

ORIFICEMETER SET-UP (EE-1691)

The apparatus consists of one pipe line contain an acrylic orifice meter. The pressure tapings from the orifice meter are taken to differential manometer to measure pressure difference. In Orifice meter the flow can also be regulated by using the bypass valve provided at the downstream of water. Present set-up is self-contained water re-circulating unit, provided with a sump tank and a centrifugal pump etc. flow control valve and by-pass valve are fitted in water line to conduct the experiment on different flow rates. Flow rate of water is measured with the help of measuring tank and stop watch.

SCOPE OF EXPERIMENTATIONS:

- To determine co-efficient of discharge through Orifice meter.
- To demonstrate the use of Orifice meter as Flow meters.

UTILITIES REQUIRED:

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



TECHNICAL DETAILS:

Orifice meter : Material Clear Acrylic compatible to 1" Dia. Pipe.
Water Circulation : FHP Pump, crompton/Standard make.
Flow Measurement : Using Measuring Tank with Piezometer, Capacity 25 Ltrs.
Sump Tank : Capacity 50 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 arrangement in good quality painted structure