

Jain Laboratory Instruments







Product Code . JL-FVA-7402

Forced Vortex Apparatus

Description

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Description:-

The experimental set up consists 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 the forced vortex is formed.

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

The experimental procedure involves measurement of the resulting free surface that represents the variation of the sum of the pressure head and datum head.

An upper probe can be transversed horizontally & vertically across the full diameter of the vessel so that water surface profile can be measured.

An arrangement is provided to drain the vessel.

Experimentation:-

To plot the surface profile of a forced vortex by measurement of the surface profile coordinates.

Utilities Required:-
Electricity supply: Single Phase, 220 V AC, 50 Hz, 5-15 amp combined socket with earth connection.
Earth voltage should be less than 5 volts.
Floor Area Required: 1 m x 1 m.
Water Supply (Initial fill).
Drain required.