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LAKSHMI ENGINEERING WORKS

Mfg & Supp of: Soil, Cement and Concrete Testing Equipment, Survey, Drawing, Hydrological, Metrological, Geological, Scientific Instruments (All type of Water Current Meters)

172(NEW329), Maktoolpuri, Roorkee- 247667 Distt.-Haridwar (Uttarakhand) INDIA **Mobile: 09759467802, Email ID:- lakshmiengworks.in@gmail.com**

Dear Sir,

Subject: PORTFOLIO OF M/s LAKSHMI ENGINEERING WORKS

We take pleasure to introduce ourselves as registered manufacturers & supplier of all kinds of Hydrological & Metrological Instruments as well as River Gauging Instruments.

We are supplying these items to all Government and Semi Government Departments with their entire satisfaction. We are also doing the repair works of these instruments at our workshop. Our all instruments covered a guarantee for one year from the date of supply.

You are therefore requested kindly enlist our firm name on your mailing register & enquire us of our quality instruments, so that we may quote the most competitive prices.

Thanking You

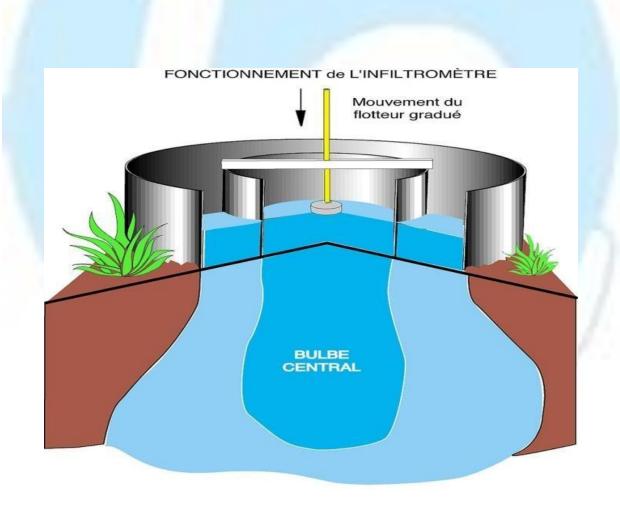
Yours Faithfully

PRAVEEN KUMAR

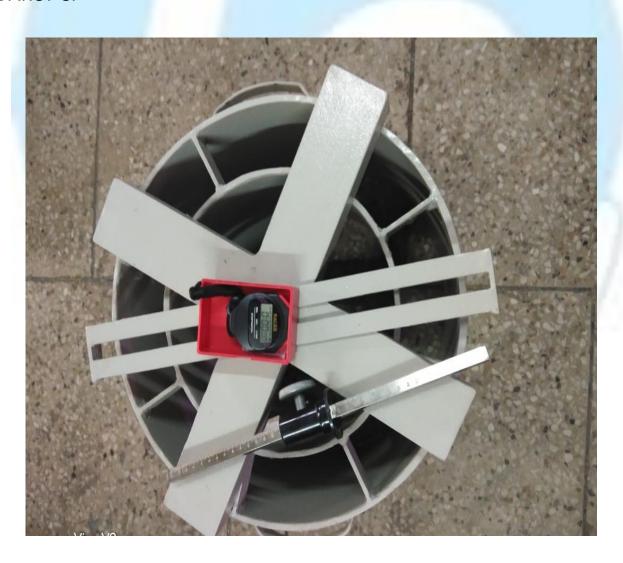
For M/s Lakshmi Engineering Works

DOUBLE RING SOIL INFILTROMETER

The **Double Ring Soil Infiltrometer** is a simple instrument which is used to determine the infiltration rate of water into the soil. The infiltration rate is determinate as the amount of water per surface area and time unit, which penetrates the soils. This rate can be calculated on the basis of the measurements and the Darcy's law. Several measurements can be executed simultaneously, yielding a very reliable and accurate mean result. As vertically infiltrated water runs away to the side. The outer ring of the infiltrometer serves as a separation. The measurement exclusively takes place in the inner ring through which the water runs virtually vertically. The instrument consists of two rings, driving plate, for inner and outer rings. The two rings are driven into the ground and partially filled with water. The double ring design helps prevent divergent flow in layered soils. The outer ring acts as a barrier to encourage only vertical flow from the inner ring. the standard set of the double ring infiltrometer consist of 2 steel rings with different diameters, a hammer, floats, a stainless steel hammering cross and a stopwatch.



The instrument consists of two concentric rings, driving plate, for inner and outer rings, driving plate for inner and outer rings. The outer rings (ID =60 cm) the inner ring (ID=30cm).the two rings are driven in to the ground and partially filled with water. The double ring design helps prevent divergent flow in layered soils. The outer ring acts as a barrier to encourage only vertical flow from the inner ring. The water level is maintained for a specific period of time depending on the type of soil and permeability level. The volume of water needed to maintain a specified level and the time factors are recorded. This information is converted in to a specific infiltration rate. This rate can be calculated on the basis of the measurements and the DARCY'S.



LIST OF EQUIPMENTS AVAILABLE WITH US:

- Automatic Weather Station
- Digital Rainfall Recorder
- Digital Rain Gauge
- Digital Evaporation rate recorder
- Automatic Soil Erosion Monitoring System
- Digital Snow Water Equivalent recorder
- Digital Solar Radiation Recorder (Pyranometer)
- Digital Water level Recorder
- Digital Water level Recorder (Pressure type)
- Digital Water level Recorder (Ultrasonic type)
- Water velocity indicator without sensor
- Water Current Meter
- Soil moisture indicator with sensor
- Soil moisture and temperature recorder
- Leaf Wetness, Air temperature and Humidity recorder
- Plant Canopy Analyzer
- Suspended Solids Indicator
- Digital Soil Tensiometer
- Soil Infilltrometer
- Water Level Indicator
- Cup Counter Anemometer (Mechanical Type)
- Wind Vane (Mechanical Type)
- Open Pan Evaporimeter

- Ordinary Rain Gauge
- Tree Height Gauge
- Stevenson Screen (Single)
- Stevenson Screen (Double)
- Aneroid Barometers
- Sunshine Recorder
- Punjab type Silt Sampler
- Winch (80 Kg)
- Maximum Minimum Thermometer
- Wet & Dry Thermometer
- GPS
- Temperature and humidity sensor
- Wind speed sensor
- Wind direction sensor
- Rainfall sensor
- Water temperature sensor
- Soil temperature sensor
- Solar radiation sensor (Silicon)
- Atmospheric pressure (Barometer) sensor
- Water level sensor (Shaft encoder)
- Water level sensor (pressure)
- Water level sensor (Ultrasonic)
- Evaporation sensor
- Soil moisture sensor
- Snow Water Equivalent (Snow Gauge)
- Leaf Wetness sensor
- Digital Soil Tensiometer sensor