



## SCS Directory

Accreditation number: SCS 0138

International standard: ISO/IEC 17025:2017  
Swiss standard: SN EN ISO/IEC 17025:2018

Eurofins Qualitech AG  
Measurement and calibration  
Franz-Burckhardt-Strasse 3 /  
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8404 Winterthur

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Internet: <http://www.eurofins-qualitech.ch>  
Initial accreditation: 13.11.2014  
Current accreditation: 07.11.2023 to 06.11.2028  
Scope of accreditation see: [www.sas.admin.ch](http://www.sas.admin.ch)  
(Accredited bodies)

Site 1  
Eurofins Qualitech AG  
Measurement and calibration  
Zentralstrasse 40  
5242 Birr

### Scope of accreditation as of 07.11.2023

#### Calibration laboratory for length and torque

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

Measured Quantity / Instrument or Gauge	Measurement Range	Measurement Conditions	Best Measurement Uncertainty $\pm$ <sup>1)</sup>	Remarks
<b>Length</b> Gauge blocks according to ISO 3650 Measurement of the mean size by differential measurement of steel of tungsten carbide of ceramics fo and fu by 5-point measurement	0,5 mm ... 100 mm Nominal dimension		0,07 $\mu\text{m}$ + 0,9 $\cdot$ 10 <sup>-6</sup> $\cdot$ L 0,10 $\mu\text{m}$ + 1,6 $\cdot$ 10 <sup>-6</sup> $\cdot$ L 0,08 $\mu\text{m}$ + 0,9 $\cdot$ 10 <sup>-6</sup> $\cdot$ L 0,05 $\mu\text{m}$	HS, GS
Gauge blocks	125 mm ... 290 mm		0,6 $\mu\text{m}$ + 1,3 $\cdot$ 10 <sup>-6</sup> $\cdot$ L	Measurement on single coordinate measuring machine



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Measured Quantity / Instrument or Gauge	Measurement Range	Measurement Conditions	Best Measurement Uncertainty $\pm$ <sup>1)</sup>	Remarks
Gauge blocks	290 mm ... 900 mm		$0,4 \mu\text{m} + 1,2 \cdot 10^{-6} \cdot L$	HS, GS
	>900 mm ... 3000		$0,5 \mu\text{m} + 1,5 \cdot 10^{-6} \cdot L$	GS
Gauge blocks for outside micrometers	1 mm ... 3900 mm		$1,1 \mu\text{m} + 2,2 \cdot 10^{-6} \cdot L$	HS (1...900mm), GS (1...3900mm),
Plug gauges	0,5 mm ... 300 mm		$0,5 \mu\text{m} + 1,3 \cdot 10^{-6} \cdot L$	HS, GS
Ring gauges	10 mm ... 300 mm		$0,7 \mu\text{m} + 1,4 \cdot 10^{-6} \cdot L$	GS
Ring gauges	2 mm ... 275 mm		$0,6 \mu\text{m} + 1,5 \cdot 10^{-6} \cdot L$	Measurement on 3- coordinate measur- ing machine HS
Dial gauges	0 ... 50 mm	0,001 mm ...	0,8 $\mu\text{m}$	Measurement on single coordinate measuring machine HS
Electrical touch-trig- ger probe		0,002 mm		
		> 0,002 mm ...	5,8 $\mu\text{m}$	Measurement on dial gauge tester GS
		0,01 mm		
Indicating caliper	Up to 1 mm	0,001 mm	0,8 $\mu\text{m}$	
Dead-weight mi- crometers	Up to 1 mm	0,001 mm	0,8 $\mu\text{m}$	
	Up to 3 mm	0,01 mm	5,8 $\mu\text{m}$	
Micrometer gauges	External dimensions	Partition		According to DIN 863 1-4
	Depth dimensions	0,001 mm	2,7 $\mu\text{m}$	HS, GS
	Up to 100 mm	0,002 mm	2,9 $\mu\text{m}$	
		0,01 mm	6,4 $\mu\text{m}$	
	100...1000mm	0,01 mm	$3,5 + 2,5 \cdot 10^{-6} \cdot L$	HS, GS
Micrometer gauges	Internal dimensions	Partition		3-line contact HS, GS
	2...240mm	0,001...0,01 mm	$3,7 + 1 \cdot 10^{-6} \cdot L$	
			$3,5 + 2,5 \cdot 10^{-6} \cdot L$	According to DIN 863-4
	Up to 900 mm	0,01 mm		2-point contact HS according to DIN 863-4
	Up to 3900 mm	0,01 mm	$3,5 + 2,5 \cdot 10^{-6} \cdot L$	2-point contact GS according to DIN 863-4



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Caliper	Up to 1000 mm	0,01 ... 0,02 mm	$30 \mu\text{m} + 15 \cdot 10^{-6} \cdot L$	According to DIN EN ISO 13385-1
		0,05 mm	$50 \mu\text{m} + 15 \cdot 10^{-6} \cdot L$	HS, GS
Height measuring devices	Up to 700 mm	0.1 $\mu\text{m}$	$1.5 \mu\text{m} + 3.5 \cdot 10^{-6} \cdot L$	With step gauge block HS
External thread	1 mm ... 200 mm		$2,7 \mu\text{m} + 2,8 \cdot 10^{-6} \cdot L$	Simple pitch- $\emptyset$ HS
Internal thread	3 mm ... 100 mm		$2,9 \mu\text{m} + 3,2 \cdot 10^{-6} \cdot L$	Simple pitch- $\emptyset$ HS
External thread	1 mm ... 95 mm		$2,5 \mu\text{m} + 5.0 \cdot 10^{-6} \cdot L$	Pitch- $\emptyset$ GS Thread scanner
Internal thread	3 mm ... 100 mm		$2,5 \mu\text{m} + 5.0 \cdot 10^{-6} \cdot L$	Pitch- $\emptyset$ GS Thread scanner
Flatness on Hard stone slabs	Up to 12,5 m <sup>2</sup>		$(0,9 + 0,8 \cdot L \cdot B) \mu\text{m}$ L = slab length in m B = slab width in m	On-site calibration with higher measurement uncertainty also possible
<b>Form</b>				
Roundness	Exterior 1 mm ... 300 mm	0.14 $\mu\text{m}$		On form measuring machine HS
	Interior 2 mm ... 300 mm	0.14 $\mu\text{m}$		
Straightness	Evaluated length 10 ... 500 mm	$0.20 \mu\text{m} + 1.8 \cdot 10^{-6} \cdot L$		On form measuring machine HS
<b>Torque</b>				
Torque wrench and screwdriver	2 Nm ... 2100 Nm	Generation of torque via torque sensor	1 %, but not less than 1 digit	According to DIN EN ISO 6789-1 GS
Torque - transducers and measuring devices	0,5 Nm ... 1000 Nm	Via horizontal double lever arm and loading pieces	1 %, but not less than 1 digit	GS

In case of contradictions in the language versions of the directories, the German version shall apply.

Abbreviation	Signification
GS	Branch in Birr
HS	Headquarters in Winterthur

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