

Purpose:

Capture accurate as-built geometry and context so projects can validate construction, update asset

records and feed design changes.

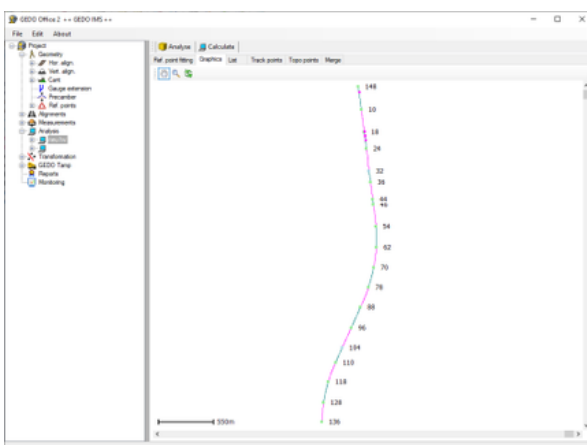
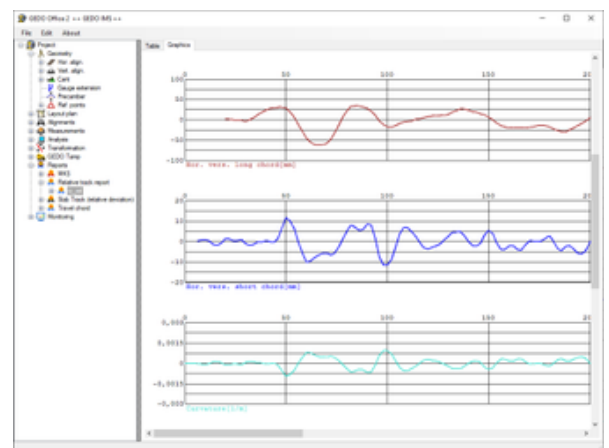
As-built surveys verify that installed track and structures match design, quantify deviations and provide authoritative datasets for rail owners and contractors.

Workflow:

- 1) Establish/Verify control
- 2) Measure track and surroundings
- 3) Process to geometry/sections/reports
- 4) Deliver CAD/BIM and QA results

Deliverables:

- Absolute track geometry and centreline
- Cross-sections and distances to platforms/structures
- Deviation reports to design
- CAD files and PDFs
- Point clouds/images (where applicable)



Configuration: Trimble GEDO CE 2.0 trolley/GEDO Electronic Track Bar + control unit + Trimble total station.

Method:

Measures left/right rail with gauge and cant to produce absolute track position and deviations to design.

When to use:

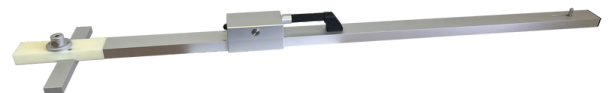
Small-scale projects, short sections, tie-ins, platforms and locations where trolley access is not practical.

Deliverables:

- Absolute deviations to design for lift and line
- As-built track geometry
- Offsets to design,
- PDF/CAD deliverables.
- Reports from GEDO Office.



GEDO Track System



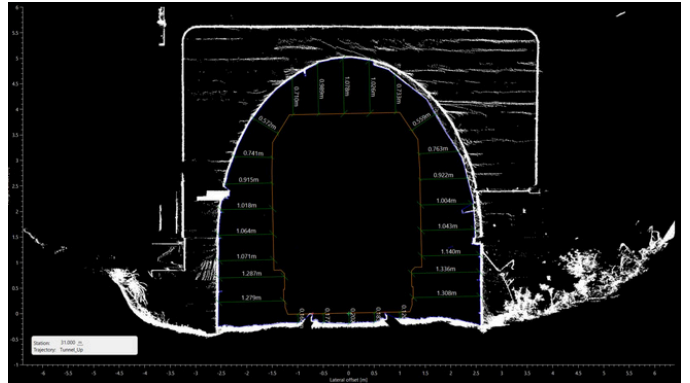
GEDO Electronic Track Bar



GEDO Track System



GEDO Track System



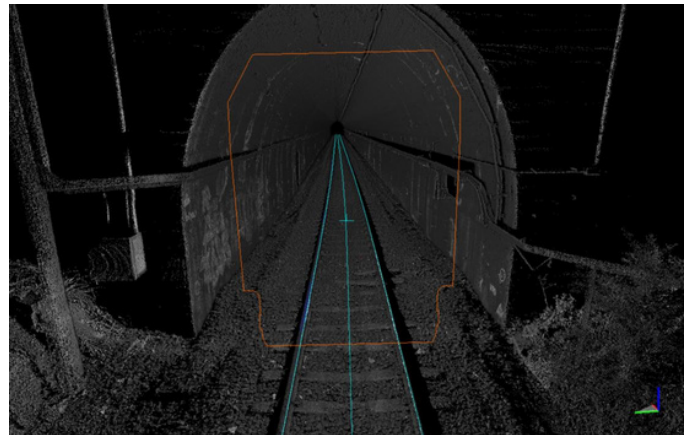
Configuration: GEDO trolley + GX50 + total station (geodetic referencing).

Method:

High-resolution scanning with geodetic ties to deliver absolute as-built models, cross-sections and clearances.

Field Advantages:

- Absolute positioning via total-station ties (works in tunnels, cuttings, under OLE).
- High-resolution near-track capture: rails, platforms and structures in a single pass.
- Fast setup and walk-and-scan workflow — ideal for short possessions/minimal track occupation.
- GEDO Scan Office for envelopes, cross-sections and CAD/BIM outputs.



Deliverables:

- Cross-sections
- Clearance checks
- As-built point clouds
- CAD/BIM packages.



GEDO IMS System

Configuration:

Single GEDO CE 2.0 trolley +
GEDO IMU + control unit + GEDO Profiler or
total station for control.

Method:

Inertial measurement with periodic control
ties for fast corridor as-builts capturing full
track geometry with absolute positioning.

Field advantages:

Inertial measurement with periodic
control ties for fast corridor as-builts
capturing full track geometry with
absolute positioning.

Deliverables:

- Lift & line correction tables (per chainage)
- Full geometry set: alignment/elevation, gauge, cant, twist (absolute)
- 3D track trajectory line
- Absolute alignment/elevation, gauge/cant/twist
- QA plots and CAD exports

