

DRAISINE \ **WPG D340** with ELO \ RAIL

Bringing eddy currents to the railways

- ▶ Carbon-Fiber Inspection Trolley – ultralight
- ▶ Small on weight – big on manageability
- ▶ Requires just one operator – tool-free assembly
- ▶ For rails and switches
- ▶ Usable with track gauges from 1400 up to 1700 mm
- ▶ Optionally available for track widths from 900 to 1700 mm





Usable with track gauges from 900 up to 1700 mm

DRAISINE \ WPG D340

We bring eddy currents to the rail!

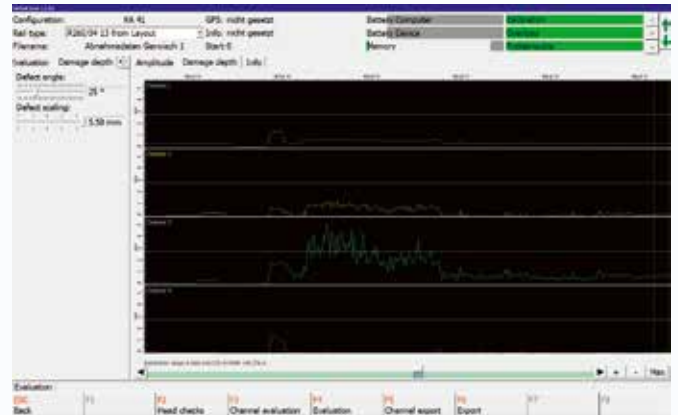
Railway tracks are components subjected to high loads — these loads are increasing due to rising traffic volumes (cyclic loading), higher axle loads, and higher speeds, particularly on high-speed lines. Therefore, installed tracks must undergo careful inspection, depending on the load profile.

The task for a modern eddy current testing device is therefore to search for, locate, and evaluate damage such as head checks, squats, and other cracks, even in weld seams.

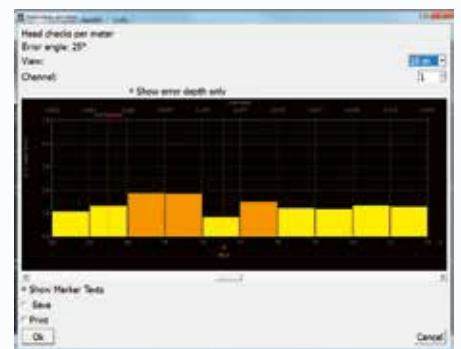
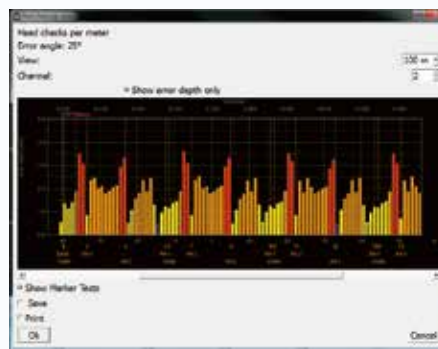
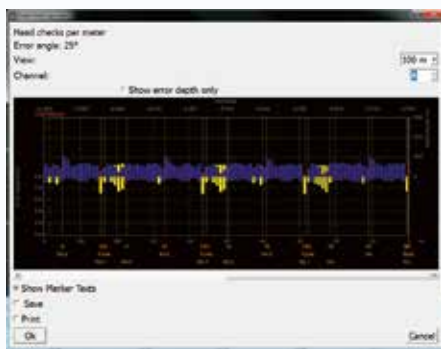
The ROHMANN trolley is constructed from ultra-lightweight carbon fiber and can be easily operated by a single person.

Setup and takedown can be done quickly without tools. The trolley is versatile and can be equipped with the appropriate eddy current devices depending on the inspection task and scope. The trolley is guided by a novel, patented magnetic mount. This enables extremely smooth and precise inspection of the rail head.

The trolley is guided exclusively by magnetic forces (adjustable) at the running edge, making it suitable for use on soft tracks. The sensors feature ceramic wear protection. Thanks to the mechanical design and housing, optimal sensor spacing is always ensured.



Data acquisition and real time visualization of the raw data/ postprocessing of the raw data leading to calculated



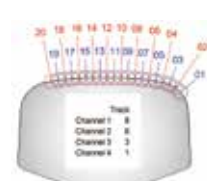
Easy and quick analysis of the track condition, based on the acquired defect information per track segment

EOT Rohmann GmbH Head check report

Inspection: Abnahmedaten Gerwisch 1 prt
 Date: Fr 3. Mai 13:57:55 2013
 Info: nicht gesetzt
 Inspection Report: nicht gesetzt
 Start kilometer: 0
 Acquisition length: 0.140278km (from 0km to -0.140278km)
 Evaluation range: 0.140278km (from 0km to -0.140278km)
 Schiene am Gleis

Streckensummer
 Richtung Links

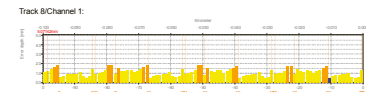
Legend head check colors:
 0 to < 0.5 mm: ■ 0.5 to < 1.5 mm: ■ 1.5 to < 2.7 mm: ■
 2.7 to < 5 mm: ■ from 5 mm: ■



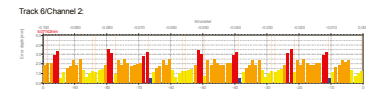
nicht_gesetzt_Abnahmedaten_Gerwisch_1,2013_3,34_2500 Page 1 / 4

EOT Rohmann GmbH Head check report

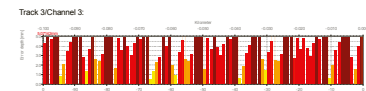
Track 8/Channel 1:



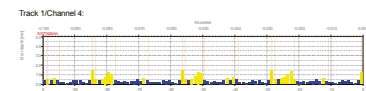
Track 6/Channel 2:



Track 3/Channel 3:



Track 1/Channel 4:



Legend head check colors:
 0 to < 0.5 mm: ■ 0.5 to < 1.5 mm: ■ 1.5 to < 2.7 mm: ■ 2.7 to 5 mm: ■ from 5 mm: ■

nicht_gesetzt_Abnahmedaten_Gerwisch_1,2013_3,34_2500 Page 2 / 4

EOT Rohmann GmbH Head check report

Notes:

Number:	Position:	Comment:
1	-0.139983km	Ende
2	-0.13959km	Kommentar: Ende (Position <-0.139550>)
3	-0.133478km	Kommentar: RA3 (Position <-0.133478>)
4	-0.123018km	Kommentar: RA2 (Position <-0.123018>)
5	-0.112498km	Kommentar: RA1 (Position <-0.112498>)
6	-0.111489km	Kommentar: Ende (Position <-0.111489>)
7	-0.105472km	Kommentar: RA3 (Position <-0.105472>)
8	-0.09453km	Kommentar: RA2 (Position <-0.094953>)
9	-0.08451km	Kommentar: RA1 (Position <-0.084510>)
10	-0.063489km	Kommentar: Ende (Position <-0.063489>)
11	-0.077434km	Kommentar: RA3 (Position <-0.077434>)
12	-0.066923km	Kommentar: RA2 (Position <-0.066923>)
13	-0.056421km	Kommentar: RA1 (Position <-0.056421>)
14	-0.055449km	Kommentar: Ende (Position <-0.055449>)
15	-0.040388km	Kommentar: RA3 (Position <-0.040388>)
16	-0.038904km	Kommentar: RA2 (Position <-0.038904>)
17	-0.028419km	Kommentar: RA1 (Position <-0.028419>)
18	-0.027481km	Kommentar: Ende (Position <-0.027481>)
19	-0.021368km	Kommentar: RA (Position <-0.021368>)
20	-0.010848km	Kommentar: RA (Position <-0.010848>)
21	-0.000388km	Kommentar: RA (Position <-0.000388>)
22	-0.001058km	Start

Di Sep 24 2013

nicht_gesetzt_Abnahmedaten_Gerwisch_1,2013_3,34_2500 Page 1 / 4

Head Check evaluation with detailed documentation of injuries

TROLLEY FOR THE MANUAL INSPECTION OF THE RAIL HEAD

- ▷ Local follow-up inspection
- ▷ Inspection of rails in switches (fully suitable for switches)
- ▷ Inspection of rails on straight sections and curves
- ▷ Re-examination of ambiguous test results
- ▷ Follow-up inspection during grinding
- ▷ May be used on all track systems
- ▷ For all established rail profiles: UIC 60, etc.
- ▷ Adjustable to different track gauges (see supplement)

DESIGN

- ▷ Lightweight chassis made of CFK (12 kg/ 26,45 lb without laptop)
- ▷ Maximum stability at lowest dead weight
- ▷ Patented magnetic guiding along the railrunning edge without any clamps, therefore easy removable from the track
- ▷ Real one-man operation
- ▷ Easy and quick manual assembly without tools
- ▷ Disassembled and packed in a useful protective trolley case
- ▷ Patented calibration standard

PROBES

- ▷ Special eddy current probes for the inspection of rails
- ▷ Cracks with a length of up to 12 mm can be distinguished
- ▷ Probefocus: approx. 6 mm per probe
- ▷ 4 probes adjustable to 20 different test positions, which cover up to 60 mm of surface over the gauge corner
- ▷ Sliding probes made of ceramic (sliding block) offer an optimal probe distance and probe angle
- ▷ Probe head especially adapted to the gauge corner curvature

PROTECTIVE SYSTEM

- ▷ IP63

OPERATING FEATURES

- ▷ Self-sufficient operation for 4 hours

WEIGHT

- ▷ Approx. 12 kg/ 26,45 lb net including test instrument and probes with wiring (without laptop)

SOFTWARE ELORAIL

- ▷ Precise data acquisition in relation to the track position along the rail
- ▷ Multi channel display (up to 4)
- ▷ Selectable display of the raw data (eddy current signal) or of the calculated depth of damage for headchecks
- ▷ Quick analysis and presentation of results in a PDF report
- ▷ Export functions for reconstruction and further processing for example, in Microsoft Excel
- ▷ Software can also be used as a desktop version without a license



Easy assembling



Case with trolley

Approved by the DB Netz AG

On basis of DB Ril 821.2007
No. of approval: 052-ZU-0250-12
Valid from 02/2015