

# What is ATEX?

ATEX is a set of Directives issued by the European Union relating to areas with potentially explosive atmospheres (known as hazardous areas). Consisting of 2 separate directives, ATEX spells out requirements for equipment manufacturing, testing, and installation as well as operations for hazardous areas. The intent is to prevent potentially catastrophic explosions and fires in facilities having areas with potentially explosive atmospheres. Compliance with the Directive is mandatory for any equipment intended for use in hazardous areas, as well as any facility operating such areas.

**ATEX is only applicable in the European Union, unless dictated by national or client requirements.**

**There are 2 directives that fall under ATEX:**

Directive **99/92/EC**, also known as ATEX 137, is a workplace directive which details the minimum requirements for improving the safety and health protection of workers potentially at risk from explosive atmospheres. It directs employers or facility operators to conduct risk assessments and risk mitigation, and to provide necessary safeguards to protect employees, contractors, and the general public from potential explosions or fires resulting from hazardous area operations.

Directive **94/9/EC**, commonly known as ATEX 95, is related to equipment. Using a set of requirements known as the Essential Health & Safety Requirements (EHSR), the directive specifies the construction and testing requirements for **both electrical and non-electrical** equipment intended for use in hazardous areas, as well as installation and maintenance requirements for such equipment. Although the directive lacks fully comprehensive standards for all potential situations, it requires manufacturers and operators to comply with the EHSR's OR the European Harmonized standards (EN 60079 series) as long as the EHSR's are met - which is assumed to be true, in most cases, when the harmonized standards are fully met.

Note that the European Harmonized standards - EN 60079 series - are identical to the IEC 60079 series of standards on equipment intended for use in hazardous areas.

**Why was it introduced?**

The ATEX Directive main objectives are to guarantee the free circulation of goods within the European Union by aligning the technical and legal requirements of the Member States. Prior to the introduction of the harmonized standards and / or ATEX directives, equipment produced in one member state may not necessarily be accepted into another member state. Products certified under the ATEX directive are now acceptable for use in any of the countries participating in the EU.

**What does it apply to?**

The Directive applies to electrical and/or mechanical equipment used on the surface, below the ground and on fixed offshore installations. Specifically, the Directive covers:

- **All equipment intended for use in potentially explosive atmospheres and which are capable of causing an explosion through their own potential sources of ignition.**
- **Protective systems intended for use in potentially explosive atmospheres. Protective systems are defined as units which are intended to halt incipient explosions immediately and/or to limit the effective range of explosion flames and explosion pressures**
- **Components, which are defined as any item essential to the safe functioning of equipment and protective systems but with no autonomous function.**

Equipment is only considered to be within the scope of the directive if it is intended (either in whole or in part) to be used in a potentially explosive atmosphere - however there are multiple factors which must be considered in conjunction with the directive in order to determine if equipment is subject to the directive.