SCIENTICO INDIA
Manufacturer & Exporter · Ambala, Haryana, India

PRODUCT DATA SHEET
Catalogue reference for product evaluation

Phone: +91 7015865225 **Email:** info@scienticoindia.com **Web:** scienticoindia.com **Address:** #71, Industrial Area, Ambala Cantt, Haryana, India

Flow Visualization Apparatus | FluidoSurge-X 200

Category: Fluid Mechanics · **Country of Origin:** India

Product Overview

The Flow Visualization Apparatus is designed to demonstrate laminar, two dimensional potential flow. It enables clear visualization of streamlines, sources, sinks, and flow around bodies. Made by Scientico India, ISO 9001:2015 certified, and supplied with a calibration certificate and operation manual.

View this product online: https://scienticoindia.com/product/flow-visualization-apparatus-fluidosurge-x-200/



Request a model-specific quotation
Include quantity and delivery country.

Technical Specifications

Parameter	Specification
Model	FluidoSurge-X 200
Type	Flow Visualization Apparatus
Principle	Potential flow using Hele Shaw cell
Plate Size	338 x 395 mm
Plate Gap	2 to 3 mm
Flow Medium	Water
Contrast Medium	Ink
Water Connections	8 connections for sources and sinks
Injection Points	12 ink injection points
Upper Plate	Hinged glass plate
Bottom Plate	Cross shaped water connections
Models Material	Acrylic

Key Features

Key Features-

- Demonstration of potential flow using a Hele Shaw cell
- Visualization of streamlines with ink contrast medium
- Flow around drag bodies and through varying cross sections
- Overlay of parallel flow with sources and sinks
- Formation of Rankine half bodies and dipoles
- Hinged top plate for quick model replacement

Applications-

- Visualization of flow around bodies such as cylinders and guide vane profiles
- Study of flow through nozzles, sudden contraction, and enlargement
- Demonstration of flow separation and ninety degree deflection
- Modelling potential flow using sources, sinks, and dipoles
- Analogy studies between fluid flow and other Laplace equation based systems

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Construction & Design Details-

The apparatus consists of two parallel plates with a controlled narrow gap to generate laminar two dimensional flow. The upper glass plate is hinged for easy insertion and removal of models. The bottom plate includes eight water connections that can be activated individually or in combination. Valves allow precise control of water flow rate and ink injection for clear streamline visualization. A grid on the observation panel supports accurate interpretation of flow patterns.

Export & Supply Capability-

SCIENTICO manufactures the Flow Visualization Apparatus FluidoSurge-X 200 for domestic and international supply. The unit is suitable for export to engineering colleges, universities, and research laboratories. Standard packing, fittings, and documentation are provided with each unit.

Ordering & Delivery

- Send the product name, quantity, delivery country and destination with your enquiry.
- Production schedule, freight, payment terms and export documents are confirmed in the written quotation.

Frequently Asked Questions

Q1. What type of flow is demonstrated by this apparatus?
It demonstrates laminar, two dimensional potential flow.

Q2. How are streamlines visualized during experiments?
Streamlines are visualized by injecting ink as a contrast medium into the water flow.

Q3. Can flow around different bodies be studied?
Yes, interchangeable models such as cylinders, guide vane profiles, and geometric shapes are included.

Q4. Can sources and sinks be combined during experiments?
Yes, multiple water connections can be activated to form sources, sinks, dipoles, and Rankine half bodies.

Q5. What medium is required for operation?
The apparatus uses water as the flowing medium and ink for visualization.

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