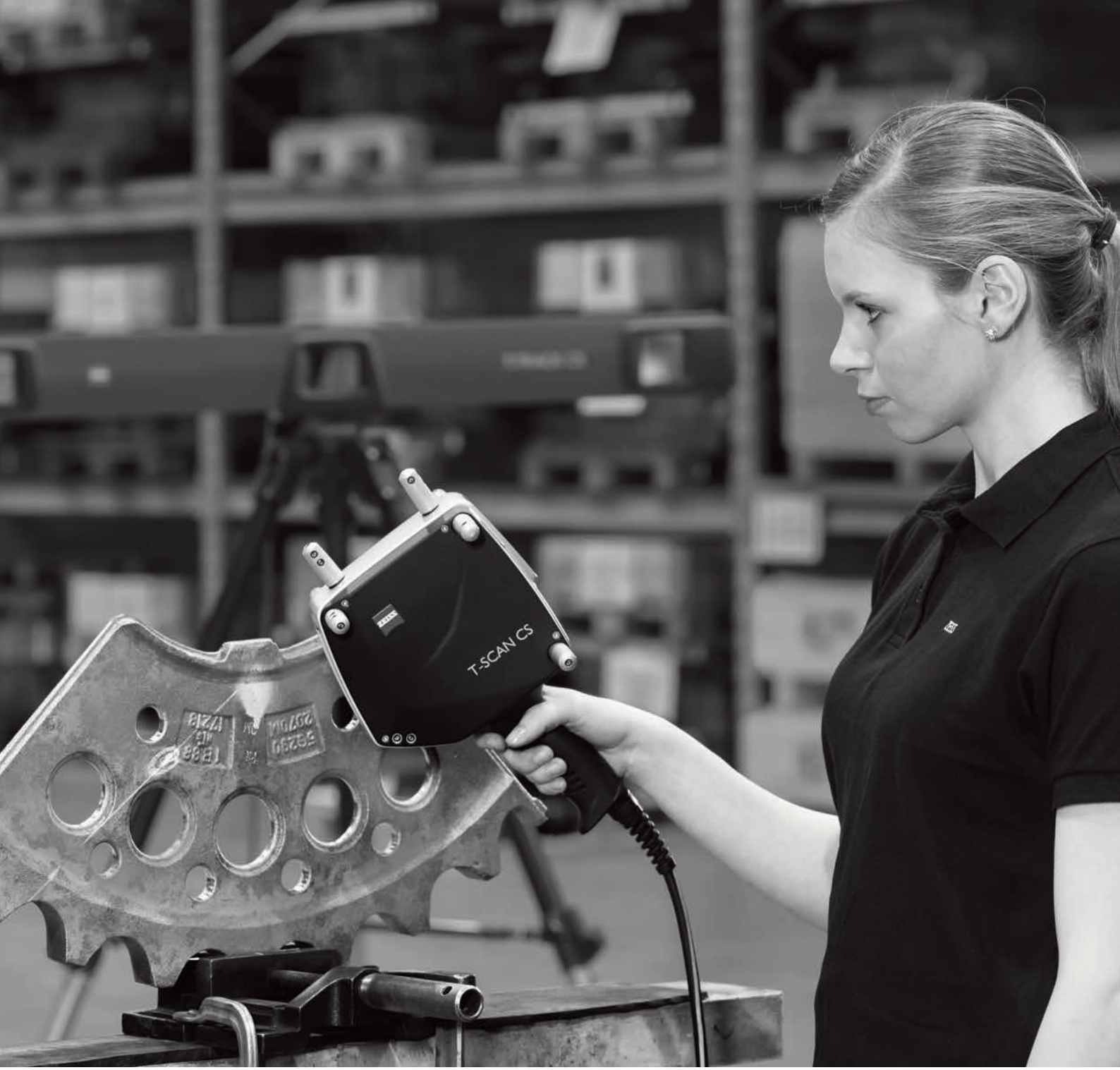


ZEISS T-SCAN

3D Digitization / Laser Scanning

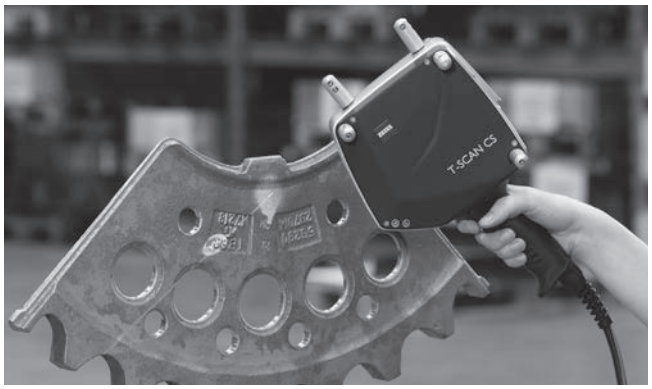
Intuitive data capture with a hand-held laser scanner

ZEISS

ZEISS T-SCAN

The innovative, complete laser scanning solution impresses with its exceptional performance, user friendliness and flexibility

Fast, intuitive and highly precise 3D scanning – the hand-held ZEISS T-SCAN laser scanner is a complete solution, achieving a new dimension in coordinate measuring technology.
With its perfectly matched components (tracking camera, hand-held scanner and touch probe), this modular system offers maximum flexibility for many different applications.
The high-performance colin3D software platform ensures a consistently efficient and project-oriented workflow during the entire measuring process.



Quick and intuitive 3D data capture with the hand-held ZEISS T-SCAN laser scanner

User-oriented, ergonomic design and ease-of-use for efficient data capture

The ZEISS T-SCAN hand-held scanner has been ergonomically tailored to the operator's needs, enabling effortless and intuitive scanning. With its light-weight and compact sensor housing, the device is ideally suited for capturing data in even the most difficult-to-reach areas.
Outstanding technical features, e. g. the high dynamic range for scanning on diverse object surfaces and a hitherto unmatched data rate, allow for an unparalleled scanning speed and precise measuring results.

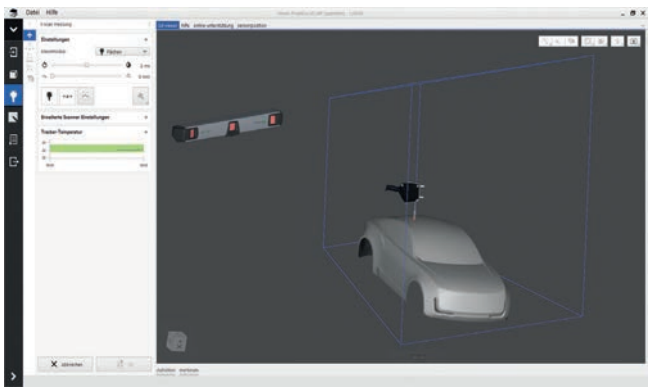
The hand-held ZEISS T-POINT touch probe – the ideal portable coordinate measuring machine for simple single-point measurements

Hand-held touch probe for fast point measurements

The ZEISS T-POINT touch probe captures the selected measuring positions quickly and reliably, making it the perfect solution for single-point measurements on object areas such as (trimmed) edges and ruled geometries. The device can be used with conventional measuring probes which can be replaced easily and quickly.

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 (production environment, e. g. a press shop, or parts in operation, e. g. measuring sealings on moving car doors, etc.).

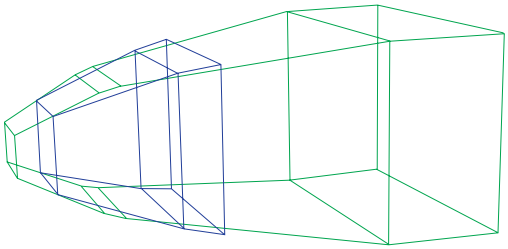


ZEISS colin3D measuring and analysis software supports an efficient workflow

Universal software interfaces

From data acquisition through data processing all the way to data comparison – the ZEISS T-SCAN can be controlled by many different direct real-time interfaces, making system integration into existing processes easy and straightforward.

Optical tracking systems for different measuring volumes
From small all the way to large-format components – the CS+ and LV system configurations always provide you with the ideal solution for your measuring job.



ZEISS T-TRACK CS+: an added 'plus' for greater flexibility
The ZEISS T-TRACK CS+ optical tracking system enables a wide range of metrology applications through optimal matching with all other system components.
The high data processing rate means measurements are performed at maximum speed, minimizing machine occupancy time.

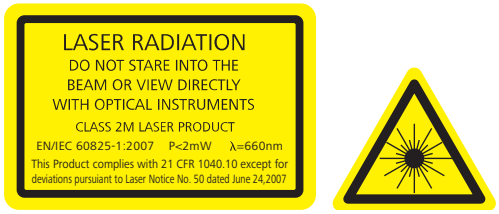
ZEISS T-TRACK LV: the large volume tracker
With the uniquely large measuring volume of this innovative scanning and tracking combination, you achieve completely new perspectives in optical 3D digitization.
Now you can capture the 3D data from large-format objects more quickly and easily – the high scanning speed of the hand-held laser scanner and a tracking volume of up to 35 m^3 offer you maximum freedom of movement for an efficient measuring run.

A wide range of applications

- Quality control / inspection
  - Nominal / actual comparison of CAD
  - Boundary / edge extraction (sheet metal parts)
  - Shop floor inspection
- Tool and mold making
  - Tool reconstruction
  - Scan data for generating machining paths
  - Actual-capture following tool approval
  - Inspection of complex welded structures
  - Gage and fixture setup
- Rapid manufacturing
  - 3D data capture for rapid prototyping
- Reverse engineering
  - Capture of highly complex geometries as reverse engineering data
- Design
  - Scanning of design models for CAD downstream processing and documentation
  - Capture of character lines
  - Fast capture of base surfaces (alignment)
- Capture of complex component dynamics, e. g. during a clamping procedure
- Archeology, documentation of art-historical objects, etc.
- Applications in medical technology (motion analysis, etc.)

ZEISS T-SCAN hand-held laser scanner – technical data

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
Standard scanner-PC cable length	10 m
Mean point distance	0.075 mm
Points per line	1312
Laser type	Diode
Wavelength	658 nm
Laser class	2 M
Available software	ZEISS colin3D Direct real-time interfaces available with almost all standard software packages



ZEISS T-TRACK optical tracking system – technical data

	T-TRACK CS+	T-TRACK LV
Measuring distance: object-camera	2.0 m – 4.0 m	1.5 m – 7.5 m
Measuring volume	6.3 m^3	35 m^3
Field of view	Up to 2466 mm x 2178 mm	Up to 3700 mm x 2600 mm
Measuring rate	Up to 4 kHz	Up to 4.5 kHz
Weight	18.5 kg	24 kg
Dimensions	1150 x 180 x 150 mm	1157 x 230 x 175 mm
PC	Notebook or desktop PC	Notebook or desktop PC
Available software	ZEISS colin3D Direct real-time interfaces available with almost all standard software packages	ZEISS colin3D Direct real-time interfaces available with almost all standard software packages
Possible configurations	T-SCAN CS/T-POINT CS/T-REF CS	T-SCAN LV/T-POINT LV/T-REF LV

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