

**Product Name :**  
Process Control Trainer AUTOMATION MACHINES LAB

**Product Code :**  
AUTOMATION0002



### Description :

Process Control Trainer AUTOMATION MACHINES LAB

### Technical Specification :

This device as process control and automation instrumentation integrated experimental system is developed for higher education teaching and engineering practice. The device can completes of relevant courses experiment, but also engineering training, graduation& curriculum design platform for students. Also enables engineering technical training and technical practice. The system covers the course: process control; automatic instruments and testing sensing devices; automated meter network communications.

1. AC power supply: three-phase five-wire AC  $380 \pm 10\%$  50 Hz;

1. The basic experiment of process control

(1) Control system compose training

Object hardware device structure and instrumentation operation, the sensor calibration (zero migration and span adjustments) training;

Experimental software and development platform;

Control loop selection and loop connection training;

Frequency water pump operation characteristics and flow determination training;

Regulating Valve Training;

Heat Transfer Characteristics training;

(2) Object mathematics model determination training

The determination training of single-tank water level mathematical model;

The determination training of two-tank water level mathematical model;

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(3) Digital temperature control training

Boiler tank water temperature digital control training;

(4) Single-loop controller training

Upper tank level setting (following) control training;

Tandem connection double capacity middle tank water level setting control training;

Boiler inner tank water temperature setting Control training(dynamic flow of water);

Boiler Jacket water temperature fixed value control training (dynamic flow of water);

Flow-meter flow fixed value control

(5) Cascade control training

Water tank level and flow cascade control training;

Upper & middle water tank level cascade control training;

Boiler water temperature cascade control training;

(6) Ratio control system training

Flow-meter flow variable ratio of single-loop control;

Flow-meter flow variable ratio of double-loop control training;

2. Frequency isobarically Water Supply Training

Frequency isobarically Water Supply Training(Single inverter

3. Industry control configuration software configuration control training

Real-time database configuration, M graphics animation, reports, curve, alarm configuration, equipment communication configuration, script program application configuration training, etc.

 **LAB ENGINEERING**

**Elab Engineering Equipments Manufacturers**