

# Festo Training and Consulting

## From industry – for industry

**FESTO**



PN111

### **Industrial pneumatics**

559395

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Designed as a general introduction, this training provides an insight into pneumatic principles. It aims to familiarize participants with main pneumatic components and explain their functions. The participants will be able to perform systematic maintenance and troubleshoot pneumatic systems. Using state-of-the-art industrial components, a safe environment is created to carry out the exercises and construct pneumatic applications. Pneumatic simulation and educational software packages are used to enhance the knowledge transfer process.

This training includes a wide range of hands-on exercises, which give delegates the opportunity to put theory into practice and for learning-by-doing. Working from the diagrams they have produced, participants apply the instructed knowledge by building and testing the pneumatic circuits using real industrial components. The training course sets a good background for further automation trainings.

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**Training content**

- Drives: Cylinders for different applications
- Valves types: pneumatic/electric controlled, structures, different mid positions etc.
- Various pneumatic controls:
  - Position control: Limit switches and sensors
  - Speed control: Uses of throttle valves
  - Logic control: AND/OR valves
  - Pressure control: Uses of adjustable pressure sensors
  - Time-dependent control
- Basic principles of compressed air supply: Production, preparation and distribution
- Symbolic representation of devices and drawings standards
- Identifying and eliminating faults
- General safety in working with pneumatics systems
- Overview on energy saving principles in pneumatic systems

**Training outcomes**

After completing this training course, the participants:

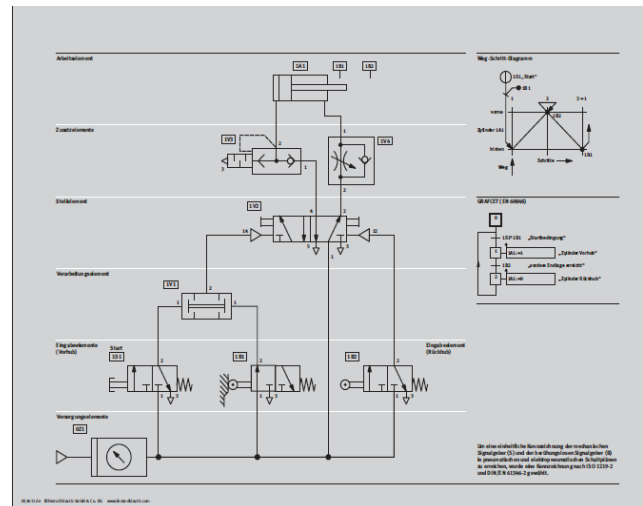
- can design, assemble and test basic pneumatic circuits
- are able to maintain and troubleshoot pneumatic components and basic control systems.
- can identify and describe the design, features and operation of pneumatic components
- can identify and explain symbols for pneumatic components
- are able to interpret technical specifications and data relating to pneumatic components
- explain the fundamentals of compressed air generation

**Target group**

Shop Floor, Maintenance, Engineering, Educational Staff

**Duration**

3-4 days



All Festo Didactic training courses offer the following additional benefits:

- Post-tests can additionally be used to monitor the training effectiveness
- Our trainings can be customized and carried out worldwide (on demand)
- Trainings take place with real industrial components, used in a safe environment
- Our trainers are certified according to our internal trainer qualification „Festo Certified Training Professional“ and have many years of industrial experience