

Solutions for



Con- struc- tion

Focus
**Skid-steer
Loader**

Axial Fans and Clutches

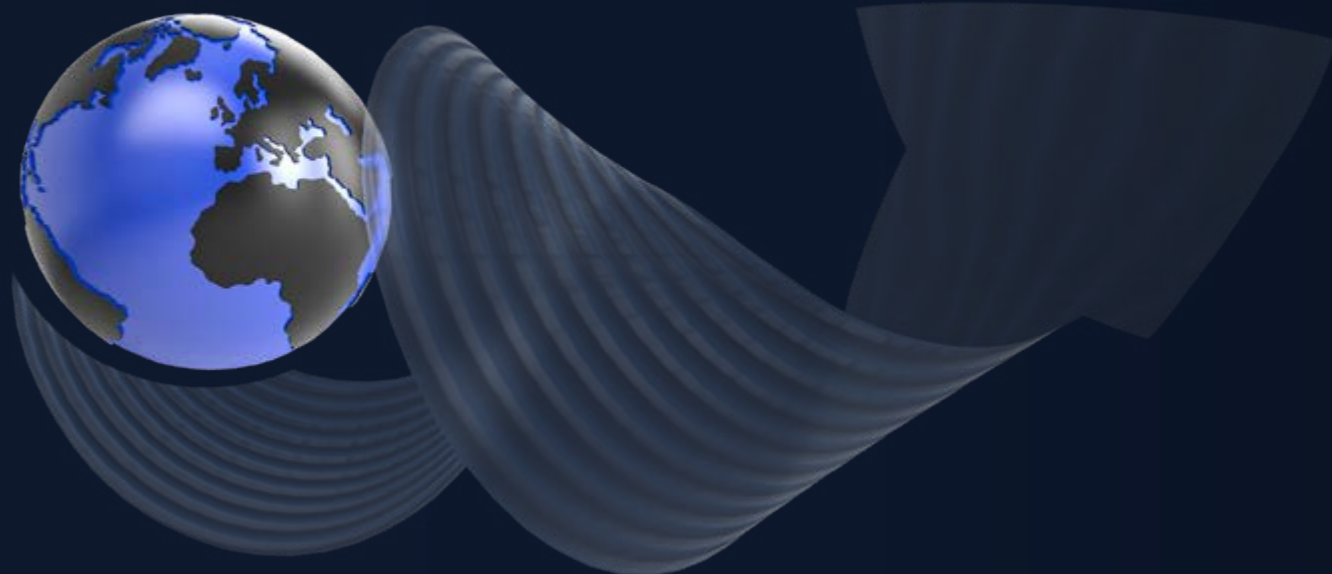
Smart Fan Technology

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.



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.

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**.

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.



Skid-steer Loader



Durable low noise fan

Its high durability and superb performance is why the **VS2R** fan is trusted by some of the world's largest skid-steer manufacturers to keep the machines cool in any climate.

High performance cooling

Wide frame skid-steer machines are quietly and efficiently cooled with our **S2Z** fan with BLEX blade extension technology.



Extremely high pressure in very limited space

WingFan has developed a high performance one-piece fan specifically for the extremely high pressure and airflow demands in skid-steer machines. The very limited space available for the fan requires a very high rpm to cool the machine effectively with a relatively small diameter fan.

By applying **BLEX® blade extensions** to the tips of the blades it is possible to reduce the rpm by up to 800 rpm and still achieve the same cooling performance but with up to 3 dB(A) less noise.

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.

Free download at
wingfan.com



3D Visualization

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



Resonance 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 Animation

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.



WingFan Ltd. & Co. KG
Lademannbogen 10
22339 Hamburg | Germany



+49 (040) 853 109-10
+49 (040) 853 109-99



info@wingfan.com
www.wingfan.com

