

Dept. :	Filling-2	Month and year:	Apr 2026
Code No. :	T-555	Capacity(a) :	220.000 (gm)
Make:	Mettler	Model:	ML203T/A00
Standard Weight Box Id :	T-515,	Least Count(e) :	0.001 (gm)

1. Calibration using standard weights :

Tolerance: +/- Least count of the balance OR +/- 0.1 % of Standard weight whichever is higher and value should be rounded off on lower side as per display capacity of balance.

Standard weights for calibration (gm)		Tolerance (gm)	Accuracy Limits (Std wt +/- Tolerance) (gm)
20e	0.020	± 0.001	0.019 - 0.021
20% of a	0.100	± 0.001	0.099 - 0.101
50% of a	0.500	± 0.001	0.499 - 0.501
80% of a	1.000	± 0.001	0.999 - 1.001
	10.000	- 0.100 + 0.010	9.900 - 10.010
	100.000	± 0.200	99.900 - 100.100
	200.000	± 0.100	199.800 - 200.200

Note:

1. Adjust zero error before commencing the weighing operation.
2. Check against standard weights on every month.

Date	Time	Cleanliness (Clean / Unclean)	Spirit Level (Ok / Not Ok)	Zero Error	Standard weights kept on the balance (gm)		Readings shown (gm)	Done by
03.04.2026	17:34:40	17:34:40	OK	No Zero Error	20e	0.020	0.020	Tushar
					20% of a	0.100	0.100	Tushar
					50% of a	0.500	0.500	Tushar
					80% of a	1.000	1.000	Tushar
						10.000	10.000	Tushar
						200.000	200.000	Tushar
						100.000	100.000	Tushar

2. Uncertainty test :

Sr. No.	Standard Weight (gm)	Reading displayed on the balance (gm)	Remarks
0	100.000	100.000	Not Ok
1	100.000	100.000	Ok
2	100.000	100.000	Ok
3	100.000	100.000	Ok
4	100.000	100.000	Ok
5	100.000	100.000	Ok
6	100.000	100.000	Ok
7	100.000	100.000	Ok
8	100.000	100.000	Ok
9	100.000	100.000	Ok
Mean		100.000	-
Standard Deviation (S.D.)		0.000	-

$$\text{Uncertainty} = \frac{3 \times \text{SD}}{\text{Reported Standard Weight (gm)}} = 0.000$$

Acceptance criteria : Value of uncertainty should be NMT 0.001 kg.

Result :Complies

3. Repeatability test :

Sr. No.	Standard Weight (gm)	Reading displayed on the balance (gm)	Remarks
1	160.000	160.000	Ok
2	160.000	160.000	Ok
3	160.000	160.000	Ok
4	160.000	160.000	Ok
5	160.000	160.000	Ok
6	160.000	160.000	Ok
7	160.000	160.000	Ok
8	160.000	160.000	Ok
9	160.000	160.000	Ok
10	160.000	160.000	Ok
Mean		160.000	-
Standard Deviation (S.D.)		0.0000	-

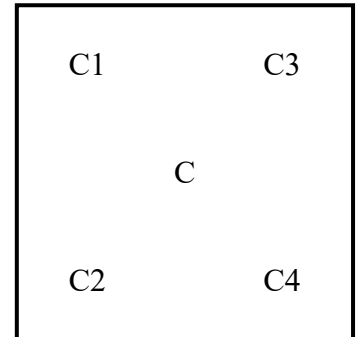
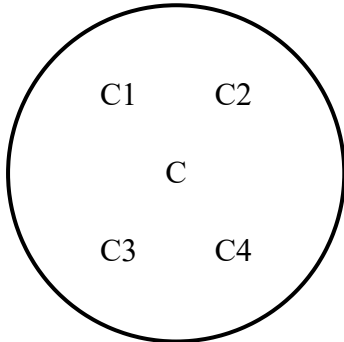
Repeatability (%) =	$\frac{2 \times (0.41 \times d)}{\text{Reported standard weight (gm)}} \times \frac{X}{100}$	=	0.00
---------------------	--	---	------

Acceptance criteria : Repeatability is NMT 0.10 %

Result : Complies

4. Eccentricity test :

Note: Adjust zero error before commencing the weighing operation.



Sr No.	Standard Weight (gm)	Position	Reading displayed by the balance (gm)	Deviation from center = X - C	Remark
1	64.000	C	64.000	-----	Ok
2	64.000	C1	64.000	0.000	Ok
3	64.000	C2	64.000	0.000	Ok
4	64.000	C3	64.000	0.000	Ok
5	64.000	C4	64.000	0.000	Ok

Where, X = C1, C2, C3, C4 i.e. different corners of the balance.

Acceptance criteria : Deviation is not more than 0.05%

Result: Complies

Comment: _____

Calibration performed by :
(User)

Abhishek (A)

Checked by :
(Quality Assurance)

Date: 06.06.2023

Date: