

RAIL MEASURING TECHNOLOGY
WHEN ACCURATE MEASUREMENTS MATTER



RCA-V

*RCA-V Rail Corrugation Analyzer with
integrated Vision system.
Longitudinal rail profile and roughness
measuring system for tracks and switches.
Suitable for mounting on railway vehicles,
hi-rail vehicles and trolleys.*

Product description:

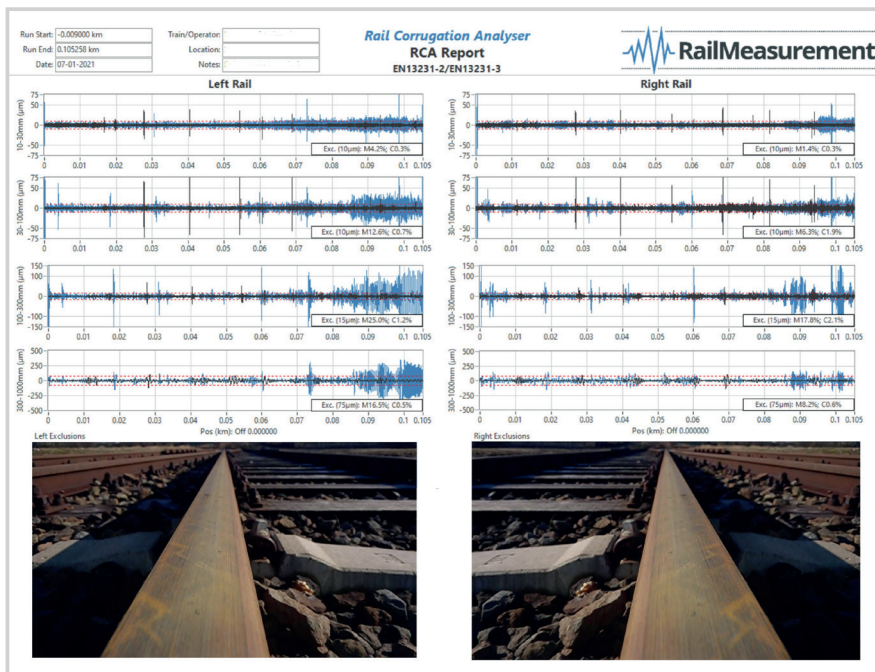
Rail surface irregularities of the order of microns (0.001mm) in amplitude are important in the generation of wheel/rail rolling noise and vibrations. The RCA-V is a compact and easy to install high precision measuring device to obtain a continuous longitudinal measurement of irregularities on the rail surface and capturing high resolution images from the railhead. The RCA-V can be fitted to trains, hi rail vehicles and wagons and can be used on various track gauges (standard, narrow or wide gauge).

Applications:

- Monitoring of rail quality
- Detection of corrugation
- Detection and classification of both short and long waves
- Assessment of mobile rail treatment results e.g. rail grinding and milling
- Visual assessment of rail condition

Main characteristics:

- Measurements that are highly accurate and repeatable
- Relatively simple installation and setup
- Contact measurement system using inertial sensors
- Suitable for any track gauge
- User-friendly software for acquisition and review of measurement data
- Operation through notebook or tablet-pc
- Robust yet light weight design
- Extensive product support



The RCA-V gives reliable measurement results of irregularities on the rail head over the full wavelength range as per the EN13231-2 2020 and earlier versions of this standard. The user friendly reporting software allows for superimposing measuring runs, setting required tolerance limits and showing the % exceedances.

TECHNICAL DATA RCA-V

Interval at which data are saved	2 mm
Measuring speed	1 - 20 kph
Precision of measurements	0.1 µm (0.0001 mm)
Accuracy	1 µm RMS 10 - 30 and 30 - 100 mm 2 µm RMS 100 - 300 mm
Data storage requirements	30 MB per KM of track 200Mb per Km of track when using vision
Output compatibility	EN 13231-2 2020 and equivalents
Camera mode and Image quality	Color and black & white 1936x1464 px 2, 3 or 5 images per meter
Image offset	0.5 m
Recording configuration	Images or video
Wavelength filters	10 - 30, 30 - 100, 100 - 300, 300 - 1000 mm
Requirements	110/240VAC and 120psi/7.5bar air supply (RCA) 24VDC or PoE IEEE802.3af 15W (vision)