Scope of Accreditation for Calibration

Accreditation No. : **CALIBRATION 0156**

Laboratory Status : ☐ **Permanent** ☑ **Site** ☐ **Temporary** ☐ **Mobile**

Field of Measurement	Parameter/Range/Item	Calibration and Measurement Capability*	Standard/Technique/ Method/Equipment/Remark
3. Temperature (cont.)	Autoclave		In-house method : CM-023
	110 °C to 130 °C	0.70 °C	by comparison with wireless data logger with sensor
4. Dimension	Surface plate		In-house method : CM-057
	300 mm x 300 mm	2.1 µm	based on JIS B 7513 : 1992
	≤ 400 mm x 250 mm	2.2 µm	
	≤ 400 mm x 400 mm	2.2 µm	
	≤ 450 mm x 300 mm	2.2 µm	
	≤ 600 mm x 450 mm	2.4 µm	
	≤ 600 mm x 600 mm	2.4 µm	
	≤ 630 mm x 400 mm	2.5 µm	
	≤ 630 mm x 630 mm	2.6 µm	
	≤ 750 mm x 500 mm	2.7 µm	
	≤ 800 mm x 500 mm	2.9 µm	
	≤ 900 mm x 600 mm	3.0 µm	
	≤ 1 000 mm x 750 mm	3.3 µm	
	≤ 1 000 mm x 1 000 mm	3.4 µm	
	≤ 1 200 mm x 800 mm	3.9 µm	
	≤ 1 500 mm x 1 000 mm	4.6 µm	
	≤ 2 000 mm x 1 000 mm	6.0 µm	
	≤ 2 000 mm x 1 500 mm	6.1 µm	

* expressed as an uncertainty (+) which for k = 2, providing a level of confidence of approximately 95%

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4. Dimension (cont.)	Surface plate (cont.)		In-house method : CM-057
	≤ 2 000 mm x 2 000 mm	6.7 µm	based on JIS B 7513 : 1992
	≤ 3 000 mm x 1 500 mm	8.7 µm	
	≤ 3 000 mm x 2 000 mm	8.8 µm	
	≤ 3 000 mm x 3 000 mm	11 µm	
	Universal length measuring machine (ULM)		In-house method : CM-078 based on ISO 3611-1978 (E)
	0 mm to 100 mm	0.090 µm + 2.9 x 10^{-6} x l	
	> 100 mm to 500 mm	0.57 µm + 2.9 x 10^{-6} x l	
		l being the nominal length	
	Gauge block comparator		In-house method : CM-085
	0 mm to 100 mm	0.032 µm	based on EAL-G21
	Profile projector		In-house method : CM-082
	Measuring accuracy of rotation angle of rotating screen		based on JIS B 7184 : 1999
	0 degree to 360 degree	3.0 minute	

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4. Dimension (cont.)	Profile projector (cont.)		In-house method : CM-082 based on JIS B 7184 : 1999
	Measuring accuracy of each axis		
	0 mm to 50 mm	1.5 µm	
	> 50 mm to 150 mm	2.0 µm	
	> 150 mm to 250 mm	2.0 µm	
	Measuring microscope / toolmaker's microscope		In-house method : CM-083 based on JIS B 7153 : 1995
	Measuring accuracies of respective axis, x-axis direction and y-axis direction		
	0 mm to 50 mm	1.5 µm	
	> 50 mm to 150 mm	2.0 µm	
	> 150 mm to 250 mm	2.0 µm	
5. Electrical	pH meter		In-house method : CM-062 by direct measurement with standard calibrator
	DC Voltage		
	-414.12 mV	65 µV	
	-354.96 mV	65 µV	
	-295.80 mV	65 µV	
	-236.64 mV	65 µV	
	-177.48 mV	65 µV	

* expressed as an uncertainty (+) which for k = 2, providing a level of confidence of approximately 95%