



## SCS Directory

Accreditation number: SCS 0074

International standard: ISO/IEC 17025:2005  
Swiss standard: SN EN ISO/IEC 17025:2005

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Initial accreditation: 18.12.1996  
Current accreditation: 20.01.2017 to 19.01.2022  
Scope of accreditation see: [www.sas.admin.ch](http://www.sas.admin.ch)  
(Accredited bodies)

### Scope of accreditation as of 20.01.2017

#### Calibration laboratory for Length

##### Calibration and Measurement Capability (CMC)

Measured Quantity / Instrument or Gauge	Measurement Range	Measurement Conditions	Best Measurement Capability $\pm$ <sup>1)</sup>	Remarks
<b>LENGTH</b> Gauge blocks according to ISO 3650  - from steel - from ceramic	0.5 mm to 100 mm + 131.4 mm	Measurement of the deviation of the central length by comparison measurement  Measurement of the deviations $f_o$ and $f_u$ from the central length by 5 points comparison measurement	0.05 $\mu$ m + 0.6 * 10 <sup>-6</sup> * L 0.06 $\mu$ m + 0.6 * 10 <sup>-6</sup> * L 0,05 $\mu$ m	



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Measured Quantity / Instrument or Gauge	Measurement Range	Measurement Conditions	Best Measurement Capability $\pm$ <sup>1)</sup>	Remarks
<b>DIAL GAUGES</b>	up to 100 mm	Resolution Digital 1 $\mu$ m 10 $\mu$ m Analog	1.5 $\mu$ m 6 $\mu$ m 3 $\mu$ m	
Dial indicators	up to 3 mm		0,5 $\mu$ m	
Dial test indicators	up to 1,6 mm		0,7 $\mu$ m	
Micrometer Heads	up to 100 mm		3 $\mu$ m + $10 \cdot 10^{-6} \cdot L$	
Inductive measure probe	up to 100 mm		0.5 $\mu$ m + $10 \cdot 10^{-6} \cdot L$	
Micrometer	up to 100 mm		3 $\mu$ m + $10 \cdot 10^{-6} \cdot L$	
Caliper	up to 500 mm		20 $\mu$ m + $20 \cdot 10^{-6} \cdot L$	
Height gauge	up to 600 mm	Resolution 0,1 $\mu$ m	0.9 $\mu$ m + $3 \cdot 10^{-6} \cdot L$	
Length measurement error $E_0$ according to EN ISO 10360-2 for coordinate measuring machines	Specified length measurement error $E_0$ , MPE $\geq 1,2 \mu\text{m} + 3 \cdot 10^{-6} \cdot L$ with $L \leq 1,5 \text{ m}$	Tactile measuring Specified operating conditions	$E_0$ : 0,5 $\mu$ m + $0,2 \cdot 10^{-6} \cdot L$ not compensated MMT  0,3 $\mu$ m + $1 \cdot 10^{-6} \cdot L$ compensated MMT	Further required parameters according to 10360-2 are not determined.
Length measurement error $E_0$ according to EN ISO 10360-2 for coordinate measuring machines	500 mm to 5000 mm	With laser interferometer	$E_0$ : 0.06 $\mu$ m + $0.5 \cdot 10^{-6} \cdot L$	Further required parameters according to 10360-2 are not determined.
Single-stylus form error $P_{FTU}$ according to EN ISO 10360-5 for coordinate measuring machines		Tactile measuring Specified operating conditions	$P_{FTU}$ : 0,11 $\mu$ m	
Unidirectional length measurement error $E_{UXY}$ and $E_z$ for CMM equipped with imaging probing systems according to EN ISO 10360-7	Specified length measurement error $E_{UXY} \geq 1,2 \mu\text{m} + 3 \cdot 10^{-6} \cdot L$ with $L \leq 400 \text{ mm}$	Specified operating conditions	$E_{UXY}$ and $E_{UZ}$ : 0,4 $\mu$ m + $0,5 \cdot 10^{-6} \cdot L$	Further required parameters according to 10360-7 are not determined.
Axially parallel unidirectional length measurement error $E_{UXY}$ for projectors analogue to EN ISO 10360-7	cross table X-, Y-axis 0 to 300 mm		$E_{UX}$ and $E_{UY}$ : 0,4 $\mu$ m + $2,5 \cdot 10^{-6} \cdot L$	



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Axially parallel unidirectional length measurement error $E_{UXY}$ for measuring microscopes analogue to EN ISO 10360-7	cross table X-, Y-axis 0 to 400 mm		$E_{UX}$ and $E_{UY}$ : $0,4 \mu\text{m} + 2,5 \cdot 10^{-6} \cdot L$	

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