

Rotary Air Compressor Test Rig. KFM-26

Specifications:

- Vane compressor Rotary compressor, driven by 0.5HP single phase motor.
- Calibrated orifice meter with water manometer 300 mm height to measure air intake.
- Air Tank 300 mm x 300 mm.
- Energy enter to measure input of the meter.
- Pressure gauge to measure discharge pressure.
- Control valve at delivery side.
- Stop clock.
- Temperature Indicator 0 to 200 °C.
- Storage tank suitable.

Range of Experiments:

To determine volumetric efficiency, power consumption and free air discharge of compressor.

Electrical Analogy Apparatus KFM-27



- The Electrical Analogy Instrument shall have following facilities: The Apparatus Is In Two Parts Namelv:
- Experimental Setup.
- Analogue Field Plotter.
- The experimental set up consists of a transparent tank of 400 - 450 mm area and 75 mm depth. In this • It shall be supplied with user's tank the model under study is to be installed. The model is to be designed as per the requirement out of copper and Bakelite plates. A sample model arrangement will be given with the setup.
- · A probe is mounted on a trolley, which can traverse in two planes

fitted on tray to locate equipotential lines. X – Y Co – ordinate of the probe at each be locate on the scale fitted on the cross slide.

- Necessary potential can be given with the help of analogue field plotter can be displayed on the meter provided.
- manual and necessary accessories.

Range of Experiments:

To verify the very fundamental Flow Net Rule - 'Flow lines and Equipotential lines must always intersect at right angles

Gear Pump Test Rig KFM-28

Specifications:

- Gear pump with 1/2 HP motor with three speed cone pulley, mounted over the sump tank.
- Discharge measurement tank.
- Pressure gauge for discharge head and vacuum gauge for suction vacuum.
- Energy meter for power input.
- · Pressure relief valve in discharge pipe.
- Needle valve to control discharge pressure.

Following characteristics can be determined.

- a) Speed V/S Discharge.
- b) Head V/S Discharge.
- c) Discharge V/S input power.
- d) Discharge V/S efficiency.





