

# Jain Laboratory Instruments







Product Code . JL-FML-10025

## **Impact of Jet on Vanes Apparatus**

### **Description**

Impact of Jet on Vanes Apparatus

### **Description:-**

The Set-up consists of two sided clear fabrication.

Water is fed through a nozzle and discharged vertically to strike a target carried on a stem, which extends through the cover.

A weight carrier is mounted on the upper end of the stem.

The dead weight of the moving parts is counter balanced by a compression spring.

The vertical force exerted on the target plate is measured by adding the weights supplied to the weight pan until the mark on the weight pan corresponds with the level gauge.

A total of two targets are provided a flat plat and a hemispherical cup.

#### **Experiments:-**

To measure the force developed by a jet of water impinging upon a different targets (Hemispherical & Flat Plate) and comparison with the forces predicted by the momentum theory.

#### **Utilities Required:-**

Water Supply & Drain

Electricity Supply:- Single Phase, 220 VAC, 0.5 kW

**Technical Specification:-**

**Test Plates:-** Material Brass (2 Nos.)

1. Flat Plate 2. Hemispherical Cup

Nozzle:- Material Brass

Stainless Steel Chamber:- Having of opposite sides made of glass

Water Circulation:- FHP Pump, Crompton / Sharp make

Flow Measurement:- Using Measuring Tank with Piezometer, Capacity 40 Ltrs.

**Sump Tank:-** Capacity 60 Ltrs.

**Stop Watch:-** Electronic

Control Panel:- On / Off Switch, Mains Indicator etc.

The whole Set-up is well designed and arranged in a good quality painted Structure.