

6.1.4 เครื่องมือมาตรฐานในงานบำรุงรักษาเครื่องมือทางการแพทย์มีความเหมาะสมเป็นไปตามข้อกำหนดของผู้ผลิต หรือตามมาตรฐานของวิชาชีพที่เกี่ยวข้อง หรือตามประกาศของกรมสนับสนุนบริการสุขภาพ และเครื่องมือมาตรฐานต้องสามารถสอบกลับผลการวัดได้



TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)
CORPORATE SERVICES 3: EQUIPMENT CALIBRATION AND TESTING SERVICES
 534/4 PATTANAKARN ROAD SOI 18, SUANLUANG, SUANLUANG, BANGKOK, 10250
 TEL. 0-2717-3000-24 FAX. 0-2719-9484




Certificate No. : 26B60
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Certificate of Calibration

Equipment : Electronic Balance
Manufacturer: TOMS
Model : TM-EXF2204H
Serial No.: TM150700636
ID No.: -

Condition As-Received: Used Item
Received Date: 26 January 2026
Calibration Date: 04 February 2026

Reference: 2601-0824WN
Ambient Temperature: (23 ± 2) °C
Relative Humidity: (50 ± 15) %
Atmospheric Pressure: 1013.1 hPa

Submitted by: AT PREVENT & CALIBRATION LIMITED PARTNERSHIP
 276 MOO 21, T.SILA, A.MUENG, KHONKEAN 40000

Procedure used: Calibration were conducted using in-house calibration procedure CP-B01 according to direct measurement method against standard weights.

Condition of this result of calibration

1.Reference standards instruments :

Instrument	Model	Serial No.	Certificate No.	Due Date
1) Standard Weight Set (E2)	73336	20026	MM-0038-24	25 Mar 2026
2) Standard Weight Set (E2)	73338	20028	MM-0055-24	01 Apr 2026

2.This certificate is not certified for any commercial transaction.
 3.The certificate is valid only to the item calibrated on date and place of calibration.
 4.This measurement result is traceable to the International System of Unit maintained through:-
 -National Institute of Metrology Thailand (NIMT)

Calibrated by : Thapakorn Thammachai
Issue Date : 06 February 2026

Approved Signatory : 
 Phalinee Prabpaipal
 Sura Suwannasri
 Sorapong Koomkainam

หน้า 1



Range capacity : 0 g to 220 g Resolution : 0.0001 g
 Result of calibration : Before adjustment

Applied Weight (g)	UUC* Reading (g)	Correction Value (g)	Uncertainty of Measurement (\pm g)	Coverage Factor (k)
100	100.1700	-0.1700	0.00030	2.04
200	200.3305	-0.3305	0.00030	2.01

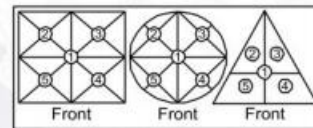
After adjustment at 200 g

1. Determination of the standard deviation of weighing machine (n = 10 number of measurement)

Applied Weight (g)	Standard Deviation of reading (g)
100	0.000000
200	0.000084

2. Eccentric or off-center loading

A mass of 100 g was placed to various position on the pan.
 The weighing machine reading error obtained is given in the table



Position 1 (g)	Position 2 (g)	Position 3 (g)	Position 4 (g)	Position 5 (g)	Maximum difference between off-center and central loading (g)
0.0000	+0.0028	+0.0028	+0.0018	-0.0024	0.0028

3. Error of indication from nominal value

Applied Weight (g)	UUC* Reading (g)	Correction Value (g)	Uncertainty of Measurement (\pm g)	Coverage Factor (k)
Unload	0.0000	0.0000	0.000082	2.00
20	20.0000	0.0000	0.00030	2.13
40	40.0000	0.0000	0.00030	2.09
60	60.0000	0.0000	0.00030	2.07
80	80.0001	-0.0001	0.00030	2.04
100	100.0000	0.0000	0.00030	2.04
120	120.0003	-0.0003	0.00030	2.02
140	140.0002	-0.0002	0.00030	2.01
160	160.0001	-0.0001	0.00030	2.01
180	180.0000	0.0000	0.00030	2.01
200	199.9999	+0.0001	0.00030	2.01

*UUC = Unit Under Calibration

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor k , providing a level of confidence of approximately 95 %.



Certificate of Calibration

Certificate No. : 26B61
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Equipment : Digital Force Gauge
Manufacturer: Sundoo
Model : SH-2K
Serial No.: 5B22H02155
ID No.: -

Condition As-Received: Used Item
Received Date: 26 January 2026
Calibration Date: 04 February 2026

This certificate may not be reproduced other than in full,
 except with the prior written approval of the head of
 Corporate Services 3: Equipment Calibration and Testing Services.

Reference: 2601-0824WN
Ambient Temperature: (23 ± 2) °C
Relative Humidity: (50 ± 15) %
Atmospheric Pressure: 1012.1 hPa

Submitted by: AT PREVENT & CALIBRATION LIMITED PARTNERSHIP
 276 MOO 21, T.SILA, A.MUENG, KHONKEAN 40000

Procedure used: Calibration were conducted using in-house calibration procedure CP-B03 according to direct measurement method against standard hook weights. The unit under calibration was placed in a vertical position.


Condition of this result of calibration

1.Reference standards instruments :

Instrument	Model	Serial No.	Certificate No.	Due Date
1) Standard Hook Weights(M1)	1 g-25 kg	-	25M984	26 May 2027
2) Standard Weight Set (F1)	-	-	25M2172	08 Dec 2026

- This certificate is not certified for any commercial transaction.
- This result of calibration was made on requested at the point specified by customer.
- The certificate is valid only to the item calibrated on date and place of calibration.
- This measurement result is traceable to the International System of Unit maintained through:-
 -Technology Promotion Association (Thailand-Japan), NSC-ONSC Accredited No. Calibration 0008

Calibrated by : Thapakorn Thammachai
Issue Date : 06 February 2026

Approved Signatory : 
 Phalinee Prabpaipal
 Sura Suwannasri



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Certificate of Calibration

Certificate No. : 26E358

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Equipment : Digital Tachometer
Manufacturer: TLEAD
Model : DT2236B
Serial No.: S887791
ID No.: A&T-Tachometer-01
Condition As-Received: Used Item
Received Date: 26 January 2026
Calibration Date: 04 February 2026
Reference: 2601-0824WN
Ambient Temperature: (23 ± 2) °C
Relative Humidity: (50 ± 10) %

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 Corporate Services 3: Equipment Calibration and Testing Services.

Submitted by: AT PREVENT & CALIBRATION LIMITED PARTNERSHIP

276 MOO 21, T.SILA, A.MUENG, KHONKEAN 40000

Procedure used: Calibration were conducted using calibration procedure No. CP-E20 by direct measurement with frequency standard.

Condition of this result of calibration

1.Reference standards instruments :

Instrument	Model	Serial No.	Certificate No.	Due Date
1) Synthesized Function Generator	706011-7-F	91L857590	EF-0014-25	25 Feb 2026

- This result of calibration was made on requested at the point specified by customer.
- The certificate is valid only to the item calibrated on date and place of calibration.
- This measurement result is traceable to the International System of Unit maintained through:-
 -National Institute of Metrology Thailand (NIMT)

Calibrated by : Napachanok Prasomsoosiri
Issue Date : 05 February 2026

Approved Signatory : _____
 Phalinee Prabpaipal
 Nuntawat Khamchai