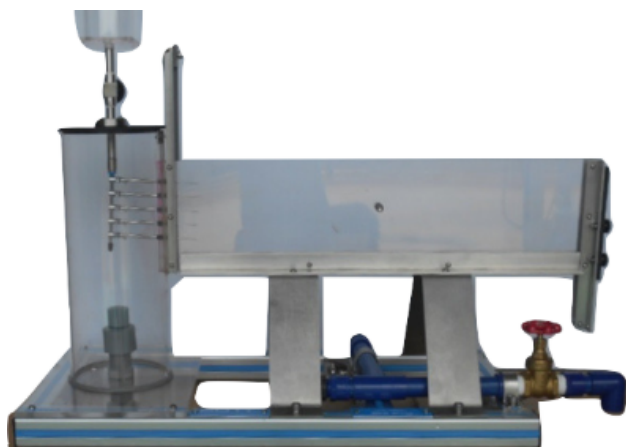


FLOW CHANNEL TRAINER

Model Number : GOTT-FCT-01



DESCRIPTION

GOTT-FCT-01 is designed to help students to visualize a range of open-channel flow behaviour and also to visualize flow pattern around immersed object in steady flow. Open-channel flows are those that are not entirely included within rigid boundaries; a part of the flow is in contact with nothing at all, just empty space. The surface of the flow thus formed is called a free surface, because that flow boundary is freely deformable, in contrast to the solid boundaries. The boundary conditions at the free surface of an open-channel flow are always that both the pressure and the shear stress are zero everywhere. But a flow can have a free surface but not be an open-channel flow. Closed-conduit flows that consist of two immiscible fluid phases of differing density in contact with each other along some bounding surface are not open-channel flows, because they are nowhere in contact with open space, but they do have a freely deformable boundary within them. Such flows are free-surface flows but not open-channel flows, although they are usually called stratified flows, because the density difference between the two fluids gives rise to gravitational effects in the flow. On the other hand, open-channel flows are by their definition also free surface flows. In a narrow technical sense, flows of liquid at the Earth's surface, like ocean-surface currents or rivers, are not open-channel flows, because they are in contact with another fluid—the atmosphere—at a free surface within a two-phase fluid medium. But the contrast in density between water and air is so great that in studying Earth-surface liquid flows we usually ignore the presence of the overlying atmosphere. The main purpose of this equipment is to provide an indication of the range of open-channel flow phenomena that can occur and visualise flow around the models; quantitative analysis is not required. The relevant theoretical background is provided in many basic texts in fluid mechanics.

FEATURES

- Clear acrylic working section fed from stilling tank
- Six different models for investigation
- Dye injection system
- Quick release fitting for easy connection to hydraulics bench

EXPERIMENT TOPICS

- Determination of Open Channel Flow Behavior
- Determination of Flow Pattern Visualization

Manuals :

- (1) All manuals are written in English
- (2) Model Answer
- (3) Teaching Manuals

General Terms :

- (1) Accessories will be provided where applicable.
- (2) Manual & Training will be provided where applicable.
- (3) Design & specifications are subject to change without notice.
- (4) We reserve the right to discontinue the manufacturing of any product.

Warranty :

2 years

ORDERING INFORMATION :

ITEM	MODEL NUMBER	CODE
FLOW CHANNEL TRAINER	GOTT-FCT-01	200-008

* Proposed design only, subject to changes without any notice