Constructing slab track calls for fast, precise measurements and immediate feedback. Trimble GEDO CE is a simple, integrated system to measure for precise adjustments, inspections and quality checks. In one operation, the Trimble GEDO CE captures the 3D coordinates of the track, together with gauge and cant. The information is compared to the design, and offsets and correction values are displayed in the field, where work crews make the necessary adjustments. With its precision measurement systems, Trimble GEDO CE is suitable for conventional and high-speed rail construction.

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 SLAB TRACK CONSTRUCTION AND ADJUSTMENT

Trimble GEDO CE Trolley
A single operator can quickly and safely capture information to document existing track. Positioning is supplied by Trimble GNSS Receivers or Trimble S-Series Total Stations. The trolley is easily removed to stay clear of railway operations.

Trimble GEDO Office
Software for preparing alignments. Supports standard formats for data exchange with external systems.

Trimble GEDO Track
Field software optimized for slab track construction, adjustment and verification. GEDO Track runs on the Trimble TSC3 Controller.

Trimble GEDO Calc
Processing, analysis and review of field data and prepare documentation of the construction and final position.

Trimble Profiler GEDO CE 2.0
Laser measurement unit to measure object close to the track, As-Built survey, platform gauging and clearance check. The measurement can be taken relative according to the track position or by using total station or GNSS absolute coordinates can be measured additionally.

Key Benefits:

- Reduce construction time and costs with immediate comparison of measured data to design
- Verify track geometry with accuracy and confidence. Precise optical positioning and a simple, self-contained trolley provide flexibility and reliable results
- Capture track 3D coordinates, gauge and cant in a single operation
- Import alignment design from digital or paper plans. Check design information before it goes to the job site
- Reduce time for documentation and acceptance. Capture adjustment and track acceptance data and quickly prepare reports for contractors and quality inspection
- Support for industry standard calculations including FAKOP® widening
- Satisfy reporting requirements with graphical and list form output of corrections for side and height correction plates
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## APPLICATION
- Track adjustment for slab track construction-based on railbounded systems
- High speed railways, trams, metros, industrial railways, turnouts
- > 100 meters/hour for documentation and acceptance
- Other gauges on request

## PERFORMANCE
- 200 m to 400 m/day for adjustment
- 1 Hz
- ±0.3 mm
- ±1 mm
- Trimble S5 Total Station, Trimble S6 Total Station, Trimble S7 Total Station, Trimble S8 Total Station, Trimble S9 Total Station

## TECHSHEET

### APPLICATION
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- 1 Hz
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- ±1 mm
- Trimble S5 Total Station, Trimble S6 Total Station, Trimble S7 Total Station, Trimble S8 Total Station, Trimble S9 Total Station

### SUPPORTED EQUIPMENT
- **Trimble GEDO CE 2.0 TRACK MEASURING**
  - **Description**: Track-mounted trolley
  - **Weight**: 16.0 kg
  - **Gauge measurement**
    - **Range**: ~20 mm to +60 mm
    - **Accuracy**: ±0.3 mm
  - **Cent measurement**
    - **Range**: ±10° or ±265 mm
    - **Accuracy**: ±0.5 mm (static)
  - **Type**: Trimble S-Series Li-Ion, rechargeable
  - **Life**: 6–8 hours

- **Trimble TSC3 CONTROLLER**
  - **Operating system**: Windows Embedded Handheld 6.5 Professional
  - **Interfaces**: USB, RS232, Bluetooth®, WiFi (802.11b/g)
  - **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
  - **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**: 3.5 kg
  - **Accuracy**
    - **Range**: ±0.5 mm (static)
    - **Range**: ±10° or ±265 mm
  - **Battery life**
    - **Range**: 0.8 mm + 1 ppm or 1 mm + 2 ppm

### ENVIRONMENTAL PROTECTION
- **Trimble GEDO CE 2.0 TRACK MEASURING**: IP67; MIL-STD-810G
- **Trimble TABLET PC**: USB, RS232, Bluetooth®, WiFi (802.11b/g)

### SUPPORTED SENSORS
- **Trimble S5 Total Station**
- **Supporting software**
  - TRIMBLE TSC3 CONTROLLER
  - TRIMBLE TABLET PC

### SUPPLEMENTARY INFORMATION
- **Weight**
  - **Trimble S5 Total Station**: 3.5 kg
  - **Trimble S6 Total Station**: 3.5 kg
  - **Trimble S7 Total Station**: 3.5 kg
  - **Trimble S8 Total Station**: 3.5 kg
  - **Trimble S9 Total Station**: 3.5 kg

### ACCURACY
- **Trimble S5 Total Station**: ±0.3 mm

### SUPPORTED GAUGES
- **1000 mm, 1067 mm, 1435 mm, 1520 mm, 1600 mm, 1668 mm**
- **Other gauges on request**

### SUPPORTED SATELLITE SYSTEMS
- **RTK**

### SUPPORTED BATTERIES
- **Trimble S-Series Li-Ion, rechargeable**

### SUPPORTED MEASUREMENTS
- **Distance measurement**
  - **Typical accuracy**
    - **Trimble S5 Total Station**: ±1.5 mm
    - **Trimble S6 Total Station**: ±1.5 mm
    - **Trimble S7 Total Station**: ±1.5 mm
    - **Trimble S8 Total Station**: ±1.5 mm
    - **Trimble S9 Total Station**: ±1.5 mm

### SUPPORTED SOFTWARE
- **Trimble GEDO CE 2.0 TRACK MEASURING**
- **Trimble TABLET PC**
- **TRIMBLE TSC3 CONTROLLER**
- **TRIMBLE S9 TOTAL STATION**

### SUPPORTED ROADS
- **High speed railways, trams, metros, industrial railways, turnouts**
- **Slab track types**
  - on railbounded systems

### SUPPORTED INDUSTRIES
- **Transportation, industrial**

### SUPPORTED COUNTRY SPECIFICATIONS
- **USA**
  - **Address**: 10368 Westmoor Dr, Westminster CO 80021
  - **Website**: www.trimble-railway.com

### SUPPORTED REGIONAL PARTNERS
- **NORTH AMERICA**: Trimble Navigation Limited
  - **EUROPE**: Trimble Railway GmbH
  - **ASIA-PACIFIC**: Trimble Navigation Singapore Pty Limited