# KFM-23 Hydraulic Ram Test Rig.



#### **Specifications:**

- This is a demonstration type model. The hydraulic ram consists of a valve chamber. The valve chamber contains a waste water valve and delivery valve.
- Water to chamber is supplied from an overhead tank and delivered through a pipe of comparatively small diameter at a height above the height of overhead tank.
- The water flow is intermittent or cyclic.
  - Over Head tank-100 lit capacity.
  - Head over Ram 2m
  - Diameter of Supply pipe 50mm.
  - Diameter of delivery 15mm.
  - Valve chamber comprising of waste valve and a delivery valve.
  - A non return valve fitted in delivery pipe.

### **KFM-24 Pressure Measurement Apparatus**

### **Specifications:**

- ½ H.P. pump to circulate water through the piping.
- Sump tank of 1000 mm x 300 mm x 400 mm capacity.
- Measuring tank of 300 mm x 300 mm x 500 mm height.
- · Pressure gauge.
- · Vacuum gauge.
- U-tube manometer 300 mm height.
- Differential manometer 300 mm, 45°C
- Single tube manometer.
- · A technical manual accompanies the unit.

#### **Range of Experiments:**

Measure pressure at different points using U tube manometer, U – tube differential manometer & mechanical pressure gauge.



# KFM-25 Series & Parallel Pump Test Rig.



#### **Specifications:**

- Pumps: 1 HP, 40 to 50 LPM discharge at 20m. Head, 2 nos.
- Motor: 2880 rpm of suitable capacity with variable speed drive. 2 nos
- Measurement Tank OR
- Rotameter:To measure discharge
- Energy meter To measure electrical input.
- Pressure and vacuum gauges one each for each pump.

- Sump Tank of suitable capacity.
- Necessary piping and valves for series and parallel operation of the pumps.

#### Range of Experiments:

- Performance evaluation of individual pumps.
- Study of performance of pump in series and parallel combinations