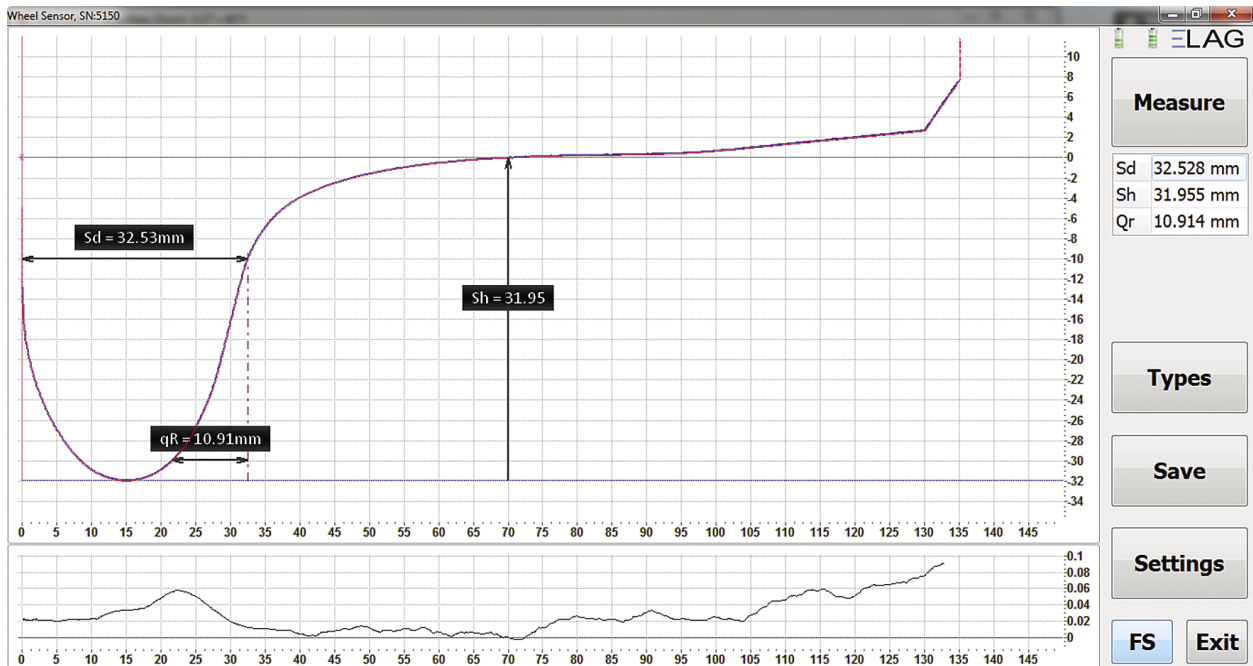


## Wheel Profile Sensor

# Wheel Profile Sensor

The new Optimess WP wheel profile sensor has been designed to measure wheel profile and wheel diameter rapidly and with the highest precision. A contactless laser scan of the wheel profile is performed and different profile parameters are calculated and displayed automatically.

The measurement process, wheel and the type of train can be configured freely, and the fully automated measurement is performed with a one-button operation.



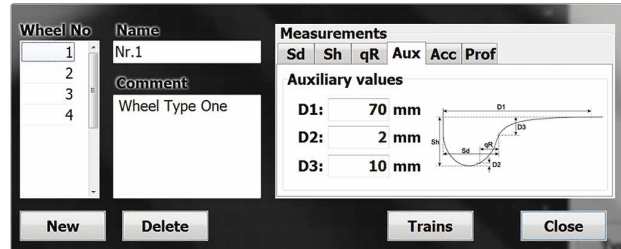
- Highest precision ( $\pm 25\mu\text{m}$ )
- Quick measurement of wheel profile and diameter (<5s)
- Wireless communication between sensor and tablet using Bluetooth
- Measurement in confined spaces
- Risk-free operation, without reaching between the wheel and the rail by hand
- Simple and intuitive user interface
- Online profile comparison
- Custom configuration of wheel and train type, unlimited quantity
- Data export in different formats (Excel, CSV and XML)
- User management
- Unicode support (UTF-8)
- Multilingual (German, English, French, Chinese)
- Up to 700 measurements per battery charge
- Quick battery charge (<1h)

## Handling

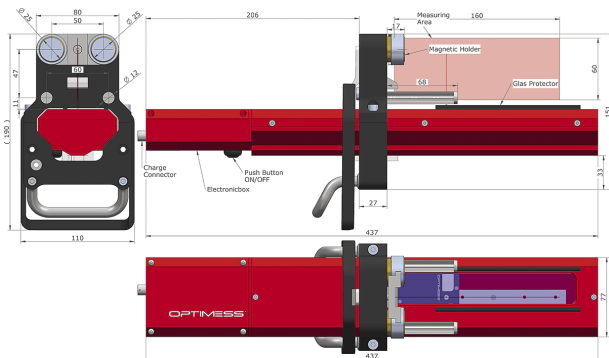


## Software

The measurement programme is used for the simple measurement of single wheels, axles or entire trains. The profile is displayed online during the measurement. The required profile values are available as soon as the measurement has been completed, and will be displayed in colour-coded form based on the pre-set tolerance values. Thus the values can be checked easily immediately after the measurement. A train inspection is managed by the programme using a graphical overview, and the next measurement starts at the touch of a button. The programme runs on Windows 7 or higher. Different Windows 10 tablet solutions are available for collecting the data.



## Technical data



Type: OMS 15037		
Measurement range	60 (9-69)	mm
Distance resolution	5	µm
Distance precision	±25	µm
Scan range	160	mm
Scan resolution	1	µm
Scan precision	± 2	µm
Scan straightness	±10	µm
Battery time	> 500 Measurements	
Operating temperature	-15 to 50	°C

## Optional equipment

### Wheel flange distance Ar measurement module

The compact measurement module integrated in the wheel profile sensor. The electronic tape measures the distance between the two plane surfaces of the wheels.

### Equivalent conicity

Software module for the calculation of equivalent conicity according to DIN EN 15302 and UIC 519 respectively.

The rail profile, inclination and distance can be selected freely and stored as a type of track. Data are calculated and displayed, and tolerances are monitored online.



ELAG Elektronik AG has developed and supplied measurement systems world-wide since 1983, and sets the highest standards of quality.

The team of efficient and innovative engineers at ELAG Elektronik AG develop and manufacture all measurement systems including sensors, mechanical systems and software applications. Our customers benefit from tried and tested sensors and seamlessly integrated measurement devices that guarantee highly precise results and are simple to operate.

We are committed to working in close partnership with our customers. We believe that short lines of communication are essential to implementing your requirements in line with consistently high quality standards.

This includes professional consultancy from the sales stage to commissioning through to system maintenance all provided to our customers.

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