



# **Users of Compressed Gases and Equipment**

Personnel using compressed gases and equipment require information on the safe use of the gases and equipment in line with current H & S guidelines and Codes of Practice.

# **Compressed Gas User Safety Course**

Interactive course on compressed gases and equipment with topics including: Operator behaviour, gas properties & hazards, cylinder identification & data, associated equipment, flammable toxic & special gases, emergency procedures, PPE, cylinder storage & handling, legislation & Codes of Practice.

As appropriate, manifold operations, cylinder transport.

Multiple choice questions are held throughout with a final test requiring 75% pass rate.

### Onsite Practical - 1 hour session in groups of no more than 6 persons

The trainer will demonstrate, and all learners will be given the opportunity to undertake, before-use checks, regulator fitting, manual handing of cylinders. (Includes question and answer session when taken following e-Learning requires an additional 30 minutes.)

#### Certification

Learners successfully completing both theory and practical course:

- Certificate of Achievement
- Gas Safety Passport Card

Certification is valid for 3 years after which refresher instruction is recommended.

Where e-Learning or webinar takes place without practical session:

• Certificate of Achievement (pdf emailed on completion)

Delivery Options	<b>Price</b> (VAT at standard rate applicable)	Duration	Max no. of learners
Onsite classroom & up to 2 practical sessions	£995 + £85 per learner	Classroom session 3.5 hour Practical sessions 1 hour	12
e-Learning	£55 per learner	1.5 hours	Unlimited
Real-time Webinar	£595 + £55 per learner	3.5 hours	24
Onsite practical day (following e-Learning or webinar)	£995 + £30 per learner	up to 4 @ 1.5 hour practical sessions	24

# **Onsite Facilities Required**

- Suitable room equipped with a screen or monitor and electrical supply
- Access to compressed gases and equipment for practical session
- To participate in practical session cylinder manual handling and regulator fitting, learners must wear PPE according to local site conditions, the minimum being safety shoes, gloves and goggles.

















### **Compressed Gases Learning Objectives**

At the end of the training all learners will:

- 1. Have established their current level of knowledge
- 2. Understand the manufacture and filling processes of cylinder gases
- 3. Understand the properties of common compressed gases with direct safety implications
- 4. Understand the relationships between Pressure, Volume and Temperature of gases in sealed containers
- 5. Understand the effects of Oxygen deficient and enriched atmospheres, with particular reference to confined spaces
- 6. Understand the hazards of compressed Oxygen when exposed to contamination with oil-based substances
- 7. Know the definition and hazards of pressure, and its relevance to cylinder/hose/pipe construction with special reference to safety relief devices
- 8. Have a detailed knowledge of the hazards and properties of Oxygen, Inert and Flammable gases (as appropriate)
- 9. Understand the emergency procedures for flammable gases
- 10. Understand the hazards associated with the leakage of LPG and the need for correct storage of LPG cylinders
- 11. Have a general knowledge of the hazards associated with Toxic and Corrosive gases, associated safety devices and hazard nomenclature
- 12. Know how to handle gas cylinders safely and correctly
- 13. Know the hazards associated with incorrect manual handling of gas cylinders
- 14. Understand general Risk Assessment and Safe Systems of Work procedures
- 15. Know how to identify cylinder gases correctly, and understand Special Gas labelling
- 16. Understand the general requirements for safe storage and transport of gas cylinders
- 17. Be able to carry out safe and thorough leak detection
- 18. Understand the general requirement for, and function of, compressed gas system safety devices such as flashback arrestors and non-return valves
- 19. Understand the differences between Single and Two-Stage regulators and make an informed selection of the correct regulator for specific laboratory processes
- 20. Understand gas equipment date marking
- 21. Know the correct Personal Protective Equipment to wear
- 22. Be able to undertake a Before-Use safety assessment of their work area
- 23. Be able to perform regulator Before-Use Checks and fit/remove a regulator to/from a cylinder
- 24. Understand the general function and operation of manual and semi-automatic compressed gas manifold systems with reference to the general principles of manual cylinder changing techniques (as appropriate).













