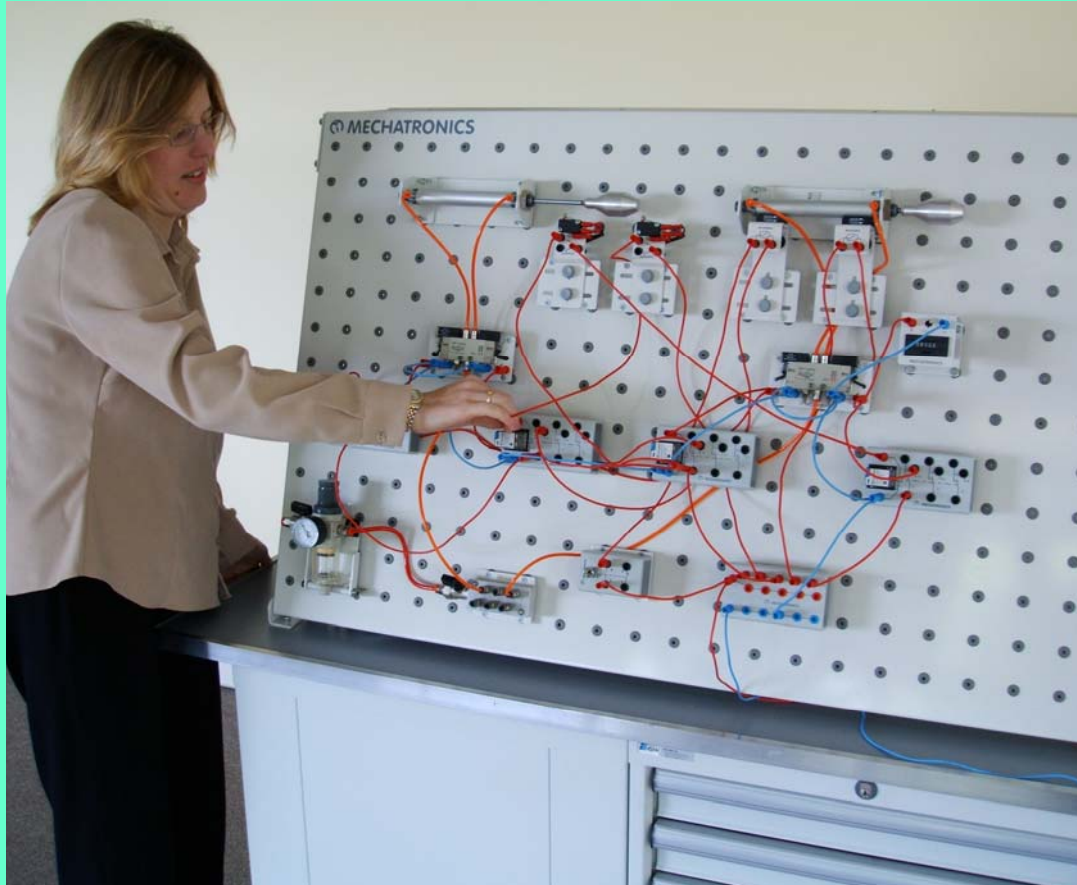


ELECTRO-PNEUMATICS TRAINING SYSTEM

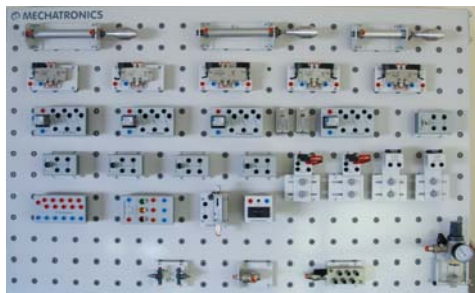


Practical 'Hands ON' training systems for those taking part in
Multi-skilling, Cross-skilling, NVQ or Modern Apprenticeship
Training programmes



MECHATRONICS

The Electro-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 electro-pneumatics and Programmable Logic Control (P.L.C.) of electro-pneumatic systems.



Set of Components – Electro-pneumatics, level 1

(24V d.c. power supply unit and cable sets not shown but included in set)

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 and electrical connectors throughout.

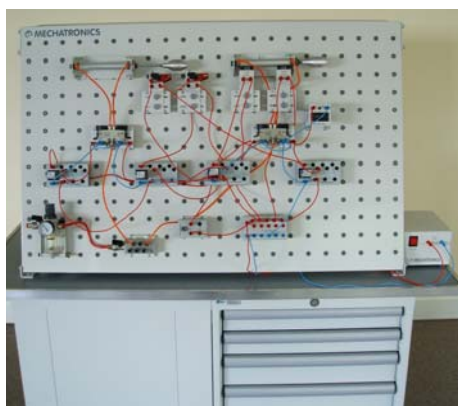


Set of Components – Abridged Electro-pneumatics, level 1

This set is intended for those who already have the Set of Components - Pneumatics and wish to expand it to cover Electro-pneumatics as well

(24V d.c. power supply unit and cable sets not shown but included in set)

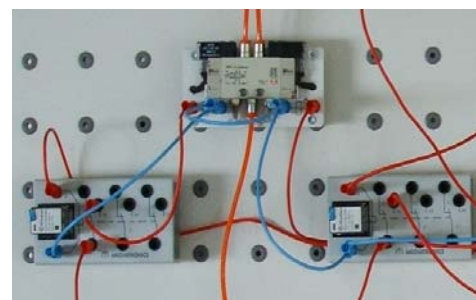
All the components used in the system are genuine industrial items that are widely used in various industries worldwide. The components are quickly and easily mounted on the circuit building panel with a simple push fit, eliminating the requirement for any tools. The complete assembly, test and disassembly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



Sample circuit constructed on laboratory trolley

The components available cover a very wide range and even more extensive circuits and controls can be built by connecting to the P.L.C. training systems from **MECHATRONICS**. All electrical connections are made via shrouded safety sockets and safety plugs.

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



Combination of relays used in conjunction with directional control valve, electrical connections made via shrouded plugs and sockets, pneumatic connections made via push-in fittings, relays have manual over-ride facility, solenoid have LED status indicators

The **MECHATRONICS** Electro-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.



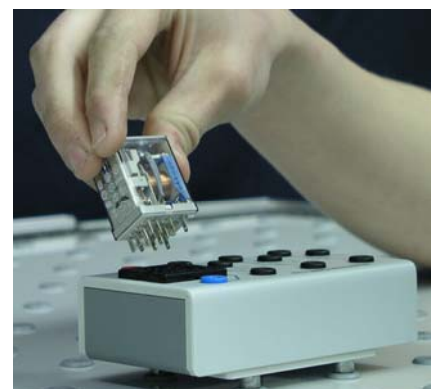
Mechanically actuated limit switches

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).

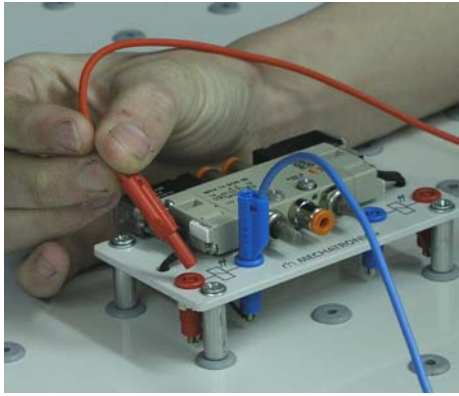


Cylinder proximity switches

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



Standard industrial plug-in relays and timer relays



All electrical connections are made via shrouded safety sockets and plugs.

Support Materials available:-

- Exercises/Solutions with Question/Answer Papers:
 - Electro-Pneumatics
 - P. L. C.
- OHP Transparencies
- Magnetic Symbols
- Manuals & Textbooks



Limit switches, cylinder proximity switches and sensors have both horizontal and vertical adjustment



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 and electrical connectors
- Choice of electro-pneumatics and/or P.L.C.'s
- 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 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)

Safety:

- All electrical connections made via shrouded safety sockets and plugs
- 24V d.c. control voltage used for electro-pneumatics and P.L.C. systems

TECHNICAL SPECIFICATION

Electrical Supply: 24V d.c. control voltage used throughout for added safety

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 Electro-pneumatics Training System we are also manufacturers of training systems in all of the following subject areas:-

Pneumatics (portable and laboratory trolley based systems)
Electro-pneumatics (portable 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.

MECHATRONICS International Ltd

Mechatronics House, Unit 9, Lancaster Park, Newborough Road, Needwood,
Burton-on-Trent, Staffordshire, DE13 9PD, England

Tel: +44 (0) 1283-575444
Web: www.mech.co.uk

Fax: +44 (0) 1283-575766
email: admin@mech.co.uk

E. & O. E.

As the company operates a system of continually striving to improve its products and services we reserve the right to change, amend or modify the product/s without prior notification.