

IMPACT OF JET ON VANES APPARATUS (EE-1524)

The setup consists of a two sided clear fabrication section 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. A 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 plate and a hemispherical cup.

SCOPE OF EXPERIMENTATIONS:

To measure the force developed by a jet of water impinging upon a stationary object and comparison with the forces predicted by the momentum theory.

UTILITIES REQUIRED:

Hydraulic Bench

TECHNICAL DETAILS:

Test Plates : Material Brass(2 Nos.)
1. Flat Plate
2. Hemispherical Cup
Nozzle : Material Acrylic
Stainless Steel enclosure : Having of opposite side made of glass.

The whole set-up is well designed and arranged in a good quality painted structure.

