



CERTIFICATE OF ACCREDITATION

In terms of section 22(2) (b) of the Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act, 2006 (Act 19 of 2006), read with sections 23(1), (2) and (3) of the said Act, I hereby certify that:-

SA GAUGE (PTY) LTD
Co. Reg. No.: 2003/017040/07
TEMPERATURE CALIBRATION LABORATORY

Accreditation Number: **345**

is a South African National Accreditation System Accredited Calibration Laboratory provided that all SANAS conditions and requirements are complied with

This certificate is valid as per the scope as stated in the accompanying scope of accreditation Annexure "A", bearing the above accreditation number for

TEMPERATURE METROLOGY

The facility is accredited in accordance with the recognised International Standard

ISO/IEC 17025:2017

The accreditation demonstrates technical competency for a defined scope and the operation of a laboratory quality management system

While this certificate remains valid, the Accredited Facility named above is authorised to use the relevant SANAS accreditation symbol to issue facility reports and/or certificates

A handwritten signature in black ink, appearing to read 'T Baleni', is written over a horizontal line.

Mr T Baleni
Acting Chief Executive Officer

Effective Date: 15 March 2023
Certificate Expires: 14 March 2028



ANNEXURE A

SCOPE OF ACCREDITATION TEMPERATURE METROLOGY

Accreditation Number: 345

Permanent Address of Laboratory: SA Gauge (Pty) Ltd Temperature Calibration Laboratory 8 Beechfield Crescent Springfield Park Durban 4091 Postal Address: P O Box 22369 Glen Ashley 4022 Tel: (031) 579-2216 E-mail: riaan@sagauge.com		Technical Signatories: Mr R Reinach Ms S Naidoo (Items 1.1, 1.3.2, 1.3.3, 1.4.1 & 2) Nominated Representative: Mr R Reinach Issue No.: 07 Date of Issue: 15 March 2023 Expiry Date: 14 March 2028		
ITEM	MEASURED QUANTITY OR TYPE OF GAUGE OR INSTRUMENT	RANGE OF MEASURED QUANTITY	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (\pm)	METHOD / PROCEDURE
1	THERMOMETRY			
1.1	Thermocouples			
1.1.1	Noble Metal	0 °C to 200 °C	0,5 K	Calibration by comparison with a reference thermometer in a bath, drywell, or furnace.
1.1.2	Base Metal	200 °C to 500 °C 500 °C to 1 100 °C	1,0 K 2,0 K	
1.1.3	Compensation and Extension Lead	0 °C to 70 °C	1,0 K	
1.1.4	Surface Temperature Probes	50 °C to 300 °C	1,5 K	Calibration by Comparison with a reference thermometer against a radiant temperature source.
1.2	Resistance Thermometers			
1.2.1	Platinum Resistance Thermometers	- 30°C to 200 °C 200 °C to 500 °C 500 °C to 600 °C	0,1 K 0,15 K 1,0 K	Calibration by Comparison with a reference thermometer in a bath, drywell, or furnace.

Original Date of Accreditation: 01 February 2019

Page 1 of 2

The CMC, expressed as an expanded uncertainty of measurement, is stated as the standard uncertainty of measurement multiplied by a coverage factor $k = 2$, corresponding to a confidence level of approximately 95%

Accreditation Manager



ANNEXURE A

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1.3	Thermometers			
1.3.1	Liquid in glass	- 30 °C to 150 °C 150 °C to 200 °C	0,5 K 1,0 K	Calibration by comparison with a reference thermometer in a bath, ice point, drywell or furnace, or radiant temperature source.
1.3.2	Digital Thermometers	- 30 °C to 500 °C 500 °C to 1 100 °C	0,15 K 2,0 K	
1.3.3	Mechanical (Dial) Thermometers	- 30°C to 200 °C 200 °C to 500 °C 500 °C to 600 °C	1,5 K 2,5 K 4,5 K	
1.3.4	Radiation Thermometers	0 °C to 200 °C 200 °C to 500 °C	2,0 K 3,0 K	
1.4	Reference Temperature Sources			
1.4.1	Ice Point Reference	0,0 °C	0,05 K	Prepared in a thermally insulated flask using distilled water and ice.
2	ELECTRICAL SIMULATION			
2.1	Thermocouple Simulation			
2.1.1	Digital Thermometers / Indicators	- 270 °C to 1 750 °C	0,3 K	Calibration by the application or measurements of voltages equivalent to the thermocouple type.
2.1.2	Temperature Transmitters			
2.1.3	Temperature Calibrators			
2.1.4	Cold Junction Compensation	0 °C to 30 °C	0,3 K	
2.2	Resistance Simulation			
2.1.1	Digital Thermometers / Indicators	- 200 °C to 800 °C	0,15 K	Calibration by the application or measurement of electrical resistance equivalent to the resistance thermometer type.
2.1.2	Temperature Transmitters			
2.1.3	Temperature Calibrators			
3	On-Site Calibration for items 1 and 2 above			

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Page 2 of 2

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ISSUED BY THE SOUTH AFRICAN NATIONAL ACCREDITATION SYSTEM

Accreditation Manager

