The Flow Control Setup includes an orifice with a DPT to detect flow rate. A Control Valve with a pneumatic actuator regulates the flow of water. The actuator is controlled by an I to P converter. To determine the actual flow rate, a rota-meter is provided. The system is set up on a tabletop with all of the necessary piping. The electronic panel comprises of DELTA PLC with RS232/USB interfaces the system with computer.

SCADA Software is provided for experimentation, Control action like PD, PI, PID can be conducted. Online data acquisition, trend plot are the salient feature of the system. Off line analysis, Printing of data graph can be done easily. The software is compatible with windows XP operating system. Detail Manual will be provided to conduct experiment.

Specification:
- **Flow Sensor:**
  - Orifice with DPT (Model :ULP-25O-PLC).
  - Turbine type flow Meter (Paddle Wheel) (Model : ULP-25T-PLC)

- **Water Circulation:**
  - FHP Pump with necessary piping (Flexible type)

- **Source Tank:**
  - SS Tank of capacity 20 lt (approximately)

- **Control Valve:**
  - 1/2" Globe valve (Linear) 15mm Stem travel.

- **Actuator:**
  - Diagram type Pneumatic Actuator input 3 to 15 PSI

- **I to P Converter:**
  - Input 4-20mA output 3-15 PSI supply air pressure upto 60 PSI

- **PC Interface card:**
  - DELTA PLC with RS232/USB Port.

- **Power Supply:**
  - 230V 50 Hz

- **Manual Bypass valve:**
- Needle valve(1/2") for Manual Bypass.

- **Flow Measurement:**
  - Rotameter (1500 LPH), Digital Indicator (Optional)

- **Mounting:**
  - Mounted on a powder coated metal frame(appi:650X500X750 LXBXH)

- **Controller:**
  - PLC with SCADA based PID Software to control the process, control Action P,PI,PID. Trend plot with on line and off line, Printing and analysis

Accessories (Optional):
- Digital Flow Indicator with Retransmission output
- Air Compressor
- Personal computer with latest features

Note: Specifications are subject to change.