

**Product Name :**  
Free And Force Vortex Apparatus

**Product Code :**  
FML0010



**Description :**

Free And Force Vortex Apparatus

**Technical Specification :**

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.

• **SCOPE OF EXPERIMENTS:-**

- Ø To plot the surface profile of a free and forced vortex by measurement of the surface profile coordinates and to show that total energy is constant throughout vortex.

- **TECHNICAL SPECIFICATION: -**

- Cylinder : Material Acrylic Dia. 200mm approx
- Height of Overflow point : 150mm
- Drive : FHP variable speed motor, speed way
- The whole Set-up is well designed and arranged in a good quality painted Structure, Civil Engineering Laboratory Equipments Suppliers, Mechanical Engineering Laboratory Equipments Suppliers  
 , Engineering Teaching Aids, Models Equipments Theory of Machine Lab Suppliers, Hydraulics Laboratory Equipment and Apparatus

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