

## Flow Visualisation Apparatus (EDC-FM-104)

### EXPERIMENTAL DATA:

Visualization of streamlines in

- flow around drag bodies like Cylinder, Aerofoil and Bluff body
- flow through changes in cross-section
- Formation of a Rankine half body and oval

Influence of sources and sinks



### DESCRIPTION:

The Unit is used to study various source and sink arrangements, and look at flow around an unlimited variety of different shaped models. This Apparatus can be used to visualize streamline fields for flows around drag bodies and flow through changes in cross-section. The streamlines are displayed in color by injecting a contrast medium (ink). Sources and sinks are generated via four water connections in the bottom plate. The streamlines can be clearly observed through the glass plate during flow around and flow through. The water flow rate and the quantity of contrast medium injected can be adjusted by valves. The water connections are also activated by valves and can be combined as required. Individual models can be cut out of a rubber plate that is included.

This unit can be operated by Laboratory supply or with Hydraulic Bench (EDC-FM-100).

### TECHNICAL DATA:

- 10 drag bodies and changes in cross-section
- Rubber plate for your own models
  - LxW: 300x450mm and 2mm thick
- Flow chamber contains two plates
  - distance between the plates: 3mm
  - upper plate made of PMMA/glass
  - bottom PMMA/glass plate with four water connections for sources/sinks
  - size experiment area: LxW: 400x300mm
- Dye Injectors:
  - 15 needles

### DIMENSIONS AND WEIGHT:

L x W x H (mm): 650 x 550 x 550

Weight: 22 kg



### SCOPE OF DELIVERY:

- 1 x EDC-FM-104
- 1 x Instructional Manual