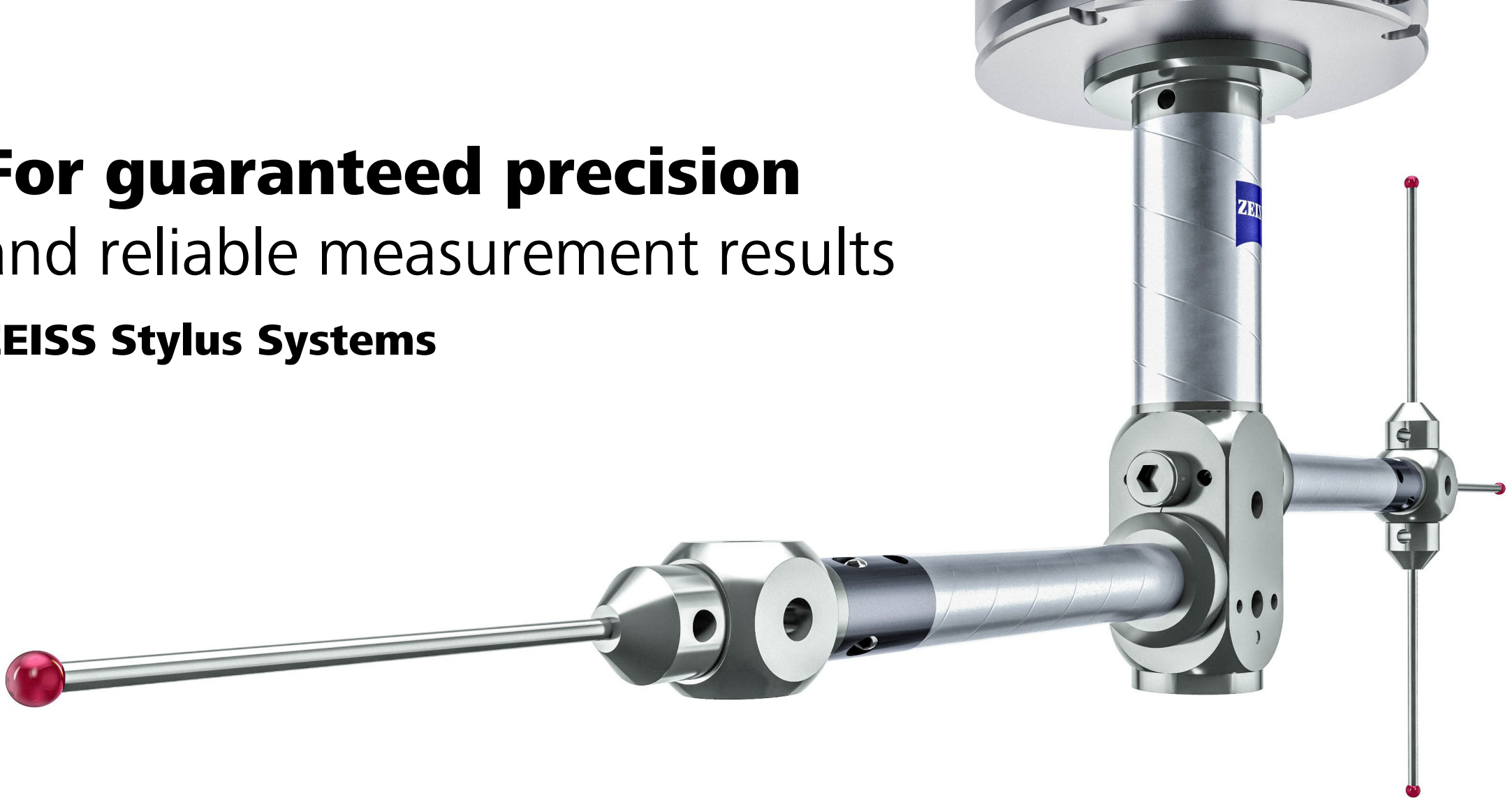


For guaranteed precision
and reliable measurement results

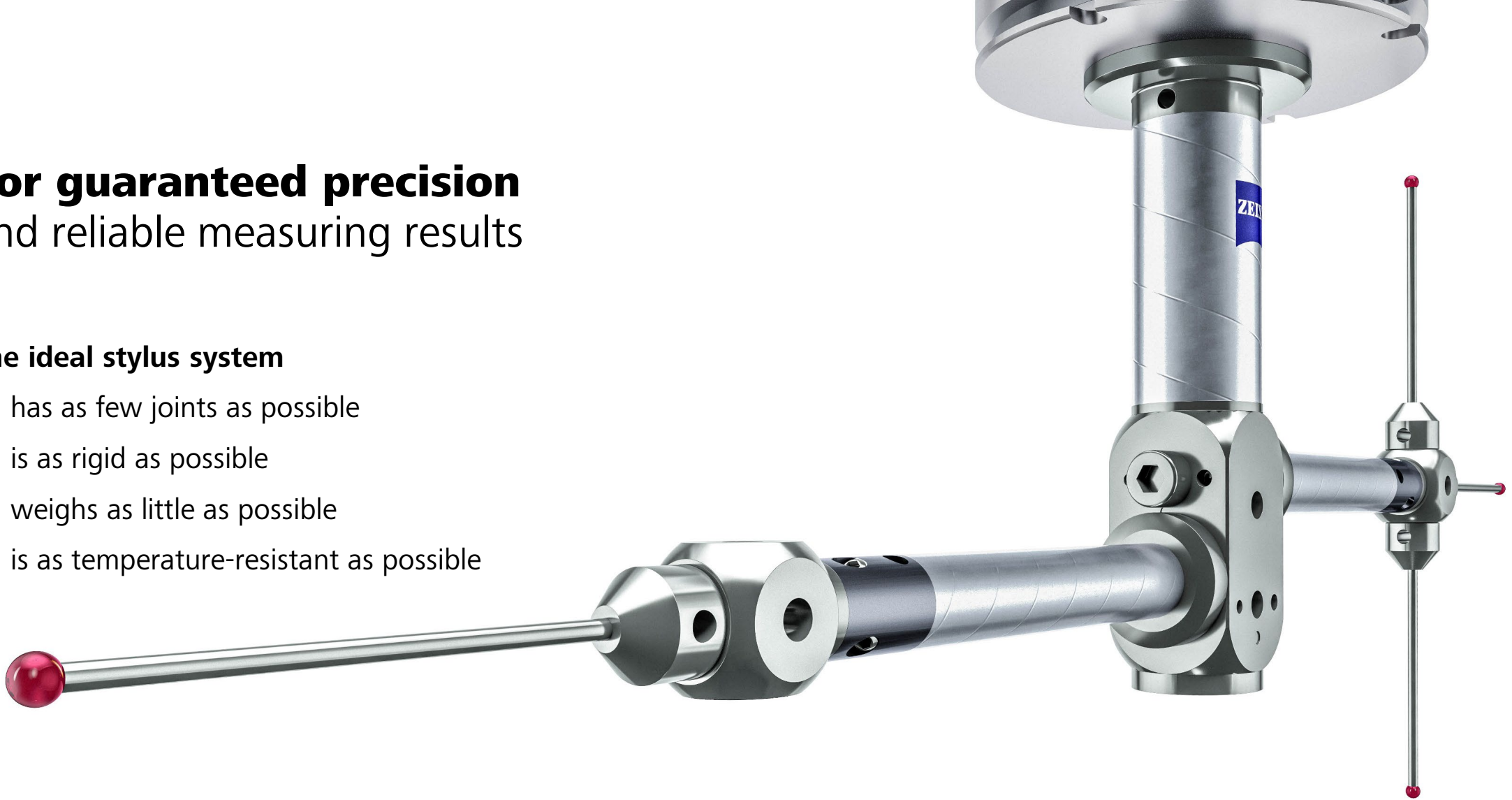
ZEISS Stylus Systems



For guaranteed precision and reliable measuring results

The ideal stylus system

- has as few joints as possible
- is as rigid as possible
- weighs as little as possible
- is as temperature-resistant as possible



**Only use certified original accessories for your ZEISS measuring system.
This is the only way to guarantee maximum precision and compliance
with the specifications of your measuring system.**

ZEISS Stylus Systems

The perfect match for your CMM

- Original ZEISS components
- Assembly service
- Application and technical support
- ZEISS Stylus System Creator
- Cloud access

- Personalized ZEISS Metrology Shop section
- Tool management



Learn more about [stylus systems from ZEISS!](#)

ZEISS Stylus Systems

Original ZEISS components

- Certified components: the only way to guarantee best functionality and performance of your measuring system
- Advanced production technologies and high-end materials
- Accessories for all applications: from standard level to high-end
- Developed and tested for and on your ZEISS measuring systems



ZEISS Stylus Systems

Assembly service

- Unique service – only from ZEISS
- Assembly and adjustment
- Soldered connections for highest stability and torsional safety on demand
- Dedicated SAP number



ZEISS Stylus Systems

Application and technical support

- Technical verification of systems
- Technical advice on the individual components
- Application support from ZEISS Quality Excellence Centers worldwide



ZEISS Stylus Systems

ZEISS Stylus System Creator

- Assemble, view and document stylus systems virtually on the workstation computer
- Create and locally save Stylus System Creator files required for simulation in the CALYPSO Planner simulation package (not part of this software)
- With the help of a component library, easily assemble stylus systems from individual components. Interfaces between the individual components are already predefined, so that only technically possible combinations can be built
- Create PDF documentation with parts list and images at the push of a button
- All individual components are available for purchase in the ZEISS Metrology Shop



ZEISS Stylus Systems

Cloud access

- Storage of approved data of stylus systems
- Design data section with access for all involved users
- Direct communication with component experts



ZEISS Stylus Systems

Personalized ZEISS Metrology Shop section

- Complete stylus system with a special SAP no. visible in the shop
- Visible only to selected users
- Includes stock list and PDF documentation

Find your ideal Stylus System now:
shop.metrology.zeiss.com

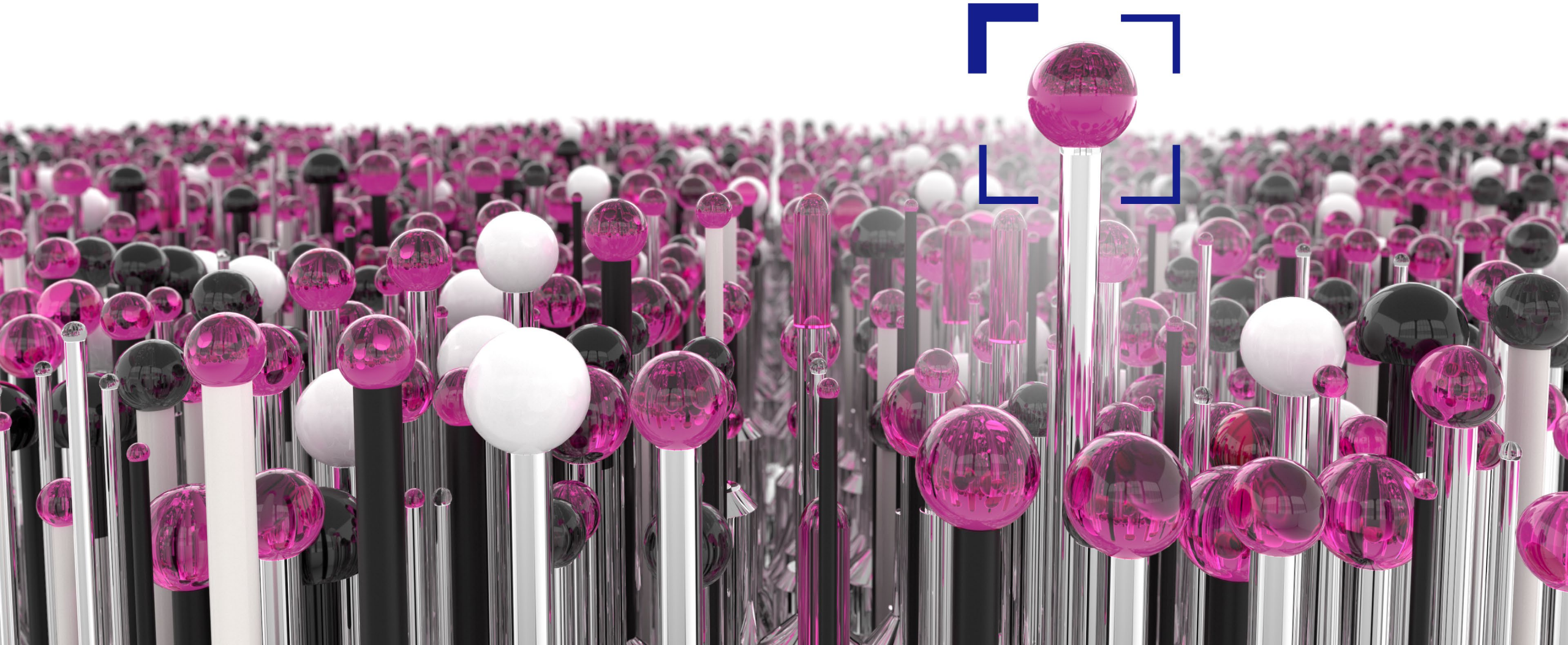


**The perfect match for your measuring tasks.
Ready when you need it.**

ZEISS STYLUS PORTFOLIO



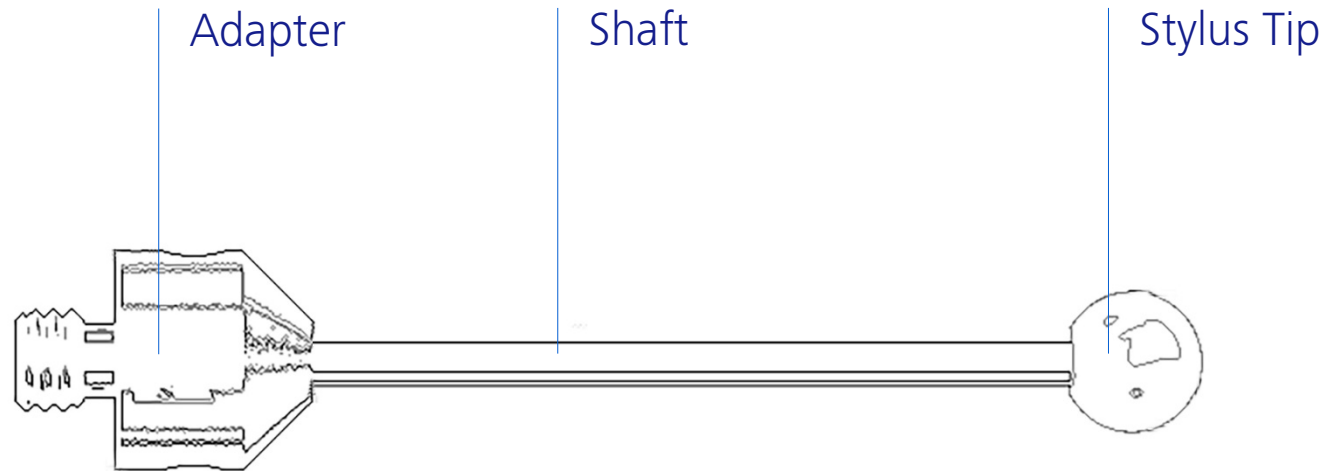
Seeing beyond



ZEISS Stylus Portfolio

First contact point to your workpiece

The stylus is the tip of the stylus system and is the first point of contact to the workpiece. Even the construction of the stylus, impacts the stylus system and thus the measurement result.



ZEISS Stylus Portfolio

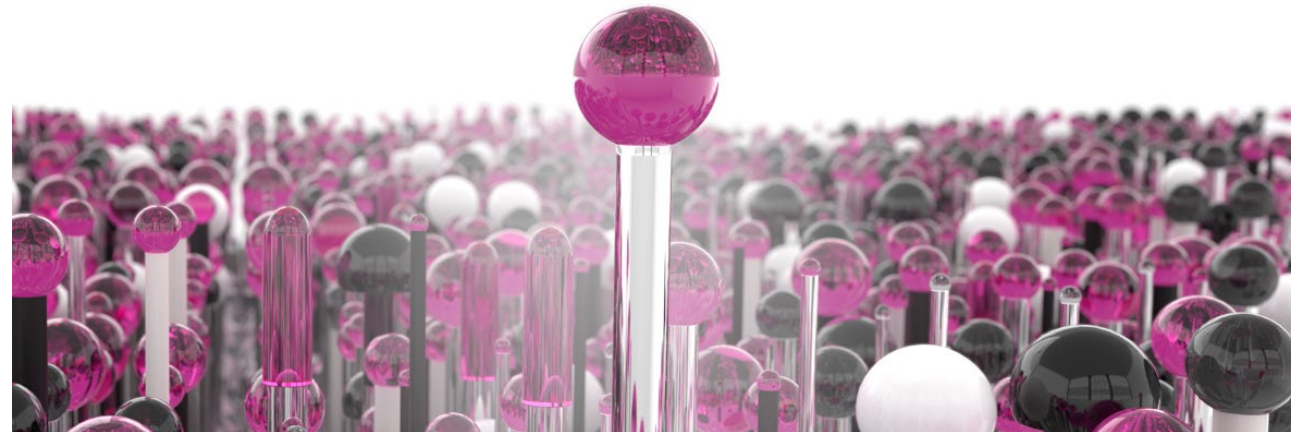
The largest standard styli portfolio

Styli of any length, diameter and material in just a few clicks?

ZEISS makes it possible!

Browse the largest standard styli portfolio with over 7,000 standard styli in the ZEISS Metrology Shop to find and order your ideal stylus right away.

Learn more about the [ZEISS Stylus Portfolio!](#)

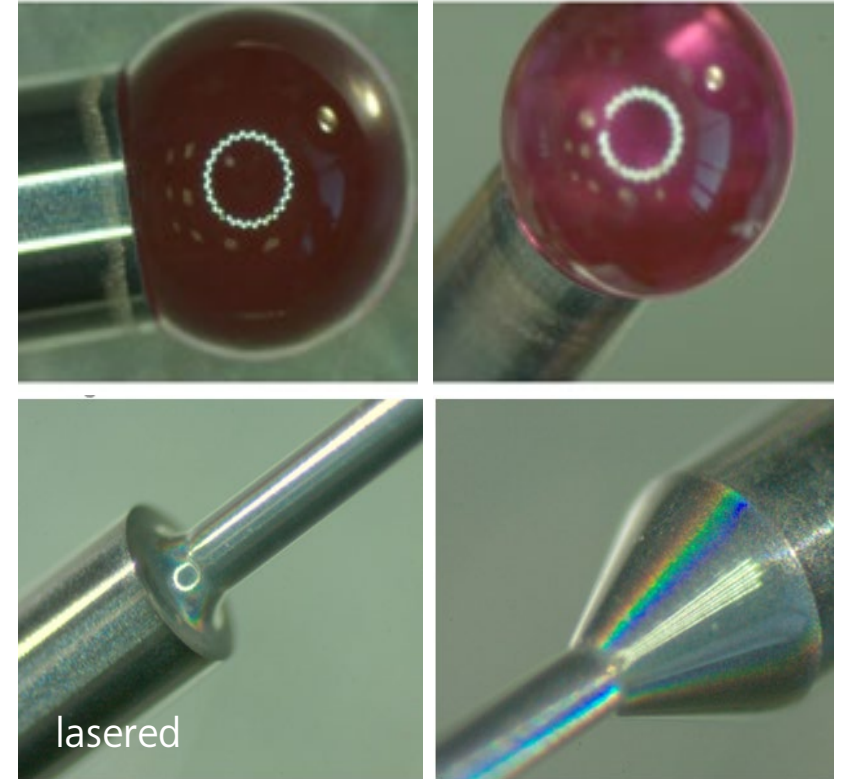


ZEISS Stylus Portfolio

Advanced production technologies

Quality makes the difference: Styli may be small, but they are the part of a coordinate measuring machine that touches the workpiece to be measured and performs highly accurate measurements via the respective measuring probe tip.

In addition to using high-end materials, ZEISS applies the latest technologies such as soldering and laser processing to significantly increase stylus quality and service life.



ZEISS Stylus Portfolio

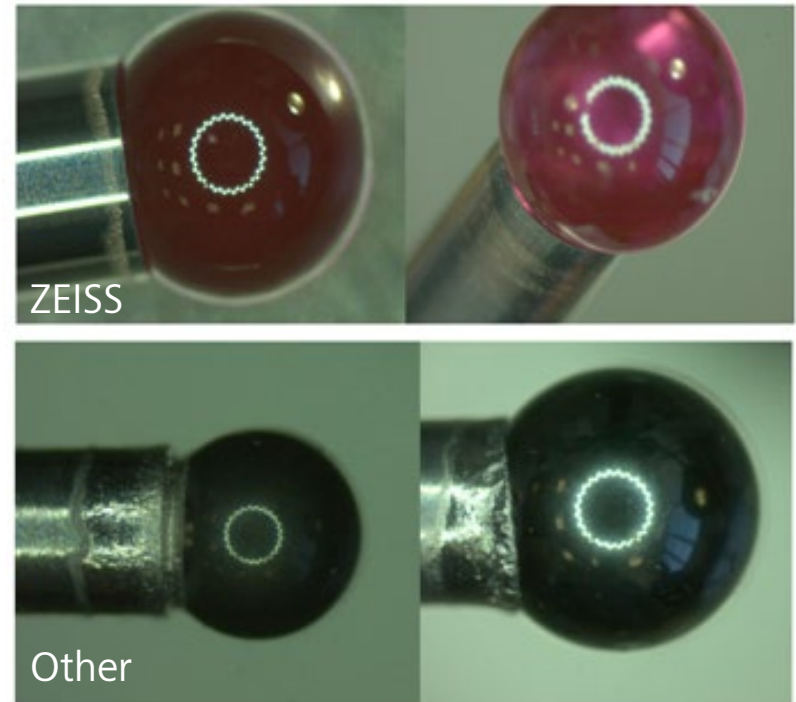
Advanced production technologies

Soldering

ZEISS relies exclusively on a new type of connection between the shaft and the ball. A **vacuum soldering process** achieves maximum stability and **increases the service life enormously**.

The disadvantages of an adhesive connection, such as aging or the influence of moisture, are thus eliminated.

However, closer observation under the microscope shows that a **high level of technical competence** is required to establish a soldered connection



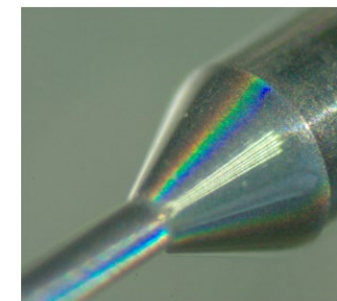
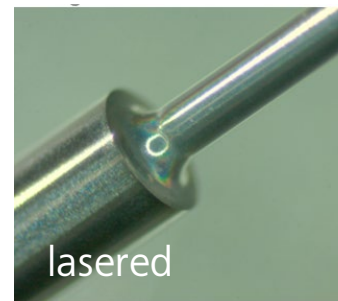
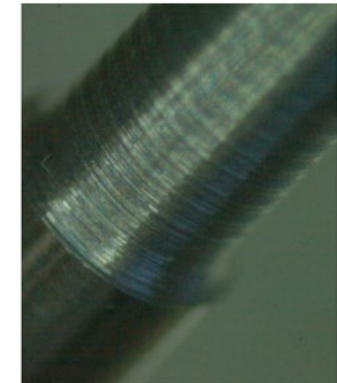
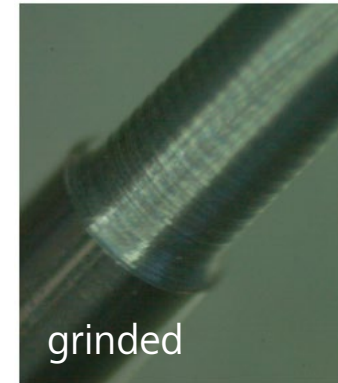
ZEISS Stylus Portfolio

Advanced production technologies

Laser processing

ZEISS is the **only manufacturer** of styli that uses laser technology to machine shafts. Unlike traditional grinding, this enables the creation of a polished surface that **reduces the shaft break by more than 50%** in daily use.

A more accurate observation of the surfaces under the microscope shows the generation of possible fractures by the grinding process compared to the laser-machined surf

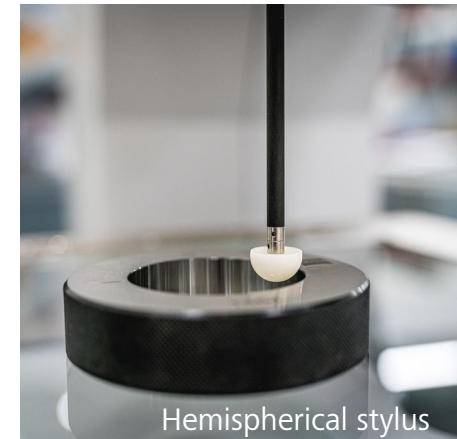
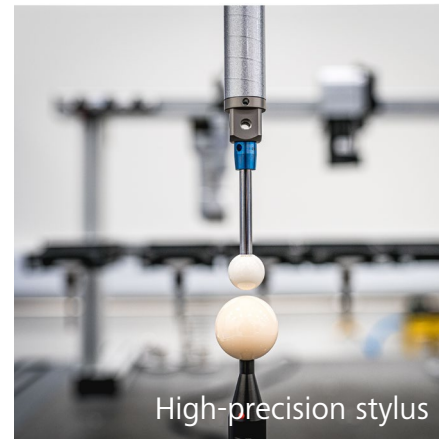
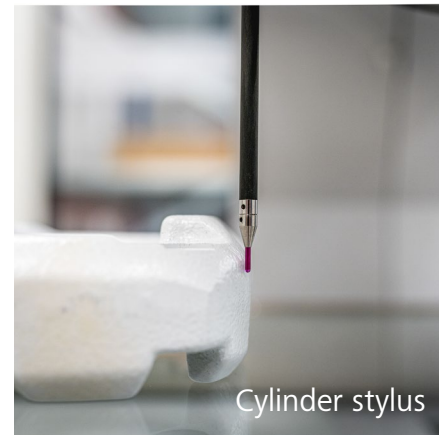


ZEISS Stylus Portfolio

Special styli for every measuring task

Ruby spheres are suitable for most measuring tasks, but special tasks require special styli.

In addition to spherical styli, you will also find star styli, cylinder styli and T-styli as well as many others in our range - for every task imaginable.

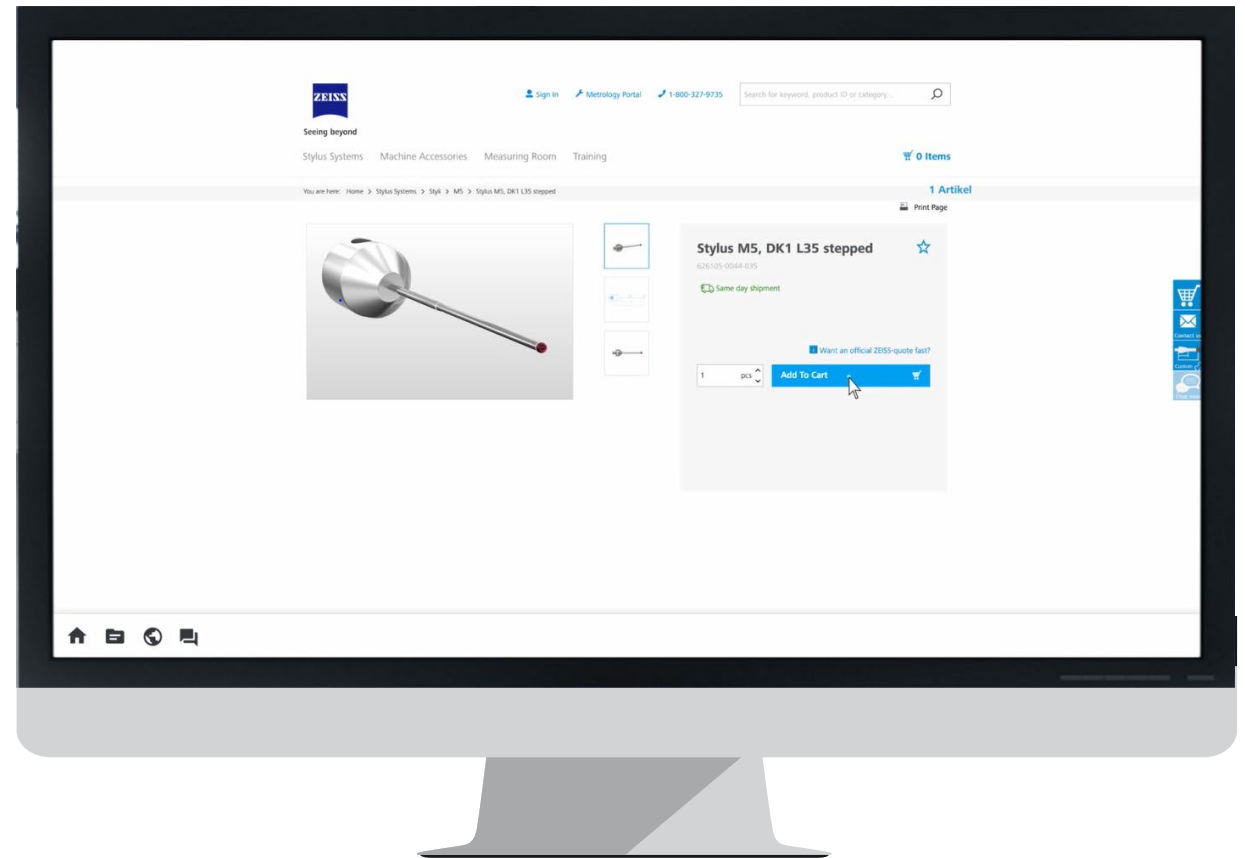


ZEISS Stylus Portfolio

Ordered. Produced. Delivered.

Highest ZEISS quality, delivered faster than ever: Select your perfect stylus from the world's largest standard styli portfolio in the ZEISS Metrology Shop and receive your perfect stylus in no time.

Find your perfect stylus now:
shop.metrology.zeiss.com



ZEISS Stylus Portfolio

Take good care of your styli

Even high-quality styli are consumable items that are subject to wear and material build-up. Cleaning and inspecting your styli on a regular basis is therefore essential for achieving measurement results with maximum accuracy.



ZEISS Stylus Portfolio

Take good care of your styli

No Wear

Diamond!Scan styli do not wear on account of their hardness when extremely hard materials such as ceramic are measured. You can rely on your measurement, because the diamond sphere retains its high-precision form and contributes to a precise measurement of the flatness of this hard workpiece surface.

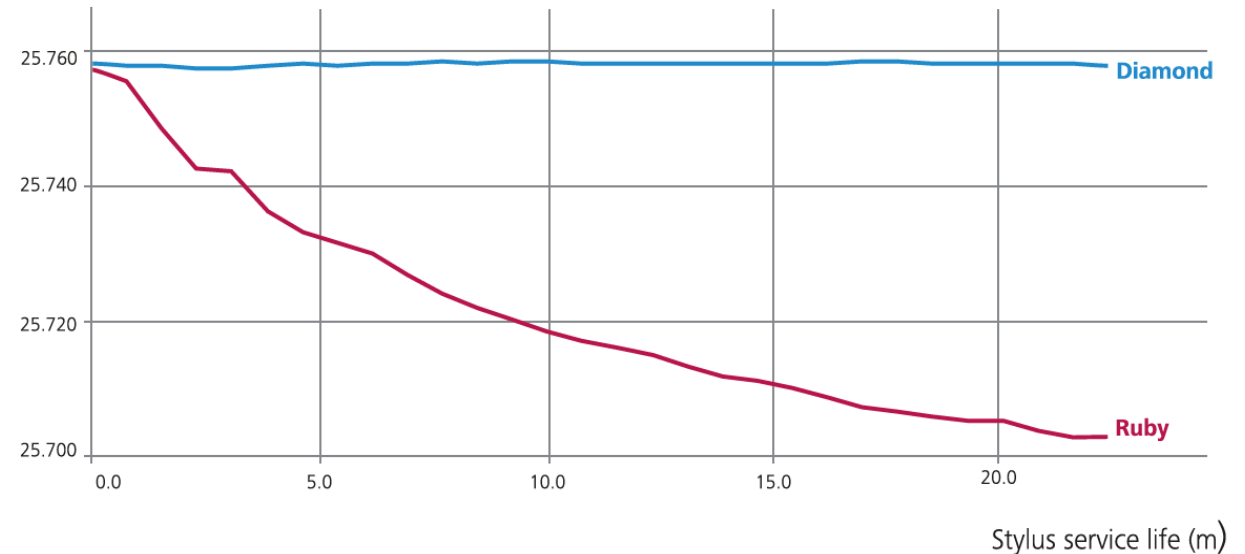
Learn more about ZEISS Diamond!Scan:

[Diamond styli from ZEISS](#)

Wear



Measuring position, stylus tip (mm)



ZEISS Stylus Portfolio

Take good care of your styli

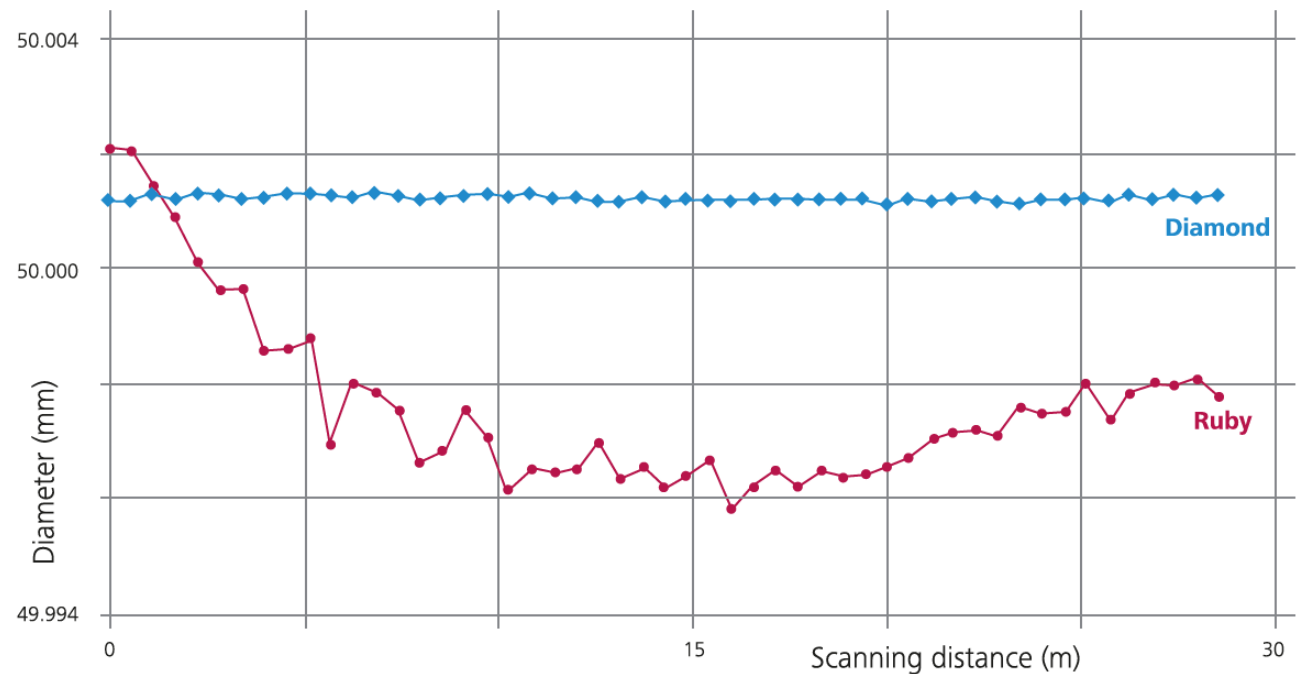
No material build-up

No material adheres to diamond spheres, not even with extremely soft aluminum alloys. Diamond!Scan spheres retain their high-precision form at all times, thereby preventing additional measuring uncertainties.

Learn more about ZEISS Diamond!Scan:

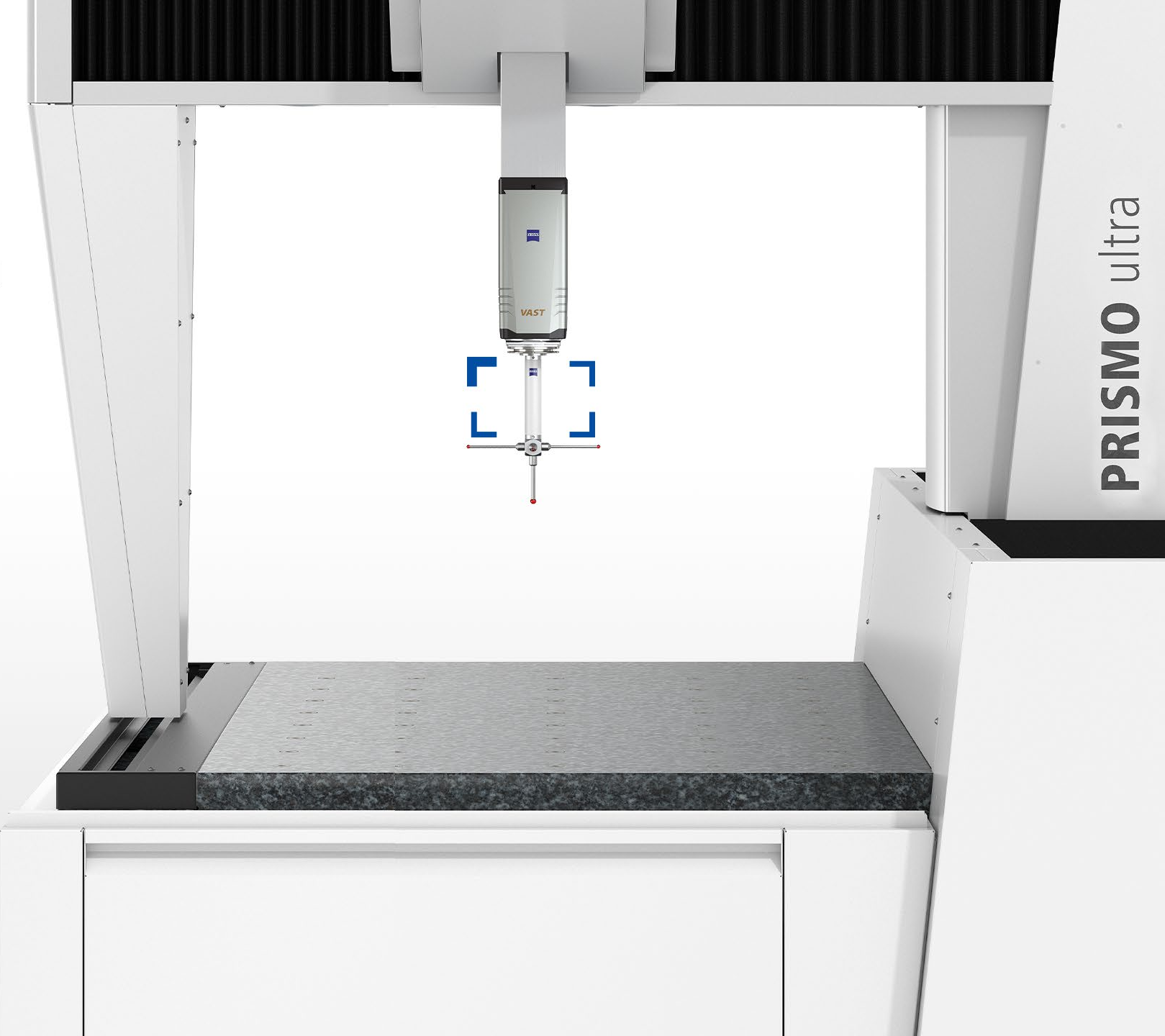
[Diamond styli from ZEISS](#)

Deposit



Don't let the extension downgrade your CMM

ZEISS REACH CFX



ZEISS REACH CFX

No more downgrading

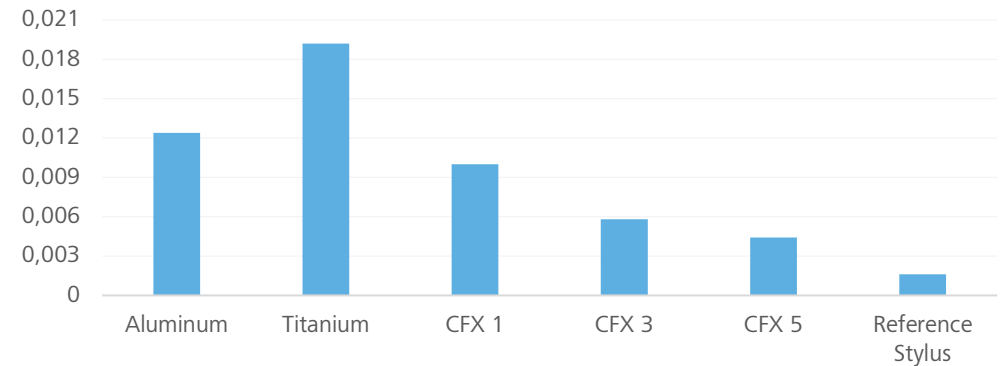
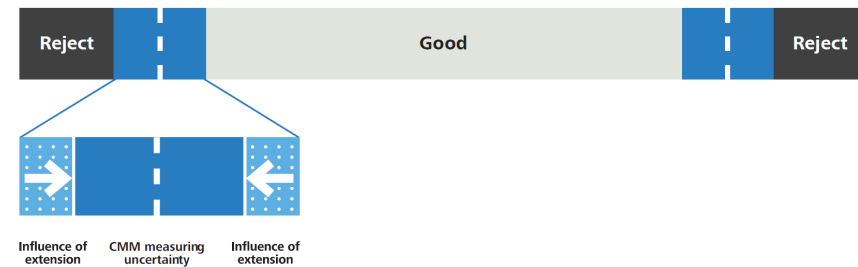
To distinguish good parts from rejects having reliable measuring results is a necessity. This can only be achieved when keeping the measuring uncertainty at a minimum.

Using extensions that don't have the right properties has a direct negative influence on the overall measuring uncertainty and therefore downgrades the accuracy your CMM could achieve.

The overall influence of the extension on the measuring uncertainty is mainly determined by three factors: **weight**, **thermal expansion** and **static stiffness**.

Using ZEISS REACH CFX can decrease the influence of the extension on the CMM measuring uncertainty by up to 5 times compared to Titanium.

Learn more about [ZEISS REACH CFX Extensions!](#)



ZEISS REACH CFX

What is a good extension?

WEIGHT



**LIGHT
WEIGHT**

Build complex stylus systems
and be conform with the
probe weight restrictions.

EXPANSION



**THERMALLY
STABLE**

No thermal expansion of
the material and associated
loss of precision.

DEFLECTION



**STATICALLY
STIFF**

Maximum stiffness allows
faster scanning without loss
of precision.

ZEISS REACH CFX

Portfolio


















ZEISS REACH CFX is a portfolio of carbon fiber extensions that are customized for the varying accuracy requirements of different CMMs - to always keep their accuracy on the highest possible level.

Find your ideal ZEISS Reach CFX Extension now:
shop.metrology.zeiss.com

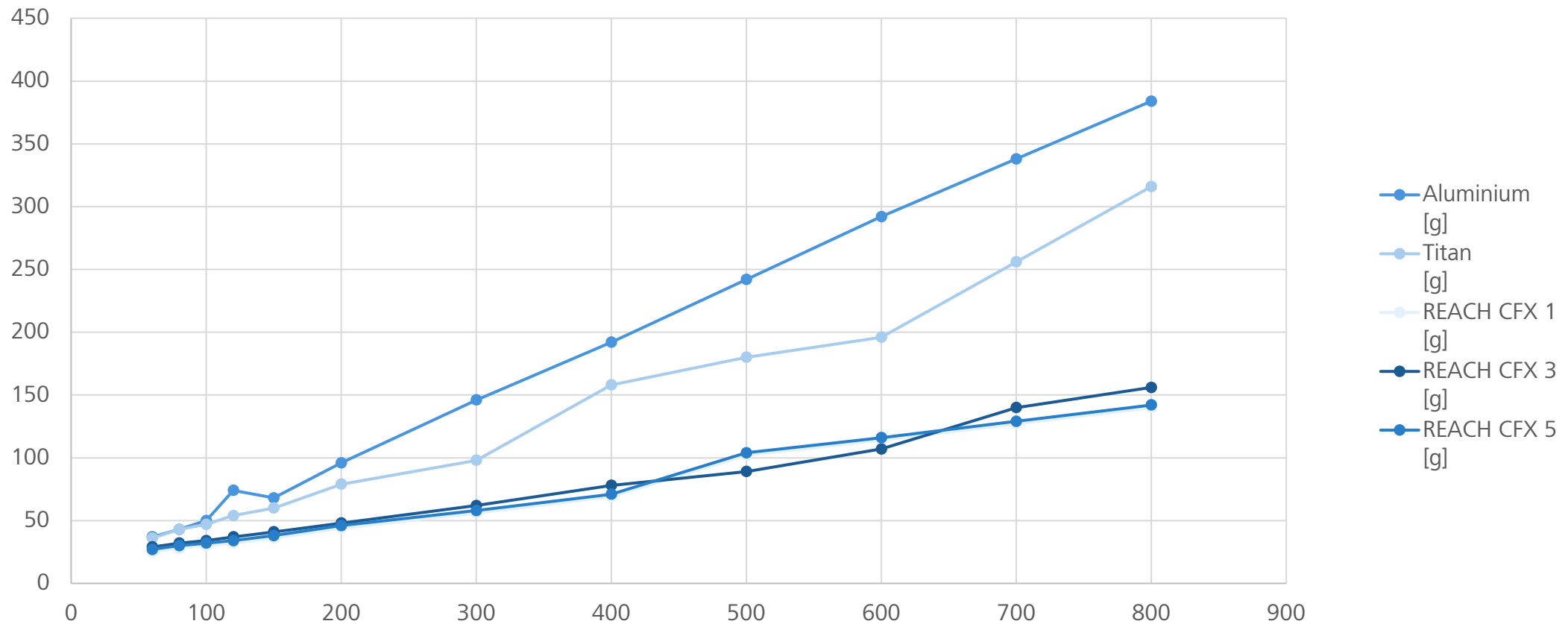
ZEISS REACH CFX

Technical Properties

Material	Weight	Expansion	Deflection
ZEISS REACH CFX 5			
ZEISS REACH CFX 3			
ZEISS REACH CFX 1			
Aluminum			
Titanium			

ZEISS REACH CFX

Light weight



ZEISS REACH CFX

Thermally stable

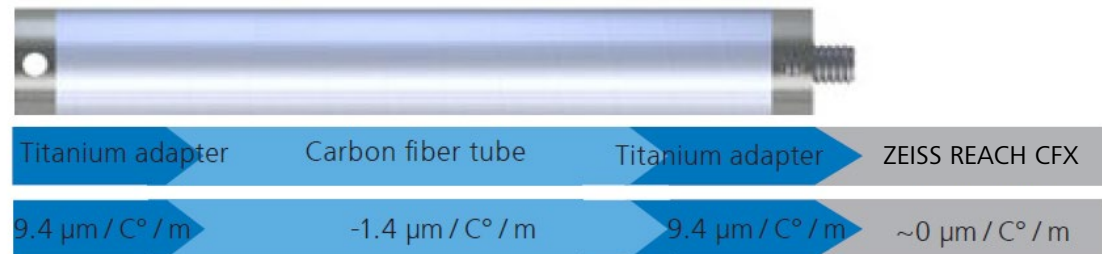
Aluminum 23.4 $\mu\text{m} / ^\circ\text{C} / \text{m}$

Titanium 9.4 $\mu\text{m} / ^\circ\text{C} / \text{m}$

V2A 16.0 $\mu\text{m} / ^\circ\text{C} / \text{m}$

ZEISS REACH CFX Portfolio $\sim 0.0 \mu\text{m} / ^\circ\text{C} / \text{m}$

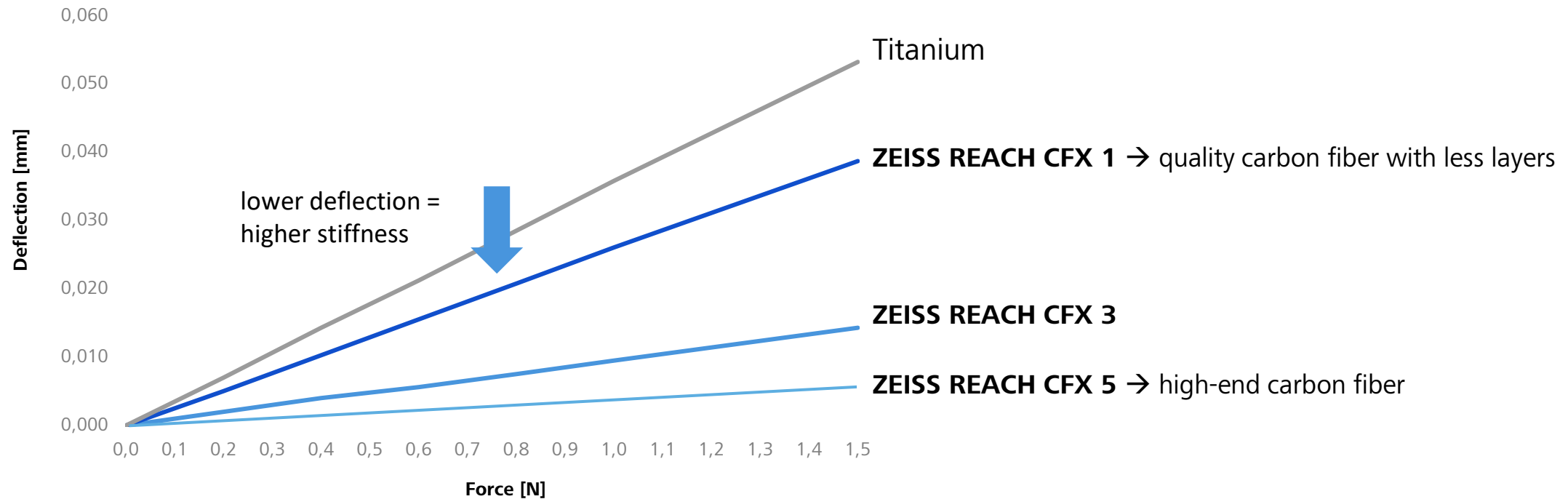
Standard Carbon Fiber - 1.4 $\mu\text{m} / ^\circ\text{C} / \text{m}$



ZEISS REACH CFX

Deflection

Deflection for extension Ø11 x L150



ZEISS REACH CFX

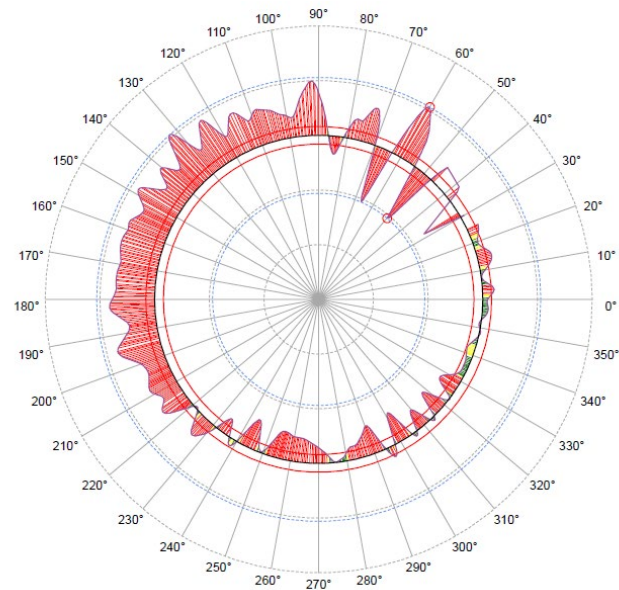
Deflection

Measuring roundness on an adjusting ring

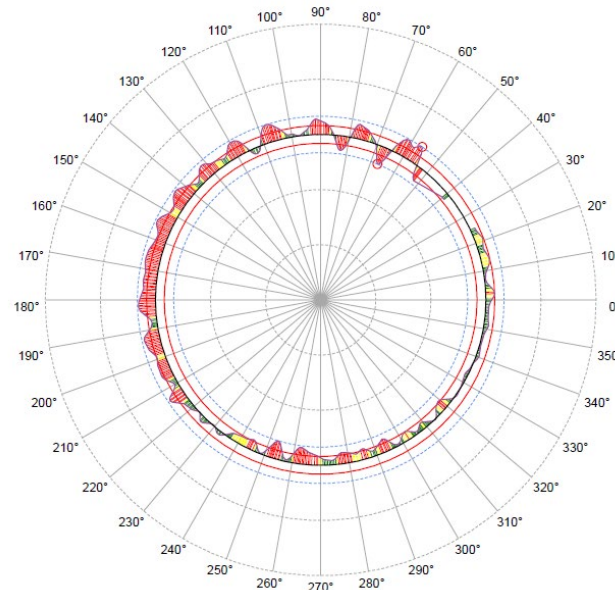
Ring: Ø20 mm
Scanning Speed: 20 mm/s
Repetitions: 20

Stylus System

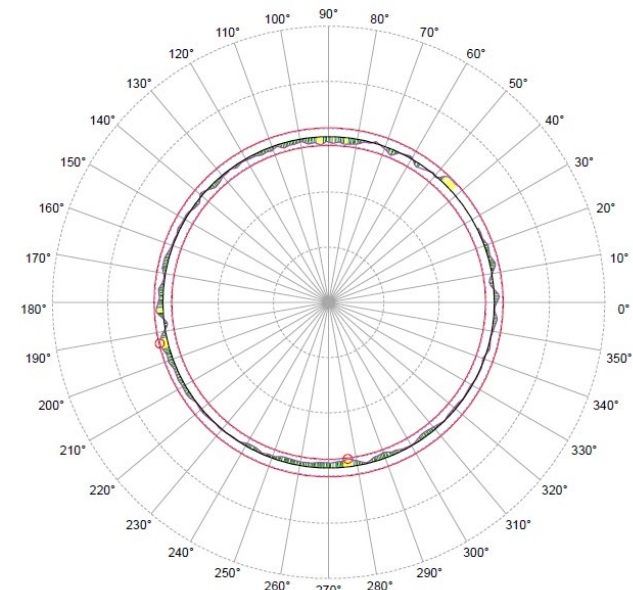
Plate extension: 100 mm
Extension: 300 mm
Stylus: Ø8 x 63



Titanium: 0,0112



ZEISS REACH CFX 1: 0,0066



ZEISS REACH CFX 5: 0,0037

ZEISS REACH CFX 1

The cost-effective introduction to carbon fiber

ZEISS REACH CFX 1 offers a cost-effective introduction to carbon fiber technology. Their performance in thermal stability and stiffness make them an obvious upgrade to titanium and aluminum.

recommended for:

ZEISS SPECTRUM plus*

ZEISS CONTURA

Available lengths:

DG 11: 40 – 250 mm

DG 20: 40 – 400 mm



ZEISS REACH CFX 3

New name – same performance

ThermoFit is now ZEISS REACH CFX 3. New name - same performance. The renowned extensions allow you to reduce your measurement time without compromising the reliability of your results.

recommended for:

ZEISS PRISMO

ZEISS PRISMO fortis

ZEISS ACCURA

Available lengths:

DG 11: 40 – 250 mm

DG 20: 40 – 400 mm

Custom lengths possible



ZEISS REACH CFX 5

Maximum precision when even the last μ counts

ZEISS REACH CFX 5 are the stylus extensions for the most precise measuring demands. Their state-of-the-art carbon fiber and unique winding enables maximum stiffness when even the last μ counts.

recommended for:

ZEISS PRISMO verity

ZEISS PRISMO ultra

ZEISS MICURA

ZEISS XENOS

Available lengths:

DG 11: 40 – 250 mm

DG 20: 40 – 400 mm



Fast. Certified. Future-proof.

ZEISS Adapter Plates

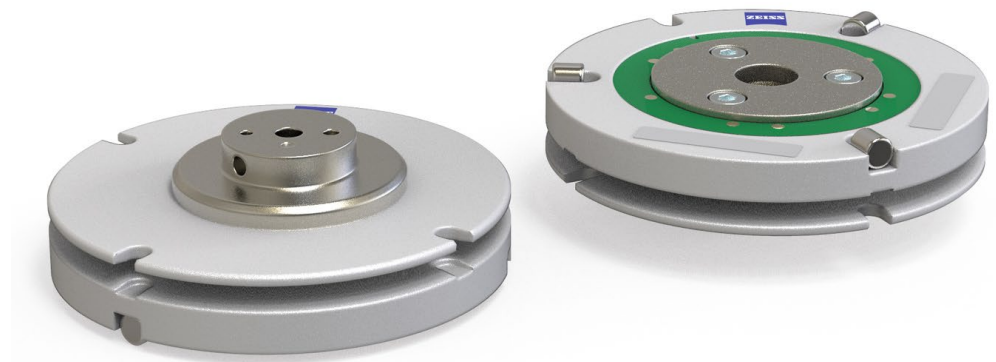


ZEISS Adapter Plates

Fast. Certified. Future-proof.

- Prevent operating errors and incorrect measurements
- Reduced measuring time and accelerated stylus changes
- More robust data transmission
- Future-proof operation – ready for upcoming software functionalities

Learn more about [ZEISS Adapter Plates](https://shop.metrology.zeiss.com) and grab yours online now:
shop.metrology.zeiss.com



Variety for your stylus system

ZEISS Connection Elements



ZEISS Connection Elements

Overview

- ZEISS Connection Elements are the **next-generation accessories** in the area of stylus system accessories. **One solution for all stylus systems** without the need to use special elements.
- In combination with CALYPSO Planner and Stylus System Creator **the time to process start of new measuring programs is reduced.**
- Programmers can work simultaneously with the manufacturer of the stylus accessories.
- Changes are **quick and easy** to implement, no additional documentation as this is available immediately.
- **Short delivery times** through prefabricated blanks for angle pieces.
- No additional CAD capacity is required.

Learn more about [connection elements from ZEISS!](#)

ZEISS Connection Elements

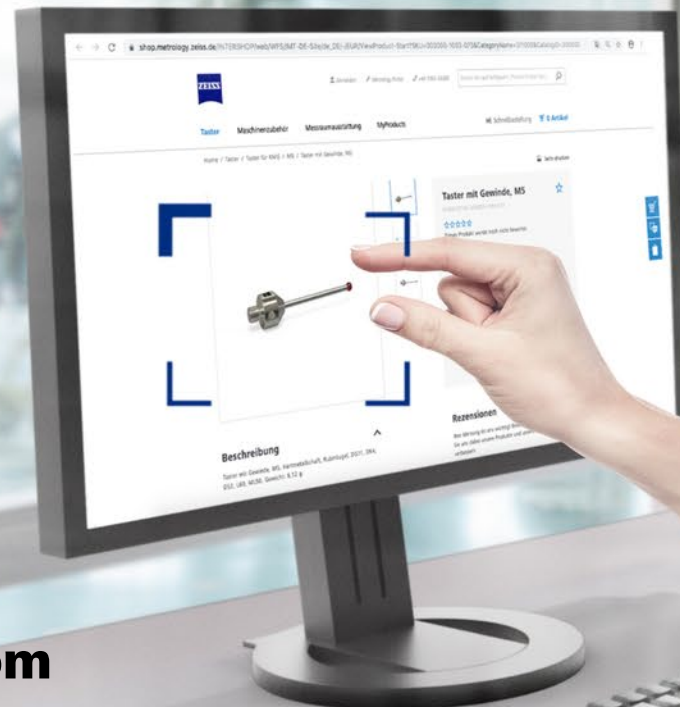
Overview



Find your next-generation connection elements now: shop.metrology.zeiss.com

Just grab it online
(It's almost that easy)

ZEISS Metrology Shop



shop.metrology.zeiss.com