



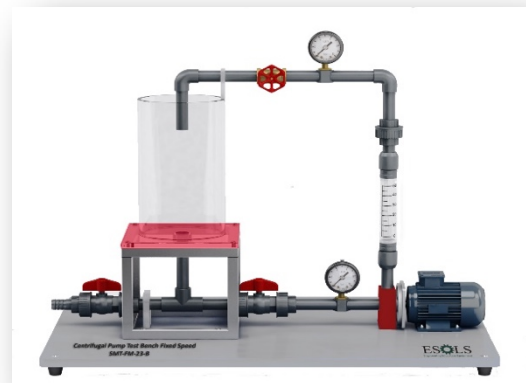
Centrifugal Pump Test Bench (Variable Speed with DAQ Software) (SMT-FM-23-A)

The centrifugal pump demonstration unit is designed for instructional and experiment of Centrifugal Pump. The unit is set up on a stable base plate and includes a pump, tank, all required fittings and devices for flow rate, temperature, and pump speed, intake and discharge pressure. The apparatus has the capability to perform the centrifugal pump characteristics based upon Variable speed and Variable head of the pump.

TECHNICAL SPECIFICATIONS

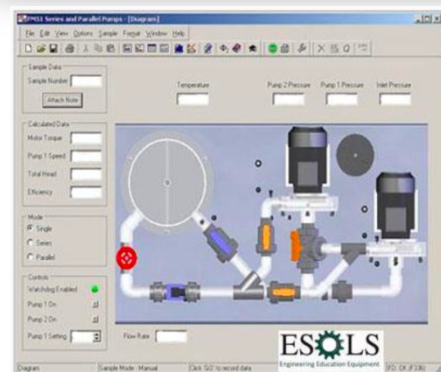
Specifications:

- Functioning behaviour of a centrifugal pump
- Variable speed via frequency converter
- Transparent PMMA tank.
- Sensors of pressure, speed, flow rate.
- Digital display of speed and power.
- ESOLS software with control functions and data acquisition via USB under Windows 7, 8.1, 10



Technical Data:

- Pump:
 - Centrifugal.
 - Power: 1/2hp, 0 to 3000 rpm Variable speed
 - Qmax: 35 L/min
 - Max. Head: 30m.
- Measuring ranges:
 - Pressure Gauge -intake side: -1...+2bar.
 - Pressure sensor -delivery side: -1...+4bar.
 - Velocity sensor: 0...3000rpm.
 - Flow Rate: 3 to 50L/min
- L*W*H:900*600*600
- Weight Approx. 40kg



Experiments:

- Recording of characteristic pump curves at constant and Variable Pump speed.
- Determination of pump efficiency.
- Effect of speed on discharge quantity and head.
- Power and efficiency curves
- Measuring the electrical drive power
- Determining the hydraulic power
- Calculating the efficiency