

# 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.





## 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 m<sup>3</sup> or the new ZEISS T-TRACK 10 for a smaller measuring volume and higher accuracy.

## ZEISS T-SCAN

Hand-held 3D laser scanner



## ZEISS T-POINT

Hand-held touch probe for single points

NEW



## ZEISS T-TRACK 10

Optical tracker with a measuring volume of 10 m<sup>3</sup>



## ZEISS T-TRACK 20

Optical tracker with a measuring volume of 20 m<sup>3</sup>





# 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 m<sup>3</sup>. 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 m<sup>3</sup>. 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 single-point 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.



# High process reliability

## GOM Inspect Suite



ZEISS T-SCAN operates with GOM Inspect Suite, the all-in-one software solution and well established standard in 3D metrology. Measurements and inspection can be performed in the software including a parametric workflow where all process steps are traceable. A software-guided scanning and probing process that simplifies and speeds up your workflow.

[Download for free](#)[Learn more](#)

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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
- ✓ Shop floor inspection

## Tool and mold making

- ✓ Tool reconstruction
- ✓ 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

#### Type / ZEISS T-TRACK 10

Measuring distance: object-camera	2.0 m – 4.50 m
Measuring volume	10 m <sup>3</sup>
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)

### ZEISS T-TRACK 20

#### Type / ZEISS T-TRACK 20

Measuring distance: object-camera	2.0 m – 6.0 m
Measuring volume	20 m <sup>3</sup>
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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