



## 4 Variable process control trainer

Référence : CEB/2000



#### Instrumentation

- Temperature probes Pt100Ω.
- Float flowmeter.
- Electromagnetic flowmeter transmitter.
- Relative pressure transmitter.
- Differential pressure transmitter.
- Guided radar level meter.
- PID configurable controller.
- The 4-20mA signals available on wiring terminals Ø 4mm.

**Dim**: 180 x 65 x 185cm – 290 kg SS tubular framework 40 x 40mm

# Unit designed for training technicians to adjust and/or maintain industrial control systems multiparameters

#### **GENERAL SPECIFICATIONS**

- Main glass transparent graduated tank. Level detector.
- Stirring system, variable speed, stirring speed display.
- Stainless steel immerged electrical heater, power.
- Secondary glass transparent tank.
  Level detector.
- SS centrifugal pump fixed speed and SS centrifugal pump with frequency variator.
- Electropneumatic control valve, adjustable Cv.
- SS heat exchanger with temperature reading. Cooling circuit with control valve with adjustable Cv.
- Cold water feeding circuit, and compressed air.

#### DESCRIPTION

### 4 Variable process control trainer

The unit is autonomous, composed of two tanks and two pumps for running in closed circuit.

It allows to study and set several control loop simple or in cascade.

#### It includes:

- Water flow rate control by action on a valve
- Water level control by action on a valve
- Discharge pressure control by action on the pump's variator
- Water level control by action on the pump's variator
- Bath temperature control by action on an electrical heater
- Exchanger outlet temperature control by action on a valve
- Flow / level cascade control by action on a valve
- Discharge pressure / level cascade control by action on a variator

Two control loops can function on the same time.

The wiring of different control loops is achieved by safety plugs sensor-controller-actuator.

The components installed are industrial one allowing a technologic study with the help of the technical documents in the technical file.

A tactile screen display the measures, control parameters setting, the functioning mode auto/manu, the data recording on a USB stick.

# Study and adjust a number of simple control and cascade loops

Temperature control

Level control

Flow control

Pressure control

Large choice of actuators: electrical heater, control valve or pump with frequency variator

## Study and set the parameters of the industrial sensors/actuators installed







