

## Solutions for

# <text>

**Axial Fans and Clutches** 

### CUSTOM AXIAL FAN SOLUTIONS

# 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 light weight 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-ofthe-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.





Ex ATEX PACAS

### ZEROTIP® CLEARANCE TECHNOLOGY

# **BLEX®** the gap

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 **fuel/energy savings**. SAFETY IN EXPLOSIVE ATMOSPHERES [ATEX]

# **Anti-Static fans**

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.

The flexible nylon 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-ofthe-art BLEX® technology.



# Marine Ventilation

Built in fans to resist the most adverse conditions for offshore applications

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**Explosive atmospheres** 

Our **PACAS blade material** is suitable for most **ATEX** applications ensuring safety in explosive atmospheres.

The efficiency and low characteristics of our Z and H blade series can help significantly reduce the power consumption and noise.

Ex ATEX

Built to fit in many offshore applications, WingFan's extra heavy duty fans can work in the most aggressive and corrosive environments, assuring a long life and operating hours at any type of installation. From ships to oil platforms, we ensure our fans are designed to meet your demands.

Carbon fiber reinforced Anti-Static material

PACAS



### **Corrosion resistant**

For applications requiring an aluminum fan, the versatile **P3H** airfoil profile increasing the overall fan efficiency. The compact dimensions make the P3H a perfect solution for challenging requirements with limited space.

All our fans assembled for marine applications come with A2/A4 bolts and nuts to prevent corrosion.







### **Smart Fan Selection Software**

# We make things easier for you !

WingFan SELECT 3D, the leading fan selection software in the industry, is the best tool to **support your fan sizing**. Learn about the unique features like 3D visualization, resonance data, project management or 3D file export.



### **3D** Visualization

The feature create highly accurate 3D visualizations to show what the fan configuration will look like once completed.



### Resonace Check

This particular feature identify and/or confirm a high vibration level caused by a resonance frequency caused by the chosen fan speed.

# Performance Data

The feature is intended to provide an overview of the performance of the selected fan and its parameters.



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### 3D Animation

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Automated 3D Animation provides a faster way to easily visualize the function and behavior of your fan configu-



Each individual fan selection can be exported as a technical drawing to the Portable Document Format (PDF).



### Drawing Export

SELECT BI





An important function in the data exchange relationship between the SELECT and CAD worlds is the ability to port the Fan assembly into mechanical design software for the purposes of physical clearance checking.



WE DELIVER TO ALL FIVE CONTINENTS

# We think global and act local!

WingFan with its headquarters in Hamburg, Germany is operating a global network of manufacturing on 5 continents and distribution in over 36 countries. WingFan also offers phone support for your product and technical questions. To discuss a specific application, specification question or request a prototype, contact the WingFan location closest to you.

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