



Industrial & OEM
Capabilities

ELTA



Privately owned and managed with enthusiasm, drive and determination, Elta is an internationally recognised brand committed to leading the world in product and technical ingenuity through our operations in Europe, Asia and Australasia.

Elta has been designing and manufacturing market-leading ventilation products for over five decades.

Guided by our founders' belief in putting the customer's needs first and their dedication to innovative engineering, we now field one of the most comprehensive and flexible ranges of fans available on the market today. This achievement is not only testament to the capabilities of our people, but also to our determination to exceed the unique challenges that ever-evolving technology brings.

From the Antarctic to the Gulf of Mexico, our fans can be found in OEM application across the world, including: agriculture, offshore oil and gas, power generation and defence.





RIGHT FIRST TIME, ON TIME, EVERY TIME.

Built around our leadership in specialist OEM market sectors, Elta design, manufacture and supply standard and bespoke fans specifically for precision OEM applications around the world.

Combining unrivalled customer satisfaction with unmatched technical support, our customer-focused approach enables us to develop solutions of unprecedented precision for our customers' needs.

With dedicated industry experts, knowledgeable in specialist applications and international regulations, managing every project, the dependability of our solutions is equalled by the seamlessness of our customers' experience.



INNOVATION & DESIGN

With an internationally recognised brand, Elta products are defined by our combination of bespoke designs, innovative engineering and exceptional performance.

Continuously expanding and advancing our capabilities, we embrace change, allowing us to position our business at the forefront of Research and Development to achieve technological firsts within the industry. We continually develop bespoke products in-house and have access to four Elta Group R&D facilities across Europe and Australia.

Furthermore, our design teams utilise market-leading software that reduces the costs of traditional prototyping and allows the production of detailed designs in the shortest possible time frame.

Our tools include:

- [Finite element analysis](#)
- [Solid modeling](#)
- [Computerised 3D design systems](#)
- [Dedicated fan selection software](#)
- [CFD analysis](#)

Supported by these, our fan engineers use their expert knowledge to overcome the complex requirements of our customers and their markets, providing solutions that have been carefully tailored to every new situation and application.

ADVANCED MANUFACTURING

We have a long-standing commitment to the pursuit of manufacturing excellence, exemplified by our attainment of accreditations such as the BS EN ISO 9001.

For dynamic balancing, automated cutting, punching and spinning processes, our manufacturing sites include state-of-the-art machinery from world leaders including Trumpf and Nodi, allowing us to undertake almost all of our manufacturing processes in-house.

Continual development and training of our people, from impeller assembly to the processing of sheet metal, ensures a flexible operation that is able to quickly adapt to changing production requirements.

This successful approach is mirrored in all of Elta' manufacturing facilities worldwide to deliver consistent quality at a local level.

SUSTAINABLE DEVELOPMENT

Our products have been designed and manufactured to meet and exceed all energy efficiency standards in every market, reducing their running costs.

Minimising the energy consumption of our products through innovative designs and the latest technologies also allows us to maximise our contribution to a sustainable environment.



Fareham
United Kingdom



Kolkata
India



Kuala Lumpur
Malaysia



INTERNATIONAL CAPABILITIES

Elta is a truly international brand. With manufacturing facilities across three continents and the support of our sister companies within Elta Group, our customers always have access to the highest standards of care, knowledge and flexibility.

Drawing on over five decades of experience, fans were the starting point on which the Elta brand grew and diversified. Today, it remains a critical part of Elta Group, renowned for reliability and quality along with a much broader ventilation offering – and its products are found in applications everywhere from the Antarctic to the Mexican Gulf.



Brisbane
Australia

ENGINEERED PRODUCTS OF THE HIGHEST STANDARD

Our stringent quality standards allowed us to become one of the first fan companies to be granted the BS EN ISO 9001 certification. Today, all of our products are designed and manufactured to the latest BS EN ISO standards.

Furthermore, all of our products are strictly tested at our own dedicated laboratories to ISO 5801 (Airside Performance), BS 848 Part 2 (Sound Performance) and BS ISO 13347-2 (Reverberation Room Method), enabling us to confidently provide accurate performance data for integration into customer OEM designs.

All of our products are thoroughly tested during manufacturing and again prior to despatch, with third-party witness testing also available.





CUSTOMER FOCUSED

The Elta approach places customers at the heart of everything we do. Our UK businesses have over 1000 years of collective service, with every member of the team focused on delivering unrivalled customer satisfaction and comprehensive technical support.

Our customer service and sales teams are dedicated industry experts who have close working relationships with our customers, enabling us to understand developments taking place in their individual markets. Every customer is assured of a unique approach to help them meet the needs of their projects and we ensure that, no matter the query, our customers always speak to the person who best understands their application's requirements.



PRODUCTS

The cornerstone of Elta's products is our ability to provide customised solutions for precise requirements.

Elta provides a comprehensive range of standard and specialist application products.

Utilising axial, mixed-flow and centrifugal technologies, our products are all designed around a variety of OEM air movement requirements.

We are committed to delivering high-integrity products built to the maximum attainable quality so our components and materials are carefully selected to ensure long-term reliability, sustainability and performance for our customers.



LONG & SHORT CASED AXIAL FANS

A core product range of our business for over 50 years, today our capabilities and reputation in axial fan manufacturing are renowned in the industry. Ranging from a standard unit to ventilate a factory building, to major applications including electrical sub-stations, drying processes and refrigeration, we are able to provide products for a wide array of applications.

With a diverse range of design and manufacturing options, as well as a complete range of ancillaries and guide vanes to provide more efficient power consumption, our engineers can develop the perfect solution to our customers' requirements.

Over **160**
long and short
case models

Diameters
from **150mm**
to **2000mm**

10
hub sizes

**Single &
three** phase
50Hz or 60Hz
supply

Volume flow
rates from
**0.20m³/s to
100.00m³/s**

Alternative
blade & casing
material finish
options

Single or
two speed
motors

Contra
rotating for
high-pressure
applications

Variable
motor &
terminal
mounting

Wimes 3.03
specification
motors (water
industry spec/
standard)

ATEX FANS

Manufactured to meet the requirements of the ATEX Directive, IEC standards and EN14986, our comprehensive range of axial fans for hazardous applications carry the proper equipment marking for the region and zone they are designed to operate in.

Our ATEX fans are designed and built to the exacting Area, Zone and Category requirements of a given project and utilise components that are certified under ATEX. Additionally, our manufacturing capabilities allow us to meet specific overseas hazardous classifications with a variety of flexible component options.

Diameters from 315mm to 2000mm	Long & short case variants	Belt-driven construction	Bifurcated, plate & cased construction
Specially certified terminal boxes	Spark minimising track	Specialist paint treatments	Aluminium, stainless steel or carbon loaded polypropylene
Gas Area – Zone 1 gas category 2G with electrical equipment Ex d, Ex de & Ex e Area – Zone 2 gas category 3G with electrical equipment Ex nA	Dust Area - Zones 21 & 22 category 2D & 3D	Thermistor protection & specialist motors	





PLATE FANS

Manufactured internationally across our sites and those of our sister companies in Elta Group, the proven reliability and performance of our axial plate fans, along with their flexible construction options, have made them the preferred choice for a broad range of standard and specialist applications.

Each plate is manufactured from mild steel, features the latest in impeller technology and, for a complete package solution, also has a dedicated range of ancillaries and controllers.

9
models

Diameters
from **315mm**
to **800mm**

Epoxy
coating

**Explosion
proof**
motors

Standard
three phase
motors

AC & EC
models

BELT DRIVEN FANS

Elta are able to offer belt driven fans for when it is essential that the motor be outside the airstream. Products can be designed for safe or hazardous area (IEC or NEMA) applications.

Fan casings are constructed to meet the most arduous conditions and, as standard, are manufactured from mild steel and then hot dip galvanised to BS EN ISO 1461:2009.

Diameters from 315mm to 2000mm	10 hub sizes	Single or two speed motors
Alternative blade & casing material finish options	Single or dual belt driven options	Multiple groove belt drive pulleys
Belt tensioning mechanism	Single & three phase 50Hz or 60Hz supply	Volume flow rates from 0.20m³/s to 100.00m³/s





BIFURCATED FANS

Elta's bifurcated axial fans are direct-driven units that were specially developed for handling hostile air conditions including hot air, gases and corrosive fumes.

Manufactured to the highest quality from mild steel and hot-dip galvanised to BS EN ISO 1461:2009, the range is available for standard and high-temperature applications. Our bifurcated range delivers a wide selection of air performances, including higher-pressure models.

Diameters
from **400mm**
to **1250mm**
(CYL)

Diameters
from **250mm**
to **630mm**
(CON)

150°C (CYL) &
200°C (CON)
operating
temperatures

Alternative
casing
materials &
finishes

BASEEFA
or other flame
proof approved
motors

50Hz or
60Hz
supply

CAR PARK FANS

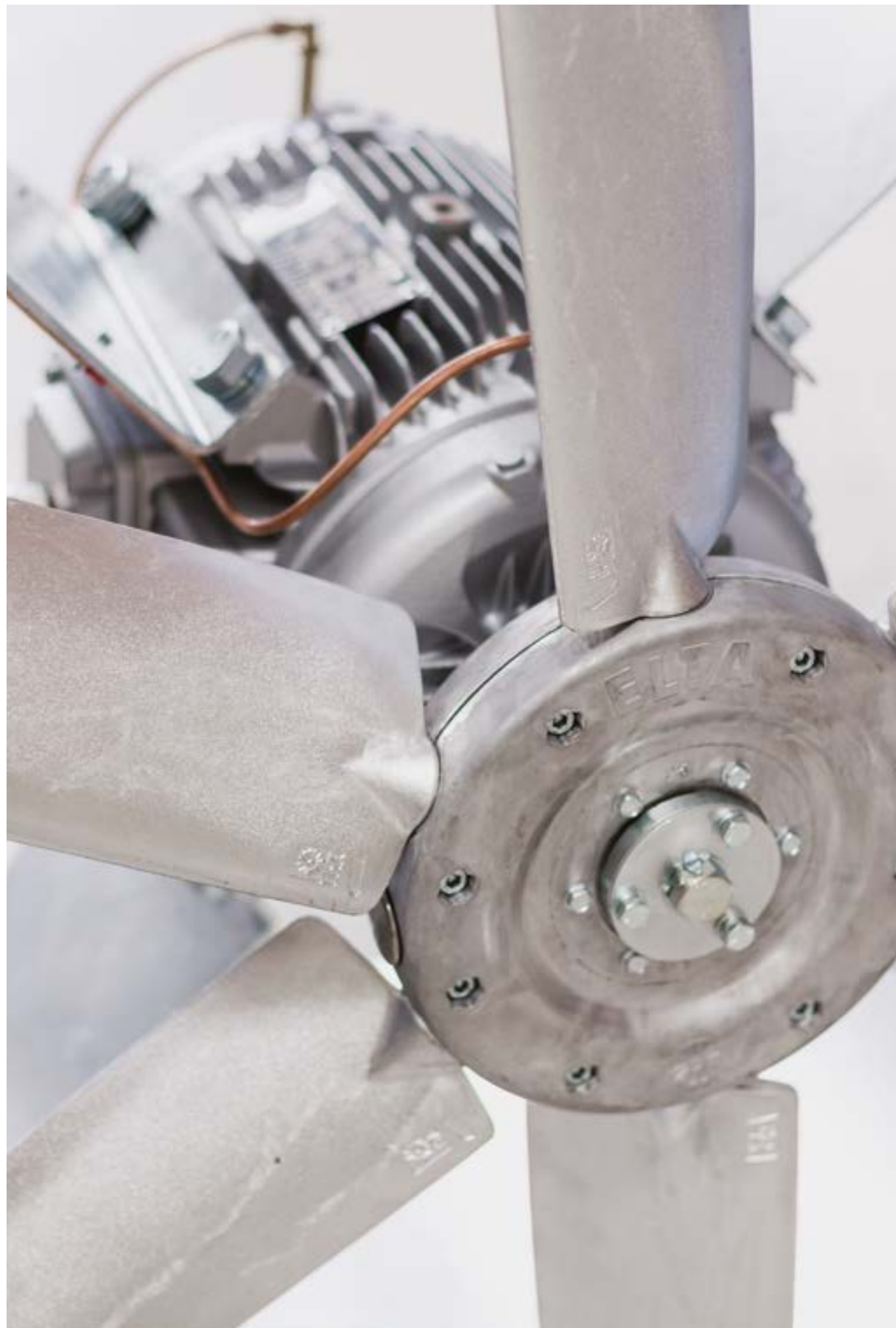
We manufacture a range of fans including axial and centrifugal variants for both general ventilation and emergency situations in car park applications.

Our JetVent range includes induction and impulse ventilation models specifically developed to operate as both general ventilation and for once-only, emergency extract mode at temperatures of up to 400°C.

The product design eliminates the requirement for ducted systems, making efficient use of the limited space of enclosed car parks, in addition to reducing power consumption and the associated running costs.

20N, 50N & 100N sizes	Truly reversible or unidirectional airflow	AC motors available
All impulse fans 300/2 or 400/2	Isolator switch or terminal box variants	Flanged or unflanged units





SMOKE FANS

Elta are a major supplier of axial flow fans for smoke ventilation, specifically developed for emergency smoke extract systems.

Our fans can operate as part of the main extract system, or as dedicated fans for emergency clearance in hazardous fire, smoke and fume conditions. With three manufacturing facilities certified to EN12101-3 for Smoke Ventilation, Elta can supply units tailored to regional and project specifications as required.

Diameters
from 315mm
to 2000mm

Single or
two speed
operation

Single or
two stage

Prefabricated
options

200°C,
300°C, 400°C
operating
temperatures

A range
of motor
mounting
arrangements

Compliant
inverters

Compliant
silencers for
smoke

MARINE FANS

Our marine fans are designed in close co-operation with marine architects and builders to provide compact designs with high performance that can cope with rigorous marine conditions. They can be manufactured to meet the requirements of the major marine classification authorities including Lloyds, DNV and ABS.

We offer custom-built fans for special requirements, a standard range of centrifugal fans developed for battery rooms and axial cased fans for wider ventilation applications including engine rooms.

Hydraulic & pneumatic fans	Single or three phase available	50Hz or 60Hz supply	12V - 220V DC to suit customer application
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NOISE CONTROL

Our Acoustica brand offers a complete acoustically packaged system, assisted by our fan selection program that is designed to help select the components for the system through its acoustic analysis feature. Our team of experts, with over 30 years of experience in acoustics, can provide unrivaled guidance and support to solve complex noise issues, from acoustic attenuators to custom-designed acoustic enclosures.



Diameters
from 315mm
to 2000mm

Circular &
rectangular
splitter type

Enclosures

Louvres

200°C,
300°C, 400°C
operating
temperatures

Special
materials

Consultancy
services

Compliant
for smoke
systems



INDUSTRIES & APPLICATIONS



Agriculture & Food

We supply the agriculture and food processing industry with a range of axial flow and mixed flow fan configurations. Our products are engineered to meet market demands for production, storage, drying and transportation, all the way through to the retail environment.



Offshore, Oil and Gas

Offshore applications have diverse and demanding environmental conditions with stringent quality and safety requirements. Our range and flexibility in manufacturing allows us to design and engineer products of the highest specifications for use in this sector. From the Thunder Horse production platform in the Gulf of Mexico to the Azeri oilfield in Azerbaijan, our axial fans can be found on operational platforms around the world.



Marine

From small leisure boats to hazardous naval applications, fans can be supplied from a standard range or can be custom-built with approved motors or specialist materials for a range of different projects.

Industrial Plants

Many industrial plant processes are extremely energy intensive and generate high quantities of waste heat. Our fans have been engineered to exceed international energy efficiency standards and to operate with minimal power consumption over a long service life.

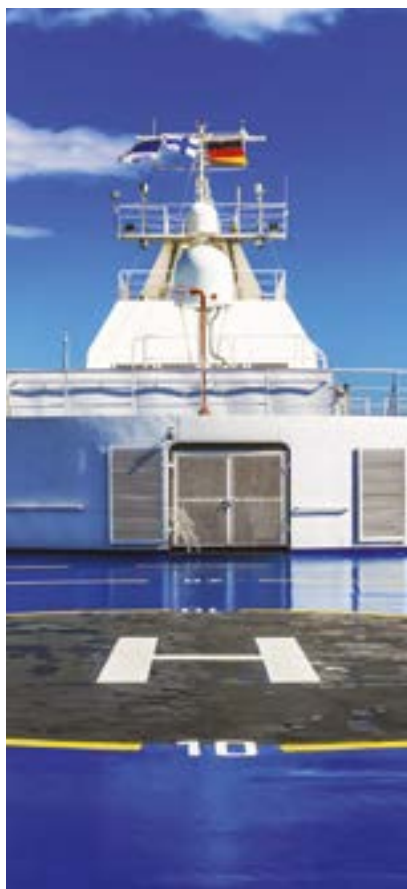
The diverse range of applications and environmental loads provide engineering challenges for OEM manufacturers. Elta provide units made with specific corrosion resistant materials and finishes to exacting specifications that are tolerant of toxic and unstable compounds ideal for this complex market.



Defence

Elta recognise that safety is of the utmost importance in order to protect personnel in this sector. Providing a well-designed and easily maintained ventilation system is critical to a safe and comfortable work environment.

We work in conjunction with military OEM manufacturers to design and engineer fans for the most arduous environments, including corrosive seas, chemical/biological contamination, explosive atmospheres, high temperature emergency conditions, and high-shock combat circumstances.



Power Generation

Designing and manufacturing to exacting site requirements has made Elta a leading supplier in power production applications, such as CHP, gas turbines, generator cooling and acoustic enclosures. We are able to supply products engineered specifically for operation in remote locations and demanding climates and environments.



INDUSTRIES & APPLICATIONS



Refrigeration

Elta has considerable refrigeration expertise and is able to provide solutions to meet stringent requirements for sound, efficiency and operating temperatures within this sector. Our fans have been supplied to compressor, chiller and condenser manufacturers for integration into their OEM designs for applications including blast chillers, condensers and food storage.



Transportation

Good ventilation is an essential part of the planning process for the transport sector, with a need for series-produced fans operating with high reliability for safety and passenger comfort. Meeting the diverse and changeable airflow requirements, Elta equipment can be found on the latest high-speed rail networks, underground applications and in large-scale tunnel projects.



Hazardous Area and Emergency

Elta manufacture a range of critical operation products dedicated to the preservation of human life, buildings and equipment. From induction and impulse car park technology, emergency smoke extract fans, axial ATEX units and bespoke anti-explosion fans, our engineering team review every project in detail to ensure they provide the highest performance possible.



Mining

Mines and quarries require fans for applications including input ventilation, dragline ventilation, exhaust gas systems, as well as dust and fume extraction. Our range of fans, including axial-flow units and explosion-proof fans, are suitable for harsh environments and corrosive atmospheres, and are engineered with the safety of mine operatives in mind.

ACCREDITATIONS

Elta are committed to conforming to the highest standards. We hold a number of internationally recognised accreditations and certifications, including:

BS EN ISO 9001
Kite Mark — BS EN12103-3
LPCB
ATEX
CompEX

We are also active members of professional organisations that help to shape and direct the research, legislation, trends and issues of the present and future:

FETA
FMA
EVIA
CIBSE Patrons
HEVAC Association
BSRIA
AMCA
Smoke Control Association

All welders are coded to the following:

ASME Boiler & Pressure Vessel Code – Section IX (welding procedure qualification records & individual welder performance qualifications)
BS ISO 15614-1:2004 A2:2012 (welding procedure qualifications records)
ISO 9606-1:2013 (individual welder performance qualifications)

OUR HERITAGE

Established over 50 years ago by two pioneers of the industry, Elta's foundations are built on a culture of innovation.

Throughout our storied history, we have been at the forefront of the industry as a result of technological advantages in fan design and manufacturing. Our foundations are built on a culture of innovation and engineering that continues to guide the company today.

Our successful history is a testament to engineering excellence, that continues to develop year after year. From our humble beginnings in fan manufacturing, to transcending our previous capabilities to deliver full ventilation solutions, the heart of our success lies in the unwavering dedication of our exceptional team. Today, the same dedication and commitment continues to guide Elta, ensuring a legacy of quality, reliability, and cutting-edge solutions for years to come.





PART OF ELTA GROUP

**Across all of our people, in all of our businesses,
on all continents on which we operate, Elta Group
has one purpose: To enhance life through air.**

For over 25 years we have been a proudly independent, family-owned group, but our foundations were laid over 50 years ago. Our foundations were built on an entrepreneurial spirit and a clear vision of meeting market needs and improving air quality. These have seen us become a leader in high-integrity solutions that move, filter, treat and distribute air, from agriculture to building services to applied technology. We're never standing still, always living and breathing our cause, and looking to the horizon.

eltagroup.com

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eg | ELTA
GROUP



ELTA

**AIR MOVEMENT
AIR QUALITY**

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A MEMBER OF  **ELTA
GROUP**