

Tesca Impulse Turbine Test Apparatus is widely used for pumping liquids in several applications including domestic, industrial, irrigation and drainage. The Impulse Turbine is a small scale impulse turbine unit which is designed to be used in conjunction with the service unit. An impulse turbine uses the momentum transferred from the impact of a jet of water onto the turbine blades to generate power. The Impulse Turbine is an experimental set-up necessary for any Fluid Mechanics and Hydraulics Laboratory of an educational institution.

Tesca Impulse Turbine Test Apparatus consists of an inlet manifold which supplies water to four jets which are equally spaced around the turbine runner. Each of the jets can be individually controlled using ball valves. The runner itself is mounted on a horizontal shaft with a clear acrylic splash guard to allow maximum visibility of the workings. The unit incorporates a pressure sensor to measure the inlet condition of the water. This pressure can be accurately controlled using the software supplied with the service unit.

The impulse Turbines a compact unit and all components and instrumentation are placed in a robust and mobile frame. The complete unit is manufactured from corrosion resistant material.

OPTION:

Computer based learning software is included to enable students to understand and conduct experiments, tabulate results and plot graphs. The Tesca Impulse Turbine Test Apparatus is an important experimental set-up for any Fluid Mechanics and Hydraulics Laboratory of an educational institution.

List of Experiments:

- Determining the characteristics of the turbine including the relationships of volume flow rate, head, torque produced, power output and efficiency to rotational speed.
- Comparison of nozzle and throttling control of an Impulse Turbine

Services Required:

1. Single phase electrical supply, 220-240 V, 50 Hz.
2. Water supply and drainage.



Overall Dimensions:

Length : 1200mm.

Width : 600mm.

Height : 800mm.

The manual describing the theoretical and practical aspects of the apparatus, operation and maintenance, analysis of results and sample of results will be supplied with the equipment.

Note: Specifications are subject to change.

Tesca Technologies Pvt. Ltd.

IT-2013, Ramchandrapura Industrial Area, Sitapura Extension,
Near Bombay Hospital, Vidhani Circle, Jaipur-302022, Rajasthan, India,
Tel: +91-141-2771791 / 2771792; Email: info@tesca.in, tesca.technologies@gmail.com
Website: www.tescaglobal.com