Schedule of Accreditation

issued by

United Kingdom Accreditation Service

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



instrument of Oauge					
RANGE IN MILLIMETRES AND UNCERTAINTY IN MICROMETRES UNLESS OTHERWISE STATED					
LENGTH					
Thread measuring cylinders	As BS 5590:1978 and specials 0.1 to 5 diameter	0.50 on diameter	Using a length measuring machine and end standards.		
Plain plug gauges (parallel), cylindrical setting standards	1 to 50 diameter 50 to 100 diameter 100 to 150 diameter 150 to 200 diameter 200 to 300 diameter	0.80 1.0 1.5 2.0 3.0 0 diameter	Using a length measuring machine and end standards.		
Plain plug gauges (taper)			Using a length measuring		
Taper up to 1 in 8 on diameter	3 to 50 diameter 50 to 100 diameter 100 to 150 diameter	2.0 3.0 4.0			
Taper above 1 in 8 and up to 1 in 3 on diameter	3 to 50 diameter 50 to 100 diameter 100 to 150 diameter	4.0 5.0 6.0			
Plain ring gauges (parallel)	10 to 50 diameter 50 to 100 diameter 100 to 150 diameter	1.0 1.5 2.0 on diameter	Using a length measuring machine and end standards.		
Plain ring gauges (taper)			Using a length measuring		
Taper up to 1 in 8 on diameter	10 to 50 diameter 50 to 100 diameter 100 to 150 diameter	3.0 4.0 5.0 on diameter			
Taper above 1 in 8 and up to 1 in 3 on diameter	10 to 50 diameter 50 to 100 diameter 100 to 150 diameter	5.0 6.0 7.0			

UKAS CALIBRATION 0249 Accredited to	Schedule of Accreditation issued by United Kingdom Accreditation Service 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK Threadmaster Gauges Limited Issue No: 021 Issue date: 01 February 2023				
ISO/IEC 17025:2017 Calibration performed at main address only					
Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty (<i>k</i> = 2)	Remarks		
RANGE IN MILLIMETRES AND UNCERTAINTY IN MICROMETRES UNLESS OTHERWISE STATED					
LENGTH (cont'd) Screw plug gauges (parallel) including check and setting plugs See Note 4 Screw plug gauges (taper) See Note 2 Screw ring gauges (parallel) See Note 4 Screw ring gauges (taper) See Note 2 Screw pitch Screw flank angle Screw thread adjustable caliper gauges (parallel) See Note 3	1 to 100 diameter 100 to 300 diameter 2 to 100 diameter 100 to 300 diameter 1 to 100 diameter 100 to 150 diameter 150 to 300 diameter 6 to 150 diameter 0.2 to 8 0° to 52° 1 to 100 diameter	$ \begin{array}{c} 2.5 \\ 5.0 \\ . \\ 4.0 \\ 8.0 \end{array} \text{on pitch diameter} \\ 5.0 \\ 6.0 \\ 8.0 \\ 7.0 \end{array} \text{on pitch diameter} \\ 7.0 \end{array} $ $ \begin{array}{c} 1.5 \\ 5.0 \text{ minutes of arc} \\ \text{See Note 5} \end{array} $	Using a length measuring machine and end standards. Using a length measuring machine and end standards. The 1 mm to 6 mm diameter range relates to functional test of size using check plugs. The rest of the range is determined using a length measuring machine and end standards. Using a length measuring machine and end standards. Using a projector Using setting plugs.		
NOTES Calibration results may be give Single start, symmetrical thread Single start symmetrical and asy Single and multi-start symmetric 	n in imperial units of measurement w forms only. ymmetrical thread forms only. cal and asymmetrical thread forms	here appropriate.			

5. Functional test of size using setting plugs.

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: $Q[a, b] = [a^2 + b^2]^{1/2}$