

ZEISS

DuraMax family

The natural choice for the shop floor

Seeing **beyond**

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ZEISS

DuraMax family

The natural choice for the shop floor

ZEISS DuraMax family brings reliable quality assurance directly to your production environment. Designed for demanding shop floor conditions — including temperature fluctuations, vibrations and dust — these CMMs combine robustness, precision and efficiency in a compact footprint. Whether for single parts, larger batches or automated workflows, ZEISS DuraMax systems enable accurate measurements exactly where they are needed.



Benefit from **space, time & cost savings**

Efficiency



Optimized measurement volume in a compact footprint

- Space-saving design for a small footprint
- Generous and easily accessible measuring volume
- Loading from three sides and from above
- No compressed air required

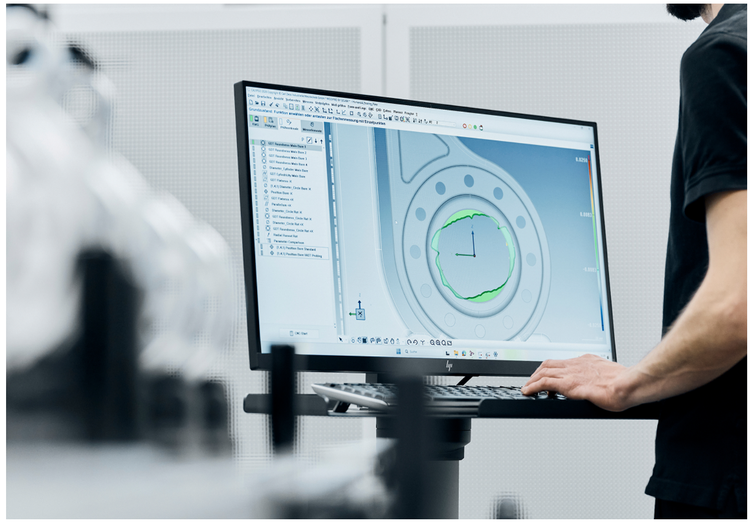
Speed



Reduced operating times and fast measurements

- Fast scanning with ZEISS VAST XXT
- Single-point measurements with ZEISS VAST probing
- ZEISS Duplex system and other automation solutions for increased throughput
- 4-axis measurement with rotary table

Precision

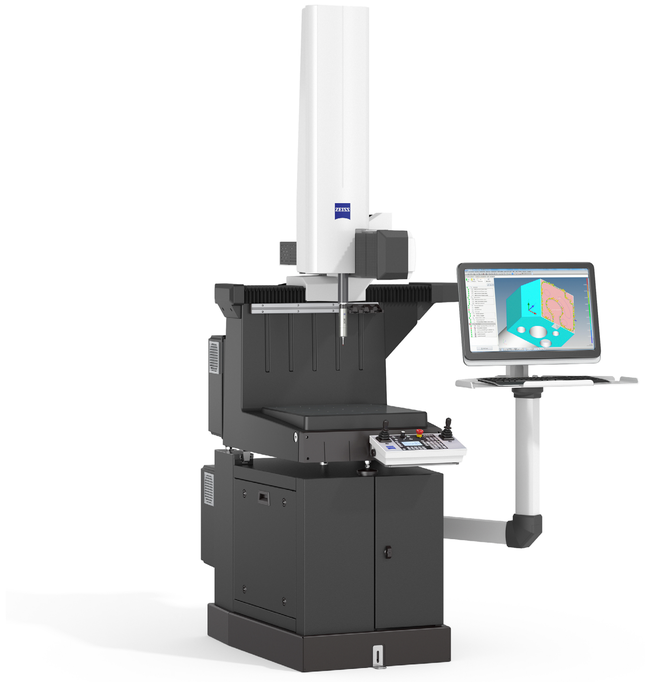


Reliable and precise results even in harsh environments

- Dust and moisture protection
- IP54-rated shop floor base
- Thermal stability due to glass-ceramic scales
- Linear drive system and ball-bearing guides with covered guideways in all axes
- Passive vibration damping as standard

System overview

Choose the right fit for your shop floor



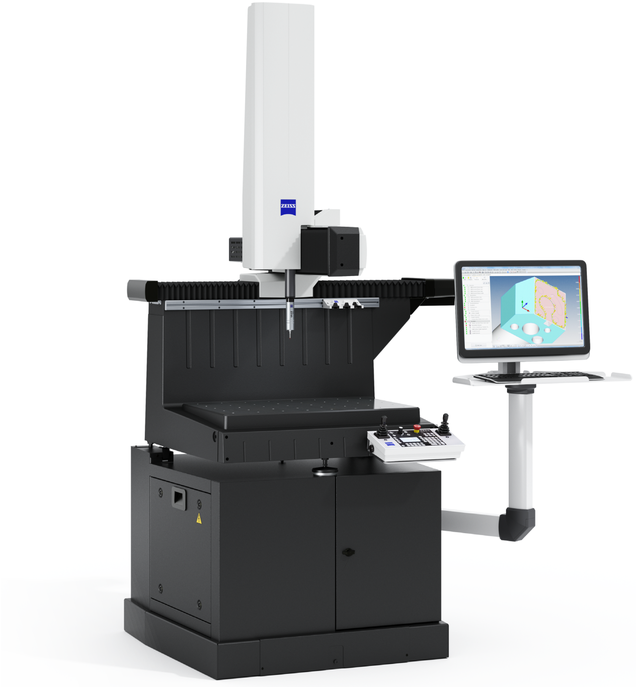
ZEISS DuraMax 5/5/5

The ideal entry into shop floor metrology, delivering fast single-point and scanning measurements in challenging environments.



ZEISS DuraMax 5/5/5 HTG

Engineered for extended temperature ranges to achieve stable measurement results in even more extreme environments.



ZEISS DuraMax 8/5/5

More workpiece flexibility through a spacious measuring volume for larger and heavier parts or batches of small parts.



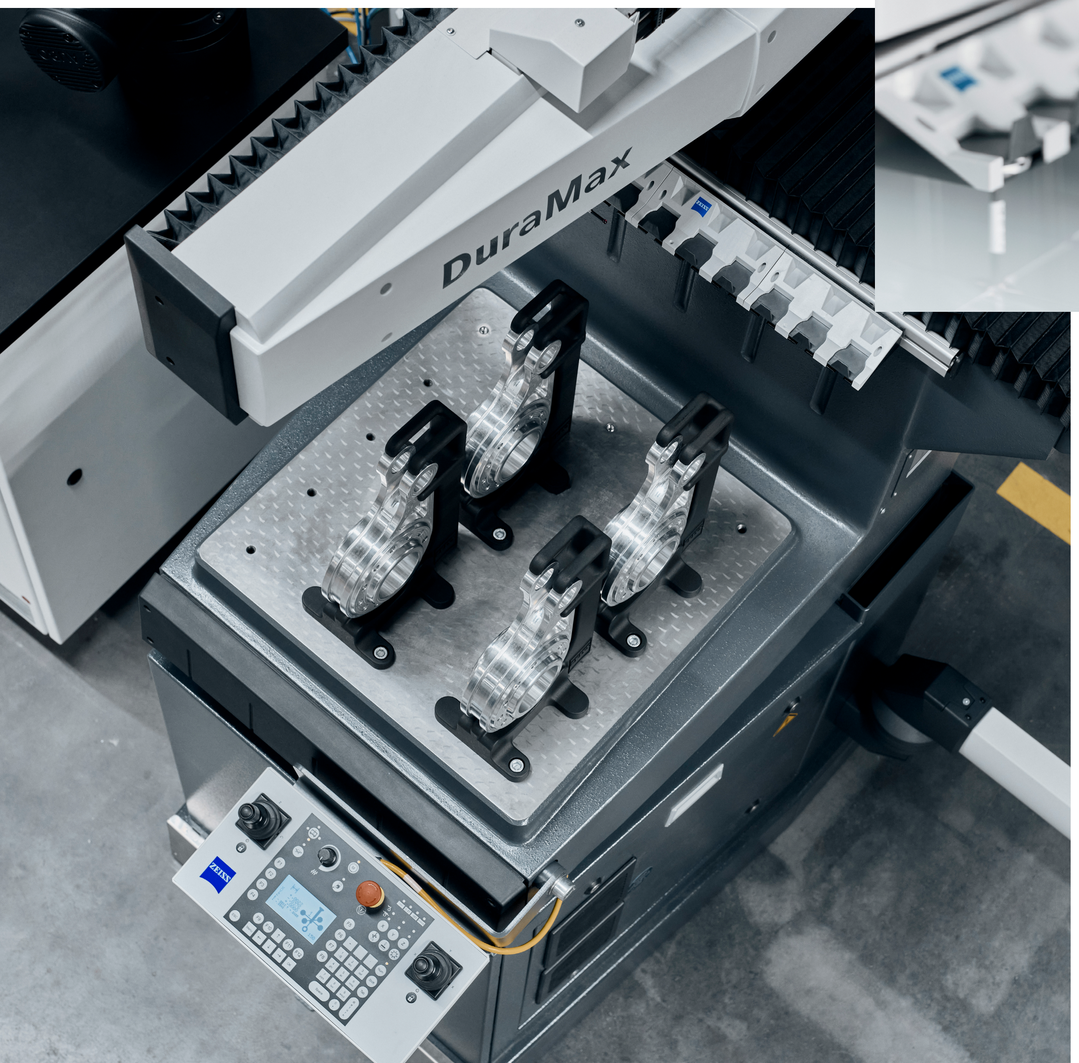
ZEISS DuraMax 5/5/5

Proven precision for the shop floor

Quality assurance in production demands precision, robustness and efficiency — all in one system. ZEISS DuraMax 5/5/5 is engineered for measurement in harsh shop floor environments, delivering reliable results despite temperature fluctuations, vibrations and dust. With its compact design, high stability and powerful scanning technology, it enables fast single-point measurements as well as contour and free-form surface inspection. The combination of ZEISS VAST XXT sensor and ZEISS CALYPSO software ensures productive and repeatable measurement processes.

- Robust design for high precision in harsh conditions
- Fast scanning and single-point measurement with ZEISS VAST XXT
- Automation-ready for higher throughput
- Optional rotary table for 4-axis measurement





ZEISS DuraMax 5/5/5

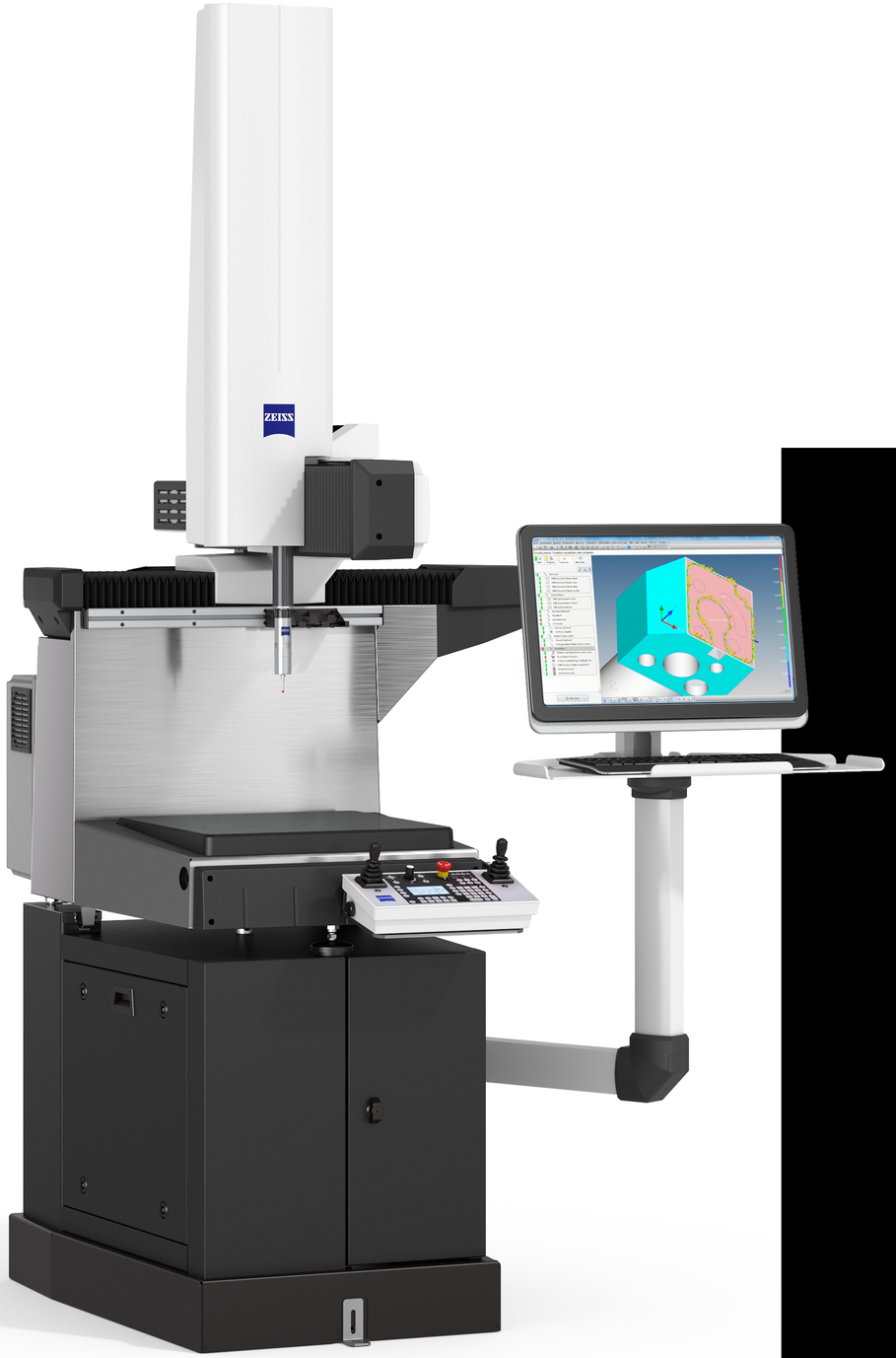
The reliable space-saver for harsh environments

Fully equipped for your challenges: Designed for demanding shop floor environments, ZEISS DuraMax 5/5/5 combines high stability, flexible configuration and efficient operation while improving accessibility, productivity and ease of use.

Measurement volume: The efficient measuring volume-to-footprint ratio provides excellent accessibility from three sides and from above. Clear visibility and an ergonomic loading height simplify handling, improve safety and reduce operating time.

Rotary table for 4-axis-measurement: The optional rotary table enables 4-axis measurement for rotationally symmetrical small parts. It simplifies complex measurement tasks and minimises stylus changes – saving valuable operating time.

ZEISS VAST XXT allows scanning and single-point measurement for optimal productivity with stable results. High point density enables detailed evaluation of size, shape and position tolerances for complex features on different parts.



ZEISS DuraMax 5/5/5 HTG

Even less temperature-sensitive, even more robust

ZEISS DuraMax 5/5/5 HTG offers the widest temperature range with the highest temperature gradient within the DuraMax family and can be operated both at the production site and in automation systems. This provides more flexibility as you can perform your measurement tasks with even more resistance to environmental influences – for measurement results with reliable precision.

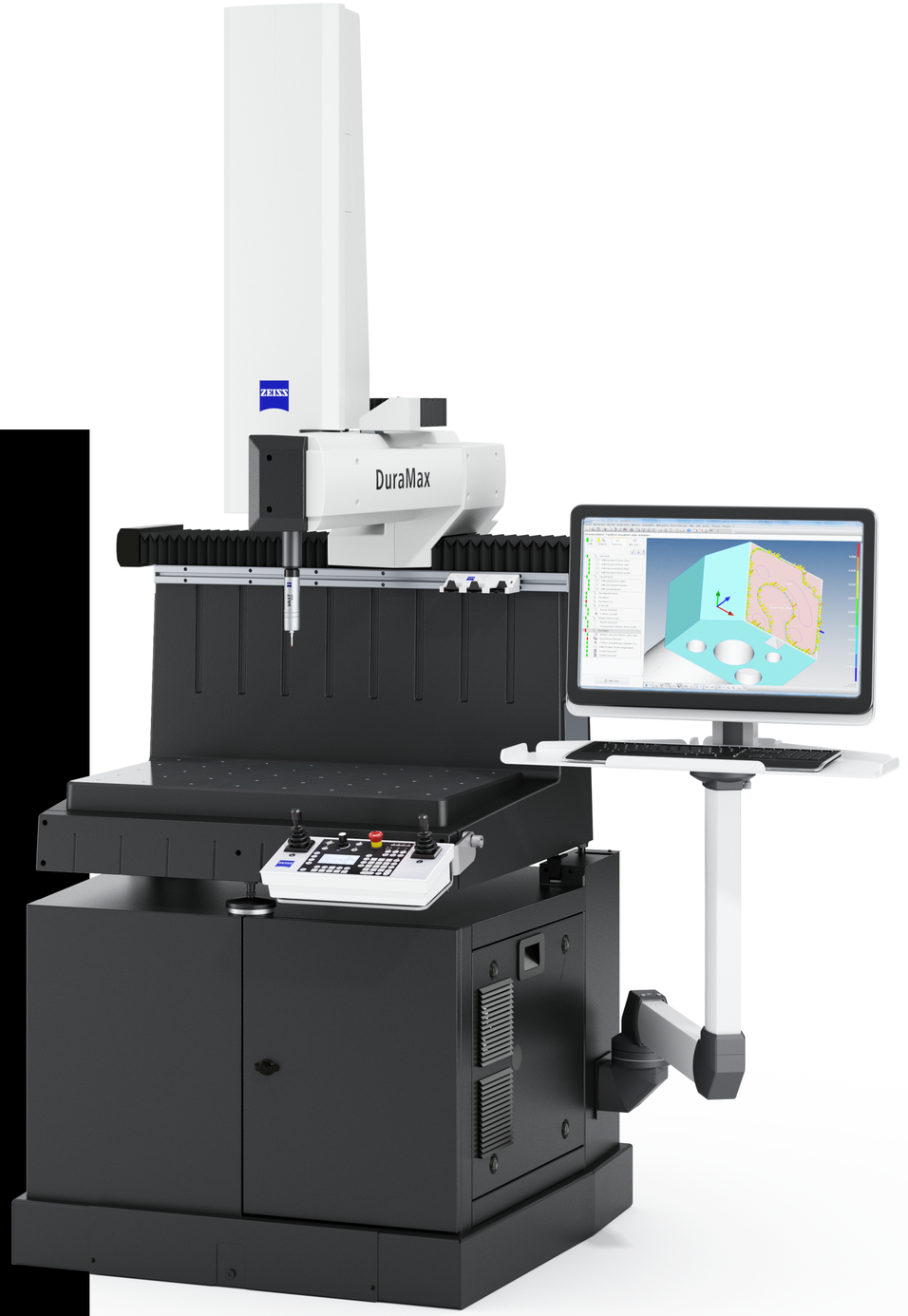
- Frame insulation and stainless steel cover with reflecting surface
- ZERODUR® scales for minimal thermal expansion
- Additional filter pads in all axes to protect against dirt and dust

ZEISS DuraMax 8/5/5

The choice for expanded shop floor precision

More space, same trusted performance: ZEISS DuraMax 8/5/5 delivers the ideal balance of footprint, performance, and scalability for those seeking greater flexibility on the shop floor. The latest member of ZEISS DuraMax family offers a larger measuring volume that significantly increases flexibility for measurements — particularly for larger and heavier parts as well as batch processing of smaller parts. Benefit even more from greater accessibility of your parts, more room for fixtures, stylus systems, and rotary table applications, as well as flexible automation solutions.

- Enlarged measuring volume for maximum flexibility
- Optimized accessibility & automation readiness
- ZEISS CALYPSO for efficient & reliable inspection



ZEISS DuraMax 8/5/5

Built for flexibility in production

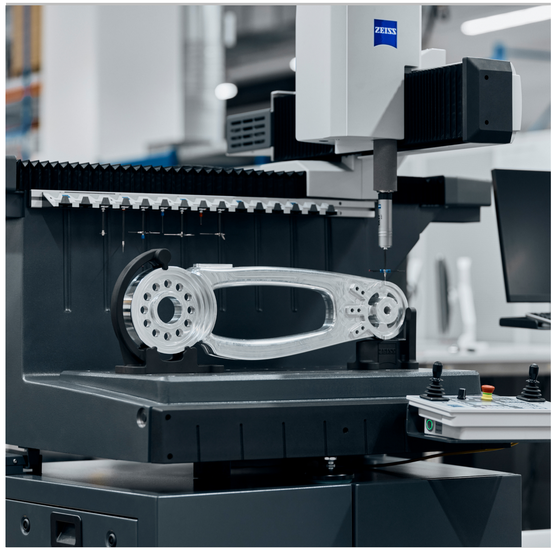
Process larger batches of small parts: The enlarged measuring volume accommodates more parts at once, increasing throughput and reducing handling.

Measure larger & heavier parts: An extended X-axis of +300 mm enables larger workpieces; handling can be simplified even more by automation solutions.









Space for more stylus systems: These can remain directly on the CMM, thereby reducing manual changes and supporting uninterrupted automated workflows.

Keep reference spheres on the CMM inside the measuring volume: Enable automated calibration with fewer interruptions and less manual handling.

Better workpiece accessibility: Improved side access and travel paths provide greater reach for deep holes and complex geometries, reducing repositioning effort.

Rotary table and fixtures: The optimized measuring volume improves rotary table usability and provides space for additional fixtures, simplifying setup and changes.



Get more out of your system with

Automation solutions

Greater efficiency & higher throughput

From simple operator assistance to fully automated part loading, ZEISS DuraMax offers scalable automation options that grow with your production requirements. Each solution is designed to make measurement processes more reliable, increase CMM utilization and throughput, and reduce the workload for operators — while allowing you to choose the level of automation that fits your needs.

- Fast program selection with barcode scanning
- Increased throughput with the manual Duplex system
- Extended unattended operation with the automated Duplex system
- Seamless integration with ZEISS Automation Interface



Barcode scanning

Fast program selection for different parts

A barcode scanner provides an easy entry point into measurement automation. Operators simply scan the barcode or QR code on the part or production order, and the correct measurement program is selected automatically. This reduces input errors and makes switching between different parts fast and reliable.

Manual Duplex system

Increased throughput with parallel setup and measuring

With the manual Duplex system, setup and measurement take place in parallel. While one pallet is being measured, the next part can already be prepared on the second pallet. This reduces setup-related downtime and increases CMM utilization – without requiring complex automation technology.



Automated Duplex system

Extended unattended operation with automated pallet changes

The automated Duplex system changes pallets automatically, allowing the next measurement to start with minimal operator involvement. This increases machine utilization during breaks, shift changes and unattended periods while also reducing routine tasks.

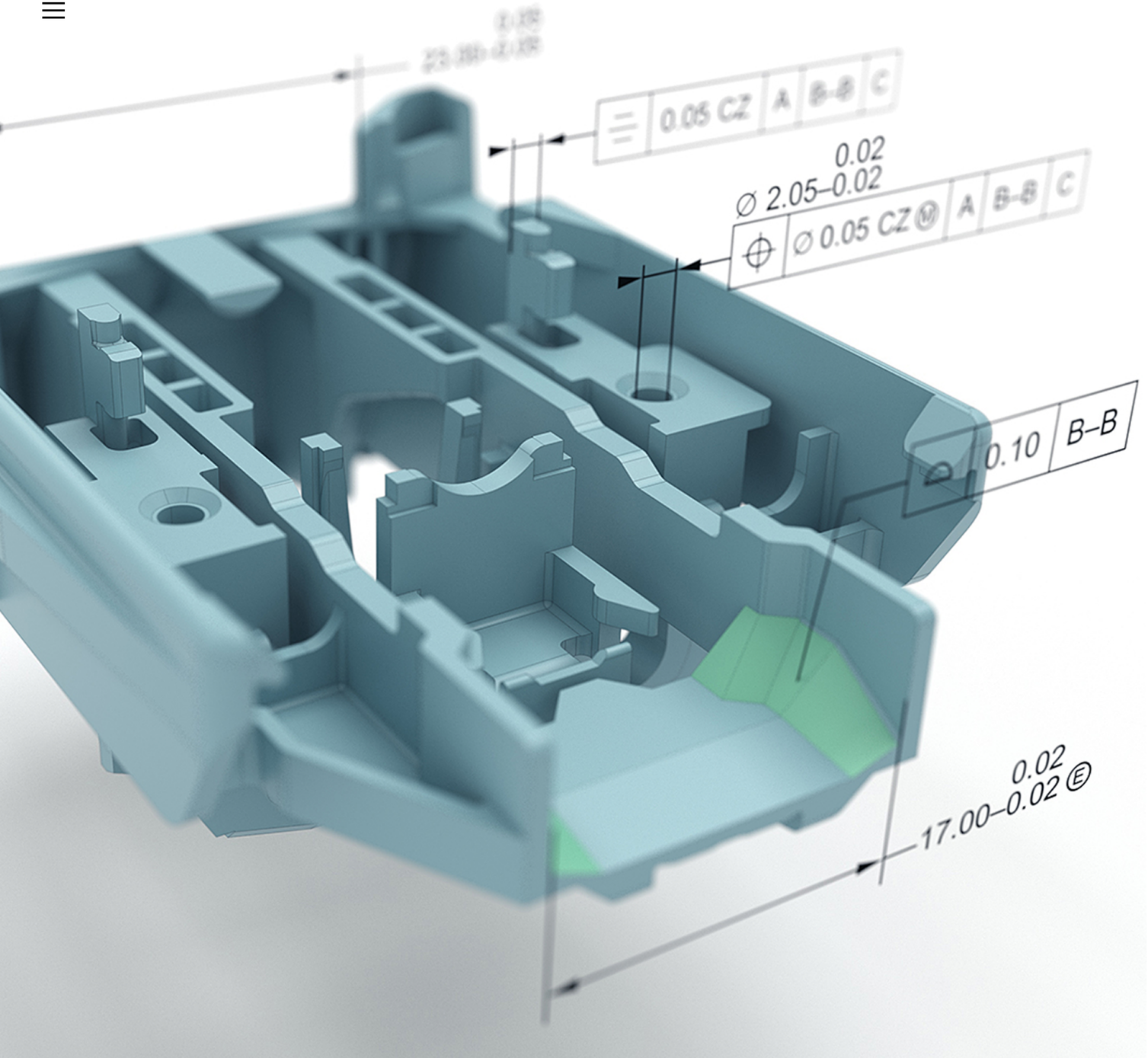




ZEISS Automation Interface

Easy integration through a standardized interface

The ZEISS Automation Interface streamlines the integration of measuring systems into an automated metrology solution and guides operators step by step. Whether you're scanning with an Auto-ID device or enabling fully automated robot loading, it maximizes your process efficiency.



ZEISS CALYPSO

Software for dimensional measurement technology

ZEISS CALYPSO measures standard geometries simply, quickly and reliably. Inspection plans can be easily created by clicking on the desired features. Travel paths are generated automatically and optimally by the software. Thanks to numerous optional extensions, ZEISS CALYPSO also offers the right tools for special requirements, for example with ZEISS CALYPSO VAST probing and ZEISS CALYPSO pallet optimizer. These functions allow measurements to be carried out up to 25% faster.

Learn more

Versatile applications

Across a range of industries



General Industry & machining

- Small housings
- CNC machined parts and mechanical components
- Plastic parts
- Small gears



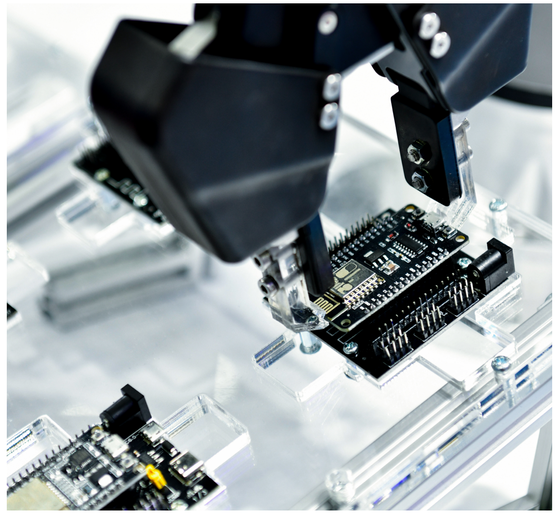
Medical Devices

- Orthopedic components (e.g. hip stems)
- Small precision parts (e.g. inhaler components)
- High requirements on accuracy and documentation



Aero

- Small turbine components (e.g. blades, blisks)
- High-precision parts with complex geometries



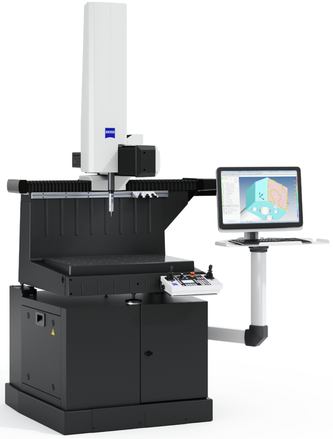
Electronics

- Connectors and housings
- Small and complex plastic or metal components
- High-volume production with tight tolerances

Technical data







	ZEISS DuraMax 5/5/5	ZEISS DuraMax 5/5/5 HTG	ZEISS DuraMax 8/5/5
Type	Compact class of shop floor systems	Compact class of shop floor systems	Compact class of shop floor systems
Size in mm	X: 500 Y: 500 Z: 500	X: 500 Y: 500 Z: 500	X: 800 Y: 500 Z: 500
Compatible Sensors	VAST XXT TL3	VAST XXT TL3	VAST XXT TL3
Optional pneumatic damping	Yes	Yes	In development
Optional rotary table	Yes	No	Yes
Software	ZEISS CALYPSO	ZEISS CALYPSO	ZEISS CALYPSO
Temperature range	18°C - 30°C	15°C - 40°C	18°C - 30°C
Accuracy E0 in µm	2.4 + L/300	2.2 + L/300	2.2 + L/210

ZEISS Portfolio

CMM



Optical 3D



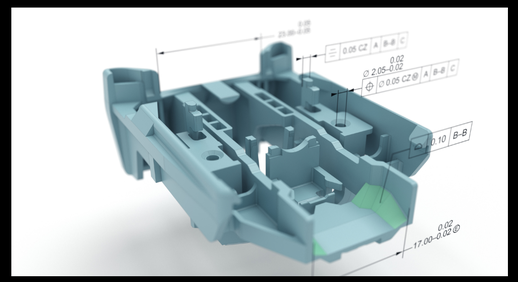
X-Ray



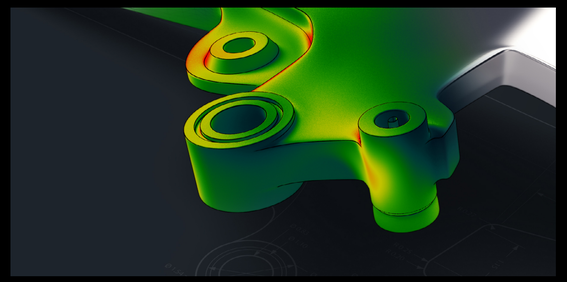
Industrial Microscopy



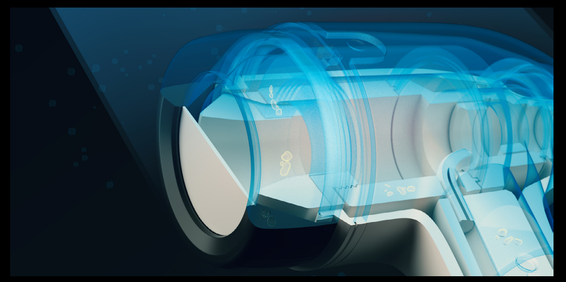
ZEISS CALYPSO



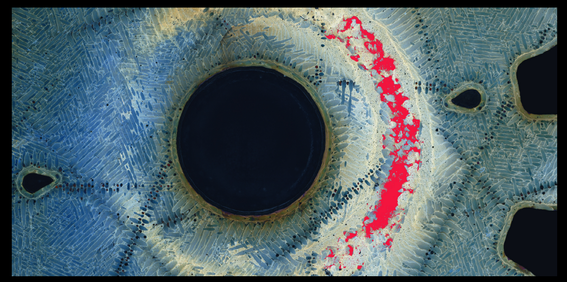
ZEISS INSPECT Optical 3D

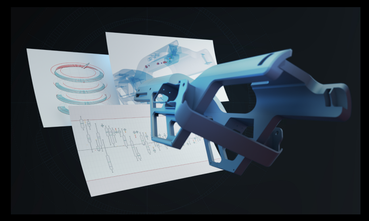


ZEISS INSPECT X-Ray



ZEISS ZEN core

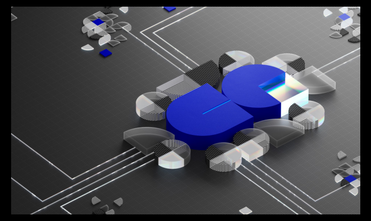




DATA MANAGEMENT

ZEISS PiWeb scalable reporting and quality management software combines metrology results from different measuring technologies for efficient tracking of production quality. Its powerful features and intuitive templates handle huge amounts of data and provide immediate results.

Read more



METROLOGY HUB

ZEISS CONNECTED QUALITY seamlessly connects your measuring systems, operators and quality data worldwide. The new product family enables completely new dimensions of collaboration! Easily monitor your systems from anywhere, at any time – using a tool of your choice.

Read more

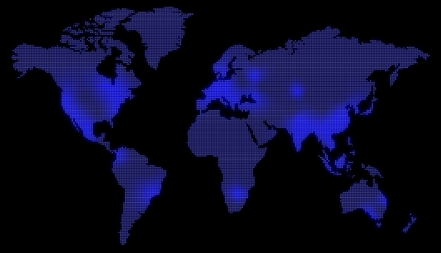
ZEISS **Services and support**

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.

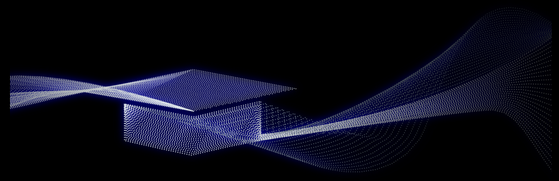
We offer customized service packages, tailored to the needs of our customers and serve them through a highly skilled, global network of technicians. Equipped with enhanced digital tools and technologies, we are able to help our customers maximize their machine uptime, increase equipment utilization efficiencies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



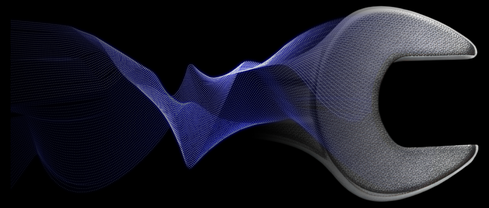
ZEISS QEC



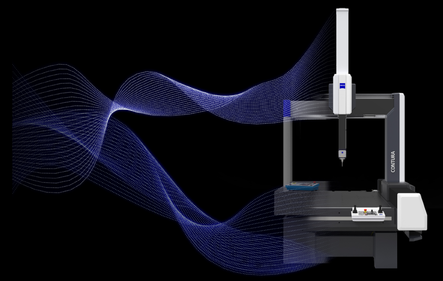
Knowledge



Maintenance & Repair



Retrofit & Productivity



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