

Information Sheet : University Cylinder Workshops

If you can't identify the hazards you can't assess the risks

Why delegates need to have received safety awareness training prior to attending a practical connecting regulators workshop

The Health And Safety At Work Act 1974 etc requires organisations to provide whatever training, instruction, information and supervision is needed to ensure, so far as is reasonably practicable, the health and safety of its employees.

In addition, The Management of Health and Safety at Work Regulations 1999 place a statutory requirement on organisations to assess the risks to the health and safety of anyone who may be affected by their activities.

The principle hazards when using gas cylinders are:

- Lack of knowledge concerning the hazards posed by the gas(es) being used
- Misuse of cylinders and equipment by operators
- Complacency
- The pressure of gas inside the cylinder (up to 300 bar)
- Lack of knowledge as to how different cylinders operate
- Incorrect work practices
- Oxygen enrichment
- Oxygen deficiency (asphyxia)
- Flammability
- Lack of ventilation
- Gas leakages from cylinders and equipment
- Incorrect selection and use of equipment
- Use of poorly maintained and/or old gas control equipment
- Lack of knowledge of how gas control equipment works
- Unauthorised repairs or modifications by operators
- Incorrect handling operations
- Poor storage facilities and practices
- Improper or no use of personal protective equipment
- Lack of emergency control procedures

British Compressed Gas Association GN2 states that all people engaged in the storage and handling of gases in cylinders must receive suitable training. It should include, but not be necessarily confined to the following subjects:

- Identification of cylinder contents
- Cylinder labels and colour coding
- Properties of gases
- Potential hazards by gas type
- Contents of supplier gas safety data sheets
- Fire triangle
- Construction of cylinders
- Materials of construction
- Difference between welded and seamless cylinders
- Valve operation and valve types
- Use of guards and caps on valves where fitted
- Checks on cylinder condition
- Handling of cylinders
- Cylinder weights full and empty
- Safe handling techniques for individual cylinders
- Use of trolleys
- Personal equipment required
- Storage
- Separation of full and empty cylinders
- Reporting of cylinder defects to line managers
- Identification by proper signage
- Need for security
- Emergency actions
- Actions to be taken in cases of:
 - Leaking cylinder valves
 - Cylinders in fires
 - Fire impact on cylinders in storage
 - Location of emergency equipment
 - Emergency contact details of supplier
- **Training should be carried out regularly under a formalised system and records kept**

Gas Safety in Universities

If you can't identify the hazards you can't assess the risks

First step - have your delegates received gas safety awareness training?

After carrying out our own risk assessment of the potential hazards and risks when undertaking a practical training workshop on a client's site, we have identified a significant risk if any of the delegates have not been trained in the topics shown overleaf.

Consequently prior to undertaking a practical training workshop Gas Safe need to understand whether the delegates attending the session have been trained in the above areas and whether they are able to identify potential hazards when using gas systems.

This may be achieved by:

- Written confirmation from your organisation that all delegates have received formal training in the above topics and photocopies of the delegates individual training records
- Delegates undertaking and successfully completing our on line **e-Learning** safety awareness session prior to our undertaking a practical workshop
- Or undertaking an Instructor-led half day safety awareness workshop prior to conducting a practical workshop

Do you have liquid nitrogen on site?

If the answer is yes then all users should complete the following workshops;

- **e-Learning** 'Using Liquid Nitrogen Safely within Universities'
- Once complete delegates can then attend the following practical workshop;
- Instructor-led 'University Safe Decanting of Liquid Nitrogen Practical Workshop'

Contact us...



If you know or wish to discuss your requirements;

Call one of our training advisors on **01270 758890**

Visit **www.gassafeconsultants.co.uk** and complete an enquiry form

Write to us at;
Gas Safe Consultants Ltd
Waterloo House
2 Station Road
Elworth, Sandbach
Cheshire
CW11 3JG

