ATEX Standards
Axial Fans
“Fan engineered products are only worth having if they comply with the very highest standards of quality, reliability, performance, function and safety. ”
ATEX & HAZARDOUS APPLICATION FANS

Our hazardous application fans are no exception to our approach, whereby Elta Fans continue to make every effort to develop the highest specification products; by matching our capabilities to the very latest standards. These capabilities are reflected by our ability to manufacture a comprehensive range of axial flow fans to meet the ATEX Directive, and the current form of the EN 14986 standard. This relatively new, but evolving standard, requires a range of design refinements to the features Elta Fans have incorporated within their hazardous fans for more than 40 years.

The ATEX Directive requires a specifier to clearly state from their site risk assessment, the Area, Zone and Category that the ventilation equipment needs to fulfil. As fan manufacturers, we design and build a product that shall meet those requirements, although we are not expected to assess, decide or guess as to the required equipment standard. The products manufactured to a particular build specification, should not be used in any alternative environments or applications without the agreement of the fan manufacturer in writing.
APPLICATIONS

Dust

Area – Zones 21 and 22
Category 2D and 3D where alternative specifications are required, Elta Fans have the design and manufacturing capabilities to meet specific overseas hazardous classifications. With fans specifically designed and refined to meet a variety of hazardous applications, Elta Fans will endeavour to design and supply to your needs.

Typical Applications

- Marine and offshore oil drilling and production platforms
- Chemical Process
- Oil and gas refineries
- Gas turbine and engine enclosure cooling
- Water and sewage treatment
- Material and gas waste
- Landfill gas processing
- Dust and paint extraction
- Battery room ventilation
- Refrigeration

Gas

Area – Zone 1
Gas category 2G with electrical equipment EExd, EExde and EExe

Area – Zone 2
Gas category 3G with electrical equipment EExn or EExnA
“We design and manufacture a wide range of axial fans from 315mm to 2000mm diameter, which are all suitable for hazardous environments.”
FEATURES & BENEFITS

Our design and manufacturing skills in fan engineering enable customers to benefit from more than 40 years experience, but by combining know how with the very latest standards, Elta Fans can offer the following design and build standards, ensuring safe operation in hazardous environments.

Design Appeal
Long, short, belt driven, bifurcated and plate type fans. The assessment of temperature operating limitations, with special consideration to tip clearance requirements. Full application and classification data provided on product nameplates. Casing terminal boxes, certified in their own right; together with the necessary cabling systems are usually provided for incoming supply connections.

Motors
A wide variety of motor supply requirements, with due consideration to terminal box access for motor connection checking. Where required, motors can be fitted with thermistor protection for operation where inverter control or other flow-limiting devices are used, for example, powered dampers.

Impeller
High efficiency aerofoil impellers in Aluminium alloy with natural finish painted to client requirements, as well as alternative impellers manufactured in stainless steel or carbon filled GRP.

ACCESSORIES

Elta Fans design, manufacture and supply a full range of accessories, which include:

Feet, Anti-Vibration mounts, Flexible collars and rings, Gravity dampers, Bell mouth inlets, Guards and required access panels / doors. Special items such as Hazardous flow switches, pressure switches, stop / start control centres.
CASING & CONSTRUCTION

Special ‘Naval’ brass for spark minimising rings.
All stainless steel 316 or 304 grade casings and accessories. Steel casings all hot dipped galvanised after manufacture. Treatment to avoid galvanic action between dissimilar materials and special paint treatments to client requirements where required.
STANDARD ATEX FANS

Elta Fans manufacture a comprehensive range of axial flow fans to meet the ATEX Directive, and the current form of the EN 14986 standard. This evolving standard requires a range of design refinements to the features Elta Fans have incorporated within their hazardous fans for over 40 years.

Typical applications would include; chemical process, water and sewage treatment, material and gas waste, dust and paint extraction, battery room ventilation and refrigeration.

Raptor SFB

ATEX Plate Mounted Axial Flow Fan
The Raptor SFB is a range of Ziehl-Abegg ATEX rated plate mounted axial fans for internal mounting, manufactured in mild steel with a RAL9005 paint finish. These units are designed to meet the requirements for Hazardous Areas, with protection to Ex II 2G c Ex IIB T4

SLCX ATEX

ATEX Long Cased Axial Flow Fan
The SLCX is a range of ATEX rated duct mounted axial fans, manufactured in heavy gauge sheet steel. These units are designed to meet the requirements for Hazardous Areas with carbon filled anti-static impeller blades and protection Ex II 2G c IIC T4 X.
The Elta Fans Applied Technology division is based in Hampshire, England and have been manufacturing industrial axial fan units since 1976.

We never stop challenging ourselves when it comes to quality of both our products and services. We are committed to continued improvement in all aspects of our business. Our capabilities and engineering have no boundaries and we are driven by challenges set by our customers. We pride ourselves on our engineering capabilities having a wealth of experience means that we can boast a thing or two about the class of the products we manufacture.

The same engineers who make our stocked ATEX fans are responsible for projects and fans such as those pictured below. We supply industrial axial fans globally to a wide range of industries including:

- Acoustic Enclosure
- Agriculture
- Cooling Tower
- Heat Exchanger
- Industrial Cooling
- Load Bank
- Offshore
- Power Generation
- Refrigeration
- Smoke Extract
The same engineers that make our stocked ATEX fans make our bespoke fans designed and built with your requirements in mind.