Introduction to Subsea Control Systems

Course Description:

Who is the course for?

This eLearning course is aimed at individuals working in the oil and gas industry who are required to work with or have a good understanding of subsea control systems.

Is previous experience required?

You do not need prior knowledge or experience to complete this course and it is assumed that you are competent in your designated role.

How will the course benefit me?

Control systems are used to open and close valves on subsea wellheads so that they can operate safely. This course will give you a basic understanding of both hydraulic and electric subsea control systems.

The knowledge gained in this course will help you to understand how these control systems and their components operate. It will also explain the role of the Control Room Operator.
How will the course benefit my company?

Subsea wellhead technology is an important part of sustaining oil production on existing assets. By ensuring you are fully aware of how subsea control systems function, you can work safely with these systems.

What standards are referenced in the course?

This course does not refer to specific legislation or standards but is written to industry best practice and standard operating procedures.

Is there an assessment?

Once you have completed the course, you will be asked a series of questions to check your knowledge and understanding. These are based on the learning objectives for the course and have a pass mark of 80%.

Learning Objectives:

- Define what is meant by a Subsea Hydraulic Control System
- Identify the different types of Subsea Hydraulic Control Systems
- Describe the different types of Subsea Hydraulic Control Systems
- Identify the advantages and disadvantages of Subsea Hydraulic Control Systems
- Identify the components of the Hydraulic/Electro Dual Solenoid Valve
- Describe the process by which the Hydraulic/Electro Dual Solenoid Valve opens and latches
- Describe the process by which the Hydraulic/Electro Dual Solenoid Valve closes and latches
- Explain the need for Electrical Control Systems
- Explain the limitations of Subsea Electrical Controls
- Explain the importance of a power controller
- Describe uninterruptible power supplies
- Explain how uninterruptible power supplies work