

NO: SAMM 082(Issue 2, 18 May 2018 replacement
of SAMM 082 dated 8 December 2017)**SCOPE OF CALIBRATION: DIMENSIONAL**

Instrument Calibrated/ Measurement Parameter	Range	Calibration and Measurement Capability Expressed as an Uncertainty(\pm)*	Remarks
Plain Plug Gauge / Pin Gauge (Diameter)	0 mm to 10 mm	0.2 μ m	Calibrated using ULM
	10 mm to 100 mm	0.4 μ m	
	100 mm to 300 mm	1.0 μ m	
Plain Ring Gauge (Diameter)	0 mm to 10 mm	0.4 μ m	Calibrated using ULM
	10 mm to 100 mm	0.5 μ m	
	100 mm to 300 mm	1.0 μ m	
External Micrometer 50 mm frame 100 mm frame 150 mm frame 200 mm frame 300 mm frame 400 mm frame 450 mm frame 600 mm frame	Up to 25 mm	1 μ m	Calibrated using Gauge Blocks based on BS EN ISO 3611:2010
	25 mm tranverse	1.1 μ m	
	25 mm tranverse	1.2 μ m	
	25 mm tranverse	1.3 μ m	
	25 mm tranverse	1.6 μ m	
	25 mm tranverse	2 μ m	
	25 mm tranverse	2.5 μ m	
25 mm tranverse	2.5 μ m		
Caliper Checker	0 mm to 600 mm	3 μ m	Calibrated using Gauge Blocks based on ISO 7863:1984
Dial / Digimatic & Vernier Caliper	0 mm to 200 mm	5 μ m	Calibrated using Gauge Blocks based on BS EN ISO 13385- 1:2011
	200 mm to 450 mm	7 μ m	
	450 mm to 1,000 mm	7.5 μ m	
	1,000 mm to 1,500 mm	17 μ m	
	1,500 mm to 2,000 mm	23 μ m	
Dial Gauge	0 mm to 50 mm	1.5 μ m	Calibrated using Dial Gauge Calibrator based on BS 907:2008
Dial Test Indicator	0 mm to 50 mm	1.5 μ m	Calibrated using Dial Gauge Calibrator based on BS 2795:1981
Dial / Digimatic & Vernier Height Gauge	0 mm to 450 mm	7 μ m	Calibrated using Gauge Blocks based on BS EN ISO 13225:2012
	450 mm to 600 mm	7.5 μ m	
	600 mm to 1,000 mm	7.7 μ m	
Height Setting Micrometer & Riser Block	0 mm to 600 mm	3 μ m	Calibrated using Gauge Blocks based on ISO 7863:1984

NO: SAMM 082(Issue 2, 18 May 2018 replacement
of SAMM 082 dated 8 December 2017)**SCOPE OF CALIBRATION: DIMENSIONAL**

Instrument Calibrated/ Measurement Parameter	Range	Calibration and Measurement Capability Expressed as an Uncertainty(\pm)*	Remarks
Screw Plug (simple pitch diameter)	0 mm to 20 mm	0.5 μ m	Calibrated using ULM
	20 mm to 100 mm	1.0 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	0.12 μ m	Calibrated using Gauge Blocks based on ISO 3650:1998
	10 mm to 25 mm	0.12 μ m	
	25 mm to 50 mm	0.13 μ m	
	50 mm to 75 mm	0.14 μ m	
	75 mm to 100 mm	0.16 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	0.5 mm	
Vee Blocks	220 mm x 160 mm x 80 mm	4 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 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	
Setting Rod	0 mm to 25 mm	0.3 μ m	Calibrated using ULM and Gauge Blocks based on BS 870:2008
	25 mm to 100 mm	0.5 μ m	
	100 mm to 600 mm	2.2 μ m	

NO: SAMM 082(Issue 2, 18 May 2018 replacement
of SAMM 082 dated 8 December 2017)**SCOPE OF CALIBRATION: DIMENSIONAL**

Instrument Calibrated/ Measurement Parameter	Range	Calibration and Measurement Capability Expressed as an Uncertainty(\pm)*	Remarks
Thickness Coating Film	0 mm to 2.5 mm	0.2 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	0.2 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	1.4 μ m 1.5 μ m 2.0 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 1.4 μ m	Calibrated using Gauge Blocks based on JIS B 7519:1994
Snap Gauge	0 mm to 100 mm 100 mm to 200 mm	0.4 μ m 0.6 μ m	Calibrated using ULM and Setting Ring

NO: SAMM 082(Issue 2, 18 May 2018 replacement
of SAMM 082 dated 8 December 2017)**SCOPE OF CALIBRATION: DIMENSIONAL**

Instrument Calibrated/ Measurement Parameter	Range	Calibration and Measurement Capability Expressed as an Uncertainty(\pm)*	Remarks
<u>Taper Plain Plug</u> Diameter	0 mm to 20 mm 20 mm to 300 mm	0.5 μ m 1.0 μ m	Calibrated using ULM and Setting Ring
Angle		0.003°	Calibrated using ULM
<u>Taper Plain Ring</u> Diameter	0 mm to 20 mm 20 mm to 300 mm	0.5 μ m 1.0 μ m	Calibrated using ULM and Setting Ring
Angle		0.003°	Calibrated using ULM
<u>Taper Thread Plug</u> Pitch Diameter	0 mm to 20 mm 20 mm to 100 mm	0.5 μ m 1.0 μ m	Calibrated using ULM
Angle		0.002°	Calibrated using ULM
<u>Taper Thread Ring</u> Pitch Diameter	0 mm to 20 mm 20 mm to 100 mm	0.5 μ m 1.0 μ m	Calibrated using ULM and Setting Ring
Angle		0.002°	Calibrated using ULM
Length Bar	125 mm 150 mm 175 mm 200 mm 250 mm 300 mm 400 mm 500 mm	0.63 μ m 0.71 μ m 0.79 μ m 0.87 μ m 1.0 μ m 1.2 μ m 1.6 μ m 2.3 μ m	Calibrated using ULM and Gauge Blocks

NO: SAMM 082(Issue 2, 18 May 2018 replacement
of SAMM 082 dated 8 December 2017)**SCOPE OF CALIBRATION: DIMENSIONAL**

Instrument Calibrated/ Measurement Parameter	Range	Calibration and Measurement Capability Expressed as an Uncertainty(\pm)*	Remarks
Measuring Tape	1. Steel type 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	Calibrated using scale and tape calibration unit based on JIS B 7512:1993
		0.17 mm	
0.26 mm			
0.33 mm			
0.37 mm			
0.53 mm			
0.64 mm			
0.83 mm			
1.2 mm			
2. Fabric 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	0.12 mm	Calibrated using scale and tape calibration unit based on JIS B 7522:2005
		0.17 mm	
		0.27 mm	
		0.34 mm	
		0.38 mm	
		0.53 mm	
		0.84 mm	
		1.2 mm	
Holtest	0 mm to 175 mm 175 mm to 200 mm	1 μ m	Calibrated using Master Ring Gauge based on DIN 863-4:1999 for repeatability test only
		2 μ m	
Bevel Protractor	0° to 360°	0.6°	Calibrated using inclinometer and Feeler Gauge based on BS 1685:2008

Scan QR Code or visit www.ism.gov.my/cab-directories for the current scope of accreditation**Signatories:**

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

NO: SAMM 082(Issue 2, 18 May 2018 replacement
of SAMM 082 dated 8 December 2017)

Page: 10 of 40

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	
Micrometer (External)	0 mm to 600 mm	2.5 μ m	Calibrated using Gauge Blocks based on BS EN ISO 3611-2010
Linear Height Gauge	0 mm to 1,000 mm	7.5 μ m	Calibrated using Gauge Blocks based on BS EN ISO 13225 : 2012

Scan QR Code or visit www.ism.gov.my/cab-directories for the current scope of accreditation

NO: SAMM 082(Issue 2, 18 May 2018 replacement
of SAMM 082 dated 8 December 2017)

Page: 11 of 40

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

Signatories:

1. Seah Leong Ho