

## Oil Flooded Screw Compressor Test Rig <u>About</u>

The Compressor test rig is used to test various lubricating oils regarding their usability in the compressor GA VSD15 from Atlas Copco. Compressor test rig to evaluate the compressor oil performance under a variety of operating Condition predict expected oil service life .Compressor able to run ISO VG oil 32 to 100.The Compressor should have high reliability for uninterrupted operation for at least 4000 hours. It should have sufficient Instruments and sensors for monitoring and fault diagnosis and appropriate controls with interlock for safe operations.

This compressor test rig has 4 parts for smooth running of this test rig.

- (I) Compressor part: In this part 15 kw motor with screw type compressor is mounted with air dish end for air compressor. All required sensor and item are mounted in this section. Oil & air cooling and heating system are provided in this part.
- (II) Power control unit: For the smooth running of system we are providing a VFD control unit with mains power supply.
- (III) Data acquisition system (DAQ): In this section we are providing data control through PLC.
- (IV) Air storage: we are using this air storage for storage the compressed air for testing of outlet pressure temp and flow.





## **Technical Details**

Item name	Item description
Male Adaptor (F1.1-F1.4)	1" BSPM X 1" tube od , Working pressure : 13 bar , working media : air , MOC: brass , working temp : 120 deg C
Elbow (2.0)	90 Elbow , Size : 1" Tube OD X 1 " Tube OD , Working pressure : 13 bar , working media : air , MOC: copper
Reducer (F3.0)	1" BSPM X 1/2" BSPM , Working pressure : 13 bar , working media : air , MOC: MS
Male Adaptor (F4.1-F4.2)	1/2" BSPM X 1/2" BSPM , Working pressure : 13 bar , working media : air , MOC: MS
Male Adaptor (F5.0)	1/2" BSPM X 1/4" tube od , Working pressure : 13 bar , working media : air , MOC: SS
Gauge Adaptor (F6.0)	1/2" BSPF X 1/4" tube OD , , Working pressure : 13 bar , working media : air , MOC: SS
Manifold -I	As per drawing
copper tube	size : 1 " X 1 mm wall thk , working pressure: 13 bar ,working temp : 120 degC
copper tube	size : 1/4" , working pressure : 13 bar , working media : air ,





## **KEY FEATURES**

- 1. Compressor
- 2. Determination of volumetric efficiency
- 3. Mechanical Efficiency
- 4. Isothermal Efficiency
- 5. Gauge Adaptor
- 6. Copper tube





## **Application**

Oil & Gas industry

Food industry

