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Product Name :Fixed Fluidized Bed Apparatus

Product Code: LBNY-0005-11600018



Description:

The apparatus consists of a water and an air system. Each has a fluidized column and a pump. Air or water is supplied to the column via bottom porous plate and escape and the top. Fixed & Fluidized Bed Apparatus bench top apparatus is designed for a study of fluid bubbling phenomena in fixed and fluidized beds of solid particles. Control valve varies the rate of flow. Two sizes of bed materials are supplied. Measurement of flow rate is by rotameters and pressure drop is by manometers.

Experiments:

Visualization of fluidization Pressure drop through packed and fluidized beds for both water and air systems Observation of difference between particulate and aggregative fluidization Verification of Carman Kozeny equation.

Technical Specification:

Technical Data:

Fluidized column:

a. Glass tube with 1mm scale.

b. 50 mm diameter x 550 mm long.

Bed plate: Porous material.

Air rotameter : 1 ea.
Water manometer : 1 ea.
Water pump : 1 ea.
Air manometer : 1 ea.
Water rotameter : 1 ea.

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Air compressor : 1 ea.

Bed material: Alumina oxides or washed sand, two sizes.

Power supply: 220V 1Ph 50 Hz.



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