



#### Features:

- Unit designed for a practical demonstration of the Hydrological principle of Groundwater flow.
- The tank is manufactured from Fiber-reinforced plastic and all components in contact with water are non-corroding materials.

Tesca Ground Water Flow Unit consists of Sand Tank manufactured from Fibre Reinforced Plastic for durable life & corrosion-free operation. The tank is mounted on a free-standing steel frame. The tank is to be filled with a layer of fine sand. The tank has inlet & outlet connections at each end. Each connection has a flow control valve to maintain the desired water level in the tank. The bed has 19 pressure tappings at the base that are connected to a 19 tube piezometer panel at the front to indicate the profile of the water table in the sand. For studies of abstraction, two wells are provided at the base of the tank. Water can be supplied to the unit from Hydraulic Bench or Tap Connection inside the lab.

#### Specifications:

- Tank:-
  - Length: 990mm
  - Width: 490mm
  - Depth: 235mm
- Piezometer: Range: 0 to 155mm , Calibrated 1mm intervals
- Overall Dimensions
  - Length: 1115mm
  - Width: 585mm
  - Height: 530mm

#### Ordering Specifications:

- A bench-standing sand tank capable of demonstrating, on a small scale, the hydrological principles of groundwater flow.
- The unit allows simple three dimensional flow situations to be set up quickly and measurements of piezometric levels taken at appropriate positions within the model under study.
- The accompanying instruction manual describes six basic demonstrations of importance in Engineering Hydrology.

#### Experiment Capabilities:

- Hydraulic gradients in groundwater flow, including the effect of permeability.
- Cone of depression for a single well in an unconfined aquifer
- Abstraction from a single well in a confined aquifer
- Cone of depression for two wells.
- Dewatering of an excavation site using two wells
- Draining of a polder or lake.

#### Required Services:

- Electricity supply: 220/240V/1PH/50Hz
- Hydraulics Bench or cold water supply
- Drain for cold water
- 0.1m<sup>3</sup> of clean 0.6-2.0mm washed and graded coarse sand.

Note: Specifications are subject to change.

#### **Tesca Technologies Pvt. Ltd.**

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