GUIDANCE NOTES

European Directives

ATEX European Directives

Summary:

Since July 2003 the EU ATEX Directive 94/9/EC has required most products used in potentially explosive environments to be ATEX compliant. **Elmac Technologies®** can help plant operators ensure they are ATEX compliant by offering specific guidance on their flame arrester requirements, including: site surveys, technical presentations and flame arrester specification.

EU ATEX Directive 94/9/EC - Equipment intended for use in Potentially Explosive Atmospheres

Elmac Technologies has been independently assessed by a notified body against the requirements of the ATEX Directive 94/9/EC. Elmac flame arresters meet the criteria and are supplied with CE and EX markings, an EC Declaration of Conformity and an EC Type Examination Certificate.

Elmac flame arresters and ancillary products are certified and fully compliant with the ATEX directives. However, EU ATEX Directive 94/9/EC has to be read in conjunction with Directive 99/92/EC, which regulates the safety of workplaces where hazardous areas are present. There is a requirement in the workplace directive that states 'where workplaces which contain areas where explosive atmospheres may occur are already in use before 30 June 2003, they shall comply with the minimum requirements set out in this Directive no later than three years after that date.' (Article 9.4)

This means that those existing workplaces must now comply with the regulations which include such activities as zoning, and carrying out risk assessments. If any new equipment is installed, it has to be ATEX compliant or if any substantial modifications are made to existing equipment it needs to be brought into compliance with ATEX. However, there is no requirement to replace equipment that is already in use as long as the user has had it risk assessed, and can therefore prove that it is still safe to be used in the environment.

End users have the ultimate responsibility to ensure ATEX compliance.

What is ATEX?

ATEX is the name given to a set of European Directives relating to Hazardous Area Installations (Flammable Atmospheres) that takes its name from the French "Atmospheres Explosibles". It spells out a set of Essential Health & Safety Requirements (EHSR) which when followed should enable everyone in the industry to operate safely and to avoid incident.

Two separate directives have been introduced covering equipment (94/9/EC) and Safety of Working Operations (99/92/EC).

ATEX European Directives

When was it introduced?

The ATEX Directive came into effect on a voluntary basis on the 1st March 1996 and has been mandatory since 1st July 2003. It is now necessary for all products placed on the market, or put into use, to comply with the ATEX Directive, even if they are only intended for use in their country of origin. If products come within the scope of the Directive, companies wishing to sell them or have them put into service in the European Union (EU), have to comply with the Essential Health and Safety Requirements (EHSR's) specified in the Directive and mark them with the CE marking.

Why was it introduced?

It was adopted by the European Union (EU) to facilitate free trade in the EU by aligning the technical and legal requirements in the member states for products intended for use in potentially explosive atmospheres within the EC. It requires manufacturers to adhere strictly to the latest European Normatives (EN Standards) in respect of design, construction and certification. For example EN 12874 applies to flame arrester products. Equipment that complies with the ATEX Directive can be marked with the 'Distinctive Community Mark', this mark is required to ensure that the equipment will be accepted in all Member State countries and be permitted for use in Potentially Explosive Atmospheres. The possible financial implications of failing to comply with the new European Directives (and the damage to your company's reputation) justify the effort involved in obtaining the correct approvals.

The onus of responsibility is with the end users.

What does it apply to?

The Directive covers equipment and protective systems, which may be used in areas endangered by potentially explosive atmospheres created by the presence of flammable gases, mists or dusts. The Directive covers both electrical and mechanical equipment. Also included in the term "equipment" are safety or control devices installed outside the hazardous area but having an explosion protection function. "Protective Systems" are defined as items that prevent an explosion that has been initiated from spreading or causing damage.

Elmac Expertise

Elmac have been manufacturing flame arresters since 1948, and bring enhanced levels of flame and explosion protection to a diverse range of applications. Elmac Technologies offers considerable technical leadership and using test facilities along with CFD capabilities, employs research teams renowned for developing solutions for the most challenging of industrial applications.

Customer Support Team

Elmac Technologies can assist clients by providing a review of proposed new installations, advice on extensions to sites and undertake existing site reviews, to ensure that flame arresters are, or will be, ATEX compliant.

Customer Support Team

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Innovative Safety Solutions

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