

## BERNOULLI'S THEOREM APPARATUS (EE-1521)

The equipment is designed and fabricated to demonstrate the Bernoulli's theorem. It consists of a test section made of acrylic. It had convergent and divergent sections. Pressure tapings are provided at different locations in convergent and divergent section.

Present set-up is self contained water re-circulating unit, provided with a sump tank, centrifugal pump etc. An arrangement is done to conduct the experiment on different flow rates. Flow rate of water is measured with the help of measuring tank and stopwatch.

### SCOPE OF EXPERIMENTATIONS:

- To verify Bernoulli's Theorem experimentally.
- To plot the Total energy line Vs distance.

### UTILITIES REQUIRED:

- Water Supply.
- Drain
- Electricity 0.5 kw, 220V AC, Single Phase.
- Floor Area 1.5 x 0.75 m.



### TECHNICAL DETAILS:

- Test Section : Material Acrylic(One Piece)
- Piezometer Tubes : Material P.U. Tubes (9 Nos.)
- Water Circulation : FHP Pump, Crompton/Kirlokar make.
- Flow Measurement : Using Measuring Tank with Piezometer, Capacity 25 Ltrs.
- Sump Tank : Capacity 70 Ltrs.
- Inlet Tank : Capacity 20 Ltrs.
- Stop Watch : Electronic
- Control Panel comprises of Standard make on/off Switch Mains Indicator Etc.  
Tanks will be made of Stainless steel.
- The whole set-up is well designed and arranged in good quality painted structure.