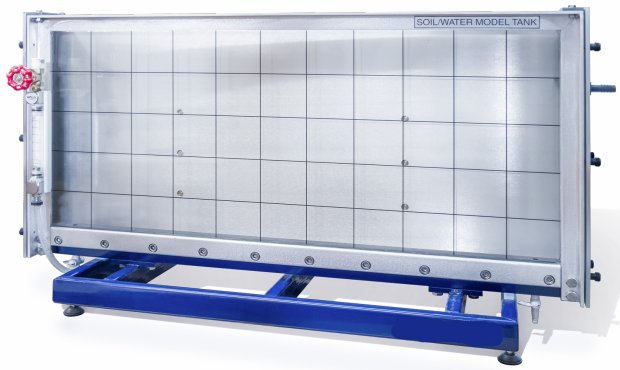

Introduction:-

- The Surface Irrigation Apparatus, has been developed to help students of irrigation understand more fully the interaction of factors which influence water movement both on the soil surface and in the soil profile. The equipment allows actual surface irrigation experiments to be performed on a small scale in the laboratory.
- The apparatus consists of a narrow transparent fronted tank, which may be partially filled with any soil type. It is supported on a bench mounted frame. The equipment is self-contained with a sump tank, pump and flow meter fitted behind the tank.
- Water may be discharged along the soil surface or directed to twin drip nozzles to demonstrate trickle irrigation. Measurement of rates of water penetration into the soil is aided by a grid on the tank front. Removable end plates enable soil samples to be changed quickly and easily

Scope of learning :

- Understand surface and sub-surface effects of surface water application
- Understand optimum irrigation application rates to maximise infiltration and minimise surface run-off
- Demonstrating the effect of rate of discharge on the advance and infiltration of water into the soil
- Demonstrating the effect of soil texture on the advance and infiltration of water into the soil
- Demonstarting the effect of land slopes on the advance and infiltration of water into the soil
- Demonstarting the effect of surface irregularities on the advance and infiltration of water into the soil
- Demonstrating the use of drip irrigation methods and how drip rate and spacing of drip points affects the wetted profile within the soil
- Demonstrating by visualising the flow lines how a tile drain works.

Technical Specifications :

- Length : 1.1m
- Width : 0.5m
- Height : 0.75m

Utility Required :

- Electrical supply: 220-240V/1Ph/50Hz
- Cold water supply

Note: Specifications are subject to change, Photos shown above are Indicative, Actual Product can Vary.