

MEASURING EQUIPMENT

ROMEAS 82.05 Versine Measuring Device

For measuring track curves.

- Not independent of clearance gauge
- Two aluminium angle supports with level
- 50 m chord/nylon rope
- With ruler
- Complete in faux leather bag
- Weight 2.6 kg



ROMEAS 82.06 Versine Measuring Device

For easy checking and determination of versine values in a track curve.

- Independent of clearance gauge
- Can be used for all common rail types
- Measuring chord can be adjusted to rail height as well as in lateral direction
- Easy fastening at the foot of the rail
- Consisting of 2 tension clamps with rope drum and 50 m chord/nylon rope
- Complete in faux leather bag
- Weight 4.3 kg



ROMEAS 82.07 VIG1300 Sighting and Levelling Unit

Optical instrument for determining longitudinal level, track level and switch level.

THE ADVANTAGES. YOUR BENEFITS.

Ergonomic & precise

- High-quality optics with tilting device
- Sturdy tripod with practical quick-fastening and bubble tube for checking alignment
- Sighting rod with level for alignment and transport bracket can be segmented
- Mirrored circular bubble
- With scale for displaying rotation area
- True image



SPECIFICATION

Optics		
Height-adjustable		+ 50 mm
Tilting range		± 40 ‰
True image		
Telescope magnification		24-fold
Shortest sighting range		< 0.5 m
Rotation range		with micro adjustment 360°
Sighting rod		
Measuring scale		with mm/E-graduation
Measuring range of basic scale		± 800 mm
Measuring range of adjustable level slide		+150 mm to -100 mm
Total weight		10.3 kg

ACCESSORIES

Push-on part for grooved rail

ROMEAS 82.11 SQUARE Track Square



For aligning sleepers.

THE ADVANTAGES. YOUR BENEFITS.

- Double leg
- In robust aluminium construction
- With inner and outer stops
- Insulated from rail to rail

SPECIFICATION	Fixed design	Collapsible design	Version for switch blades
Dimensions (L x W)	1700 x 1400 mm	1700 x 700 mm	800 x 600 mm
Weight	3.6 kg	3.2 kg	1.8 kg

ROMEAS 83.07 RCA Switch Gauge and Superelevation Measuring Device

For all common measuring points of switches.

THE ADVANTAGES. YOUR BENEFITS.

Light. Easy to handle. Modular.

- Modular design and low weight
- Available for different track gauges
- Insulated from rail to rail
- Individual functions can be extended with equipment options
- DB user acceptance

SPECIFICATION

Track gauge	1435 mm (1415 mm to 1475 mm)
Check rail gauge	1385 mm to 1405 mm
Back to back distance	1345 mm to 1361 mm
Flange groove	30 mm to 82 mm
Cross level	-30 mm to +200 mm
Weight	2.5 kg

ACCESSORIES

Changeover bolt
Fibre glass version (fully insulated)
Segmented version for track gauge ≥ 1435 mm
Version for grooved rails ≥ 20 mm
Test adapter for switch blades (gauges 1/2)
DB test adapter for switch blades (gauges 1/2/2-19/2-21)



Measuring device for frog nose incline
Grooved rail adjustment
Check rail level measuring device
Transport bag for segmented devices
Transport and storage case

ROMEAS 83.15 POINT Fixed Point Measuring Device

For measuring distances between fixed points at the track and signal posts, concrete walls, etc. and for checking individual level values using an appropriate measuring staff.

THE ADVANTAGES. YOUR BENEFITS.

- Attached to the rail by magnets
- Exact position adjustable via a level

SPECIFICATION

Weight	1.2 kg
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ROMEAS 83.18 MK150 Joint Gap Measuring Device

For measuring the distance between two adjoining rails and for checking the switch blade as per DB Regulation 821.2005.

- Aluminium
- With measuring scale

SPECIFICATION

Measuring range	1 mm to 15 mm
Weight	0.1 kg



ROMEAS 83.20 GG718 Stock Rail and Switch Blade Gauge

For correct and safety-relevant checking and measuring of wear spots in the switch blade area.

GG718 is available in a standard version (Gauge 1/2) and in the DB version (Gauge 1/2/2-19/2-21).

- Insulated from rail to rail
- With test gauge Ø 4 mm
- Gauge 1/2
- Gauge 1/2/2-19/2-21 (DB)
- DB user acceptance

SPECIFICATION

Weight	1.4 kg
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ROMEAS 83.37 RCS Track Gauge and Superelevation Measuring Device

For all common track gauge and superelevation measurements.

THE ADVANTAGES. YOUR BENEFITS.

Light. Easy to handle. Modular.

- Modular design and low weight
- Available for different track gauges
- Insulated from rail to rail
- Individual functions can be extended with equipment options
- DB user acceptance

SPECIFICATION

Track gauge	1435 mm (1415 mm to 1475 mm)
Cross level	-30 mm to +200 mm
Weight	2.5 kg



ACCESSORIES

Changeover bolt
Fibreglass version (fully insulated)
Segmented version for track gauge ≥ 1435 mm
Transport bag for segmented devices
Transport and storage case

ROMEAS 83.50 RCAD Digital Switch Gauge and Superelevation Measuring

For all common track gauge and superelevation measuring tasks in tracks and switches.

The required measurement parameter is selected using the keyboard, and the measurement value is determined using the measuring pin.

THE ADVANTAGES. YOUR BENEFITS.

- Precise digital measurements
- Centre illuminated measurement value display
- Insulated from rail to rail
- Various equipment options
- DB user acceptance

SPECIFICATION

Track gauge	1435 mm (1367 mm to 1475 mm)
Cross level	+/- 225 mm
Flange groove	20 – 128 mm
Check rail gauge	1347 – 1455 mm
Back-to-back distance	1327 – 1435 mm
Weight	2.5 kg

Other gauges available on request.



Option: With Bluetooth function

With the Bluetooth version, the displayed values can either be stored in the internal device storage or - if a Bluetooth connection exists - sent to a connected end device.

Option: MessApp

The MessApp software offers efficient support when sending and evaluating the measurement results as exceeded tolerances are displayed directly.

ACCESSORIES

Changeover bolt
Fibreglass version (fully insulated)
Segmented version (available for track gauge 1435 mm)
Test adapter for switch blades (gauges 1/2)
DB test adapter for switch blades (gauges 1/2/2-19/2-21)
Measuring device for frog nose incline
Measuring device groove depth

Check rail level measuring device
Transport and storage case
Transport bag for segmented devices
Bluetooth connection to iOS, Android and "MessApp" Microsoft software
Wide measuring bases MB1100 and/or MB1800

ROMEAS 83.87 PLAT Platform Clearance Gauge

For measuring the distance between centre of track and platform (ramp) and for measuring the height from top of rail to platform edge, including track gauge and cross level measurements.

THE ADVANTAGES. YOUR BENEFITS.

- Insulated from rail to rail
- 2 level measuring blocks (to platform edge)
- Storage of level measuring blocks in transport tube



SPECIFICATION

Track gauge	1435 mm (-10 mm to +40 mm)
Horizontally	from centre of track 0 mm to 2050 mm
Vertically	from top of rail 0 mm to 1200 mm
Superelevation	-30 mm to +200 mm
Weight	5.5 kg
Other gauges available on request.	

ACCESSORIES

Transport and storage case

ROMEAS 85.01 SKM Rail Head Wear Measuring Instrument

To determine vertical and lateral wear of rail profiles.

Available in variants SKM 1 and SKM 2. SKM is scaled and can be pre-adjusted for different rail profiles. Other or additional rail profiles available on request.

THE ADVANTAGES. YOUR BENEFITS.

- Robust aluminium construction with magnetic clamp
- Includes handy plastic case
- Can be configured for further rail profiles
- DB user acceptance



SPECIFICATION

	SKM1	SKM2
Standard profiles	49E5, 54E4, 60E2	49E5, 54E4, 60E2
Lateral slide gauges	1	3
Measuring reference to rail centre line	45°	22.5°, 45°, 67.5°
Weight	1.2 kg	1.5 kg

ROMEAS 85.02 MP Measuring Gauge

For determining reference points L + L1 during welding work in switches and crossings.

- Galvanised surface
- For rails 49E1, 54E3, 60E1
- Special equipment for other rail profiles
- Weight 0.6 kg



ROMEAS 85.02 MP – 9001300056

ROMEAS 85.05 Rail Measuring Roller

For measuring the lengths of rail sections.

For rail profiles 49E1, 54E3, 60E1

THE ADVANTAGES. YOUR BENEFITS.

- Available in measuring tolerances “Standard” (under 0.05 %) and “Precision” (under 0.02 %)
- Counter above the running wheel (also counts backwards)

SPECIFICATION

Measuring range	up to 10,000 m
Wheel diameter	318.5 mm = 1 m circumference
Weight	5.5 kg

ACCESSORIES

Transport and storage case



ROMEAS 85.05 – 9808505001

ROMEAS 85.07 SA75 Track Spacing Instrument

For checking the track geometry with reference to a fixed point at the catenary support or adjacent track.

THE ADVANTAGES. YOUR BENEFITS.

Track distance and level measurements to the fixed point can be determined accurately in a single operation.

Note: For fixed point measurements to the centre of track half the track gauge is included.

SPECIFICATION

Measuring range	Measurable distance 1250 mm to 4262 mm
Measurable height	up to 700 mm
Weight	6.5 kg

ACCESSORIES

Transport and storage case



ROMEAS 85.07 SA75 - 8008507001

ROMEAS 85.20 Rail Thermometer

For measuring the target rail temperature for length compensation during rail neutralisation before joint welding.

THE ADVANTAGES. YOUR BENEFITS.

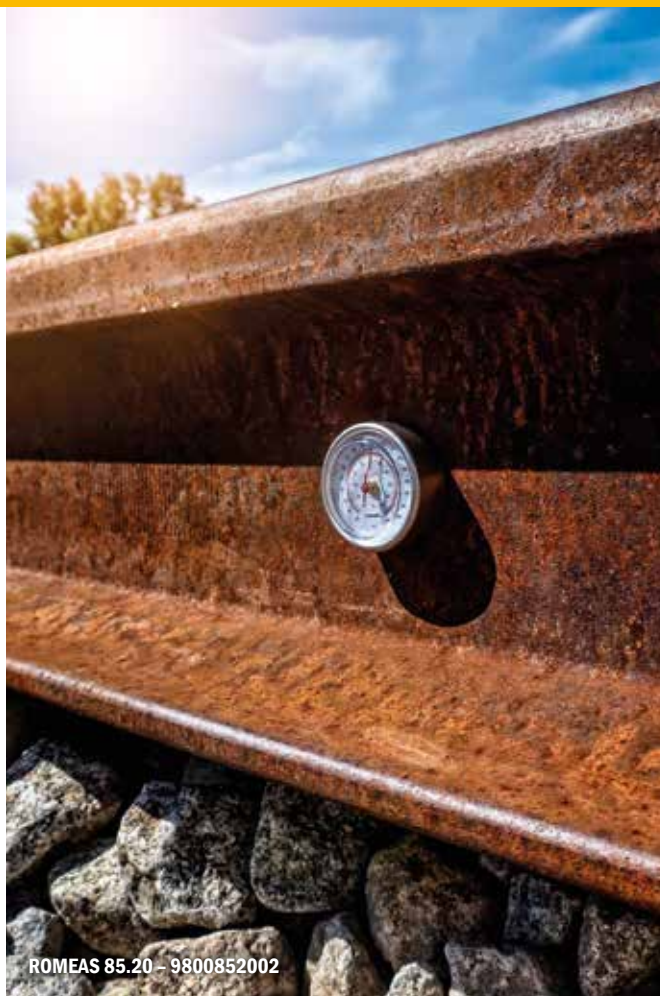
- Round with magnetic clamp
- White dial plate with easy-to-read scale

SPECIFICATION

Nominal size	40 mm
Measuring range Centigrade	-30 / +70° C
Measuring range Fahrenheit	-20 / +160° F
Weight	0.07 kg

ACCESSORIES

Aluminium screw cap box (Ø 46 x 23 mm)



ROMEAS 85.20 - 9800852002

If you require other digital measuring systems for track, switch or rail profile, please contact your local ROBEL Holding partner.

ROMEAS 83.40 MESSREGPTPII Hand-Guided Switch Inspection System

Digital measuring system for spot measurements and validation of switches and (short) track sections.

THE ADVANTAGES. YOUR BENEFITS.

- Digital measuring system
- Equipped with a minicomputer
- User-friendly software with menu-guided measurement process
- Measuring points are recorded at the touch of a button
- Automatic storage and direct display of results (incl. exceeded tolerances)
- DB user acceptance
- Meets requirements of EN 13484-4:2011



MEASURED PARAMETERS

- Track gauge
- Flange groove
- Check rail gauge
- Back-to-back distance
- Cross level
- Twist
- Derived values
- Switch blade validation

ROMEAS 83.41 MESSREGCDM Mobile Track and Switch Inspection System

Continuous data recording for efficient, comprehensive measurement, documentation and validation of switches and (long) tracks.

THE ADVANTAGES. YOUR BENEFITS.

- Digital measuring system
- Menu-guided measurement process with display of measuring progress and current measurement values in real time
- Automatic storage and direct display of results (incl. exceeded tolerances)
- Comment function for noting down precise position of structural characteristics or track defects during measurement process
- Equipped with high-performance 10" Outdoor Notebook and comprehensive software package
- DB user acceptance
- Meets requirements of EN 13484-4:2011



MEASURED PARAMETERS

- Track gauge
- Flange groove
- Groove depth (optional)
- Check rail gauge
- Back-to-back distance
- Cross level
- Twist
- Derived values
- Switch blade validation
- Distance travelled
- Option: GPS

For recording the longitudinal profile of left and right rail simultaneously after grinding or milling work.

THE ADVANTAGES. YOUR BENEFITS.

- Digital measuring system
- Numerical graphic display of measurement values and measuring progress in real time
- Comment function for noting down precise position of structural characteristics or track defects during measurement process
- Equipped with high-performance 10" Outdoor Notebook and user-friendly measuring program
- Meets requirements of EN 13484-4:2011

MEASURED PARAMETERS

- Track gauge
- Cross level
- Twist
- Distance travelled
- Option: GPS



ROMEAS 84.15 MESSREGCTS

For recording the longitudinal profile of left and right rail simultaneously after grinding or milling work.

THE ADVANTAGES. YOUR BENEFITS.

- Digital measuring system
- Evaluation of welding joints
- Acceptance of reprofiling work
- Numerical graphic display of measurement values and measuring progress in real time
- Comment function for noting down precise position of structural characteristics or track defects during measurement process
- Equipped with high-performance 10" Outdoor Notebook and user-friendly measuring program with the option of integrated data analysis
- DB user acceptance
- Meets requirements of EN 13231-2:2020



ROMEAS 85.11 RMF1100

MEASURED PARAMETERS

- Rail longitudinal profile (corrugation) in wavelength range 10 – 1000 mm
- Examination of welding joints
- Distance travelled

ROMEAS**85.12 RM1200D****Hand-Guided Corrugation Measuring System**

For recording the rail longitudinal profile (measured section = 1200 mm) after grinding or milling work.

THE ADVANTAGES. YOUR BENEFITS.

- Digital measuring system
- Evaluation of welding joints
- Verification and acceptance of reprofiling work
- Numerical graphic display of measurement values and results
- Equipped with high-performance 7" Outdoor Tablet and userfriendly measuring program with the option of integrated data analysis
- DB user acceptance
- Meets requirements of EN 13231-2:2020

MEASURED PARAMETERS

- Rail longitudinal profile (corrugation) in wavelength range 10 – 1000 mm
- Examination of welding joints
- Distance travelled

**ROMEAS 85.12 RM1200D****ROMEAS****85.15 RM150HR****Hand-Guided Measuring System for Determining the Quality of the Rail Running**

For automatic recording of rail surface quality (measured section = 150 mm) before and after grinding or milling work.

THE ADVANTAGES. YOUR BENEFITS.

- Digital measuring system
- High resolution
- Numerical graphic display of measurement values and results
- Quality certification of rail running surface using the quality parameter [QKw] for acceptance of reprofiling work
- Equipped with high-performance 7" Outdoor Tablet and user-friendly measuring program with integrated data analysis
- DB user acceptance
- Meets requirements of EN 13231-2:2020

MEASURED PARAMETERS

- Rail surface quality [QKw]

**ROMEAS 85.15 RM150HR**



For capturing the rail transverse profile of Vignoles rails and optionally grooved rails after grinding or milling work.

THE ADVANTAGES. YOUR BENEFITS.

- Laser-based capture of the rail transverse profile
- Metal removal measurement
- Measurement and evaluation in real-time
- Comparison of the actual profile to many different target rail profiles
- Comparison of measurements before/after rail treatment
- Complies with EN 13231-2:2020
- Can be integrated into reprofiling machines
- For Vignoles rails (variant V)
- Optional additional for grooved rails (variant VG)
- Can be used for any gauge

MEASURED PARAMETERS

- Rail transverse profile
- Option: Grooved rails measurement

Calibration and Repair

In line with applicable regulations and for operational safety, measuring equipment is to be tested and calibrated at regular intervals.

Your contact for calibration and repair of measuring instruments and systems:

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