# **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 5 Rise Road Sunningdale Ascot Berkshire SL5 0BH	<b>Local contact</b> Mr A Hodgson	Pressure Temperature Time interval	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.	Pressure Temperature Time interval	Site



Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ( <i>k</i> = 2)	Remarks	Location Code			
TEMPERATURE							
Temperature sensors with indicators				Lab			
Resistance sensors	-40 °C to +200 °C -40 °C to +150 °C	0.030 °C 0.046 °C	By comparison in a liquid bath By comparison in a dry block				
Thermocouple sensors	-40 °C to +50 °C 50 °C to 200 °C	0.10 °C 0.17 °C	By comparison in a liquid bath				
Temperature block calibrators	-40 °C to +150 °C	0.046 °C	Using PRT sensors				
Temperature sensors with indicators		0.14 C		Site			
Resistance sensors	-40 °C to +140 °C	0.11 °C	By comparison in a dry block				
Thermocouple sensors	-40 °C to +140 °C	0.18 °C	By comparison in a dry block				
Temperature controlled autoclaves, media preparators, incubators, ovens, environmental chambers, fridges/refrigerators and freezers (inclusive of associated indicators, controllers and recorders)	-40 °C to +200 °C	0.50 °C	Single and multipoint time dependent temperature profiling, also referred to as spatial temperature surveying or mapping Calibrations can be carried out as part of the performance and safety tests for sterilizers as prescribed in the following standards: BS 2646:1993:Part 5:Section 3 BS 3970:1990 EN 285:2015				

# Calibration and Measurement Capability (CMC)



Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ( $k = 2$ )	Remarks	Location Code		
PRESSURE			Methods consistent with EURAMET CG17.			
Gas pressure gauge						
Calibration of Pressure indicating instruments and gauges	-96 kPa to 30 kPa	23 Pa	By comparison with a digital pressure standard.	Lab		
	30 kPa to 700 kPa	0.14 kPa	By comparison with a deadweight tester.			
	-96 kPa to +100 kPa 100 kPa to 400 kPa 400 kPa to 700 kPa	0.34 kPa 0.40 kPa 0.64 kPa	By comparison with a digital pressure standard.	Site		
Gas pressure absolute						
Calibration of Pressure indicating instruments and gauges	3.5 kPa to 130 kPa	20 Pa	By comparison with a digital pressure standard.	Lab		
	130 kPa to 800 kPa	0.14 kPa	By comparison with a deadweight tester.			
	35 kPa to 200 kPa 200 kPa to 500 kPa 35 kPa to 800 kPa	0.34 kPa 0.40 kPa 0.64 kPa	By comparison with a digital pressure standard.	Site		
TIME INTERVAL						
Timers	10 s to 12 hrs	2.0 s		Lab & site		
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] =  $[a^2 + b^2]^{1/2}$