Solutions for

HVAC/Refrigeration

Axial Fans and Clutches
SMART FAN TECHNOLOGY

WingFan’s core competence in aerodynamic engineering allows us to develop advanced technology blade profiles to minimize fan power consumption with the lowest noise emissions. Advanced CFD development tools enable us to offer highly efficient and lightweight fan solutions for all types of HVAC and refrigeration fans. Various blade materials are available to meet the requirements of almost any application. Validation of fan performance data is performed on our state-of-the-art wind tunnel built according to AMCA Std. 210-99 (fig.15). Compliance to the ErP energy efficiency directive for electrically driven fans can be easily checked using the integrated ErP feature in our SELECT fan selection software.

Our flame retardant carbon fiber reinforced PACAS blade material is suitable for all ATEX, mining and offshore applications with a temperature range from -40 to 110°C. Special epoxy coatings can also be applied to the hubs to further improve the resistance to sparks caused by debris impact. Typical applications: Compressors, oil and gas industrial coolers, chemical plant coolers.

With WingFan’s BLEX® technology, the static pressure is dramatically improved and the noise may be reduced by 2 to 3 dB(A). The noise at the fan blade tips caused by air slippage and turbulence is significantly reduced due to minimized tip clearances. The same air flow can be achieved while reducing pitch angle and fan speed, thus lowering power consumption. The overall system efficiency is increased by up to 20% resulting in significant energy savings. The flexible fabric is designed to adapt the fan diameter to the contour of the shroud thereby reducing the clearance close to ZeroTip®. All regular blade profiles in the WingFan product range made of PA and PAG material are available with state of the art BLEX® technology.
Large diameter cost effective fans for induced or forced draught cooling towers with low power consumption and noise characteristics are important selection criteria. Our BLEX blade extension technology can assist in dramatically reducing the noise emissions by reducing the tip clearance close to zero, which also results in a measurable power consumption reduction. In some cases the performance of a fan fitted BLEX blade extensions is increased to the extent that a lower motor speed can be used, further reducing the fan noise.

The wide chord width of the new EDGE 5 blade profile helps to minimize noise and performs exceptionally well industrial cooling tower applications up to a maximum diameter of 1357 mm.

For applications requiring an aluminum fan, the new P8T is a robust and very efficient choice for diameters up to 1633 mm.
WingFan’s robust yet lightweight fans for oil coolers and dry coolers can be fitted with a wide variety of center bosses to fit any electric motor. Our weight optimized thermoplastic blade material not only increases the bearing life of the motors, but are also a cost-effective cooling solution for standardized modular heat exchangers.

Longer motor life and operating cost reduction

The new lightweight EDGE 5 blade profile has been developed specifically to meet the noise and efficiency targets of industrial heat exchanger applications up to a diameter of 1357 mm.

Quiet and efficient

Sickle profiles such as our S45Y and S4Z can help to reduce noise by minimizing operating rpm and tip speed for diameters up to 950 mm.

RPM reduction

HEAT EXCHANGERS
Energy efficiency and low noise are important factors when selecting a fan for climate controlled livestock environments. WingFan has developed state-of-the-art fan solutions powered with highly efficient permanent magnet motors for many of the industry leaders in livestock ventilation. Climate controlled sheds and barns for poultry, dairy cows, pigs and turkeys dramatically reduce the energy bill while improving the welfare of the animals and farm workers while improving the yield.

Wood drying kilns and other dryers require fans that can efficiently deliver equal airflow in both airflow directions at high temperatures and humidity in a corrosive environment. These challenging conditions are perfectly mastered with our high efficiency truly reversible R4Z aluminum blade profile covering diameters up to 1013 mm.

Axial fan solutions for efficient climate control

Large diameter and low power consumption

The 6 bladed P9T is a widely used highly efficient and quiet fan for cooling dairy cow sheds in the hottest climates.

Equal airflow in both directions

The aluminium R4Z is a reliable and efficient truly reversible fan for all dryer applications requiring periodic airflow direction reversal.
SELECT
Fan Selection Software

The leading free fan selection software in the industry. SELECT is a powerful tool to easily find the right fan for your application.

- Immediate 2D visualization of the fan including all performance data, important dimensions, as well as axial deflection
- Create official ErP certificates for all selections within SELECT with just a few clicks
- Automatic updates ensure that the latest fan and performance data are always available
- Project management function: all selections / comparisons can be saved, retrieved and simply sent to colleagues or WingFan via email

Quality can not simply be claimed - it has to be proven time and again.

Download at wingfan.com
WingFan’s innovative fan technology helps to increase the energy efficiency and reduce emissions of your system.

We think global

WingFan is a globally active technology leader of modular axial fan solutions for efficient engine cooling and HVAC/Refrigeration applications.

We act local

Local production – worldwide. With production facilities on every continent and our extensive distribution network, we ensure a short supply chain and local support.

Smart technology for improved performance

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