



PHARMA DEVILS

ENGINEERING DEPARTMENT

STANDARD OPERATING PROCEDURE

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|--|------------------------|
| Department: Engineering | SOP No.: |
| Title: Calibration of Pressure Gauges | Effective Date: |
| Supersedes: Nil | Review Date: |
| Issue Date: | Page No.: |

1.0 Revision History

| Rev. No. | Details of changes | Reason for change |
|----------|--------------------|-------------------|
| 00 | NIL | NEW SOP |

2.0 OBJECTIVE:

The Objective of this SOP is:

- 2.1 To describe the procedure for Calibration Of Pressure Gauges.

3.0 SCOPE:

- 3.1 This SOP is applicable for the calibration of Pressure Gauge installed in manufacturing & Other Facilities of

4.0 RESPONSIBILITY:

- 4.1 The Maintenance Engineer shall be:
 - 4.1.1 Responsible for Calibration of Pressure Gauges.

5.0 ACCOUNTABILITY:

Head –Engineering Services

6.0 PROCEDURE:

- 6.1 Calibration of pressure gauges to be done by the outside party against calibrated standard Pressure gauge fixed on the comparator.
- 6.2 Institute should certify the calibrated reference standard for Design of Electrical Measuring Instruments (IDEMI) / Electronics Regional Test Laboratory (ERTL)
- 6.3 Fix the pressure gauge, which is to be calibrated on comparator.
- 6.4 Check the zero setting of the pressure gauge. Rectify it, if required.
- 6.5 Check the least count (LC) of the pressure gauge.
- 6.6 A deviation of ± 1 LC is allowable.
- 6.7 Apply the pressure up to maximum reading with the help of comparator.
- 6.8 Compare the reading of pressure gauge with standard calibrated pressure gauge.
- 6.9 Record the observations at various pressure ranges.



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- 6.10** If any deviation observed adjust the span accordingly.
- 6.11** After adjustment also, the deviation is not within the limit of acceptance criteria, the external Party should inform the status of pressure gauge to Engineering department.
- 6.12** The concerned engineer should replace the pressure gauge. Which should be calibrated as per point 6.4 to 6.9.
- 6.13** As per Instrument Calibration plan, if pressure gauge is Critical/Non Critical, engineering department should inform Quality Assurance and concerned department.
- 6.14** Label the instrument with date and difference in readings, which are taken during calibration of equipment.
- 6.15** Certificate of calibration to be obtained from the outside party.
- 6.16 FREQUENCY:**
- 6.16.1** All pressure gauges being used in various departments are to be calibrated as per the Instrument Calibration Plan prepared as per SOP No.:

7.0 ANNEXURES:

NIL

8.0 References (S)

NIL

9.0 Glossary

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| SOP | : Standard Operating procedure |
| No | : Number |
| IDEMI | : Institute for Design of Electrical Measuring Instruments. |
| ERTL | : Electronics Regional Test Laboratory |
| OOC | : Out of Calibration |
| LC | : least count |