

**Product Name :**  
Submersible Pump Test Rig

**Product Code :**  
TOUR0003



## Description :

Submersible Pump Test Rig

## Technical Specification :

The Submersible pump Test Rig is a self-contained unit operated on closed circuit basis containing a sump tank. The experimental unit includes a self-priming Submersible pump, a ball valve on the outlet side and manometers on the inlet and outlet side.

The set-up consists of a submersible pump coupled with a DC Motor.

Power input to the DC Motor is varied by means of a Thruster 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 stopwatch.

Vacuum gauge is fitted on suction line and Pressure gauge is fitted on delivery line to measure the pressure.

An asynchronous motor drives it.

The speed is infinitely adjustable by using a frequency converter.

A ball valve is used to adjust the head.

The experimental unit is positioned easily and securely on the work surface of the pump draws in water from the tank on the flow rate is determined volumetrically by flowing back into the measuring tank.

### FEATURES:

Characteristic curve of a Submersible pump

Investigation of a Submersible pump

Drive with variable speed via frequency converter

Determining the flow rate

Recording the pump characteristics for different speeds

Power and efficiency curves

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Measuring the electrical drive power  
Ball valve to adjust the head  
Manometers on the inlet and outlet side of the pump  
Digital display of speed and power  
Measuring the inlet and outlet pressure  
Determining the hydraulic power  
Calculating the efficiency  
SPECIFICATION:  
Pump :  
Variable speed  
Maximum flow rate: 70lpm  
Maximum head: 7 mtr  
Power rating: 0.75 kw  
Measuring instruments :  
Pressures gauge/sensors  
Vacuum gauge/sensor  
Flow meter  
Power required: 230v 1ph 50hz

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