

Fluid Flow and Mechanical Operations Lab

1.2 Course Number: CH223L

1.2 Contact Hours: 0-0-2

Credits: 02

1.3 Semester -Offered: 2nd Year-Odd

2. List of Experiments

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1	To determine the co-efficient of discharge (C_d) for Venturi meter
2	Centrifugal Pump Test Rig
3	To determine the co-efficient of discharge (C_d) for Orifice meter
4	To measure point velocity at different points along the cross section in a pipe using Pitot Tube
5	To calculate the pressure drop per unit length of packed bed.
6	To determine the head loss coefficient in the sudden enlargement, sudden contraction, and various fittings in the pipe
7	To calculate the collection efficiency of a given cyclone separator
8	To perform the screening analysis with Rotap Sieve Shaker
9	To calculate the efficiency of a Ball Mill for grinding a material of known work index (W_i).
10	To determine the efficiency of the crusher for crushing a material of known work index (W_i).
11	To study the Laminar and turbulent flow using Reynold's Apparatus
12	To calculate the percentage recovery of coal in froth flotation cell from coal-sand mixture.
13	To determine the specific cake resistance (α) for a given slurry of CaCO_3 using Rotary Vacuum Filter
14	To calculate the pressure drop per unit length of fluidized bed.
15	Two Phase Flow System: To determine the friction factor for flow of a liquid through a packed bed using Ergun's equation and from Leva's correlation