

# Implications of the New Machinery Directive 2006/42/EC & Changes to the Safety of Control Systems Standards

## Course Summary

- Meeting the requirements of the “NEW” Machinery Directive 2006/42/EC
- Differences between the old Machinery Directive 98/37/EC and the new Machinery Directive 2006/42/EC
- An introduction to EN 62061 and EN ISO 13849-1 and understanding the differences to EN 954-1

The “NEW” Machinery Directive, 2006/42/EC, was published on 9<sup>th</sup> June 2006 and the provisions of the new Directive become applicable on 29<sup>th</sup> December 2009. However, from a practical and technical point of view, manufacturers & importers of machinery are advised to anticipate application of Directive and prepare for the new requirements for CE Marking. In the 10 years since the last publication of the Machinery Directive (98/37/EC), there have been significant advancements in the technology of safety related control systems and new & revised standards have allowed the introduction of programmable and networked systems. The course aims to highlight these changes, overview the technologies available and how to select and validate their application.

## Objectives

The objective of this course is to make manufacturers, importers and users of machinery aware of their new obligations and to bring them up-to-date with the revised and new harmonised standards and, in the UK, the NEW Supply of Machinery (Safety) Regulations 2008.

## Who Should Attend?

This course is intended for designers, manufacturers, importers and users of machinery.

## What Does The Course Include?

A comprehensive set of course notes, training CD, refreshments, lunch and a completion certificate.

Day 1	Day 2
<p><b>Europe &amp; Directives</b> The aims of the European Union and their implementation using European Directives.</p> <p><b>Changes to the Machinery Directive</b> Detailing the changes between the old Machinery and New Machinery Directive including; New exclusions from the Directive; Machines now within scope of the Directive; Choosing between the Low Voltage or Machinery Directive; Changes to the Conformity Assessment Procedures (Annex IV); Additional requirements for Risk Assessment/Management; The relationship with the Medical Devices Directive; Changes for partly-completed machinery.</p> <p><b>Changes to the Essential Health and Safety Requirements</b> Changes to the Essential Health and Safety Requirements of the “New” Machinery Directive, and how they differ from the old Directive.</p> <p><b>European Harmonised Standards</b> To introduce new &amp; revised standards being in support of the “New” Machinery Directive and so called “Functional Safety”.</p>	<p><b>CE Marking of Machinery</b> The purpose of CE Marking. What manufactures and importers of machinery must do to apply the CE mark under the “New” Machinery Directive, and the reasons for change.</p> <p><b>Risk Assessment</b> Exploring types of risk associated with machinery and their application environment and how control over the risks may be applied. Examination of method of risk assessment and how they are most suitably applied.</p> <p><b>Design of Safety Related Control Systems</b> Understanding of the purpose, requirements and realisation of the safety related parts of control systems &amp; assessing the required performance in relation to the risks. Safeguards &amp; protective devices and their appropriate application in electrical, pneumatic, hydraulic and mechanical parts of the control system.</p> <p><b>Verification &amp; Validation of Safety Related Control Systems</b> Quantified verification and validation of safety related control systems under EN 61508, EN 62061 &amp; EN ISO 13849-1. Understanding the ‘new’ terminology including SIL, PL, CCF, etc. Determining the required level of performance and quantify the anticipated performance of a safety related system using practical values and techniques.</p>

## Booking Details:

Places will be provisionally booked by completing the online booking form. Confirmed bookings are made by faxing the signed booking form to 01527 595033. Alternatively you can post the form to the address below. This course is delivered by Wemtech, on behalf of the CE Marking Association, and has been endorsed by BSI. Further information on dates and costs are available on our website: <http://www.wemtech.co.uk/>

To: CE Marking Association

Fax: 01527-595033

## Booking Form

**Booking Details** - Places may be provisionally booked by completing this form, signed and Faxed to CE Marking Association. All courses are run in conjunction with Wemtech. Posting this signed booking form with a cheque made payable to "Wemtech Ltd" makes confirmed bookings:

### Course Details

Course Name	
Course Date	

### Your Company Details

Booking Contact	
Company Name	
Address Line 1	
Address Line 2	
Address Line 3	
Address Line 4	
Post Code	
Telephone	
Fax	
E-mail	

### Delegate Details

Title	First Name	Surname	Job Function

### Price

Unit Price	Qty	Total Price
£650+VAT p/delegate		
£325+VAT members price where applicable		
<b>£50 BSI Certificate of Attendance (optional)</b>	<b>plus VAT at 17.5%</b>	
	<b>Order Total</b>	

Authorised Signature \_\_\_\_\_ Date \_\_\_\_\_

**Booking Conditions** - Payment with order please. Provisional bookings will be accepted and confirmed on receipt of full payment. Bookings cancelled will incur an admin fee of £35 except less than 14 days prior to the course when full fees will be payable. Delegate substitutions may be made free of charge. Wemtech reserve the right to alter amend or cancel where appropriate.