



財團法人全國認證基金會  
Taiwan Accreditation Foundation

## Certification Accreditation

(Certificate No : L0954-220830)

This is to certify that

**Gong-Hung Technology Co., Ltd.  
GCH Technology Calibration Laboratory(Length)**

No.1, Ln. 36, Wenfeng St., Fengshan Dist., Kaohsiung City 830, Taiwan (R.O.C.)

**is accredited in respect of laboratory**

**Accreditation Criteria :** ISO/IEC 17025:2017 ; CNS 17025:2018

**Accreditation Number :** 0954

**Originally Accredited :** January 01, 2003

**Effective Period :** July 20, 2022 to July 19, 2025

**Accredited Scope :** Calibration Field, see described in the Appendix



Scan to verify

*Ching-Chang Lien*

Ching-Chang Lien  
President, Taiwan Accreditation Foundation  
August 30, 2022

Accreditation Number : 0954

Laboratory Head : HUNG, Chuan-Hsi

## Length

calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units	explanation	value	units
KA2003 caliper	Mitutoyo/515-556-2 KOBA/600 mm	caliper calibration procedure (Document No.: GCH-SCP-L01)	0	mm	300	mm	vernier outside diameter (resolution: 0.02 mm)	0.03	mm
			0	mm	300	mm	vernier inside diameter (resolution: 0.02 mm)	0.03	mm
			0	mm	300	mm	vernier outside diameter (resolution: 0.05 mm)	0.05	mm
			>300	mm	600	mm	vernier outside diameter (resolution: 0.05 mm)	0.06	mm
			0	mm	300	mm	digimatic inside diameter (resolution: 0.01 mm)	0.06	mm
			>300	mm	600	mm	digimatic inside diameter (resolution: 0.01 mm)	0.06	mm
			0	mm	200	mm	digimatic outside diameter (resolution: 0.01 mm)	0.02	mm
			0	mm	200	mm	digimatic inside diameter (resolution: 0.01 mm)	0.02	mm
			0	mm	300	mm	digimatic outside diameter (resolution: 0.01 mm)	0.02	mm

The Appendix forms an integral part of this Certificate, which shall be invalid when use without the Appendix

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calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units		value	units
KA2003 caliper	Mitutoyo/515-556-2 KOBIA/600 mm	caliper calibration procedure (Document No.: GCH-SCP-L01)	>300	mm	600	mm	digimatic outside diameter (resolution: 0.01 mm)	0.02	mm
			0	mm	300	mm	digimatic inside diameter (resolution: 0.01 mm)	0.02	mm
			>300	mm	600	mm	digimatic inside diameter (resolution: 0.01 mm)	0.02	mm
			0	mm	300	mm	dial outside diameter (resolution: 0.02 mm)	0.03	mm
			0	mm	300	mm	dial inside diameter (resolution: 0.02 mm)	0.03	mm

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KA2005 outside micrometer	Mitutoyo/BMI-10N-0/PD	outside micrometer calibration procedure (Document No.: GCH-SCP-L03)	0	mm	25	mm	digimatic (resolution: 0.001 mm)	0.003	mm
	Mitutoyo/BM1-8M-0/D		25	mm	50	mm	digimatic (resolution: 0.001 mm)	0.003	mm
	Mitutoyo/611673-021		50	mm	75	mm	digimatic (resolution: 0.001 mm)	0.003	mm
	Mitutoyo/611674-021		75	mm	100	mm	digimatic (resolution: 0.001 mm)	0.003	mm
	Mitutoyo/611676-021		0	mm	25	mm	vernier (resolution: 0.01 mm)	0.01	mm
	Mitutoyo/611677-021		25	mm	50	mm	vernier (resolution: 0.01 mm)	0.01	mm
	Mitutoyo/611678-021		50	mm	75	mm	vernier (resolution: 0.01 mm)	0.01	mm
	Mitutoyo/611679-021		75	mm	100	mm	vernier (resolution: 0.01 mm)	0.01	mm

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calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units	explanation	value	units
KA2008 2D Height Gauge (on-site calibration included)	Step Gauge	Calibration Procedure for 2D Height Gauge (Document No.: GCH-SCP-L06) (on-site calibration included)	0	mm	600	mm	resolution 0.0001 mm	7.8	μm
			0	mm	600	mm	resolution 0.0001 mm (on- site calibration)	9.0	μm
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KA2008 Height Gauge (on-site calibration included)	Step Gauge	Calibration Procedure for Height Gauge (on-site calibration included) (Document No.: GCH-SCP-L05)	0	mm	600	mm	digimatic (resolution: 0.01 mm) (on-site calibration included)	0.02	mm
			0	mm	600	mm	dial (resolution: 0.01 mm) (on- site calibration included)	0.02	mm
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KA2010 dial indicator	Mitutoyo /1.005 mm-9 mm	dial indicator calibration procedure Mitutoyo /BMI-10N-0/PD	0	mm	10	mm	dial (resolution: 0.01 mm)	0.01	mm
			0	mm	20	mm	dial (resolution: 0.01 mm)	0.01	mm
			0	mm	25	mm	digimatic (resolution: 0.01 mm)	0.01	mm
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calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units	explanation	value	units
KA2010 Test indicat	Dial Gauge Calibrator	Test indicat Calibration Procedure (Document No.: GCH-SCP-L04)	0	mm	0.2	mm	resolution: 0.001 mm	0.004	mm
			0	mm	0.8	mm	resolution: 0.01 mm	0.01	mm

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KA4008 3D Coordinate Measuring Machine (on-site calibration)	Mitutoyo/30 mm Mitutoyo /BM1-8M-0 KOBA/ (200 to 500) mm KOBA/600 mm KOBA/700 mm SAGER /24.99505 mm	Calibration Procedure for 3D Coordinate Measuring Machine (on-site calibration) (Document No.: GCH-SCP-L08)	0	mm	500	mm	X Axis/ (20±2) °C	[ (1.1) <sup>2</sup> + (9.1 L) <sup>2</sup> ] <sup>1/2</sup> , Length L in m	μm
			0	mm	700	mm	Y Axis/ (20±2) °C	[ (1.3) <sup>2</sup> + (9.1 L) <sup>2</sup> ] <sup>1/2</sup> , Length L in m	μm
			0	mm	500	mm	Z Axis/ (20±2) °C	[ (0.84) <sup>2</sup> + (9.1 L) <sup>2</sup> ] <sup>1/2</sup> , Length L in m	μm
			0	mm	700	mm	space/ (20±2) °C	[ (1.6) <sup>2</sup> + (9.1 L) <sup>2</sup> ] <sup>1/2</sup> , Length L in m	μm
							probing error/ (20±2) °C	0.7	μm
			0	mm	500	mm	X Axis/ (20±5) °C	[ (1.1) <sup>2</sup> + (22 L) <sup>2</sup> ] <sup>1/2</sup> , Length L in m	μm
			0	mm	700	mm	Y Axis/ (20±5) °C	[ (1.3) <sup>2</sup> + (22 L) <sup>2</sup> ] <sup>1/2</sup> , Length L in m	μm
			0	mm	500	mm	Z Axis/ (20±5) °C	[ (0.85) <sup>2</sup> + (22 L) <sup>2</sup> ] <sup>1/2</sup> , Length L in m	μm
			0	mm	700	mm	space/ (20±5) °C	[ (1.6) <sup>2</sup> + (22 L) <sup>2</sup> ] <sup>1/2</sup> , Length L in m	μm



calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units	explanation	value	units
KA4008 3D Coordinate Measuring Machine (on-site calibration)	Mitutoyo/30 mm	Calibration Procedure for 3D Coordinate Measuring Machine (on-site calibration) (Document No.: GCH-SCP-L08)					probing error/ (20±5) °C	0.8	µm
	Mitutoyo		0	mm	500	mm	X Axis/ (20±10) °C	[ (1.1) <sup>2</sup> + (43 L) <sup>2</sup> ] <sup>1/2</sup> , Length L in m	µm
	/BM1-8M-0		0	mm	700	mm	Y Axis/ (20±10) °C	[ (1.3) <sup>2</sup> + (43 L) <sup>2</sup> ] <sup>1/2</sup> , Length L in m	µm
	KOBA/ (200 to 500) mm		0	mm	500	mm	Z Axis/ (20±10) °C	[ (0.85) <sup>2</sup> + (43 L) <sup>2</sup> ] <sup>1/2</sup> , Length L in m	µm
	KOBA/600 mm		0	mm	700	mm	space/ (20±10) °C	[ (1.6) <sup>2</sup> + (43 L) <sup>2</sup> ] <sup>1/2</sup> , Length L in m	µm
	KOBA/700 mm						probing error/ (20±10) °C	1.0	µm
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calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units		value	units
KA4010 video measurement system (linearscale type) (on-site calibration)	Mitutoyo /BM1-10N-0/PD Mitutoyo /BM1-8M-0 Nikon/50 mm Nikon/300 mm Mitutoyo /182-532 Mitutoyo /HL3-1000	Calibration Procedure for video measurement system (on-site calibration) (Document No.: GCH-SCP-L07)	0	mm	50	mm	X Axis/ (20±2) °C	1.9	μm
			0	mm	300	mm	X Axis/ (20±2) °C	2.1	μm
			0	mm	500	mm	X Axis/ (20±2) °C	2.5	μm
			0	mm	780	mm	X Axis/ (20±2) °C	3.2	μm
			0	mm	50	mm	Y Axis/ (20±2) °C	2.2	μm
			0	mm	300	mm	Y Axis/ (20±2) °C	2.3	μm
			0	mm	500	mm	Y Axis/ (20±2) °C	2.7	μm
			0	mm	580	mm	Y Axis/ (20±2) °C	2.8	μm
			0	mm	150	mm	Z Axis/ (20±2) °C	1.8	μm
			0	mm	50	mm	Exy diagonal axis/ (20±2) °C	2.9	μm
			0	mm	300	mm	Exy diagonal axis/ (20±2) °C	2.9	μm
			0	mm	500	mm	Exy diagonal axis/ (20±2) °C	3.1	μm
			0	mm	900	mm	Exy diagonal axis/ (20±2) °C	3.9	μm
			0	mm	50	mm	X Axis/ (20±5) °C	1.9	μm
			0	mm	300	mm	X Axis/ (20±5) °C	2.7	μm
			0	mm	500	mm	X Axis/ (20±5) °C	3.7	μm
			0	mm	780	mm	X Axis/ (20±5) °C	5.4	μm
			0	mm	50	mm	Y Axis/ (20±5) °C	2.2	μm
			0	mm	300	mm	Y Axis/ (20±5) °C	2.8	μm
			0	mm	500	mm	Y Axis/ (20±5) °C	3.8	μm
			0	mm	580	mm	Y Axis/ (20±5) °C	4.3	μm
			0	mm	150	mm	Z Axis/ (20±5) °C	3.4	μm
			0	mm	50	mm	Exy diagonal axis/ (20±5) °C	2.9	μm
			0	mm	300	mm	Exy diagonal axis/ (20±5) °C	3.3	μm

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calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units	explanation	value	units
KA4010 video measurement system (linearscale type) (on-site calibration)	Mitutoyo /BM1-10N-0/PD Mitutoyo /BM1-8M-0 Nikon/50 mm Nikon/300 mm Mitutoyo /182-532 Mitutoyo /HL3-1000	Calibration Procedure for video measurement system (on-site calibration) (Document No.: GCH-SCP-L07)	0	mm	500	mm	Exy diagonal axis/ (20±5) °C	4.1	µm
			0	mm	900	mm	Exy diagonal axis/ (20±5) °C	6.4	µm
			0	mm	50	mm	X Axis/ (20±10) °C	2.0	µm
			0	mm	300	mm	X Axis/ (20±10) °C	4.2	µm
			0	mm	500	mm	X Axis/ (20±10) °C	6.6	µm
			0	mm	780	mm	X Axis/ (20±10) °C	10.1	µm
			0	mm	50	mm	Y Axis/ (20±10) °C	2.2	µm
			0	mm	300	mm	Y Axis/ (20±10) °C	4.3	µm
			0	mm	500	mm	Y Axis/ (20±10) °C	6.6	µm
			0	mm	580	mm	Y Axis/ (20±10) °C	7.6	µm
			0	mm	150	mm	Z Axis/ (20±10) °C	6.4	µm
			0	mm	50	mm	Exy diagonal axis/ (20±10) °C	2.9	µm
			0	mm	300	mm	Exy diagonal axis/ (20±10) °C	4.5	µm
			0	mm	500	mm	Exy diagonal axis/ (20±10) °C	6.7	µm
			0	mm	900	mm	Exy diagonal axis/ (20±10) °C	11.7	µm
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Note: Smallest uncertainty represents an expanded uncertainty using a coverage factor approximately 95 % level of confidence.

(Null Below)

