



ATEX REGULATIONS - POTENTIALLY EXPLOSIVE ATMOSPHERES

In many workplaces, even those less dangerous, there could be hazardous situations for workers or people transit.

The ATEX guidelines dispose that in the hazardous classified areas all potential sources of ignition and static electricity must be reduced

The ATEX guidelines (Directive 94/9/EC) came into force in 2003 and they are executed in presence of explosion risk atmosphere. To classify a place as hazardous, there must be the presence of fuel, oxidizer and source of ignition. The regulation distinguishes 2 main categories:

- **Group I:** equipment intended for use in underground mines and related surface plants, exposed to release of firedamp and/or combustible dust risk;
- **Group II:** equipment intended for use in other environments where there can be explosive atmospheres. This group includes surface industries also.

Each zone will be classified according to ATEX regulation:

CATEGORY 1 - Zone 0 (gas) Zone 20 (dusts) - A very high level of protection must be ensured, because there is a high probability of arising or detecting explosive atmospheres (often or for long periods).

CATEGORY 2 - Zone 1 (gas) Zone 21 (dusts) - A high level of protection must be ensured, because there is probability of arising explosive atmospheres.

CATEGORY 3 - Zone 2 (gas) Zone 22 (dusts) - - A normal level of protection must be ensured, because there is low probability of arising explosive atmospheres (rarely and for short periods)