

Swiss Confederation

Federal Department of Economic Affairs, Education and Research EAER

State Secretariat for Economic Affairs SECO

Swiss Accreditation Service SAS

## SCS Directory

**Accreditation number: SCS 0136** 

International standard: ISO/IEC 17025:2017

Swiss standard: SN EN ISO/IEC 17025:2018

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Initial accreditation: 09.12.2013

Current accreditation: 09.12.2023 to 08.12.2028

Scope of accreditation see: www.sas.admin.ch

(Accredited bodies)

## Scope of accreditation as of 09.12.2023

Calibration laboratory for length measurements, coating thickness measurements, elemental analysis and electrical conductivity measurements

Calibration and Measurement Capability (CMC)

Measured Quantity / Instrument or Gauge	Measurement Range	Measurement Conditions	Best Measurement Uncertainty ± 1)	Remarks
Length (coating thickness)	0.5 - 500 micrometers (μm)	Comparison with a certified reference material using electron microscopy	For 0.5 - 1.0 µm: 8 % For 1 - 5 µm: 2 % For > 5 µm: 1 %	
	0.5 µm - 100 milli- meters (mm)	Tactile, with electro- magnetic method	0.5 μm	

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<sup>1)</sup> The given extended measurement uncertainty is the standard uncertainty of the measurement multiplied by an extension factor k = 2, which corresponds to a confidence level of about 95% for a normal distribution.

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## **SCS Directory**

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Measured Quantity / Instrument or Gauge	Measurement Range	Measurement Conditions	Best Measurement Uncertainty ± 1)	Remarks
Coating thickness (mass per area)	From 5 nanometers (nm) to 100 µm	ED-XRF, ICP- OES	1 nm	Measuring range and uncertainty vary with the method and the coating structure. Assumption of known density of the coatings.
Elemental analysis of solid materials and solutions	From 10 milligrams per kilogram (mg/kg) to 1000 grams per kilogram (g/kg)	Destructive or non- destructive and con- tactless (ICP-OES, ED-XRF)	5 mg/kg	Measuring range and uncertainty vary with method and analyte/matrix.
Electrical conductivity of non-ferrous metals	0.3 - 63 megasie- mens per meter (MS/m),	Tactile, phase-sen- sitive eddy-current measurement	1 % relative	
	0.5 -108 % « International Annealed Copper Standard » (%IACS)			

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

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