

# Session 4 – European Directives – CE Marking Overview





### **CE Marking**

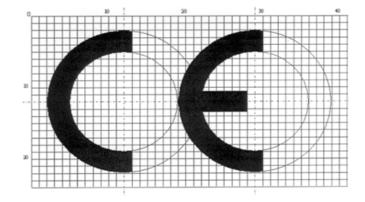
In order to demonstrate that certain products are legal within Europe, it is a requirement of national legislation implementing EU New Approach Directives to apply CE marking to certain categories of products. The CE-marking of an assembly represents a declaration by the manufacturer (or his authorized representative in the EU, in the case of products imported into Europe) that it complies with the essential requirements of all Directives relevant to assemblies.

The purpose of the CE Mark is to indicate to national administrations that there is a "presumption that the essential requirements of the relevant Directives have been met". It enables an assembly to be placed on the European market without any initial challenge by any of these authorities. The policing of compliance of products with these Directives will be complaint driven. Should investigations carried out by a national enforcement authority confirm that any of the requirements have **not** been met, then this could lead to total banning of the assembly system from the European market, and perhaps the fining and/or imprisonment of the responsible person.



## **CE Marking (cont.)**

It should be noted that this indication for the benefit of national administrations is the sole purpose of the CE Mark. It is not intended to be used as a marketing tool; it does not even indicate that an assembly is "Made in Europe". Nor does it imply a level of quality or that the assembly has been in any way "approved" or third-party certified.



Electrical products intended for Zone 0 and Zone 1 installations still require testing by a third party and a documented quality system by the manufacturer. This implies that Zone 2 material does not have to undergo third party testing and approvals, but can be self-certified by the manufacturer. The CE mark is a manufacturers self declaration that the products meet a standard. It is not an approval and is only required in the European market.



## **Countries requiring CE compliance**



The EU Member states legally require CE-Marking.

The European Free Trade Association (EFTA\*) countries, with the exception of Switzerland, also enforce CE-Marking.

\*-Iceland, Liechtenstein, Norway and Switzerland are EFTA countries.

Austria (became member in 1995) **Belgium** (Founder Member in 1957) **Denmark** (1973) **Finland** (1995) **France** (1957) **Germany** (1957) **Greece** (1981) Ireland (1973) **Italy** (1957) Luxemburg (1957) the Netherlands (1957) **Portugal** (1986) **Spain** (1986) **Sweden** (1995) **United Kingdom (Great Britain)**(1973) **Estonia** (2004) **Latvia** (2004) Lithuania (2004) **Poland** (2004) Czech Republic (2004) Slovakia (2004) **Hungary** (2004) Slovenia (2004) Malta (2004) **Cyprus** (2004) **Romania** (2006)

# SOURCE IEx

## **Countries requiring CE compliance**





Member states of the European Union (2008)

Candidate countries

SOURCE IEx

# **Directives for CE compliance**

73/23/EEC 93/68/EEC	73/23/EEC	Low Voltage
87/404/EEC 90/488/EEC 93/68/EEC		Simple Pressure Vessels
88/378/EEC 93/68/EEC	88/378/EEC	Safety of toys
89/106/EEC 93/68/EEC	89/106/EEC	Construction products
89/336/EEC 92/31/EC 93/68/EEC 2004/108/EC	89/336/EEC	Electromagnetic compatibility (EMC)
98/37/EC 98/79/EC		Machinery
89/686/EEC 93/68/EEC 93/95/EEC 96/58/EC	89/686/EEC	Personal protective equipment (PPE)
90/384/EEC 93/68/EEC		Non-automatic weighing instruments
90/385/EEC 93/42/EEC 93/68/EEC	90/385/EEC	Active implantable medical devices
90/396/EEC 93/68/EEC	90/396/EEC	Appliances burning gaseous fuels
92/42/EEC 93/68/EEC	92/42/EEC	Efficiency requirements for new hot-water boilers fired with liquid or gaseous fuels
93/15/EEC		Explosives for civil uses
93/42/EEC 98/79/EC 2000/70/EC		Medical devices
94/9/EC		Equipment explosive atmospheres (ATEX)
94/25/EC 2003/44/EC	94/25/EC	Recreational craft
95/16/EC		Lifts
97/23/EC		Pressure equipment
98/79/EC		In vitro diagnostic medical devices
1999/5/EC		Radio Equipment and Telecommunications Terminal Equipment and the Mutual Recognition of their Conformity
2000/9/EC		Cableway installations designed to carry persons
2004/22/EC		Measuring instruments



## **EC DoC Example**

#### EC - Declaration of conformity

CE – Dèclaration De Conformitè

EG - Konformitätserklärung



Victor Products Ltd New York Way New York Industrial Park Newcastle upon Tyne NE27 0QF ENGLAND

#### TRIDENT VL125

VL125 IP66/67 SIRA03ATEX3206 T100°C C € II 2GD EEx em II T4

#### Victor Products Ltd

Hereby declare our sole responsibility that the product which is the subject of this declaration is in conformity with the following standards or normative documents.

Erklären in alleiniger Verantwortung, daβ das Product auf das sich diese Erklärung bezieht, mit der/den folgenden Norm(en) oder normativen Dokumenten Ubereinstimmt.

Déclarons de notre seule responsabilité, que le produit auquel cette déclaration se rapporte, est conforme aux norme(s) ou aux documents normatifs suivants.

Number and date of standard	Directive description
Nr. Sowie Ausgabedatum der Norm	Bestimmungen der Richtlinie
No. Ainsi que date d'emission des normes.	Prescription de la directive
EN 50014 (1998)	94/9 EC : Equipment and protective systems intended for use in potentially explosive atmospheres.
EN 50019 (2000)	aunospheres.
EN 50028 (1987)	94/9 EG: Geräte und Schutzsysteme zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen
EN 50281 (1999)	explosionsgerani detern bereichen
· ,	94/9 CE: Appareils et systèmes de protection destinés a êtré utilisés en atmosphères explosibles.
EN50082 (1992)	89/336 EEC: Electromagnetic Compatability
EN55015 (1993)	89/336 EWG: Elektromagnetische Verträglichkeit
EN 60555-2 (1987)	89/336 CEE: Compatabilité électromagnétique
Notified Body: SIRA Certification Services (0518) Rake Lane Eccleston Chester CH4 9JN	G. 1. Mood
	Dr. G. I. Mood Technical Director 29/03/04

ec Declaration of Conformity

— Different than an Ex Certificate.

Issued by the Manufacturer in Question.

Does not necessarily mean tested by a lab.



# Other Directives that Electrical Engineers should be aware of...

### **Machine Guideline Directive**

Directive of the European Parliament and the council dated June 22, 1998, for alignment of the legal and administrative regulations of the member states concerning machines 98/37/EC (based on 89/392/EEC) 01.01.93 31.12.94

### **PED Pressure equipment Directive**

Directive 97/23/EC of the European Parliament and the council dated May 29, 1997, for alignment of the legal regulations of the member states concerning pressure equipment 97/23/EC 29.11.99 29.05.02



### DET NORSKE VERITAS

### **OS** CERTIFICATE OF ASSESSMENT-EC

Application of the Council Directive 97/23/EC of 29 May 1997 on Pressure Equipment, as amended.

#### CERTIFICATE NO. PED-H-50

This Certificate consists of front page + Appendixes

This is to certify that the quality system of

### Invensys Systems Inc. FOXBORO-MA 02035, USA

for design, manufacture and testing of

#### Flowmeters and Pressure Transmitters

as specified in the Appendix I to this certificate, is found to comply with the requirements of the Pressure Equipment Directive

The Manufacturers Quality System for the equipment has been assessed with respect to the procedure of conformity assessment as described in Module H, in the Directive

Further details of the product and conditions for the certification are given overleaf.

Place and date Høvik, 2902-07-09 for DET NORSKE VERITAS AS

Carl-Morten Gjeldnes
Head of Section
CNCNO750

Notified Body No

Local Office DNV Calgary



Hans Dyrdal Rasmussen

Notice: The certificate is subject to terms and condition, if any, overleaf. Any significant changes in design or construction of the product, the quality system or amendments to the Directive or Standards referenced above may render this certificate invalid. The product liability rests with the manufacturer or his representative in accordance with the Council Directive, as amended.

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Nonke Vertas, then Det Nonke Vertas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall never exceed USD 2 million in this provision "Det Nonke Vertas" shall never the compensation shall never exceed USD 2 million in this provision "Det Nonke Vertas" shall never the compensation shall never exceed USD 2 million in this provision "Det Nonke Vertas" shall never the Compensation shall never exceed USD 2 million in this provision "Det Nonke Vertas" shall never the compensation shall never exceed USD 2 million in this provision "Det Nonke Vertas" shall never the compensation shall never exceed USD 2 million in this provision "Det Nonke Vertas" shall never the compensation shall never exceed USD 2 million in this provision "Det Nonke Vertas" shall never the compensation shall never exceed USD 2 million in this provision "Det Nonke Vertas" shall never the compensation shall never exceed USD 2 million in this provision "Det Nonke Vertas" shall never the compensation shall never exceed USD 2 million in this provision "Det Nonke Vertas" shall never the compensation shall never exceed USD 2 million in this provision "Det Nonke Vertas" shall never the compensation shall never exceed USD 2 million in this provision "Det Nonke Vertas" shall never the compensation shall never exceed USD 2 million in this provision "Det Nonke Vertas" shall never the compensation shall never exceed USD 2 million in this provision "Det Nonke Vertas" shall never the compensation shall never exceed USD 2 million in this provision "Det Nonke Vertas" shall never the compensation shall never exceed USD 2 million in the compensation of the Compensation shall never exceed USD 2 million in the compensation of the Compensation shall never exceed USD 2 million in the compensation shall never exceed USD 2 million in the compensation shall never exceed USD 2 million in the co