



monitoring the process in SCADA mode.

## Description

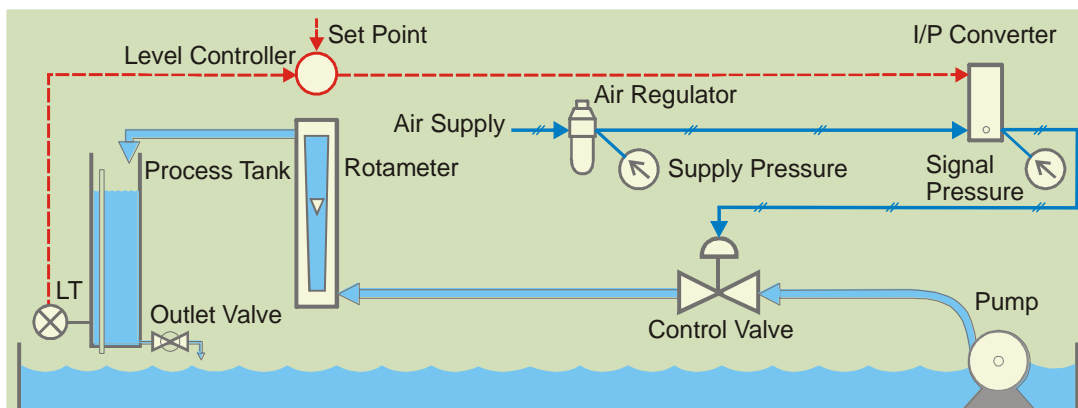
Level control trainer is designed for understanding the basic principles of level control. The process setup consists of supply water tank fitted with pump for water circulation. The level transmitter used for level sensing is fitted on transparent process tank. The process parameter (level) is controlled by microprocessor based digital indicating controller which manipulates pneumatic control valve through I/P converter. A pneumatic control valve adjusts the water flow in to the tank. These units along with necessary piping are fitted on support housing designed for tabletop mounting. The controller can be connected to computer through ethernet port for

## Features

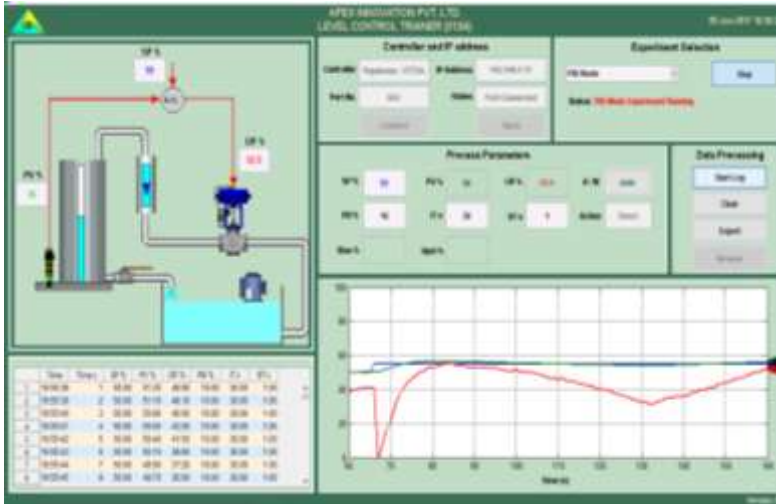
- ON-Off & PID operation
- Open / closed loop tuning
- Auto tuning
- Stability analysis
- SCADA study
- MODBUS communication
- Simulation mode

## Range of Experiments

- Study of open loop (Manual control)
- Study of on/off controller
- Study of proportional controller
- Study of prop. integral controller
- Study of prop. derivative controller
- Study of PID controller
- Tuning of controller (Open loop method)
- Tuning of controller (Closed loop method)
- Tuning of controller (Using Auto Tuning )
- Study of stability of the system (Bode plot)



## Software

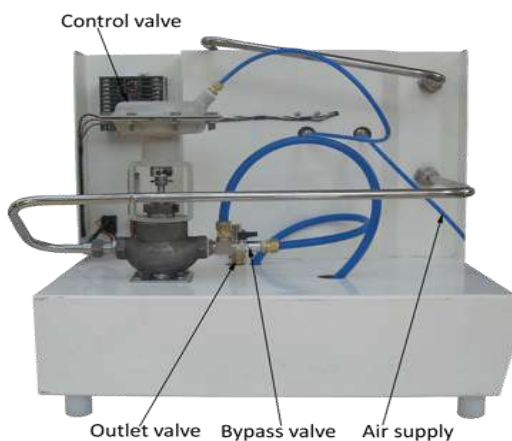


Specially developed SCADA Software is provided which helps in learning the principles of control. Different experiments can easily be selected and studied. The software is easy to use, flexible & with features like Data access, trend plots, Data logging, Printing, Data export.

## Specifications

Product	Level control trainer
Product code	313A
Type of control	SCADA
Control unit	Digital indicating controller with Ethernet communication Make Yokogawa, model UT35
Level transmitter	Type Electronic, two wire, Range 0–250 mm, Output 4–20mA, Make Wika
I/P converter	Input 4-20mA, Output 3-15 psig, Make Control air
Control valve	Type Pneumatic, Size 1/4", Input 3–15 psig, Air to close, Char. Linear, Make Pneucon
Rotameter	10-100 LPH, Make eureka
Pump	Fractional horse power, type submersible
Process tank	Transparent, Acrylic, with 0-100% graduated scale
Supply tank	SS304
Air filter regulator	Range 0-2.5 kg/cm <sup>2</sup> , Make Airmatic
Pressure gauge	Range 0-2.5 kg/cm <sup>2</sup> (1No), Range 0-7 kg/cm <sup>2</sup> (1No), Make Wika
Overall dimensions	550Wx475Dx520H mm

## Back View



## Utilities Required

### Electric supply

230 +/- 10 VAC, 50 Hz, 1 phase

### Water supply

Distilled water @10 liters

### Computer

With standard configuration

### Air Supply

Clean, oil and moisture free air, Pressure 2 Bar, consumption 50 LPH

### Support table

Size: 800Wx800Dx750H in mm



Specifications subject to change without notice

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