

# MiniProf <sup>BT</sup>

## Rail

The MiniProf BT Rail system is a full contact measuring system for fast and high-accuracy cross-sectional rail profile measurements. It is a lightweight hand held tool, which can be used for planned maintenance, wear prediction, trending analyses and much more. Magnetically attached to the top of the railhead using the opposite rail as reference, the rail profile and track gauge is measured in less than five seconds reducing exposure on the track. Measurements are performed easily via the free Android app MiniProf Criterion and calculations of wear parameters are provided instantly. Full access to numerous additional calculations and data handling opportunities are included in the powerful Envision software for laptop and PC.

### TECHNICAL DATA

#### Technology:

Full contact with a magnetic knife-shaped probe wheel for direct contact during the complete measuring process.

#### Product ID:

MP-260-IP (with built-in perpendicular device, no gauge determination available)

MP-261-IP (with gauge determination, no built-in perpendicular device available)

MP-262-IP (with gauge determination and built-in perpendicular device)

#### Profile accuracy:

Better than:  $\pm 11,0 \mu\text{m}$

Repeatability:  $\pm 2,5 \mu\text{m}$

#### Measuring speed:

< 5 seconds per profile

#### IP rating:

IPX4

#### Battery life:

~ 1000 measurements or 10 hours of work

#### Operating temperature:

-15°C to +50°C

#### Weight/dimensions:

MP-260-IP: 0,8 kg

MP-261-IP: 0,7 kg

MP-262-IP: 1,2 kg

Transport case: 4,0 kg (500 x 400 x 190 mm)

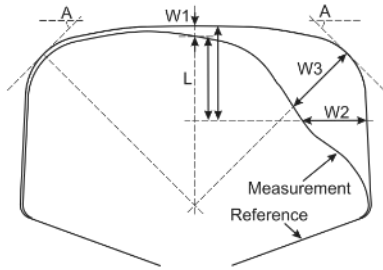
Telescopic rod: 0,6 kg

#### Scope of delivery:

- MiniProf Rail unit
- Full Envision software package, 5 installations, free software updates. Measuring and analysis supported.
- MiniProf Criterion for Android smart phone data collection. Measuring and analysis (selected calculations) supported.
- MiniProf cable & charger
- Telescopic rod
- Rugged and waterproof transport case IP67 with room for MP and accessories
- Quick guide, tutorial videos and free hotline support
- 2 years standard factory warranty with option to prolong to 5 years in total

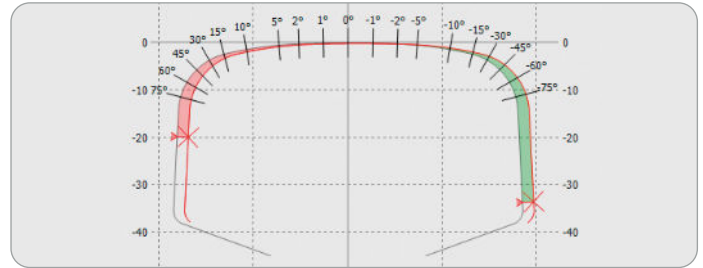
# MiniProf - Much more than a measurement!

A world of data handling opportunities available in the full MiniProf Envision software package



## Rail wear calculations

Vertical, horizontal and angled wear is calculated instantly. Numerous additional calculations and alignments for rails are available in the versatile and flexible Envision software package and can easily be added for optimum and customized configuration.



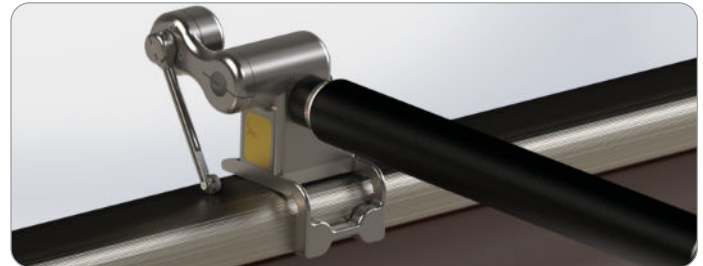
## Rail analysis & grinding

The MiniProf Envision software can visualize and calculate residuals and areas automatically and provides a functionality which is often used for rail grinding analysis. Measurements can be compared in multiple ways and easily exported to various formats. MiniProf Envision offers you a powerful rail analysis tool as well as user friendly measuring software.



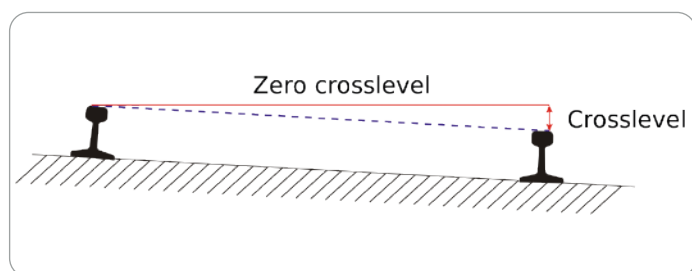
## Gauge measuring

MiniProf BT Rail is equipped with a telescopic rod using the opposite rail as reference. This ensures a correct and stable position and prevents the instrument from tilting. Depending on system configuration, the track gauge is measured simultaneously.



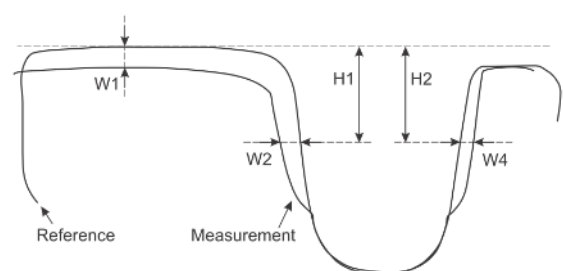
## Perpendicular device

Depending on system configuration, MiniProf BT Rail is equipped with a small built-in perpendicular device which ensures correct alignment to the rail and prevents potential faulty diagonal measurements.



## Super-elevation / Grade

Super elevation and grade are measured automatically depending on system configuration. The values are stored with the measurement and can be displayed at any time. The range of the measured inclination is  $\pm 30$  deg.



## Suitable for grooved rail

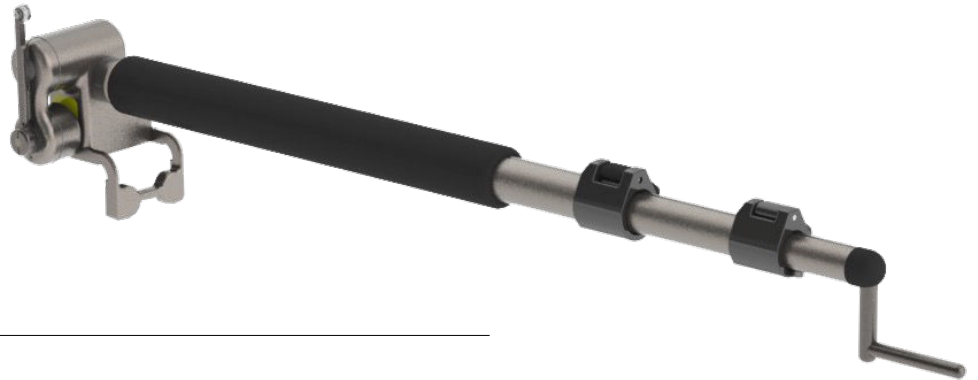
MiniProf BT Rail, type MP-261-IP, can be used on grooved rails as well. The full contact magnetic measuring wheel ensures that the measurement is taken all the way down to the groove. Based on a reference, both the horizontal wear and the side wear are calculated.

# MiniProf BT Rail configurations

The MiniProf Rail systems are available in different configurations for use on all types of tracks depending on customer requirements. This includes options for track gauge determination, super elevation, grade measurements and for use on grooved rails. In addition, a MiniProf Rail system can be delivered with or without a perpendicular device for correct alignment to the rail and for preventing faulty diagonal measurements. Please refer to below illustration of the available configurations.

## **MP-260-IP**

- Perpendicular device
  - Quick connecting telescopic rod
  - No gauge determination
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## **MP-261-IP**

- No perpendicular device
  - Quick connecting telescopic rod
  - Digital gauge determination
  - Grade, super elevation
  - Also suitable for grooved rails
- 



## **MP-262-IP**

- Perpendicular device
  - Quick connecting telescopic rod
  - Digital gauge determination
  - Grade, super elevation
- 

