Schedule of Accreditation

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Accredited to ISO/IEC 17025:2005

Sheffield Testing Laboratories

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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 50-56 Nursery Street Sheffield South Yorkshire S3 8GP **Local contact** Mr C Blank	Dimensional Force Torque	P

Site activities performed away from the locations listed above:

Location details	Activity	Location code
Customers' sites or premises The customer's sites or premises must be suitable for the nature of the particular calibrations undertaken and will be subject of contract review arrangements between the laboratory and the customer	Dimensional	S

DETAIL OF ACCREDITATION

Measured Quantity Instrument or Gauge	Range	Calibration and Measurement Capability (CMC) Expressed as an Expanded Uncertainty (k=2)	Remarks	Location Code
FORCE			NOTES	
Calibration of force measuring devices e.g. proving devices, strain gauged load cells, load measuring rings and force meters in compression and tension modes	Machine No 1 100 kN up to 500 kN 50 kN up to 500 kN Machine No 2 10 kN up to 100 kN Machine No. 3, 2 kN up to 56 kN Machine No 4 10 kN up to 25 kN 0.5 kN up to 25 kN Machine No 5 0.1 N up to 2.5 kN	 0.020 % 0.050 % 0.020 % 0.020 % 0.010 % 0.020 % 0.010 %	1. Calibration can be performed in accordance with ISO 376:2004, BS EN ISO 376:2004 and ASTM E74-06.	P
TORQUE				
Hand torque tools	0.5 Nm to 1000 Nm to BS EN ISO 6789:2003	0.75 %		P
RANGE IN MILLIMETRES AND UNCERTAINTIES IN MICROMETRES UNLESS OTHERWISE STATED				
LENGTH				
Gauge blocks Inch (Steel, tungsten carbide and ceramic)	As BS 4311:Part 1: 2007 0.01in to 0.4 in 0.4 in to 1 in Size 2 in Size 3 in Size 4 in	Class (See footnotes) C D 3.0 4.0 4.0 5.0 5.0 7.0 6.0 8.0 7.0 10 µ inches	2. All dimensional calibrations can be given in Inch units.	P
Millimetre (Steel, tungsten carbide and ceramic)	As BS EN ISO 3650:1999 0.5 to 10 10 to 25 Sizes 30, 40, 50, 60, 70, 75, 80, 90, 100	C D .080 .10 .10 .13 .12 .17 .15 .21 .18 .25		
Comparison				

Class C uncertainties apply to the measurement of length of steel gauges by comparison with grade K standards of length of a similar material. Class C uncertainties apply to grade 0, 1 and 2 gauges to BS EN ISO 3650:1999 and BS 4311:Part 1:2007.

Class D uncertainties represent the best capability for the measurement of length of tungsten carbide and ceramic gauges by comparison with grade K standards of length of a dissimilar material.

Measured Quantity Instrument or Gauge	Range	Calibration and Measurement Capability (CMC) Expressed as an Expanded Uncertainty (k=2)	Remarks	Location Code
RANGE IN MILLIMETRES AND UNCERTAINTIES IN MICROMETRES UNLESS OTHERWISE STATED				
LENGTH (cont'd)			NOTES (cont'd)	
Thread measuring cylinders	As BS 3777:1964, BS 5590:1978 and specials 0.1 to 5	0.50	3. The uncertainty quoted is for the departure from flatness, straightness, or squareness, i.e. the distance separating the two parallel planes which just enclose the surface under consideration.	P
Plain plug gauges (parallel) cylindrical setting standards, gear measuring cylinders and rollers	1 to 50 diameter 50 to 100 100 to 150 150 to 200 200 to 300 300 to 400	0.50 0.80 1.0 1.5 2.0 2.5		
Plain ring gauges (parallel) and setting standards	1.5 to 25 diameter 25 to 50 50 to 100 100 to 150 150 to 300	0.80 1.0 1.5 2.0 2.5	4. Single start, symmetrical thread forms only.	
Plain plug gauges (taper)			5. Single start symmetrical and asymmetrical thread forms only.	P
Taper up to 1 in 8 on diameter	3 to 50 diameter 50 to 100	3.0 4.0	6. Features and associated parts of these gauges can be measured to the uncertainties given for equivalent items listed in this schedule.	
Taper above 1 in 8 and up to 1 in 3 on diameter	3 to 50 diameter 50 to 100	5.0 6.0		
Plain ring gauges (taper)				P
Taper up to 1 in 8 on diameter	3 to 50 diameter 50 to 100 100 to 200	4.0 5.0 6.0		
Taper above 1 in 8 and up to 1 in 3 on diameter	3 to 50 diameter 50 to 100 100 to 200	6.0 7.0 8.0		
Length gauges, flat and spherical ended	1 to 1000	0.80 + (3.0 x length in m)		P
Plain gap gauges (parallel)	1 to 100 100 to 200 200 to 300	2.0 3.0 4.0		P

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RANGE IN MILLIMETRES AND UNCERTAINTIES IN MICROMETRES UNLESS OTHERWISE STATED				
LENGTH (cont'd)				
Screw plug gauges (parallel) including check and setting plugs See Note 9	1 to 100 diameter 100 to 200r	3.0 4.0 on pitch diameter		P
Screw plug gauges (taper) including check plugs See Note 8	5 to 100 diameter 100 to 200	5.0 8.0		
Screw ring gauges (parallel) See Note 9	3 to 100 diameter 100 to 200	5.0 6.0		
Screw ring gauges (taper) See Note 8	5 to 100 diameter 100 to 200	7.0 10		
	Pitch 0.2 to 8 Flank angle 0° to 30°	1.5 5.0 minutes of arc		
Feeler gauges	As BS 957: 2008 0.025 to 1	1.0		P
Graduated rules	As BS 4372:1968 0 to 2000	5.0 + (10 x length in m)		P
Vee blocks	As BS 3731:1987 20 to 150	Dependent on size and grade From 2.5 up to 5.0		P
Parallels	As BS 906:1972 5 to 50 x 100 x 400	Dependent on size and grade From 1.5 up to 5.0		P
ANGLE				
Squares				
Blade type	As BS 939:2007 50 to 450	3.0 on squareness See Note 7		P
Angle plates and box angle plates	As BS 5535:1978 50 to 600	Squareness: 3.0 + (1.0 per 100 mm) (See Note 7) Parallelism: 1.0 + (1.0 per 100 mm)		P
Sine bars and tables	As BS 3064:1978 0 to 500 length	Linear dimensions: 1.0 + (10 x length in m) Overall performance 3.0 seconds of arc		P

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RANGE IN MILLIMETRES AND UNCERTAINTIES IN MICROMETRES UNLESS OTHERWISE STATED				
ANGLE (cont'd)				
Sine centres	0 to 500 length or between centres	Linear dimensions 1.0 + (10 x length in m) Overall performance 5 second of arc		P
Compound sine tables	With tables or equivalent 0 to 500 length			
Bevel Protractors (and Combination sets)	As BS 1685:2008 0° to 360°	5 minutes of arc		P
FORM				
Surface plates				P & S
Granite	As BS 817:2008 160 x 100 to 2500 x 1600	1.5 + (0.8 x diagonal in m) See Note 7		
Cast iron				
Steel balls	2 to 25 diameter 25 to 50	0.80 on diameter 1.0		P
MEASURING INSTRUMENTS ANDMACHINES				
Micrometers				P
External Internal Depth	As BS 870:2008 0 to 1000 As BS 959:2008 0 to 900 As BS 6468:2008 0 to 300	Heads: 2.0 between any two points Setting and extension rods: 0.8 + (3.0 x length in m)		
Micrometer heads	As BS 1734:1959 0 to 50	1.0 between any two points		P
Height setting micrometer	0 to 300	Heads: 1.2 between any two points Stepped column: 1.6 Overall performance: 2.0		P
Riser blocks for above	150 300	1.0 2.0		P
Vernier gauges Caliper Height Depth	As BS 887:2008 0 to 1000 As BS 1643:2008 0 to 1000 As BS 6365:2008 0 to 1000	Overall performance: 10 + (30 x length in m)		P

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RANGE IN MILLIMETRES AND UNCERTAINTIES IN MICROMETRES UNLESS OTHERWISE STATED				
MEASURING INSTRUMENTS ANDMACHINES (cont'd)				
Height gauges, electronic	0 to 1000	Overall performance 2.0 + (10 x length in m)		P
Vernier Gauges Bench Mounted	0 to 1800	Overall performance 10 + (30 x length in m)		P & S
Dial gauges and dial test indicators	As BS 907:2008 and BS 2795:1981 0 to 50	1.0		P
Bench centres	0 to 1000 between centres	Linear Dimensions 1.0 + (10 x length in m)		P
Comparators (external)	As BS 1054:1975 250 to 1000 magnifications	1.0 % of range Minimum 0.20		P
Thread diameter measuring machines	As NPL Schedules MOY/SCMI/9 and MOY/SCMI/12 0 to 300	Overall performance 1.5		P
Receiver, position and profile gauges, jigs and fixtures	Maximum size 0 to 500 x 750 x 1000	See Note 6		P
END				