

Jain Laboratory Instruments







Product Code . JL-FML-10024

Friction in Pipe Lines Apparatus

Description

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Description:-

The Set-up consists of 2 pipes of different diameters, which are connected in parallel.

Pressure tapings are provided on each pipe to measure the pressure losses with the help of a Differential Manometer.

Control valves are fitted on each pipe, which enables to use one pipe at a time for experiment.

Present set-up is self-contained water re-circulating unit, provided with a sump tank and a centrifugal pump etc.

Flow control valve and by-pass valve are fitted in water line to conduct the experiment on different flow rates.

Flow rate of water is measured with the help of measuring tank and stop watch.

Experiments:-

To determine the losses due to fiction in pipes

To determine the friction factor for Darcy Weis back equation

Utilities Required:-

Water Supply & Drain

Electricity Supply:- Single Phase, 220 VAC, 0.5 kW

Technical Specification:-

Pipes (2 Nos.):- Material GI of 1/2 " & 1" Diameter

Pipe Test Section:- Length 1 m

Water Circulation:- FHP Pump, Crompton / Sharp make

Flow Measurement:- Using Measuring Tank with Piezometer, Capacity 25 Ltrs.

Sump Tank:- Stainless Steel, Capacity 50 Ltrs.

Stop Watch:- Mechanical / Electronic

Control Panel:- On / Off Switch, Mains Indicator etc.

The whole Set-up is well designed and arranged in a good quality painted Structure.