

Cryogenic Gas User Safety Workshop

Training Requirement

Operators using or coming into contact with cryogenic gases and equipment require training on the safe use of the gases and equipment in line with current H & S guidelines and Codes of Practice.

Training Objective

Comprehensive training leading to the award of a Cryogenic Gases Safety Passport Card demonstrating the learner has been provided with, and has understood, the safety requirements for the safe use of cryogenic gases and equipment.

Classroom session

- User behaviour & perceptions
- Incident case study
- Gas properties
- Hazards caused by cryogen
 - cold
 - asphyxiation
 - oxygen enrichment
 - pressure
- Carbon dioxide & dry ice
- Embrittlement
- Functions of pressurised vessels
- Dewars
- Ice plugs
- Cryogen in lifts
- Oxygen enrichment & deficiency
- Cryogenic spillage & emergency procedures
- PPE
- First aid

Practical decanting: Time dependent upon procedure allow ½ - 1 hour
Safe procedures & practice for the safe decanting of Liquid Nitrogen

This module is available as an addition to the Compressed Gas User. Please call to discuss this option.

Onsite Training Facilities Required

- Suitable training room equipped with a screen or monitor and electrical supply
- Access to decanting area with vessels and dewars
- Learners must have available appropriate PPE: Safety goggles, gloves, footwear, overalls

Certification

- PGS Certificate of Achievement
- Cryogenic Gases Safety Passport Card valid 3 years



Onsite	Webinar	Blended
Face to face classroom and practical instruction at your location*	Trainer led – real time session, allows delegate interaction with Q&A. Practical demonstration included	e-Learning course supplemented by onsite practical instruction
Classroom 3.5hrs	Classroom 3.5hrs	1-.15hrs learner dependant
Practical 1.5 hrs approx. Max 2 session 4 delegates per session	Trainer led practical demonstration supported by Video 1hr	Onsite practical module 2hrs. Max 3 sessions per day with up to 4 delegates*
£895 plus £85 per learner	£895 plus £85 per learner	From £50pp Plus £895 for onsite practical
Maximum of 8 delegates	Maximum of 12 delegates	Unlimited e-Learners Max 12 onsite
Scheduled at customer request. Interactive trainer led session with practical demonstration on your equipment.	Scheduled at customer request, uses remote voting technology to engage learners. Onsite practical session available on request*	Train at your convenience. Interactive and accessible course

*Onsite elements are only available where our Covid-19 safety guidelines can be met

E-Learning

Cryogenic gases safety training is also available through the PGS e-learning site, call for details of multi-user discounts.

<https://pgstraining.com/safety-training/cryogenic-gases-safety-e-learning-course/>

Learning Objectives

At the end of the training all learners will:

1. Understand the effects of Oxygen deficient and enriched atmospheres, with particular reference to confined spaces
2. Understand the manufacture and filling processes of Cryogenic gases
3. Have a detailed knowledge of the hazards and properties of Cryogenics
4. Understand the hazards of cold burns, hypothermia and frostbite and the initial First-Aid treatment applicable in each case
5. Know the importance of Oxygen monitoring systems and understand their use
6. Understand the behaviour of Cryogenics during filling and transfer operations
7. Understand the reasons for the formation of Oxygen enriched atmospheres round transfer hoses and pipelines
8. Understand the hazards associated with the spillage of Cryogenic liquids and how to assess the correct actions to take
9. Know the definition and hazards of pressure, and its relevance to dewar and vessel construction with special reference to safety relief devices
10. Know how ice plugs are formed and the hazards posed by them
11. Know the hazards associated with the transport of Cryogenic vessels in lifts
12. Know the correct Personal Protective Equipment to wear

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**Cryogenic Gases & Equipment
2020 Safety Training Proposal**

13. Be able to undertake a Before - Use safety assessment of their work area



EAL (Excellence Achievement Learning Ltd)

PGS has been independently verified by EAL as a provider of Compressed and Cryogenic Gases Safety workshops. PGS training delivery, assessment, quality assurance, customer support documentation and procedures have been found to meet their exacting standards.

For further information or to book please contact:
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