

## WEB-Seminar: High precision length measurement

*24 November 2020, 2:00 pm to 2:45 pm*

In industry and research, the demands on measuring technology are increasing when it comes to the highest precision and accuracy. Especially in the characterisation of:

- Precision guides,
- Measuring, microscope and positioning stages,
- Measuring and testing machines,
- Coordinate measuring machines,
- Machine tools,
- Non-contact measurement of surfaces and
- Tactile length measurement of thickness, contours and flatness.

Interferometric measuring systems developed by SIOS Messtechnik GmbH set worldwide standards in dimension measurements. SIOS interferometers realise measuring ranges from a few nanometres up to 80 metres combined with low measurement uncertainty and high length resolution. For the field of long-term measurement SIOS offers special interferometers with modified sensors, which guarantee highest stability.

### **You want to know:**

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- Which interferometric measuring system is suitable for which measuring task?
- Which factors influence measurement uncertainties?
- How you can implement an Abbe error-free measurement setup?
- What to consider when creating an optimal measuring arrangement or
- How you can measure other degrees of freedom such as pitch and yaw angles as well as straightness synchronously to the length?

**Our experts Peter Grundschock and Wolfram Meyer get to the bottom of these and other questions.**

## Our programme:

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### The Theory

- Basics of Interferometry
- Insecurity budget - an example

### The Universalists: Single-beam and Three-beam Laser Interferometers

- setup, parameters, special features and application examples

### The Specialists: Differential Laser Interferometer

- special features and differences of SP-DI and SP-DI/F, fields of application and usage in industry, research and as OEM systems

### The reflectors: variety and characteristics

- Design and parameters

### The high linear: Precision laser interferometric probes

- tactile length measurement with probes LM-20/LM-50

### The exchange: hardware interfaces and SIOS software

- Output and processing of measurement data

At the end of the seminar we will be happy to answer your questions on the subject of length measurement.



Wolfram Meyer, Vertriebsingenieur



Peter Grundschock, Vertriebsleiter

## Quick Info

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**Date:** Tuesday, 24/11/2020

**Time:** 2:00 pm to 2:45 pm (CET, UTC+1).

**Speakers:** Peter Grundschock, Sales Manager, SIOS Meßtechnik GmbH  
Wolfram Mayer, Sales Engineer, SIOS Meßtechnik GmbH

**Seminar venue:** Online Webex Meeting

**Language:** English

**Target group:** Measurement technicians, engineers, constructors, quality managers, production planners, project managers and scientists

**Industries:** Measurement technology, optics industry, metrology, materials research, materials testing, high-precision mechanical- and apparatus engineering, research and development

We are looking forward to your participation and the dialogue with you.

**Online registration**

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