

## **Pneumatic WorkBench**



Electro Pneumatic Workbench is designed to understand fundamental of design, construction and application of Pneumatic components and circuits. We have two variants of Workbench one is without PLC and another is With PLC, user can select any according to hid application, todays industries are moving towards hybrid Industrial Automation systems with the help of PLC and other Pneumatic components and modules.

There is a huge demand of Pneumatic technology in numerous areas of engineering. And our Workbench allows User to do hands on practice on the basic "building blocks" of modern Pneumatic and how they are interconnected to form systems. Pneumatic Systems fulfil the power needed to drive and control conveyor systems, metal forming machinery, component test stands, foundries and primary metals plants, presses, including cushions, clutches and brakes, automated assembly systems, packaging systems, pulp and paper industries, material handling, and robotic systems. PLC provides flexibility to design and build numerous systems using software and I/O interfaces without changes to the hard wired connections.

## Features

- Powerful instruction sets
- High execution speed
- Extremely easy and student friendly software
- Several sample Ladder programs
- PLC operated Electro Pneumatic platform
- 12 Digital Inputs, 8 Digital Outputs
- Open platform to explore wide PLC and Pneumatic applications
- Industrial feel & look
- DIN rail mounting for PLC
- Function and identification of Pneumatic components and their symbols
- Robust construction
- Toggle switches, Push to on Switch, double acting cylinder, Single Acting cylinder, solenoid valve, flow control
  valve, manifold, hand lever valve, limit switch, proximity sensor, palm actuator, OR valve, roller lever valve, FRL,
  pressure gauge, single acting cylinder, air compressor, Audio and visual indicator4 mm patch cord connections
- Mounting panel for Pneumatic components
- Practice troubleshooting skills
- Workbench has 4 wheels, suitable for movement installation
- Two storage drawers with telescopic locking facility, place in drawers for meters, patch cords, components, bread board and other accessories for storage.
- MCB for ON/OFF control and over load protection
- Sequential & linear Pneumatic control

Technical Specifications:

1 Compressor unit :

suitable for Pressure: 8 bar, Delivery: 50 lpm (or more), Reservoir capacity: 24 Litres (or more), 230V, 50 Hz, with pressure regulator and water separator

2 Pneumatic Trainer Kit, each consisting of the following matching components and accessories

I. Single acting cylinder Max. stroke length 50 mm, Bore dia 20 mm

II. Double acting cylinder Max. stroke length 100 mm, Bore dia 20 mm, magnetic type

III. 3/2-way valve manually-actuated, Normally Closed

IV. 3/2-way valve pneumatically-actuated, spring return

V. One-way flow control valve

VI. 5/2-way valve with manually-operated switch

VII. 5/2-way valve pneumatically-actuated, spring return

VIII. 5/2-way pneumatic actuated valve double pilot

IX. 3/2-way roller lever valve direct actuation Normally Closed

X. Shuttle valve (OR)

XI. Two-pressure valve (AND)

XII. Pressure gauge 0-16 bar

XIII. Manifold with self-closing NRV, 6-way

XIV. Pushbutton station for electrical signal input with 3 illuminated momentary-contact switches (1 NO + 1 NC) and 1 illuminated maintained-contact switch (1 NO + 1 NC), Contact load 2A

XV. Relay station with 3 relays each with 4 contact sets (3NO+1NC or Change-over type), 5 A

XVI. 3/2-way single solenoid valve with LED

XVII. 5/2-way single solenoid valve with manual override and LED

VIII. 5/2-way double solenoid valve with manual override and LED

XIX. Power supply unit, Input voltage 85 – 265 V AC, Output voltage: 24 V DC, Output current: max. 4.5 A, short-circuit-proof.

XX. Profile plate, Anodized Aluminum 1100x700 mm, with carriers, mounting frames and mounting accessories (To be fitted onto the pneumatic workstation) Pneumatic Workstation : MS with Aluminum 40mmx40mm profile legs, wooden work surface surface, and one pedestal drawer unit having 5 drawers, each with handles and individual locks, on metallic full panel drawer slide: (1) Work Table – Size(Approx.) L 1200 mm X W 900 mm X H900 mm, with four castor wheels including two lockable wheels at the front side, (2) Drawer – Size (Approx.) – L460mmxW495mm xH158mm each, and overall size of Drawer unit (Approx.) - L470mmxW495mmxH825 mm and (3) Drawer slide height (Approx.) 85mm. Carrier for mounting components, such as SMPS & relay boxes.

\*\*Please feel free to share your requirements by filling your details in ask query section or request a Quote section on the website, we will be happy to cater your requirement.