

### KFM-04 Heleshaw Apparatus

Flow through pipes, channels may be laminar or turbulent. The type of flow depends upon the rate or volume of flow, surface roughness of pipe/ channel, velocity of fluid. However in most of the cases the flow is turbulent. The Acrylic test section with drain cock test specification with following models.

- 1) Symmetrical aerofoil model
- 2) Square model
- 3) Circular model

#### Specifications:

- Size approx. 220 mm x 360 mm height.
- Transparent Heleshaw Apparatus.
- Suitable stand.
- Two dimensional models of cylinder, aerofoil, Square & triangular.
- Measuring cylinder



### KFM-05 Notch Apparatus



#### Specifications:

- M. S. storage tank (channel) of size 250 mm x 250 mm x 1250 mm Length provided with four sets of baffles and sieves for steadying water supply, fixing arrangement for interchangeable notches. Baffles for steadying water supply. Arrangement for fixing interchangeable Notches. Supporting stand for the equipment.
- Measuring tank of 1000 mm x 300 mm x 400 mm capacity with drain valve & gauge glass.

- Sump Tank size 300 mm x 300 mm X 500 mm.
- Set of 2 brass Notches: (As requirement extra provided with extra cost)
  - 1) Rectangular Notch
  - 2) 'V' Notch. 60°C

#### Range of Experiments:

- To determine Co-efficient of discharge (Cd) through
  - a) Rectangular Notch
  - b) V Notch

### KFM-06 Pipe Friction Apparatus

#### Specifications:

- Three pipes: 15mm, 19 mm & 25mm I. D. nominal diameters approximately connected in a common manifold.
- Pressure tapping at 1 m distance.
- Supporting stand structure for the equipment.
- Measuring tank with drain valve & gauge glass.
- Differential manometer of 300 mm length with mercury.

#### Range of Experiments:

- To determine coefficient of friction for pipes.
- To plot relation between pressure loss & flow rates for a particular pipe diameter.

