

What is CE?

CE, or *Conformité Européen (European Conformity)*, ensures the free movement of products or goods throughout the European Union and provides evidence that the product complies with the requirements of all relevant directives. It is essentially the manufacturer's guarantee that their product has been designed and constructed in accordance with the directives, which are intended to ensure the safety and reliability of products sold in the EU.

Directives are issued by the European Union council, and are mandatory throughout each country belonging to the Union - they are often adopted into national laws.

Compliance by manufacturers is mandatory in order to place products on the market anywhere in the EU. Failure to do so can result in civil and criminal penalties, as well as being forced to withdraw a product from the market.



Approved products will bear the CE mark:

How Do You Obtain a CE Mark?

In order to obtain CE marking for a product or system, a manufacturer must first know:

- Which directives apply to the products
- How to test and document compliance
- Who can issue certificates of compliance
- What information is needed to obtain a certificate of compliance

All of that can be complicated, especially for companies or manufacturers with little or no experience in the European market. While product standards exist in North America and elsewhere, compliance with those standards does not equate to compliance with EU standards in most cases.

It should be noted that compliance with one directive - such as ATEX - does not necessarily mean total compliance with the requirements for CE marking. Each product must be evaluated by the manufacturer to ascertain exactly which directives the product must meet, and then certification under each of those directives must be obtained prior to applying for - and receiving - CE marking certification.

ATEC Training and Certification can help companies better understand CE marking and European directives through our various training courses, AND we can assist in obtaining the testing, documentation, and certifications necessary to obtain the CE mark. By discussing your requirements, we can advise on the directives and standards that apply to you, the route to achieving compliance, and undertake any work that may be required along the way.

Our courses are designed to enable your personnel to understand the directives, applicable standards, and industry best-practices. Our courses cover everything from competency in design of ATEX equipment and systems to hands-on training for your installers / builders. We also offer "overview" courses designed to familiarize all of your staff with CE, ATEX, and other potentially relevant directives.

While ATEX - the directive concerning equipment and operations in areas with potentially explosive atmospheres - is our primary focus, we can also offer training, information, and assistance with other CE directives, including the most common industrial ones listed below:

Electromagnetic Compatibility (EMC Directive)

The EMC directive applies to all electrical equipment in the European Union. It requires testing of equipment to ensure that it does not unduly interfere with other equipment due to electromagnetic interference, and that it is not too susceptible to such interference FROM other equipment.

Low Voltage Directive (LVD)

LVD is really an electrical safety directive or standard. The purpose is to ensure that electrical equipment and products do not endanger the safety of people, domestic animals and property. In some cases, compliance with other directives may preclude the necessity of examination under the LVD, as compliance with those directives would ensure LVD compliance

Machinery Directive

The Machinery Directive addresses the construction and assembly of any equipment with moving parts. Much like the LVD, it is concerned with protecting the safety of people, domestic animals, and property, and therefore specifies requirements such as safety guards or devices in order to ensure that the machinery can be operated safely.

Pressure Equipment Directive (PED)

Often one of the most difficult directives to meet, the PED applies to any equipment or system which is subjected to .5 bar (about 7 psi). Any such equipment must be assessed to determine what **category** it falls into, and subsequently either self-certified under sound engineering practice, or evaluated by a notified body.