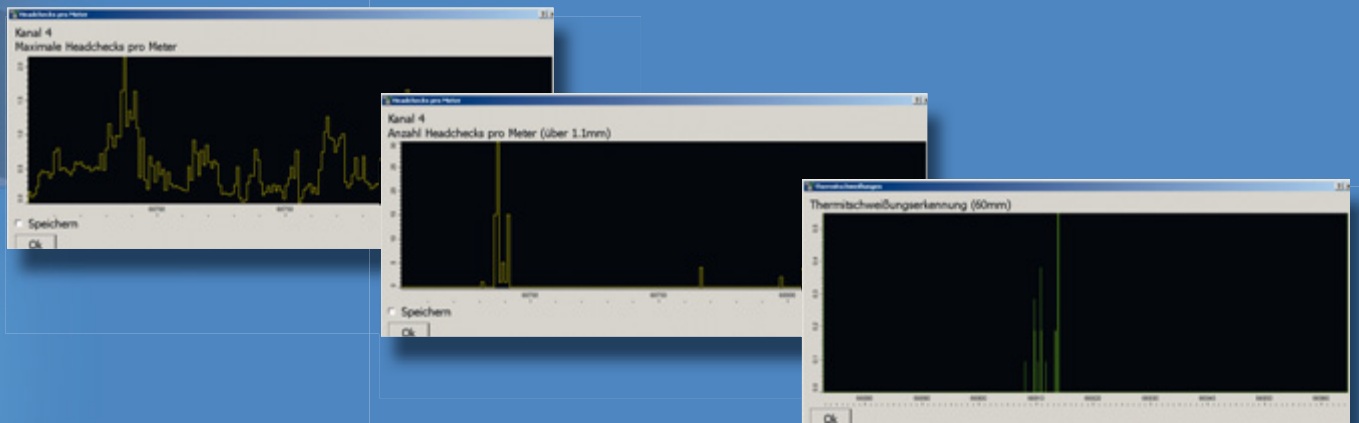
**Probe head of the trolley**



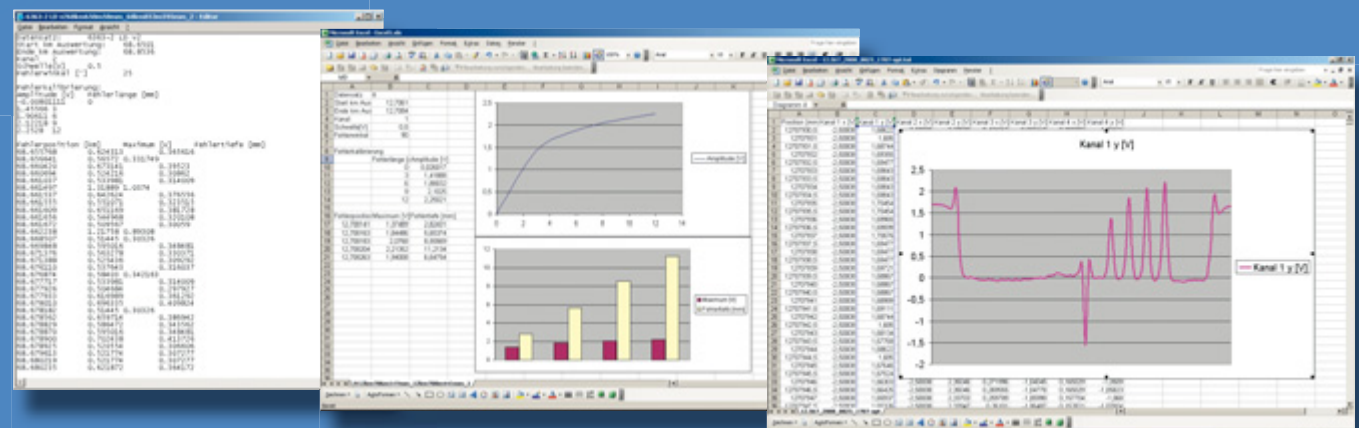
**May be disassembled without tools**



Depth of Damage • Measurement of Raw Data • Calibration Curve



Maximum number of Headchecks per meter • Number of Headchecks per Meter • Detection of Thermite Welding



Statistical Evaluation • Depiction of the Evaluation • Reconstruction in e. g. EXCEL

## Use

### Trolley for the Manual Inspection of the Rail Head

- Local Follow-up inspection
- Inspection around switches (fully suitable for switches)
- Inspection of difficult-to-access tracks
- Re-examination of ambiguous test results
- Preparatory and follow-up inspection during grinding
- May be used on all track systems
- For all established rail profiles

## Design

- Patented probe guidance using magnetic holder along the running edge (no pin rollers, adjustable retention force)
- Made of CFK (carbon) - very sturdy yet lightweight
- May be collapsed into a small package
- Easy and quick manual assembly (no tools required)
- Little rolling resistance with easy manual guidance
- Completely wired, simply plug in instrument and probe

## Probes

- Special eddy current probes for the inspection of rails
  - Simple probe for the depth-evaluation (up to approx. 3 mm depth of damage)
  - Combination probe provides depth evaluation and high-resolution counting probe
- Continuous adjustment of the track
- Sliding probe guidance with correction of the angle
- Contactless and sliding probe guidance available
- Ceramic wear protection for the probe (sliding block)
- Probe head adapted to the profile
- Automatic trailing when worn rails are inspected
- Track width approx. 8 mm (0.2")
- Optimized for cracks that are open to the surface of the rail

## Draisine 300

### • Draisine 320 (2 channels):

- 4 probes that are adapted to the profile
- 2 active tracks

### • Draisine 340 (4 channels):

- 4 probes that are adapted to the profile
- 4 active tracks

## Software

- Path-synchronized data acquisition
- Display of the defects true to their position
- Choice of display of the crack or the damage depth
- Multi-channel display
- Detection of thermite welding
- Defect statistics: max. no. of headchecks per meter/ no. of headchecks per meter
- Choice of online or offline evaluation

## Protective System

IP65 - splash proof

## Operating Features

Self-sufficient operation for 5 to 6 hours

## Weight

Approx. 12kg net including test instrument and probes with wiring (without laptop)

## Draisine Light

### • Draisine + test instrument ELOTEST M2V3 (1 channel):

- 2 probes that are adapted to the profile
- 1 active track

## Protective System

IP65 - splash proof

## Operating Features

Self-sufficient operation for 5 to 6 hours

## Weight

Approx. 5kg net including probes with wiring (without instrument)

