

RAILSTRAIGHT

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



SAFETY AND RIDE COMFORT THANKS TO RELIABLE CHECKS

The geometrically perfect production of welded rail joints and the correct alignment and surface finish of the rails are essential parameters for the durability of railway infrastructure.

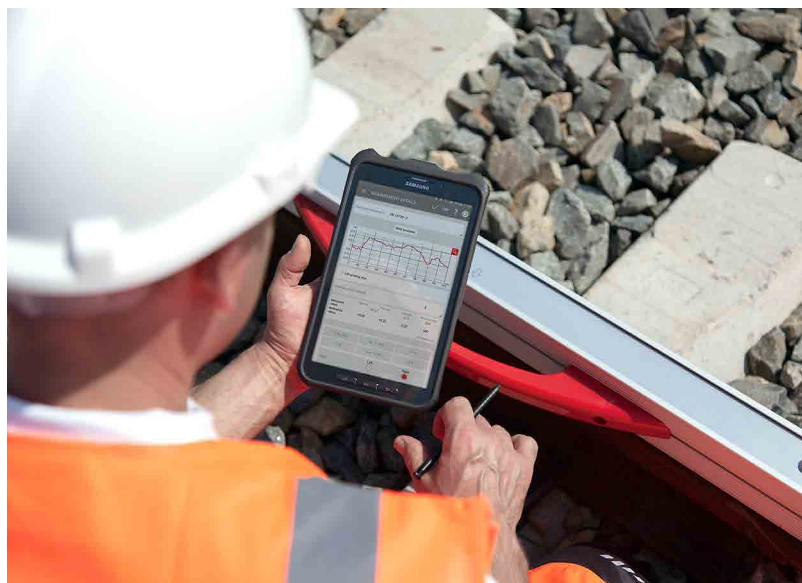
It is therefore necessary to document these factors – namely using measuring technology that is both objective and reliable. Then you will be in an excellent position with respect to the construction of new high speed rail tracks, heavier track loads and demands for better ride comfort. The benefits of our Railstraight measuring devices are clear:

- Extremely accurate in measuring straightness and surface quality of longitudinal rail profiles as well as the analysis of corrugation
- Start measuring using the Railstraight app on a device for Android™
- Simple data transmission via app and Bluetooth® interface to the Dari® central database solution
- There is an option to monitor the calibration via the Railstraight app
- Automatic referencing of the measurement system for temperature compensation every 30 seconds
- Powerful, internal lithium-ion battery which can be recharged via micro-USB
- Alternative power supply via eight AA batteries for longer operating periods
- Robust design (IP protective class 54) for flexible operation on the track

THE MEASURING DEVICE SUITABLE FOR EVERY REQUIREMENT

By taking geometric measurements with Railstraight measuring devices, you can document that the execution of the rail connection and the rail condition meet quality requirements. As practice has shown that requirements sometimes vary greatly, Railstraight is available in different versions.

RAILSTRAIGHT COMPACT	RAILSTRAIGHT DUAL	RAILSTRAIGHT WAVE
<p>Fulfils requirements in accordance with:</p> <ul style="list-style-type: none"> • DB directive 824.8210 • EN 14730-2 • RLN00127-2 (Quality Index QI) • NAV 3-3-2.1 • AS1085.20 	<p>Fulfils requirements in accordance with:</p> <ul style="list-style-type: none"> • DB directive 824.8210 • EN 14730-2 • RLN00127-2 (Quality Index QI) • NAV 3-3-2.1 • AS1085.20 	<p>Fulfils requirements in accordance with:</p> <ul style="list-style-type: none"> • DB directive 824.8210 • EN 14730-2 • RLN00127-2 (Quality Index QI) • NAV 3-3-2.1 • AS1085.20 • DB directive 824.8310 • EN 13231-3
<ul style="list-style-type: none"> • Measurement of straightness of gauge face and running surface of joints and welding connections • Suitable for measuring the running surface of grooved rails, even in turnout areas 	<ul style="list-style-type: none"> • Simultaneous measurement of straightness of gauge face and running surface of joints and welding connections • Suitable for measuring the running surface and running edge of grooved rails, even in turnout areas, at the height of check rails 	<ul style="list-style-type: none"> • Straightness measurement of gauge face and running surface and for corrugation measurement of longitudinal rail profiles • Determination of corrugation wave lengths in four different ranges is possible: 10-30 mm, 30-100 mm, 100-300 mm, 300-1 000 mm



The devices are also suitable for measurements and documentation with imperial measurement units together with the Railstraight app.

PROCEDURE FOR PRECISE DIGITAL MEASUREMENTS



The Railstraight app enables you to quickly and easily prepare reports confirming perfect track position and with it acceptance quality directly on site. A connection to Goldschmidt's central database solution, Dari®, enables you to benefit from many additional features and advantages.



FEATURES AND BENEFITS

Data is recorded in real time via the Railstraight app and integrated Bluetooth interface, stored, then transferred to the central database Dari®

Intuitive user interface for every process step

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

Measurement of rail temperature and transmission via the rail thermometer (optional)

Quick preparation of reports and data export via CSV or PDF for sending via e-mail

Available for smartphones and tablets operating on Android

Measurements are available in real time and can be accessed and evaluated from anywhere worldwide, at any time

GPS positioning for localising measured values

Direct access to references for welds and measurements via the Dari® database solution

Direct exchange of data for remote maintenance via the application using the log file and mailing

Programming of country- or region-specific speed profiles in accordance with applicable regulations

DARi

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

	RAILSTRAIGHT COMPACT	RAILSTRAIGHT DUAL	RAILSTRAIGHT WAVE
Measuring length	1 m	1 m	1 m
Horizontal resolution	500 points	500 points	500 points
Linearity error	± 0.5 %	± 0.5 %	± 0.5 %
Measuring range	+1.5...-2.5 mm	+1...-2 mm	+1...-2 mm
Vertical resolution	0.001 mm	0.001 mm	0.001 mm
Display resolution	0.01 mm	0.01 mm	0.01 mm
Measuring time	6 sec	6 sec	6 sec
Weight	5 kg	8 kg	5 kg
Dimensions	1230 x 165 x 110 mm	1330 x 192 x 95 mm	1230 x 165 x 110 mm
Operating time of rechargeable batteries (internal/external)	min. 400/300 measurements	min. 400/300 measurements	min. 400/300 measurements
Ambient temperature	-10...+50 °C	-10...+50 °C	-10...+50 °C
Rail temperature	-20...+60 °C	-20...+60 °C	-20...+60 °C

CONTENTS

- Railstraight device with integrated lithium-ion battery and 2 silicon caps (Compact/Wave)
- Green reference measuring bar
- Neoprene carrying bag
- Micro USB charger 110/220 V
- AA batteries
- Car charger 12 V
- Railstraight app (download)
- Connection to Goldschmidt's database solution Dari®
- Operating instructions

OPTIONAL ACCESSORIES

- Rail thermometer with Bluetooth interface
- Transport box aluminium
- Smartphone or tablet operating on Android for device control

PRODUCT CATALOGUE

You can find more measuring devices in our comprehensive product catalogue.

We can send you a printed copy of our product catalogue at any time. You can also download the catalogue as a PDF version from our website at:

www.goldschmidt.com/en/service/brochures





SMART RAIL SOLUTIONS

Together with you, Goldschmidt masters all 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 railways. Goldschmidt combines its extensive railway expertise and benefits from its global expertise and cross-disciplinary thinking to create tailor-made local solutions for you. The global presence of Goldschmidt gives access to its whole portfolio – with one goal: to lead your railway infrastructure into the future.