



RAILSTRAIGHT

**ELECTRONIC MEASURING DEVICES FOR
INSPECTION OF LONGITUDINAL PROFILES**



SAFETY AND RIDE COMFORT ENSURED WITH RELIABLE CHECKS

Dimensionally flawless welded rail joints, as well as the correct alignment and surface characteristics of rails are essential parameters when it comes to the service life of rail infrastructure.

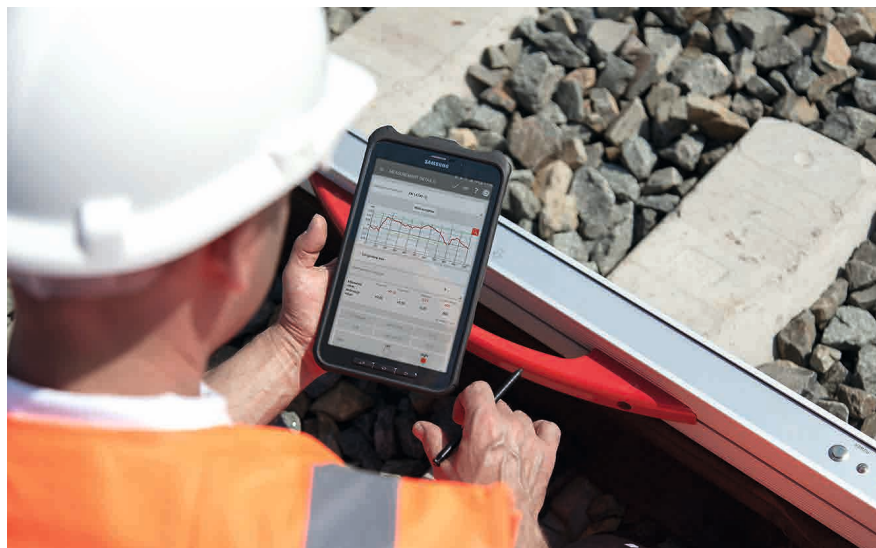
Therefore it is important to document these factors using measuring equipment that is both objective and reliable. This is a key aspect of ensuring that extraordinary ride comfort will be guaranteed when building new high-speed rail lines and dealing with increased track loads. The answer to these challenges are our Railstraight measurement devices:

- Extremely accurate in measuring straightness and surface quality of longitudinal rail profiles
- Railstraight Wave also offers the analysis of corrugation
- Measuring using the Railstraight app on a device for Android™
- Involvement into the Dari® software or database solutions enables further analysis and visualizations
- Calibration can be checked with the Railstraight app
- The measuring system is referenced automatically 30 second intervals to compensate for the influence of temperature
- Powerful internal Li-ion battery, rechargeable with Micro-USB
- For longer operating times, you can use eight AA batteries as an alternate source of power
- Heavy-duty design (IP54 degree of protection) for flexible use on track
- Railstraight Wave is approved for the Deutschen Bahn network

THE RIGHT MEASURING DEVICE FOR EVERY NEED

By using Railstraight measuring devices for dimensional measurements, you can both document the corresponding track condition and have a record confirming that rail connections meet the applicable quality requirements. And since real-life experience shows that requirements can vary widely, we have several versions of Railstraight to meet your specific needs.

RAILSTRAIGHT COMPACT	RAILSTRAIGHT DUAL	RAILSTRAIGHT WAVE
<p>Meets the requirements in:</p> <ul style="list-style-type: none"> • DB 824.8210 • EN 14730-2 • RLN00127-2 (Quality Index QI) • NAV 3-3-2.1 • AS1085.20 	<p>Meets the requirements in:</p> <ul style="list-style-type: none"> • DB 824.8210 • EN 14730-2 • RLN00127-2 (Quality Index QI) • NAV 3-3-2.1 • AS1085.20 	<p>Meets the requirements in:</p> <ul style="list-style-type: none"> • DB 824.8210 • EN 14730-2 • RLN00127-2 (Quality Index QI) • NAV 3-3-2.1 • AS1085.20 • DB 824.8310 • EN 13231-3
<ul style="list-style-type: none"> • Straightness measurement of the running edge and running surface of fish plate and welded joints • Suitable for measuring the running surface of grooved rails even in switch areas 	<ul style="list-style-type: none"> • Simultaneous straightness measurement of the running edge and running surface of fish plate and welded joints • Suitable for measuring the running surface and running edge of grooved rails even in switch areas and at guide rail height 	<ul style="list-style-type: none"> • Straightness measurement of the running edge and running surface and corrugation measurement of longitudinal rail profiles • Determination of wavelengths in various wavelength ranges, e.g., 0.4"-1.2", 1.2"-4", 4"-12", 12"-39"



Together with the Railstraight app, the devices can be used for measurements and documentation with both imperial and metric units.

CARRY OUT DIGITAL AND PRECISE MEASUREMENTS

With the Railstraight app, you can generate reports verifying the track position, ensuring acceptance-level quality quickly and in a straightforward manner on site. A involvement into the Dari® software or database solutions from Goldschmidt, enables you to benefit from many additional features and advantages.

DARi



FUNCTIONALITIES AND BENEFITS

Data acquisition via Railstraight app and, if desired, connection to other Dari® software or database solutions

Intuitive user interface for each process step

Display reports on the longitudinal profiles of the running surface and running edge with support for user-defined specifications

Measure the rail temperature and transmit it via the rail thermometer (optionally available)

Quick preparation of reports and data export via CSV or PDF for sending from the Railstraight app

Available for Android smartphones and tablets

Worldwide availability and evaluation of the measurement data via cloud solutions of the Dari® software or databases

GPS positioning for pinpointing the measurement location

References for welds and measurements in Dari® software or database applications

Directly exchange data for remote maintenance through the application using the log file and email

Program country-specific and region-specific speed profiles according to the applicable rules



VISIONARY IDEAS NEED POWERFUL SOLUTIONS:
DARI® BY GOLDSCHMIDT.

Our database solution **Dari®** – Data acquisition for rail infrastructure – enables us to make our products smarter, more effective and sustainable. Goldschmidt has therefore taken the next logical step and combined a collection of **modern, high performance stand-alone solutions** into a **digital network of intelligent products**.

This innovative edge, based on the forward-looking technology of **Dari®**, is the special and unique added value offered by our Goldschmidt products. Experience new dimensions at the track construction site.
With Dari® by Goldschmidt.

TECHNICAL DATA

SPECIFICATIONS	RAILSTRAIGHT COMPACT	RAILSTRAIGHT DUAL	RAILSTRAIGHT WAVE
Measuring length	1 yd	1 yd	1 yd
Horizontal resolution	500 points	500 points	500 points
Linearity error	±0.5 %	±0.5 %	±0.5 %
Measuring range	+0.059 ... -0.098 in	+0.039 ... -0.079 in	+0.039 ... -0.079 in
Vertical resolution	39.4 µin	39.4 µin	39.4 µin
Display resolution	394 µin	394 µin	394 µin
Measuring time	6 sec	6 sec	6 sec
Weight	11 lbs	17.6 lbs	11 lbs
Dimensions	48.4 x 6.5 x 4.3 in	52.4 x 7.6 x 3.7 in	48.4 x 6.5 x 4.3 in
Battery life (internal/external)	At least 400/300 measurements	At least 400/300 measurements	At least 400/300 measurements
Ambient temperature	14 ... 122 °F	14 ... 122 °F	14 ... 122 °F
Rail temperature	-4 ... +140 °F	-4 ... +140 °F	-4 ... +140 °F

CONTENTS

- Railstraight device with integrated Li-ion battery and 2 silicone caps (Compact/Wave)
- Green reference measuring bar
- Neoprene carrying bag
- Micro-USB charger for 110/220 V
- AA batteries
- 12 V car charger
- Railstraight app (download)
- Connection to a cloud-based Dari® database solution for data analysis
- Operation manual

OPTIONAL ACCESSORIES

- Rail thermometer with Bluetooth interface
- Aluminum transport box
- Smartphone or tablet operating on Android for device control
- Other Dari® features available





SMART RAIL SOLUTIONS

Together with you, Goldschmidt masters the challenges of modern, railbound mobility – for safe, sustainable and long-lasting railways of premium quality. As with Thermit®, Goldschmidt is also a pioneer in maintenance, inspection and digitalization and continues to improve processes and extend the lifecycle of railway infrastructure. Goldschmidt benefits from its global expertise and cross-disciplinary thinking to create tailor-made local solutions for you. The global presence of Goldschmidt gives you access to its whole portfolio – with one goal: to lead your railway infrastructure into the future.