

FLUID MECHANICS AND HYDRAULIC MACHINES LABORATORY

The Fluid Mechanics and hydraulic Machines Lab is an indispensable supplement to the theory of Fluid Mechanics.

It helps students to understand by performing experiments on the basic laws and equations used for analysis of static and dynamic fluids.

The main activities of the Laboratory for Hydraulic Machines are teaching, research and service in the field of hydrodynamics of rotating machines such as hydraulic turbines, pumps, etc.

Measurements of critical Performance parameters like efficiency, flow rate etc. of various hydraulic machines such as turbines, pumps are also measured in this lab.

The equipment is operated in a closed loop system which conserves water and averts the need for large quantities of water supply.

The facilities available in the laboratory:

- Turbine flow meter
- Kaplan Turbine
- Multistage centrifugal pump test rig
- Centrifugal pump test rig
- Francis Turbine
- Pelton wheel Turbine
- Reciprocating Pump
- Pipe Friction test rig
- Impact of Jet
- Orifice meter calibration setup
- Venturi meter and Orifice meter
- Loss due to sudden contraction equipment
- Bernoulli experiment

S.No	Name of major equipments	Photo/Image
1.	Turbine flow meter	

2.

Kaplan Turbine



3. Multistage
centrifugal pump test
rig



4.

Centrifugal pump test rig.



5.

Francis Turbine



6. Pelton wheel Turbine



7. Reciprocating Pump



8. Pipe Friction test.



9.

Impact of Jet on Vanes.



10.

Venturi meter and
Orifice meter.



11. Orifice meter setup.



12.

Loss due to sudden contraction



13. Bernoulli's experiment setup.

