

Product Name :
Reciprocating Pump Test Rig for engineering schools

Product Code :
Fluid Machinery005

Description :

Reciprocating Pump Test Rig, technical teaching equipment for engineering

RECIPROCATING PUMP TEST RIG (VARIABLE SPEED)

DESCRIPTION :

The present Reciprocating Pump Test Rig is a self-contained unit operated on closed circuit basis containing a sump tank. The set-up consists of a Double acting, Single Cylinder Reciprocating Pump coupled with a DC Motor Power input to the DC Motor is varied by means of a Thyristor controlled DC Drive to vary the RPM of motor. A RPM Indicator with Proximity sensor indicates the RPM of Pump. Flow of water is measured by using measuring tank and stop watch. Vacuum gauge is fitted on suction line and Pressure gauge is fitted on delivery line to measure the pressure.

EXPERIMENTATION:

- To determine total head, overall efficiency, pump efficiency and volumetric efficiency of the reciprocating pump.
- To plot Graph: Head vs Discharge Pump efficiency vs Discharge.

UTILITIES REQUIRED :

- Electricity

Supply : Single Phase, 220 V AC, 50 Hz, 5-15amp
combined socket with earth
connection.

- Water Supply
- Drain required.
- Floor Area Required: 1.5 m x 0.75 m

TECHNICAL DETAILS :

- Pump
: Double acting, Single Cylinder. Capacity 1 HP

Speed 250 RPM (max.) and Head 5 kg/cm²
- Drive : 1HP DC Motor with Thyristor controlled DC Drive for variable speed
- Sump Tank : Material Stainless Steel, Capacity 65 Ltrs.
- Flow Measurement : Using Measuring Tank (made of stainless steel,
Capacity 40 Ltrs.)and Electronic Stop Watch
- Pressure Gauge : Bourdon type.
- RPM measurement : Digital RPM Indicator with Proximity sensor.
- Energy measurement : Electronic Energy meter, L&T make.
- Tanks will be made of Stainless Steel

Technical Specification :

Reciprocating Pump Test Rig

Naugra Export

Website: www.naugraexport.com, **Email:** sales@naugraexport.com

Address: 6148/6, Guru Nanak Marg, Ambala Cantt, Haryana, India, **Phone:** +91-0171-2643080, 2601773