

Product Name :
Process Control Experimental System

Product Code :
CHINAVLABM12130001



Description :

Process Control Experimental System China Engineering Lab Training System Suppliers

Technical Specification :

The system can fulfill the lab exercises as follow:

Basic operating and commissioning

Zero drifting and performance test of pressure transducer

Objective characteristics test of single-capacity self-balance tank

Objective characteristics test of double-capacity self-balance tank

On-off temperature-control experiment

Continuous temperature-control experiment (four control modes: MCU-based control, intelligent instrument control, PLC control, analog PID control)

Intelligent instrument control experiment

Liquid-level PID control for single-capacity tank system (four control modes: MCU-based control, intelligent instrument control, PLC control, analog PID control)

Liquid-level PID control for double-capacity tank system (four control modes: MCU-based control, intelligent instrument control, PLC control, analog PID control)

Flow fixed value control (four control modes: MCU-based control, intelligent instrument control, PLC control, analog PID control)

Pressure PID Control of Single-Capacity Tank System(four control modes: MCU-based control, intelligent instrument control, PLC control, analog PID control)

Quality Analysis of Single-Loop Control System

Wiring Exercises of Cascade Control System

Liquid-Level Cascade Control of Upper/Middle Tank System

Computer-Based Control System

MCU-Based Control System

PLC Liquid-Level Control of Single/double -Capacity Tank System—using PC/PPI communication cable, MCGS configuration software

Flow fixed value control experiment--using PC/PPI communication cable, MCGS configuration software

On/off temperature-control experiment- using PC/PPI communication cable, MCGS configuration software

Continuous temperature-control experiment- using PC/PPI communication cable, MCGS configuration software

PLC cascade control of upper and lower tanks- temperature-control experiment- using PC/PPI communication cable, MCGS configuration software

Cascade control of liquid-level and flow-using PC/PPI communication cable, MCGS configuration software

Including:

Stainless steel frame

Two sets of water tanks made of synthetic glass

Heating tank

Stainless steel reservoir

Two magnetic drive pumps

Turbine flowmeter

Two uncompensated silicon pressure transducers

PT100

U-type electrical heating pipe
control panel

sensor output and display

MCU-based control

PID adjuster control: two
on/off, continuous control

system flow chart

AC frequency conversion control: two

PLC

PC/PPI cable

luxurious computer desk

Bench

Single-phase air breaker with leakage protection

Voltage indicator

Start/stop buttons

Key switch

Solid state relay

Intelligent adjuster

Switching power supply

Configuration software

Accessories and connecting wires

Operating instructions and laboratory manual



Engineering Lab China