



National Association of Testing Authorities, Australia

SCOPE OF ACCREDITATION

Australian Calibrating Services (A'sia) Pty Ltd - ACS

NEW SOUTH WALES LABORATORY

| Accreditation Number: 1239 | Site Number: 910 |

Address Details:

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AUSTRALIA

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Availability: Services available to external clients

Note: Not all of the columns of the scope of accreditation displayed include data.

The only data displayed is that deemed relevant and necessary for the clear description of the activities and services covered by the scope of accreditation.

Grey text appearing in a SoA is additional freetext providing further refinement or information on the data in the preceding line entry.

ISO/IEC 17025 (2005) Calibration

SERVICE	PRODUCT	DETERMINANT	TECHNIQUE	PROCEDURE	LIMITATION/RANGE
Dimensional metrology - Engineering equipment and precision instruments	Micrometer setting gauges	Length measurements	Comparison with a reference standard		

CAPABILITY

with Calibration and Measurement Capability of -
1 in 10⁵ or 1 µm (whichever is greater) up to 1 000 mm

	Depth and height micrometers	Length measurements	Comparison with a reference standard	Precision vernier height gauges including compliance to BS 1643 Depth micrometers including compliance to BS 6468	
	Micrometer heads	Length measurements	Comparison with a reference standard	Including compliance to AS 2328 and BS 1734	
	Electronic calipers;	Length measurements	Comparison with a	including compliance to AS	

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Vernier calipers;	reference standard	1984; BS887; and JIS 7507
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CAPABILITY

with Calibration and Measurement Capability of -
(10 + 0.025L) μm for indication errors where L is the scale value in mm up to 1.5m

Dial gauges	Length measurements	Comparison with a reference standard	Including compliance to AS 2103
External micrometers	Length measurements	Comparison with a reference standard	Up to 1 m including compliance to AS 2102 and BS 870

CAPABILITY

Straight edges	Length measurements	Comparison with a reference standard	Including compliance to AS 1003
Extensometers	Length measurements	Comparison with a reference standard	Including compliance to AS 1545

CAPABILITY

with Calibration and Measurement Capability of -
(1 + 0.5 L) μm where L is the extension in mm

Vernier height and depth gauges	Length measurements	Comparison with a reference standard	Precision vernier height gauges including compliance to BS 1643	
Precision spirit levels	Length measurements	Comparison with a reference standard	Including compliance to AS 2054	
Internal micrometers	Length measurements	Comparison with a reference standard	Up to 1 m including compliance to AS 2101 and BS 959	1 m
Surface plates	Length measurements	Comparison with a reference standard	Including compliance to AS 1004	
Feeler gauges	Length measurements	Comparison with a reference standard	Including compliance to AS 1655	

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	Steel rulers and measuring tapes	Length measurements	Comparison with a reference standard	Steel rules including compliance to BS 4372	
CAPABILITY					
	Squares	Length measurements	Comparison with a reference standard	Engineers squares, grades A and B, up to 1 m including compliance to BS 939	
Dimensional metrology - Jigs, fixtures, cutting tools, machine tools, gears, splines and serrations	Components and QC standards	Length measurements	Comparison with a reference standard by differential measurement		
CAPABILITY with Calibration and Measurement Capability of - <u>Linear measurements</u> 5 in 10 \square μ or 5 μ m (whichever is greater) up to 1 000 mm					
Dimensional metrology - Length and angle standards	Extensometer calibrators	Length measurements	Comparison with a reference standard	including compliance to AS 1545 and AS 2328	
	Gauge blocks and accessories	Length measurements	Comparison with a reference standard	including compliance to AS 1457, Grades 1 and 2 for metric blocks and BS 4311 Grade 2 only for imperial blocks	
Force metrology - Force measuring and testing equipment	Elastic force measuring devices	Force in compression; Force in tension;	Comparison measurement with reference load cell	Calibration of devices such as load measuring rings for soil testing machines in tension and compression at forces up to 500 kN to Class AA and 3.3 MN to Class A requirements of AS 2193	500 kN to Class AA and 3.3 MN to Class A requirements of AS 2193
including on site calibrations					



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Force metrology - Force measuring and testing equipment	Compression and universal machines in compression; Tension and universal machines in tension;	Force in compression; Force in tension;	Comparison measurement with reference load cell		
including on site calibrations					

CAPABILITY

Including on site calibrations

with a Calibration and Measurement Capability of -

Tension and universal machines in tension

Calibration at forces up to 500 kN to Class AA and 3 MN to Class A requirements to AS 2193

0.17% of reading from 0.01N to 1000 kN

0.25% of reading from 1000 kN to 3 MN

Compression and universal machines in compression

Calibration at forces up to 500 kN to Class AA, 4.5 MN to Class A and Class B above 4.5 MN to 10 MN requirements of AS 2193

0.17% of reading from 0.01N to 500 kN

0.25% of reading from 500 kN to 10 MN

Force metrology - Force standards	Force calibrating equipment; Force standards and load cells used as force standards;	Force in compression; Force in tension;	Comparison measurement with reference load cell	Calibration at forces up to 500 kN in tension and 2 MN in compression to - Class 1 requirements of AS 2193 up to 500 kN in tension Class 1 requirements of AS 2193 up to 500 kN in compression Class 2 requirements of AS 2193 above 500 kN up to 2 MN in compression Class 0.5 (up to 500 kN) and Class 1 requirements of ISO 376	500 kN in tension and 2 MN in compression
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CAPABILITY

with Calibration and Measurement Capability of -

0.03% of reading or 0.14N (whichever is greater) up to 2 MN

Force metrology - Hardness standards and equipment	Rockwell hardness machines	Rockwell hardness	Comparison with a reference standard	Partial and complete calibration, except indenter dimensions and measuring apparatus,	
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				including compliance to AS 1815	
including on site calibrations					
Force metrology - Hardness standards and equipment	Brinell hardness machines	Brinell hardness	Comparison with a reference standard	<u>Brinell hardness machines</u> Partial and complete calibration including compliance to AS 1816	<u>Brinell hardness machines</u> from 39.2 N to 29.4 kN
including on site calibrations					
Force metrology - Hardness standards and equipment	Dead weight rubber hardness testers	Rubber hardness	Comparison with a reference standard	Rubber hardness tests (I.R.H.D.) on rubber products including liquid limit device bases for compliance including compliance to AS 1683.15.1	
including on site calibrations					
Force metrology - Hardness standards and equipment	Dead weight rubber hardness testers	Rubber hardness	Direct force and length measurement	Rubber hardness tests (I.R.H.D.) on rubber products including liquid limit device bases for compliance with AS 1683.15.1 and similar specifications	
including on site calibrations					
Force metrology - Hardness standards and equipment	Izod impact machines	Izod impact	Comparison with a reference standard	Partial and complete calibration including compliance to AS 1544	
including on site calibrations					
Force metrology - Hardness standards and equipment	Rubber hardness meters (durometers)	Rubber hardness	Comparison with a reference standard	Including compliance to AS 1683.15.2 and similar specifications	



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including on site calibrations					
Force metrology - Hardness standards and equipment	Vickers micro-hardness machines	Vickers hardness	Comparison with a reference standard	less than HV 0.2 Direct verification except indenter dimensions including compliance to AS 1817	
including on site calibrations					
Force metrology - Hardness standards and equipment	Vickers low-load hardness machines	Vickers hardness	Comparison with a reference standard	HV 0.2 to HV 5 Verification of forces including compliance to AS 1817	9.8 N to 49 N
including on site calibrations					
Force metrology - Hardness standards and equipment	Resilience testing machines	Resilience	Comparison with a reference standard	Calibration of rebound pendulum to DIN 53512 and similar specifications	
including on site calibrations					
Force metrology - Hardness standards and equipment	Charpy impact machines	Charpy impact	Comparison with a reference standard	<u>Charpy impact machines</u> Partial and complete calibration including compliance to AS 1544	
including on site calibrations					
Force metrology - Hardness standards and equipment	Rockwell superficial hardness machines	Rockwell hardness	Comparison with a reference standard	Partial and complete calibration except depth measuring device including compliance to AS 2025	
including on site calibrations					
Force metrology -	Indenters; Portable	Length measurements	Direct length measurement	<u>Portable Brinell measuring</u>	

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Hardness standards and equipment	Brinell measuring microscopes;			<u>microscopes</u> with minimum scale intervals of 0.05 mm <u>Indenters for hardness machines</u> Visual examination	
including on site calibrations					
Force metrology - Hardness standards and equipment	Vickers hardness machines	Vickers hardness	Comparison with a reference standard	Partial and complete calibration, except indenter dimensions, including compliance to AS 1817	from 24.5 to 980 N
including on site calibrations					
	Hardness standards	Rubber hardness	Comparison with a reference standard	Rubber hardness tests (I.R.H.D.) on rubber products including liquid limit device bases including compliance to AS 1683.15.1 and similar specifications	
Mass - Determination of mass and calibration of weighing devices	Industrial weighing devices; Laboratory weighing devices; Precision laboratory balances;	Mass	Gravimetric measurement against reference mass		

CAPABILITY

Including on site calibration
With Calibration and Measurement Capability of -
Precision laboratory balances
2 in 10^6 or 20 μg (whichever is greater);
Industrial balances
1 in 10^5 or 1 mg (whichever is greater);
Industrial weighing appliances
5 in 10^5 or 100 mg (whichever is greater)

Pressure metrology - Pressure and vacuum measuring equipment	Pressure control devices; Pressure gauges; Pressure recorders; Pressure	Gauge pressure	Comparison with dead weight tester; Comparison with reference instrument;	Calibration to AS1349 and/or MSA test methods 1 and 2	
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	transducers; Vacuum gauges;				
including on site calibrations					
<p>CAPABILITY with Calibration and Measurement Capability of - 0.05% of reading or 0.05 kPa (whichever is greater) from -100 kPa to 70 MPa</p> <p>On site calibrations 0.46% from -10 kPa to -20 kPa and 10 kPa to 20 kPa 0.23% from -100 kPa to -20 kPa and 20 kPa to 70 MPa</p>					
Torque - Torque measuring and testing equipment	Torque indicators; Torque wrenches;	Torque	Comparison with a reference standard	By the methods of ISO 6789 and AS 4115 Torque wrenches Torque transducers (transducers to test method CP035a-1)	
including on site calibrations					
<p>CAPABILITY with Calibration and Measurement Capability of - 0.2% up to 1500 N.m; 0.5% above 1500 N.m up to 18000 N.m</p> <p>For on site calibrations 0.2% yo to 1500 N.m</p>					

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