

Product Name :
Astra Scientific Impact of A Jet Apparatus

Product Code :
Fluid Mechanics Lab0020



Description :

Astra Scientific Impact of A Jet Apparatus

Technical Specification :

DESCRIPTION:

The module consists of a cylindrical tank with lateral transparent surfaces where a nozzle, connected to the Hydraulics Bench is aligned with a device in which the problem surface is fitted. The vertical force made by the water against the surface is measured using calibrated weights that balance this force. Taking as a reference a gauge, which has been previously adjusted to a zero reference, we measure the force thanks to a mark that appears on the surface where the masses were placed.

The dead weight of the moving parts is counterbalanced 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.

Holes made on the tank base in order to drain the water. In this way, splashes are avoided.

FEATURES:

- Discharge nozzle inside clear acrylic cylinder
- Impact against a flat surface.
- Impact against a curve surface of 120° .
- Impact against a hemispherical surface.
- Measurement of the jet forces via the weight-loaded scale
- Apparatus could be accommodated on the top surface of fluid mechanics bench
- Flow rate could be measured via the flow meter of the fluid mechanics bench.
- Use of the fast connectors.
- Measuring the force exerted on different targets and comparison with the forces predicted by momentum theory

SPECIFICATIONS:

- Jet diameter: 8 mm.
- Impact surfaces diameter: 40 mm.
- Impact surfaces:

180° hemispherical surface. 120° curve surface. 90° flat surface.

- A set of masses of 5, 10, 50 and 100 g. is supplied.
- Easy and quick coupling system built-in.

Address: K-88, 20th Street, Annanagar, Chennai, India – 600040 **Phone:** +91-8860605265



Astra Scientific

www.astrascientific.com, **Email:** info@astrascientific.com