



STANDARD OPERATING PROCEDURE

Department: Quality Control	SOP No.:
Title: Operation and Calibration of Vacuum Oven	Effective Date:
Supersedes: Nil	Review Date:
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1.0 OBJECTIVE:

To lay down a procedure for operation and calibration of Vacuum Oven.

2.0 SCOPE:

This SOP is applicable to the vacuum oven in the Quality Control Department.

3.0 RESPONSIBILITY:

Officer, Executive – Quality Control Department

Head – Quality Control Department

4.0 DEFINITION(S):

NA

5.0 PROCEDURE:

5.1 Operation:

5.1.1 Open the door.

5.1.2 Clean the chamber, the flange and the rubber gasket from inside

5.1.3 Close the glass door and tighten it with knobs.

5.1.4 Close the glass door and tighten it with knobs. Connect the vacuum pump through hose pipe to vacuum cock. Switch on the mains supply, open the vacuum cocks & start the vacuum pump. Create the vacuum unto 30 mm Hg on vacuum gauge. Close vacuum cock & put off the vacuum pump.



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5.1.5 Select the position of three heat switch as follows:

Switch Position	Temperature Range
0	-----
1	0 - 50°C
2	50 - 100°C
3	Above 100°C

5.1.6 Press set push button for adjusting the required temperature on the coarse knob & fine knob. Relieve the set push button, the controller will indicate the oven temperature.

5.1.7 Keep the energy regulator (ER) in (-) side to limit the initial temperature oven shoot. Let the temperature to be stable. If it is less than set temperature' then turn energy regulator knob on (+) side slightly; wait for some time see the temperature. If it is not attained turn ER knob further, wait for some time. Do this hit & trial method until set temperature is achieved. The temperature achieved will be within accuracy of $\pm 2^{\circ}\text{C}$.

5.1.8 If there is moisture present in the chamber, while heating vacuum may fall, restart the vacuum pump to set the desired vacuum.

5.1.9 Record the details in the instrument log book for results & breakdown

5.2 Calibration:

5.2.1 Calibration of Vacuum gauge and digital temperature indicator is done by External Party.

Frequency: Six Monthly.

5.2.2 If instrument is out of calibration, affix "UNDER MAINTENANCE" label on the instrument and call for service engineer.

5.2.3 Fill the calibration status on metallic calibration label of the instrument

5.2.4 Note calibration activity in the instrument log book

5.3 Cleaning:

Clean the Instrument properly with cotton cloth.



PHARMA DEVILS
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5.4 Precaution:

5.4.1 Do not handle Flammable material near the instrument.

6.0 ABBREVIATION(S):

QCD - Quality Control Department
SOP - Standard Operating Procedure

7.0 REFERENCE(S):

NA

8.0 ANNEXURE(S):

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9.0 REVISION CARD

S.No.	REVISION No.	REVISION DATE	DETAILS OF REVISION	REASON (S) FOR REVISION