

**Axial Fans and Clutches** 

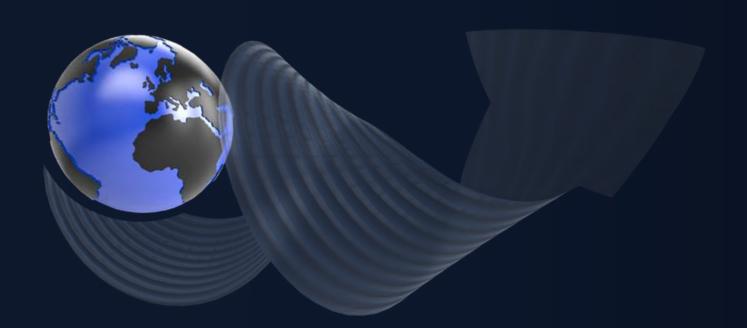
# Smart Fan Technology

WingFan's core competence in aerodynamic engineering provides you with the most advanced technology to comply with noise and emissions legislations.

Cooling modern construction equipment is becoming increasingly difficult, especially with operators asking for quieter machines for use in urban areas, which is why engineers are now paying much more attention to the cooling efficiency of new machines.

An optimized cooling fan is one of the few things that can be easily changed to reduce noise emissions and improve cooling efficiency.

Every application has its unique challenges that have to be addressed individually. Our axial fan solutions for construction machinery and related applications are custom configured to minimize fuel consumption and provide optimal cooling with minimal fan noise.





#### **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.

FOR HIGHER ENGINE EFFICIENCY

#### **FanClutch solutions**

Clutches control the fan speed in direct proportion to the engine cooling needs resulting in **improved fuel** economy, lower cyclic fan noise and increased operator comfort.

Choose from our highly advanced maintenance free electronic viscous clutches that can be precisely controlled by the ECU, or fully modulating bi-metal clutches that sense the temperature of the air passing through the heat exchanger for accurate fan engagement.

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-of-the-art BLEX® technology.



# Cold Milling and Paving Machines

Innovative solutions for modern machines



# Maximum performance at lower rpm

The class leading static pressure and airflow of the **\$38Z** at lower rpm minimizes the power draw from the engine while delivering the maximum cooling airflow.



The strong **P7T** blade is made of high quality fiberglass reinforced nylon to minimize blade deflection and ensure high durability.

WingFan has powerful and robust fan solutions for modern milling machines with dual engines. When only one engine is in use the fan rpm can be reduced to save fuel and minimize the power drain from the engine. The wide variance in fan

load is efficiently mastered by our innovative products. Our extremely robust fans are built to withstand the toughest operating conditions on machines that demand long maintenance intervals.

**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.





#### 3D Ani<u>mation</u>

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



# Drawing Export

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



# 3D File Export

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.











