

RAIL MEASURING TECHNOLOGY  
WHEN ACCURATE MEASUREMENTS MATTER



***RM-RCA Rail Corrugation Analyser***  
*Longitudinal rail profile measuring system for measuring  
corrugation and roughness on rails in tracks and switches.  
Suitable for mounting on trains, road-rail vehicles and  
trolleys.*

### Product description:

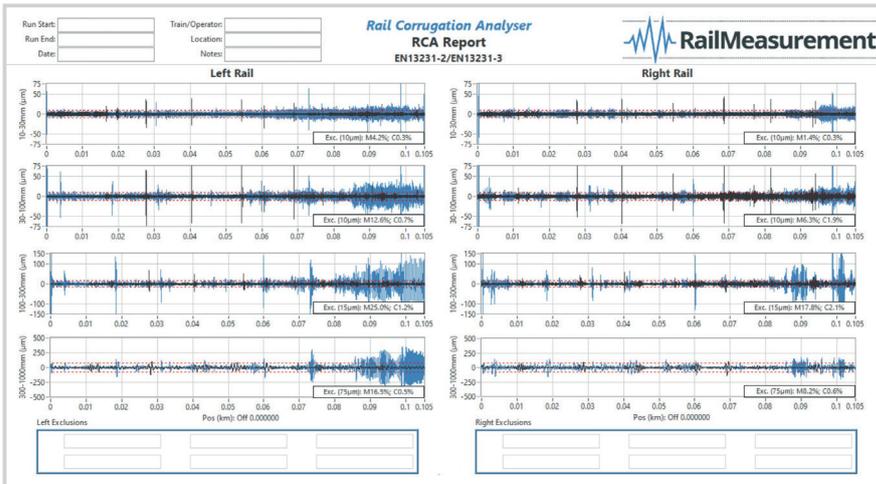
Rail surface irregularities of the order of microns (0.001mm) in amplitude are important in the generation of wheel/rail rolling noise and vibrations. The RCA is a compact and easy to install high precision measuring device to obtain a continuous longitudinal measurement of irregularities on the rail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

### 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

### 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 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

Interval at which data are saved	2 mm	
Measuring speed	1 - 20 kph	Different speeds on request
Precision of measurements	0.1 $\mu\text{m}$ (0.0001 mm)	Displacement
Accuracy	1 $\mu\text{m}$ RMS 10 - 30 and 30 - 100 mm 2 $\mu\text{m}$ RMS 100 - 300 mm	
Data storage requirements	30 MB per KM of track	
Output compatibility	EN 13231-2 2020 and equivalents	
Wavelength filters	10 - 30, 30 - 100, 100 - 300, 300 - 1000 mm	
Requirements	110/240 VAC and 120 psi/7.5 bar air supply	
Approvals	Approved for use on Deutsche Bahn (DBAG)	