

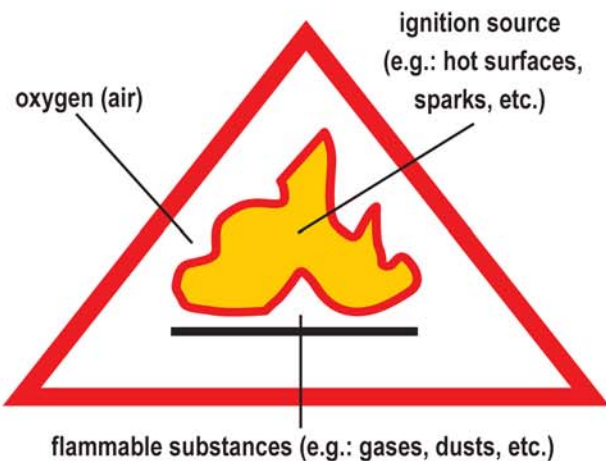
Terminology Explosion Protection

In chemical and petrochemical industries, in the exploration of oil and gas, when storing flammable gases, liquids and dusts and in many other industries gases and dusts are caused during production, processing, transportation or storage.

These flammable gases, vapours, smokes and dusts result in combination with oxygen in an explosive atmosphere. The ignition of these atmospheres result in explosions causing severe damage to human beings and property.

Explosions triangle

3 elements are required for an explosion:



Therefore it is necessary to avoid any possible sources of ignition and to use/install so called explosion-proof signalling products in these industries. For avoiding any danger of explosion respective precautionary measures exist in the form of laws, decrees and standards which shall guarantee a high degree of safety.

Due to increasing international economic integration the standardization of standards was aimed at and achieved within the European Union with Directive 9/94/EG (ATEX 100a).

By the way the name ATEX was derived from the french (ATmosphere EXplosible).

Explosion-proof signalling equipment has to be tested and certified before sale/use by independent authorities/testing and inspection/certification bodies (eg. PTB Braunschweig, DMT Essen etc.).



AUER develops and manufactures since more than 25 years explosion-proof signalling equipment (visual and audible signalling equipment and telephones). The precondition for manufacturing and marketing of ATEX certified equipment is the respective proof by the manufacturing of a successful audit by independent authorities/testing and certification bodies.



See double page before as overview of required marking / descriptions using as example the classification of typical AUER signalling equipment and the respective meanings for better understanding.