

#HandsOnMetrology

PART OF

ZEISS

Your mobile measuring room ZEISS T-SCAN



Seeing beyond



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A mobile measuring room for intuitive 3D data capturing

The modular T-SCAN system is your fast way forward: Capture 3D data without any part preparation. Its perfectly matched components – the hand-held T-SCAN laser scanner, the optical tracking system T-TRACK and the touch probe T-POINT – form an intuitive and highly precise 3D metrology solution. In combination with the software GOM Inspect Suite, it reaches a new dimension in coordinate measuring technology.



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A modular all-in-one concept

The modular all-in-one concept and complete laser scanning solution offers maximum flexibility for a large variety of applications and surfaces.

Early detection of deviations

Save time and money: This mobile measuring solution can be used on the shop floor and allows a very intuitive way to analyse, measure and obtain a digital twin.

A guided software workflow

The system T-SCAN is equipped with the software GOM Inspect Suite. See progress on the monitor in real-time and get guided through scanning, probing and inspecting.



A mobile system with two options

Combine a hand-held laser scanner and a touch probe with the optical tracking system of your choice: the established ZEISS T-TRACK 20 for large measuring volumes of up to 20 m³ or the new ZEISS T-TRACK 10 for a smaller measuring volume and higher accuracy.





ZEISS T-POINT Hand-held touch probe for single points



ZEISS T-TRACK 10 Optical tracker with a measuring volume of 10 m³



ZEISS T-TRACK 20 Optical tracker with a measuring volume of 20m³



Easy data capture with a hand-held laser scanner ZEISS T-SCAN

The hand-held T-SCAN scanner captures 3D data fast and intuitively. Thanks to the ergonomic design, it enables effortless scanning. With its lightweight and compact sensor housing, the device is ideally suited for capturing data even in the most difficult-to-reach areas.

Measure in any dimension ZEISS T-TRACK 20

The measuring system ZEISS T-TRACK 20 offers a measuring volume of 20 m³. Measure parts of up to 4 m in length in just one single setup. Using the system is easy to learn. You can capture 3D data efficiently, accurately and fast. Just put a part into its tracking volume and you are ready to measure – no preparation of reference points is needed.

The traceable accuracy guarantees reproducible and reliable measuring results.





NEW

Measure with high accuracy ZEISS T-TRACK 10

The measuring system T-SCAN 10 with the new T-TRACK 10 offers a measuring volume of 10 m³. It allows you to measure parts of up to 2.5 m in length in just one single setup. Thanks to highly reliable ZEISS optical components it is a perfect fit for applications which require higher accuracy.

The traceable accuracy guarantees reproducible and reliable measuring results.

Fast point measurements ZEISS T-POINT

The touch probe T-POINT is the perfect solution for singlepoint measurements on object areas such as (trimmed) edges and standard geometries or optically hard-to-reach areas. It captures the selected measuring positions quickly and reliably. The device can be used with conventional measuring probes which can be replaced easily and quickly.



Extend your measuring volume ZEISS T-SCAN SMTs

T-SCAN SMTs (Spherical Mounted Targets) allow you to further extend your measuring volume or even combine multiple ZEISS T-SCAN systems. If a part is too big for ZEISS T-TRACK or its geometry blocks the line of sight, this convenient multi-position tracking application can be easily mounted on an object and supports you in capturing 3D data with consistent precision.



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Fast and highly precise 3D scanning

Outstanding technical features, such as the high dynamic range for scanning of various object surfaces, innovative camera technology and high quality ZEISS optics as well as a fast data rate, allow for a smooth scanning process and precise measuring results.

Dynamic referencing

Capture 3D data with high precision, even on moving objects – with the dynamic referencing function you perform your measurements independently of component movements and difficult ambient conditions, including vibrations.



A wide range of applications

Quality control / inspection

- ✓ Nominal / actual comparison of CAD
- Boundary / edge extraction (sheet metal parts)
- ✓ Inspection of complex welded structures
- \checkmark Shop floor inspection

Tool and mold making

- \checkmark Tool reconstruction
- \checkmark Scan data for generating machining paths
- ✓ Actual capture following tool approval
- Capture of complex component dynamics,
 e.g. during a clamping procedure

Product development and design

- High dynamic range to scan all kinds of surfaces
- Scanning of design models for CAD downstream processing and documentation
- ✓ Gage and fixture setup
- Fast capture of reference geometries and specified areas

Technical Data

ZEISS T-SCAN hand-held laser scanner

Type / ZEISS T-SCAN

| Measuring depth | +/- 50 mm |
|--|-----------------------|
| Line width | Up to 125 mm |
| Mean working distance | 150 mm |
| Line frequency | Up to 330 Hz |
| Data rate | 210,000 points/second |
| Weight | 1100 g |
| Sensor dimensions (incl. handle and IR pins) | 300 x 170 x 150 mm |
| Cable length | 10 m |
| Mean point distance | 0.075 mm |
| Laser class (IEC 60825-1:2014) | Class 2M (eye-safe) |
| Software | GOM Inspect Suite |

Technical Data ZEISS T-TRACK 10 NEW



ZEISS T-TRACK 20

Type / ZEISS T-TRACK 10

| Measuring distance: object-camera | 2.0 m - 4.50 m |
|-----------------------------------|-------------------------|
| Measuring volume | 10 m ³ |
| Field of view | Up to 2894 mm x 2324 mm |
| Measuring rate | Up to 2,8 kHz |
| Weight | 18,5 kg |
| Dimensions | 1150 x 180 x 150 mm |
| Software | GOM Inspect Suite |
| Traceable accuracy | Yes |
| Accuracy | 33+(33*L/1000) |

Type / ZEISS T-TRACK 20

| Measuring distance: object-camera | 2.0 m – 6.0 m |
|-----------------------------------|-------------------------|
| Measuring volume | 20 m ³ |
| Field of view | Up to 3200 mm x 2500 mm |
| Measuring rate | Up to 2,8 kHz |
| Weight | 18,5 kg |
| Dimensions | 1150 x 180 x 150 mm |
| Software | GOM Inspect Suite |
| Traceable accuracy | Yes |
| Accuracy | 40+(40*L/1000) |



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