



Homersham Limited

Client Number 85

5/3 Homersham Place, Burnside, Christchurch, 8053

Telephone 03 358-8309

www.homershams.co.nz

Authorised Representative

Ms Jennie Dingley
 Laboratory Manager
 5G Cain Road
 Penrose
 Auckland 1061
 New Zealand

Programme

Metrology & Calibration Laboratory

Accreditation Number 132

Initial Accreditation Date 5 March 1980

Conformance Standard

ISO/IEC 17025:2017


General requirements for the competence of testing and calibration laboratories

Laboratory Services Summary

- 5.35 Hygrometry
- 5.42 Differential Pressure Measuring Devices (including Manometers)
- 5.44 Pressure and Vacuum
- 5.61 Temperature Measuring Equipment

Key Technical Personnel

- Ms Jennie Dingley 5.42, 5.44
- Mr Joshua Jourdain 5.35, 5.42, 5.44, 5.61
- Mr Aidan Lindsay 5.35, 5.42, 5.44, 5.61

Operations Manager Authorisation:		Issue 49	Date:07/11/25	Page 1 of 6
--------------------------------------	---	----------	---------------	-------------



Homersham Limited
 Metrology & Calibration Laboratory
SCOPE OF ACCREDITATION

Accreditation Number 132

Calibration and Measurement Capability (CMC) uncertainties are expressed as an expanded uncertainty corresponding to a level of confidence of 95 % ^{Note1}.

Measurement results are traceable to the International System of Units (SI) via an unbroken chain of comparisons to the New Zealand National Standards or to the National Standards of other Signatories to the CIPM MRA.

Unless stated elsewhere in this schedule, calibrations are performed at the premises of the accredited laboratory.

	Measurand/Range	Parameter	CMC Uncertainty
--	-----------------	-----------	-----------------

5.35 Hygrometry

(a) Humidity measuring devices

Industrial hygrometers in accordance with an in-house method by comparison with a reference Relative Humidity meter in a controlled humidity chamber

	10 %rh to 90 %rh		1.1 %rh
--	------------------	--	---------

5.42 Differential Pressure Measuring Devices (including Manometers)

- (a) Diaphragm types
- (b) Liquid column types, inclined and vertical
- (c) Transducers and transmitters
- (d) Other types

Differential pressure by comparison with a pressure calibrator (line pressure approximately 100 kPa) either in the laboratory or on-site

	0 Pa to 250 Pa		0.36 Pa
--	----------------	--	---------

5.44 Pressure and Vacuum

- (a) Pressure gauges
- (b) Vacuum gauges
- (c) Pressure transducers
- (d) Pressure recorders

Accuracy classes: 0.1, 0.25, 0.6, 1.0, 1.6, 2.5, 4.0 in accordance with AS 1349:1986 and BS EN 837-1:1998; gauges of accuracy 3A, 2A, 1A and below as defined in ASME B40.100-2013

By comparison with dead weight tester

	-102 kPa to -3 kPa		0.001 kPa or 0.006 %, whichever is greater
--	--------------------	--	--

Operations Manager Authorisation:		Issue 49	Date:07/11/25	Page 2 of 6
-----------------------------------	--	----------	---------------	-------------



Homersham Limited
 Metrology & Calibration Laboratory
SCOPE OF ACCREDITATION

Accreditation Number 132

3 kPa to 102 kPa	0.001 kPa or 0.006 %, whichever is greater
102 kPa to 3020 kPa	0.05 kPa or 0.006 %, whichever is greater

Pressure and vacuum gauges by comparison with reference gauges (in the laboratory or on-site)

Gauge Pressure

-35 kPa to 35 kPa	0.012 kPa
-100 kPa to 70000 kPa	0.025 % or 0.03 kPa, whichever is greater

Absolute Pressure

3 kPa to 200 kPa	0.07 kPa
200 kPa to 3000 kPa	0.37 kPa

Maximum vacuum achievable is subject to ambient barometric pressure conditions.

Controllers, indicators, recorders and transmitter systems, wholly or in part, by electrical simulation or measurement using a process calibrator either in the laboratory or on-site for the ranges and CMCs above.

5.61 Temperature Measuring Equipment

- (d) Germanium thermometers
- (e) Thermistors and other semi-conductor thermometers
- (g) Clinical thermometers
- (j) Radiation thermometers
- (k) Vapour pressure thermometers
- (l) Filled metal systems
- (m) Bimetallic systems
- (o) Indicators, recorders and controllers
- (p) Other direct reading temperature measuring systems, including handheld thermometers

By comparison with reference thermometers in a temperature source in accordance with in-house methods.

Contact thermometers in the laboratory for classes (d),(e),(g),(k),(l),(m),(o),(p)

-30 °C to -20 °C	0.08 °C
Ice point	0.01 °C
-20 °C to 60 °C	0.03 °C
60 °C to 199 °C	0.05 °C

Contact thermometers on site (in the field) for classes (d),(e),(g),(k),(l),(m),(o),(p)

-30 °C to 200 °C	0.3 °C
------------------	--------

Operations Manager Authorisation:		Issue 49	Date:07/11/25	Page 3 of 6
-----------------------------------	--	----------	---------------	-------------



Homersham Limited
 Metrology & Calibration Laboratory
SCOPE OF ACCREDITATION

Accreditation Number 132

Non-contact (including infrared) thermometers in the laboratory for class (j)

-30 °C to 140 °C (where $\epsilon = 1$) 0.5 °C

Controllers, indicators, recorders and transmitter systems, wholly or in part, by electrical simulation or measurement using a process calibrator either in the laboratory or on-site for the ranges and CMCs listed above and for additional sensor types listed below

Sensor type

Resistance

RTD (source and measure), Pt100 385 (3W)

-200 °C to 0 °C	0.7 °C
0 °C to 400 °C	0.9 °C
400 °C to 800 °C	1.2 °C

Thermocouples

Type K – Measure

-200 °C to -100 °C	0.7 °C
-100 °C to 400 °C	0.3 °C
400 °C to 1200 °C	0.5 °C
1200 °C to 1372 °C	0.7 °C

Type K – Source

-200 °C to -100 °C	0.4 °C
-100 °C to 400 °C	0.3 °C
400 °C to 1200 °C	0.3 °C
1200 °C to 1372 °C	0.3 °C

Type J – Measure

-210 °C to -100 °C	0.6 °C
-100 °C to 800 °C	0.3 °C
800 °C to 1200 °C	0.5 °C

Type J – Source

-210 °C to -100 °C	0.3 °C
-100 °C to 800 °C	0.2 °C
800 °C to 1200 °C	0.2 °C

Operations Manager
 Authorisation:

Issue 49

Date:07/11/25

Page 4 of 6



Homersham Limited
 Metrology & Calibration Laboratory
SCOPE OF ACCREDITATION

Accreditation Number 132

Type N – Measure

-210 °C to -100 °C	1.0 °C
-100 °C to 900 °C	0.5 °C
900 °C to 1300 °C	0.6 °C

Type N – Source

-210 °C to -100 °C	0.6 °C
-100 °C to 900 °C	0.5 °C
900 °C to 1300 °C	0.3 °C

Type T – Measure

-250 °C to -200 °C	1.7 °C
-200 °C to 0 °C	0.6 °C
0 °C to 400 °C	0.4 °C

Type T – Source

-250 °C to -200 °C	0.9 °C
-200 °C to 0 °C	0.4 °C
0 °C to 400 °C	0.3 °C

Type R – Measure

-20 °C to 0 °C	2.3 °C
0 °C to 100 °C	1.5 °C
100 °C to 1767 °C	1.0 °C

Type R – Source

-20 °C to 0 °C	1.2 °C
0 °C to 100 °C	1.1 °C
100 °C to 1767 °C	0.9 °C

Electrical

Current

Measure	0 mA to 24 mA	0.025 % of reading + 0.025 % of range
Source	0 mA to 22 mA	0.01 % of reading + 0.04 % of range

Voltage

Operations Manager Authorisation:		Issue 49	Date:07/11/25	Page 5 of 6
--------------------------------------	--	----------	---------------	-------------



Homersham Limited
 Metrology & Calibration Laboratory
SCOPE OF ACCREDITATION

Accreditation Number 132

Measure	0 V to 30 V	0.05 % of reading + 0.005 % of range
Source	0 V to 10 V	0.015 % of reading + 0.005 % of range

Note 1:

Unless stated otherwise the CMC is based on the performance of the best available device and measurement uncertainties achieved for specific calibrations may be greater than the CMC Uncertainty. A laboratory may not report measurement uncertainties lower than its CMC. However, if the device under calibration has a greater accuracy than the device used to calculate the CMC the laboratory may be able to use the calibration data to lower its CMC Uncertainty. Please contact the laboratory to discuss your specific requirements.

Operations Manager
 Authorisation:

Issue 49

Date:07/11/25

Page 6 of 6