

Centrifugal Pump Test Rig (Variable Speed With Swinging field Dynamometer)



Product Categories: [Engineering Equipment](#), [Hydraulic Lab](#)

Product Page:

<https://www.labappara.com/product/centrifugal-pump-test-rig-variable-speed-swinging-field-dynamometer/>

Product Description

Centrifugal Pump Test Rig (Variable Speed With Swinging field Dynamometer)

DESCRIPTION :

The present Centrifugal Pump Test Rig is a self-contained unit operated on closed circuit basis containing a sump tank. The setup consists of a Centrifugal pump coupled with a swinging frame type DC Motor which permits direct torque measurement with the help of a spring balance. 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.

Technical Details :

Pump : Kirloskar Make, Capacity 1 HP

Speed 2800 RPM (max.), Head 12 m (max.)

Medium Flow : Clear Water

Drive : 1 HP DC Motor swinging frame type with Thyristor controlled

DC Drive for variable speed.

Spring Balance : Dial type.

Sump Tank : Capacity 110 Ltrs.(approx.)

Flow Measurement : Using Measuring Tank with Piezometer,

Capacity 70 Ltrs.(approx.)

Stop watch : Electronic.

Pressure Gauge : Bourdon type

Control Panel Comprises of:

RPM measurement : Digital RPM Indicator with Proximity sensor.

MCB : For overload protection.

Standard make On/Off Switch, Mains Indicator, etc.

Tanks will be made of Stainless Steel.

An ENGLISH instruction manual consisting of experimental procedures, block diagram etc. will be

provided along with the Apparatus

The whole set-up is well designed and arranged on a rigid structure painted with industrial PU Paint.