## INDUSTRIAL AUTOMATION TECHNOLOGY LABORATORY TRAINING SETS



# Y-0046 PROCESS & SCADA TRAINING SET

Process and scada training set is complying with the application and project development activities towards the project automation subjects. Measuring, monitoring and controlling of pressure, level and tempature parameters have been carried out.

Process was designed in accordance with the application that three colors (Cyan-Magent-Yellow) have been mixed in various rates and the new color has been obtained.

The colored liquids in the main color tubes could be monitored as analogue by ultrasonic level sensors. The proportional regulator and pressure sensor are used for pressure level.

The obtained color liquid has been mixed in the mixer tank and has been kept in identified constant temperature. In order to measure the temperature of the mixture and check it, the PID controller was used.

The obtained mixture has been discharged by dosing to the tubes in the filling unit and it has been conveyed to the next station by the circular movement mechanism.

Entire system has been checked by PLC and all data could be transmitted to the visual objects on SCADA screen.

# **TECHNICAL SPECIFICATIONS**

- · Color tanks mounted vertically on the laboratory table
- Aluminum profiled structure
- 3 Color Tanks
- 1 Mixer Tank
- PLC 14 digital input 10 digital output
- PLC Analog Module
- PID controller
- Scada Program
- · Led and simulation keys in the digital inputs
- All inputs are 2 mm born electric terminal
- Proportional regulator and pressure sensor
- 3 ultrasonic liquid level sensor
- Heating sensor
- 2 optic sensor
- Inductive sensor
- Capacitive sensor
- Circular movement mechanism
- 24V DC power supply
- Start-Stop and Emergency stop buttons
- Dimensions: 100x170x65 (WxHxD)







## Y-0046 **PROCESS & SCADA TRAINING SET**

#### **TRAINING SUBJECTS**

- Joint evaluation and application as well as development of Process Automation Vehicles
- · Qualifications to measure, check and control the pressure, heating and level processes
- Activities towards PLC programming
- · Using of PID controller
- Preparing of SCADA project
- Application of electro pneumatic
- Program simulation
- Digital input/output application
- Analog input/output application
- Assembly/Installation application
- · Diagnosis and defect repair
- · Comments and reviewing of the documentation



## YOUR REQUIREMENTS FOR THE APPLICATION

- 25 lt/mn, 6 bar Air Compressor
- Computer

### ACCESSORIES

 1 user manual and testing booklet as well as application CD

- 1 licensed PLC Programming Software CD 1 licensed SCADA programming CD
- 1 PLC programming cable
- 1 IEC Power Cable (2 mt.)
- 3 color tubes (Cyan-Magenta-Yellow)
- 10 pcs empty filling tubes



### **OPTIONS**

- · LCD screen,
- Touch LCD screen,
- Computer
- Air Compressor