



Product Code . JL-FML-10023

Study of Pipe Fitting

Description

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The Set-up consists of a $\frac{1}{2}$ bend and elbow, a sudden expansion & sudden contraction fitting from 15 mm to 25 mm, ball valve and gate valve.

Pressure tapings are provided at inlet and outlet of these fittings under test. A differential manometer fitted in the line gives pressure loss of individual fitting.

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 loss of head in the fitting at various water flow rates.

To measure the loss co-efficient for the pipe fittings.

Utilities Required:-

Water Supply and Drain

Electricity Supply: Single Phase, 220 V AC, 0.5 kW.

Technical Specification:-

Sudden Enlargement : From 15 mm to 25 mm

Sudden Contraction : From 25 mm to 15 mm

Bend:- $\frac{1}{2}$

Elbow:- $\frac{1}{2}$

Ball Valve:- $\frac{1}{2}$

Gate Valve:- $\frac{1}{2}$

Water Circulation:- FHP Pump, Crompton / Sharp make

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

Sump Tank:- Capacity 50 Ltrs.

Stop Watch:- Electronic

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

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