

ENGINEERING DEPARTMENT

STANDARD OPERATING PROCEDURE				
Department: Engineering	SOP No.:			
Title: Procedure for 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 U/012-PG 01 performed on 12.04.07 as under.

12.04.07/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
- 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.



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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 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	Α		P	A

P:	: Plan (Column:	Fill the	date and	l make	it vellow	of for six	monthly	/ calibration	on and Light	green for	Yearly	calibration.

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



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Annexure II Next Month Calibration Plan

MONTI	H:	YEAR:			
S.No	INSTRUMENT/EQUIPMENT	ID. No.	DUE DATE		



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Annexure III Old Calibration Tag Record

S.No	Calibration Tag No	Date of Destruction	Destructed By	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

Equipment Name	Name of Instrument	Equipment ID	Reason For Replacement	Replaced By/Date	Checked By
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	Equipment Name	Equipment Name of Instrument	Equipment Name of Instrument ID Comparison Compariso	Equipment Name Instrument Equipment ID Reason For Replacement ID Reason For Replacement ID ID ID ID <td< td=""><td>Equipment Name of Instrument ID Reason For Replaced By/Date </td></td<>	Equipment Name of Instrument ID Reason For Replaced By/Date