

 AIR COMFORT

 FIRE SAFETY

FAN RANGE

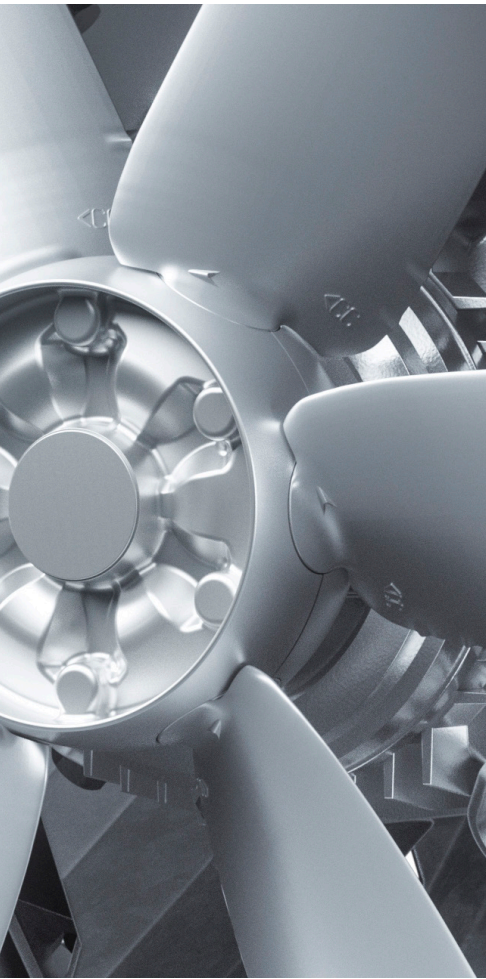
CATALOGUE - 2016

» WE BRING BETTER AIR TO LIFE



TOTAL AIR MOVEMENT SOLUTIONS – PRECISELY

Air movement in occupied buildings has many roles to play. Not just to bring the ventilation and comfort that are vital to human existence. It also has the potential to protect.



In an ideal world, this would all be achievable via natural, non-mechanical processes. But reality is different.

In most cases, and to varying extents, powered air movement is essential.

From functional operational routines, to one-off emergency situations, fans have a front-line role to play in many built environments. And, whatever each precise need, Fläkt Woods certainly has the right solution.

FROM ONE EXPERT SOURCE

Fläkt Woods has the widest range of fans available in today's market: from the largest infrastructure fan; through to compact, lightweight models designed for small premises or domestic situations.

That means we can deliver all the air movement functions, capacity and performance that a building or structure requires – whatever its size and purpose.

In short, our expertise has precisely the answer you need. At Fläkt Woods, we have the technology and experience to give you that perfect combination.

THE PERFECT SOLUTION

The ideal air movement equipment will satisfy the correct combination of several factors, insofar as each applies to a specific project:

- **FUNCTION**
Including air supply or extraction; heat transfer and recovery; drying; blowing; particle transportation and filtering in hazardous areas and, in the event of fire, emergency management of smoke and toxic fumes
- **FLOW**
Required air volume capacity and speed
- **ENERGY EFFICIENCY**
Less energy consumed to achieve the desired result
- **CONTROLLABILITY**
Allowing performance to match demand – no more, no less
- **SOUND**
Quiet operation to avoid noise distraction
- **SPACE AVAILABILITY**
Fitting the space or location available

FAN OPTIONS FOR GENERAL VENTILATION

Units and ranges designed to provide routine ventilation and general air movement functions for a variety of applications and environments include:

- Axial Fans
- Bifurcated Fans
- Box Fans
- Plate Fans
- ILC Fans
- Car Park Jet Thrust Fans
- Roof Units
- Centrifugal Fans

Fläkt Woods also offers a comprehensive choice of air handling units for small commercial and industrial premises.



CASED AXIALS - JM AEROFOIL

FEATURES

- 315 - 1000 mm diameter
- Air flow up to 24.0 m³/s
- Static pressures up to 1170 Pa
- Fans tested to ISO5801 and BS848
- High energy efficiency
- Low installed noise levels
- Motor protection and terminal box IP55

ELECTRICAL SUPPLY

380-420V/50Hz/3φ

TEMPERATURE RANGE

Standard Operating temperature range: -40°C to 50°C, plus a one off emergency use at 200°C for 2 hours (3 ph motors). Where fans need to operate between 50°C and 70°C, fans must be run at full speed only.

SIZES

315, 355, 400, 450, 500, 560, 630, 710, 800, 900 and 1000 mm.

IMPELLERS

A unique high efficiency aerofoil section blade with a smoothed hub and clamp plate for adjustable pitch angle availability.



The Fläkt Woods impellers are all high pressure die cast to offer thin aerofoil sections for low generation of noise. Every cast aluminium component is X-ray examined using Real Time Radiography inspection prior to assembly. The maximum pitch angles shown are based on speed control by frequency inverter. This range is available in Form B only (air entering the impeller first).

HIGH EFFICIENCY CASED AXIALS - JMv AEROFOIL

FEATURES

- 315 - 1000 mm diameter
- Volume up to 27.8 m³/s
- Static pressures up to 1638 Pa
- Fans tested to ISO5801 and BS848
- High energy efficiency
- Low installed noise levels
- Motor protection and terminal box IP55
- Overheat protection fitted as standard

ELECTRICAL SUPPLY

380-420V/50Hz/3φ

TEMPERATURE RANGE

Standard Operating temperature range: -40°C to 50°C, plus a one off emergency use at 200°C for 2 hours (3 ph motors). Where fans need to operate between 50°C and 70°C, fans must be run at full speed only.

SIZES

315, 355, 400, 450, 500, 560, 630, 710, 800, 900 and 1000 mm.

IMPELLERS

Our impeller design includes features such as our unique high efficiency, high twist aerofoil section blades, which are fitted into an aerodynamically optimised hub and clamp plate, that allows pitch angles to be adjusted to precisely match customer needs. Fläkt Woods impeller blades are all manufactured from either high

NEW



**GAIN THE AERODYNAMIC
ADVANTAGE AND SAVE UP
TO 27% ON ENERGY COSTS**

pressure die cast aluminium or high quality gravity die casting process, which enables us to offer thin aerofoil sections that reduce noise generation.

Every cast aluminium component is X-ray examined using Real Time Radiography inspection prior to assembly to ensure that high quality is maintained.

The maximum pitch angles shown are based on speed control by frequency inverter. This range is available in Form B only (air entering the impeller first).

THE COMPLETE SOLUTION TO CAR PARK VENTILATION

The Fläkt Woods Thrust Fan System is one of the most efficient and cost effective car park ventilation systems available on the market today.

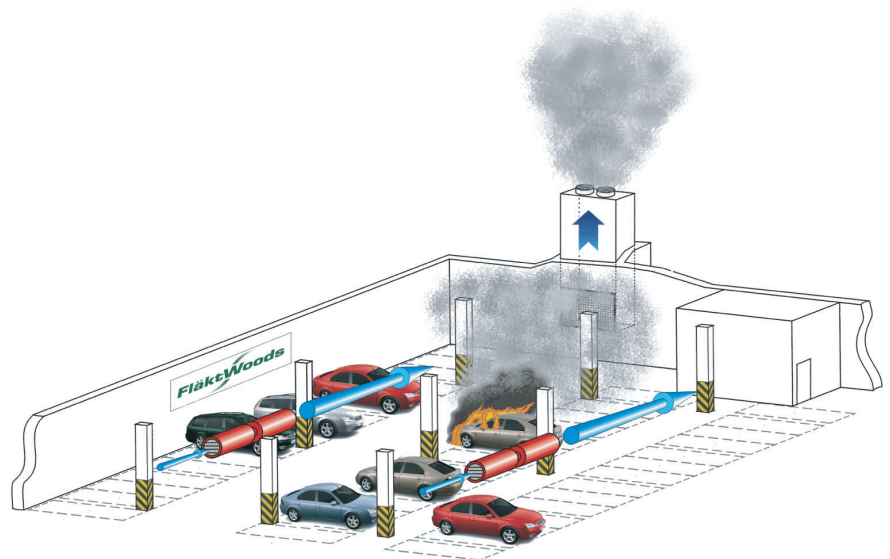
Both day-to-day pollution and emergency smoke are safely and effectively ventilated. Designed to the highest standards and meeting the most stringent criteria to ensure all design requirements are met.

- High System Performance
- Low Installation Costs
- Low Running Costs
- Optimises Car Park space
- CFD System Design
- Complete Turnkey Package available in UK

Although the Fläkt Woods Thrust Fan System works on surprisingly simple principles, highly trained engineers, backed up with the latest high quality Computational Fluid Dynamic (CFD) software, gain high system performance through skilled design.

This system design, paired with Fläkt Woods high-tech product design, ensures an optimised high performance system.

Fläkt Woods offers a complete turnkey solution in the UK if required. Expert project management allows us to design, supply, install, test and commission, ensuring we deliver the complete solution.



THRUST FAN SYSTEMS ARE ONE OF THE MOST COST EFFECTIVE WAYS TO VENTILATE, BOTH IN TERMS OF INSTALLATION COST AND LONG TERM RUNNING COSTS

POLLUTION CONTROL

Fläkt Woods Thrust Fan System, is an efficient and reliable ventilation system, providing fresh air and removing harmful emissions to ensure the safety of car park occupants.

Pollution ventilation can be designed on a traditional volumetric air change rate, or by using CO, LPG and NOx sensor monitoring systems.

Emergency ventilation can be designed using volumetric or design fire calculations.

A Thrust Fan System is a duct-free system, relying on a series of strategically placed jet fans, to control and distribute air around the car park.

Main extract fans, take the contaminated air out of the car park, with fresh make up air supplied from

entrance/exit ramps, or through supply fans if required.

Choice in fan sizes and profiles, operating systems and detection systems allows versatility in the Thrust Fan System design, allowing the most efficient design to meet the car park's requirements.

Extract rates can be varied by constant pollution monitoring. Sensors placed at optimum points around the car park, allowing the control system to regulate which fans operate to dilute and/or extract the contaminated air.

The system's high flexibility allows the most favourable operation both in terms of safety, economy and efficiency.

CAR PARK FANS - JET THRUST

FEATURES

- Motor frame Size: 80 and 90
- Mounting: Pad Mounted
- Ingress Protection: IP55
- Bearings: Sealed For Life
- Operating Range: +50°C Continuous
- High Temperature: F200, F300 or F400
- Insulation: Class F Class H
- Lubrication: Polrex EM Krytox GPL266

ELECTRICAL SUPPLY

380-420 V, 50Hz, 3 ϕ

440-480 V, 60Hz, 3 ϕ

380 V, 60Hz, 3 ϕ

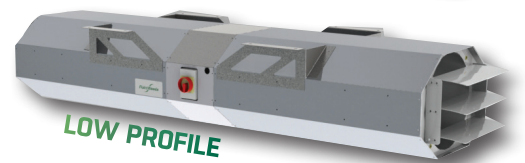
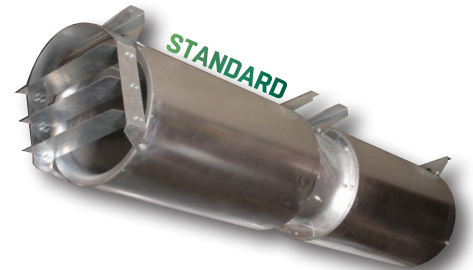
Ratings Comply With BS5000 and IEC 60034-1
All Motors are suitable for inverter Control.

HT CERTIFICATION

The Jet Thrust fans are high temperature certified to the latest European standard EN12101-3 and are CE compliant.

TRULY REVERSIBLE AIR FLOW

Fläkt Woods has developed the JM fan to give the optimum aerodynamic and acoustic performance. To optimise the performance Fläkt Woods used the latest design software to establish the blade shape and in particular the aerodynamic blade sections.



CAR PARK FANS - INDUCTION THRUST

FEATURES

- Motor frame Size: 90
- Mounting: Pad Mounted
- Ingress Protection: IP55
- Bearings: Sealed For Life
- Operating Range: +50°C Continuous
- High Temperature: 300°C for 2/hrs
- Insulation: Class H
- Lubrication: Krytox GPL266

ELECTRICAL SUPPLY

380-420 V, 50Hz, 3 ϕ

440-480 V, 60Hz, 3 ϕ

380 V, 60Hz, 3 ϕ

Ratings Comply With BS5000 and IEC 60034-1
All Motors are suitable for inverter Control.

HT CERTIFICATION

The induction Thrust fans are high temperature certified to the latest European standard EN12101-3 and are CE compliant.

UNI-DIRECTIONAL AIR FLOW

The induction Thrust fan is ideal for mounting in an area which has a particularly stringent height requirement. They are designed to be mounted directly to the soffit to reduce any additional allowance for fittings.





WE BRING **BETTER AIR**[™] TO LIFE

With over a century of innovation and expertise to share with our customers, Fläkt Woods is a global leader in Air Technology products and solutions. We specialize in the design and manufacturing of a wide range of products and solutions for Air Movement, Air Treatment, Air Distribution, Air Management and Air Diffusion with focus on two major benefits – **Air Comfort** and **Fire Safety**. With market presence in 65 countries we are in a unique position to be a local supplier and an international partner in our customer's projects.

Our product brands such as SEMCO®, eQ®, eQ Prime®, JM Aerofoil®, JMv Aerofoil®, VCC technology®, Econet®, Veloduct®, Optivent®, Optimix®, Econovent® and Cleanvent® are well-known and trusted by customers all over the world to deliver high quality and energy efficient solutions.

