

Manufacturers & Exporters of Engineering, Scientific & Laboratory Equipments**HELESHAW APPARATUS (EE-1850)****DESCRIPTION**

The present set-up is designed to visualize the ideal flow around immersed body. It consists of a flow table in which flow of water is circulated in between two transparent sheets with a small gap between them. Water is supplied to the table and a colored dye is injected in the inlet of water flow at different location. Flow is made laminar by operating inlet control valve for water and it is visualized due to transparent sheet and colored dye. A small capacity dye tank is provided which provides flow of dye to be injected in fluid inlet stream. Any obstacle can be placed between the sheets and change in flow pattern can be visualized. Obstacles of different types will be supplied with the apparatus. Present set-up is self-contained water re-circulating unit, provided with a sump tank, inlet calming section, centrifugal pump etc. Water is pumped by means of centrifugal pump and passing through the inlet tank & test section, it returns back to the sump which make the system re-circulating type. Flow control valve and by-pass valve are fitted in water line to conduct the experiment on different flow rates. The supplied set-up is complete in all respect. Only water supply, electricity supply and dye is to be provided by the end user for running the set-up

EXPERIMENTATIONS:

- To visualize the ideal flow around the immersed bodies of different types.

UTILITIES DETAILS:

- Water Supply (Initial fill)
- Floor Drain Required
- Electric Supply : 1 Phase, 220 V Ac, 50 Hz, 5-15 amp combined socket with earth connection
- Floor Area Required : 2 x 1 m.

**TECHNICAL DETAILS:**

- 2 glass plates : minimum size 1000 mm x 500 mm.
- Distance between glass plates : 5 mm.
- Bottom glass plate with minimum eight water connections to act as source/ sinks.
- Two tanks connecting the glass plates 1000 ml capacity.
- One tank for contrast medium (ink) of minimum 200 ml capacity with an inlet valve to control flow.
- Rhodamine-B : two bottles of 100 ml each
- Minimum 8 valves for source connections, and 8 valves for sink connections.
- One inlet valve for controlling the inflow through sources.
- 6 drag bodies to visualize streamflow around them.
- One outflow valve to drain water from the tanks.
- Total of 19 nozzles, one for each valve with appropriate size
- An ENGLISH manual will be provided along with the Apparatus.
- The whole setup is well designed and arranged in a good quality painted structure.