

Forced Vortex Apparatus



Product Categories: [Engineering Equipment](#), [Hydraulic Lab](#)

Product Page: <https://www.labappara.com/product/forced-vortex-apparatus/>

Product Description

Forced Vortex Apparatus

Forced Vortex Apparatus] set up consist of a circular transparent cylindrical tank in which plate is rotated with the help of a variable speed motor so that the cylinder rotates about its vertical axis with the help of a V belt and forced vortex is formed. An upper probe can be transversed horizontally & vertically across full diameter of the vessel so that water surface profile can be measure.

Both axes contain graduations so that exact position of the probe is known.

The experimental set up consist of a circular transparent cylindrical tank in which four circumferential jets have been placed along the circumference of the cylinder near its bottom which helps in the formation of free vortex. It is assumed that the torque exerted by these jets is negligible. The Orifice is reducing bush so that a reduced diameter can be investigated. The plate can also be rotated with the help of a variable speed motor so that the cylinder rotates about its vertical Axis with the help of a V belt and forced vortex is formed. Conditions wear allowed to steady state and the depth of flow at any particular point was observed not to change over a period of time. The experimental procedure involves measurement of resulting free surface that represents the variation of the sum of the pressure and datum

head.

TECHNICAL SPECIFICATION: -

Cylinder : Material Acrylic Dia. 200 mm approx

Height of Overflow point : 150 mm

Drive : FHP variable speed motor, speed way

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

Motor : Variable Speed, DC Motor, Compatible capacity.

Control Panel Comprises of : Speed Control Unit, Standard make On/Off Switch,

Mains Indicator.