# **Building Services**Global Capabilities



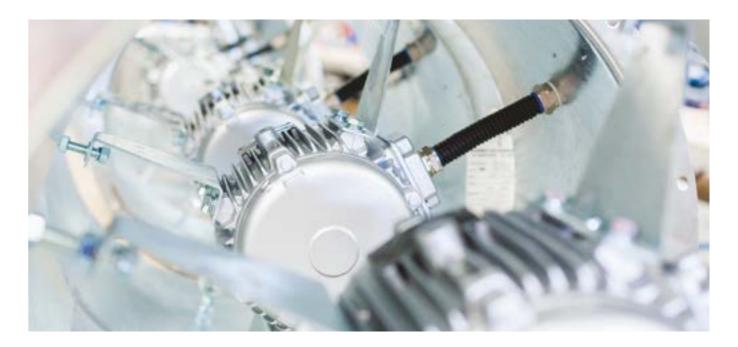


Since 1976, Elta Fans has been a marketleading manufacturer of fans for the Building Services, Applied Technology, Residential and OEM markets.

Over the last 40 years, Elta Fans have become a major supplier of axial flow fans for smoke ventilation, as well as a range of Building Services applications including air coolers and refrigeration, offshore and marine, industrial processing and many more.

Elta Fans prides itself on supplying high quality products that are carefully inspected and tested prior to despatch to ensure optimum efficiency of every unit.

Whilst Elta Fans' principal manufacturing plant is located in the UK, we also have operational manufacturing and assembly facilities in Italy, Malaysia, Australia, New Zealand and South Africa.









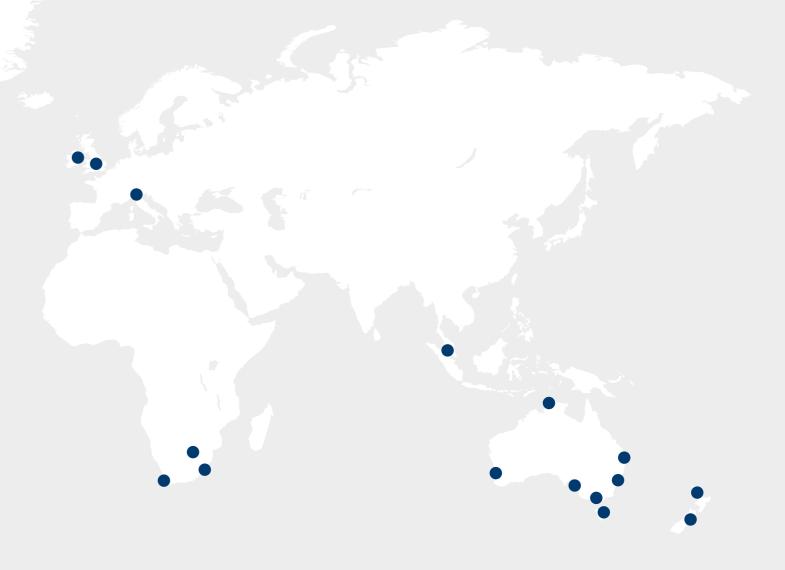


## PART OF ELTA GROUP

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 20 years we have been a proudly independent, family-owned group, but our foundations were laid over 45 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



Europe Africa Asia Australasia **REGIONS**  Building Services
Applied Technology
Agriculture
International
MARKETS

Fans
Air Handling
Heat Recovery
Filtration
Natural Ventilation
Acoustics
Air Distribution
Controls
Heating
Cooling
Welfare
Lighting
PRODUCTS

## Our heritage

#### 1972

Roger Crook and John Snape begin by producing single-phase, long-case, axial fans for commercial ovens under the company name of 'Low Temperature Applications'.



#### 1974

Occupying just 70m<sup>2</sup>, the company's first production facility in Woking, Surrey, UK, is set up, allowing the product range to be extended into three-phase fans up to 1.2m in diameter.

« Boundry Road manufacturing

#### 1979

Rapid expansion sees the company move into a new 500m² factory in Byfleet, Surrey. This expansion enables the company to establish its first dedicated design and engineering team.

#### 1982

The premises are expanded to  $800\text{m}^2$  to keep pace with production requirements; sub-contracted sheet metal work is brought in-house. The Centraflow range of in-line, centrifugal fans — designed to prevent stalling in high winds — is launched for offshore applications.

#### 1984

Following intensive development and investment, Elta Fans' first axial impeller is launched, providing Elta Fans with the ability to fullymanufacture a highly-competitive, axial fan unit. The product is shipped around the world, including to South Africa, Australia and the USA.

#### 1991

The ongoing growth of the business allows Elta Fans to relocate to a custom-built, 1,200m² manufacturing and office premises in Fareham, Hampshire, UK.

This marks the start of a decade of substantial investment in state-of-the-art machinery, including Trumpf punching machines and Nodi flanging equipment, across all manufacturing sites, allowing for more manufacturing processes to be brought in-house to ensure optimal product quality from design through to production. The Fan Selection Programme is launched to market, providing customers with the ability to have full sound spectrum produced for their intended applications – an industry first.

Custom-built premises in Hampshire »



# Elta Fans

#### 1976

Low Temperature Applications is renamed 'Elta Fans Ltd.'

« Elta Fans Byfleet premises

#### 1986

Elta Fans becomes the only manufacturer in the UK to achieve full certification of its range to the new BS 848 pt 1 (airflow) and pt 2 (noise) tests.

#### 1989

The first 'Compact Fan' range is launched, utilising the Brook Crompton 'V' Range motor and Elta Fans' own standard glass-reinforced plastic impeller.



Compact Fan »

#### 1994

The Fareham premises are further expanded to 2,000m<sup>2</sup>.

#### 1995

With a dedicated manufacturing plant in Cape Town, Elta Fans' product range is launched in South Africa through fellow Elta Group company, Air Movement Supplies.

#### 1996

The business becomes the principal operating company in the newly formed Elta Group Ltd.

6 Building Services 7

## Our heritage



#### 1998

Elta Fans moves into a 4,000m², purpose-built facility alongside the existing Fareham building. This major investment includes a modern Research and Development laboratory, and a reverberation chamber for acoustic testing, providing the ability to test all products, in-house, to the latest aerodynamic and acoustic standards. The facility pushes product innovation to new levels, including the development of the world's first adjustable-pitch, mixed-flow impeller within the same year.

« Elta Fans Fareham premises

#### 2004

Impulse fans for car parks are introduced to the range.

#### 2005

The Fareham facility achieves
Elta Fans' first EN 12101-3
Manufacturing Facilities for Smoke
Ventilation accreditation.

#### 2006

Elta Fans operations and sales relocates into a new 5,000m² facility in Kingswinford, West Midlands, UK.

#### 2011

A second dedicated test facility opens in Kingswinford.



#### 2013

To meet changing international legislation, the core axial-impeller is re-developed for increased efficiency.

« LC/SC axial fans

#### 1999

In Dudley, West Midlands, UK, Elta Fans launches a new division dedicated to the building services market.

#### 2000

The introduction of new blades, as well as 400mm and 550mm hub sizes, expands the impeller range to up to two metres in diameter. The following year the addition of two more (255mm and 350mm) further expands the scope of product selection.

First building services export quotes arranged and distributors set up.

#### 2002

Building services export relocates to Fareham, Hampshire. Distribution accounts continue to grow throughout Europe and the Middle East.



#### 2007

Additional investment in Nodi flanging equipment in Fareham and Cape Town strengthens Elta Fans' production capacity, ensuring consistently high quality and optimising manufacturing efficiency.

« Nodi flanging machine

#### 2010

Installation of a new, state-of-theart Trumpf TruPunch 2020 punch machine in Fareham and a Nodi flanging machine in the Kuala Lumpur facility supports the need for larger and increasingly complex components to meet the bespoke requirements of customers around the world.

#### 2015

Installation of a 5 tonne, twin hoist crane to increase production capabilities of larger fans inline with customer and market requirements.

5 tonne, twin hoist crane »

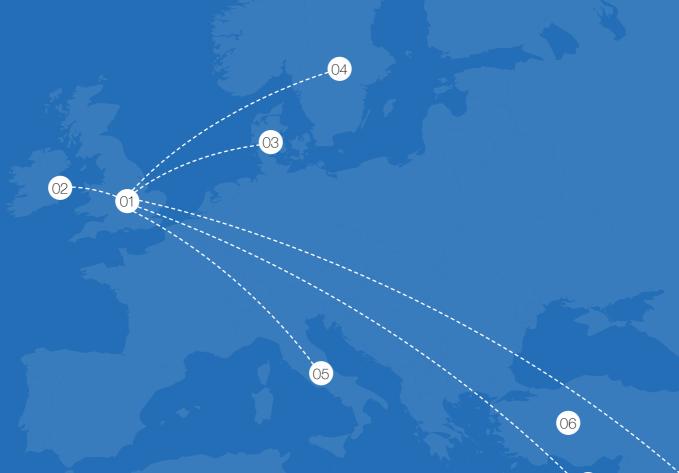


#### 2016

Elta Fans begins manufacturing acoustic products in Colchester, UK.

8 Building Services 9





## Network of Distributors

Elta Fans has a strong relationship with a number of loyal distributors and our brand name is firmly established in many countries within the European and Middle Eastern markets.

- 01 United Kingdom
- O2 Republic of Ireland
- 03 Denmark
- 04 Sweden
- 05 Italy

- 06 Turkey
- 07 Cyprus
- 08 Jordan
- 09 Egypt
- 10 Saudi Arabia
- 11 Kuwait
  - 12 Bahrain
- 13 Qatar
- 14 United Arab Emirates
- 15 Oman

09

**12** Building Services Global Capabilities 13



## Manufacturing Excellence

Technical innovations are the foundation of Elta Fans' product range. Continued investment in plant and machinery, combined with the utilisation of modern manufactuing techniques, provides a fast, responsive and flexible approach to satisfy changing market conditions.

Within each department, Elta Fans complies with rigorous procedures to ensure design and implementation meets the highest standards of quality in our industry. The technology available to our engineers means they can pinpoint, analyse and make design changes and improvements without the expense of conventional prototyping.

Elta Fans' products and services conform to agreed contractual specifications and, where appropriate, national and international standards. With a research and development laboratory conforming to BS EN ISO 9001, our products are tested to the very latest aerodynamic and acoustical standards, providing reliable, accurate data, which customers can apply to their requirements.

## Efficiency & Sustainability

Our products are 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 allows us to maximise our contribution to a sustainable environment. Elta Fans' high efficiency adjustable pitch aerofoil impellers have been developed in line with the latest ErP legislation to deliver outstanding efficiency capabilities for overall lower running costs.

## Group Knowledge

Since joining Elta Group in 1996, we have benefited from sharing our knowledge and experience with the other companies within the group.

There are over 30 businesses and brands within Elta Group, giving us invaluable access into other product development sectors including:

**Acoustic Equipment Agricultural Products Air Distribution** Air Filtration Air Handling **Heating & Cooling Equipment Heat Recovery Marine Fans** Oil & Gas Ventilation Residential Fans

## Our Facilities

Elta Fans is an international brand with offices in the UK, Australia, Malaysia and South Africa. Designing and manufacturing reliable products of a high quality is the top priority for all of our UK and global facilities.

In the UK alone, we have a total of 15,000m<sup>2</sup> space specialising in research and development, manufacturing and assembly of a full range of Applied Technology and Building Services products.











## Long & Short Cased Axial Fans

A core product range of our business for over 40 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 315mm to **2000mm** 

10 hub sizes

Single & three phase 50Hz or 60Hz supply

Volume flow rates from 0.20m3/s to 100.00m<sup>3</sup>/s

Alternative blade & casing material finish options

Single or two speed motors

Contra rotating for high-pressure applications

Downstream guide vanes

Variable motor & terminal mounting

Wimes 3.03 specification motors (water industry spec/ standard)

## ATEX Fans

Manufactured to meet the requirements of the ATEX Directive 2014/34/EU, relevant IEC standards and BS EN 14986:2017, our comprehensive range of axial fans for hazardous applications carry the appropriate equipment marking for the region and zone they are designed to operate in.

Our ATEX fans are designed and built to the Area, Zone and Category requirements of a given project and utilise electrical components that are certified under both ATEX and IECEx. 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

**Specialist** motors

Bifurcated, plate & cased construction

Specially certified terminal boxes

Spark minimising track

Specialist paint treatments

Aluminium, stainless steel or carbon loaded polypropylene impellers available

Gas

Area - Zone 1 EPL Gb and Gc Area - Zone 2 EPL Gb and Gc Electrical protection concepts Ex d, Ex de, Ex e and Ex nA available

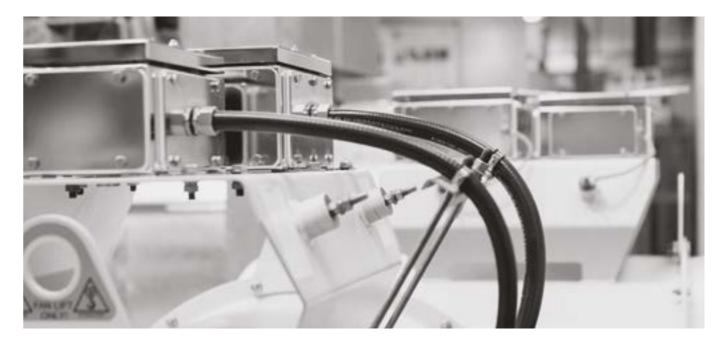
Dust Area - Zones 21 & 22 Category EPL Db and Dc

Single & three phase 50Hz or 60Hz supply











## Bifurcated Fans

Elta Fans' 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) & 250°C (CON) operating temperatures

Alternative casing materials & finishes

ATEX / IECEx or other flame proof approved motors

**50Hz** or 60Hz supply

## Plate Fans

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 fan is manufactured from mild steel and features the latest in impeller technology. Our plate fans also have a dedicated range of ancillaries and controllers available.

Diameters from 250mm to **800mm** 

AC & EC motors available

Ероху coated pressed sheet steel

Single & three phase 50Hz or 60Hz supply

### Box Fans

Manufactured using our own state-of-the-art production facilities, the box fan range is available with EC motors either single or twin. The robust 1.2mm galvanised mild sheet steel casing can be internally lined with Class O rated (BS476 Parts 6 and 7) fire resistant acoustic foam lining to reduce sound breakout in noise sensitive locations.

Diameters from 100mm to **500mm** 

AC & EC motors available

**Acoustic** lining available

Single & three phase 50Hz or 60Hz supply

## Roof Fans

Our Axial Roof Cowls use a robust, low profile glass fibre, weatherproof cowl that is manufactured from UV stabilised GRP and finished in goose wing grey to standard BS 00-A-05. There is also a range of centrifugal roof fans available that use external rotor or IEC motors with vertical discharge. These fans are also robust due to their all metal casing that is manufactured from pre-galvanised sheet steel.

AC & EC versions

**5** ranges covering 7 sizes

Centrifual or **Axial** roof units

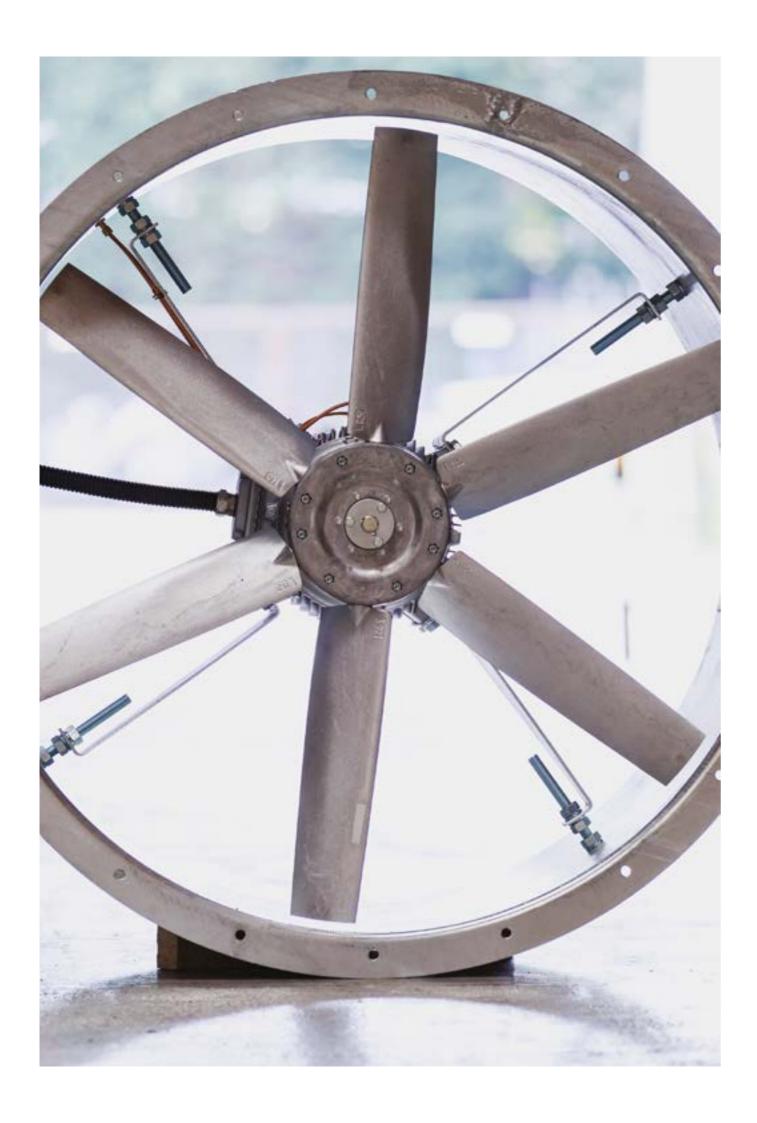
Single & three phase 50Hz or 60Hz supply











## Smoke Fans

Elta Fans are a major supplier of axial flow fans for smoke ventilation, with the SmokeVent range having been specifically developed for emergency smoke extract systems.

Our standard range can operate as part of the main extract system, or as dedicated fans for emergency clearance in hazardous fire, smoke and fume conditions. With four facilities certified to EN12101-3 Manufacturing Facilities for Smoke Ventilation, Elta Fans 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

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

A range of motor mounting arrangements LPCB certified for two manufacturing sites

Downstream guide vanes

Contra rotating for high-pressure applications

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.

50N & 100N induction fans

Truly reversible or unidirectional airflow

AC motors available

All impulse fans **300/2** or 400/2

Isolator switch or terminal box variants









## Select Range Products

As well as our bespoke and specification products, we stock over £4m worth of products that are available for immediate despatch. These products include:



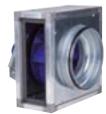
Window & Wall



**Ducted & Inline** 



**Roof Fans** 



**High Temperature** 



Hazardous Area



Destratification



**Portable Cooling** 

Contact your local Elta Fans representative for a full catalogue of the above products.

## Certifications

We are very specific about our design and manufacturing processes to ensure that we conform to the highest standards. We hold a number of internationally recognised certifications, including:

Certificate of Constancy of Performance 0086-CPR-493001 LPCB C937a-05 Kite Mark KM613754 BS EN 12101-3:2015 smoke and heat control systems

Additionally, all of our welders in the UK are coded to:

#### **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

EU

Individual welder performance qualifications.

UAE	Dubai Civil Defence (DCD), Abu Dhabi Civil Defence (ADCD)
Turkey	Environment and Urban Ministry (CSB)
Qatar	Qatar Civil Defence (QCD), Qatar General Organisation for Standards
	and Metrology (QGOSM), Qatar Construction Standards (QCS), Public
	Works Authority (ASHGAL), Qatar General Electricity and Water
	Corporation (KAHRAMAA)
Egypt	Civil Defence of Egypt (CDE), Housing and Building National Research
	Center (HBRC), Egyptian Codes for Building & Construction (ECB)
Kuwait	Kuwait Fire Department (KFD), Kuwait Oil Company (KOC), Kuwait
	National Petroleum Company (KNPC), Ministry of Electricity and Water
	(MEW/MPW), Ministry of Health (MOH)
Jordan	Jordanian Civil Defence (JCD), Jordan Institution for Standards and
	Metrology (JISMO)
Bahrain	Bahrain Civil Defence (BCD), Standards and Metrology Directorate
	(BSMD)
KSA	Saudi Standards, Quality and Metrology Organisation (SASO)
Oman	Oman Civil Defence (OCD), Military Works Department (MWD)

Energy Related Products Directive (ErP)

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:

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

**FETA** 

17 Barnes Wallis Road, Segensworth East Industrial Estate, Fareham, Hampshire, PO15 5ST, United Kingdom

**Tel:** +44 (0) 1489 566500 **Fax:** +44 (0) 1489 566555 **Email:** export@eltafans.co.uk **Website:** www.eltafans.com



