

Fluid Mixing Apparatus



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

Product Page: <https://www.labappara.com/product/fluid-mixing-apparatus/>

Product Description

Fluid Mixing Apparatus

Description :

For a processing vessel to be effective the volume of fluid circulated by the impellers must be sufficient to sweep out the entire vessel in a reasonable time. The velocity of the stream leaving the impeller must be sufficient to carry the current to the remotest parts of the tank. Liquids are most often mixed in some kind of tanks or vessels, usually cylindrical in form and with a vertical axis. Tank bottom is rounded to eliminate regions into which the fluid currents would not penetrate. In the present set-up mixing is done with the help of stirrer. The stirrer is complete with SS Impeller with SS Shaft coupled to FHP DC motor. The speed of agitator can be varied with the help of Thyristor controlled DC Drive and power consumption is measured by Digital Voltmeter & Digital Ammeter. Four replaceable baffles are provided to prevent swirling. One 4-bladed propeller and one 6-bladed turbine are provided which are interchangeable. Drain valve is also provided at the bottom. Effectiveness of power consumption in fluid mixing can be performed with and without baffles hence increasing the range of experimentation. The whole set-up is mounted on a rigid MS frame structure.

Technical Details :

Tank (approx.)	: Material Stainless Steel. Dia. 300 mm, Depth 400 mm
Stirrer	: SS Impeller with SS Shaft coupled to Standard make FHP
Variable Speed	Motor and Drive.
Agitator turbine)	: Stainless Steel shaft & impellers (i.e. one propeller & one
Baffles	: Material Stainless Steel, 4 Nos. 2" width. (detachable).
Sampling point	: 4 Nos. at random locations.
RPM Measurement	: Digital RPM Indicator, Non Contact type with Proximity sensor.
Digital Voltmeter	: 0-300 Volts
Ammeter	: 0-5 Amps.
Instruction Manual	: An ENGLISH instruction manual will be provided along with the Apparatus