



DLGK-373 Process Control Training System

■ Overview

- DLGK-373 process control training system includes the control cabinet, computer desk and process control unit.
- Control cabinet is the center of the whole control system, mainly composed of the power supply module, PLC module, intelligent instrument module, DCS analog input module, DCS analog output module and frequency converter module, its role is to collect a varies of analog, switch signal to calculating, processing, and convey the operational results to actuating equipment to control.

■ Technical Parameter

- Input power : single-phase, three-wire AC 220V \pm 10% 50Hz/60Hz
- Operating power : DC 24V 3A
- Environment temperature : -10°C~ 40°C
- Environment humidity : \leq 90% (25°C)
- Total dimension (process control unit) : 1500 \times 800 \times 1800mm
- Capacity : \leq 2.5KVA

- Electric logic : NPN or PNP

- Occupancy PLC I / O points

Switch input points : 2 way(DC24V) Switch output points : 2 way (DC24V)

Analog input points : 4 way (Current type/voltage type)

Analog output points : 1 way(Current type/voltage type)

■ Optional

- HMI

- CP5611 communication card

- Computer table

■Experiment projects:

Consists understanding experiment of the process control system:

(1) Process control and detection device hardware structure composed understanding, the composition of the control program and control system connection experiment.

(2) Smart regulation instruments, smart transmission instruments such as smart meter operation and parameter settings.

(3) The sensor calibration (zero and span adjustments migration)

Object properties testing laboratories

(1) Single-tank water level mathematical model test experiment

(2) Dual tank water level mathematical model test experiment

(3) Boiler liner water temperature characteristic test experiments

Single-loop control system experiment

Single-tank water level setpoint control experiments

Dual tank water level setpoint control experiments

Boiler liner water temperature setpoint control experiments

Single-loop flow setpoint control experiments

Boiler liner pressure setpoint control experiments

Cascade Control System Experiment

Tank level cascade control experiments

TANK boiler water temperature and circulating water flow cascade control experiments

Tank level with the inlet flow cascade control experiments

Ratio Control System Experiment

Flow ratio control system experiment

Constant pressure water supply experiment

Industry control configuration software configuration control experiments

All experiments were performed including database configuration, graphics, animation, report, curve, alarm configuration, equipment, communication configuration, algorithms, and other experimental configuration