 Discovery Labs	STANDARD OPERATING PROCEDURE			
	SOP No.:	SOP-ED-019-01	Effective Date:	01.09.2017
	Supersedes :	SOP-ED-019-00	Next Review Date:	31.08.2020
	Department:	Engineering	Page:	1 of 6
TITLE: PROCEDURE FOR OPERATION, PERFORMANCE AND MAINTENANCE OF WEIGHING BALANCES				

1.0 PURPOSE:

To lay down the Procedure for Operation, Performance and Maintenance of Weighing balances in various departments at Discovery Laboratories Pvt. Ltd.

2.0 SCOPE:

This SOP is applicable at various departments for the Operation, Performance and Maintenance of Weighing balances at Discovery Laboratories Pvt. Ltd.

3.0 RESPONSIBILITY:

- 3.1 It is the responsibility of user department personnel to follow this procedure.
- 3.2 It is the responsibility of engineering department personnel to rectify problem.
- 3.3 Head –User / Designee is responsible for implementing the procedure.

4.0 DEFINITIONS:


- 4.1 **Performance Check:** Test performed by the operator to determine whether a balance operates within acceptance criteria, when checked against operating range by using standard weights.
- 4.2 **Operating Range:** Based on the capacity of the Weighing balance, manufacturer will define the range.
- 4.3 **Least Count:** The smallest mass difference, which can be read on the instrument.
- 4.4 **Eccentricity Check:** The test of the eccentric loading determining, how the display value influenced by manner in which the test load is positioned on the load receptor.

5.0 PROCEDURE:

5.1 Operation Procedure of Weighing Balance:

- 5.1.1 Ensure that the Performance check of balance is completed before weighing.
- 5.1.2 Ensure that the balance is clean and check the spirit level of the balance (If applicable).

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5.1.3 Switch on the power mains, if the main is switched off and press the ‘ON’ key and wait till the display shows all zeros.

5.1.4 When required, press the ‘REZERO’ key to display all zeros.

5.1.5 Keep the container on weighing pan / platform and note down the displayed reading.

5.1.6 Remove the container from weighing pan / platform.

5.1.7 Switch off the mains when balance is not in use.

5.2 Performance Check Procedure of Weighing balance:

5.2.1 Warehouse personnel shall carry out the performance check of the weighing balance.

5.2.2 Clean the weighing platform and check the spirit level (if applicable) of the Weighing balance.

5.2.3 Switch on the power mains.

5.2.4 Initial setting and adjustment of the balance shall be done as per the operational procedure, before starting the performance check.

5.2.5 Performance check shall be carried out in two intervals i.e. Daily and Monthly (Eccentricity Check).

5.2.6 Performance check shall be carried out by considering the operating range of the weighing balance.


5.3 Procedure for Daily Performance Check:

5.3.1 Performance check of weighing balance shall be checked at Minimum, Middle and Maximum weights based on the usage range of individual balance.

5.3.2 Keep the standard weights one by one on the midpoint of the weighing pan / platform.

5.3.3 Record the readings in respective formats “Balance Daily Performance Check Record”.

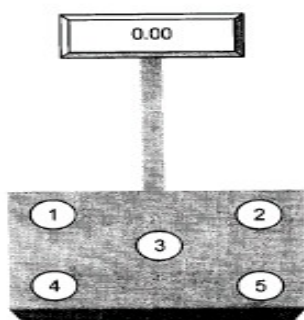
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- 5.3.4 Remove the Standard weights and place them in respective place after completion of the performance check.
- 5.3.5 The performance check readings shall match with the standard weights within the acceptance criteria.
- 5.3.6 Acceptable limits are captured in individual “Balance Daily Performance Check Record”.
- 5.3.7 If the weighing balance display value does not found within the acceptance limit, then balance shall be labeled as ‘Under Maintenance’ and informed to Engineering and Maintenance department. After getting repaired, Performance Check shall be carried out.


5.4 Procedure for Eccentricity Check (Monthly):

- 5.4.1 The eccentricity check shall be carried at maximum capacity of the Weighing balance / usage range.
- 5.4.2 Warehouse personnel shall carryout the eccentricity check on monthly basis by placing the standard weights on the four corners and middle point of the weighing pan / platform as shown in the below figure.



- 5.4.3 Place the weights on the sensing areas of the four corners and middle point of the balance.
- 5.4.4 Record the readings in respective formats “Balance Eccentricity Check Record”.

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5.4.5 Remove the Standard weight and place it in respective place after completion of the performance check.

5.4.6 The performance check readings shall match with the standard weight within the acceptance criteria.

5.4.7 Acceptable limits are captured in individual “Balance Eccentricity Check Record”.

5.4.8 If the Weighing balance readings are not out of the acceptance limits, then balance shall be labeled as “Under Maintenance” and inform to Engineering department.
After getting repaired, Performance Check shall be carried out.

5.5 Certification of Standard Weights:

Ensure the balance and standard weights are stamped as per the norms by legal metrology department or recognized agency.

5.6 Maintenance of Weighing Balances and Standard Weights:

5.6.1 Weighing balances, Weighing pan / platform and Standard weights should be clean and neat.

5.6.2 Weighing balances and standard weights should be numbered for identification.

5.6.3 Weighing balance numbering system shall be expressed as XXWB-YYY,
XX – Department Code
WB – Weighing balance

YYY – Sequential number of the balance, Ex: WHWB-01


5.6.4 Standard Weights Numbering System shall be expressed as SW-YYY,
SW - Standard Weights

YYY – Sequential number of Standard Weight box, Ex: SW-01

5.6.5 Standard weights should be placed in a designated place after usage.

5.6.6 Mains of the balance should be switched off when not in use.

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5.6.7 Inform to the Engineering department whenever the balance displays abnormal readings.

5.6.8 At de-dusting area, if material weighing is below / above the usage range, and then use the suitable balance at other areas in Warehouse.

5.7 **Acceptance Criteria:** Acceptance limits during the performance check shall be considered as follows;


5.7.1 Least count shall be considered as an acceptance limit during weight checking of an individual balance.

6.0 FORMATS / ANNEXURE(S):

6.1	Balance Daily Performance Check Record 3.00Kg	: ED019-FM046
6.2	Balance Daily Performance Check Record 60.00Kg	: ED019-FM047
6.3	Balance Daily Performance Check Record 150.00Kg	: ED019-FM048
6.4	Balance Daily Performance Check Record 300.00Kg	: ED019-FM049
6.5	Balance Daily Performance Check Record 500.00Kg	: ED019-FM050
6.6	Balance Eccentricity Check Record 3.00Kg	: ED019-FM051
6.7	Balance Eccentricity Check Record 60.00Kg	: ED019-FM052
6.8	Balance Eccentricity Check Record 150.00Kg	: ED019-FM053
6.9	Balance Eccentricity Check Record 300.00Kg	: ED019-FM054
6.10	Balance Eccentricity Check Record 500.00Kg	: ED019-FM055

7.0 CHANGE HISTORY:

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Revision No.	Effective Date	Details of Revision	Ref. CCF No.	Remarks
00	01.01.2017	New SOP	ED-CRF-006/16	---
01	01.09.2017	1. SOP format changed in line with SOP-QA-001-05.	CCF/GEN/17007	--

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