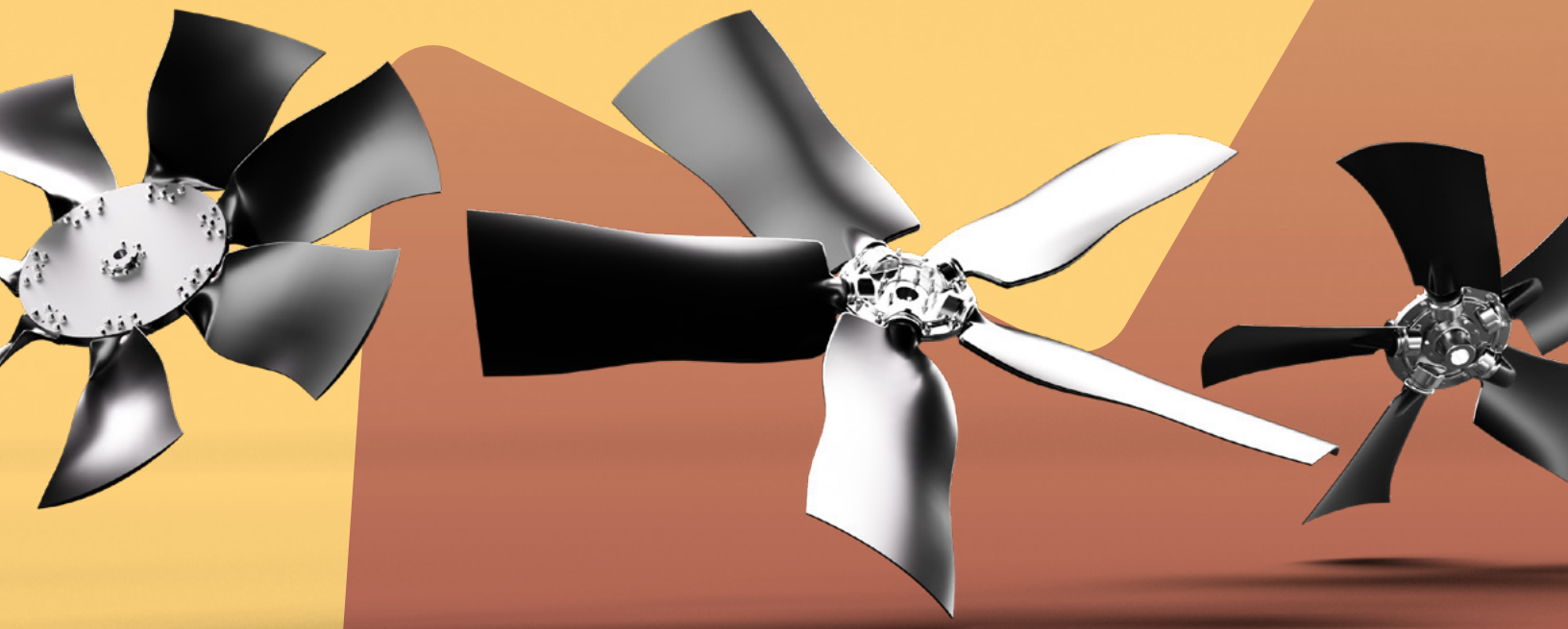
MULTI*WING



MODULAR
IMPELLER RANGE

THE WORLD'S WIDEST RANGE OF AXIAL IMPELLERS

We configure and manufacture customized axial impellers configured to suit your application from 40 different blade profiles and 37 hubs. We have over 60 years of experience solving **the most challenging targets** of fan noise reduction and efficiency improvement.

Rotation
Right
Left

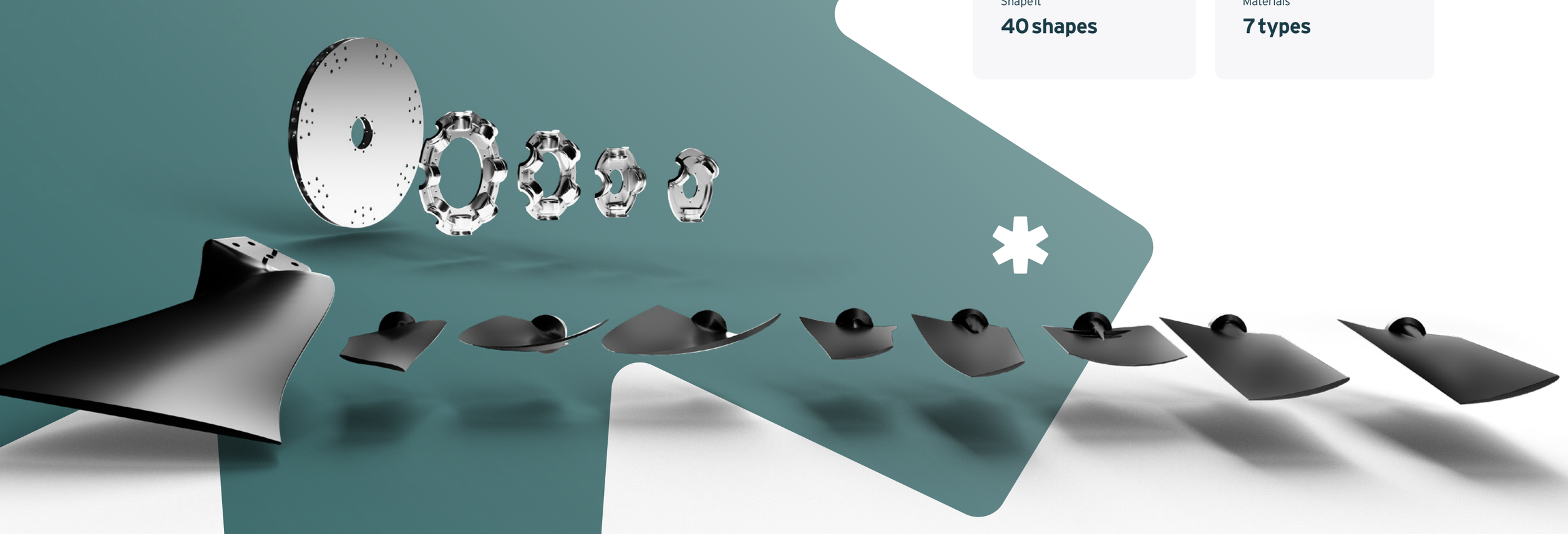
Size it
200-2,746 mm
7.8-108.1 inch

Pitch angles
Adjustable pitch

Add-ons
Winglets, EPS, Clutch

Shape it
40 shapes

Materials
7 types

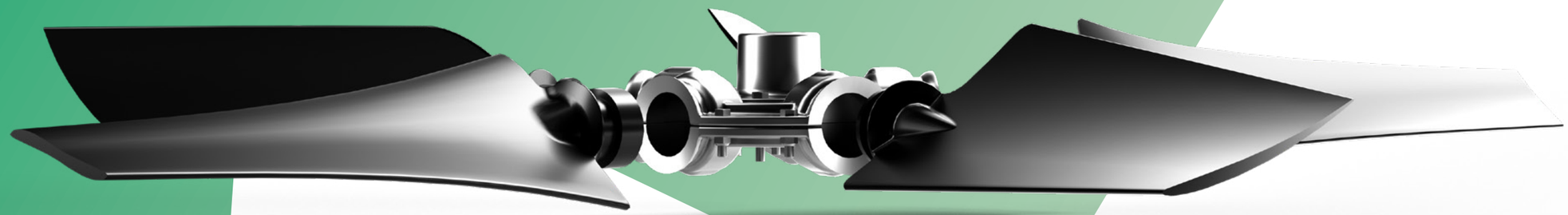


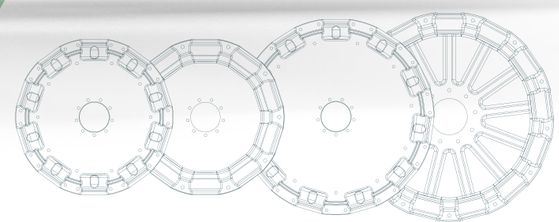
BLADE IT YOUR WAY

We offer 40 different blade geometries and 37 hub types to match the optimum shape with your airflow, pressure, rotation speed, temperature and other application specific parameters. Configuring a fan with the proper blade geometry optimizes airflow, lowers noise and improves efficiency.

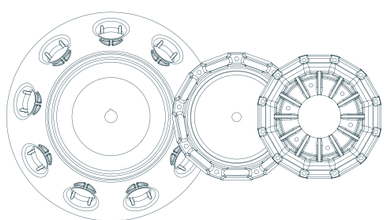
40 Blade geometries

37 Hub types

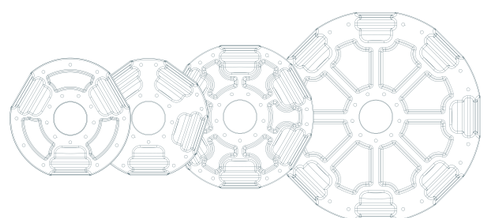




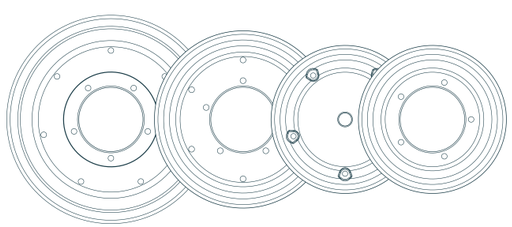
W Retaining Plates



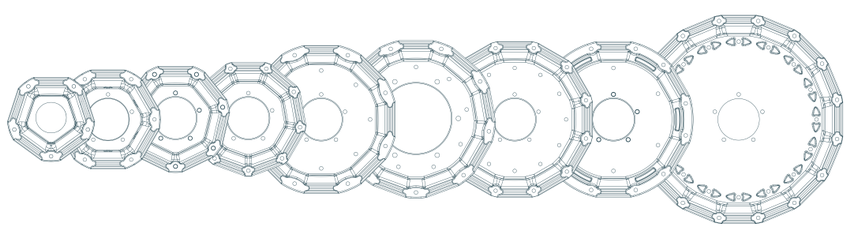
MxFlo & PMAX3 Plates



G Retaining Plates



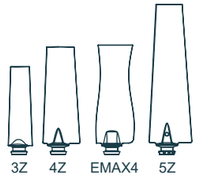
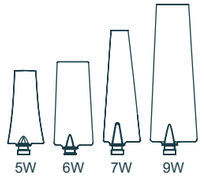
H Retaining Plates



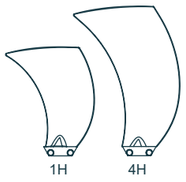
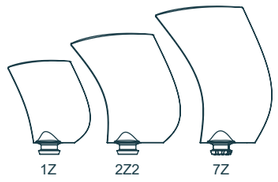
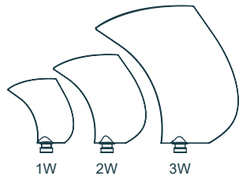
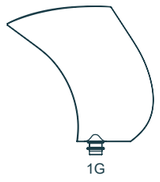
Z Retaining Plates

THE FLEXIBILITY TO KEEP YOU COOL

Airfoil

H	Z	W	G	C
 2H 3H	 3Z 4Z EMAX4 5Z	 5W 6W 7W 9W	 10G	 3C
225-742mm (88.6-292.1in)	**225-1,261mm** (88.6-496.5in)	**504-1,981mm** (198.4-779.9in)	**1,210-2,746mm** (476.4-1,081.1in)	**405-792mm** (159.4-311.8in)

Sickle

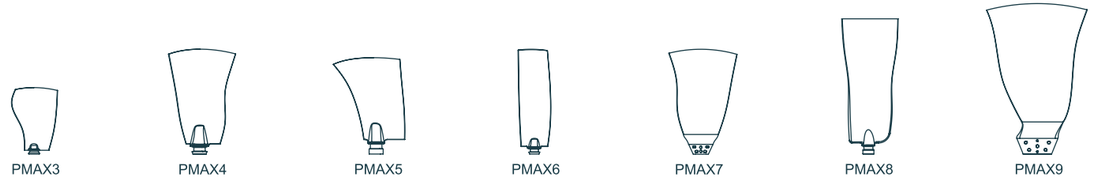
H	Z	W	G
 1H 4H	 1Z 2Z2 7Z	 1W 2W 3W	 1G
225-742mm (88.6-292.1in)	**225-1,261mm** (88.6-496.5in)	**504-1,981mm** (198.4-779.9in)	**1,210-2,746mm** (476.4-1,081.1in)

Increasing arc

H	Z
 6H	 6Z
225-742mm (88.6-292.1in)	**319-1,255mm** (125.6-494.1in)

PMAX

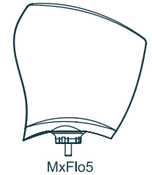
Profiles


PMAX3 PMAX4 PMAX5 PMAX6 PMAX7 PMAX8 PMAX9

PMAX3	PMAX4	PMAX5	PMAX6	PMAX7	PMAX8	PMAX9
432-635mm (170-250in)	**550-950mm** (216.5-374in)	**792-1,118mm** (311.8-440.1in)	**627-1,295mm** (246.8-509.8in)	**1,200-1,600mm** (472.4-629.9in)	**1,386-2,020mm** (545.7-795.3in)	**1,930-2,438mm** (759.8-959.8in)

MxFlo5

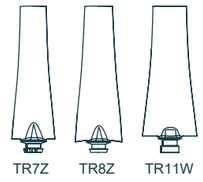
Profile


MxFlo5

624-920mm (245.7-362.2in)

Reversible

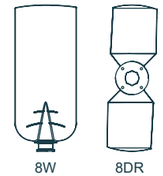
Profiles


TR7Z TR8Z TR11W

316-1,606mm (124.4-632.3in)

Broad Paddle

Profiles


8W 8DR

283-1,656mm (111.4-651.9in)

MATERIALLY SIGNIFICANT

Each application calls for different combinations of materials. **Our five thermoplastic materials** and **two aluminium alloys cover** applications from low-pressure livestock ventilation to smoke extraction fans covering a temperature range from -60 to 400°C (-76 to 752 °F).

Thermoplastic materials

PAG
Glass Reinforced Polyamide
High strength and vibration resistance

Temperature range:
-60 to +120°C (-76 to 248°F)

PPG
Glass Reinforced Polypropylene
Lightweight and durable

Temperature range:
-30 to +90°C (-22 to 194°F)

PAGV1
Glass Reinforced Polyamide
For Rail and other applications requiring low flammability

Temperature range:
-60 to +120°C (-76 to 248°F)

PAGAS
Anti-static Glass Reinforced Polyamide
For operation in potentially explosive atmospheres

Temperature range:
-60 to +120°C (-76 to 248°F)

PAG6-C
Carbon fibre reinforced Polyamide
For extreme operating conditions Anti-static properties

Temperature range:
-60 to +120°C (-76 to 248°F)

Aluminium alloys cover

AL
Aluminium
For high temperature drying applications

Temperature range:
-60 to +245°C (-76 to 473°F)

High temperature tested
at 250°C (482°F) for maximum 2 hours
at 300°C (572°F) for maximum 1 hour

AL 400C
Aluminium
For tunnel ventilation and smoke extraction

Temperature range:
-60 to +400°C (-76 to 752°F)

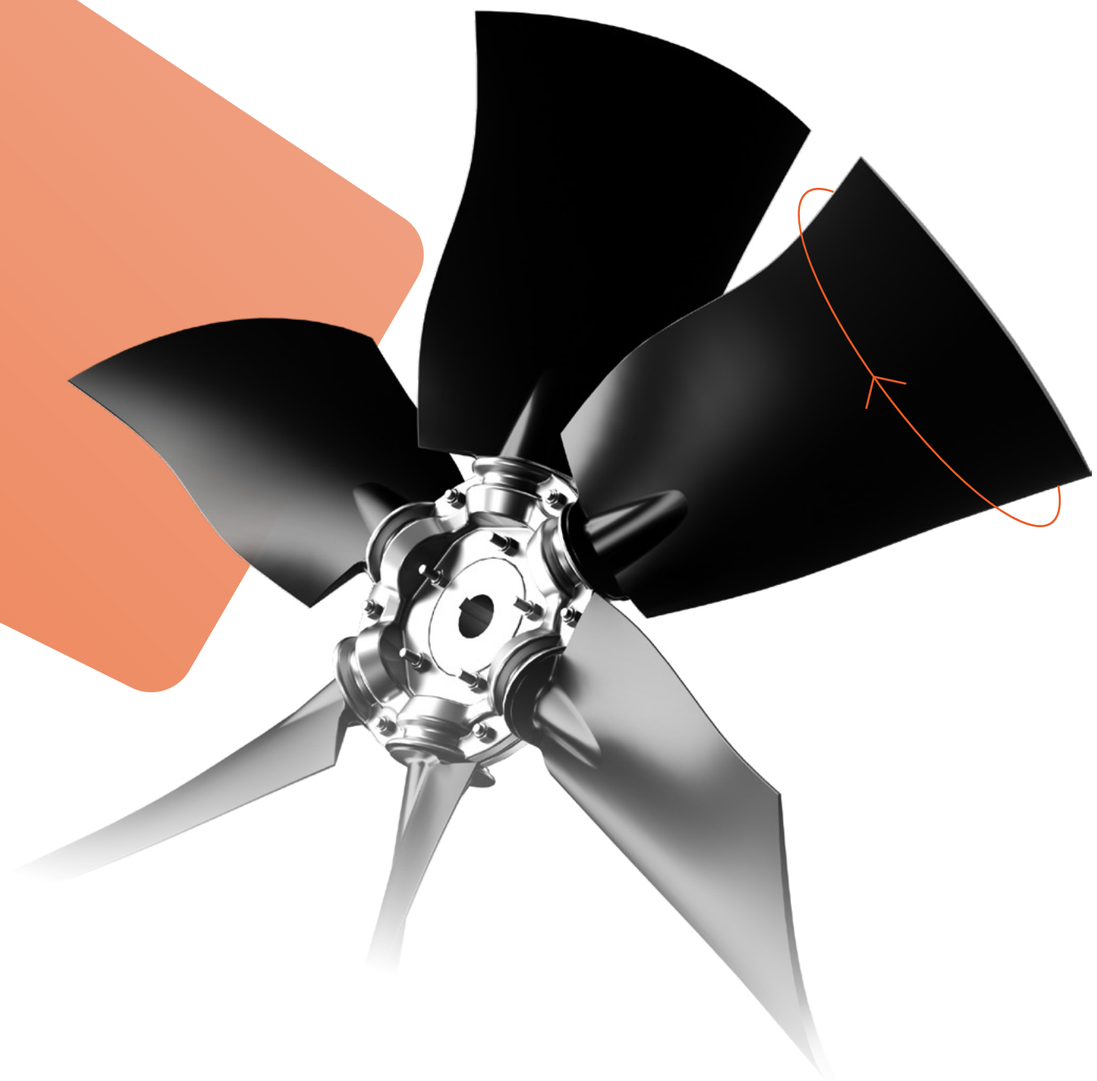
High temperature tested
at 400°C (752°F) for maximum 2 hours

WHAT EVER WAY YOU SPIN

Most of our blade profiles are **available in both left- and right-hand turning versions** for maximum flexibility in pusher (blowing) or puller (suction) applications.

LEFT-HAND TURNING

RIGHT-HAND TURNING



Our modular axial fans can be configured and assembled with **a wide range of blade pitch angles** ensuring the optimum efficiency is achieved at your required duty point. The width of the fan can be tailored to fit into your available installation envelope by adjusting the pitch.

PITCH: PERFECT

HOW TO MAKE A GREAT IMPELLER EVEN BETTER

**FOR MAXIMUM FUNCTIONALITY,
WE OFFER THESE ADD-ONS
FOR PERSONALIZED USE JUST FOR YOU.**

CLUTCH

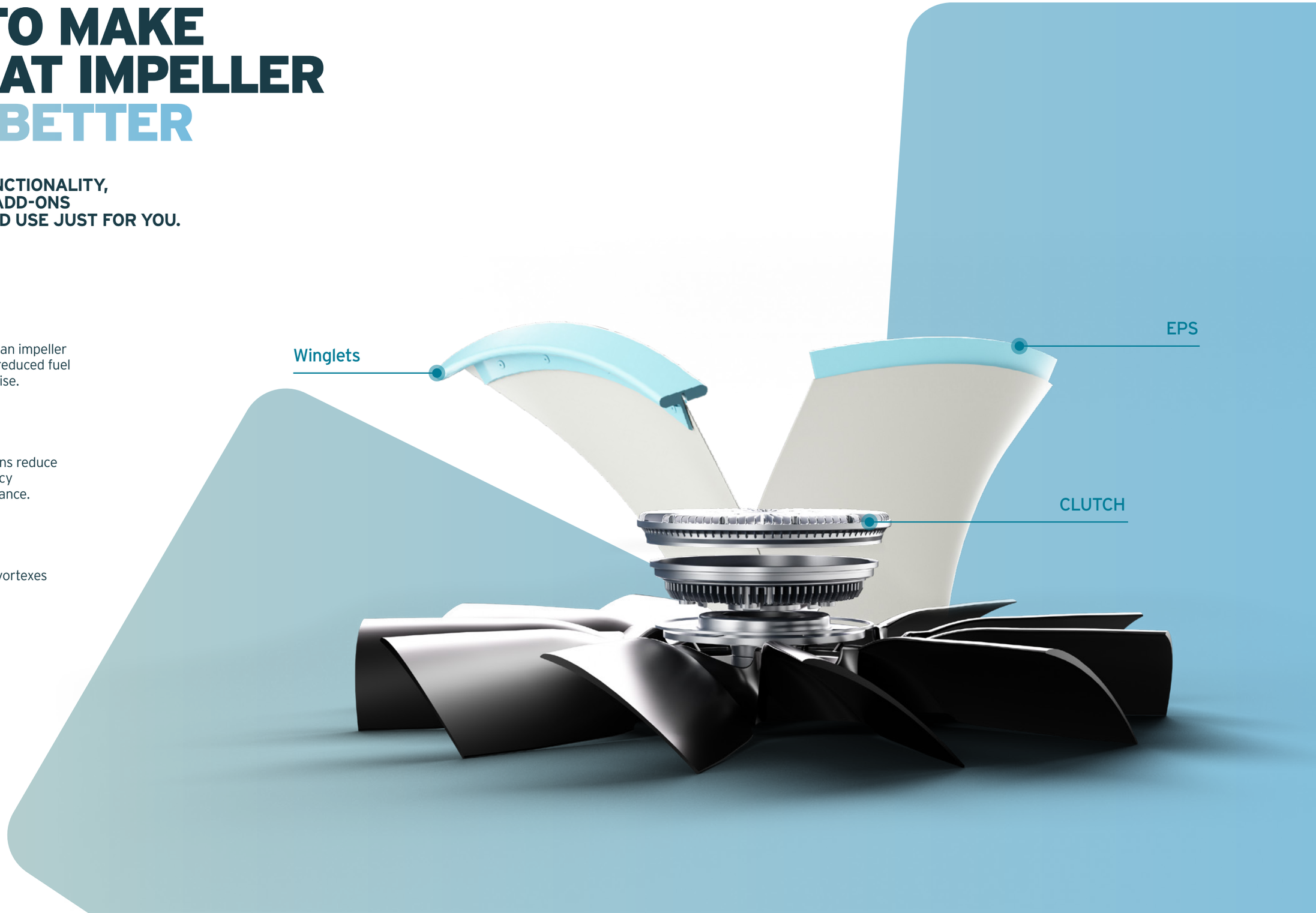
Adding a viscous clutch to an impeller brings speed modulation, reduced fuel consumption and lower noise.

EPS

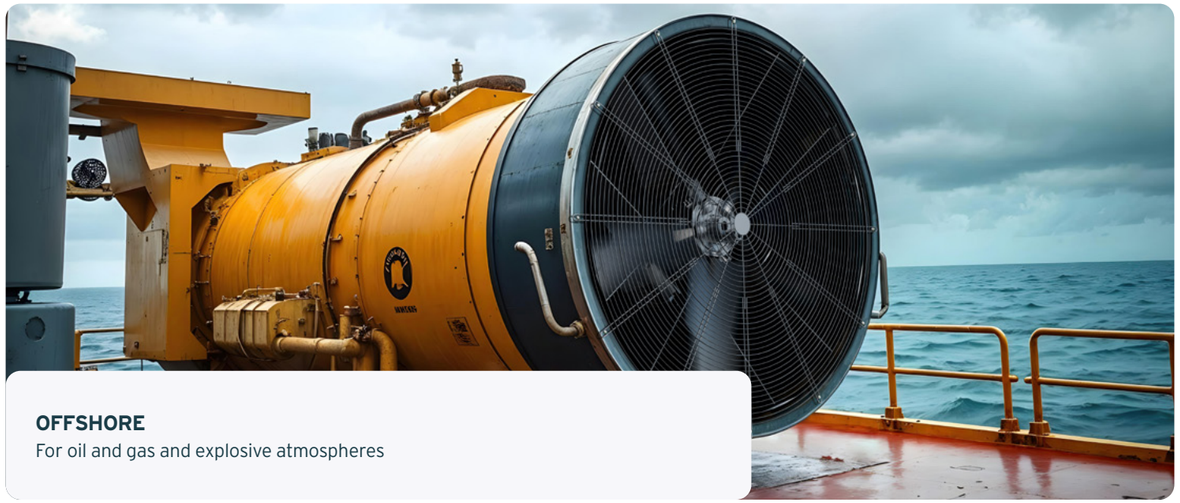
Flexible fan blade extensions reduce noise and improve efficiency by minimizing the tip clearance.

WINGLETS

Winglets reduce blade tip vortexes and minimize fan noise.



APPLICATION EXAMPLES: FROM TOUGH TO EVEN TOUGHER

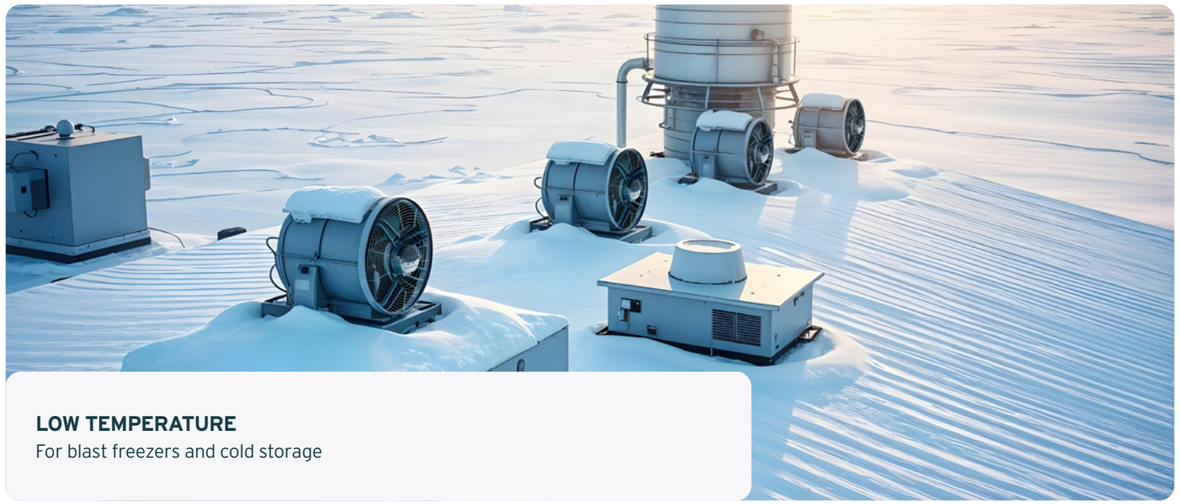


OFFSHORE
For oil and gas and explosive atmospheres

ENERGY
Efficient and low-noise cooling for Gensets and wind turbines

WOOD DRYING
Homogenous drying with reversible airflow

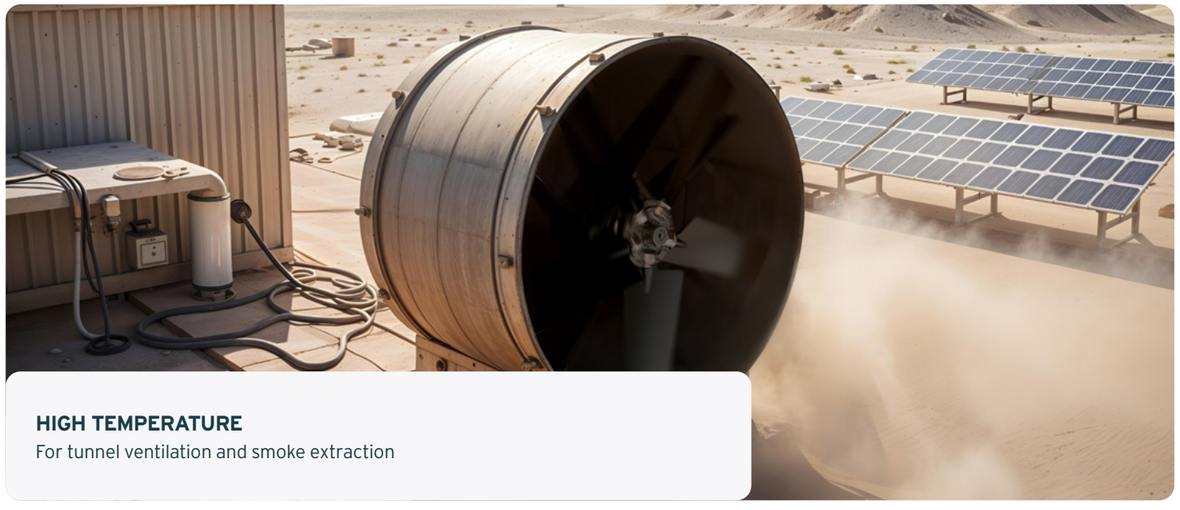
COOLING TOWERS
For high relative humidity and low noise



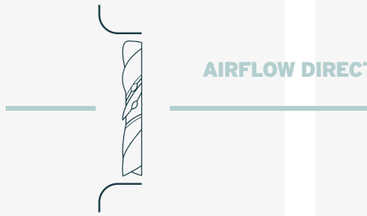
LOW TEMPERATURE
For blast freezers and cold storage

OFF-HIGHWAY POWERTRAIN COOLING
For highest pressures in harsh environments

GREENHOUSE & LIVESTOCK VENTILATION
High efficiency and maximum throw length

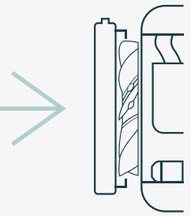


HIGH TEMPERATURE
For tunnel ventilation and smoke extraction



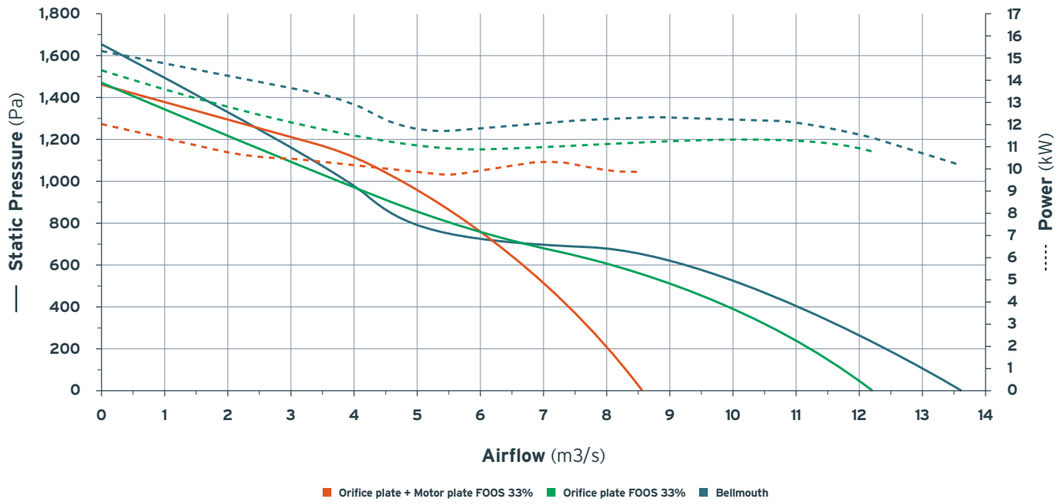
Bellmouth

Orifice plate



Orifice plate + Motor plate

850/6-6L/PMAX4 @1800 rpm with 1% tip clearance



PMAX PERFORMACE DATA

OPTIMISER FOR OPTIMAL AIRFLOW SOLUTION

Optimiser is Multi-Wing's product selection software which helps our customers to opt for the best axial fan solution matching their specific demands.

SHAPING AIRFLOW FOR FUTURE GENERATIONS

A GREENER TRANSITION

Central to our mission and strategy is a concern for environmental impact - of our business, products, and their applications.

EFFICIENT & DURABLE FANS

Designed to reduce energy consumption, lowering costs and CO_2 emissions.

LEGISLATION COMPLIANCE

Exceeding ESPR and DOJ standards for peace of mind.

LIFETIME MAXIMATION

Fans are repairable and serviceable, making them last longer, decreasing raw material use.

DRIVE REPLACEABILITY

Design for proper recycling of electronics at end of life.

SCIENCE-BASED TARGETS

Approved with a market leading net zero goals aligned with the Paris treaty.

UN GLOBAL COMPACT

Active membership of the world's #1 corporate sustainability initiative.

RECYCLED MATERIALS

>90% recycled aluminum from our main source.

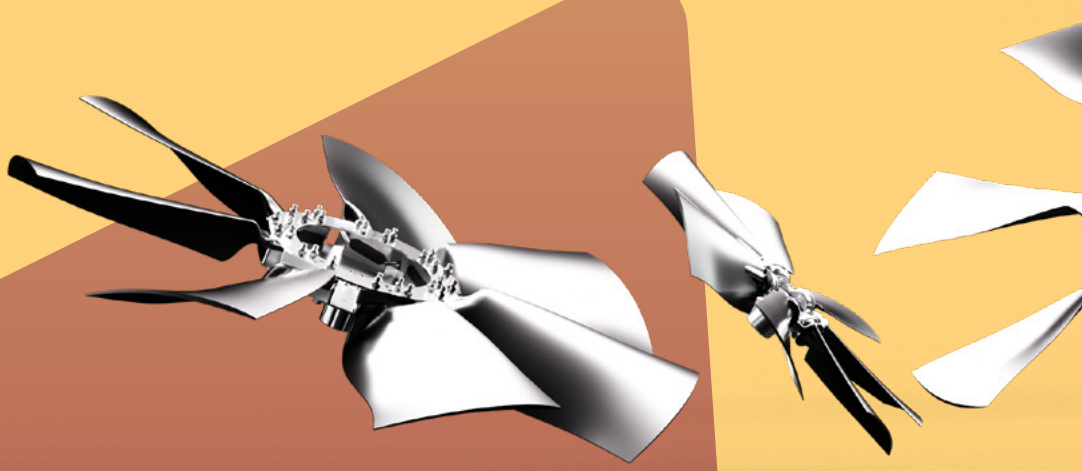
GLOBAL PROXIMITY

Minimizing shipment of components and offering returnable packaging.

OUR DEDICATED ESG TEAM

Ready to help you achieve your sustainability goals.

OUR COMMITMENT TO SUSTAINABILITY



GET IN TOUCH

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info@multi-wing.com