

BSP02.xls Revision No: 07 Date: April 24, 2021

PLC BASED BOTTLE FILLING PLANT TRAINER-ADVANCED

MODEL: BSP02-C



FEATURES

- Robust and sturdy construction
- Easy and versatile operation
- Incorporates standard industrial components
- Can be interfaced with any standard PLC



DESCRIPTION

The trainer is designed to teach and familiarize students with PLC application especially in case of bottle filling plant. Fluid from a storage tank is passed to a bottle, for a specified time when bottle is placed in correct location. After the filling operation, the bottle is moved ahead. Entire operation is operated by PLC and is electro-pneumatic in nature.

The trainer can be interfaced with any standard PLC. The PLC can be supplied if specifically asked for.

INSTRUCTION MANUAL

Self explanatory operating manuals are provided with each system. Detailed theory as well as practical exercises is also included in the manual.

EXPERIMENTS

- 1. To study the bottle filling of different volume
- 2. To study the solenoid valve operation through PLC
- 3. To study the stepper motor operation through PLC
- 4. To study the water level ON-OFF control through PLC

COMPONENTS

- 1. Proximity sensors, 3 nos.
- 2. A Linear conveyor with motor and gear mechanism, 1 no.
- 3. Solenoid valve, 2 nos.
- 4. Level switch, 2 nos.
- 5. Feed tank, 1 no.
- 6. Sump tank, 1 no.
- 7. Pump, 1 No
- 8. Power supply
- 9. Piping
- 10. Structure

OPTIONAL

- PLC with cable
- Ladder logic software
- SCADA Software
- Volume based bottle filling
- Weight based bottle filling

SERVICES REQUIRED

- Electric supply 230 V AC, 50 Hz,
- Water with drain arrangement

NiYo Engineers

Unit 1B, Devgiri Industrial Estate, S. No. 17/1B Plot No. 14, Kothrud, Pune 411 029 INDIA, Tel-91 20 2546 5004, 2546 8051, 2546 7296 Telefax - 91 20 2546 8051 e-mail- <u>sales@niyoindia.com</u> Web: www.niyoindia.com



(1) Since research and development is an on-going activity, the specifications mentioned herein are subject to change without notice

(2) Photographs are indicative only.