

## DISCHARGE OVER NOTCHES APPARATUS (EE-1523)

The lab setup consists of a channel having sufficient length and width in which water is supplied from the bottom. Required Notch is fitted at one end of this channel. A hook gauge with Vernier Scale is fitted to measure the height of fluid in flow channel. Arrangement for fixing interchangeable notches is made Set of three brass notches, i.e. rectangular notch, 60 V notch & 45 V notch is provided along with the set-up.

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 stopwatch.

### SCOPE EXPERIMENTATIONS:

- ) To determine co-efficient of discharge (Cd) through.
- ) V notch(45° and 60 °)
- ) Rectangular Notch.

### UTILITIES REQUIRED:

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



### TECHNICAL DETAILS:

- ) Channel Test Section : Size 600 x 250 x 180 mm.
- ) Weirs : Material Brass (3 Nos.)
  1. Rectangular Notch.
  2. 45° V notch
  3. 60° V notch
- ) Hook/Pointer Gauge : With Vernier scale.
- ) Water Circulation : FHP Pump, Kirloskar/Standard make.
- ) Flow Measurement : Using Measuring Tank with Piezometer, Capacity 25 Ltrs.
- ) Sump Tank : Capacity 70 Ltrs.
- ) Stop Watch : Electronics.
- ) Control Panel Comprised of : Standard make On/Off Switch, Mains Indicator, etc.
- ) Tanks and Channel will be made of Stainless Steel.

The whole set-up is well designed and arranged in a good quality painted structure.