

RAIL MEASURING TECHNOLOGY
WHEN ACCURATE MEASUREMENTS MATTER



RDD

*RM-RDD (ACFM) Rail Defect Detection
Rail Surface crack detection trolley based on
ACFM technology (Form of Eddy Current
technology configured in a particular way to
enhance the inspection of ferritic metals
including welds).*

Product description:

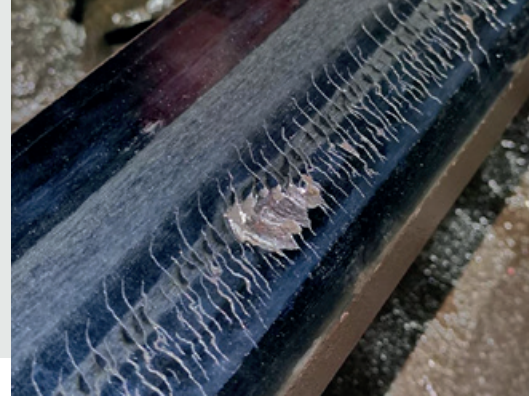
Rail rolling contact fatigue damage (RCF) in the form of rail surface cracks of the order of mm's in depth can cause for serious safety hazards and potential rail breaks. It is therefore important that such defects which initiate from the rail surface are detected and sized in an early stage. The RDD portable rail defect detection trolley is easy to carry and set up and is suitable for detecting rail surface cracks with length and depth measurement. The instrument meets the requirements of the EN16792-2: 2020 standard.

Applications:

- Detection of rail surface cracks with length and depth measurement
- For single and dual rail measurement of rails in tracks and switches

Main characteristics:

- Measurements that are highly accurate and repeatable
- Relatively simple installation and setup
- No requirement for on site calibration (less room for operator error)
- Works through air, paint, water and grease (less rail cleaning requirements)
- Full record of data (irrespective of whether defects are found)
- 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



Crack Location	Crack Depth	Crack Position	Crack Location	Crack Depth	Crack Position	Crack Location	Crack Depth	Crack Position
Age	mm		Age	mm		Age	mm	
1	205	0.5	1	493	1.1	1	917	1.5
1	212	1.1	1	575	1.5	1	922	1.1
1	267	0.5	1	580	0.6	1	925	1.1
1	277	0.6	1	583	0.6	1	931	1.5
1	324	0.6	1	589	0.8	1	936	1.3
1	330	0.6	1	593	0.7			
1	336	0.7	1	623	0.8			
1	359	1	1	630	0.6			
1	364	1.3	1	636	1			
1	369	1.2	1	623	0.6			
1	376	0.7	1	627	0.8			
1	387	0.6	1	633	0.5			
1	389	1.3	1	660	1.7			
1	394	1.1	1	645	1.3			
1	395	1.4	1	650	1			
1	402	1.2	1	656	1.1			
1	408	2.1	1	661	0.9			
1	415	1.2	1	658	0.9			
1	430	0.8	1	675	2.2			
1	434	1	1	675	1.2			
1	479	1	1	682	1.4			
1	484	1.5	1	688	1.3			
1	490	1.1	1	694	2.4			
1	444	2.1	1	699	1.6			
1	449	2.5	1	706	0.9			
1	454	1.8	1	746	0.8			
1	459	2.7	1	883	0.8			
1	466	0.5	1	903	1			
1	477	2.2	1	906	1.8			
1	485	0.7	1	912	2.4			



TECHNICAL DATA RDD Trolley

# probes/sensors	Single rail: 1 shaped probe profiled to wheel shape (16 sensors per rail) Dual rail: 2 shaped probes (1 each rail)
Operating temperature range	-20 to +40 degrees Celsius
Typical reporting range	1-8+ mm
Detection and sizing depth range	0.1-12 mm The instrument meets the EN 16729-2: 2020 standard
Typical measuring speed	3-6 kph
Track gauge	Variable 1000-1435-1520-1676 mm (other gauges optional)
Reporting output	Crack location, depth and classification Each crack measurement is given an individual ID number and a visual description Cluster RCF reported as deepest crack per meter