



Number

: LA-2002-0265-C-2

Date of Issue: 11 November 2022

Date of Expiry: 10 November 2026

Certificate of Accreditation

This certifies that

Cairnhill Metrology (Thai) Ltd 89 Cosmo Office Park, 7th Floor Unit N. Popular Road, Ban Mai Pakkret, Nonthaburi

11120, Thailand

is accredited by the Singapore Accreditation Council to

ISO / IEC 17025 : 2017

for specific scope within the field of

Calibration & Measurement

as detailed in the attached schedule.

Chairman

This Certificate is awarded subject to the organisation's compliance with the stated criteria and terms and conditions laid down by the Singapore Accreditation Council.

This Certificate may not be reproduced except with the written permission of the Chairman.

SINGAPORE LABORATORY ACCREDITATION SCHEME



Schedule

: LA-2002-0265-C-2

Cairnhill Metrology (Thai) Ltd Certificate No.

89 Cosmo Office Park

7th Floor Unit N Issue No. : 22

Popular Road, Ban Mai
Pakkret, Nonthaburi
Date : 09 February 2025

11120, Thailand

Expiry of Certificate : 10 November 2026

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FIELD OF TESTING: Calibration and Measurement

	MEASURED QUANTITIES / RANGE / INSTRUMENTS TO BE CALIBRATED	METHOD OF CALIBRATION / INSTRUMENTS USED	CALIBRATION & MEASUREMENT CAPABILITY (CMC *)
1.	Starrett Measurement Projector Travel : 300 mm x 200 mm Resolution : 1 to 5 μm	In-house Calibration Procedure (WI 15-10 V7)	2.0 μm
2.	Universal Length Metroscope ULM Calibration Range of Measuring Headstock: X ≤ 100 mm Resolution: 0.01 μm	In-house Calibration Procedure (WI 15-08 V7)	0.10 μm
3.	Optical / Non-Contact Co-ordinate Measuring Machine		
	Starrett Non-Contact CMM Range: $X \le 350 \text{ mm}$ $Y \le 350 \text{ mm}$ $Z \le 250 \text{ mm}$ Resolution: 0.1 to 0.5 μ m $Z \le 350 \text{ mm}$	In-house Calibration Procedure (WI 15-11 V1)	2.0 μm
	Z-axis (For Contact Probe)		2.0 μm 1.0 μm



Schedule

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	MEASURED QUANTITIES / RANGE / INSTRUMENTS TO BE CALIBRATED	METHOD OF CALIBRATION / INSTRUMENTS USED	CALIBRATION & MEASUREMENT CAPABILITY (CMC *)
4.	(#) Portable Co-ordinate	In-house Calibration Procedure (WI 15-06, V1)	
	Measuring Machine (Hexagon) (Hexagon Absolute RA7 and older) Resolution : 1 μm	ASME B89.4.22-2004 (R2014)	
a)	Error Indication of Single Point Articulated Test (SPAT) is determined using Steel Trihedral Length Bar		4 μm
b)	Error indication of Volumetric Performance Test is determined using Steel Trihedral Length bar: 1) 185, 390, 580 and 800 mm 2) 220, 410, 610, 805, 1005 and 1200 mm		4 μm
5.	(#) Portable Co-ordinate Measuring Machine (Hexagon Absolute RA8 and newer) Resolution: 1 μm	In-house Calibration Procedure (WI 15-18, V1) ISO 10360-12 V2016	
a)	Length measurement error, E _{UNI} :		
	L up to 2000 mm		Q [0.004, 2.7E-06L], L in mm
	L above 2000 mm to 3000 mm		Q [0.014, 3.4E-06L], L in mm

^{*} CMC is expressed as an expanded uncertainty estimated at a level of confidence of approximately 95 %.

[#] Calibration Facility located at: 89 Cosmo Office Park, 1st Floor Unit 6, Popular Road, Ban Mai, Pakkret, Nonthaburi, 11120 Thailand.





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Approved Signatories:

Mr Loh Kum Seng - For item 1 to 4
Mr Tan Peng - For item 1, 2, & 3
Mr Lim Seng Hoo - For item 1, 2, & 3
Mr Wong Kian Wah - For Item 1, 2, & 3
Mr Sutthipong Denkaew - For Item 4 & 5
Mr Jakkaphan Sripapat - For Item 4 & 5
Mr Lim Chen Kee - For all items

Note:

This laboratory is accredited in accordance with the recognised International Standard ISO/IEC 17025. A laboratory's fulfilment of the requirements of ISO/IEC 17025 means the laboratory meets both the technical competence requirements and **management system requirements** that are necessary for it to consistently deliver technically valid calibration results. The **management system requirements** in ISO/IEC 17025 are written in language relevant to laboratory operations and operate generally in accordance with the principles of ISO 9001.