

FLUIDIZED BED CHARACTERISTICS (EE-1649)

DESCRIPTION

The setup consists of a glass column with fluidizing material i.e. beads, S.S. mesh to support the beads and with calming section. Pressure drop across fluidization can be measured by manometer. The setup studies in fluidization characteristics and relationship between the velocity of the fluid and pressure drop per unit length. The apparatus is close circuit type provided with suitable capacity tank, FHP pump, necessary pipeline valves and a Rotameter to measure the flow rate of fluid. The setup is fitted on a MS frame painted with good quality paint.

EXPERIMENTATION

- To study fluidization characteristics.
- To study relationship between velocity of fluid and pressured roper unit length.

UTILITIES REQUIRED

- Electricity 500 watts, 220V, 1 Phase.
- Floor Area 0.75m x 0.75 m.

TECHNICAL DETAILS

- Column : Material Borosilicate Glass
- Packing : Glass Beads
- Water tank : Material Stainless Steel, Capacity 30Ltrs.
- Water Circulation : FHP Pump, Kirloskar/Standard make.
- Flow Measurement : Rota meter for water
- Pr. Drop Measurement : Manometer
- Instruction Manual : An ENGLISH instruction manual will be provided along with the Apparatus
- The whole set-up is well designed and arranged in a good quality painted structure.

