



COMPANY PROFILE

Innovation and Experience in Air Movement





From the specialized and bespoke to our off-the-shelf range, **we offer performance optimized air movement solutions** for your applications.



OUR VISION

We are totally committed to serve the needs of all our customers. We value every opportunity to demonstrate continually improving service through innovation that enhances customer satisfaction and builds stronger relationships.

Woods Air Movement is one of the world's leading designers and manufacturers of the highest quality Air Movement products with a focus on axial flow fans. Woods has dedicated product designs and business divisions dedicated to:

- **Building & parking garage ventilation & fire safety**
- **Tunnel and metro ventilation**
- **OEM and industrial process ventilation**
- **Commercial kitchens ventilation**

With more than one hundred years of industry experience we are constantly innovating and

adapting to the ever-changing environment. We not only offer a range of products which we are always improving and adding to, but we also work with our customers to provide them with a product that meets their bespoke design requirements; from minor customizations to complete product development.

We focus on our customers needs and take a high customization approach to tailor our products to our client's application and commercial needs. We offer one of the world's largest high temperature certified fans (up to F400).

Building on more than 100 years of innovation

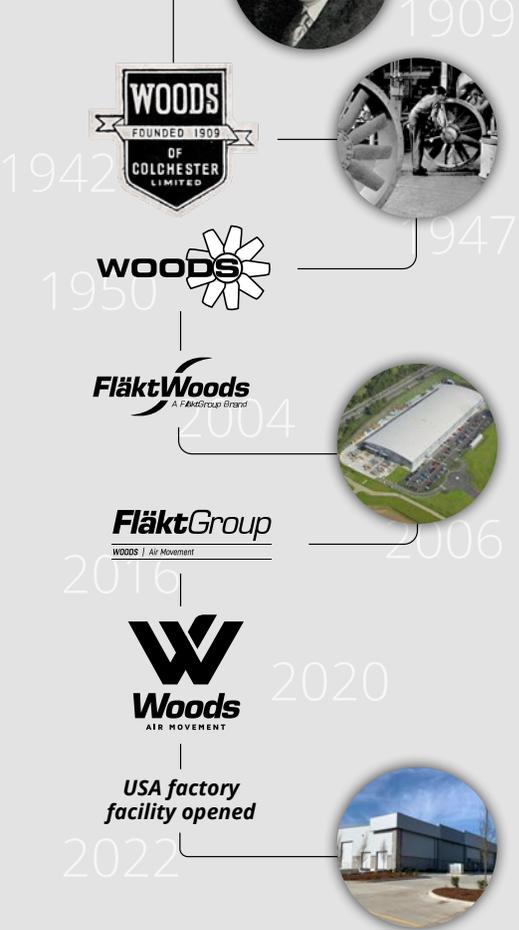
Woods was founded in 1909 in Colchester, United Kingdom. We began as manufacturers of small electric motors and introduced a range of propeller fans in the 1920s.



Over the years, Woods moved away from manufacturing motors and concentrated on the design and manufacture of axial fans, developing the first aerofoil blade design. This continuous development has evolved into one of the world's largest ranges of certified axial fans for almost any application imaginable including fire safety, ventilation, industrial process, oil & gas and marine.

Woods was merged with Fläkt in 2002 to create Fläkt Woods which was subsequently merged with Denco Happel in 2016 to create FläktGroup. In 2020, Fläkt Woods changed their trading name to Woods Air Movement under FläktGroup holdings and opened offices in the United States of America and Germany. In 2022, Woods Air Movement opened a new factory in the USA who manufacture fans specifically for the local market.

Woods has over 100 years of experience and knowledge in designing axial flow fans and remains a distinct brand within the FläktGroup family.





OUR FOOTPRINT

Our head office is situated in Colchester in the United Kingdom with a state of the art (177,605 sqf) factory producing around 100,000 fans annually for the global market, with a sales office situated in Germany. We also have a newly opened (21,000 sqf) factory, AMCA certified laboratory and office situated in the United States of America. In India we have installed one of the first test rigs in the country. Our products are distributed and reach various markets globally, through strong partnerships with over 70 international distributors and agents.

A complete fan range

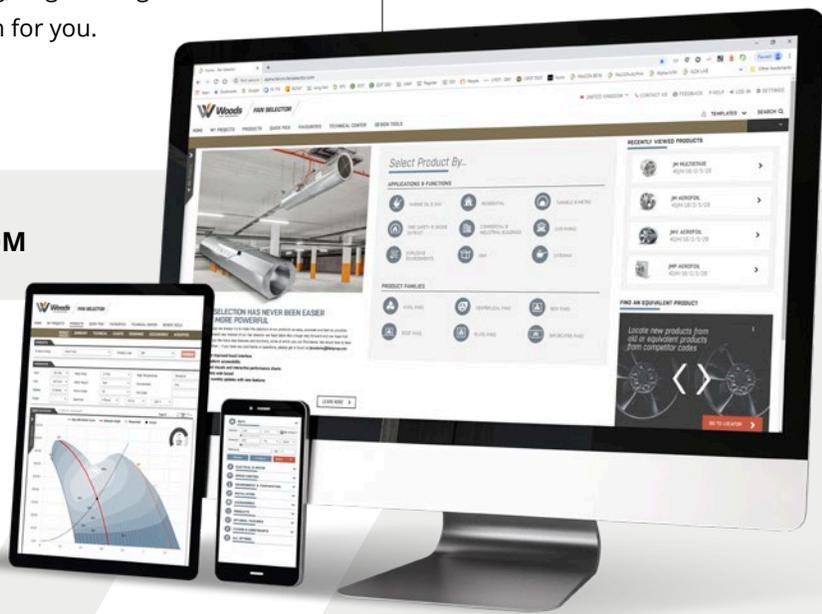
We manufacture the most reliable and best quality air movement and ventilation products for various applications and industries. To ensure you receive the best quality, we run various tests on our fans before they are delivered to your doorstep.

Most of our product range are available as standard or high temperature, please contact one of our sales team members to find out more technical information on our products. If any of products do not meet your requirements then we have inhouse capabilities to assist with designing, engineering and manufacturing the perfect solution for you.

ENSURING THE BEST POSSIBLE QUALITY IN EVERY DETAIL

- All moving parts in our fans are x-rayed to ASTM E155 standards.
- We ensure our products follow the ISO1940 Balance standards and Vibration BS848 pt 7 ISO14694.
- Our fans endure impeller strain gauge tests of speed over 125% for 15min.

> WOODSAIRMOVEMENTS.COM



PRODUCT SELECTION AND CONFIGURATION HAS NEVER BEEN EASIER – OR MORE POWERFUL

We always try to make the selection of our products as easy, accurate and fast as possible. With the brand new release of our Fan Selector we have taken a huge step forward and we hope that you will enjoy the many new features and functions – including web-based multi-platform accessibility with touch interface and interactive performance charts.

JM AEROFOIL (USA)

Tube Axial Flow Fan



INTRODUCTION

Our JM Aerofoil (Tube) fans deliver high aerodynamic efficiencies (up to 79%) which is achieved using Aerofoil section impeller blades and aerodynamically optimized hub design, which deliver peak operating efficiencies.

- Fan casings (housings) are hot dip galvanized to offer enhanced corrosion resistance
- Fully cased design makes installation quick, simple and cost effective
- Robust reliable products by design
- NEMA Premium efficiency motors are UL Listed and have IP55 ingress protection as standard
- Low installed noise levels
- Reduced lead times to market, as this range is built in America



Please visit our [Online fan selection tool for technical data sheet based on your performance requirements.](#)

TECHNICAL PARAMETERS

Casing (Fan Housing)	Long
Size	315 to 1600mm (12.4" to 63")
Temperature	104°F to 572°F for 2hrs (emergency operation)
Volume	up to 123 380 cfm
Pressure	up to 9.65 inwg
Electrical Supply	208v, 230v or 460v / 3 Ph / 60Hz
Motors	Single speed, Nema Premium efficiency machines, UL listed, IP55 ingress protection

CONSTRUCTION DETAILS

Our JM product is available as a fully cased axial flow fan which offers high efficiency performance. Each impeller is manufactured from high-pressure die cast aluminum, which is X-ray inspected using real time radiography (in accordance with ASTM E-155) to ensure product integrity and quality. Impellers are precision balanced to minimize vibration levels and assure smooth operation. Impeller blades are mounted into a hub and clamp plate assembly, which allows manual blade pitch angle adjustments to be made on site which offers performance flexibility.

APPLICATIONS

Our products are designed to serve a wide range of applications. Every day they deliver comfort and safety in critical situations to millions of people around the world. Our dedicated team of experts will always ensure that you get the optimal solution for your needs.



OUR APPLICATION AREAS



BUILDINGS

- Smoke Extraction
- Stairwell Pressurisation
- Atrium Extract

As buildings get taller, so does the challenge to ventilate them, so the need for more robust and intelligent air quality, control smoke and life protection systems. These systems provide comfortable air quality conditions for the occupants, as well as assist their evacuation during emergency conditions.

We have a range of products that can be used for this application to ensure we can give you the perfect solution.



PARKING GARAGE SYSTEMS

- Underground Parking Garages
- Jet Thrust Systems
- Fully Ducted Systems
- Smoke Control
- Pollution Control

We have a dedicated in-house team of parking garage design experts who can assist using CFD (Computational Fluid Dynamics) software to find the best and optimized and tailored solution for your project whether it be day-to-day pollution control or emergency smoke extract mode.

Our expert team will ensure they follow applicable local codes and standards. We offer a turnkey solution to our customers with their projects where we provide product selection, system design, controls and sensors, installation, as well as commissioning and maintenance with local partners.



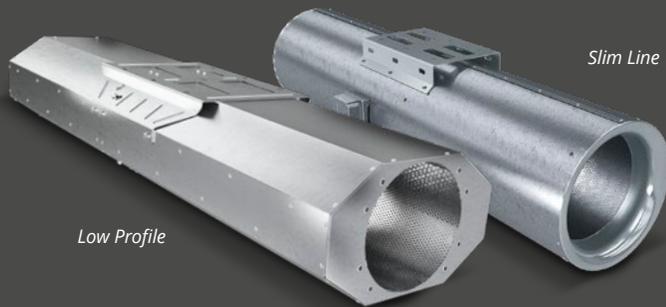
TUNNEL AND METRO

- Road Tunnels
- Rail Tunnels
- Metro Systems

Tunnel and Metro ventilation is required to manage day to day ventilation and pollution control and smoke extract in the case of a fire. We manufacture bespoke solutions for tunnel ventilation to smoke extraction.

We offer more than just a product, we have a team of experts who design optimal solutions, calculate pressure drop and noise calculations, offer product testing, installation guidance, support and commissioning assistance globally.

OUR PARKING GARAGE PRODUCTS



Low Profile

Slim Line



JTv JET THRUST FAN

- Low Profile: compact design to accommodate lower ceilings, combined with lower noise levels
- Slim Line: Modern, streamlined look, higher performance
- 3 sizes available; 315 mm, 355 mm and 400 mm. Integrated mounting bracket included
- 50 Hz Uni-Directional JTv Performance: 33–77 N (Max Thrust 91 N)
- 60 Hz Uni-Directional JTv Performance: 40–71 N (Max Thrust 88 N)
- 2 Speed or inverter controlled motors
- Choice of high temperature electrical isolator or terminal box
- Can be supplied with either guards or deflector vanes



EC INDUCTION THRUST FAN

- Dual centrifugal impellers
- Energy efficient dual EC motors
- 1 phase with both 50/60 Hz usage
- Maximum operating temperature of 60 °C (140 °F)
- 100% speed controllable
- Low sound level of 64 dB(A) at 3 m
- Light weight fan, 15 kg only

CONTROLS

- Control panels designed and built to local requirements by our distribution partners
- Gas detection sensors
- Commissioning
- Installation
- Smoke tests
- Long term maintenance and service



INDUCTION THRUST FAN

- Low profile solution to optimise installation space requirements
- Performance: 50 N, 75 N and 100 N
- 2 Speed motors (Inverter controllable in standard ambient conditions)
- Integrated mounting feet
- High temperature isolator

Engineering, testing and production capabilities

We have a team of engineers that work with the latest tools; Computer Aided Design (CAD), Finite Element Analysis (FEA) and Computational Fluid Dynamics (CFD). This ensures all of our product designs are always the optimal solution providing quality, safety and a long operational life.

We also have a dedicated team within our engineering department who are constantly working on product development so that we continuously improve our range of products.

Onsite at our factory in the United States of America (and in the United Kingdom as well as India), we have AMCA certified laboratories that offer customer witness tests. These customer witness tests can be done in person or through live video streaming. Our laboratories run various tests on our new products before they become part of our offering.



Our certified laboratory can offer the following certifications:

- Testing to ISO, AMCA, EN, BS, IEC
- Specific Aerodynamic Testing ISO 5801 Type C Code D cl. 33.5
- Acoustic Testing Semi Reverberant Area ISO 5136
- Vibration Testing ISO14694
- Thrust and Acoustic Testing ISO 13350

We have the following testing capabilities in our laboratory:

AERODYNAMIC



- ISO 5801 (BS 848 Pt1)
- ISO 13350 (BS 848 Pt10) Jet Fan Test

ACOUSTIC

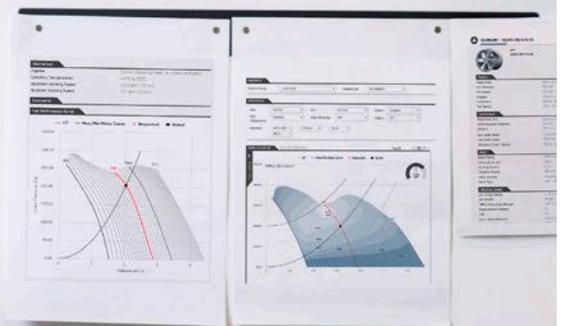


- ISO 5136 (BS 848 Pt 2) induct test systems
- ISO 3745 (BS 848 Pt2) semi-anechoic room 7.5 m (W) x 8 m (L) x 3.5 m (H), minimum NR29
- ISO 13350 (jet fan) semi-reverberant environment 8 m (W) x 20 m (L) x 4 m (H)
- Dual channel real time frequency analysis, general noise mapping in anechoic environment or with sound intensity, impeller noise traverses.

HIGH TEMPERATURE



- 400 °C test system for fans up to 3.55 m capable of thermal shock and fan reversal.
- Test system operates with a data acquisition system, providing raw and processed data directly on to a PC.





Woods Air Movement Ltd. delivers smart and energy efficient Air Movement and Fire Safety solutions to support every application area. We offer our customers innovative technologies, high quality and outstanding performance supported by more than fifty years of accumulated industry application experience. The widest range of Air Movement and Ventilation products in the market, and strong market presence with over 100 years of experience and manufacturing of products, guarantees that we are always by your side, ready to deliver Excellence in Solutions.

**Contact our friendly sales team today
for more information**

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www.woodsairmovement.com

