

CE Marking to the Machinery Directive -- Certificate Program

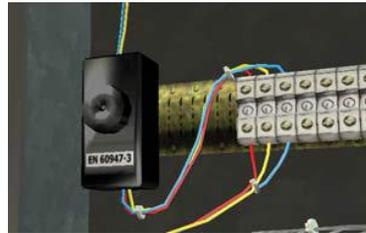
Earn a Professional Development Certificate in European Safety Requirements including: CE Marking, Electrical Standards and Practical Risk Assessment. As global standards become more of a requirement, this course was developed to a market demand for machinery safety qualification. This course was derived from a similar course delivered in the European Union by a recognized University in collaboration with TÜV-SÜD of the UK.

Machine Manufacturers who export to Europe have to deal with the legal requirements required for the European Market. Two of the main European Directives which will apply are the Machinery and Low Voltage Directives. This course examines practical requirements of managing machine safety legislation and includes sessions on how to implement CE Marking, risk assessment and the practical application of EN Standards.

Participants will come away with the practical experience of carrying out CE Marking to the Machinery Directive, while also understanding the role of EN standards and how to apply them to assist with legal compliance.

This course is geared to managers, engineers, and those involved in exporting machinery and carry out assessments of machinery as part of their job.

This course may be used to meet professional development requirements for PEs.



Tuesday, December 2 through Thursday, December 4, 2014

Kent State University Hotel & Conference Center

215 South Depeyster Street, Kent Ohio 44242

Cost: \$2200 -- includes course materials, meals, parking and follow-up assessment

Registration Link: www.ce-mark-training-course.eventbrite.com

Hotel Information: Kent State University Hotel 330-346-0100
www.kentstatehotel.com

Contact Tom Southards, Outreach Program Manager, Kent State University, College of Applied Engineering, Sustainability and Technology, wsouthar@kent.edu or 330-672-0793 for additional information, or registration other than online.



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Add value.

Your Presenter – David Corr

David Corr is a member of the machinery safety team at **TÜV SÜD Product Service** and is responsible for the delivery of machinery safety training provided by TÜV SÜD including the University Course in Professional Development for Machinery Safety.

Ohio Manufacturing & Technology
Small Business Development Center



**Global Business
Resource Center**



Program Details

This program provides a practical approach to CE Marking for the Machine Builder -- Machine builders who export to Europe, have to deal with the legal requirements required for the European market. Two of the main European Directives which will apply are the Machinery and Low Voltage Directives.

This course examines the practical requirements of dealing with machinery safety legislation and includes sessions on how to carry out CE Marking, risk assessment and the practical application of EN Standards. Following the 3-day classroom sessions, there will be a 16-week period in which participants may complete a CE Marking assessment of a virtual machine (software supplied) which forms the basis of the overall course assessment, and thus the certification.

Day 1: MACHINERY DIRECTIVE 2006/42/EC

- Introduction
- CE Marking Significant Directives
- CE Requirements And Implications
- Background To The Machinery Directive
- Complex Assemblies
- Risk Assessment
- Declaration Of Conformity/Incorporation
- Feedback/Questions

Case Study

Day 2: ELECTRICAL MACHINERY SAFETY (EN 60204-1)

- Introduction to EN Standards
- EMC requirements
- Control device selection
- Electrical isolation, termination and wiring
- Protection against electric shock
- Control circuits, control devices, and control functions
- Control gear location and mounting
- Wiring practice
- Equipment marking
- Technical documentation for equipment
- Testing and verification

Case Study

Day 3: OTHER RELEVANT EN STANDARDS

- EN 12100 - General Requirements For Safety
- EN ISO 13857 - Access Of Upper Limbs And Lower Limbs
- EN 349 - Access Of Body Parts
- EN 953 - Guarding Requirements
- EN ISO 4413 - Hydraulic Systems
- EN ISO 4414 - Pneumatic Systems
- EN ISO 13850 - Emergency Stop Circuits
- EN 574 - Two Handed Controls
- EN ISO 13849 - Safety Related Circuitry
- EN ISO 13855 - Positioning Of Protective Safety Devices
- EN ISO 14119 - Interlocking Of Guards

Scope of Standards & Case Study

Introduction to the Assessment Software that provides a virtual machine environment in which you may apply and test your skills.

Host – Manufacturing and Technology Small Business Development Center (MTSBDC) at Kent State University / MAGNET

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Content Provider

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2) The Ohio Small Business Development Center Program of Ohio (SBDC) program is funded in part through a cooperative agreement with the U.S. Small Business Administration. The SBDC program is also funded in part by the Ohio Development Services Agency. All opinions, conclusions or recommendations expressed are those of the author(s) and do not necessarily reflect the views of the SBA. Reasonable accommodations for persons with disabilities will be made if requested at least two weeks in advance. Contact (Tom Southards, KSU – CAEST, PO Box 5190, Kent, OH 44242-0001 / 330-672-0793 or 330-672-2892 / wsouthar@kent.edu).