

# PNEUMATIC TECHNOLOGY IN AUTOMATION

The Viking Hotel, County Waterford,  
April 19<sup>th</sup> & 20<sup>th</sup>, 2023

## STRUCTURE & CONTENT

### Two-day course

Safety first – the dangers of compressed air, introducing careful practices and important directives.

Introduction to pneumatic systems – pressure, flow, air compression & distribution, leaks (energy saving).

Air treatment – introduction to airline equipment, contamination, filtration & separation, air quality standards, monitoring flow, regulating pressure, isolating, dumping & reinstatement of air.

Actuators – overview of the different actuator types, single & double acting, force calculation, cushioning, mounting, position detection.

Direction control valves – overview of valve types, functions, methods of operation, mounting and accessories.

Basic pneumatic circuits – understand the ISO 1219-2 standard for fluid power symbols, for valves, cylinders, FRLs etc and build pneumatic circuits.

Introduction to electro-pneumatics – basic principles of electricity, solenoid valves and how sensors and programmable logic controllers interact in pneumatic automation systems.

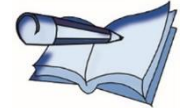
Participants that enrol early have the option of two weeks access to our online digital platform [eLEARNING-200](#)

## COURSE AIM

This course allows the learner to develop their skills in the fundamentals of pneumatics in industrial automation & the technologies that pneumatics interact with in control systems.



Theory



Design  
Circuits



Practical  
Build Circuits



Fault  
Find

## COURSE OUTCOME

Understand the function & prepare for the maintenance needs of pneumatic systems.

Ability to design & build pneumatic circuits.

Ability to troubleshoot pneumatic circuits & component faults.

Understand the interrelationship between pneumatics, vacuum, energy & automation control devices like sensors, PLC's, etc



**Price: €695 for two-day course**  
**Contact [sales@smcautomation.ie](mailto:sales@smcautomation.ie)**



# Booking Form

PNEUMATIC TECHNOLOGY IN AUTOMATION.

Course Fee: €695 per person per course - includes course, materials, lunch & refreshments.

(note, course fee does not include transport, accommodation, evening meal or other expenses)

Venue: The Viking Hotel, Cork Road, Waterford, Ireland, X91 Y657,

Requirements: Participants should have a basic technical knowledge.

Duration: 9.00am – 5.00pm both days.

Documentation: Course handbook and certificate on completion.

Equipment: The SMC desktop pneumatic training kit.

If you wish to book a place on this course, please complete and return this form to;  
email: [sales@smcautomation.ie](mailto:sales@smcautomation.ie)

Participant first name:

Participant surname:

Participant email address:

(note, this is required to set up optional eLEARNING-200)

Participant job title:

Company:

Company address:

Purchase order number:

Conditions:

- A place on this course will only be confirmed on receipt of an order number.
- Cancellation within 14 days of the course will result in 50% of the course fee being retained.
- On completion of the course, participants will be presented with a certificate of completion.
- Subject to our general conditions of sale.

