# Small Plant Model







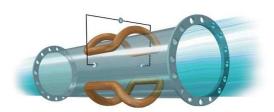
# **FLOW CONTROL**

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**INSTRUMENTATION AND AUTOMATION EDUCATION CENTUM** 

#### MISSION:

"In this Flow Plant model and its textbook education help learners to enhance their understanding about the real world of control engineering



and instrumentation. To inspire them become the practical people who can integrate his/her strong background of theory and practice together."

#### **GENERAL INFORMATION:**

Flow Plant Model is simulation process plant for study and you can knowledge about, Participants and theory of Vortex Flowmeter, Understanding about of Reynolds number, Pressure drop and loss, orifice plate, Differential Pressure Flowmeter to apply to practical in industry in process control such as Flow.

#### **FEATURE:**

Modularized design oriented and safety for operation Easy to calibrate and maintenance

Systematic training media, in-depth coverage basic principles and advanced application fully coverage of :

- 1. Process Variable & Measurement
- 2. Smart Transmitter, Recorder and Controller Operation, Configuration & Calibration
- 3. Calibration of Control Valve
- 4. Feed Back Control (PID Tuning)
- 5. Cascade Control

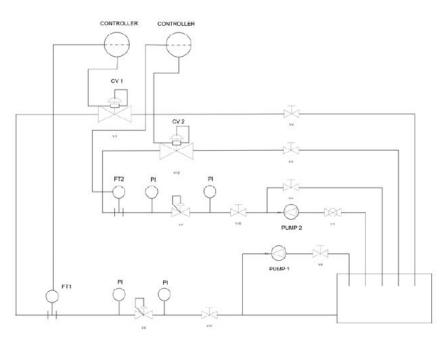






### **TECHNICAL SPECIFICATION:**

Туре	Range	Accuracy (%)
1. Flow Transmitter 1 set (4-Wire)		±0.35% of rate
- Vortex Flow meter	4 - 20 mA , 10.5 to 32 VDC	±0.75% of reading
		(Gas >1%)
2. Final Control Element	AI 1-5 volt DC or 4-20 mA	
- Electro Pneumatic Control Valve	AO 4-20 mA	-
- Power Supply	220 V AC 50 Hz	



**P&I Diagram for Control** 

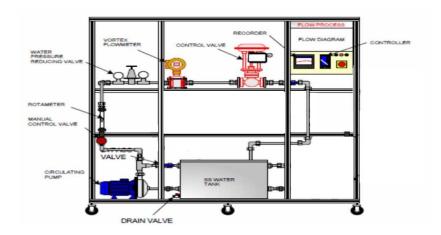






## **Small Plant Model Using for:**

- > Increase knowledge of process control
- ➤ Gain Operating and maintenance experience, confidence, check fault diagnosis and corrective actions in case of process equipment malfunction.
- > Increase operator awareness, skills and safety
- > To know the strategies used to solving problems.
- > Avoid the errors caused it easy to works.
- > Improve working for performance and maximum success.
- > Learn from the real device
- > Trainer Expert

















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