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**Product Name :**  
Fluidization and Fluid Bed Heat Transfer Unit

**Product Code :**  
LBNY-0002-710004



**Description :**

Fluidization and Fluid Bed Heat Transfer Unit

**Technical Specification :**

Fluidization and Fluid Bed Heat Transfer Unit

The Fluidization and Fluid Bed Heat Transfer Unit, has been designed to provide visual and quantitative results related to the flow of air through a packed bed and a fluidized bed made of granular material. It provides clear experimental possibilities for the research of the heat transfer in a fluidized bed.

The main element is a glass chamber, lit from behind, where a granular material is contained. A fluid (air), supplied to the bed through the bottom thanks to a distributor, passes through that material. Nine different distributors are provided so that they can be compared during the process. They have different number of orifices, different sizes of orifices and different distribution of orifices.

Air is expelled through the upper side of the chamber, crossing a filter that removes the particles that may have been dragged by the air when crossing the bed before releasing it to the atmosphere.

When the air speed is slower than the so-called expansion rate, the flow only crosses the fixed bed. When the speeds are faster than that expansion rate, the bed is softened, so that the state of the solid particles change, being suspended and forming a fluidized bed.

To regulate this flow of air the unit has a regulation valve at the inlet and flow meters to measure that flow of air. The chamber of the bed has a heating element for the study of the heat transfer in the fluidized bed, measuring the temperature of the inlet air, the temperature of the outlet air, the temperature of the fluidized bed, the temperature of the heating element surface and the supplied heating power. Both the temperature sensors of the bed and the heating element as the heating element itself may be vertically displaced, enabling to perform the practical exercises at different heights of the chamber.

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The pressure drop in the bed can be determined with a U-shaped manometer.  
Two types of granular material of different size are supplied to form the bed.

Fluidization and Fluid Bed Heat Transfer Unit, Fluidization and Fluid Bed Heat Transfer Unit Equipments,  
Fluidization and Fluid Bed Heat Transfer Unit Tools, Fluidization and Fluid Bed Heat Transfer Unit Tool Kits,  
Fluidization and Fluid Bed Heat Transfer Unit Manufacturers, Fluidization and Fluid Bed Heat Transfer Unit  
Suppliers from India, China, Kenya



**Laboratory Instrument India**