

Scope of Accreditation



ACCREDITATION NO: 2143

PCS Measurement Pty Limited Precision Calibration Service (Newcastle) Pty Ltd

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FACILITIES: Public testing service

This laboratory complies with the requirements of ISO/IEC 17025 (2005)
Their least uncertainties of measurement are expressed as expanded uncertainties (\pm)

1.01 Limit gauges

- .01 Plain plug gauges
 - .01 Plain Plug Gauges
 - up to 10mm in diameter
 - with least uncertainties of measurement of -
3 μ m
- .02 Plain ring gauges
 - .02 Plain Ring Gauges
 - up to 100mm in diameter
 - with least uncertainties of measurement of -
4 μ m

1.03 Engineering metrology equipment

- .22 External micrometers
 - External micrometers up to 1 000 mm for compliance with AS 2102
 - with least uncertainties of measurement of -
 - 1.4 μ m for linear measurements up to 25 mm;
 - (1.4+0.01L) μ m where L is the length in mm for linear measurements above 25mm
 - up to 1000 mm
- .23 Internal micrometers
 - Internal micrometers up to 1000 mm for compliance with AS 2101
 - with least uncertainties of measurement of -
 - 2 μ m up to 100 mm;
 - 3 μ m from 100 to 300 mm;
 - 5 μ m from 300 to 500 mm;
 - 10 μ m from 500 to 1000 mm
- .24 Depth micrometers
 - Depth micrometers up to 300 mm for compliance with BS 6468
 - with least uncertainties of measurement of -

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- (2 + L/250) μm where L is the indicated depth in mm
- .25 Electronic indicators, dial gauges and test indicators
 - Dial gauges for compliance with AS 2103
 - with least uncertainties of measurement of -
 - 1 μm
 - .27 Electronic and vernier callipers
 - For compliance with AS 1984
 - with least uncertainties of measurement of -
 - 13 μm for linear measurements up to 150 mm;
 - 18 μm for linear measurements from 150 mm up to 300 mm;
 - 23 μm for linear measurements from 300 mm up to 600 mm
 - .29 Feeler gauges
 - with least uncertainties of measurement of -
 - 3 μm
 - .30 Extensometers
 - Calibration to AS 1545
 - with least uncertainties of measurement of -
 - (1.5 + 0.5 L) μm where L is the extension in mm
 - for measurement of indicated extension
 - .32 Micrometer setting gauges
 - From 25 to 1 000 mm
 - with least uncertainties of measurement of -
 - 2 μm up to 100 mm
 - 3 μm from 100 to 300 mm
 - 5 μm from 300 to 500 mm
 - 10 μm from 500 to 1 000 mm

1.11 Masses

- .01 Mass standards
 - with least uncertainties of measurement of -
 - 20 μg up to 2 g;
 - 2 in 10^6 or 30 μg (whichever is greater) from 2 to 200 g;
 - 6 in 10^6 or 10 mg (whichever is greater) from 500 g to 10 kg;
 - 1 in 10^5 from 10 to 30 kg
- .03 Determination of mass
 - with least uncertainties of measurement of -
 - based on 1.11.01 up to 30 kg;
 - 0.1% up to 20 t

1.12 Weighing devices

- .01 Precision laboratory balances
 - with least uncertainties of measurement of -
 - 2 in 10^6 or 20 μg (whichever is greater) up to 200 g
- .02 Industrial balances
 - with least uncertainties of measurement of -
 - 5 in 10^6 up to 5 kg;
 - 1 in 10^5 up to 30 kg
- .03 Industrial weighing appliances
 - with least uncertainties of measurement of -
 - 1 in 10^4 or 1 g (whichever is greater) up to 2 t

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1.23 Force measuring devices

.01 Calibrating devices

Calibration at forces up to 20 kN in tension and compression to Class 1 requirements of AS 2193

.02 Elastic force measuring devices

Calibration of devices such as load measuring rings for soils testing machines in compression at forces up to 2 MN to Class AA requirements of AS 2193

1.25 Torque measuring devices

.01 Torque wrenches

Calibration of torque wrenches, clockwise and anti-clockwise at torques up to 4 000 N.m (3 000 lbf.ft) to method based on AS 4115

1.26 Testing machines

.01 Tension and universal machines in tension

Calibration at forces up to 500 kN to Class A requirements of AS 2193

.02 Compression and universal machines in compression

Calibration at forces up to 2 MN to Class A requirements of AS 2193

.11 Vickers hardness machines

Partial and complete calibration except indenter dimensions to AS 1817 from 24.5 N to 980 N

.12 Rockwell hardness machines

Partial and complete calibration except indenter dimensions and measuring apparatus to AS 1815

.13 Brinell hardness machines

Partial and complete calibration to AS 1816 from 39.2 N to 29.4 kN

.14 Rockwell superficial hardness machines

Partial and complete calibration to AS 1815.2

.16 Vickers micro-hardness machines (less than HV 0.2)

Direct verification except indenter dimensions to AS 1817

.21 Izod impact machines

Complete and partial calibrations for compliance with AS 1544 (or equivalent), excluding striker profile

.22 Charpy impact machines

Complete and partial calibrations for compliance with AS 1544 (or equivalent), excluding striker profile

.33 Rubber hardness meters (durometers)

Shore A and D durometers for compliance with AS 1683.15.2 and ASTM D2240 with least uncertainties of measurement of - 0.2%

.42 Tension-torque machines

1.27 Ancillary mechanical testing equipment

.01 Portable Brinell measuring microscopes

.02 Indenters for hardness machines

Visual examination

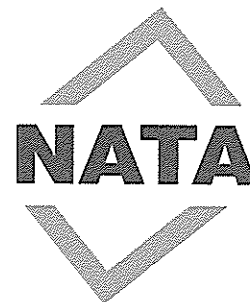
1.28 Ancillary testing equipment for construction materials

.25 Dial gauges and other displacement measuring devices

Calibration of dial gauges with 10 μ m (or greater) resolution to the NATA Construction Materials Testing supplementary requirements

.99 Other equipment

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Testing of rubber bases for liquid limit devices for compliance with
AS 1289.3.1.1
with least uncertainties of measurement of -
0.5% for rubber hardness;
0.6% for dimensional measurements

1.41 Frequency and time measuring instruments and standards

.15 Tachometers

Calibration of hand-held tachometers in the range 100 to 10 000 r/min
with least uncertainties of measurement of:-
1.5 r/min

1.80 Calibration of temperature measuring equipment

.41 Digital temperature indicator systems

With least uncertainties of measurement of -
1.1 °C from 0 to 100 °C
1.4 °C from 101 to 300 °C
2.1°C from 301 to 600 °C

1.84 Testing of controlled enclosures

.01 Ovens and Furnaces

with least uncertainties of measurement of:
1.2°C from 0°C to 140°C
3.8°C from 140° to 999.9°C
by the methods of - AS 2853

.06 Baths

with least uncertainties of measurement of:
1.2°C from 0°C to 140°C
3.8°C from 140° to 999.9°C
by the methods of - AS 2853

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(Scope Last Changed 03/09/13)
