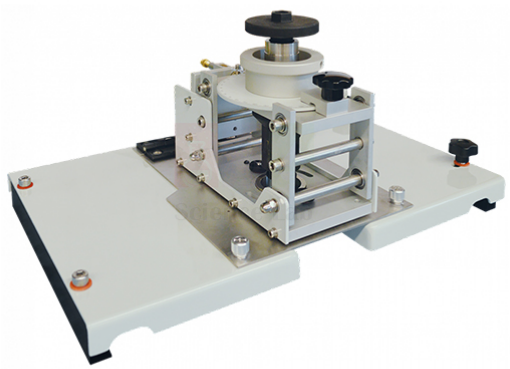
Email : sales@scilabexport.com
Phone: +91-7082934803

**Product Name :**

Lift And Drag

**Product Code :**

SLE/EFM/12



Email : sales@scilabexport.com
Phone: +91-7082934803

## Description :

**Lift And Drag** (Product Code: SLE/EFM/12) is a force balance for measuring the hydrodynamic force on a model placed in the water flow of a laboratory flume. Its balance assembly is an articulated parallelogram linked to a load cell, and a separate display unit shows the measured force. The apparatus is aimed at civil and mechanical engineering departments teaching how bodies in a moving fluid experience lift and drag, and it is built by **Jain Scientific Equipments Pvt Ltd (ScienceLab)**, Ambala, a maker of lab equipment for technical institutes.

### Specifications

| Parameter | Detail |
|---|---|
| Balance type | Articulated parallelogram linked to a load cell |
| Force path | Parallelogram resists bending moments so only the force on themodel reaches the load cell |
| Mounting | Balance assembly sits on a carrier that runs along the rails of theflume |
| Readout | Display unit showing the force measured by the load cell |
| Display mounting | Display unit hangs on the flume |
| Used with | A laboratory flume with rails (flume not listed as part of this item) |

### Typical Use

A test model is attached to the balance and lowered into the flow, and the carrier is rolled along the flume rails to place it in the working section. As water passes the model, the parallelogram linkage keeps the model's orientation steady and passes only the fluid force to the load cell, so turning moments do not distort the reading shown on the display unit. Students change the flow rate or the model's shape and orientation, record the force each time, and plot how it varies — the basis for discussing drag coefficients, streamlining and lift on inclined bodies.

Zero the display with the model in still water before each series, allow the flow to stabilise after every change, and keep the carrier rails clean so the assembly runs freely. As engineering lab equipment in India, the balance suits both undergraduate practicals and simple project work on bluff and streamlined shapes.

### Manufacturer

ScienceLab is the brand under which **Jain Scientific Equipments Private Limited** of Ambala, Haryana, designs, manufactures and supplies hydraulics teaching equipment such as this balance. The company is a registered MSME manufacturer (Udyam UDYAM-HR-01-0003714), and its overseas consignments move under DGFT Importer-Exporter Code AAECJ8618A. Background on the company is on our company profile page.

### Related Fluid Mechanics Equipment

Other