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 8 Abbey Wood Road Kings Hill West Malling Kent ME19 4YT	Local contact Mr M Norfolk	Mass (weights) Temperature	Lab

Site activities performed away from the locations listed above:

Location details	Activity	Location code
Customers' Premises. 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.	Mass (Weighing machines)	Site

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	Kent Scientific Services
0352 Accredited to ISO/IEC 17025:2017	Issue No: 036 Issue date: 14 Janaury 2022

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$	Remarks	Location Code
MASS	Nominal value (g)	(mg)	NOTES	Lab
See Notes 1 and 2				
Specific values	$\begin{array}{c} 30\ 000\\ 25\ 000\\ 20\ 000\\ 10\ 000\\ 5\ 000\\ 2\ 000\\ 1\ 000\\ 500\\ 200\\ 1\ 000\\ 500\\ 200\\ 100\\ 50\\ 20\\ 100\\ 50\\ 20\\ 10\\ 55\\ 22\\ 1\\ 1\\ 0.5\\ 0.2\\ 0.1\\ 0.05\\ 0.02\\ 0.01\\ 0.005\\ 0.00\\ 0.001\\ \end{array}$	300 250 20 10 5.0 2.0 1.0 0.50 0.20 0.10 0.060 0.050 0.040 0.030 0.024 0.020 0.016 0.012 0.016 0.012 0.016 0.008 0 0.008 0 0.006 0 0.005 0 0.004 0 0.004 0 0.004 0	 Calibrations can be given in other units as required. Intermediate values of weights can be calibrated with an uncertainty not less than that interpolated from the next higher and next lower nominal values. Borda's Substitution Method 	
Non-specific values	From 50 kg to 1300 kg	0.0020%		

Calibration and Measurement Capability (CMC)

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UKAS CALIBRATION	Kent Scientific Services		
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Calibration performed by the Organisation at the locations specified			

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$	Remarks	Location Code
NON-AUTOMATIC WEIGHING MACHINES			Methods consistent with EURAMET CG18	Lab & Site
Electronic, single pan (See Notes 1 and 2)	200mg 500mg 1g 2g 5g 10 g 20 g 50 g 100 g 200 g 500 g 1 kg 2 kg 5 kg 10 kg 20 kg 40 kg 50 kg 100 kg 200 kg 500 kg 100 kg 200 kg 500 kg 1000 kg 1150 kg	0.0092 mg 0.012 mg 0.015 mg 0.020 mg 0.024 mg 0.033 mg 0.046 mg 0.77 mg 0.14 mg 0.28 mg 0.69 mg 1.4 mg 2.8 mg 9.6 mg 20 mg 39 mg 77 mg 0.77 g 1.7 g 4.3 g 9.7 g 20 g 22 g	 Weights are available in OIML Class: E2 from 1mg to 1 kg, max. grouped load 2 kg F1 from 1 g to 20 kg, max. grouped load 40 kg M1 from 1 g to 20 kg, max. grouped load 1150 kg Other loads within the overall listed range may also be used. 	
TEMPERATURE				
Liquid-in-glass thermometers	-70 °C to -40 °C -40 °C to 100 °C 100 °C to 250 °C	0.070 °C 0.050 °C 0.070 °C	Calibration by comparison in a liquid bath	Lab
Temperature indicators and recorders, with temperature sensors	-70 °C to -40 °C -40 °C to 100 °C 100 °C to 250 °C	0.070 °C 0.050 °C 0.070 °C	Calibration by comparison in a liquid bath	Lab
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: $Q[a, b] = [a^2 + b^2]^{1/2}$