

S. No.	Description	Qty Nos.
1	<b>OIL FREE ROTARY COMPRESSOR AIR SYSTEM</b>  <b>Flow Rate: 7.5-8.0 m<sup>3</sup>/min (CMM) at 7.5 bar pressure. Driers and line filters having specifications as per page-2/4)</b>	02

## **Technical Specifications of Oil Free Rotary Air Compression Units**

### **A. General Description:-**

Compressed Air Production system including 02 No's Oil Free Rotary Air Compressors, 02No's No Compressed Air Driers and 02 sets of Line Filters along with 05 Years operational spares including line filter cartridges having features as given below.

### **B. Air Compressor Specifications:-**

Type: Oil Free Rotary Type (*Zero Oil Carry Over*). Water Lubricated.

Quantity: 02 No's

Capacity: 7.5 to 8.0 m<sup>3</sup>/min (Actual) at 7.5 bar pressure.

Working Pressure: 7.5 bar.

Power Supply: 380-420 V, 3 Phase, 50 Hz.

Driving Source: Either Direct or belt driven with Siemens, ABB, Toshiba or Equivalent make Electric motor having insulation class: IP 55/65 of appropriate rating fitted on a self-aligned attachment.

Sound Limit <75 dB at 1 meter distance with Enclosure.

### **(I) Attachment & Accessories:-**

Compressor should be fully equipped with all standard attachments, safeties and accessories including Pressure and Temperature Indicators/Gauges, Switches, Valves, Control attachments and controllers required for full Automatic Control operation of unit along with provision of built-in modern control panel.

Unit should be complete in all respect mounted on a common steel frame, fully aligned in a detachable paneled metallic housing (enclosure) along with dust filter assembly and dust filters at suction/inlet of unit.

### **C. Air Drier:-**

Type: Preferably Refrigeration Type.

Quantity: 02No's

Capacity: 11-12m<sup>3</sup>/min. (High Humidity during Monsoon)

Power Supply: 380-420 V, 3 Phase, 50 Hz.

Air Quality: Odorless, Moisture and Oil free supply of air at maximum flow

Sound Limit <75 dB at 1 meter distance with Enclosure.

Operation Time Suited for long term round the clock operation 24 hours 07 days a week.

**(i), Air Drier Assembly and Attachment:-**

The unit should be complete in all respect mounted on a steel frame, in a detachable paneled metallic housing (enclosure) and is fully equipped with all standard attachments, safeties, and instruments required for its smooth operation.

**(ii) Mounting and Accessories:-**

The system should be provided with all the mounting, accessories and safeties that would ensure smooth continuous oil and moisture free air at desired pressure,

**D. Line Filters:-**

02 No's set of Line Filters separate for each units ensuring odorless, moisture and oil free air having capacity according to capacity of compressor suited for long term round the clock operation (24hours 07 days a week).

**E. Scope of Supply:-**

- i- 02 No's of oil free rotary air compressors, complete in all respect having capacity and other features mentioned below.
- ii- 02 No's of Compressed Air Driers (Refrigerant Type) for delivering moisture / oil free air, ready for operation and complete in all respect having capacity as mentioned below.
- iii- 02 No's set of line Filters for ensuring moisture, oil free, odorless air and etcetera having capacity according to the capacity of Air Compressor.
- iv- 05 Years operational spares including spare line filter cartridges.
- v- Bidder will provide necessary guarantee / warranty in respect of supplied compressed Air unit against any abnormality in its operation.
- vi- Set of special tools (if any) required for carrying out necessary repair and maintenance work.

**F. Documents / Drawings:-**

Bidder should be responsible for provision of at least 02 No's of set of below mentioned documents / drawings in English language for the supplied units.

- i- Certificate by manufacturer that equipment being supplied is brand new.
- ii- Warranty certificate by manufacturer that equipment being supplied have been manufactured with good workmanship and are free from any defect. In case of some manufacturing defect the equipment will be replaced free of cost.
- iii- Equipment part and assembly drawing.
- iv- Unit Installation drawing and manuals.
- v- Operation / Maintenance manual describing operation of unit, trouble shooting of equipment, maintenance techniques/ methods and maintenance schedule and etc.

- vi- Detail of standard parts with part number and its manufacturing name.
- vii- Control and Electric wiring diagram of unit.
- viii- Testing and Calibration certificate of all supplied equipment, instruments and safeties.

**G. Make:-**

The system should preferably be of Air Horse Guangzhou, CHINA or Equivalent make having country of origin preferably Peoples Republic of CHINA or Equivalent.