

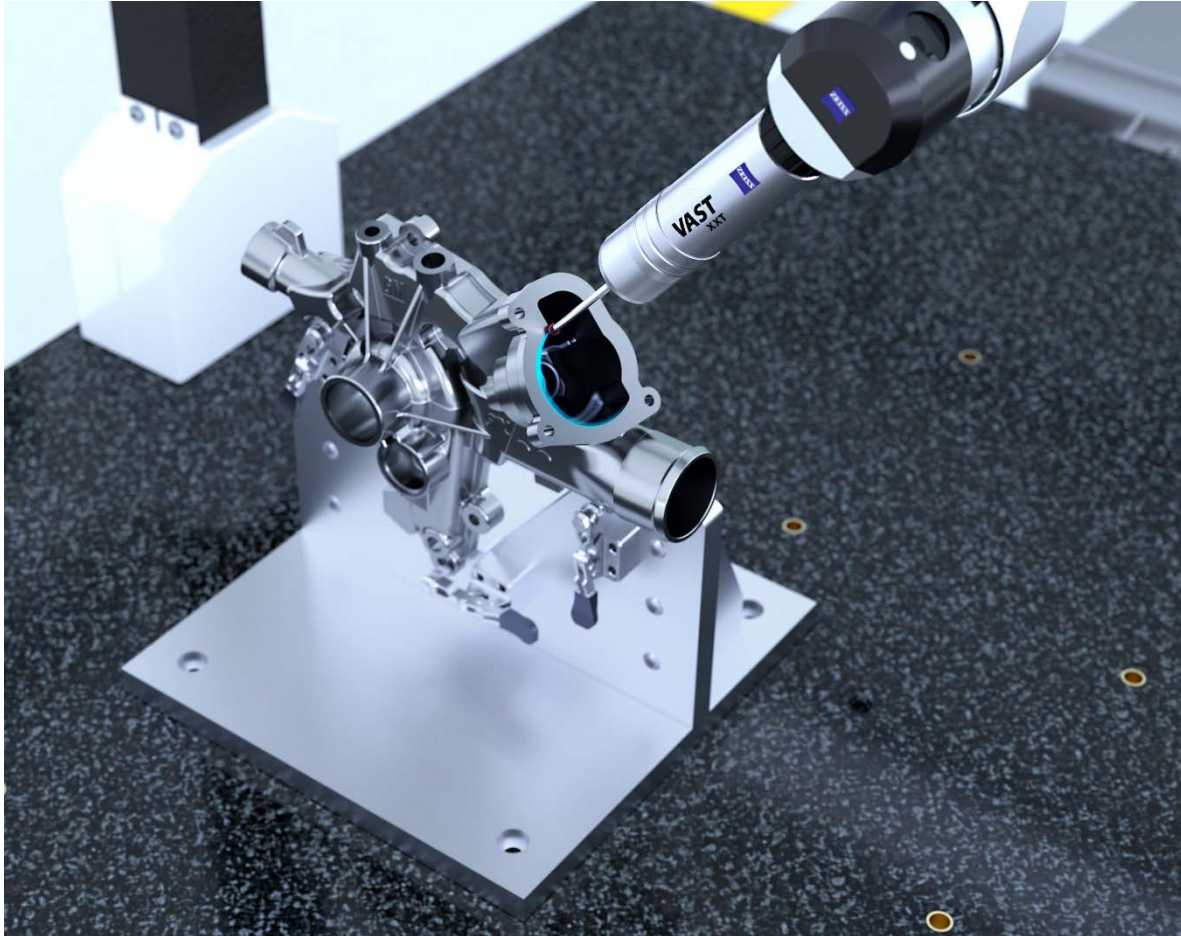
26<sup>4</sup>  
5  
DAYS with ZEISS SPECTRUM  
with 0 RETURNS  
CUSTOMER SATISFACTION



**Upgrade to trusted  
measuring results.**

**ZEISS SPECTRUM**





## WHY

**Enormous costs** arise mostly from reworking of returned parts.

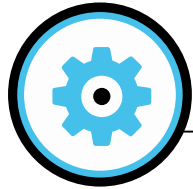
## HOW

A trustworthy quality assurance can increase profit by **providing better data quality of your parts.**

## WHAT

**Scanning technology ZEISS VAST XXT** comes as standard for the ZEISS SPECTRUM.

# Fields of Applications by Industry



## Industry

- ✓ Small housings
- ✓ Stamped parts
- ✓ CNC machined parts
- ✓ Plastic parts



## Medical

- ✓ Hip parts – e.g. femoral stem
- ✓ Joints
- ✓ Screws



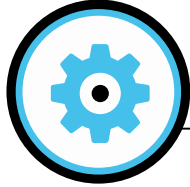
## Electronics

- ✓ Connectors



# Fields of Applications by Industry

## Industry



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# Fields of Applications by Industry

## Medical



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# Fields of Applications by Industry

## Electronics



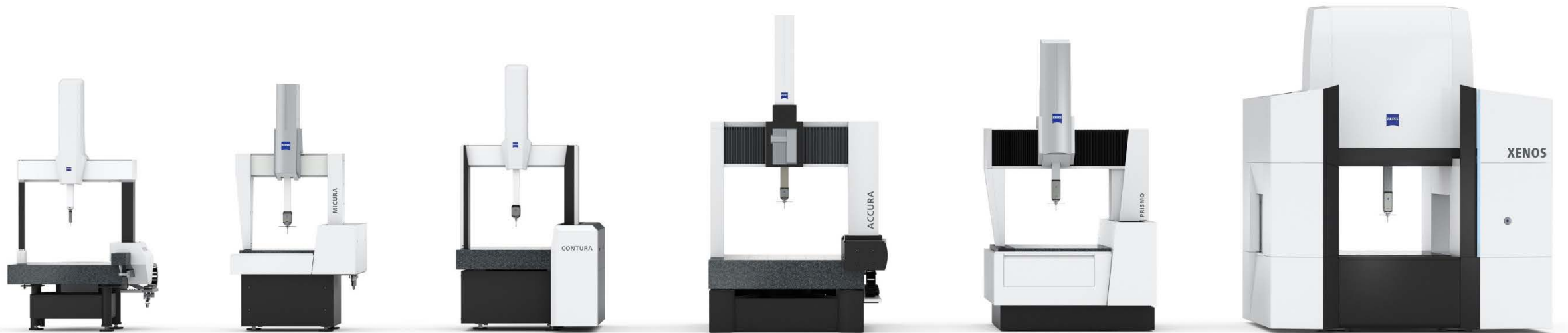
Electronics

✓ Connectors



# Bridge-type Coordinate Measuring Machines

## The Portfolio



ZEISS SPECTRUM

**Reasons to buy...**



Scanning

Increased productivity

Flexibility

ZEISS VAST XXT

Worldwide

ZEISS CALYPSO

Trust

Reliability

Cost effectiveness

# ZEISS SPECTRUM

## Key characteristics



With the ZEISS SPECTRUM coordinate measuring machine you will enter a new level of precision and trusted results – at an unmatched price-performance ratio.

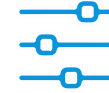
### Unmatched scanning technology

The combination of ZEISS VAST XXT and ZEISS RDS-C5 including CAA increases the reliability and reduces operation time of measurements enormously. It also enables a wide range of measurement tasks.



### Tailored for your application

**Flexibility via three different sensors**  
ZEISS XDT direct, ZEISS VAST XXT direct,  
ZEISS RDS-C5 CAA VAST XXT  
Covered by three sizes 5/5/6, 7/7/6  
and 7/10/6



### Better data quality with ZEISS VAST XXT

Form measurement error for roundness  
with a RONt of  
1.8  $\mu\text{m}$  for 5/5/6 and  
1.9  $\mu\text{m}$  for 7/7/6, 7/10/6



### Get a great value

**Highest quality from leading technology**  
with a  $MPE_{E0}$  of  
1.9+L/250  $\mu\text{m}$  for all machine sizes



### Cost effectiveness

**Get the fastest qualification time in class**  
ZEISS RDS-C5 including CAA allows a qualified  
system of all 5184 possible positions in approx.  
12 minutes.



### Reliability & performance

Patented floating mounted **glass ceramic scales**  
for eliminating the temperature scale deflection,  
meaning temperature sensors are not required.



### Small footprint

**Backpack controller**, as well as passive  
damping system and earthquake protection.



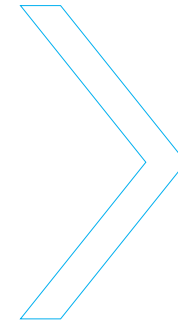
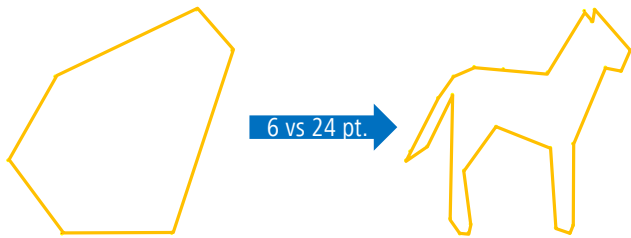
#1

**Unmatched scanning  
technology**

## Scanning Technology

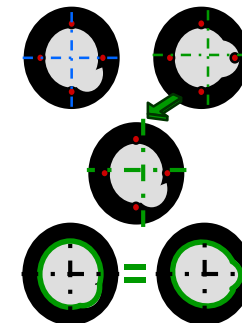
### Technical explanation and example

Scanning technology means a multitude of single points are recorded. More points allow for greater certainty and a higher-quality measured characteristic.



### How you benefit

- ✓ Reliability and repeatability of measurement results due to a massive high point density for evaluating size, form and location tolerances.
- ✓ Best value equation thanks to the highest scanning speed without compromising accuracy in this class.





#2

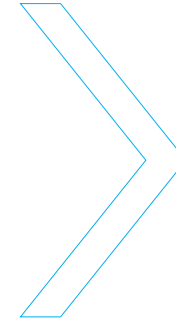
Tailored for your  
application

## #2 Tailored for your application



### Technical explanation and example

- ✓ Wide spectrum of styli (e.g. lateral star probe up to 65 mm) allowing you to measure more complex features means more applications!
- ✓ In addition, the probe head RDS with a step width of 5° in the A and B axes enables 5184 single angle positions.



### How you benefit

- ✓ ZEISS XDT:  
Fast and easy measurement
- ✓ ZEISS VAST XXT direct:  
For higher data quality
- ✓ ZEISS RDS-C5 CAA  
with ZEISS VAST XXT:  
For complex parts

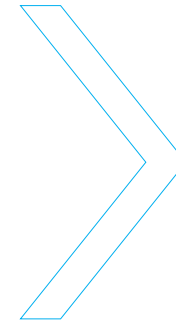
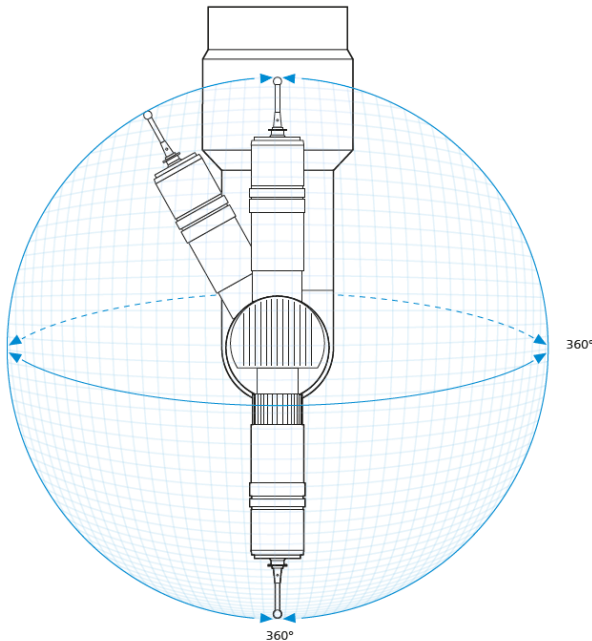
#3

Cost  
effectiveness

### ZEISS RDS-C5 CAA

#### Technical explanation and example

Step range of  $5^\circ$  in A and B axes enables high resolution of positions (5184) as well as movement in all axes.



#### How you benefit

Reduction of operating time by an exponential factor due to the RDS probe head with integrated CAA, which requires no single angle qualification.



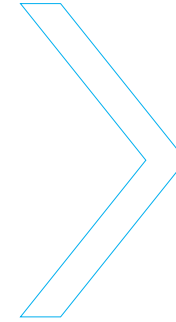
#4

**Reliability &  
performance**

## Leading Hardware Technologies

### Technical explanation and example

- ✓ **Glass ceramic scales**  
The float-mounted scales significantly reduce the influence from torsions of the base frame.
- ✓ **Ceramic components**  
Ceramics are stiff and have a lower CTE than metals.
- ✓ **Long bearing base**  
Longer bearing bases guarantee a higher stiffness against bending, pitching and yawing.
- ✓ **CAA corrections**  
Dynamic and static bending corrections are state of the art.



### How you benefit

- ✓ The influences from temperature gradients on the accuracy of the ZEISS SPECTRUM are reduced to a minimum by the floating glass ceramic scales.  
“The best correction is correction you don’t need!”
- ✓ Ceramic components and the long bearing base ensure accuracy and reproducibility.

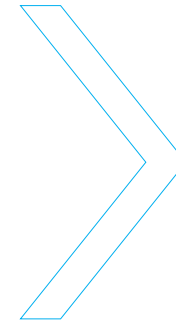
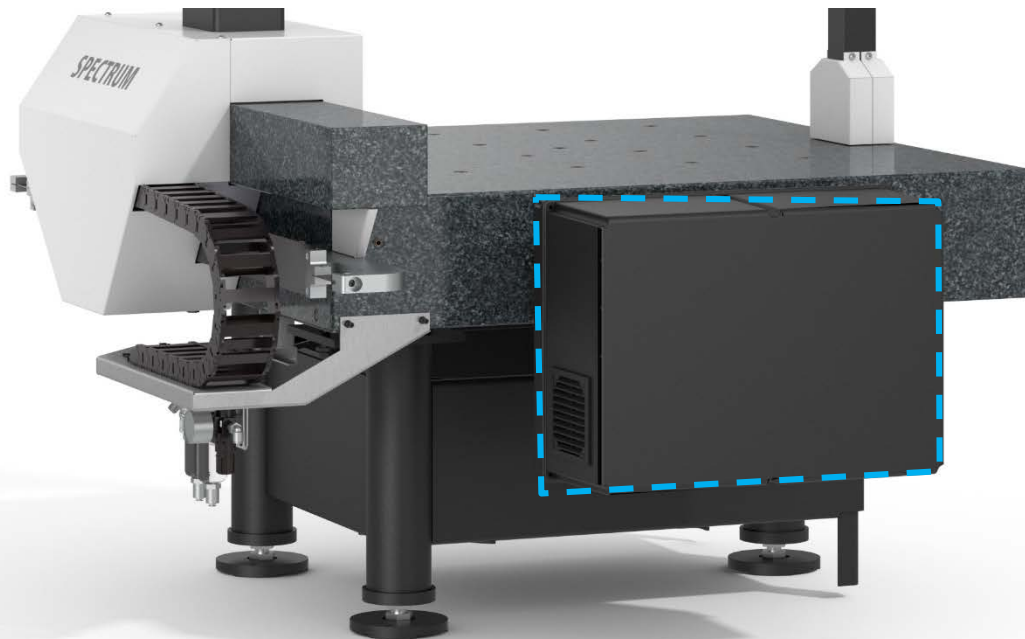
#5

**Smart footprint**

## Footprint & hardware

### Technical explanation and example

- ✓ Footprint 2.212 m<sup>2</sup> including backpack controller box.
- ✓ Passive damping system
- ✓ Earthquake protection



### How you benefit

- ✓ More space in your measuring area due to the small footprint
- ✓ Heat reduction with external fan circulation, no heat emission (others put their controller underneath the granite or as a separate box beside the machine).



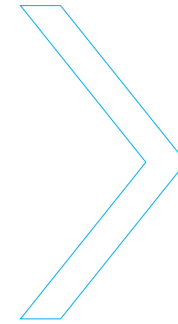
#6

**Worldwide  
sales and service**

## #6 Worldwide sales and service



### Our Global Know-how: ZEISS IQR Network



#### How you benefit

- ✓ ZEISS know-how & application technicians available globally.
- ✓ Service & support very close to the customer means fast reaction times.
- ✓ Less downtime and more security.

# 7

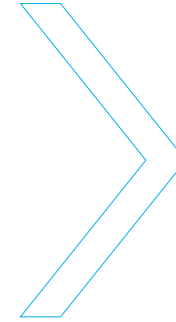
Software:

ZEISS CALYPSO

## One for all

### Technical explanation and example

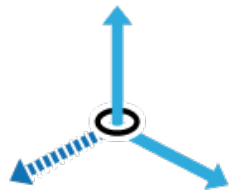
- ✓ ZEISS CALYPSO enables a consistency and compatibility across all ZEISS CMMs with additional features like ZEISS GEAR PRO measurements.
- ✓ Operate various ZEISS CMMs with one training.



### How you benefit

- ✓ Cost saving because of fewer training hours.
- ✓ More efficient operation thanks to a familiar user interface.
- ✓ A CNC will run on different ZEISS CMMs immediately.
- ✓ Optimized software for specific applications.

## CALYPSO



ZEISS CMMs



ZEISS X-Ray

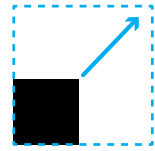
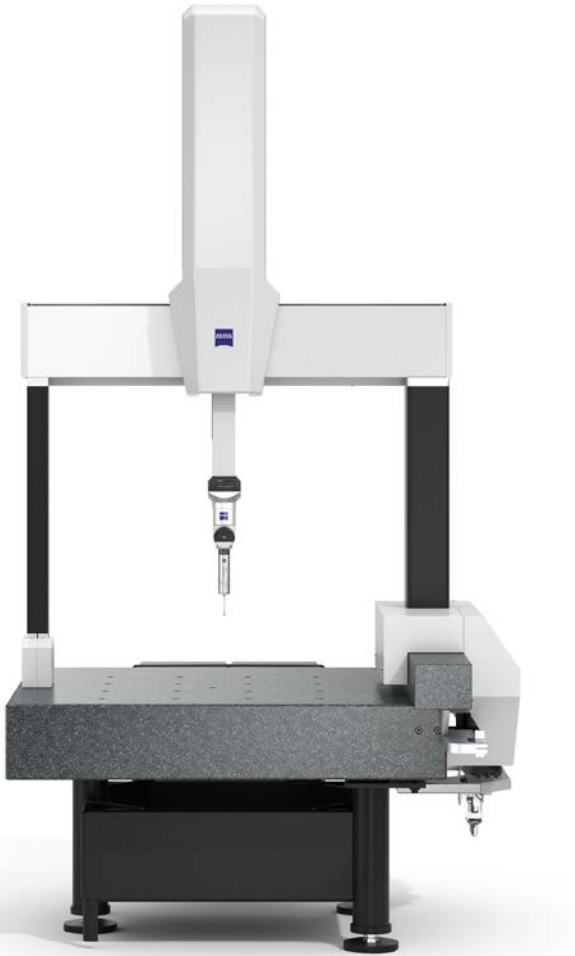


ZEISS Sensors



# Configuration standards

Your ZEISS SPECTRUM for your needs



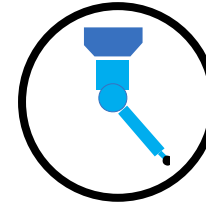
## Size

- Size 5/5/6
- Size 7/7/6
- 7/10/6



## Software

- ZEISS CALYPSO



## Probe head

- VAST XDT
- VAST XXT direct
- RDS-C5 CAA including VAST XXT

**Upgrade to trusted  
measuring results.**

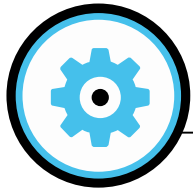
**ZEISS SPECTRUM**



**BACKUP**

# Fields of Applications by Industry

## Industry



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