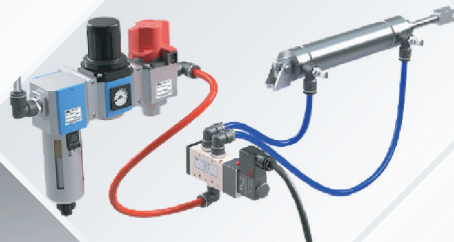
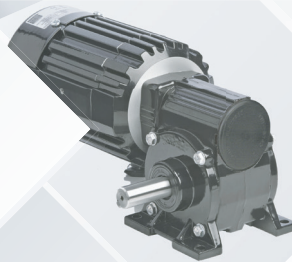
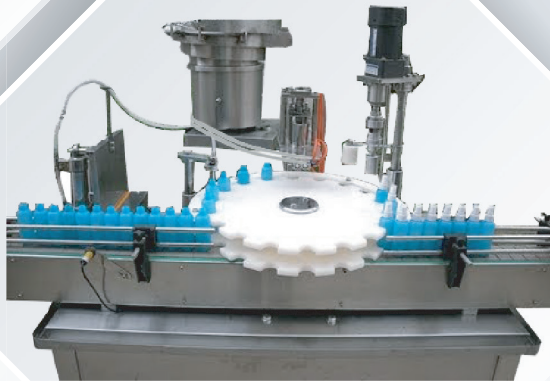


Industrial Automation Trainer (PLC Based)



TRAINING OBJECTIVE

PLC programming in a practical manner for initial training in educational institutions in the area of industrial automation db-tech offer PLC based industrial automation system for students.

Nowadays, there is a competition amongst the developed countries in presenting the most efficient production process control methods. Most of the equipment used for this purpose includes Programmable Logic Controller (PLC) systems.

Our PLC-based Industrial Control Training Set DB-716iat is designed to examine the procedures of controlling the conveyer belt, liquid filling, capping and labeling of small size pet bottle.

Cores covered

- Comprehensive experiments on PLC (S7-200) with real life industrial automation.
- Study Of PLC Ladder programming upload and download.
- All-in-one training system which comes with the PLC, inverter, touch panel and others.
- Experiments on PLC, inverter, touch panel(HMI) and sensors.
- Basic level of inverter's operation / inverter control using analog voltage.
- Experiments on analog input output.
- Experiments on speed and position control.
- Control / wiring practices for PLC's I/O module and sensor application.
- Multi-step speed control and rotating direction control using the inverter and PLC.
- Pneumatic component control.
- Control / wiring practices for close loop control system.
- Experiments on digital input outputs like switch, sensor, light, Pneumatic valve etc.

Product feature

- PLC siemens s7-200 series.
- Analog Input and Output Module EM235.
- HMI Touch Screen Weinview MT6070iE 7"800x480 TFT LCD, LED Backlight.
- 1 potentiometers for analogue value input 0 10 V/DC/10 mA.
- 2 Inverter and 3φ AC motor.
- 1 linear Potentiometer for position sense.
- 4 Infrared sensors.
- 4 key/rest switches for signal input.
- 4 color Light for status display (outputs)
- 2 switch for emergency.
- 3 pneumatic cylinders and solenoids.
- 2 AC/DC motor.
- 1 Table for Electrical and PLC accessories.
- 1 Table for Machine and Mechanical accessories.
- 1 PC-PLC interfacing cable and software.
- Other accessories.

FUNCTIONAL BLOCK DIAGRAM

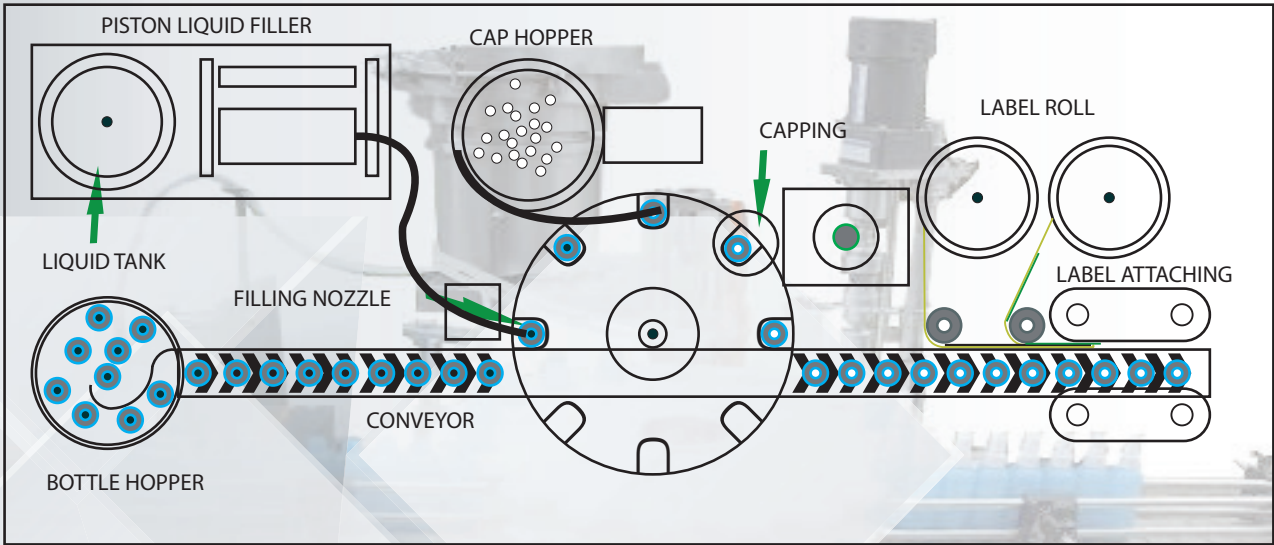


Table for Machine and Mechanical accessories

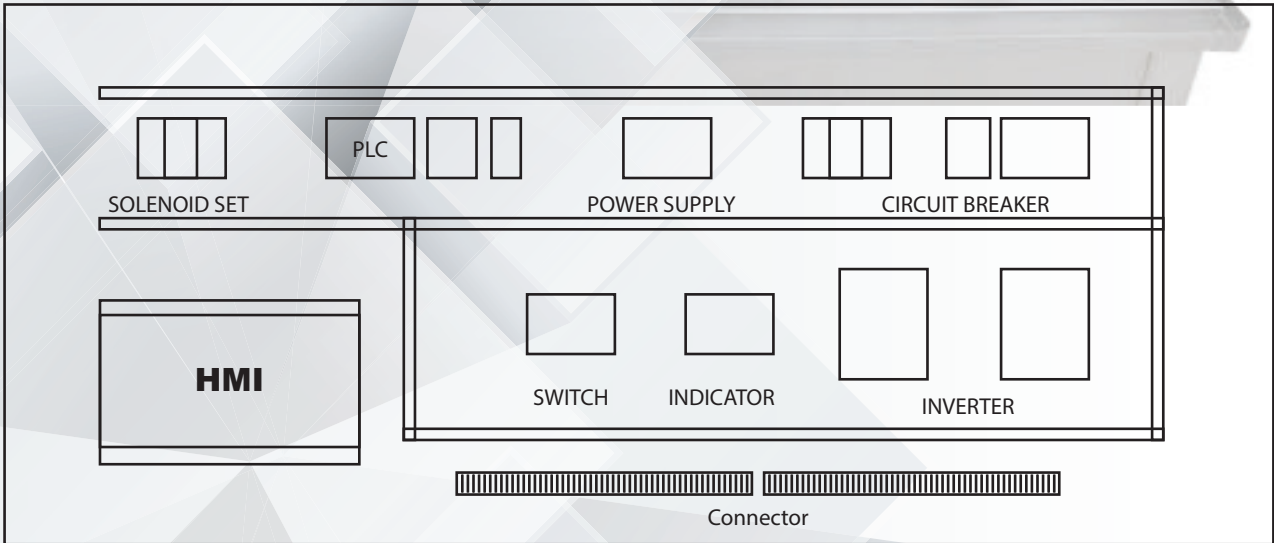


Table for Electrical and PLC accessories

TECHNICAL SPECIFICATION

Machine part:

Compact Filling Line (Filler+Capper+Labeler)

Bottle size-

H:100~220mm

D:40~68mm

Conveyer Speed: 100~2400mm/min

Filler:

Filling Cylinder : 200c.c./ 500c.c.

Filling range : 5-200ml/ 50-500ml

Filling speed : 50-150ml/sec

Filling accuracy : $\pm 0.5\%$

Air pressure requirement : 6 kg/cm²

Capper:

Capping speed: 20~40 pcs/min (depends on bottle and cap size)

Cap type: All kinds of plastic screw caps

Air consumption: 5Kg

Labeler:

Labeling speed: 20~40 pcs/min (depends on product and label size)

Label size: (W) 10~100 mm / (L) 20~100mm

Label reel: Inner diameter 75mm / Outer diameter 200mm

Accuracy: ± 2 mm

Machine dimension: H-1200mm x W-800mm x L 1600mm

Controlling part Electrical:

Controller: PLC siemens s7-200

HMI: Weinview MT6070iE 7"800x480 TFT LCD, LED Backlight.

Inverter: 0.4Kw

Motor: 0.4KW, 3 ϕ

Voltage: 1 ϕ 3wire 220 VAC

Current: 15 amp

Power : 3.3Kw

Table dimension: H-1800mm x W-800mm x L 1200mm