



## SCS Directory

Accreditation number: SCS 0001

International standard : ISO/CEI 17025:2017

Swiss standard : SN EN ISO/CEI 17025:2018

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Calibration laboratories for  
dimensional measurements  
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Initial accreditation :

27.06.1994

Current accreditation :

21.09.2022 to 20.09.2027

Scope of accreditation see :

[www.sas.admin.ch](http://www.sas.admin.ch)  
(Accredited bodies)

## Scope of accreditation as of 03.05.2024

### Calibration laboratory for dimensional measurements

#### 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>                                   |                   |                        |                                                  |                                                   |
| <b>Gauge blocks</b><br>according to<br>ISO 3650 |                   |                        |                                                  | Comparison measurement on TESA<br>UPC/UPD benches |
| - Steel                                         | 0,5 - 101,6 mm    | Central length         | $0,06 \mu\text{m} + 0,3 \cdot 10^{-6} \cdot L$   |                                                   |
| - Ceramics                                      | 0,5 - 101,6 mm    | Central length         | $0,05 \mu\text{m} + 0,3 \cdot 10^{-6} \cdot L$   |                                                   |
| - Tungsten carbide                              | 0,5 - 101,6 mm    | Central length         | $0,05 \mu\text{m} + 0,2 \cdot 10^{-6} \cdot L$   |                                                   |
|                                                 |                   | Length variation v     | $0,02 \mu\text{m}$                               | Differential measurement on 5<br>points           |
| <b>Gauge blocks</b>                             | 0,05 - 300 mm     | Central length         | $0,8 \mu\text{m} + 1,3 \cdot 10^{-6} \cdot L$    | with horizontal<br>bench                          |



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|-----------------------------------------|-------------------|----------------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------|
| <b>Height Gauges</b>                    |                   | <b>Scale interval</b>            |                                                                                                    |                                          |
| - Plunger in the axis                   | up to 100 mm      | 0,0001 mm                        | 0,5 $\mu\text{m}$ + $25 \cdot 10^{-6} \cdot L$<br>0,4 $\mu\text{m}$ + $3 \cdot 10^{-6} \cdot L$    | with vertical bench<br>with gauge blocks |
| - Plunger not in the axis               | up to 100 mm      | 0,0001 mm                        | 1,5 $\mu\text{m}$ + $30 \cdot 10^{-6} \cdot L$<br>1,2 $\mu\text{m}$                                | with vertical bench<br>with gauge blocks |
| - Plunger not in the axis               | up to 1000 mm     | 0,0001 mm                        | 1,7 $\mu\text{m}$ + $3 \cdot 10^{-6} \cdot L$                                                      | with step gauge                          |
| - Straightness / Perpendicularity       | up to 1000 mm     | 0,0001 mm                        | 1,9 $\mu\text{m}$ + $2,4 \cdot 10^{-6} \cdot L$                                                    | with granite vertical planes             |
| <b>External micrometers</b>             |                   | <b>Scale interval</b>            |                                                                                                    |                                          |
| - analogic or digital reading           | up to 100 mm      | 0,001 mm<br>0,010 mm             | 1,8 $\mu\text{m}$ + $0,8 \cdot 10^{-6} \cdot L$<br>2,5 $\mu\text{m}$ + $0,6 \cdot 10^{-6} \cdot L$ | with gauge blocks                        |
| <b>Dial gauges</b>                      |                   | <b>Scale interval</b>            |                                                                                                    |                                          |
| - analogic reading                      | 0 - 13 mm         | 0,001 mm<br>0,002 mm<br>0,010 mm | 0,8 $\mu\text{m}$<br>0,9 $\mu\text{m}$<br>2,1 $\mu\text{m}$                                        | with horizontal bench                    |
| - analogic reading                      | 13 - 100 mm       | 0,001 mm<br>0,002 mm<br>0,010 mm | 1,0 $\mu\text{m}$<br>1,1 $\mu\text{m}$<br>2,1 $\mu\text{m}$                                        | with horizontal bench                    |
| - digital reading                       | 0 - 100 mm        | 0,001 mm<br>0,010 mm             | 1,3 $\mu\text{m}$<br>6,3 $\mu\text{m}$                                                             | with horizontal bench                    |
| <b>Dial test indicators</b>             |                   | <b>Scale interval</b>            |                                                                                                    |                                          |
| - analogic reading                      | 0 - 3 mm          | 0,002 mm<br>0,010 mm             | 1,1 $\mu\text{m}$<br>2,0 $\mu\text{m}$                                                             | with horizontal bench                    |



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|------------------------------------------------------|-------------------|------------------------|--------------------------------------------------|-----------------------|
| <b>Calipers</b>                                      |                   | <b>Scale interval</b>  |                                                  |                       |
| - digital reading                                    | up to 500 mm      | 0,010 mm               | $14 \mu\text{m} + 2 \cdot 10^{-6} \cdot L$       | with gauge blocks     |
| - analogic reading                                   | up to 500 mm      | 0,020 mm               | $7 \mu\text{m} + 3 \cdot 10^{-6} \cdot L$        |                       |
|                                                      |                   | 0,050 mm               | $17 \mu\text{m} + 1 \cdot 10^{-6} \cdot L$       |                       |
| <b>Depth calipers</b>                                |                   | <b>Scale interval</b>  |                                                  |                       |
| - digital reading                                    | up to 500 mm      | 0,010 mm               | $15 \mu\text{m} + 2 \cdot 10^{-6} \cdot L$       | with gauge blocks     |
| - analogic reading                                   | up to 500 mm      | 0,020 mm               | $12 \mu\text{m} + 2 \cdot 10^{-6} \cdot L$       |                       |
|                                                      |                   | 0,050 mm               | $15 \mu\text{m} + 2 \cdot 10^{-6} \cdot L$       |                       |
| <b>3-Point Internal micrometers</b>                  |                   | <b>Scale interval</b>  |                                                  |                       |
| - analogic or digital reading                        | 6 - 200 mm        | 0,001 mm               | $2,4 \mu\text{m} + 3,3 \cdot 10^{-6} \cdot L$    | with ring gauges      |
|                                                      |                   | 0,002 mm               | $2,4 \mu\text{m} + 3,3 \cdot 10^{-6} \cdot L$    |                       |
|                                                      |                   | 0,005 mm               | $2,4 \mu\text{m} + 3,3 \cdot 10^{-6} \cdot L$    |                       |
|                                                      |                   | 0,010 mm               | $2,4 \mu\text{m} + 3,3 \cdot 10^{-6} \cdot L$    |                       |
| <b>Adjustment gauges / Length gauges</b>             | 25 - 275 mm       | Central dimension      | $0,8 \mu\text{m} + 1,2 \cdot 10^{-6} \cdot L$    | with horizontal bench |
| <b>Ring gauges</b>                                   | 3 - 10 mm         | Internal dimensions    | $0,5 \mu\text{m} + 0,9 \cdot 10^{-6} \cdot L$    | with horizontal bench |
|                                                      | 10 - 205 mm       | Internal dimensions    | $0,6 \mu\text{m} + 1,4 \cdot 10^{-6} \cdot L$    | with horizontal bench |
| <b>Plug gauges / Cylindrical revolutionary parts</b> | 0,15 - 180 mm     | External dimensions    | $0,6 \mu\text{m} + 1,2 \cdot 10^{-6} \cdot L$    | with horizontal bench |
| <b>Ring gauges / plug gauges</b>                     | 3 - 150 mm        | Roundness              | $0,9 \mu\text{m}$                                | with roundness bench  |

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

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