Schedule of Accreditation

issued by

United Kingdom Accreditation Service

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

8380
Accredited to
ISO/IEC 17025:2017

C&M Scientific Ltd

Issue No: 014 **Issue date:** 27 May 2025

1 Brewster Square
Brucefield Industrial Estate
Livingston
EH54 9BJ

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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 1 Brewster Square Brucefield Industrial Estate Livingston EH54 9BJ	**Local contact** Tel: +44 (0)1506 463734 Email: info@cmscientific.co.uk Website: www.cmscientific.co.uk	Temperature indicators Temperature controlled chambers Rotational speed of centrifuges Time Interval Electrical simulation of temperature Carbon Dioxide content	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.	Temperature indicators Temperature and humidity controlled chambers Rotational Speed of centrifuges Time interval Electrical simulation of temperature Carbon Dioxide content	Site

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Calibration and Measurement Capability (CMC)

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty (k = 2)	Remarks	Location Code
TEMPERATURE				
Calibration by comparison				
Temperature sensors with indicators or recorders	-196 -90 °C to 0 °C -40 °C to 0 °C 0 °C to 125 °C 125 °C to 300 °C	0.30 ºC 0.15 ºC 0.11 ºC 0.13 °C 0.31 °C	In liquid nitrogen In matal block bath	Lab and site
Thermal performance of centrifuges	0°C to 40°C	0.50 °C		Lab and Site
Temperature controlled, incubators, ovens, environmental chambers, refrigerators, freezers, centrifuges, hot blocks and liquid baths (inclusive of associated indicators, controllers and recorders, all with sensors)	-90 °C to +300 °C	0.35 °C	Single point probes. Single and multipoint monitoring probes Time dependent temperature profiling	Lab and Site
RELATIVE HUMIDITY				Site
Calibration by comparison				
Temperature and humidity controlled, incubators, environmental chambers,	15 %rh to 95 %rh for the temperature range 10 °C to 70 °C	2.7 %rh		
TIME INTERVAL				
Calibration by comparison				
Timers	5 s to 24 hr	3 s		Lab and site
Rotational speed Centrifuges Calibration by comparison	500 RPM to 20000 RPM	1.9 RPM		Lab and site

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Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty (k = 2)	Remarks	Location Code
ELECTRICAL CALIBRATION OF TEMPERATURE INDICATORS AND SIMULATORS				
Calibration by comparison				
PRT simulation (PT100)	-200 °C to +300 °C	0.12 °C		Lab and site
Base metal thermocouples Type T only	-200 °C to +200 °C	0.75 °C		
GAS CONTENT				Lab and site
Carbon Dioxide	0% to 20%	0.40%	Gas Analyser	
Carbon Dioxide	0% to 20%	0.75%	Single point calibration in the centre of the incubator	
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: $Q[a, b] = [a^2 + b^2]^{1/2}$