


Schedule of Accreditation

issued by

United Kingdom Accreditation Service

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

 0499 Accredited to ISO/IEC 17025:2017	PreSet Calibration Services Ltd	
	Issue No: 046 Issue date: 10 July 2020	
94A East Street Bridport Dorset DT6 3LL	Contact: Mr S S Kick Tel: +44 (0)1308 456539 Fax: +44 (0)1308 421676 E-Mail: lab@preset.com Website: www.preset.com	
Calibration performed by the Organisations at the locations specified below		

Locations covered by the organisation and their relevant activities

Laboratory locations:

Location details	Activity	Location code
Address 94A East Street Bridport Dorset DT6 3LL Local contact Mr S S Kick Tel: +44 (0)1308 456539 Fax: +44 (0)1308 421676 Email: lab@preset.com Website: www.preset.com	Electrical, Pressure, Humidity, Temperature, Time Interval and Weighing Instrument Calibration	Lab

Site activities performed away from the locations listed above:

Location details	Activity	Location code
The customers' site or premises must be suitable for the nature of the particular calibrations undertaken and will be the subject of contract review arrangements between the laboratory and the customer.	Electrical, Pressure, Humidity, Temperature, Time Interval and Weighing Instrument Calibration	Site



0499

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

PreSet Calibration Services Ltd
Issue No: 046 Issue date: 10 July 2020

Calibration performed by the Organisation at the locations specified

DETAIL OF ACCREDITATION

Measured Quantity Instrument or Gauge	Range	Calibration and Measurement Capability (CMC) Expressed as an Expanded Uncertainty ($k = 2$)	Remarks	Location Code
TEMPERATURE			Calibration by comparison with reference instruments	Lab
Resistance thermometers	-95 °C to +100 °C 100 °C to 200 °C 200 °C to 600 °C	0.13 °C 0.17 °C 0.26 °C	In block bath	
Thermocouples	-95 °C to +100 °C 100 °C to 200 °C 200 °C to 600 °C 600 °C to 1100 °C 1100 °C to 1200 °C	0.17 °C 0.19 °C 0.42 °C 1.3 °C 2.1 °C	In block bath	
Electronic thermometers with sensors	As for sensor type above			
Temperature block calibrators	-95 °C to +200 °C 200 °C to 600 °C 600 °C to 1100 °C	0.27 °C 0.40 °C 1.9 °C		
Temperature controlled baths, fridges/refrigerators, freezers, autoclaves, ovens, furnaces and environmental chambers	-95 °C to +200 °C 200 °C to 500 °C 500 °C to 1100 °C	1.0 °C 2.0 °C 3.0 °C	Single and multipoint time dependent temperature profiling, also referred to as spatial temperature surveying or mapping	Site
Pt100 sensors	-95 °C to +200 °C 200 °C to 300 °C 300 °C to 500 °C 500 °C to 800 °C	0.44 °C 0.62 °C 2.0 °C 3.0 °C	In block bath	
Thermocouples	-95 °C to +200 °C 200 °C to 500 °C	1.0 °C 2.0 °C	In block bath	



0499

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

PreSet Calibration Services Ltd
Issue No: 046 Issue date: 10 July 2020

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Calibration and Measurement Capability (CMC) Expressed as an Expanded Uncertainty ($k = 2$)	Remarks	Location Code
HUMIDITY (continued)				
Temperature sensors incorporated in humidity instruments	10 °C to 60 °C	0.37 °C		
Relative humidity	15 %rh to 95 %rh for the temperature range 10 °C to 60 °C	3.7 %rh		Site
Temperature (sensors incorporated in humidity instruments)	15 °C to 60 °C	0.60 °C		
PRESSURE			Methods consistent with EURAMET CG3.	Lab & Site
Hydraulic Pressure (Gauge)				
Calibration of pressure indicating instruments and gauges	0 MPa to 20 MPa 20 MPa to 70 MPa	50 ppm + 6.4 kPa 50 ppm + 14 kPa		
Gas Pressure (Gauge)				
Calibration of pressure indicating instruments and gauges	- 100 kPa to 0 kPa 0 kPa to 2.5 kPa 2.5 kPa to 400 kPa 400 kPa to 2 MPa 2 MPa to 4 MPa	0.65 kPa 12 Pa 0.67 kPa 0.80 kPa 0.90 kPa		
Gas Pressure (Absolute)				
Calibration of pressure indicating instruments and gauges	3.5 kPa to 700 kPa	0.13 kPa		



0499

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

PreSet Calibration Services Ltd
Issue No: 046 Issue date: 10 July 2020

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Calibration and Measurement Capability (CMC) Expressed as an Expanded Uncertainty ($k = 2$)	Remarks	Location Code
ELECTRICAL (continued)				
DC RESISTANCE (continued)				Lab & Site
Measurement	0 Ω to 100 Ω 100 Ω to 1 k Ω 1 k Ω to 10 k Ω 10 k Ω to 100 k Ω 100 k Ω to 1 M Ω 1 M Ω to 10 M Ω 10 M Ω to 100 M Ω	19 m Ω 120 m Ω 0.67 Ω 13 Ω 0.59 k Ω 4.0 k Ω 1.0 M Ω	Outputs of instruments can be measured	
DC Voltage				
Generation	0 mV to 20 mV 20 mV to 200 mV 200 mV to 2 V 2 V to 20 V 20 V to 200 V 200 V to 1 kV	7.9 μ V 11 μ V 47 μ V 520 μ V 21 mV 45 mV	These values can be generated for the calibration of measuring instruments	
Measurement	0 mV to 100 mV 100 mV to 1 V 1 V to 10 V 10 V to 100 V 100 V to 1 kV	9.2 μ V 62 μ V 670 μ V 6.4 mV 62 mV	For measurement of instrument outputs	
DC Current				
Generation	0 μ A to 200 μ A 200 μ A to 2 mA 2 mA to 20 mA 20 mA to 200 mA 200 mA to 2 A 2 A to 20 A	31 nA 840 nA 11 μ A 34 μ A 420 μ A 7.2 mA	These values can be generated for the calibration of measuring instruments	



0499

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

PreSet Calibration Services Ltd
Issue No: 046 Issue date: 10 July 2020

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Calibration and Measurement Capability (CMC) Expressed as an Expanded Uncertainty ($k = 2$)	Remarks	Location Code
ELECTRICAL (continued)				Lab & Site
DC Current (continued)				
Measurement	0 mA to 10 mA 10 mA to 100 mA 100 mA to 1 A 1 A to 3 A 3 A to 10 A 10 A to 240 A 240 A to 1000 A	4.3 μ A 35 μ A 0.82 mA 1.9 mA 1.5 A 6.0 A 25 A	For measurement of instrument outputs	
AC Voltage				
Generation	40 Hz to 1 kHz: 20 mV to 200 mV 200 mV to 2 V 2 V to 20 V 20 V to 200 V 200 V to 700 V	270 μ V 700 μ V 14 mV 120 mV 770 mV	These values can be generated for the calibration of measuring instruments	
Measurement	40 Hz to 1 kHz: 10 mV to 100 mV 100 mV to 1 V 1 V to 10 V 10 V to 100 V 100 V to 750 V	78 μ V 960 μ V 8.6 mV 51 mV 580 mV	For measurement of instrument outputs	
AC Current				
Generation	40 Hz to 1 kHz: 10 μ A to 200 μ A 200 μ A to 2 mA 2 mA to 20 mA 20 mA to 200 mA	370 nA 1.0 μ A 8.4 μ A 1.5 mA	These values can be generated for the calibration of measuring instruments	



0499

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

PreSet Calibration Services Ltd
Issue No: 046 Issue date: 10 July 2020

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Calibration and Measurement Capability (CMC) Expressed as an Expanded Uncertainty ($k = 2$)	Remarks	Location Code
<p>ELECTRICAL (continued)</p> <p>Additional measurements in support of IEE 17th Edition test equipment</p> <p>RCD testers</p> <p>Trip current</p> <p>Trip time</p> <p>AC Resistance for loop testers at 50 Hz</p> <p>Nominal values; additive to prevailing loop impedance</p>	<p>6 mA, 10 mA and 30 mA 100 mA, 300 mA, and 500 mA 1000 mA</p> <p>20 ms to 390 ms 390 ms to 5 s</p> <p>0.05 Ω, 0.15 Ω, 0.33 Ω, 1.8 Ω, 3.3 Ω, 18 Ω and 33 Ω</p>	<p>7.0 % + 20 μA 7.0 % + 160 μA 7.0 % + 840 μA</p> <p>1.0 ms 8.9 ms</p> <p>0.054 Ω</p>	<p>Nominal laboratory loop impedance 0.4 Ω.</p>	<p>Lab & Site</p>
<p>Calibration of Portable Appliance Testers</p> <p>Earth Bond</p>	<p>20 mΩ</p> <p>190 mΩ, 210 mΩ, 950 mΩ, 1 Ω 1.05 Ω, 1.08 Ω, 2 Ω 10 Ω and 18 Ω</p> <p>0 V to 20 V</p> <p>100 mA to 50 A 50 Hz 1 mA to 2 A 50 Hz 0 mA to 2 A dc</p>	<p>5.0 %</p> <p>1.0 %</p> <p>50 mV</p> <p>0.50 % + 200 mA 0.50 % + 2.0 mA 0.10 % + 2.0 mA</p>		<p>Lab & Site</p>



0499

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

PreSet Calibration Services Ltd
Issue No: 046 Issue date: 10 July 2020

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Calibration and Measurement Capability (CMC) Expressed as an Expanded Uncertainty ($k = 2$)	Remarks	Location Code
ELECTRICAL (continued)				
Electrical calibration of temperature simulators, indicators, controllers and recorders for the following sensors:-				
Noble metal thermocouples	0 °C to 500 °C 500 °C to 1500 °C	1.5 °C 0.50 °C	including cold junction compensation	Lab
Base metal thermocouples	-160 °C to 0 °C 0 °C to 1200 °C	0.20 °C 0.20 °C	including cold junction compensation	
Resistance sensors (Pt100)	-200 °C to +800 °C	0.045 °C	Simulation	
	-200 °C to +800 °C	0.050 °C	Measurement	
Cold junction compensation	At ambient temperature	0.070 °C	Nominal laboratory ambient temperature 20 °C	
Noble metal thermocouples	0 °C to 1200 °C	0.80 °C	including cold junction compensation	Site
Base metal thermocouples	-190 °C to 1300 °C	0.50 °C	including cold junction compensation	
Resistance sensors (Pt100)	-200 °C to +800 °C	1.2 °C	Simulation	
	-200 °C to +800 °C	0.20 °C	Measurement	



0499

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

PreSet Calibration Services Ltd
Issue No: 046 Issue date: 10 July 2020

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Calibration and Measurement Capability (CMC) Expressed as an Expanded Uncertainty ($k = 2$)	Remarks	Location Code
WEIGHING INSTRUMENTS			Methods consistent with EURAMET guide cg-18.	
Digital one pan non-automatic weighing instruments	Maximum capacity	CMC (mg)	Weights are available in OIML class:	Lab & Site
	200 mg	0.003 1	E2 from 1 mg to 200 g, Max. grouped load 500 g	
	500 mg	0.003 9		
	1 g	0.004 7		
	2 g	0.062	F1 from 100 mg to 1 kg, Max. grouped load 2 kg	
	5 g	0.077		
	10 g	0.093		
	20 g	0.13	M1 from 5 kg to 20 kg, Max. grouped load 60 kg	
	50 g	0.17		
	100 g	0.28		
	200 g	0.52		
	500 g	1.4		
	1 kg	7.8		
	2 kg	16		
	5 kg	390		
	10 kg	770		
	20 kg	1.6 g		
	30 kg	2.3 g		
	50 kg	3.9 g		
	60 kg	5.1 g		
END				



0499

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

PreSet Calibration Services Ltd
Issue No: 046 Issue date: 10 July 2020

Calibration performed by the Organisation at the locations specified

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 uncertainty of measurement 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 CIPM-ILAC definition of the CMC is as follows:

A CMC is a calibration and measurement capability available to customers under normal conditions:

- (a) as published in the BIPM key comparison database (KCDB) of the CIPM MRA; or
- (b) as described in the laboratory's scope of accreditation granted by a signatory to the ILAC Arrangement.

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 CMC is calculated according to the procedures given in M3003 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 CMC in certificates issued under its accreditation.

The CMC may be described using various methods in the Schedule of Accreditation:

- As a single value that is valid throughout the range.
 - As an explicit function of the measurand or of a parameter (see below).
 - As a range of values. The range is stated such that the customer can make a reasonable estimate of the likely uncertainty at any point within the range.
 - As a matrix or table where the CMCs depend on the values of the measurand and a further quantity.
- In graphical form, providing there is sufficient resolution on each axis to obtain at least two significant figures for the CMC.

Expression of CMCs - symbols and units

In general, only units of the SI and those units recognised for use with the SI are used to express the values of quantities and of the associated CMCs. Nevertheless, other commonly used units may be used where considered appropriate for the intended audience. For example, the term "ppm" (part per million) is frequently used by manufacturers of test and measurement equipment to specify the performance of their products. Terms like this may be used in Schedules of Accreditation where they are in common use and understood by the users of such equipment, providing their use does not introduce any ambiguity in the capability that is being described.

When the CMC is expressed as an explicit function of the measurand or of a parameter, this often comprises a relative term (e.g., percentage) and an absolute term, i.e. one expressed in the same units as those of the measurand. This form of expression is used to describe the capability that can be achieved over a range of values. Some examples are shown below. It should be noted that these expressions are *not*