Optical 3D Scanners

PRODUCT BROCHURE

Optical 3D Metrology

Our optical portfolio consist of industrial non-contact 3D scanners. They deliver highly accurate full-field 3D scans in a minimal amount of time. Due to their splash and dustproof housing, the systems are well-suited for the usage in challenging environments.

3D Scanning

ZEISS ATOS 5

Developed for industrial use, ZEISS ATOS 5 delivers high-precision 3D data in a short measuring time. Especially for shiny and dark surfaces, fine structures and edges the sensor delivers full-field 3D scans, enabling comprehensive process and quality control.

ZEISS ATOS 5X

Thanks to its powerful light source, ZEISS ATOS 5X enables the inspection of car bodies with maximum speed in automated applications. The integrated Laser Light Compressor generates ultra-bright light, thus enabling very short exposure times.

ZEISS ATOS 5 for Airfoil

ZEISS ATOS 5 for Airfoil delivers precise data in a short time. It's high stability and optimized working distance make it ideal for small measurement areas. The full-field 3D measurement results enable reliable quality control, visualize hidden defects and thus accelerate the production of complex parts.

ZEISS ATOS LRX

With a bright laser light source and a large measuring area of up to 4 m², ZEISS ATOS LRX delivers precise, full-field data in short time. The sensor captures up to 2 x 12 million coordinate points with just one scan.

ZEISS ATOS Compact Scan

The portable and lightweight 3D scanner ZEISS ATOS Compact Scan is designed for a wide range of applications. With different measuring volumes the system delivers high-resolution results whether scanning small or large parts.

#**HandsOn**Metrology

#HandsOnMetrology is the new go-to for everything you want to know about 3D scanning. From step-by-step setup instructions to more advanced tutorials and expert hacks: This platform is made for learning. For getting inspired. And for finding the support you need to deliver 3D scanning excellence. This platform is made for you.

ZEISS ATOS Q

Designed as a flexible 3D scanner for complex measurement and inspection tasks, ATOS Q meets high metrological demands for many industries. The Triple Scan Principle and Blue Light Equalizer enable maximum precision, even on challenging surfaces.

ZEISS GOM Scan 1

The lightweight solution allows you to capture 3D data intuitively. Easy to operate, GOM Scan 1 is the specialist for simple and fast measurements of small to medium-sized parts – even in confined spaces.

ZEISS T-SCAN hawk 2

The hand-held laser scanner captures data wherever you need. With its flexible design it adapts to your unique measuring task. Inspect finest details as well as large objects up to multiple meters. Powerful lasers ensure metrology-grade precision in a seamless workflow.

ZEISS ScanPort

ZEISS ScanPort easily captures 3 axes of objects with just one click. The mobile and flexible semi-automated solution delivers metrology-grade data of small to medium-sized parts. It is suited for various applications, like casting, additive manufacturing or plastics.

3D Photogrammetry

ZEISS PONTOS Live

Designed for the production environment, the ZEISS PONTOS Live tracking system is used for the live positioning of parts. Equipped with the Touch Probe, the system enables the combination of optical and tactile measurements.

ZEISS TRITOP

The digital photogrammetry camera ZEISS TRITOP captures 3D coordinates of individual measuring points on objects and components. The portable system is specially designed for harsh measuring environments directly in production, in a climate chamber or offshore.

3D Testing

The ZEISS 3D testing portfolio includes sensors for dynamic or static acquisition of 3D coordinates, displacements, and surface strains. Using photogrammetric methods like triangulation and bundle block adjustment, the systems deliver precise 3D coordinates for full-field and point-based measurements.

ZEISS ARAMIS 3D Camera

ZEISS ARAMIS 3D Camera is a high-resolution optical 3D measuring system for performing full-field and point-based measurements. With high stability, process reliability and ease of use, the system is suitable for high-end applications in industrial environments and offers suitable configurations for a wide range of testing tasks.

ZEISS ARAMIS Adjustable

ZEISS ARAMIS Adjustable provides precise 2D and 3D coordinates for the analysis of statically or dynamically stressed components and materials. The individually expandable system offers suitable configurations for a wide range of inspection tasks and meets the highest metrological requirements based on digital image correlation.

Automated Solutions

Automated quality assurance processes play a central role for economic success in the production environment. They ensure that sources of error can be identified at an early stage and necessary corrections can be implemented. ZEISS offers a comprehensive product portfolio for efficient quality control in the production and manufacturing process of small to large components – tailored to individual needs.

ZEISS ScanCobot

ZEISS ScanCobot is a mobile measuring station with a collaborative robot, motorized rotation table and powerful software. The system is especially suited for the efficient quality control of small and medium-sized parts made of plastic, metal or cast iron. It can be used during the pre-production phase, such as design and prototyping, as well as during market launch.

ZEISS ScanBox Series 4

ZEISS ScanBox Series 4 is an optical 3D measuring machine for the inspection and digitization of small and complex parts up to 500 mm in size. The compact and mobile system is ready for use thanks to the plug & play concept and can be easily repositioned if required.

ZEISS ScanBox Series 4 RC

ZEISS ScanBox Series 4 RC (Remote Control) is an optical 3D measuring machine with a motorized sliding door. With a robot or a customized loading system, parts can automatically be loaded into ZEISS ScanBox Series 4 RC and placed on the rotation table module. The elimination of manual individual placement significantly reduces the inspection time required and therefore ensures a higher throughput in quality assurance.

ZEISS ScanBox 4105 for eMotors

ZEISS ScanBox 4105 for eMotors is specialized in the very fast and precise inspection and digitization of hairpins and stators. Both, complete stators including hairpins and individual or multiple hairpins can be inspected fully automated within a very short time. The captured 3D measurement data are visualized and analyzed in the powerful inspection software ZEISS INSPECT. This model is also optionally available as RC version.

ZEISS ScanBox Series 5

ZEISS ScanBox Series 5 is an all-in solution for automated inspection and digitization of complex parts. The series consists of three models and offers many options for customizing to indivdual needs. The individual components are identical and therefore offer perfect possibilities for upgrading to different layouts. The maximum load of the rotation table module is 2000 kg.

ZEISS ScanBox Series 5 RC

ZEISS ScanBox Series 5 RC (Remote Control) is an optical measuring machine with a motorized sliding door. With a robot or a customized loading system, parts can automatically be loaded into ZEISS ScanBox Series 5 RC and placed on the rotation table module. As the user does not have to place the individual parts, the inspection time required for quality assurance is significantly shorter than before.

ZEISS ScanBox Series 6

In the production environment, it is important to identify, analyze and eliminate quality problems as fast as possible. For that, as many parts as possible must be completely checked in the shortest amount of time to be able to initiate targeted corrective measures at short notice and to minimize scrap. This challenges can be mastered with ZEISS ScanBox Series 6.

ZEISS ScanBox Series 7

Automated 3D measurement technology for car manufacturing, try-out toolmaking and press shops: ZEISS ScanBox Series 7 digitizes and inspects large and heavy parts, such as automobile side panels and attached parts of up to 10 meters in size. In addition, welded assemblies for transportation, mechanical engineering and aircraft construction can be measured.
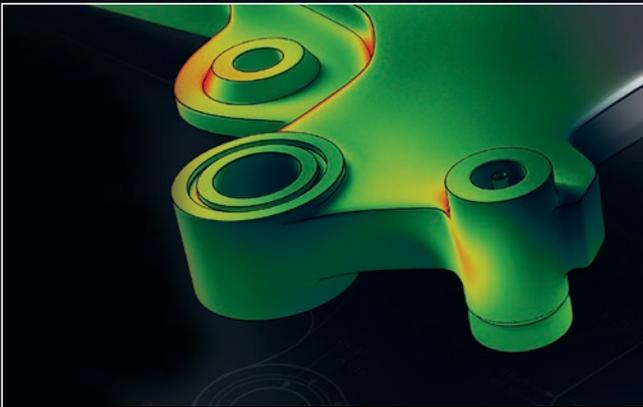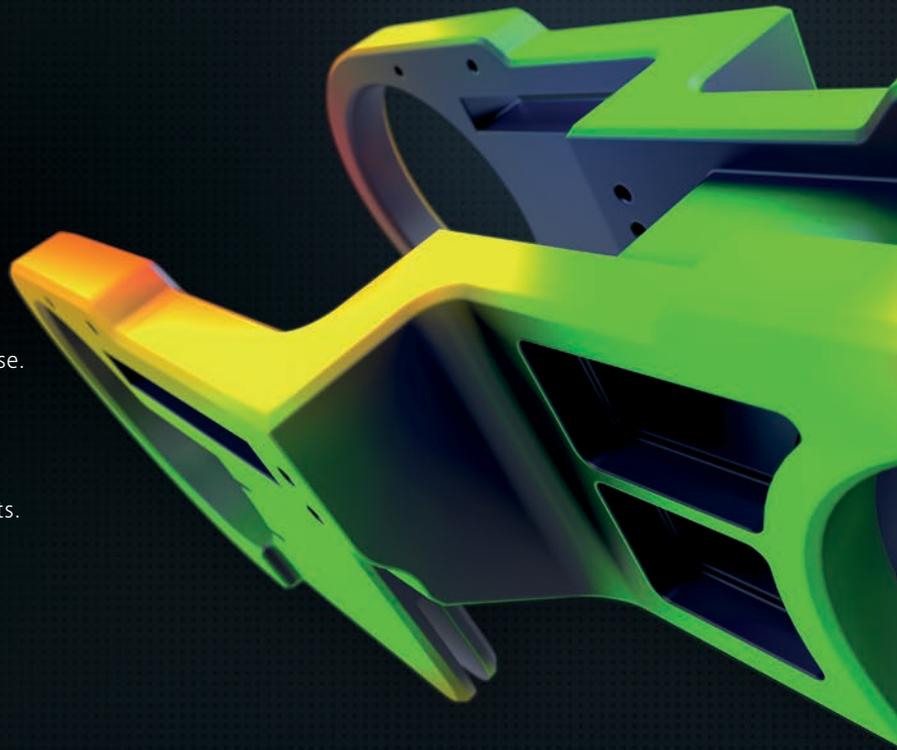

ZEISS ScanBox Series 8

This 3D measuring machine is designed for something big: With ZEISS ScanBox Series 8, complete vehicles are digitized at high speed, both from the outside and the inside. The modular measuring cell has established itself among OEMs as a complete solution for analyses in Meisterbock and Cubing, the inspection of finished vehicles, and for quality assurance in car body manufacturing
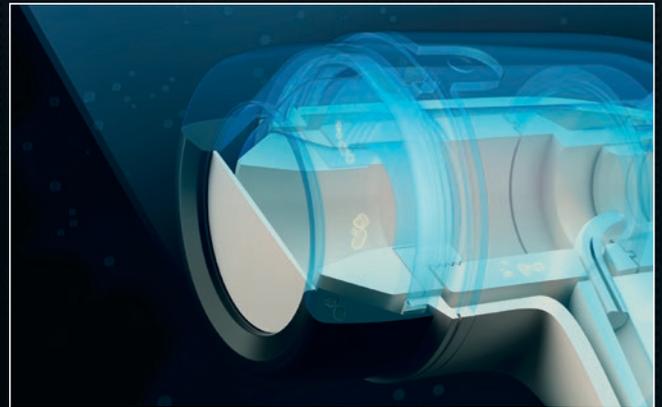
ZEISS INSPECT

Discover the versatility of ZEISS INSPECT. With one intuitive software, you analyze optical 3D data and volume data – regardless of which system you use. Numerous powerful features allow you to customize the software according to your needs. Enhance your productivity through automation. Many user-friendly features ensure efficient workflows and precise results.

ZEISS INSPECT Optical 3D

From full-field data acquisition and mesh processing to trend analyses and digital assembly, the software supports you with a consistent workflow. Experience automated programming and inspection made easy.
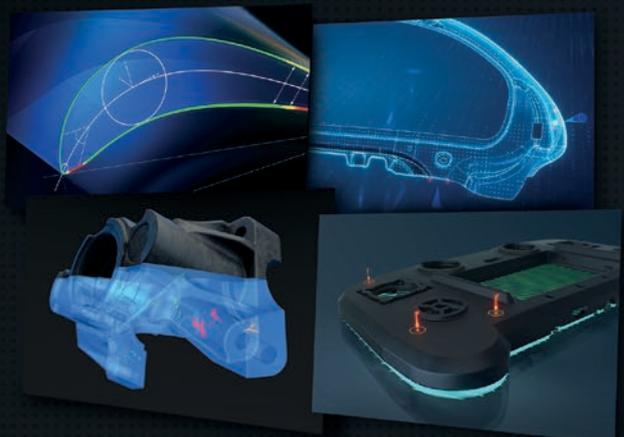
ZEISS INSPECT X-Ray

Visualize and analyze your parts down to the core using CT data. Easily evaluate multiple parts and assemblies automatically. Increase your efficiency with AI-based tools for defect detection.

Apps for ZEISS INSPECT

Get even more out of ZEISS INSPECT. Our powerful apps make it easy to integrate individual requirements. Create your own project templates and automatic measurement sequences or use AI-based defect detection.
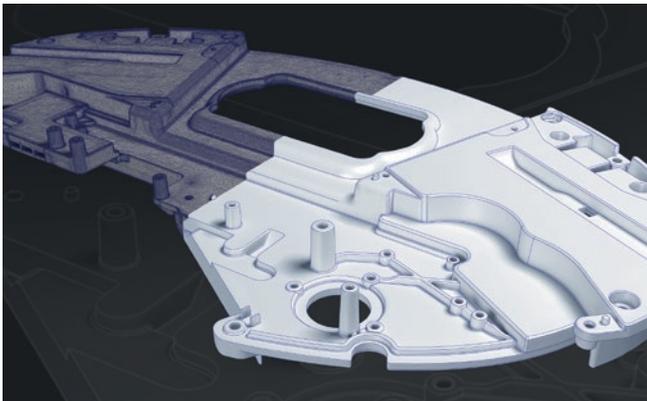
ZEISS Quality Suite
Your ecosystem for measurement technology and quality assurance

ZEISS Quality Suite* is much more than just the sum of its individual software applications. It is your central point of contact for everything related to measurement technology and quality assurance in your company.
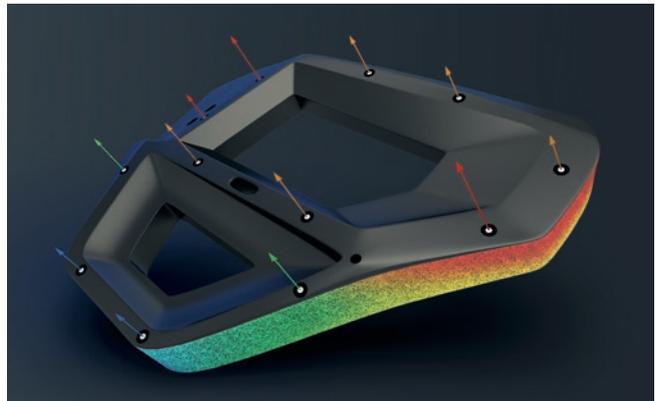
- ⊘ **Greater efficiency**
- ⊘ **Error prevention**
- ⊘ **Optimized networking and communication**

*ZEISS Quality Suite only runs on Microsoft Windows.

ZEISS REVERSE ENGINEERING

From 3D scan to CAD model: ZEISS REVERSE ENGINEERING offers you a simple software solution for reverse engineering. In just a few guided steps, a highly accurate CAD model is created. With the additional tool correction option, you save iteration loops in the correction process.

ZEISS CORRELATE

Turn videos into meaningful measurement data. Analyze dynamic processes such as displacements, rotations or angle changes. Use digital image correlation and point tracking algorithms to measure 3D coordinates with sub-pixel accuracy.

Data Exchange

Quality processes are global: those involved must be able to test, approve and utilize inspection plans, projects and results from all over the world.
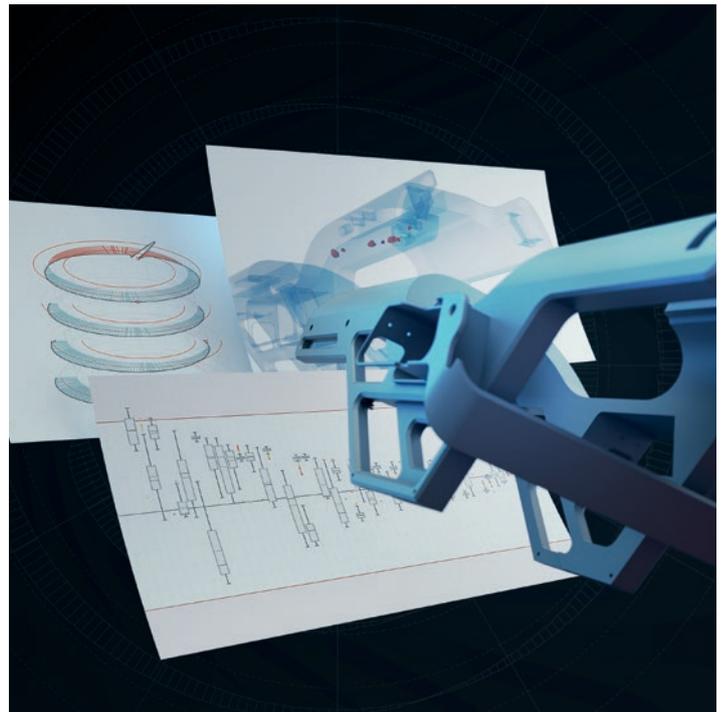
ZEISS CONNECTED QUALITY

One single source of truth: the central collaboration platform enables global metrology operations. With ZEISS CONNECTED QUALITY we facilitate agnostic, traceable, secure and global quality processes, offer access to system health & utilization data and contribute to centrally managed global quality operations.

Data Management

Industrial metrology is essential to deliver reliable product quality to the customer.
Create data evaluations, analyses and reports across technologies and systems.

ZEISS PiWeb

ZEISS PiWeb reporting and quality data management
software helps to connect metrology results coming
from different measuring technologies to shop floor
decisions. This allows you to efficiently track your
production quality across all measuring machines. The
software can capture and analyze results from tactile,
optical, manual or CT measurements.

ZEISS Smart Services Dashboard

With the ZEISS Smart Services Dashboard you
keep track of the performance of your ZEISS CMM
measuring machines. Benefit from greater machine
availability, process safety and higher productivity.
This allows you to unlock the full potential of your
measuring solutions.

ZEISS Services and Support

As a comprehensive solutions provider, ZEISS remains at your side independent of the purchase of a measuring system. From measuring services and training to enhanced application support – only ZEISS Industrial Quality Solutions is able to offer you the right expertise at all stages of the product life cycle.

We offer customized service packages, tailored to the needs of our customers and serve our customers through a highly skilled, global network of technicians. Equipped with enhanced digital tools and technologies, we are able to help our customers maximize their machine uptime, increase equipment utilization efficiencies and thereby resulting in better customer satisfaction.

ZEISS QEC	**Knowledge**	**Maintenance & Repair**	**Retrofit & Productivity**
Local Customer Center	Training & Learning	Service Contracts	Modernize Systems
Measurement Services	AUKOM	Software Maintenance	Accessories
Quality Excellence Center	ZEISS Academy	Calibration Service	Monitor & Analyse
64 QECs in 38 Countries	100+ Courses	Customized HW/SW SMA	ZEISS Metrology Shop
	38 Countries	100K+ iBase	B2B / Online
		1200+ FSEs with "Global Service Network"	15K+ Products

QUALITY EXCELLENCE CENTER

Experience our broad portfolio of measuring services in our more than 60 locations worldwide. We offer a solution for your toughest measuring challenge so that you can focus on your core business.

KNOWLEDGE

The ZEISS ACADEMY METROLOGY offers online and classroom training tailored to your needs. Receive the most up-to-date knowledge and become an indispensable asset in your company: become the solution.

MAINTENANCE & REPAIR

Customized ZEISS Metrology Care packages, Software Maintenance Agreements and on-site calibration services to unlock maximum performance, help avoid machine downtime and ensure trustworthy measurement results everytime.

RETROFIT & PRODUCTIVITY

Upgrade your old machine to the latest hardware and software standards for higher performance and more functionality at a fraction of cost of a new machine. ZEISS accessories solution for optimal precision and accuracy. Real-time monitoring, analysis and central overview with digital solutions.

METROLOGY PORTAL

From software download, to the webshop to the ZEISS community – our online portal offers digital services that simplify your daily life in quality assurance.

ZEISS

Seeing beyond

zeiss.ly/zk7z