



# PHARMA DEVILS

## ENGINEERING DEPARTMENT

### STANDARD OPERATING PROCEDURE

<b>Department:</b> Engineering	<b>SOP No.:</b>
<b>Title:</b> Calibration of Hour Meter	<b>Effective Date:</b>
<b>Supersedes:</b> Nil	<b>Review Date:</b>
<b>Issue Date:</b>	<b>Page No.:</b>

#### 1.0 Revision History

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

#### 2.0 OBJECTIVE:

The purpose of this SOP is:

2.1 To describe the procedure for Calibration Of Hour Meter being used in various departments.

#### 3.0 SCOPE:

3.1 This SOP is applicable for the calibration of Hour meter installed in manufacturing & other Facilities of

#### 4.0 RESPONSIBILITY:

3.1 The Maintenance Engineer shall be:

3.1.1 Responsible for Calibration of Hour Meter.

#### 5.0 ACCOUNTABILITY:

Head –Engineering Services

#### 6.0 PROCEDURE:

6.1 Calibration of hour meter to be done by outside party against the calibrated reference digital Stopwatch.

6.2 The calibrated digital stopwatch should be certified by Institute for Design of Electrical Measuring Instruments (IDEMI) /Electronics Regional Test Laboratory (ERTL).

6.3 Take the initial reading of hour meter and start the digital stopwatch.

6.4 After one hour, take the final reading of hour meter and compare it with calibrated digital Stopwatch.



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- 6.5** If the under test instrument is not showing proper reading then record the observation.
- 6.6** Deviation of + 1 minute is allowable for one hour.
- 6.7** If the deviation is not within the limit of acceptance criteria, the external party should inform The status of hour meter to Engineering department.
- 6.8** The concerned engineer should replace the hour meter, which should be calibrated as per point 6.3 to 6.5.
- 6.9** As per Instrument Calibration plan, if the instrument is Critical/Most Critical, engineering department should inform Quality Assurance and concerned department.
- 6.10** Record the observations.
- 6.11** Label the hour meter with date, checked by and difference in readings during calibration.
- 6.12** Certificate of calibration to be obtained from outside party.
- 6.13 FREQUENCY:**
- 6.13.1** All hour meter being used in various departments are to be calibrated as per the Instrument Calibration Plan prepared as per SOP No.:

**9.0 ANNEXURES:**

NIL

**8.0 References (S)**

NIL

**9.0 Glossary**

- SOP : Standard Operating procedure
- No : Number
- IDEMI : Design of Electrical Measuring Instruments
- ERTL : Electronics Regional Test Laboratory