Schedule of Accreditation

issued by

United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK



Locations covered by the organisation and their relevant activities

Laboratory locations:

Location details	Activity	Location code
Address Stanley House Old Brick Kiln Monk Sherborne Road Ramsdell Hampshire RG26 5PR	Humidity Temperature Air velocity Pressure	Ρ

Site activities performed away from the location listed above:

Location details	Activity	Location code
Any customer premises The customer's site or premises must be suitable for the nature of the particular calibrations undertaken and will be subject of contract review arrangements between the laboratory and the customer	Temperature Humidity Pressure Profiling of humidity and temperature chambers	S

	Schedule of Accreditation issued by United Kingdom Accreditation Service 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK	
	Testo Industrial Services Ltd	
0805 Accredited to ISO/IEC 17025-2017	Issue No: 027 Issue date: 16 October 2023	

Calibration and Measurement Capability (CMC)

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty (<i>k</i> = 2)	Remarks	Location Code
HUMIDITY Relative humidity	for the temperature range $0 \circ C$ to +20 $\circ C$ $10 \circ rh$ to 35 $\circ rh$ $35 \circ rh$ to 65 $\circ rh$ $65 \circ rh$ to 95 $\circ rh$ for the temperature range +20 $\circ C$ to +30 $\circ C$ $10 \circ rh$ to 40 $\circ rh$ $40 \circ rh$ to 70 $\circ rh$ $70 \circ rh$ to 80 $\circ rh$ $80 \circ rh$ to 95 $\circ rh$ for the temperature range +30 $\circ C$ to +70 $\circ C$ $10 \circ rh$ to 35 $\circ rh$ $35 \circ rh$ to 65 $\circ rh$	0.78 %rh 1.00 %rh 1.30 %rh 0.55 %rh 0.90 %rh 0.97 %rh 1.10 %rh 0.45 %rh 0.80 %rh	Calibration by comparison with a reference chilled mirror hygrometer and thermometers Calibration of devices with an electrical output may be undertaken	Ρ
Relative humidity	for the temperature range +5 °C to +25 °C 10 %rh to 35 %rh 23 %rh to 65 %rh 65 %rh to 95 %rh for the temperature range +25 °C to +50 °C 10 %rh to 35 %rh 23 %rh to 65 %rh 65 %rh to 90 %rh	1.6 %rh 2.6 %rh 2.6 %rh 1.6 %rh 2.3 %rh 3.0 %rh	Calibration by comparison with a reference hygrometer and thermometers	S
Dew point/Frost point	- 30 °C to +69 °C	0.16 °C	Calibration by comparison with a reference chilled mirror hygrometer	Р
Profiling of humidity and temperature chambers	+20 °C to +85 °C 20 to 95 %rh	3.30 %rh	Calibration by comparison with a reference chilled mirror hygrometer and temperature probes Uncertainty achieved will depend on the performance of the chamber at the time of calibration.	S
Saturated salt capsules	<i>At 25 ℃</i> 6 %rh to 35 %rh 35 %rh to 76 %rh 76 %rh to 90 %rh	1.0 %rh 1.4 %rh 1.7 %rh		Ρ

	Schedule of Accreditation issued by United Kingdom Accreditation Service 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK	
	Testo Industrial Services Ltd	
0805 Accredited to ISO/IEC 17025:2017	Issue No: 027 Issue date: 16 October 2023	
c	alibration performed by the Organisation at the locations specified	

Range	Expanded Measurement Uncertainty (<i>k</i> = 2)	Remarks	Location Code
		Calibration by comparison with a reference instruments	
-90 °C to 0 °C 0 °C to +110 °C +110 °C to +200 °C	0.020 °C 0.038 °C 0.041 °C	In liquid bath	Ρ
-70 °C to +45 °C +45 °C to +180 °C	0.11 °C 0.13 °C	In air chamber	
-90 °C to 0 °C 0 °C to +110 °C +110 °C to +200 °C	0.043 °C 0.054 °C 0.056 °C	In liquid bath	Ρ
-70 °C to +45 °C +45 °C to +180 °C	0.18 °C 0.20 °C	In air chamber	
-80 °C to +180 °C	0.26 °C	In customers environment	S
-40 °C to +200 °C	0.90 °C	Single and multipoint time dependent temperature profiling, also referred to as spatial temperature surveying or mapping	S
	-90 °C to 0 °C 0 °C to +110 °C +110 °C to +200 °C -70 °C to +45 °C +45 °C to +180 °C -90 °C to 0 °C 0 °C to +110 °C +110 °C to +200 °C -70 °C to +45 °C +45 °C to +180 °C -80 °C to +180 °C -40 °C to +200 °C	Range Expanded Measurement Uncertainty ($k = 2$) -90 °C to 0 °C 0 °C to +110 °C +110 °C to +200 °C 0.020 °C 0.038 °C 0.038 °C 0.041 °C -70 °C to +45 °C +45 °C to +180 °C 0.11 °C 0.13 °C -90 °C to 0 °C 0 °C to +110 °C +110 °C to +200 °C 0.043 °C 0.054 °C 0.056 °C -70 °C to +45 °C +45 °C to +180 °C 0.18 °C 0.20 °C -80 °C to +180 °C 0.26 °C -40 °C to +200 °C 0.90 °C	RangeExpanded Measurement Uncertainty (k = 2)Remarks-90 °C to 0 °C 0 °C to +110 °C +110 °C to +200 °C0.020 °C 0.033 °C 0.041 °CCalibration by comparison with a reference instruments In liquid bath-70 °C to +45 °C +45 °C to +180 °C0.11 °C 0.054 °C 0.056 °CIn air chamber-90 °C to 0 °C •°C to +110 °C +10 °C to +200 °C0.043 °C 0.056 °CIn liquid bath-70 °C to +45 °C +45 °C to +180 °C0.18 °C 0.20 °CIn air chamber-80 °C to +180 °C +45 °C to +180 °C0.26 °CIn customers environment-40 °C to +200 °C0.90 °CSingle and multipoint time dependent temperature profiling, also referred to as spatial temperature surveying or mapping

	Schedule of Accreditation issued by United Kingdom Accreditation Service 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK	
	Testo Industrial Services Ltd	
0805 Accredited to ISO/IEC 17025:2017	Issue No: 027 Issue date: 16 October 2023	
Cali	bration performed by the Organisation at the locations specified	

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty (<i>k</i> = 2)	Remarks	Location Code
AIR VELOCITY			Calibration by comparison with a reference in a characterised wind tunnel.	
Calibration of vane anemometers by comparison	0.2 m/s to 1 m/s 1 m/s to 15 m/s 15 m/s to 20 m/s 20 m/s to 30 m/s	0.10 m/s 0.20 m/s 0.32 m/s 0.60 m/s	Anemometer up to 100 mm diameter can be calibrated. Uncertainty and range achieved will depend on the	Ρ
Calibration of thermal anemometers by comparison	0.1 m/s to 1 m/s 1 m/s to 10 m/s 10 m/s to 15 m/s 15 m/s to 20 m/s	0.13 m/s 0.37 m/s 0.75 m/s 0.91 m/s	achieved will depend on the size of the anemometer calibrated	
PRESSURE			Methods consistent with EURAMET CG17.	
Gas pressure gauge				
Calibration of pressure indicating instruments and gauges	-95 kPa to -2 kPa -2 kPa to -200 Pa -200 Pa to 0 Pa 0 Pa to 200 Pa 200 Pa to 1 kPa 1 kPa to 2 kPa 2 kPa to 100 kPa 100 kPa to 7 MPa	0.035 % + 5.3 Pa 17 Pa 4.9 Pa 1.4 Pa 0.015% + 6.3 Pa 16 Pa 0.035 % + 5.3 Pa 0.019 % + 10.0 Pa	Absolute pressure calibrations can be undertaken using associated barometric pressure measurement correction. The uncertainties quoted will be increased by 72 Pa	Ρ
Gas pressure absolute			Calibrations of pressure devices with an electrical output may be undertaken	
Calibration of pressure indicating instruments and gauges	5 kPa to 160 kPa	72 Pa		Ρ
Gas pressure gauge				
Calibration of pressure indicating instruments and gauges	-95 kPa to -7 kPa - 7 kPa to -2 kPa -2 kPa to -200 Pa -200 Pa to 200 Pa 200 Pa to 1 kPa 1 kPa to 2 kPa 2 kPa to 35 kPa 35 kPa to 7 MPa	0.035 % + 5.3 Pa 17 Pa 4.9 Pa 1.4 Pa 0.015% + 6.3 Pa 16 Pa 0.035 % + 5.3 Pa 0.011 % + 0.70 kPa	Absolute pressure calibrations can be undertaken using associated barometric pressure measurement correction. The uncertainties quoted will be increased by 72 Pa.	S
Gas pressure absolute			Calibrations of pressure	
Calibration of pressure indicating instruments and gauges	5 kPa to 160 kPa	72 Pa	devices with an electrical output may be undertaken.	S
END				



Appendix - Calibration and Measurement Capabilities

Introduction

The definitive statement of the accreditation status of a calibration laboratory is the Accreditation Certificate and the associated Schedule of Accreditation. This Schedule of Accreditation is a critical document, as it defines the measurement capabilities, ranges and boundaries of the calibration activities for which the organisation holds accreditation.

Calibration and Measurement Capabilities (CMCs)

The capabilities provided by accredited calibration laboratories are described by the Calibration and Measurement Capability (CMC), which expresses the lowest measurement uncertainty that can be achieved during a calibration. If a particular device under calibration itself contributes significantly to the uncertainty (for example, if it has limited resolution or exhibits significant non-repeatability) then the uncertainty quoted on a calibration certificate will be increased to account for such factors.

The CMC is normally used to describe the uncertainty that appears in an accredited calibration laboratory's schedule of accreditation and is the uncertainty for which the laboratory has been accredited using the procedure that was the subject of assessment. The measurement uncertainty is calculated according to the procedures given in the GUM and is normally stated as an expanded uncertainty at a coverage probability of 95 %, which usually requires the use of a coverage factor of k = 2. An accredited laboratory is not permitted to quote an uncertainty that is smaller than the published measurement uncertainty in certificates issued under its accreditation.

Expression of CMCs - symbols and units

It should be noted that the percentage symbol (%) represents the number 0.01. In cases where the measurement uncertainty is stated as a percentage, this is to be interpreted as meaning percentage of the measurand. Thus, for example, a measurement uncertainty of 1.5 % means $1.5 \times 0.01 \times q$, where *q* is the quantity value.

The notation Q[a, b] stands for the root-sum-square of the terms between brackets: Q[a, b] = $[a^2 + b^2]^{1/2}$