



Key:	Course Provider Certificate	Externally Accredited Certificate
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Mechanical and Electrical Isolation-1 day		
	Pre requisite:	None
This one day course is intended to provide delegates with the practical skills and knowledge to document and undertake Mechanical and Electrical Isolation.		
During the course delegates will be asked to demonstrate an understanding of the techniques by isolating off-line equipment. Use will also be made of accident testimony and reports from the Piper Alpha and Grangemouth Oil Refinery accidents.		
Who is the Course For?		
Supervisors & Engineers		
Learning Outcomes		
At the end of the course delegates will have a clear understanding of the reasons for isolating mechanical and electrical equipment, the techniques to be used within their workplace and the purpose of the Isolation Certificate and Permit To Work used by high risk Industries.		
End test		
The course will conclude with a practical isolation exercise designed to further confirm understanding of the key learning points.		

Legal considerations

The Health and Safety at Work etc Act 1974 (HSWA), and associated legislation, requires duty holders to reduce risk, so far as is reasonably practicable. The term as low as reasonably practicable (ALARP), which is used in this document, is interpreted in the same way.

The general requirements of HSWA and MHSWR are supported by specific regulations, approved codes of practice and guidance. In this section we will undertake a brief review of some of the key requirements in relation to isolation.

A COMAH site needs to be able to demonstrate risk is ALARP for each isolation on site that could lead to a major accident hazard.

HS (G) 253 tells us that the greater the potential hazard, the more effective, secure and controlled the isolation should be. Where a number of options for risk reduction exist, you must use the lowest-risk option that is reasonably practicable. Engineering solutions are preferred to procedural controls or to reliance on the use of personal protective equipment (PPE). In some circumstances, the risks associated with an isolation may be intolerable. In such cases the work should not go ahead. No individual step in an isolation procedure should be associated with an intolerable risk. Instead, you should find an alternative approach (e.g. plant shutdown) that does not involve intolerable risk.