

ENGINEERING DEPARTMENT

STANDARD OPERATING PROCEDURE						
Department: Engineering	SOP No.:					
Title: Calibration of Field Instruments	Effective Date:					
Supersedes: Nil	Review Date:					
Issue Date:	Page No.:					

1.0 **OBJECTIVE:**

To lay down the Procedure for Calibration of field instruments.

2.0 **SCOPE**:

This standard operating procedure (SOP) is applicable for calibration of field instruments.

3.0 RESPONSIBILITY:

Executive Engineering will perform the Calibration and prepare the data sheet.

Manger Engineering will check the data sheet and calibration certificate.

Manager QA will verify & approved the data and calibration certificate

4.0 PROCEDURE:

- 4.1 Ensure that Master Instruments used for calibration are in calibration state before starting the calibration.
 - Executive engineering shall prepare the Annual Calibration Plan for succeeding year for all equipment/instruments as per Annexure-1 in the month of December.
- 4.2 Manager Engineering shall check prepared plan and same shall be submitted to Manager QA for their approval.
- 4.3 Executive Engineering shall prepare the list of instrument to be calibrated in each month, on the last week of each month as per Annexure-II
- 4.4 Executive Engineering shall inform to concern department supervisor for calibration of instruments in advance
- 4.5 Executive Engineering shall perform the calibration of instrument as per their respective SOP.
- 4.6 Executive Engineering shall record the observation in the respective data sheet and it shall be submitted to Manager Engineering for his review.
- 4.7 QA shall verify the data sheet and approved the calibration certificate...
- 4.8 Calibration Certificate No. Shall be given as follows:

DD/PMN/ID

DD: Date of Calibration.

PMN: Promed Manufacturing Nalagarh.

ID: Instrument Identification Number.

For Example: Calibration certificate number of pressure gauge having ID:..... performed on 20.04.24 as under.

20.04.24/PMN/U/012-PG 01.

- 4.9 After re-calibration retrieves the old tag and destroys. Record the details as per Annexure -III
- 4.10 Verify each instrument for ID No. Affx the tag and compile the details as per Annexure IV



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- 4.11 If the calibration results not meet the acceptance criteria then replace it with new equipment/instrument and maintain the record as per Annexure-V
- 4.12 Before installing the instrument recalibrate it as per respective SOP and inform the QA Department after the installation.

4.3 **FREQUENCY:**

- 4.3.1 Direct impact to the manufacturing process six monthly.
- 4.3.2 Indirect impact to the manufacturing process yearly.

4.4 TOLERANCE LIMIT:

- 4.4.1 +/- 7 Days in case of six monthly
- 4.4.2 +/- 15 Days in case of yearly.

5.0 SAFETY AND PRECAUTIONS:

Not Applicable

6.0 REVISION HISTORY:

Revision No.	Reason for Revision	Superseded from & date
00	New	

7.0 **REFERENCES:**

Not Applicable

8.0 ABBREVIATIONS:

SOP: Standard Operating Procedure.

ID: Identification NumberQA: Quality Assurance

9.0 ANNEXURE

Annexure – I: Annual calibration plan

Annexure – II: Next month Calibration plan



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Annexure – III: Old calibration tag record Annexure – IV: Calibration tag Annexure – V: Instrument replacement record



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ANNEXURE I ANNUAL CALIBRATION PLAN

Equipment Name	Name of Instrument	ID.No	J	an	F	eb	M	ar	 D	ec
			P	A	P	A	P	A	P	Α

Р	: Plan	Column:	Fill t	he date	and ma	ike it y	ellow	for six	k month	ıly (calıt	oratio	on and	1 Lıg	ht ;	green 1	tor `	Y earl	y cal	brati	on.

A: Actual Column: Fill the actual date of calibration and make it Green.



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ANNEXURE II Next Month Calibration Plan

MONT		YEAR:						
S.No.	INSTRUMENT/EQUIPMENT	ID. No.	DUE DATE					



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ANNEXURE III Old Calibration Tag Record

S.No	Calibration Tag No	Checked By	
+			
+			



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ANNEXURE IV CALIBRATION TAG

	SOP REF. NO:
	CALIBRATED
INSTRUMENT NAME	
INSTRUMENT ID.	
LOCATION	
CERTIFICATE NO.	
CALIBRATION ON	
NEXT DUE ON	
CALIBRATED BY	CHECKED BY



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ANNEXURE V Instrument Replacement Record

S.No	Equipment Name	Name of Instrument	Equipment ID	Reason For Replacement	Replaced By/Date	Checked By
					<i>J</i>	