

MODEL NO.
FM-32



HYDRAULIC BENCH (COMPUTERIZED)

Features:

- ❖ Hydraulic bench with necessary accessories forms a needful laboratory facility which enables a detailed Fluid Mechanics experimental course to be followed.
- ❖ Bench is having an open construction for visual appreciation of the apparatus and hence the implication of variation of circuit parameters is easily appreciated.
- ❖ Bench is supported on a frame mounted on wheels for easy moments.
- ❖ The tanks, tray is made of S.S. sheet with powder coated for minimizing the problem of corrosion.
- ❖ The accessories of each experimental apparatus (on which experiments to be performed) are to be placed on the bench.
- ❖ The supply of water to each of the apparatus is made through flexible pipe to run the apparatus individually and independently. The flow is regulated by the control valve.

Technical Specification:

- ❖ Water Tray (S.S.) – 1200mm length, 800mm width and 100mm height.
- ❖ Sump Tank (S.S.) - 900mm length, 600mm width and 300mm height.
- ❖ Centrifugal Monoblock Pump – Single phase 0.5 hp capacity.
- ❖ Control valves and drain valves of Gunmetal.
- ❖ G.I. Pipe line
- ❖ Strong M.S stand.

Experimental Capabilities:

- ❖ To verify the Bernoulli's theorem experimentally.
- ❖ To determination of C_c , C_v and C_d of a Orifice Experiment.
- ❖ To determination of C_d of venturimeter & orifice meter.
- ❖ To determination of friction factor in pipe friction.
- ❖ To determination of minor losses in pipe fitting.

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New Hardwar Road
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Phones: 01332-273721
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- ❖ To determine discharge coefficient of Rectangular and V notch
- ❖ Impact of Jet Apparatus
- ❖ To obtain the Reynolds number in different flow conditions.

Sensors Specifications

- ❖ A turbine type flow meter is provided for measuring discharge.
- ❖ The digital pointer gauge will be provided for measuring the water level in Bernoulli's theorem and Orifice experiment.
- ❖ Two pressure sensors are provided for measuring pressure difference.
- ❖ A hydrostatic level sensor is provided for measuring water level for Notch Apparatus.
- ❖ A load cell of suitable capacity is provided for calculating force in Impact of jet Apparatus.
- ❖ All the sensors will be connected to data logger.
- ❖ The data logger can be connected with computer through RS 232 port.
- ❖ The detailed software will be provided with detailed calculation for measured data.
- ❖ All data can be saved in pdf file format.

Facilities required:

- ❖ Electrical Supply (Single phase, 0.5HP cap.)
- ❖ Water supply

NOTE: APPARATUS SUBJECTED TO BE CHANGE AS PER DEMAND

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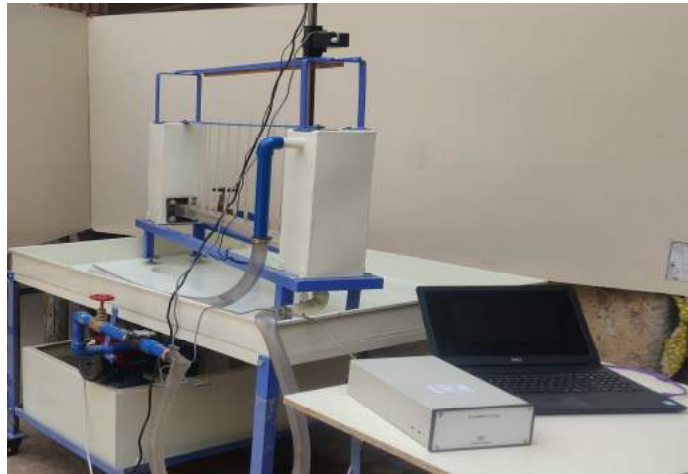
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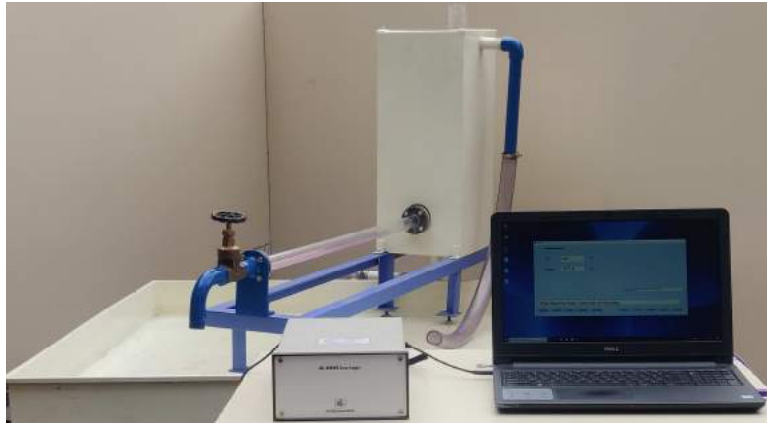
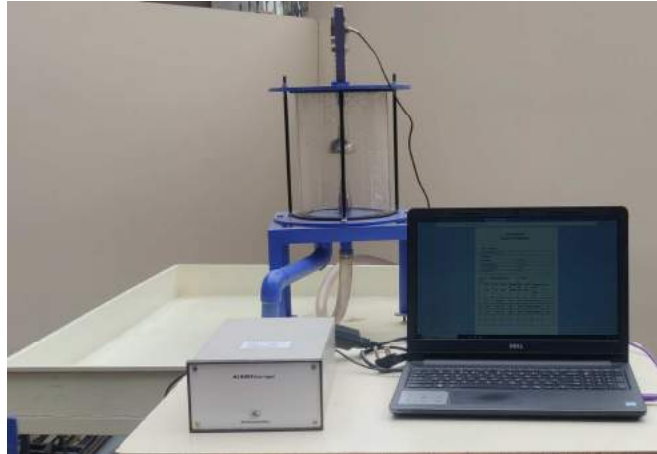
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