

Schedule

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Valid until: 23 November 2028



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SCOPE OF CALIBRATION: DIMENSIONAL

Instrument Calibrated/ Measurement Parameter	Range	Calibration and Measurement Capability Expressed as an Uncertainty(±)*	Remarks
Plain Plug Gauge / Pin Gauge (Diameter)	0 mm to 10 mm	0.6 µm	Calibrated using ULM
	10 mm to 100 mm	1.0 µm	
	100 mm to 300 mm	1.7 µm	
Plain Ring Gauge (Diameter)	1.7 mm to 10 mm	0.4 µm	Calibrated using ULM
	10 mm to 100 mm	0.6 µm	
	100 mm to 300 mm	1.0 µm	
External Micrometer Up to 25 mm 50 mm frame 100 mm frame 150 mm frame 200 mm frame 300 mm frame 400 mm frame 500 mm frame 600 mm frame	25 mm traverse	0.5 µm	Calibrated using Gauge Blocks based on BS EN ISO 3611:2010
	25 mm traverse	1.1 µm	
	25 mm traverse	1.3 µm	
	25 mm traverse	1.3 µm	
	25 mm traverse	1.5 µm	
	25 mm traverse	2.0 µm	
	25 mm traverse	2.0 µm	
	25 mm traverse	2.3 µm	
Caliper Checker	0 mm to 300 mm	3 µm	Calibrated using Gauge Blocks based on ISO 7863:1984
	300 mm to 600 mm	3 µm	
Dial / Digimatic & Vernier Caliper	0 mm to 200 mm	6 µm	Calibrated using Gauge Blocks based on BS EN ISO 13385-1:2019
	200 mm to 450 mm	7 µm	
	450 mm to 1,000 mm	8 µm	
	1,000 mm to 1,500 mm	17 µm	
	1,500 mm to 2,000 mm	23 µm	
Dial Gauge	0 mm to 50 mm	1.5 µm	Calibrated using Dial Gauge Calibrator based on BS EN ISO 463:2006
Dial Test Indicator	0 mm to 50 mm	1.5 µm	Calibrated using Dial Gauge Calibrator based on BS EN ISO 9493:2010
Dial / Digimatic & Vernier Height Gauge	0 mm to 450 mm	6 µm	Calibrated using Gauge Blocks based on BS EN ISO 13225:2012
	450 mm to 600 mm	8 µm	
	600 mm to 1,000 mm	9 µm	

SCOPE OF CALIBRATION: DIMENSIONAL

Instrument Calibrated/ Measurement Parameter	Range	Calibration and Measurement Capability Expressed as an Uncertainty(\pm)*	Remarks
Height Setting Micrometer & Riser Block	0 mm to 600 mm	4 μ m	Calibrated using Gauge Blocks based on ISO 7863:1984
Screw Plug (simple pitch diameter)	0 mm to 20 mm	0.6 μ m	Calibrated using ULM
	20 mm to 100 mm	1.1 μ m	
Screw Ring (simple pitch diameter)	0 mm to 20 mm	0.5 μ m	Calibrated using ULM
	20 mm to 100 mm	1.0 μ m	
Gauge Block Set Grade '0' and below	0 mm to 10 mm	0.10 μ m	Calibrated using Gauge Blocks based on ISO 3650:1998
	10 mm to 25 mm	0.10 μ m	
	25 mm to 50 mm	0.11 μ m	
	50 mm to 75 mm	0.12 μ m	
	75 mm to 100 mm	0.13 μ m	
Steel Rulers	0 mm to 1,000 mm	0.2 mm	Calibrated using Standard Scale based on JIS B 7516:2005
	1,000 mm to 3,000 mm	0.3 mm	
Vee Blocks	220 mm x 160 mm x 80 mm	3 μ m	Calibrated using Dial Test Indicator based on JIS B 7540:1972
Bubble Levelling Gauge	Height in respect to length 0.02 mm/m to 0.25 mm/m	6 μ m/m	Calibrated using Bubble Tube Tester and Dial Test Indicator based on JIS B 7510:1993
Cylinder Gauge	0 mm to 600 mm	1.2 μ m	Calibrated using ULM and Gauge Blocks based on JIS B 7515:1982
Internal Micrometer	0 mm to 25 mm	1.5 μ m	Calibrated using ULM and Gauge Blocks based on BS 959:2008
	25 mm to 100 mm	2 μ m	
	100 mm to 600 mm	10 μ m	

SCOPE OF CALIBRATION: DIMENSIONAL

Instrument Calibrated/ Measurement Parameter	Range	Calibration and Measurement Capability Expressed as an Uncertainty(\pm)*	Remarks
Setting Rod	0 mm to 25 mm 25 mm to 100 mm 100 mm to 600 mm	0.5 μ m 0.5 μ m 2.3 μ m	Calibrated using ULM and Gauge Blocks
Thickness Coating Film	0 mm to 2.5 mm	0.6 μ m	Calibrated using ULM and Gauge Blocks based on BS 5411
Pitch Gauge	0 mm to 12 mm	10 μ m	Calibrated using Profile Projector
Radius Gauge	0 mm to 100 mm	10 μ m	Calibrated using Profile Projector
Test Sieves	0 mm to 200 mm	10 μ m	Calibrated using Profile Projector
M μ Checker	0 mm to 3 mm	0.2 μ m	Calibrated using Gauge Blocks based on JIS B 7536 : 1982
Feeler Gauge (Thickness)	0.01 mm to 10 mm	2 μ m	Calibrated using Precision Micrometer based on BS 957:2008
Dial Gauge Calibrator	0 mm to 25 mm	0.4 μ m	Calibrated using Precision Digital Linear Probe based on JIS B 7519:1994
Depth Gauge	0 mm to 25 mm 25 mm to 100 mm 100 mm to 300 mm	2.0 μ m 2.0 μ m 3.0 μ m	Calibrated using Gauge Blocks based on BS 6468:2008
Thickness Gauge	0 mm to 10 mm 10 mm to 65 mm	1.2 μ m 1.5 μ m	Calibrated using Gauge Blocks based on JIS B 7519:1994

SCOPE OF CALIBRATION: DIMENSIONAL

Instrument Calibrated/ Measurement Parameter	Range	Calibration and Measurement Capability Expressed as an Uncertainty(\pm)*	Remarks
Snap Gauge	0 mm to 100 mm 100 mm to 200 mm	0.3 μ m 0.8 μ m	Calibrated using ULM and Setting Ring
<u>Taper Plain Plug Diameter</u>	0 mm to 20 mm 20 mm to 100 mm 100 mm to 200 mm 200 mm to 300 mm	0.5 μ m 0.6 μ m 0.9 μ m 1.0 μ m	Calibrated using ULM and Setting Ring
Angle	1.78°	0.003°	Calibrated using ULM
<u>Taper Plain Ring Diameter</u>	0 mm to 20 mm 20 mm to 100 mm 100 mm to 300 mm	0.5 μ m 1.1 μ m 1.0 μ m	Calibrated using ULM and Setting Ring
Angle	1.78°	0.003°	Calibrated using ULM
<u>Taper Thread Plug Pitch Diameter</u>	0 mm to 20 mm 20 mm to 100 mm	0.5 μ m 1.0 μ m	Calibrated using ULM
Angle	1.78°	0.002°	Calibrated using ULM
<u>Taper Thread Ring Pitch Diameter</u>	0 mm to 20 mm 20 mm to 50 mm 50 mm to 100 mm	0.5 μ m 1.0 μ m 1.0 μ m	Calibrated using ULM and Setting Ring
Angle	1.78°	0.003°	Calibrated using ULM
Long Gauge Block	125 mm 150 mm 175 mm 200 mm 250 mm 300 mm 400 mm 500 mm	0.7 μ m 0.8 μ m 0.8 μ m 0.9 μ m 1.0 μ m 1.6 μ m 1.4 μ m 2.5 μ m	Calibrated using ULM and Gauge Blocks

SCOPE OF CALIBRATION: DIMENSIONAL

Instrument Calibrated/ Measurement Parameter	Range	Calibration and Measurement Capability Expressed as an Uncertainty(\pm)*	Remarks							
Measuring Tape	Up to 1,000 mm 2,000 mm 5,000 mm 8,000 mm 10,000 mm 20,000 mm 30,000 mm 50,000 mm 100,000 mm	0.12 mm 0.18 mm 0.28 mm 0.35 mm 0.39 mm 0.56 mm 0.68 mm 0.88 mm 1.2 mm	Calibrated using scale and tape calibration unit based on JIS B 7512:2018							
				1. Steel type						
Up to 1,000 mm 2,000 mm 5,000 mm 8,000 mm 10,000 mm 20,000 mm 50,000 mm 100,000 mm					0.13 mm 0.18 mm 0.28 mm 0.36 mm 0.40 mm 0.56 mm 0.89 mm 1.3 mm	Calibrated using scale and tape calibration unit based on JIS B 7522:2016				
							2. Fabric type			
								0 mm to 175 mm 175 mm to 200 mm	1 μ m 2 μ m	Calibrated using Master Ring Gauge based on DIN 863-4:1999 for repeatability test only
								0° to 360°	0.6°	Calibrated using inclinometer and Feeler Gauge based on BS 1685:2008
								Bevel Protractor		

Signatories:

1. Seah Leong Ho
2. Chin Inn Nkot
3. Kayalvili a/p Munusamy
4. Norita binti Md. Ali

SCOPE OF CALIBRATION: DIMENSIONAL

Instrument Calibrated/ Measurement Parameter	Range	Calibration and Measurement Capability Expressed as an Uncertainty(\pm)*	Remarks
Geometric measurement			
Length measurement			Calibrated using:
1) 2D & 3 D measurement	<u>Contact</u> Up to 1000 mm	0.0064 mm	Coordinate Measuring Machine
2) Single Direct Measurement	<u>Contact</u> Up to 600 mm	0.003 mm	Length Measuring Instrument
	<u>Non-contact</u> Up to 100 mm	0.0056 mm	Profile Projector
Diameter measurement			Calibrated using:
1) 2D & 3 D measurement	<u>Contact</u> Up to 1000 mm	0.0064 mm	Coordinate Measuring Machine
2) Single Direct Measurement	<u>Contact</u> Up to 600 mm	0.003 mm	Length Measuring Instrument
	<u>Non-contact</u> Up to 100 mm	0.0056 mm	Profile Projector
Angle measurement	Up to 360°	0.013°	Calibrated using Coordinate Measuring Machine, Profile Projector



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SCOPE OF CALIBRATION: DIMENSIONAL

Instrument Calibrated/ Measurement Parameter	Range	Calibration and Measurement Capability Expressed as an Uncertainty(\pm)*	Remarks
Geometric measurement			
Plane Flatness. Straightness, Parallelism Squareness	Up to 1000 mm	0.0069 mm 0.0057 mm 0.0069 mm 0.010 mm 0.010 mm	Calibrated using: Coordinate Measuring Machine Dial Test indicator Coordinate Measuring Machine

Signatories:

1. Seah Leong Ho
2. Norita binti Md. Ali
3. Kayalvili a/p Munusamy
4. Nurul Zuraiha binti Yessuan

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SCOPE OF CALIBRATION: DIMENSIONAL

SITE: CATEGORY I

Instrument Calibrated/ Measurement Parameter	Range	Calibration and Measurement Capability Expressed as an Uncertainty(\pm)*	Remarks
Measuring Projector (individual linear axis only)	0 mm to 50 mm	1.7 μ m Magnification 0.1%	Calibrated using Glass Scale, Precision Ball and Reading Scale based on JIS B7184:1999
	50 mm to 100 mm	1.9 μ m Magnification 0.1%	
	100 mm to 200 mm	2.5 μ m Magnification 0.1%	
	200 mm to 300 mm	3.5 μ m Magnification 0.1%	
Co-Ordinate Measuring Machine	0 mm to 1,000 mm	10 μ m	Calibrated using Ball Bar Set, Long Gauge Block, Gauge Block Set and Thermometer with Sensor based on ANSI/ASME B89:1997
Caliper	0 mm to 1,000 mm	7.5 μ m	Calibrated using Gauge Blocks based on BS EN ISO 13385- 1:2011
	1,000 mm to 1,500 mm	17 μ m	
	1,500 mm to 2,000 mm	23 μ m	
External Micrometer Up to 25 mm 50 mm frame 100 mm frame 150 mm frame 200 mm frame 300 mm frame 400 mm frame 500 mm frame 600 mm frame	25 mm traverse	0.5 μ m	Calibrated using Gauge Blocks based on BS EN ISO 3611-2010
	25 mm traverse	1.1 μ m	
	25 mm traverse	1.3 μ m	
	25 mm traverse	1.3 μ m	
	25 mm traverse	1.5 μ m	
	25 mm traverse	2.0 μ m	
	25 mm traverse	2.0 μ m	
	25 mm traverse	2.3 μ m	
25 mm traverse	2.5 μ m		
Linear Height Gauge	0 mm to 1,000 mm	7.5 μ m	Calibrated using Gauge Blocks based on BS EN ISO 13225:2012

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SCOPE OF CALIBRATION: DIMENSIONAL**SITE: CATEGORY I**

Instrument Calibrated/ Measurement Parameter	Range	Calibration and Measurement Capability Expressed as an Uncertainty(\pm)*	Remarks
Surface Plate Flatness	600 mm x 600 mm 800 mm x 800 mm 1m x1m	1.3 μ m 1.8 μ m 2.2 μ m	Calibrated using Planekator, Repeat-O-Meter and Micro- Comparator based on BS 817:2008

Signatories:

1. Seah Leong Ho
2. Chin Inn Nkot

SCOPE OF CALIBRATION: DIMENSIONAL**SITE: CATEGORY I**

Instrument Calibrated/ Measurement Parameter	Range	Calibration and Measurement Capability Expressed as an Uncertainty(\pm)*	Remarks
Measuring Microscope (Individual linear axis only)	0 mm to 200 mm	2.2 μ m	Calibrated using Glass Scale based on JIS B 7153:1995

Signatory:

1. Seah Leong Ho