Schedule of Accreditation

issued by

United Kingdom Accreditation Service

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

0068

Accredited to ISO/IEC 17025:2017

Yorkshire Precision Gauges Ltd

Issue No: 029 **Issue date**: 25 Janaury 2023

Cuckoo Lane
Hatfield
Doncaster
DN7 6QF

Contact: Sean Douglas
Tel: +44 (0)1302-840303
Fax: +44 (0)1302-843570
E-Mail: Calibration@ypg.co.uk
Website: www.ypg.co.uk

Calibration performed at the above address only

Calibration and Measurement Capability (CMC)

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty (k = 2)	Remarks
RANGE IN MILLIMETRES AND UNCERTAINTY IN MICROMETRES UNLESS OTHERWISE STATED			
LENGTH			
Thread measuring cylinders Including specials	0.1 to 5 diameter	0.50	Calibration as BS 3777 or BS 5590 by comparison to reference standards
Plain plug gauges (parallel), cylindrical setting standards, gear measuring cylinders and rollers	0.5 to 50 diameter 50 to 100 100 to 150	0.50 0.80 1.0	By comparison to reference standards
Plain ring gauges (parallel) and setting standards	3 to 25 diameter 25 to 50 50 to 100	1.5 1.8 2.0	By comparison to reference standards
Plain gap gauges (parallel)	0.5 to 100 100 to 200 200 to 300	3.0 5.0 10	By comparison to reference standards
Barrel type depth gauges and feelers gauges (laboratories own manufacture)	0.5 to 100	1.0	By comparison to reference standards using documented in-house methods.
FORM			
Roundness (in support of other measurements) External Internal	 0.5 to 350 diameter 3 to 350 diameter	 0.35 on radius	Calibration as BS 3730 using a roundness measuring machine
END			

0068
Accredited to
ISO/IEC 17025:2017

Yorkshire Precision Gauges Ltd

Issue No: 029 **Issue date:** 25 Janaury 2023

Calibration performed at main address only

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