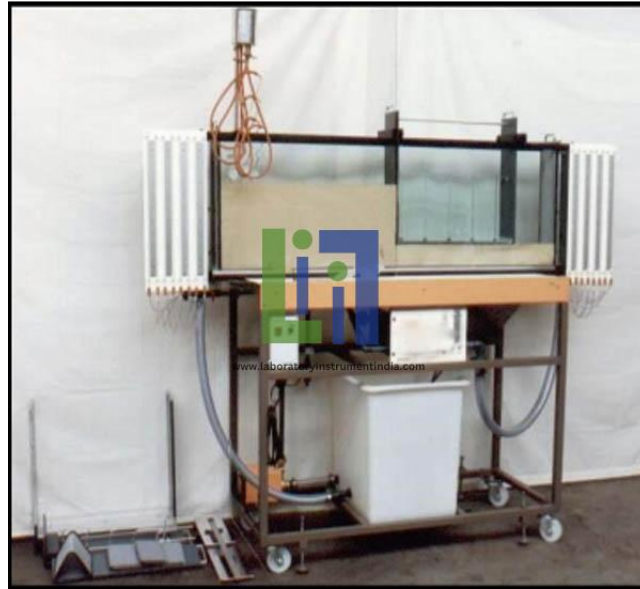




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**Product Name :**  
Permeability Apparatus

**Product Code :**  
LBNY-0005-16000026



#### **Description :**

A dye injection system allows four dye lines to be generated which highlights visualisation of flow lines and allows flow nets to be drawn for seepage analysis. Scales on the front panel assist in the preparation of models. Permeability Apparatus consists of a framed glass tank, of internal dimensions 1900 mm long by 530 mm high and 130 mm front to back. The base of the tank incorporates fourteen pressure tappings at 100 mm pitch, the tappings are specially designed to prevent the ingress of sand particles. Flexible tubes connect the tappings to two multitube manometer banks scaled 0 to 500 mm, for measurement of the water table height along the tank. The tank is mounted on a fabricated steel frame fitted with castors and levelling feet. The front, back and ends of the tank are of clear toughened glass giving scratch free visibility without the risk of abrasion of the inner surfaces by the permeable medium. Scales on the front panel assist in the preparation of models and in the preparation and recording of flow nets. Washed silica sand graded 0.2 mm to 1.0 mm should be used as the permeable medium which must either be ordered separately or supplied by the end user. Coarser material may also be used. An activated carbon decolourising filter is provided in the sump tank to prevent the progressive dis-colouration of the water by prolonged use of dye.

#### **Technical Specification :**

##### **Experimental Capability:**

Confirmation of Darcys Law and measurement of the Coefficient of Permeability  
Drawdown in two-dimensional horizontal flow  
Demonstration of piping in the development of quicks and conditions  
Construction of flownet diagrams  
Distribution of uplift and lateral pressures on walls and structures  
Two-dimensional drainage test

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Seepage flow under sheet piling and foundation slabs Stability of slopes  
Flow through a permeable earth dam, with and without toe-filter  
Seepage flow under an impermeable embankment or dam

**Features:**

Two-dimensional permeability tank

Permeable dam toe-filter

Fourteen pressure tappings and multitube manometer

Stainless steel mesh end baffles

Dye injection system for tracing flow patterns and activated carbon de-colourising filter

Independently adjustable supply and drain header

Models of impermeable sheet piling and foundation slab

Scratch resistant toughened glass front and rear sides.



**Laboratory Instrument India**