Schedule of Accreditation

issued by

United Kingdom Accreditation Service

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

0830 **Accredited to ISO/IEC 17025:2017**	**N J Metrology Limited** **Issue No:** 012 **Issue date:** 16 January 2023	
	Bedford **Bedfordshire** **MK41 8DD**	**Contact: Mr Neil Marriott** **Tel: 07831 207506** **E-Mail: sales@njmetrology.com** **Website: www.njmetrology.com**
Calibration performed by the Organisation at the locations specified below		

Locations covered by the organisation and their relevant activities

Site activities performed away from the locations listed above:

Location details	Activity	Location code
At customers premises	Dimensional	Site

Calibration and Measurement Capability (CMC)

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty (k = 2)	Remarks	Location Code
	RANGE IN MILLIMETRES AND UNCERTAINTY IN MICROMETRES UNLESS OTHERWISE STATED			
MEASURING INSTRUMENTS AND MACHINES				
Cartesian coordinate measuring machines (CMM's)	Length measurement: E 0 to 1550 (longest diagonal)	0.25 + (0.50 x length in m)	As ISO 10360-2:2001 (Withdrawn) Using end standards	Site
	Single stylus probing test:	0.16	As ISO 10360-2:2001 (Withdrawn) Using a 10 mm to 50 mm diameter test sphere	
Cartesian coordinate measuring machines (CMM's)	Length measurement: E_L 0 to 1550 (longest diagonal)	0.25 + (0.50 x length in m)	As ISO 10360-2:2009 Using end standards	Site
	Single stylus probing test: P_{FTU}	0.16	As ISO 10360-5:2010 (Withdrawn) Using a 10 mm to 50 mm diameter test sphere.	
	Single stylus probing test: $P_{Form.Sph.1\times25:SS:Tact}$ $P_{Size.Sph.1\times25:SS:Tact}$	0.092 0.29	Test uncertainties calculated in line with ISO/TS 17865:2016. As ISO 10360-5:2020 Using a 10 mm to 51 mm diameter test sphere.	
FORM				
Surface plates Granite and Cast iron	160 x 100 to 2000 x 1500		As BS 817:2008	Site
	Flatness of working surface (Note 1):	1.5 + (0.80 x diagonal in m)	Note 1: The uncertainty quoted is for the departure from flatness, i.e., the distance separating the two parallel planes which just enclose the surface under consideration.	
	Local variation of working surface:	1.8		
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: $Q[a, b] = [a^2 + b^2]^{1/2}$