Hydrogen Safety E-Passport (HSP) Course Overview

Course Provider: Hydrogen Safe

Guided Learning	Awarded on Completion	Course Composition	Assessment
1 Day	E-Passport (3 Year)	2 Units of Learning	End Point Assessment

Purpose – Risk reduction through awareness and staff competency

This HSP aims to provide reaffirmation of the fundamental safety principles to staff, then apply them to hydrogen gas safety. Through ensuring staff recognise broader health and safety legal duties and best practices, staff can effectively recognise their place in context of hydrogen gas systems. We aim to help staff become competent in working around hydrogen, recognising how risk has been reduced through good design and safe working practices - and vitally their role in further reducing risk from hazards.

This course provides the opportunity to:

- Reaffirm their competency of the legal duties of all staff to remain safe
- Increase awareness of hydrogen safety in the workplace
- Grow and assess understanding of hydrogen risk reduction techniques

Delegates will gain upon successful completion:

- Increased awareness and safety consciousness throughout your workforce
- A Hydrogen Safety E-Passport (HSP)

Unit 1 : Safety Fundamentals

1.1 Legal Duties	1.2 Health and Safety Policy	1.3 Risk Assessments	1.4 Plan Do Check Act
• Management of Health and Safety at Work Regulations 1999 • Legal duties of employers and employees • The law and consequences	• Setting a clear organisational direction • Ensuring communication of duties • What the policy should cover	• The law • Being 'suitable and sufficient' • Types of hazards and people affected • Recording findings	• The importance of each stage • Active vs Reactive monitoring

1.5 Effective leadership and response for reducing risk	1.6 Applying and using training	1.7 Staff support and consultation	1.8 Positive safety culture	1.9 Competent staff to reduce risk
• Core responsibilities • Visible leadership • Strategic integration • Performance monitoring to reduce risk	• What effective training looks like • Types of training • What training isn't • Monitoring effectiveness	• Legal requirements • Mechanisms for consultation • What bad consultation looks like	• What is it and how is it fostered? • What can cause a weak safety culture	• What is competence in a workforce • Ensuring competence • Risks of incompetence

Unit 2 : Hydrogen Gas Safety Awareness

2.1 An introduction to hydrogen gas	2.2 Site hydrogen gas storage, transportation and utilisation	2.3 Recognising and spotting hydrogen gas related hazards on site	2.4 Equipment to reduce risk	2.5 Impact reduction strategies
• Awareness of the science of hydrogen, properties of hydrogen, role in decarbonisation	• Awareness of how hydrogen gas is stored on site, including: Pressurised tank storage Tube trailer and MCP tank transport Usage examples of implementation	• Recognise the importance of following training in H_2 gas safety and understand how to spot hazards including: Leakage event Fire Jet flames Explosion	• Recognise the role all staff have in correct usage of hydrogen rated equipment to reduce risk from: Hazards stated in unit module 2.3 Embrittlement Overpressure Human error Hazardous area zones.	• Recognise the importance of impact reduction strategies and the role each staff member has in following their training. • This includes following procedure for: Alarms Ventilation Emergency exits Nearby infrastructure Public safety