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TECHNICAL TRAINING SOLUTIONS

ELECTROPNEUMATICS TRAINING COURSE

COURSE

This course provides maintenance personnel and production operators etc with the skills and knowledge necessary to carry out maintenance tasks on pneumatic and electro-pneumatic systems.

PARTICIPANTS

Suitable for anyone who is required to maintain industrial pneumatic systems. No prior knowledge of pneumatic or electrical principles is necessary.

COURSE PRESENTATION

A practical approach is taken throughout this course with participants gaining valuable 'hands-on' experience on training industry-standard components designed to simulate industrial systems. Comprehensive course notes are provided.

COURSE OBJECTIVES

On completion of the course, participants will be able to understand the need for safe isolation and be able to apply safe working practices when working with pneumatic and electro-pneumatic systems demonstrate relevant underpinning knowledge (units, pressure, forces, etc).

Identify, inspect, adjust and replace: sensors (pneumatic valves and electrical switches, proximity sensors and switches) valves (air and solenoid operated, sequence, directional control), actuators (cylinders and rotary AND / OR elements, relays, timers, flow controls and quick exhausts use visual indicators and manual overrides to check operation of components carry out repairs to pneumatic systems, replace fittings, plastic Pipe-work, etc use pneumatic circuit drawings as an aid to systematic fault-finding understand how PLCs are interfaced and used to control pneumatic systems.

DURATION

3 Days.

PRICE

#60,000

Successful completion of the course leads to the award of the Technical Training Solutions competence

certificate: Electro-Pneumatics

What do candidates on the Pneumatics course actually do?

We begin by looking at the various symbols used to describe pneumatic components and get the candidates to think about how these devices would be used in various applications. We have a range of cutaway demonstration parts which the candidates use to understand how the devices function (and the faults that they might develop).

We use large magnetic symbols to ISO 1219-1 of pneumatic components (which stick onto whiteboards) so that our instructors can explain how the components function and how they are interconnected to create useful systems on the pneumatics training course.

A selection of our sectioned pneumatic components candidates gain an understanding of the functionality by looking at these and appreciating what may go wrong with each component.

We give our candidates a range of these components to analyse the functionality of.

Students get the opportunity to work on;

ISO 6431 and ISO 6432 cylinders used on the pneumatics training course.

filters / regulators / lubricators with automatic drain used on the pneumatics training course.

Solenoid valve, Sequence valve, Pneumatic timer used on the pneumatics training course.

Rodless cylinders, 3/2 Roller valves, Magnetic piston double-acting cylinders, Single-acting cylinders, Solenoid-operated 5/2 way valves , Optical proximity switches and Modular assembly boards which candidates interconnect in the practical exercises to form various useful systems on the pneumatics course.

Pneumatic designs are also brought to life by integrating them with PLC controlled systems just as in the real industrial environment.

Troubleshooting, configuration and commissioning of these systems are integral part of this course.