



Axial Fans **Atex Standards**

# introduction

With such an extensive range of fans – the possibilities may seem endless, but fan engineered products are only worth having if they comply with the very highest standards of quality, reliability, performance, function and safety.

Our hazardous application fans are no exception to this approach, whereby Elta 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 30 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

Elta Fans design and manufacture a wide range of axial fans from 315mm to 2000mm diameter to meet the following applications:

### 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

### 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 will endeavour to design and supply to your needs.

Typical applications for these fans include; 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 and refrigeration.

# features & benefits

Our design and manufacturing skills in fan engineering enable customers to benefit from more than 30 years experience, but by combining know how with the very latest standards, Elta 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.



## 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 specific requirements where required.



## impeller

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



## motors

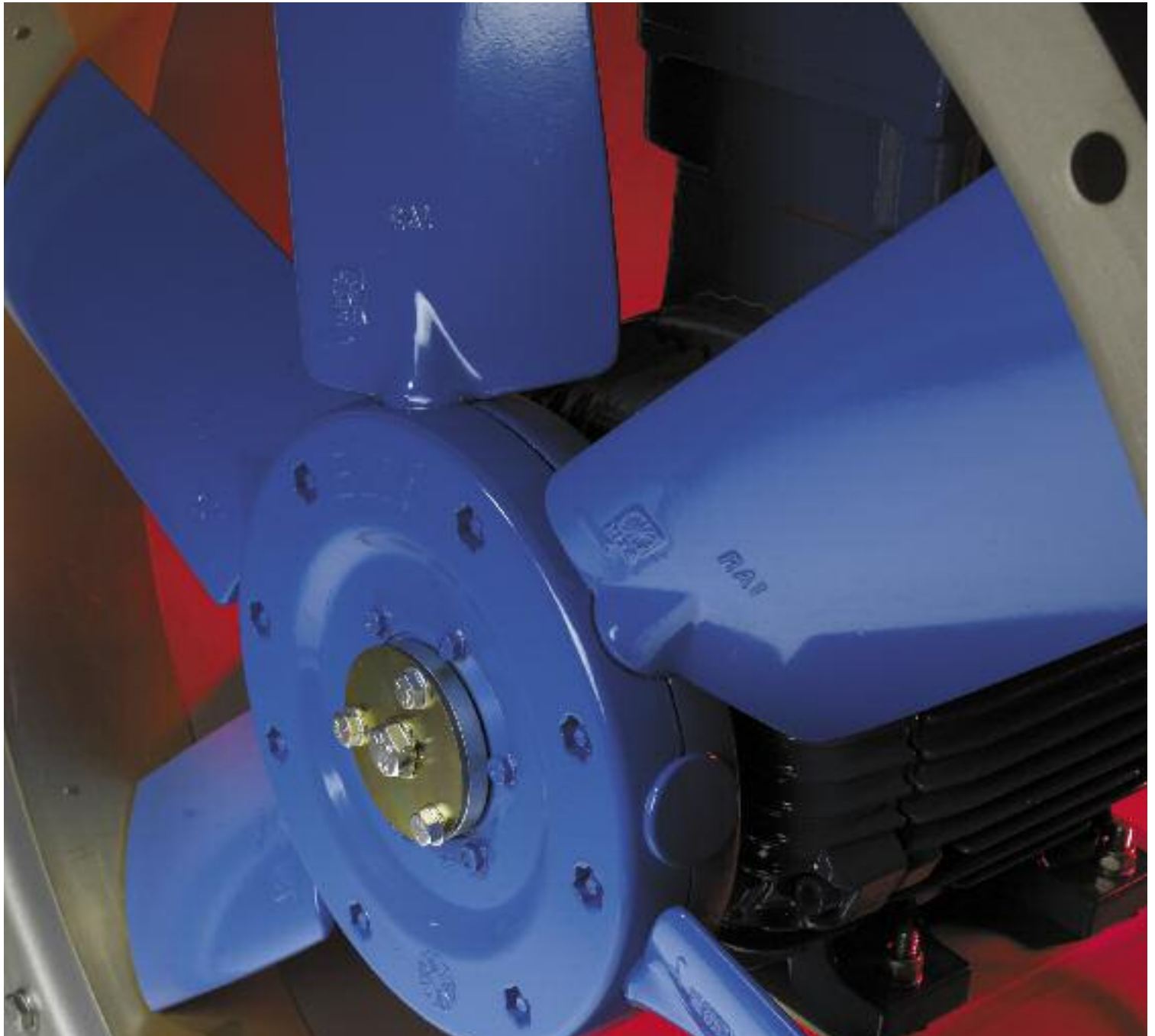
A wide variety of motor supply requirements, with due consideration to terminal box access for motor connection checking.

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.

## accessories

Elta 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



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