# PNEUMATICS TRAINING SYSTEM



Practical 'Hands ON' training systems for those taking part in Multi-skilling, Cross-skilling, NVQ or Modern Apprenticeship Training programmes



**MECHATRONICS** 

The Pneumatics Training System from **MECHATRONICS** is a high quality but low cost mobile laboratory trolley based system that can be used to cover training in pneumatics, electro-pneumatics and Programmable Logic Control (P.L.C.) of pneumatic systems.



Double sided pneumatic laboratory trolley

This system can be supplied as either double sided or single sided and comes complete and ready for use, with the relevant Courseware / Teachware supplied (no precious development time needed, as is often the case with others manufacturers).

The system is extremely clean, safe and easy to use, utilising high quality push-in pneumatic fittings throughout.



Laboratory trolley can be supplied with integral compressor/s

All the components used in the system are genuine industrial items that are widely used in various industries worldwide. The components are quickly and easily mounted on the circuit building panel with a simple push fit, eliminating the requirement for any tools. The complete assembly, test and disassembly of circuits is therefore rapid, easy and efficient, thus maximising the time available when 'putting the theory into practice'.





Roller valves have both horizontal and vertical adjustment

The components available cover a wide range actuators, and flow directional, pressure control, as well as sensors in pneumatics and electropneumatics. more extensive circuits and controls can be built connecting to the **MECHATRONICS** P.L.C. training systems.

Being of modular design the system can be very easily expanded to meet any future needs that arise.



High quality push-in pneumatic fittings used throughout for speed of assembly / dis-assembly as well as ease of use.

All components carry the relevant ISO standard symbol

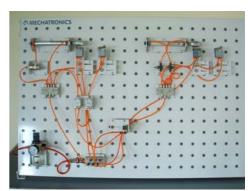
The **MECHATRONICS** Pneumatics Training System is successfully used by numerous colleges, universities and company training centres in the United Kingdom as well as overseas, it being ideally suited to achieve the practical requirements of courses such as City & Guilds, BTEC and SEMTA, amongst others, at minimal capital outlay.



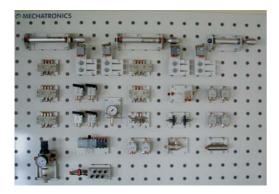
Student constructing pneumatic circuit

The lockable equipment storage cabinets are extremely durable being heavy-duty, CNC tool cabinets, totally of steel construction (other companies use chipboard office furniture cabinets for low cost).

If required at a later date the pneumatics mobile laboratory trolley can even be easily retro-fitted to convert it into a version suitable for hydraulics.



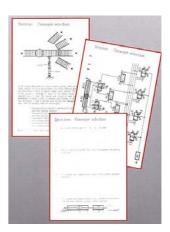
Sample circuit



Set of Components - Pneumatics, level 1

# Support Materials available:-

- Exercises/Solutions with Question/Answer Papers:
  - Pneumatics
- OHP Transparencies
- Magnetic Symbols
- Manuals & Textbooks



#### Features:

- Mobile laboratory trolley can be re-located in laboratory (or classroom) when required
- Allows secure storage of components when not in use
- Simple plug-in mounting system
- Easy, quick and clean in use
- Quick, clean and safe push-in pneumatic fittings
- Choice of pneumatics
- Extremely wide range of components available
- Full range of support materials

### Advantages:

- Low capital cost
- Genuine industrial components
- Eliminates need for tools
- Replaces permanently mounted components for easily interchangeable items
- Simple expansion into electro-pneumatic and P.L.C. systems
- Ergonomically pleasing design
- Minimum space required
- Modular easy to expand
- Supplied complete with 'Collection of Exercises/Solutions with Question/Answer papers'

#### Benefits:

- Improved quality of training
- Improved appearance
- Create professional image
- Can be used in conjunction with MECHATRONICS hydraulic / electro-hydraulic components
- No tools required
- Cost effective system
- Extensive number of exercises possible
- Supplied ready for use (no precious development time required)

#### **TECHNICAL SPECIFICATION**

Pneumatics: Maximum system pressure – 10 bar

#### Note:

Requires a clean, dry, non-lubricated, air supply for efficient operation, we can supply a range of suitable compressors if necessary.

# OTHER PRODUCTS

**MECHATRONICS International Ltd** are specialist manufacturers of an extensive range of training equipment which includes the following:-

## **Training Hardware:-**

In addition to the Laboratory Trolley based Pneumatics Training System we are also manufacturers of training systems in all of the following subject areas:-

Pneumatics (portable systems)

Electro-pneumatics (portable and laboratory trolley based systems)

Hydraulics

Electro-hydraulics

Proportional hydraulics

Programmable Logic Control (P.L.C.'s)

Mechanical Transmissions

Industrial Handling

CIM / FMS

These systems are modular and available in a wide variety of formats, they are compatible with each other and therefore may be combined together or used individually. All the required hardware from a single component through to complete, very extensive 'Turnkey Systems' can be supplied.

#### **Teachware & Courseware:-**

To support the training systems hardware we have developed a full range of Teachware suitable for use by Instructors, Lecturers, Tutors and Teachers.

Courseware suitable for use by students is available in the form of 'Industry Related' practical exercises, supported by question and answer papers, relevant to the exercises, thereby offering a complete structured assessment system. This material is covered by copyright but is supplied with a licence, which allows copying, by the purchaser for training and educational purposes.



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