



What does ATEX mean?

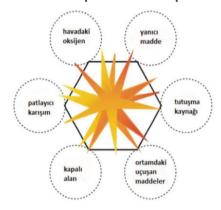
ATEX is an abbreviation of the French words "ATmospheres EXplosives". This term covers all areas of equipment used in potentially explosive atmospheres where dusts (denoted by D) and gases (denoted by G) are present.

What does "equipment" mean?

As defined in Directive 2014/34/EU, the term "equipment" includes any machinery, materials, central or mobile devices, control elements, hand tools, detection, and energy conversion of detection and extinguishing systems, as well as equipment that may cause an explosion due to the potential ignition sources they contain, as well as any machinery, materials, central or mobile devices, control elements, hand tools, detection and extinguishing systems used together or alone for production.



What is an "Explosive Atmosphere"?



Classification of powders according to established parameters

Explosive powders are divided into 4 classes according to their Kst values. The explosion categories of powders according to their kst values are given in the table below.

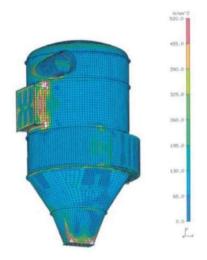
| Explosion Class | Kst [bar*m/s] | | Explosion Type |
|------------------------|-----------------|------|----------------|
| St0 | 0 | | No |
| St1 | 0< | 200< | Slim |
| St2 | 200< | 300< | Strong |
| St3 | 300< | | Very powerful |

Classification of Explosive Zones

| Danger Zone | Gases, Vapors, Mists (G) | Powders (D) |
|---|--------------------------|-------------|
| The zone where the explosive gas mixture is constantly present | ZONE0 | ZONE 20 |
| Zone where explosive gas mixture is likely to occur | ZONE 1 | ZONE 21 |
| An area where there is normally no explosive gas mixture, but if there is, it will not remain for a long time | ZONE2 | ZONE 22 |







STUDIES HAVE SHOWN THAT THE FILTER CAN BE PROPERLY PROTECTED USING DEVICES THAT COMPLY WITH ATEX 94/9/EC AND EN 1127-1. IN THE EVENT THAT SUCH PROTECTIVE DEVICES ARE NOT ORDERED AND/OR INSTALLED, THE USER SHALL BE LIABLE IN ACCORDANCE WITH 99/92/EC (ATEX 137).

AIRALT Ex is a very high efficiency dry dust filtration machine. It is specially designed for operation in environments where high explosion protection is required in accordance with ATEX 94/9/EC.

Its required high structural resistance is the result of the FEM (Finite Element Method) analysis design and complies with UNI EN 97-23-288 specifications for welding operations and consistency of the project in accordance with the 23/4 (PED) rule. The high design and manufacturing standards applied by Coral were maximized to develop a standard model (with Pred=1barg) and a special version (with Pred=2 barg). AIRALT Ex filters can be used in the presence of ST3 class dust due to their excellent mechanical resistance to extreme pressure. When used with explosion detection and suppression systems, AIRALT Ex is the best product the filtration market has to offer today in terms of technology and safety.