



Title: Operation of Multicolumn Distillation Plant

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Effective Date:		Supersedes No.	Nil
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1.0 OBJECTIVE:

To lay down a procedure for Operation of Multi Column Distillation Plant.

2.0 SCOPE:

This SOP is applicable for Operation of Multi Column Distillation Plant.

3.0 RESPONSIBILITY:

Officer / Executive-Engineering

4.0 ACCOUNTABILITY:

Head-Engineering

5.0 DEFINITION:

- The process of evaporating or boiling a liquid and condensing its vapors.
- purification or separation of mixture by using different evaporation rates or boiling points of their components.
- the process of obtaining the essence or an extract of a substance, usually by heating it in a solvent.

6.0 PROCEDURE:

6.1 START-UP:

- 6.1.1** Ensure the Cooling tower circulation of MCDP system is ON.
- 6.1.2** Switch ON Main Power Supply.
- 6.1.3** The 'Log In' screen shall appear.
- 6.1.4** Press on 'Log In' button and Enter the USER name and PASSWOD.
- 6.1.5** Wait for 'System Ready to Start' Signal.
- 6.1.6** Press the START button on the above mentioned signal displayed on screen.
- 6.1.7** Check the setting of the parameter.
- 6.1.8** Crosscheck Steam Pressure between 3 kg/cm² to 6 kg/cm².
- 6.1.9** Open the Bypass Column Condensate Drain Valve partially to drain the initial condensate.
Wait till the Steam is coming out from the Column Condensate Drain Valve.



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6.1.10 Close the Bypass condensate valve after 2 Minutes.

6.1.11 Wait till the Feed Pump Gets ON.

6.1.12 Wait till the WFI starts coming out.

6.2 SHUT DOWN:

6.2.1 Press the MAIN screen button.

6.2.2 The START and STOP button shall appear on screen.

6.2.3 Press STOP button from MMI.

6.2.4 After reducing Distill Water Temperature to low Set Point, Cooling Pump will get OFF.

6.2.5 Open all manually operated Valves to drain out the Water remains. After some time close all Manual Operated Valves.

6.2.6 Switch OFF Main Panel.

6.3 Records the details in “**Multi Column Distillation Plant Log Book**”, attached as **Annexure-I**.

7.0 ABBREVIATIONS:

SOP Standard Operating Procedure

Amps Ampere

ID No. Identification Number

Ltd. Limited

QA Quality Assurance

EN Engineering

8.0 ANNEXURES:

Not Applicable

9.0 DISTRIBUTION:

- Controlled Copy No. 01 Head Engineering
- Master Copy Quality Assurance Department

10.0 REFERENCES:



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- Operation & Maintenance Manual of Multi Column Water Still, Make Pharm lab.

11.0 REVISION HISTORY

Revision No.	Change Control No.	Details of Changes	Reason of Changes	Effective Date	Done By