

The Fan Manufacturers' Association

A group within the HEVAC Association

ATEX - Important new Health & Safety laws concerning explosive atmospheres affect **YOU**. If you have areas on your site where potentially explosive gases, vapours or dust could combine with air then you need to know about ATEX.



If there is an explosion, who will be held to account?

- YOU will.
- As the end user it is YOUR responsibility to ensure your site is safe and that all equipment in hazardous areas conforms to the ATEX regulations.
- In the event of an accident at a site not conforming to the ATEX legislation the end user will be liable for prosecution, which could result in a lengthy prison sentence.

What is ATEX?

ATEX - European legislation concerning explosive atmospheres mainly concerning two directives:

- European Directive 2014/34/EU (Equipment and protective systems intended for use in potentially explosive atmospheres) concerns equipment and protective systems intended for use in potentially explosive atmospheres. The fans and equipment YOU are responsible for buying.
- European Directive 1999/92/EC (ATEX 137 or ATEX Workplace Directive) covers the safety of working operations and protection of workers from potentially explosive atmospheres. Ensuring the safety of the people YOU are responsible for.



Does ATEX apply to me?



If the two statements above are true then ATEX applies to you.

- Directive has been applicable since 1st July 2003
- Applies to the whole of the EU and EEA.
- All new installations must conform to this regulation.
- In addition, all existing installations must have been analysed and risk assessed using this new code before the end of June 2006.



The Fan Manufacturers' Association

A group within the HEVAC Association



What is an explosive atmosphere?

Atmosphere consisting of a mixture of air and flammable substances in such proportions that it can be exploded by excessive temperatures, arcs or sparks. Flammable substances can be in the form of gas, vapour, mist or dust.

Note: This doesn't just include the obvious examples such as Hydrogen and Methane, but also include substances you may not realise are dangerous such as

metal powders, flour, grain or cereals. Most people do not appreciate that **ANY** solid substance that can be easily oxidised is explosive in powder form when in the right concentration.

How do I know if a product is ATEX compliant?

Manufacturers must identify machinery conforming to the ATEX regulations by attaching a nameplate displaying the manufacturers' details, ATEX classification, CE mark, European Commission mark for Ex products.





How does it work?

Under ATEX, hazardous areas are classified into zones on the basis of frequency and duration of an explosive atmosphere.

Zone		Zone Criteria	Equipment	Protection
Gases	Dust	(Presence of Explosive Atmosphere)	Category *	Level
0	20	Permanent or present most of the time.	1	Very High
1	21	Present occasionally in normal operation.	1,2	High
2	22	Rarely in normal operation, i.e. accidental occurrence.	1,2,3	Normal

* subject to suitability with gas or dust type present

- It is the responsibility of the end user to specify to the fan manufacturer the zone and category required and it is their duty to ensure that they supply sufficient information to obtain the appropriate fan for the job.
- The zone can be different for inside and outside the fan and the category of the machinery has to correspond to the more dangerous zone.

The fan manufacturer will usually provide the customer with an ATEX Customer Form, which they will complete specifying the categories and zones required so that the appropriate fan can be supplied.

BS EN 14986: 2007 Design of fans working in potentially explosive atmospheres - outlines design requirements for "ATEX" fans depending on equipment category. If your fans operate in or handle a potentially explosive atmosphere they should comply with this standard.

Where can I find additional information?

Fan Manufacturers' Association www.fanassociation.co.uk

Further information on the ATEX Directive can be obtained direct from the European Commission or from the UK Health & Safety Executive at the addresses below on the internet:

- European Commission website: http://ec.europa.eu/growth/sectors/mechanical-engineering/atex/index_en.htm
- Directive 2014/34/EU http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014L0034
- Health & Safety Executive: http://www.hse.gov.uk/fireandexplosion/atex.htm