HYDROGEN SKILLS ACADEMY

SBT04 - Pressure Testing (SBT, Pipe & Hose Assemblies)

The Engineering Construction Industry Training Board (ECITB) SBT01 course provides essential knowledge and hands-on skills for the correct assembly, installation and maintenance of small bore tubing (SBT) systems. This course provides essential knowledge and hands-on training in the safe pressure testing of small bore tubing, pipe and hose assemblies. Delegates will learn the hazards of stored energy, correct safe systems of work (SSOW), industry standards and the correct use of equipment during hydrostatic and pneumatic testing.

On successful completion, delegates will receive an ECITB Certificate of Training (Stage 1 of the ECITB route to competence).

COURSE DURATION

2 days

PRE-REQUISITE

 Delegates must have prior SBT assembly knowledge, supported by recognised training and assessment.

CERTIFICATION

ECITB certification of training –
Valid for 12 Months
(Note: Learners are not deemed technically competent at Stage 1)

TRAINER

 Our trainers are certified assessors and have been accredited by ECITB

COST

Price on application – maximum4 delegates per course

NOTE

This course is grant aided for ECITB registered employers

COURSE DETAILS

Health, Safety and Risk Awareness

- Legislation: HASAWA, PUWER, COSHH, PSSR, PED, RIDDOR
- Hazards: Hydrocarbon releases, high-pressure injection, stored energy failures
- Safe practices: Isolation, depressurisation, permits, toolbox talks, PPE

Introduction to Pressure Testing

- Purpose of pressure testing: Strength, integrity, leak detection
- Hydrostatic vs pneumatic testing: Principles, risks and applications
- Stored energy, pressure measurement and effects of failure

Risk Assessment and Safe System of Work (SSOW)

- Hazard identification and risk assessment (HIRA)
- Segregation, containment and exclusion zones
- Written SSOW requirements, monitoring and safe depressurisation

Equipment and Materials

- Test pumps, fittings, hoses, valves, gauges and recording devices
- Thread types and sealing methods (NPT, BSP, JIC, twin ferrule, cone & thread)
- Inspection, certification, and maintenance of adaptors and connectors

Leak Detection Methods

- Bubble testing, vacuum decay, tracer gas methods (helium, hydrogen)
- Acceptable leak rates and industry standards
- Containment, segregation and remote inspection practices

Practical Training and Assessments

- Setting up and conducting hydrostatic and pneumatic tests
- Using hand pumps and air-driven pumps
- Leak detection, safe depressurisation and documentation

Assessment

- 20-question written knowledge test (80% pass mark)
- Practical exercises



