



**Title: Preventive Maintenance of Chilling Plant**

<b>SOP No.:</b>		<b>Revision No.:</b>	00
<b>Effective Date:</b>		<b>Supersedes No.</b>	Nil
<b>Review Date:</b>		<b>Page No.</b>	1 of 3

**1.0 OBJECTIVE**

1.1 To lay down a procedure for the Preventive Maintenance procedure for the Chilling Plant.

**2.0 SCOPE**

2.1 This procedure applies to the Engineering department.

**3.0 RESPONSIBILITY**

3.1 Engineering

**4.0 ACCOUNTABILITY**

4.1 Plant Head

**5.0 REFERENCE (S)**

5.1 In-house.

**6.0 PROCEDURE**

- 6.1 Before starting Preventive maintenance of Chilling Plant put the Chilling Plant in stationary position & the drive unit is "switched off"
- 6.2 Put "**Machine Under Maintenance**" label on the panel board.
- 6.3 Operator or above has to ensure and verify the check points for the preventive maintenance as shown in the check list of this SOP. He or she has to enter all the details in these check list .
- 6.4 After the completion of preventive maintenance, check the machine for smooth Operation.
- 6.5 Remove "**Machine under Maintenance**" label on the panel board after completion of the Maintenance.
- 6.6 The operator / technician who performs the job will enter his name / sign in "Done By" column and responsible Engineer/ Officer will put sign in "Checked by" column Department head will review the record every Month.
- 6.7 Monthly preventive maintenance is to be carried out as per the following check points:
- 6.7.1 Check the refrigerant lines with soap solution for any leakages.
  - 6.7.2 Check the feed line sight glass for proper refrigerant level.
  - 6.7.3 Check the oil level of the compressor.
  - 6.7.4 Check the all interlocks for proper operation. If any problems observed rectify as per the situation.
  - 6.7.5 Check all valves for proper operation, if any leakages are observed rectify the Problem as per the situation.
  - 6.7.6 Check all gaskets for any leakages, if any leakages are observed rectify the Problem as per the situation.
  - 6.7.7 Drain out the entire water from the Hot well and cold well and change with fresh Soft water.
  - 6.7.8 Check all electrical connections (compressor control panel, all pump motors, fan motor) for any loose connections, burned contacts, signs of Overheated wires etc.



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<b>Review Date:</b>		<b>Page No.</b>	2 of 3

- 6.7.9 Check the discharge temperature of the compressor from log sheets, if required de scale the condenser unit.
- 6.7.10 Check all valves for proper operation, if any leakages are observed change the gasket or replace with a new one .
- 6.7.11 Check all gaskets for any leakages, if any leakages are observed rectify the problem as per the situation.
- 6.7.12 Drain out the entire water from chilled water loop and replace with fresh water.

**7.0 HISTORY**

7.1 Details are given below.

SOP No.	REASON FOR CHANGE	EFFECTIVE DATE

**8.0 ABBREVIATIONS:** The abbreviations used in the SOP are:

- 8.1 SOP - Standard Operating Procedure
- 8.2 No. - Number



# PHARMA DEVILS

ENGINEERING DEPARTMENT

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<b>Review Date:</b>		<b>Page No.</b>	3 of 3

## Monthly Preventive maintenance check list of Chilling Plant

Area:  
Equipment No.:

Date:

S.No	Description of the job	Done / Not Done	Remarks
1	Before starting Preventive maintenance of Chilling plant "switch off" the panel board.		
2	Put the board of " <b>Machine Under Maintenance</b> " on the panel board		
3	Check the refrigerant lines with soap solution for any leakages.		
4	Check the feed line sight glass for proper refrigerant level.		
5	Check the oil level of the compressor.		
6	Check all valves for proper operation, if any leakages are observed rectify the problem as per the situation.		
7	Drain out the entire water from the Hot well and cold well and change with fresh Soft water.		
8	Check all gaskets for any leakages, if any leakages are observed rectify the problem as per the situation.		
9	Check all electrical connections (compressor control panel, all pump motors, fan motor) for any loose connections, burned contacts, signs of Overheated wires etc.		
10	Check the discharge temperature of the compressor from log sheets, if required de scales the condenser unit.		
11	Start the chiller as per sop.		
12	Check the all interlocks for proper operation. If any problems observed rectify as per the situation		
13	Remove the board of " <b>Machine Under Maintenance</b> " on the panel board		
14	Start the Chilling plant.		

\_\_\_\_\_  
Done by  
(Sign & date)

\_\_\_\_\_  
Checked by  
(Sign & date)