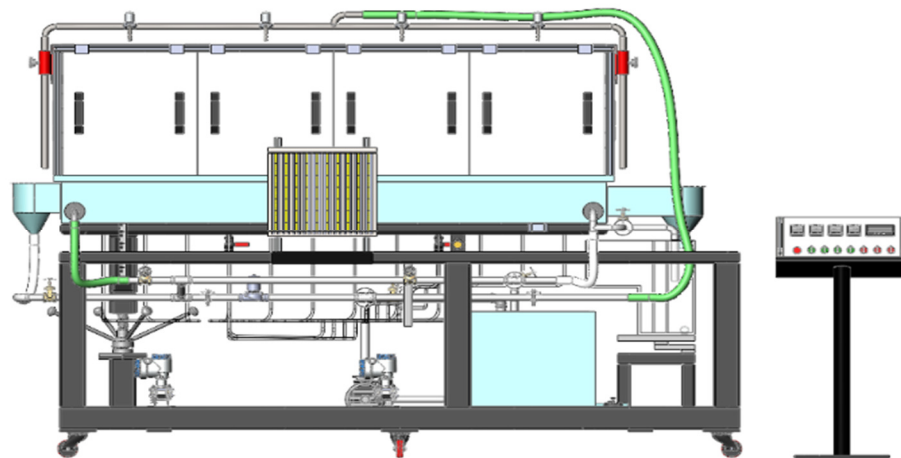


RAINFALL SIMULATOR (EE-2549)



DESCRIPTION:

This apparatus demonstrates some of the major physical processes found in hydrology. The unit comprises a rectangular open Sand tank, made of stainless steel 304 grade. In this equipment we will be Investigate the precipitation-discharge relationships, storage capacity of soils, seepage flows, groundwater flows, and sediment transport, etc. It Generate variable precipitation density and areas and different groundwater supply and drain possibilities to allow a wide variety of experiments. It will contain a closed water circuit with a storage tank (Will be made off Stainless steel 304 grade sheet having thickness 2mm) and Self priming centrifugal Pump. Sand filled stainless steel Experimental tank (material of the tank is Stainless steel 304 grade) with inclination adjustment as the core element. it will consist of two groups of four nozzles and separate the experiment tank from the chambers by fine mesh screens. It Will Provide two wells with open seam tubes to study the lowering of groundwater Allow the generation of a course of a river by means of a small weir in the supply and drain, and different water levels. Allow opening and closing of the water supply and water drain to enable a wide variety of experimental conditions.

EXPERIMENTATION:

- Facility to study the runoff and streamflow behaviors at varying rainfall and land characteristics

Manufacturers & Exporters of Engineering, Scientific & Laboratory Equipments

UTILITIES REQUIRED:

- Electricity supply: Single Phase, 220V AC, 50 Hz, 5-15 Amp combined socket with earth connection. Earth voltage should be less than 5 volts.
- Water Supply: Initial fill
- Floor drainage
- Floor Area Required: 3m x 1.5m.

TECHNICAL DETAILS:

- Frame : Made up of stainless steel with tilting mechanism (2 m x 1 m stainless steel tank, tiltable using a dual linked jacking system)
- Experimental Tank : Material Stainless Steel 304 Grade,
Dimensions 2 m x 1 m. Depth 0.2 m.
Inclination adjustment Range up to -1% to +5%.
- No. of stainless spray nozzles: 8 or more with flow rate adjustment and measurement
- Pump : centrifugal pump
- No. of flow meters : 2 (3 Lpm and 5 Lpm)
- Outlet tank allowing both water and sediment flow to be collected and measured
- A large durable plastic sump tank plus a centrifugal pump operated in single phase electric supply
- An ENGLISH instruction manual consisting of experimental procedures, block diagram etc. will be provided along with the Apparatus.
- The whole setup is being well designed and painted with good quality paint