

Scope of Accreditation for Calibration

Accreditation No. : CALIBRATION 0156

Laboratory Status : Permanent Site Temporary Mobile

Field of Measurement	Parameter/Range/Item	Best Measurement Capability*	Standard/Technique/Method/Equipment/Remark
4. Chemical (cont.)	Volumetric pipet		In-house method : CM-054 based on ASTM E 542-01
	1 ml	3.0 μ l	
	2 ml	3.0 μ l	
	5 ml	3.0 μ l	
	10 ml	4.5 μ l	
	15 ml	6.5 μ l	
	25 ml	7.0 μ l	In-house method : CM-056 based on ASTM E 542-01
	Cylinder		
	0.5 ml to 10 ml	4.0 μ l	
	> 10 ml to 50 ml	21 μ l	
> 50 ml to 100 ml	23 μ l		
> 100 ml to 500 ml	89 μ l		
5. Dimension	Vernier, dial, and digital caliper		In-house method : CM-001 based on JIS B 7507 : 1993
	0 mm to 300 mm	14 μ m	
	> 300 mm to 600 mm	16 μ m	
	> 600 mm to 1 000 mm	19 μ m	In-house method : CM-002 based on JIS B 7502 : 1994
	Can seam micrometer		
	0 mm to 13 mm	2.4 μ m	In-house method : CM-018 based on JIS B 7503 : 1997
	External dial and digital caliper gauge		
0 mm to 10 mm	6.5 μ m		
> 10 mm to 80 mm	13 μ m		

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

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5. Dimension (cont.)	Internal dial and digital caliper gauge		In-house method : CM-019 based on JIS B 7503 : 1997
	2.5 mm to 10 mm	6.5 μ m	
	> 10 mm to 30 mm	13 μ m	
	Dial and digital thickness gauge		In-house method : CM-020 based on JIS B 7503 : 1997
	0 mm to 12 mm	1.4 μ m	
	> 12 mm to 20 mm	13 μ m	
	Dial and digital indicator		In-house method : CM-039 based on JIS B 7503 : 1997
	0 mm to 25 mm	2.5 μ m	
	Steel ruler		In-house method : CM-042 based on JIS B 7516 : 1987
	0 mm to 2 000 mm	$(0.05 + 1.5 \times 10^{-5} \times l)$ mm	
	Steel tape (Hooking measurement)		In-house method : CM-043 based on JIS B 7512 : 1993
	0 mm to 2 000 mm	$(0.05 + 1.5 \times 10^{-5} \times l)$ mm	
> 2 000 mm to 30 000 mm	$(4.0 \times 10^{-5} \times l)$ mm		
Textile tape		In-house method : CM-044 based on JIS B 7522 : 1993	
0 mm to 2 000 mm	$(0.05 + 5.55 \times 10^{-4} \times l)$ mm		
> 2 000 mm to 30 000 mm	$(5.8 \times 10^{-4} \times l)$ mm		

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5. Dimension (cont.)	Micrometer caliper for external measurement		In-house method : CM-015 based on JIS B 7502 : 1994
	0 mm to 25 mm	1.4 μm	
	> 25 mm to 50 mm	1.6 μm	
	> 50 mm to 75 mm	1.7 μm	
	> 75 mm to 100 mm	1.9 μm	
	> 100 mm to 125 mm	2.2 μm	
	> 125 mm to 150 mm	2.5 μm	
	> 150 mm to 175 mm	2.7 μm	
	> 175 mm to 200 mm	3.0 μm	
	> 200 mm to 225 mm	3.3 μm	
	> 225 mm to 250 mm	3.6 μm	
	> 250 mm to 275 mm	4.0 μm	
	> 275 mm to 300 mm	4.3 μm	
	> 300 mm to 325 mm	4.6 μm	
	> 325 mm to 350 mm	4.9 μm	
	> 350 mm to 375 mm	5.2 μm	
	> 375 mm to 400 mm	5.5 μm	
> 400 mm to 425 mm	5.9 μm		
> 425 mm to 450 mm	6.2 μm		
> 450 mm to 475 mm	6.5 μm		
> 475 mm to 500 mm	6.8 μm		

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Signature

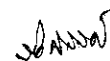
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5. Dimension (cont.)	Micrometer caliper for external measurement (cont.)		In-house method : CM-015 based on JIS B 7502 : 1994
	> 500 mm to 600 mm	9.0 μm	
	> 600 mm to 700 mm	10 μm	
	> 700 mm to 800 mm	12 μm	
	> 800 mm to 900 mm	13 μm	
	> 900 mm to 1 000 mm	14 μm	
	Micrometer caliper for internal measurement		In-house method : CM-016 based on JIS B 7502 : 1994
	5 mm to 25 mm	1.6 μm	
	> 25 mm to 50 mm	1.7 μm	
	> 50 mm to 75 mm	1.9 μm	
	> 75 mm to 100 mm	2.1 μm	
	> 100 mm to 125 mm	2.3 μm	
	> 125 mm to 150 mm	2.5 μm	
	> 150 mm to 175 mm	2.8 μm	
	> 175 mm to 200 mm	3.1 μm	
	> 200 mm to 225 mm	3.4 μm	
	> 225 mm to 250 mm	3.7 μm	
	> 250 mm to 275 mm	4.0 μm	
	> 275 mm to 300 mm	4.3 μm	
	> 300 mm to 325 mm	4.6 μm	
> 325 mm to 350 mm	5.0 μm		

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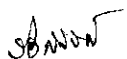
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5. Dimension (cont.)	Micrometer caliper for internal measurement (cont.)		In-house method : CM-016 based on JIS B 7502 : 1994
	> 350 mm to 375 mm	5.3 μm	
	> 375 mm to 400 mm	5.6 μm	
	> 400 mm to 425 mm	5.9 μm	
	> 425 mm to 450 mm	6.2 μm	
	> 450 mm to 475 mm	6.6 μm	
	> 475 mm to 500 mm	6.9 μm	
	Depth micrometer		In-house method : CM-045 based on JIS B 7544 : 1994
	0 mm to 25 mm	1.4 μm	
	> 25 mm to 50 mm	1.5 μm	
	> 50 mm to 75 mm	1.7 μm	
	> 75 mm to 100 mm	1.9 μm	
	> 100 mm to 125 mm	2.2 μm	
	> 125 mm to 150 mm	2.5 μm	
	Height gauge		In-house method : CM-037 based on JIS B 7517 : 1993
	0 mm to 300 mm	14 μm	
	> 300 mm to 600 mm	16 μm	
	Dial test indicator		In-house method : CM-040 based on JIS B 7533 : 1990
0 mm to 2 mm	2.5 μm		

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5. Dimension (cont.)	Surface plate		In-house method : CM-057 based on JIS B 7513 : 1992
	300 mm x 300 mm	2.1 μm	
	\leq 400 mm x 250 mm	2.2 μm	
	\leq 400 mm x 400 mm	2.2 μm	
	\leq 450 mm x 300 mm	2.2 μm	
	\leq 600 mm x 450 mm	2.4 μm	
	\leq 600 mm x 600 mm	2.4 μm	
	\leq 630 mm x 400 mm	2.5 μm	
	\leq 630 mm x 630 mm	2.6 μm	
	\leq 750 mm x 500 mm	2.7 μm	
	\leq 800 mm x 500 mm	2.9 μm	
	\leq 900 mm x 600 mm	3.0 μm	
	\leq 1 000 mm x 750 mm	3.3 μm	
	\leq 1 000 mm x 1 000 mm	3.4 μm	
	Gauge block		In-house method : CM-059 based on JIS B 7506 : 1997 and ISO 3650 : 1996
	0.5 mm to 10 mm	0.065 μm	
	> 10 mm to 25 mm	0.075 μm	
> 25mm to 50 mm	0.10 μm		
> 50 mm to 75 mm	0.14 μm		
> 75 mm to 100 mm	0.17 μm		

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Signature