

GEDO DOC

SIMPLE TRACK QUALITY MEASUREMENTS WITH AS-BUILT CHECK

The System, based on the Trimble GEDO CE 2.0 track measuring trolley, allows easy track control by measuring the basic quality parameters. The cant, track gauge and twist are measured depending on the chainage.

TRIMBLE GEDO SYSTEMS

Trimble GEDO systems can be used for various applications in measuring, recording and analyzing track position and track quality, as well as for construction and maintenance activities. The instruments and software of the Trimble GEDO systems are specifically designed for the various surveying tasks on railway lines and simplify the work in the field and in the office. Using standard data formats, information can be exchanged with leading software products for track planning and track maintenance machinery.

SYSTEM CONFIGURATION

Trimble GEDO CE 2.0

Track measurement trolley with sensors for measuring gauge and cant. In combination with a Trimble control unit suitable for use in the field, this forms the basis for a simple and fast acquisition of the most important parameters for assessing track quality. The track measuring trolley can easily be lifted off the track by one person before a train passes through.

Trimble GEDO IMS module Doc

Software module for recording the most important track quality parameters in conjunction with the Trimble GEDO CE 2.0 track measurement trolley and the Trimble GEDO Profiler. The measured values are displayed during the measurement. A comparison with known reference points can be carried out directly in the field. Results are output in a log file.

Trimble GEDO Profiler

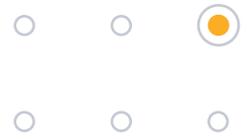
Laser measurement system with angle encoder for checking the track position at known points and for measuring distances to objects close to the track (e.g. structures and platforms). The distances are displayed both perpendicularly and vertically to the cant in relation to the track axis or inner edge of the rail.

Key Benefits

- ▶ Simple track control by measuring the basic quality parameters track gauge, cant and twist
- ▶ Support for Trimble GEDO Profiler or Trimble total stations to measure distances and height differences to nearby control points, platform edges and other objects of interest close to the track
- ▶ Live display of the current measured values
- ▶ As-built check at track marking points to verify the absolute track position
- ▶ Measurement of long sections of track during temporary closures without affecting rail traffic
- ▶ Direct output of results on site in a user definable point interval
- ▶ Recording and coding of important positions
- ▶ Use of a universal track measuring trolley with modular expansion options



Point type	Reference point	87%
Point name	11	<input type="checkbox"/> Chord point
Chainage	193,332 m	S 0,000
Code		0
Δ Lateral	14,1 mm	0,000
Δ Height	-16,6 mm	
Δ Cant	0,1 mm	
	11	
	0,00 m	
Cancel	Options	Store



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GENERAL	
APPLICATIONS	
	Track quality control by measuring gauge, cant and twist Profiler or Trimble total station for checking the track position at reference points and distance measurement to objects close to the track
PERFORMANCE	
System accuracy	±0,5 mm in Stop-&-Go-Mode ±1 - 2 mm in Kinematic Mode
Measurement speed	up to 3.600 m/h
SYSTEM REQUIREMENTS	
Controllers	Trimble TSC7, T7 and T100 controllers (Windows® OS)
TRIMBLE GEDO PROFILER	
Weight	3,5 kg
Measurement range	0,3 m to 30 m
Typical accuracy for distance measurement	±1,5 mm
Connection to control unit	Bluetooth®

TRIMBLE GEDO CE 2.0	
Description	Track-mounted trolley (Extensions are possible)
Gauges	1.000 mm, 1.067 mm, 1.435 mm, 1.520 mm, 1.524 mm, 1.600 mm, 1.668 mm (other gauges on request)
Weight	16,8 kg
GAUGE MEASUREMENT	
Range	-20 mm to +60 mm
Accuracy	±0,3 mm
CANT MEASUREMENT	
Range	±9° or ±235 mm at 1.435 mm track gauge
Accuracy	±0,5 mm (static)
BATTERY	
Type	Trimble S-Series Li-Ion, rechargeable
Life	> 12 h
COMMUNICATION	
Connection to control unit	Bluetooth



Specifications are subject to change without notice.

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