

# **Drag Coefficient Apparatus (EDC-FM-117)**

#### **EXPERIMENTAL DATA:**

- Determination of the viscosity of different fluids
- Determination of the drag coefficient of various spheres
- Visual demonstration of viscosity, simultaneously on two different fluids





### **DESCRIPTION:**

The self-standing unit with two acrylic tubes is a simple falling-sphere viscometer. The tubes are filled with the test fluids.

The two test tubes are filled with the fluid under testing and select a sphere of correct density and size. Then the sphere is dropped into the test fluid at the top of the glass tube. The time that sphere takes to cover the test section is measured with the help of stopwatch (included).

Students may also make their own use shapes to test in the unit. The shapes must fit through the valve at the base (maximum 12 mm in any single dimension). Suitable test fluids include water, thin machine oil, castor oil and motor oil. The apparatus can be used with any fluid that can be safely handled and is chemically compatible with the wetted parts of the equipment - glass and PTFE.

## **TECHNICAL DATA:**

- Transparent Acrylic test section
- Length of test section: 1000mm
- Inner Diameter of test section: 50mm
- Maximum allowable specimen size: 12mm

## **DIMENSIONS AND WEIGHT:**

L x W x H (mm): 490 x 400 x 1650

Weight: 32 kg

#### **SCOPE OF DELIVERY:**

- 1 x EDC-FM-117
- 3 x Test Spheres
- 1 x Stop watch
- 1 x Instructional Manual