

VENTURIMETER & ORIFICEMETER SET-UP (EE-1527)

The apparatus consists of two pipelines emerging out from a common manifold. One pipe line contain a Venturimeter and other contains an orifice. The pressure tapings from the Venturimeter and orifice meter are taken to differential manometer to measure pressure difference. The Venturimeter an Orificemeter are connected in parallel and any one of them can be put in operation by operating valves provided at the downstream. The flow can also be regulated by these valves.

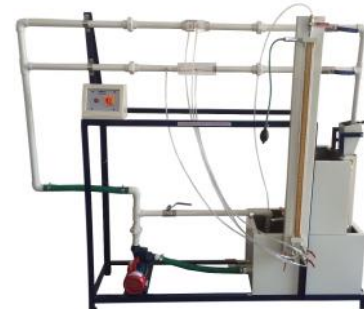
Present set-up is self-contained water re- circulating unit, provided with a sump tank and a centrifugal pump etc. flow control valve and by-pass valve are fitted in water line to conduct the experiment on different flow rates. Flow rate of water is measured with the help of measuring tank and stop watch.

SCOPE OF EXPERIMENTATIONS:

-) To determine co-efficient of discharge through Venturimeter and Orificemeter.
-) To demonstrate the use of Venturimeter & Orificemeter 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:

-) Venturimeter : Material Clear Acrylic Compatible to 1" Dia. Pipe.
-) Orificemeter : Material Clear Acrylic compatible to 1" Dia. Pipe.
-) Water Circulation : FHP Pump, Kirloskar/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.