

# PHARMA DEVILS

ENGINEERING DEPARTMENT

<b>Title:</b> Operation of Air Compressor & Air Dryer					
SOP No.:	Revision No.:	00			
Effective Date:	Supersedes No.	Nil			
Review Date:	Page No.	1 of 3			

#### 1.0 OBJECTIVE

To describe a procedure for the operation of air compressor and air dryer.

#### 2.0 SCOPE

This procedure applies to the Engineering department.

#### 3.0 RESPONSIBILITY

Engineering

#### 4.0 ACCOUNTABILITY

Plant head.

#### 5.0 REFERENCE (S)

In-house.

#### 6.0 PROCEDURE

- 6.1 Pre Start Checks:
  - 6.1.1 Check the level of the water in the cooling tower sump. If less, make up by opening the raw water valve.
  - 6.1.2 Remove the moisture from the air receiver through the moisture trap.
  - 6.1.3 Check the motor electrical connections.
  - 6.1.4 Ensure that the discharge valve of air compressor is OPEN.
  - 6.1.5 Check for the oil level in the compressor. It should be more than half. If less, make up with 220 grade oil.
- **6.2** Procedure for starting of the air compressor.
  - 6.2.1 Switch on the power supply from the panel.
  - 6.2.2 Inch the air compressor and check the direction of rotation of pulley. If the direction marked on the compressor matches with the pulley direction, switch on the air compressor.
  - 6.2.3 Check the air receiver pressure. If the air pressure is between  $6-7 \text{ kg}/\text{cm}^2$ , start the air dryer by pressing the GREEN PUSH button.
  - 6.2.4 Check the loading and unloading at preset pressures.
  - 6.2.5 Check & record the observations as per Annexure No-1 after every 2 Hours.
- **6.3** Procedure for shut down of the air compressor.
  - 6.3.1 Switch off the of air compressor from the panel.
  - 6.3.2 Switch off the air dryer from the RED push button.
  - 6.3.3 Keep open all the valves to release the air for 5 minutes and close thereafter.

#### 7.0 HISTORY

SOP No.	REASON FOR CHANGE	EFFECTIVE DATE



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

SOP - Standard Operating Procedure

No. - Number

QA - Quality Assurance





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## **ANNEXURE -I**

### AIR COMPRESSOR

S.No.	Date	Time	Oil Pressure		Cooling Water		Air Receiver	Dew Point Position	Done by	Remarks
			Before (2.0-3.0) Kg/cm <sup>2</sup>	After (2.0-3.0) kg/cm <sup>2</sup>	Inlet Pressure (1.5-2.0) kg/cm <sup>2</sup>	Outlet Pressure (1.0-1.5) kg/cm <sup>2</sup>	Pressure (6.5-7.5 kg/cm <sup>2</sup> )			

**Checked By:**