



Title: Calibration of Dosing Pump

SOP No.:		Revision No.:	00
Effective Date:		Supersedes No.	Nil
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1.0 OBJECTIVE:

To lay down a procedure for Calibration of Dosing Pump.

2.0 SCOPE:

This SOP is applicable for Calibration of Dosing Pump used for Online Dosing of known Volume of a Solution in Water during its collection at

3.0 RESPONSIBILITY:

Officer / Executive - Engineering

4.0 ACCOUNTABILITY:

Head – Engineering

5.0 ABBREVIATIONS:

SOP Standard Operating Procedure
QA Quality Assurance
No. Number
Ltd. Limited

6.0 PROCEDURE:

- 6.1 Take one Measuring Cylinder of one liter Capacity.
- 6.2 Fill it with 1000.0 ml. of specified dosing solution.
- 6.3 Start relevant Water's collection in the specified Tank.
- 6.4 Set the Knob of Dosing pump at 1, 10,30,50,70 and 90 one by one.
- 6.5 Start dosing for 1 minute at each set value.
- 6.6 Observe the volume sucked for dosing at each set value and note it in **“Dosing Pump Calibration Record”** enclosed as **Annexure-I**.
- 6.7 Ensure that dosing rate of solution at each set value is within the acceptance limit.
- 6.8 In case of non compliance paste a label of “Faulty” on it and inform you're senior as well as Head QA.
- 6.9 Call concerned engineer to do the needful adjustment of dosing pump.
- 6.10 Follow the details mentioned in **“Standard Set Parameters for Dosing Pump”**, Enclosed as **Annexure-II**.



PHARMA DEVILS

ENGINEERING DEPARTMENT

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7.0 ANNEXURES:

ANNEXURE No.	TITLE OF ANNEXURE	FORMAT No.
Annexure-I	Dosing Pump Calibration Record	
Annexure-II	Standard Set Parameters for Dosing Pump	

8.0 DISTRIBUTION:

- Controlled Copy No. 01 Head Engineering
- Master Copy Quality Assurance Department

9.0 REFERENCES:

Not Applicable

10.0 REVISION HISTORY:

CHANGE HISTORY LOG

Revision No.	Details of Changes	Reason for Change	Effective Date	Updated By
00				



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ANNEXURE-I



PHARMA DEVILS

ENGINEERING DEPARTMENT

DOSING PUMP CALIBRATION RECORD

Block: _____ **Frequency:** Once in a Month

Department: _____

Pump ID No.: _____ **Max Capacity:** 6 Liters / Hrs.

Date	Time		Knob Set Parameter	Solution Dosing Rate ml/min	Acceptance Limit (in ml)	Done By Sign & Date	Checked By (QA) Sign & Date	Remarks
	From	To						
			1		±1.0 ml			
			10		±1.0 ml			
			30		±1.0 ml			
			50		±1.0 ml			
			70		±1.0 ml			
			90		±1.0 ml			



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ANNEXURE-II



STANDARD SET PARAMETERS FOR DOSING PUMP

S.No.	Knob Set Parameter	No. of Stroke / Minute	Solution dosing Rate (in ml. per minute) Acceptance Limit: ± 1 ml.	Solution Dosing Rate (In liters / hour)
1.	1	6	6	0.36
2.	10	12	12	0.72
3.	20	24	24	1.44
4.	30	36	36	2.16
5.	40	48	48	2.88
6.	50	60	60	3.6
7.	60	72	72	4.32
8.	70	80	80	4.8
9.	80	90	90	5.4
10.	90	95	95	5.7
11.	100	100	100	6.0