GEDO VORSYS

PRE-MEASURING FOR TAMPING

Fast, accurate measurement of track conditions is a key component of productive tamping operations. Trimble GEDO CE provides adjustment data to tamping machines quickly and efficiently, and avoids costly idle time for ballast tamping machines and work crews. Precision measurement systems make Trimble GEDO CE an ideal tool in conventional and high-speed rail tamping.

THE TRIMBLE GEDO CE SYSTEM

Trimble GEDO CE is a suite of tools for measurement, recording, analysis and applications for railway track location, construction and maintenance. Specially tailored for railway tasks and processes, Trimble GEDO CE hardware and software streamlines work in the field and office. The system uses standard techniques and data formats to share information with leading applications for railway track design and maintenance

TOOLS FOR TAMPING OPERATIONS

Trimble GEDO CE Trolley

A single operator can quickly make pre- and post-tamping measurements on ballasted track. Using either single or two-trolley configurations, precise positioning is supplied by a Trimble S-Series Total Station. The trolleys are easily removed from the track to stay clear of tamping and construction machines.

Trimble GEDO Office

Software for processing and analysis of field data, and for data exchange with external systems.

Trimble GEDO Tamp

Software for processing and analysis of field data. The system prepares data for tamping machines using measurements from Trimble GEDO Vorsys. Trimble GEDO Tamp supports standard formats for data exchange with tamping machines and systems.

Trimble GEDO Quality

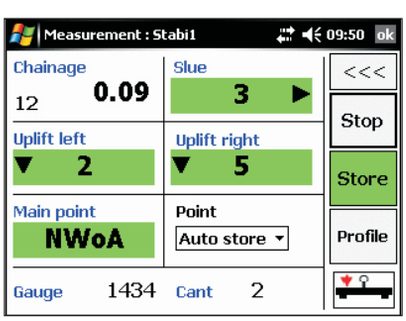
Software to generate compliance reports ensuring conformity within track safety and quality parameters.

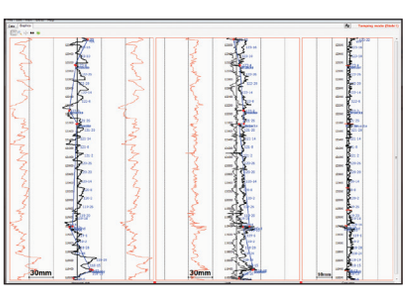
Trimble GEDO Vorsys

Field software tailored to pre-tamping measurement and data collection. Trimble GEDO Vorsys runs on the Trimble TSC3 Controller and controls all measurement functions. Wireless connections eliminate cables and ensure trouble-free operations.

Key Benefits:

- Reduce tamping time and costs with rapid delivery of data to the tamping machine
- Reduce track downtime for construction and maintenance
- Capture track 3D track position, gauge and cant in a single operation
- Verify track geometry with accuracy and confidence. Precise optical positioning and a simple, self-contained trolley provide flexibility and reliable results
- Import alignment design from digital or paper plans. Alignment editor lets you check design information before it goes to the job site
- Post-tamping measurement reduces rework and provides immediate quality control
- Support for industry-standard formats and protocols





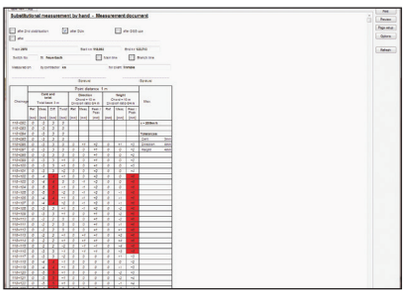
Trimble

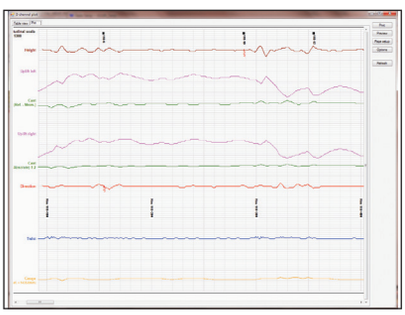
TECHSHEET

PRE-MEASURING FOR TAMPING

GENERAL

Application . . . . . Pre- and post-tamping measurement of track
New construction, renewal, maintenance, tracks and turnouts
Performance . . . . . Up to 1.400 m/hr
Up to 2,500 m/hr in Kinematic mode
Measurement speed . . . . . 1 Hz (Stop&Go Mode)
10 Hz (Kinematic Mode, only S8 and S9)
System accuracy . . . . . ±0.3 mm
Position accuracy . . . . . ±1 mm* in Stop&Go Mode
±3 mm* in Kinematic Mode
Supported positioning sensors . . . . . Trimble S5 Total Station
Trimble S6 Total Station
Trimble S7 Total Station
Trimble S8 Total Station
Trimble S9 Total Station





TRIMBLE GEDO CE 2.0 TRACK MEASURING

Description . . . . . Track-mounted trolley
Gauge . . . . . 1000 mm, 1067 mm, 1435 mm, 1520 mm, 1600 mm, 1668 mm
other gauges on request

Gauge measurement

Range . . . . . –20 mm to + 60 mm
Accuracy . . . . . ±0.3 mm

Cant measurement

Range . . . . . ±10° or ±265 mm
Accuracy . . . . . ±0.5 mm (static)
Weight instrument trolley . . . . . 19.5 kg
Weight prism trolley . . . . . 16,0 kg

Battery life

Type . . . . . Trimble S-Series Li-Ion, rechargeable
Life . . . . . 6-8 hours

TRIMBLE TSC3 CONTROLLER

Operating system . . . . . Windows® Embedded Handheld 6.5 Professional
Operation . . . . . Touchscreen, Keyboard
Interfaces . . . . . USB, RS232, Bluetooth®, WiFi (802.11b/g)
Environmental Protection IP67; MIL-STD-810G
Temperature range . . . . . –30 °C to +60 °C
Weight . . . . . 1.04 kg

Battery

Type . . . . . 28.9 Wh Li-Ion
Life . . . . . 34 hours

TRIMBLE TABLET PC

Operating system . . . . . Microsoft Windows 7 Professional
Operation . . . . . Touchscreen
Interfaces . . . . . HDMI, USB, Bluetooth® 4.0, WLAN (b/g/n)
Environmental Protection IP65; MIL-STD-810G
Temperature range . . . . . –30 °C to +60 °C
Weight . . . . . 1.4 kg

TRIMBLE S9 TOTAL STATION

Weight . . . . . 5.5 kg
Angle accuracy . . . . . 0.5'' or 1''
Typical accuracy for distance measurement . . . . . 0.8 mm + 1 ppm or 1 mm + 2 ppm

* depending on environment and setup

Specifications subject to change without notice

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