NETECS®

MANUFACTURER OF INDUSTRIAL FANS

NETECS® Sp. z o.o.
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46-300 Olesno, PL

NETECS has many years of experience in the design and manufacture of radial fans, which are most used in dust extraction installations in the woodworking industry, including explosion hazard zones, and in plants involved in the waste processing.

WWW.NETECS.EU

NETECS®

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History and Mission of Netecs

Years of Experience and Growth

Since its founding in 2005, **NETECS** has focused on designing energy-efficient fans with an emphasis on ecology and innovation. The company believes that their technologies are not only transforming the industry, but are also protecting the environment, addressing the needs of a market that combines business goals with concern for the planet.

NETECS has many years of experience in the production of fans used in dust extraction installations, in the wood processing, heating and waste treatment industries, and other waste management applications. The company is growing dynamically, expanding its range to include fans for new industries.

NETECS offers low-, medium- and high-pressure fans for various types of air, including dusty and transport air, in standard and special versions. Thanks to its advanced management model, the company provides excellent customer service, on-time delivery and high quality products.

Standards and Certifications

Foundations of Quality

The industrial fans manufactured by Netecs are renowned for their top quality and reliability. They offer high performance efficiency which means significant energy savings and low operating costs. Our fans are designed for trouble-free operation, so customers can expect long-lasting and reliable performance. We have always focused on quality and customer satisfaction, which are the key elements of our company mission.

The quality of our products is an absolute priority, as evidenced by the following certifications:

DEKRA ISO 9001:2015,
TUV AUSTRIA EN 1090-1:2009+A1:2011
TUV AUSTRIA EN ISO 3834-2

The certificates guarantee the highest standards in quality management, production and welding processes. Quality is for us a commitment that we consistently fulfil in order to provide you with products that meet all your expectations.

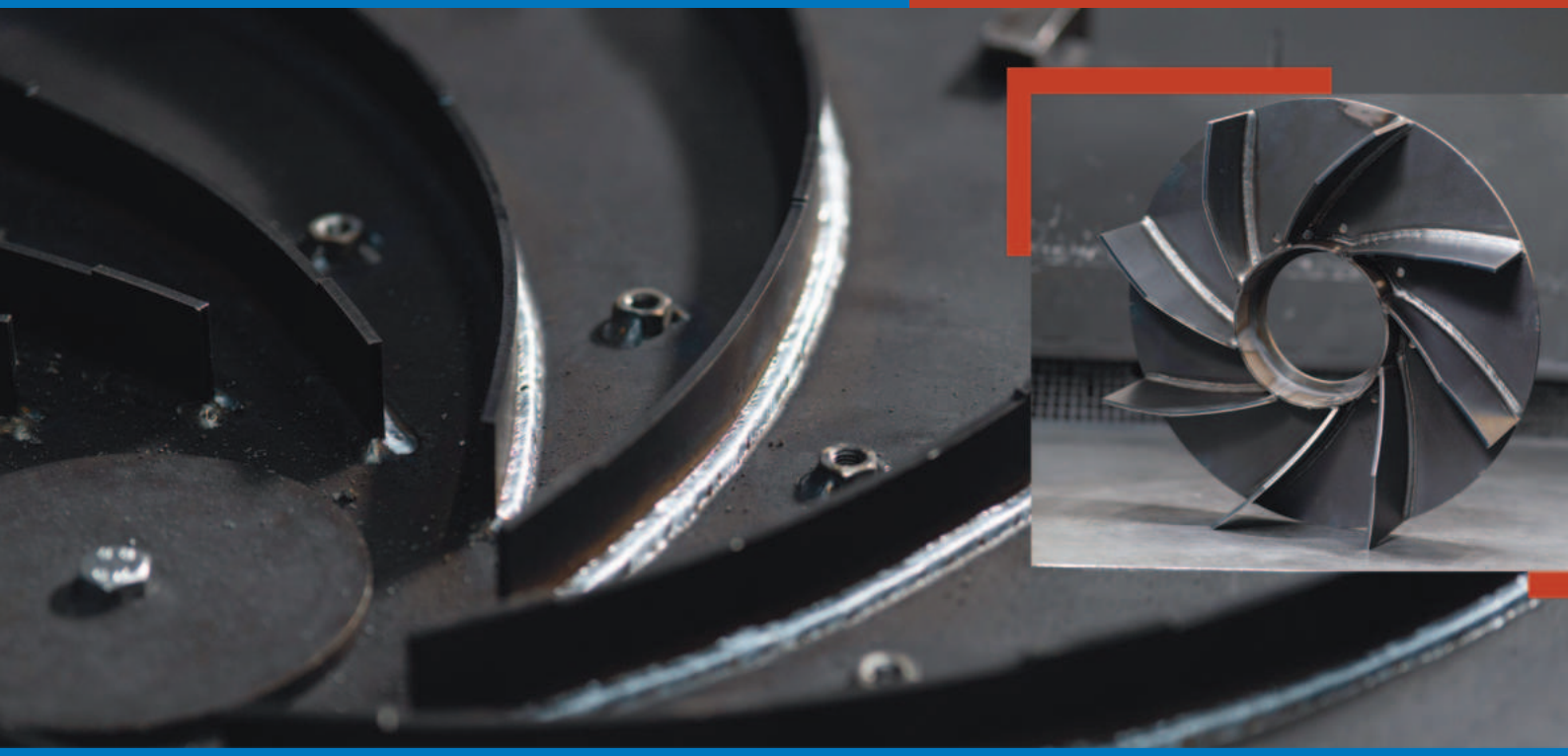
Netecs laboratory

The measurement laboratory at Netecs is a central part of our quality assurance and innovation process.

In the Netecs measurement laboratory we carry out:

- Fan flow and acoustic analyses
- Fan vibration measurements
- Temperature monitoring in the drive system
- Rotor balancing
- Electrical analyses: motor insulation testing, monitoring of energy and power consumption
- Leakage current resistance measurement
- Measurement of the aximum fan surface temperature vs. temperature of the medium.

Measurement, Analysis, Innovation



The role of the workstations goes far beyond simple quality control. They are also a key part of our R&D function, enabling the advanced research and analysis that is required to develop new technologies and innovative solutions.

Investment in high-end measurement technologies underpins our commitment to continuous improvement. They allow us not only to continuously monitor the quality of our products, but also to respond dynamically to changing market needs and technological challenges.
Thanks to them Netecs can continuously deliver solutions of the highest standards, meeting customer expectations and maintaining our industry leadership.

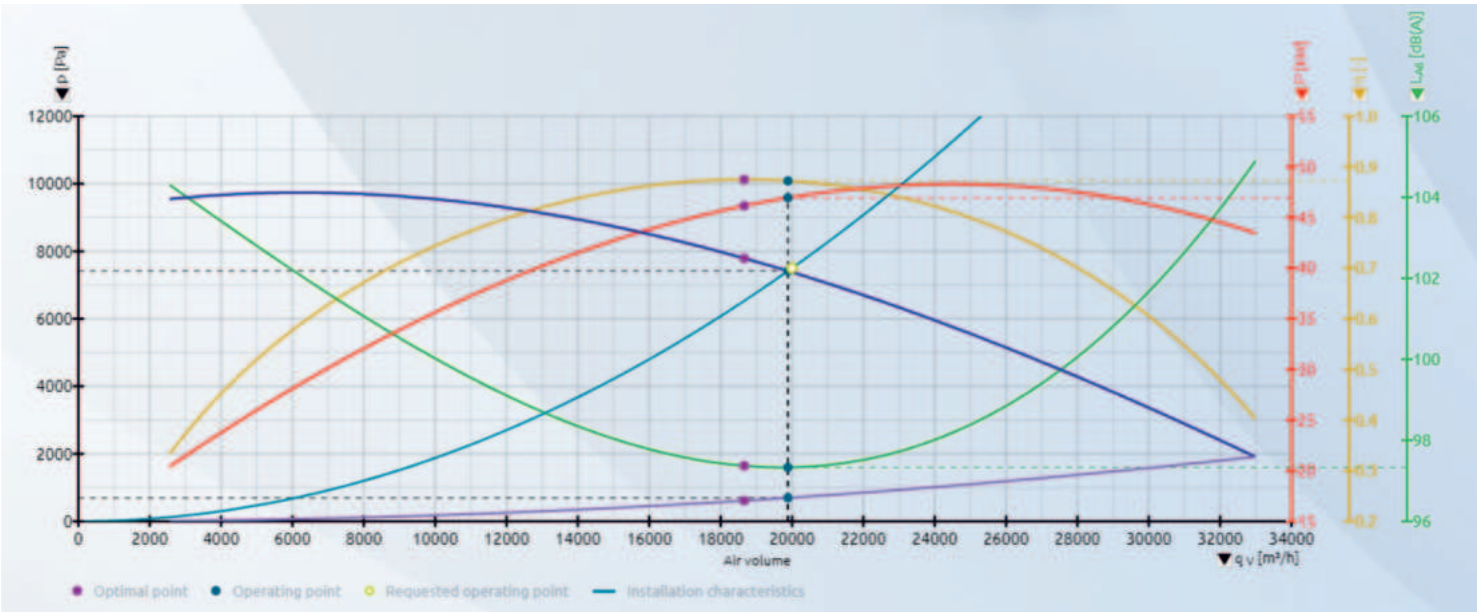
The operating range of Netecs industrial fans:

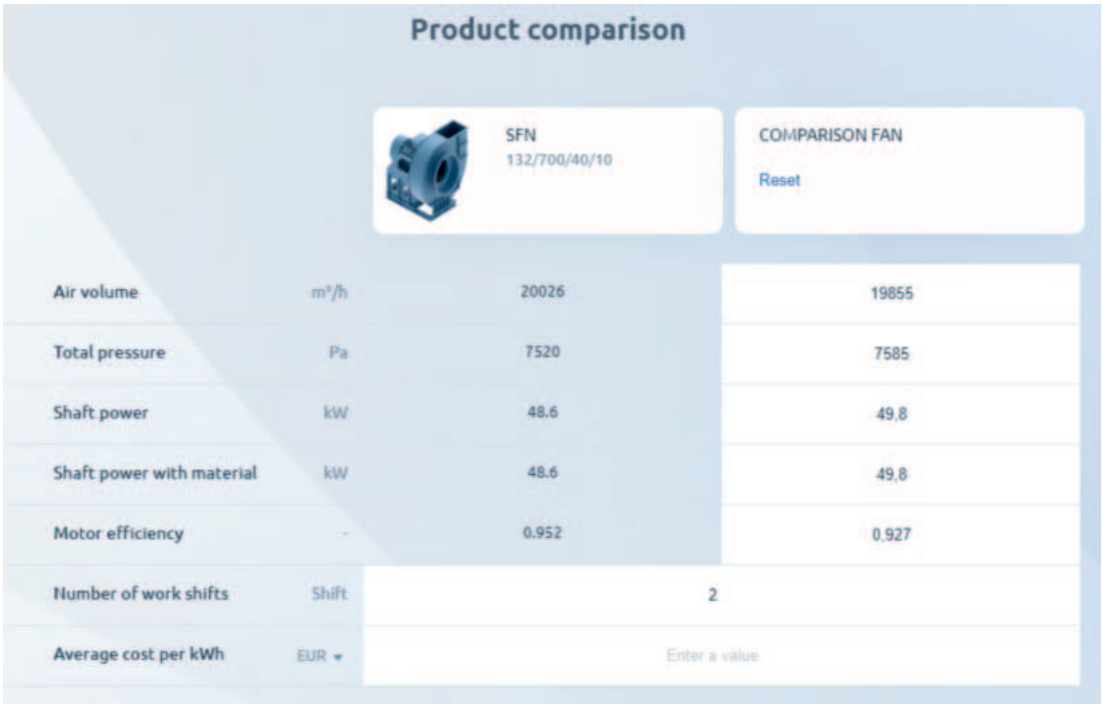
Industrial fan selection system

The NVS - Netecs Ventilator Selection application is a tool that enables the optimal selection of fans depending on the medium to be pumped. Its extensive product base, which is being expanded on a daily basis, makes it possible to meet the requirements of devices operating in a variety of installations.

www.nvselection.com

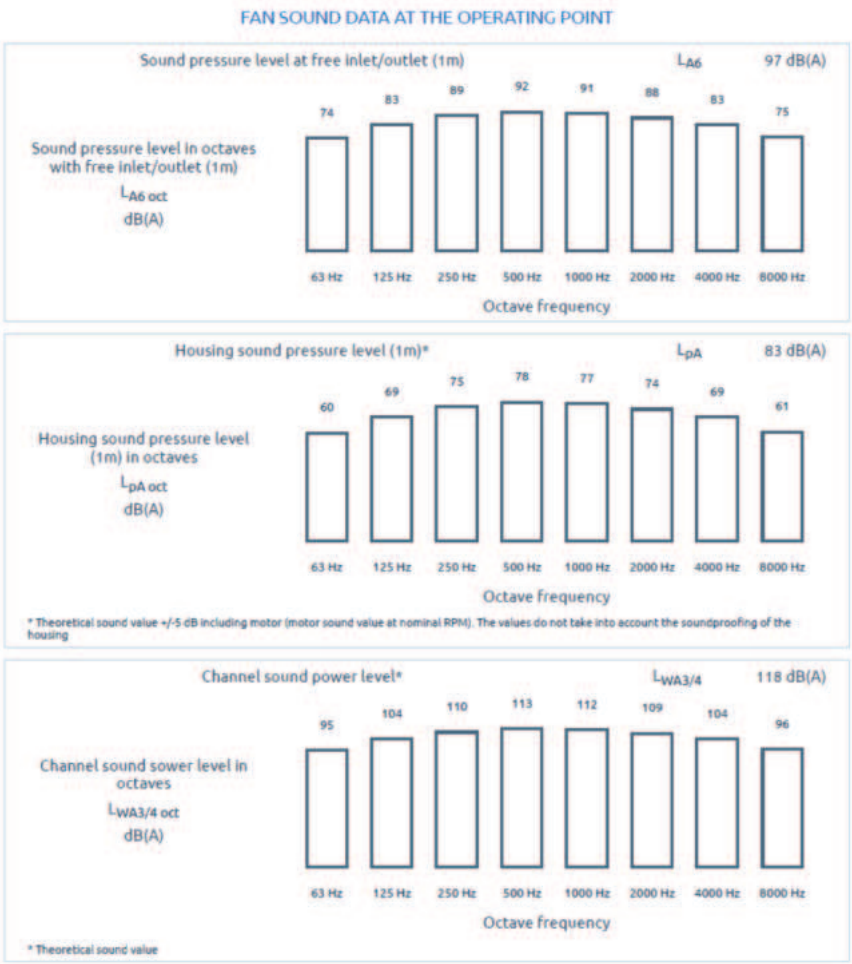
Built-in tools for analysing performance characteristics, and their variability depending on the operating conditions make it possible to precisely determine the parameters of the fan to be used in the installation.

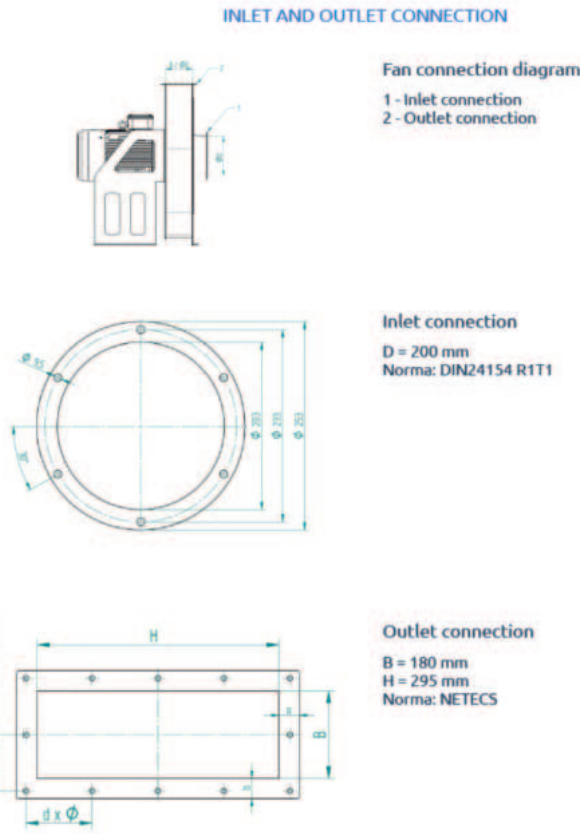




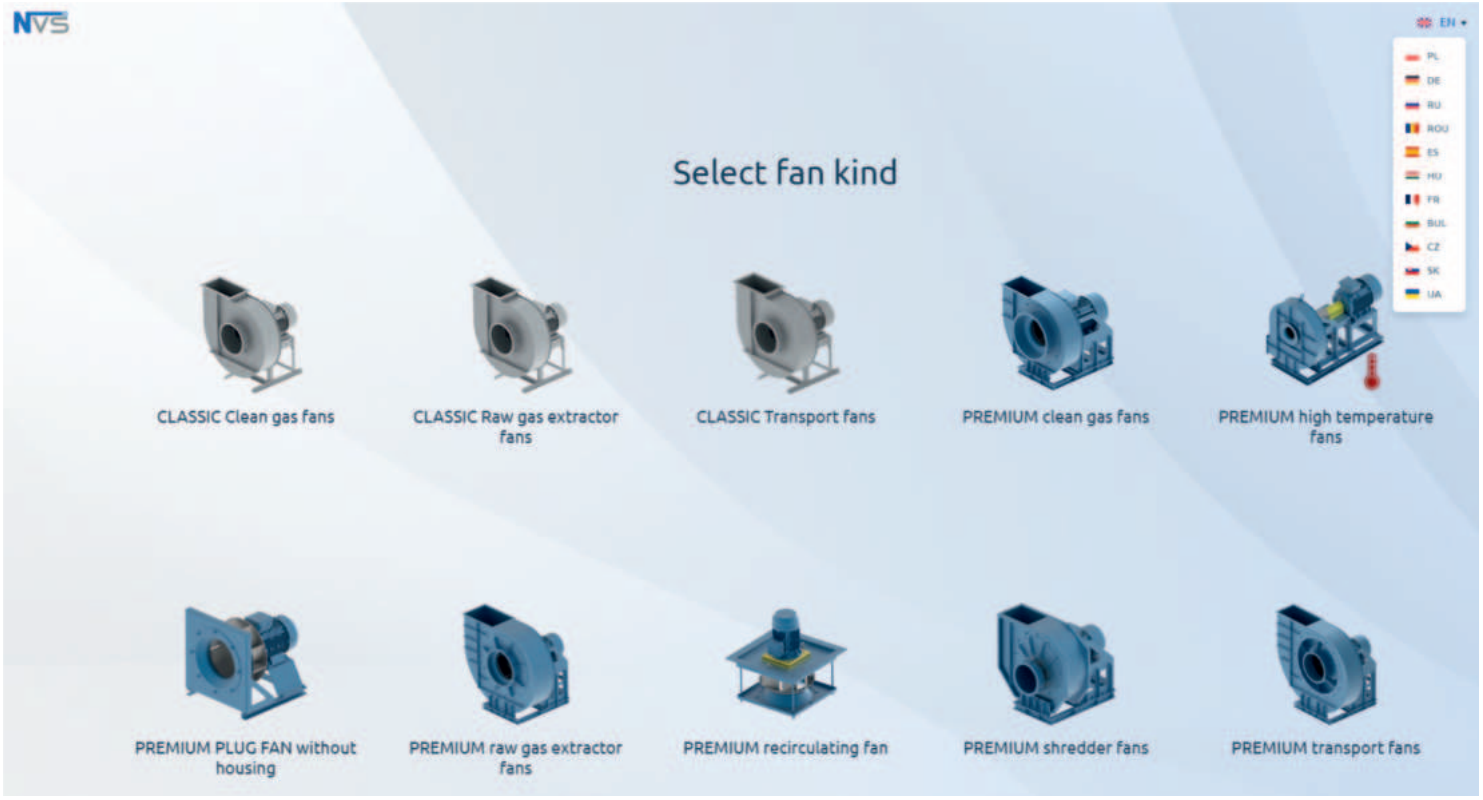
Thanks to the product comparison tool, you can compare the selected fans with each other in order to select the most economical option, or compare your selection with the offerings of other manufacturers.

The application helps to analyse and optimise the choice of the ideal fan taking both technical and economic factors into consideration.





The application is constantly being developed and upgraded with the addition of new features and new language versions.



Fans for explosion hazard zones, ATEX

The **NETECS** fans available in our range can be made to meet **ATEX** standards, which means fans intended for operation in potentially explosive areas. We currently offer fans suitable for zones 21, 22, 1 and 2.

Our horizontal clean air fans can be adapted to meet **ATEX** requirements for zones 22 and 2, regardless of whether the explosion hazard zone occurs within the fan or outside it.

In the case of vertical dust fans, transport fans and clean air fans, we offer full compliance with the requirements for zones 21, 22, 1 and 2, regardless of whether the explosion hazard is present within the fan or outside it.

All our **ATEX** fans are manufactured in accordance with **Directive 2014/34/EU** and designed in accordance with **EN 14986** “Design of fans for use in potentially explosive atmospheres”, which guarantees the highest level of safety and reliability in the most demanding conditions.

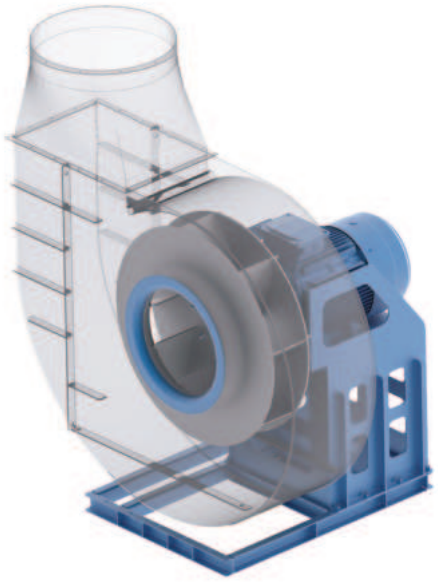
Explanation of symbols:

The Ex symbol is displayed next to fans for which an ATEX version for explosion hazard areas is available.

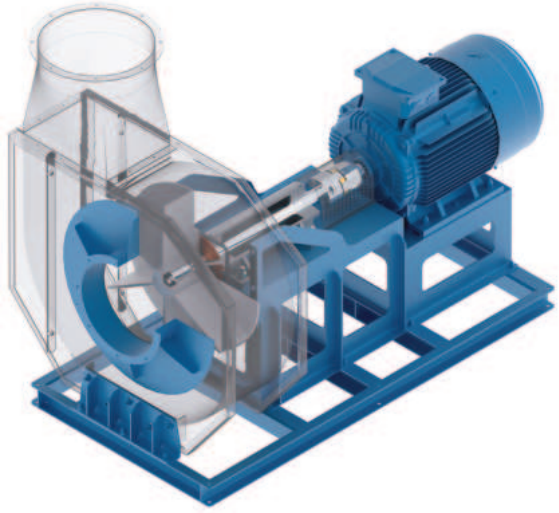
The high-temperature symbol is displayed next to fans which can transport media up to 450°C

Direct drive fans:

The direct drive fan offers a number of advantages that make it the most frequently chosen solution on the market. First and foremost, it is distinguished by its simple design, which means greater reliability and lower maintenance requirements.
Thanks to the direct connection between the motor and the impeller, the fan maintains high efficiency, which ensures reliable, long-term operation.



Indirect drive fans:

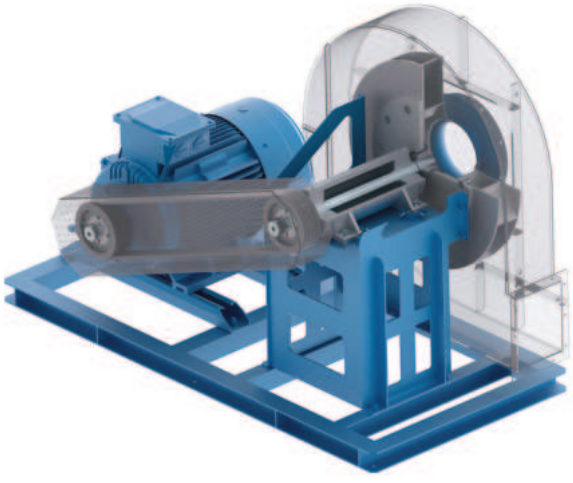


Type C:

The clutch drive fan offers a number of benefits that make it a unique product on the market.
Most notably, it is characterised by the extended life of its motor bearings, which means longer operation and reduced maintenance requirements.
Despite the use of a clutch drive, the fan maintains a high level of efficiency, which guarantees reliable performance in a variety of conditions.

Type K:

The belt-drive fan offers a number of advantages that make it an exceptional choice for a variety of industrial applications. First of all, thanks to the belt drive, it is possible to locate the motor away from the fan axis, so the unit can be installed in confined spaces.
In addition, the belt drive allows adjustment of the operating parameters without the need for an inverter, increasing flexibility of use and adaptation to different operating conditions.

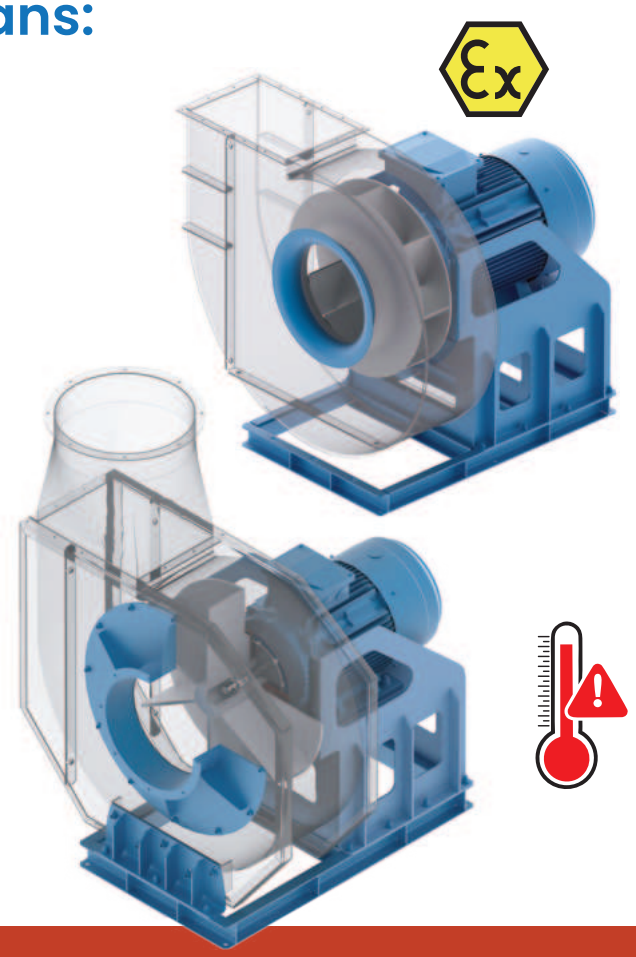


Clean air fans:

- SFN

SFN fans are designed for handling clean or filtered air. They are designed to provide many years of trouble-free operation. They are suitable for installation both indoors and outdoors.

The classic design ensures excellent performance. The efficiencies of such fans can reach up to 89%, depending on the model - thanks to the alignment of the impeller with the rest of the fan design and the choice of special blade pitches.

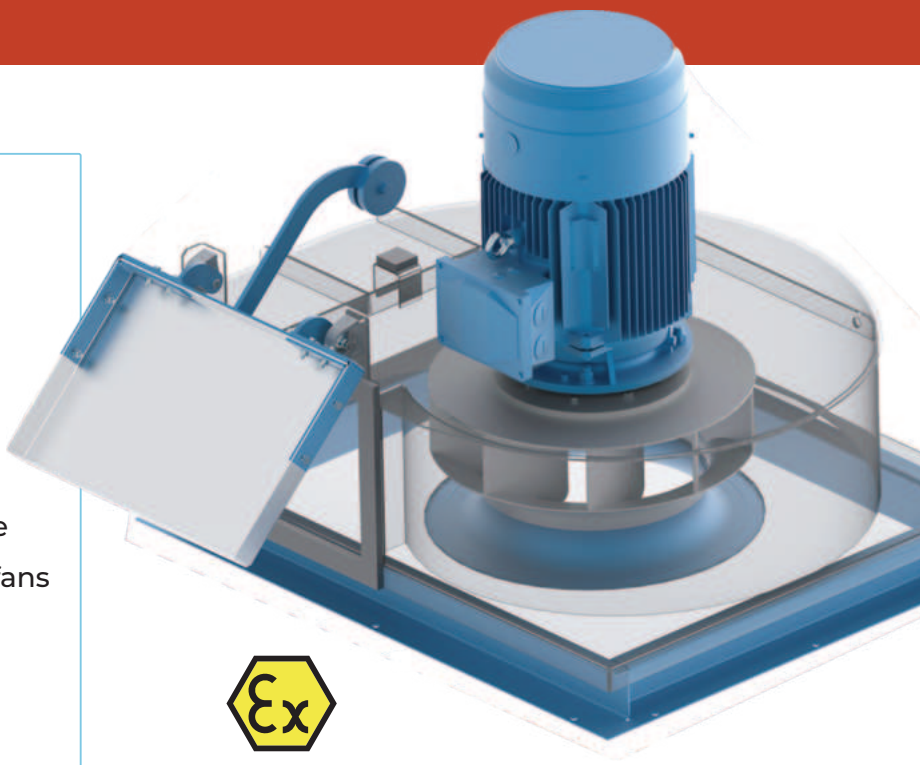


Also available in high-temperature version, HT-SFN for pumping media up to 450°C.

- FHN

FHN fans are intended for the transport of clean or filtered air. They are designed to provide many years of trouble-free operation.

FHN fans are most often used in filters operating at negative pressure where the dust extraction system ensures that the fans are on the "clean side".
In positive pressure installations, these types of fans are successfully used as pumping devices.



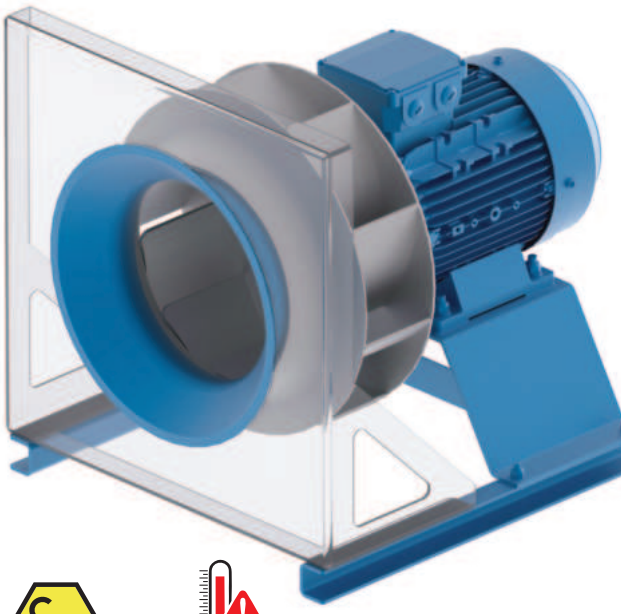
The solid design ensures very high performance parameters with efficiencies reaching up to 89% depending on the model, thanks to the alignment of the impeller with the rest of the fan structure and the choice of special blade pitches.

PLUG TYPE fans without housing for clean or slightly dusty air:

- WH

WH-type fans are advanced units designed to transport air, available in two versions: WH-SFN and WH-VS.
Both versions are characterised by a PLUG FAN design, i.e. a fan without housing in a horizontal operating position, which ensures high efficiency.

- **WH-SFN:** This model is dedicated to clean air transport. Thanks to its robust design, it provides efficient and reliable operation in applications where high air quality is required.
- **WH-VS:** Designed to transport slightly dusty air, this model is ideal for environments where fine contaminants are present.



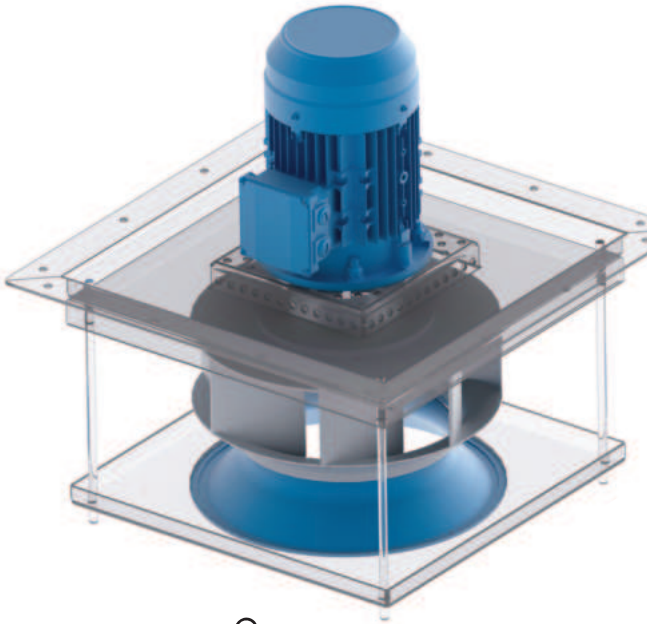
or

In addition, high-temperature WHT models are also available for both versions, allowing the transport of media up to 350°C. This makes WH fans ideal for a wide range of industrial applications where reliability and performance are required, even under extreme conditions.

- WR

WR type fans are advanced air handling units, available in two versions: WR-SFN and WR-VS. Both versions have a recirculation design, i.e. they have no housing and operate in a vertical position, which ensures high performance parameters.

- **WR-SFN:** This model is intended for clean air transport. Thanks to its design, it provides efficient and reliable performance in applications where high air quality is required.
- **WR-VS:** Designed to transport slightly dusty air, this model is ideal for environments where fine contaminants are present.



or

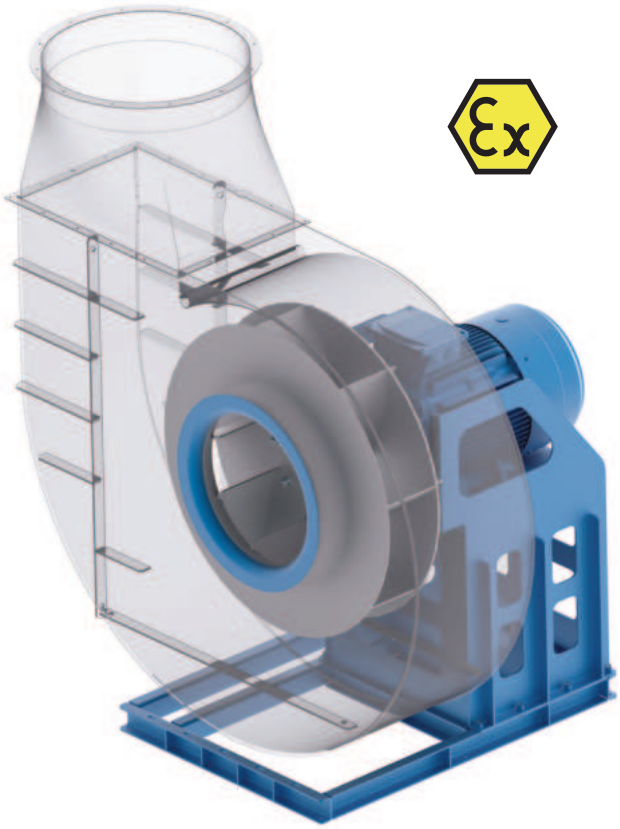
Both models are also available in WRT versions, which are suitable for high-temperature operation, allowing the transport of media up to 350°C. WR type fans are the perfect solution for industrial applications where reliability, performance and energy efficiency are important, even in harsh environments.

Fans for dusty air:

- VS

Dust fans are designed for transporting a mixture of air and dust. They are most often used in dedusting installations to handle air mixtures with a density of up to approx. 65 g/m^3.

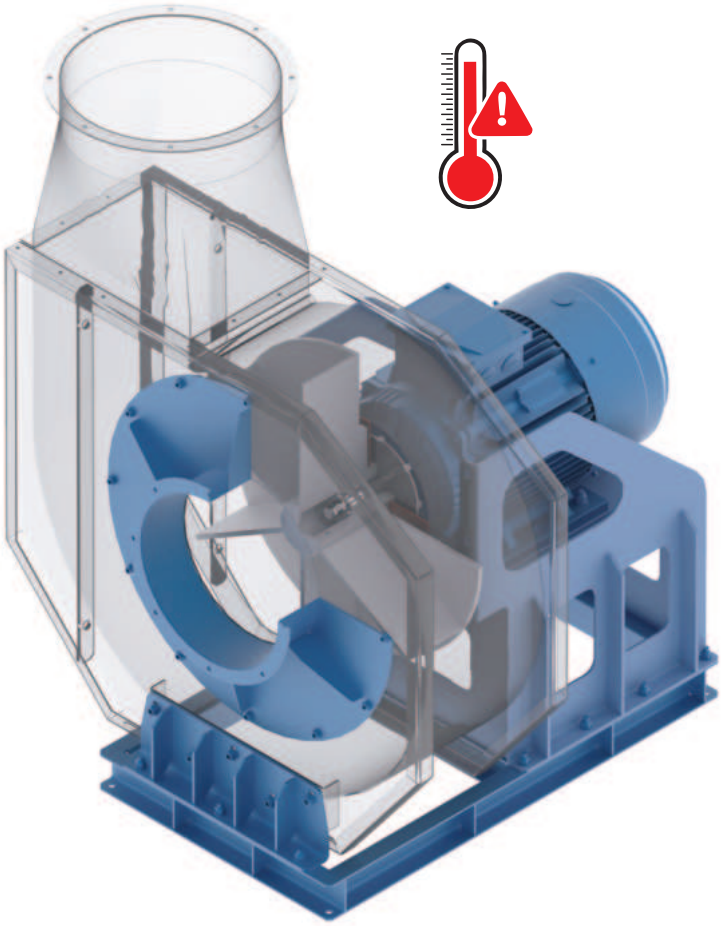
These fans have been designed to transport air/dust mixtures so that the transported material does not adhere to the impeller in a way that may disturb the fan's operation.



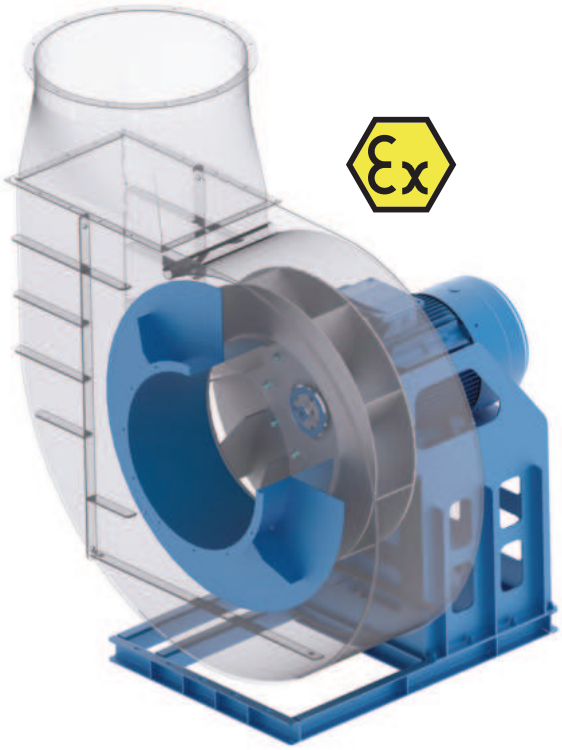
Thanks to their design, despite being constructed to transport dust, the fans maintain high performance parameters. The efficiencies of such fans can reach around 86% depending on the model.

With such high efficiencies, these fans can be successfully used as replacements for clean air fans, or in areas where there is a risk that the dust extraction system may insufficiently filter the air.

Also available in high-temperature HT-VS version for pumping media up to 450°C.



Transport fans:



- RN

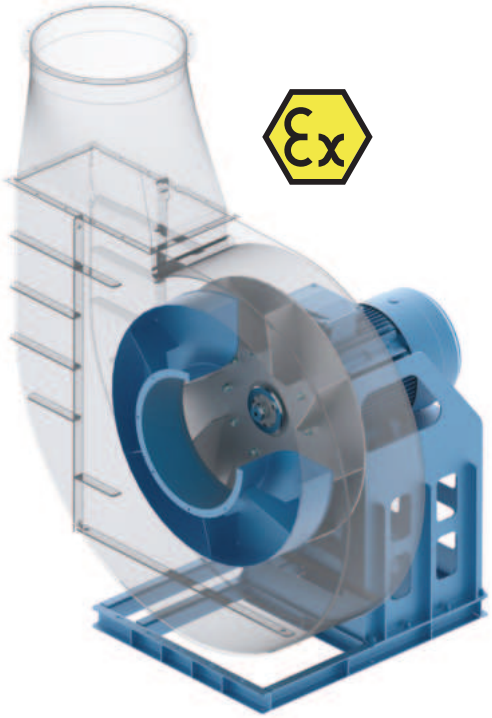
Designed to pump a mixture of air and solid particles, the vertical fan with a closed impeller is the perfect solution for transporting a variety of materials such as dust, wood chips, cement, grain and fine plastics. The unit is capable of compacting solid fractions up to 200 g/m³, allowing even large quantities of material to be handled efficiently.

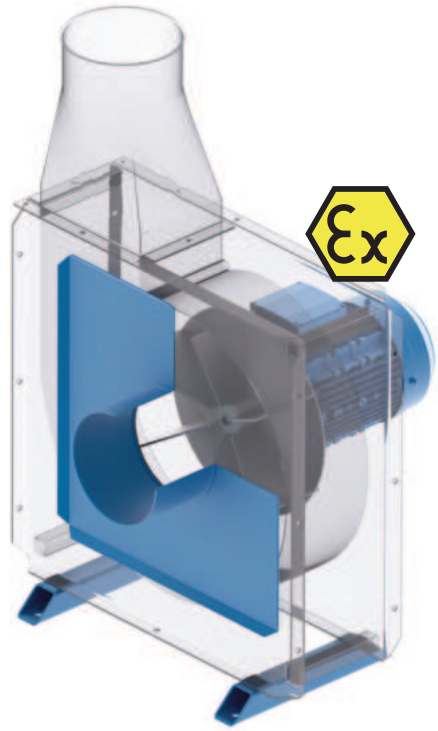
The fan demonstrates high efficiency, reaching up to 72%, which ensures optimal use of energy and lower operating costs.

- EN

The open-impeller vertical transport fan is designed for the efficient pumping of a mixture of air and solid particles. Its applications include the transport of various materials such as dust, wood chips, cement, grain, fine plastics and short shavings.

This fan is capable of compacting solid fractions up to 300 g/m³. Its efficiency within the range of 76% ensures high performance parameters.





- S

The open-impeller vertical transport fan is designed to transport a mixture of air and solid particles, as well as pieces of film and paper.
This unit has versatile applications and is suitable for the transport of materials such as dust, woodchips, cement, grain, fine plastics, short shavings, pieces of film and paper.
This fan is capable of compacting solid fractions up to 300 g/m³.

With efficiencies of up to 65%, the unit ensures high output.

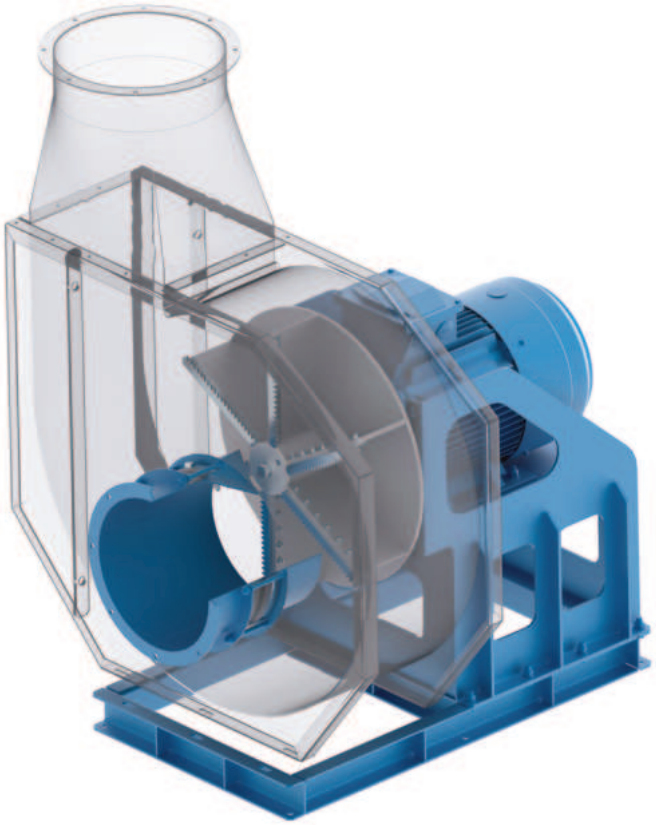
Shredding fans:

- TN

The vertical open-impeller shredding fan is designed for shredding or cutting transported material of considerable lengths. Thanks to its versatility, it can cut a variety of materials such as corrugated cardboard, plastics, film, paper, aluminium foil, gypsum and many others.

This fan is equipped with a special cutting knives system made of high-grade steel to ensure efficient and precise cutting.

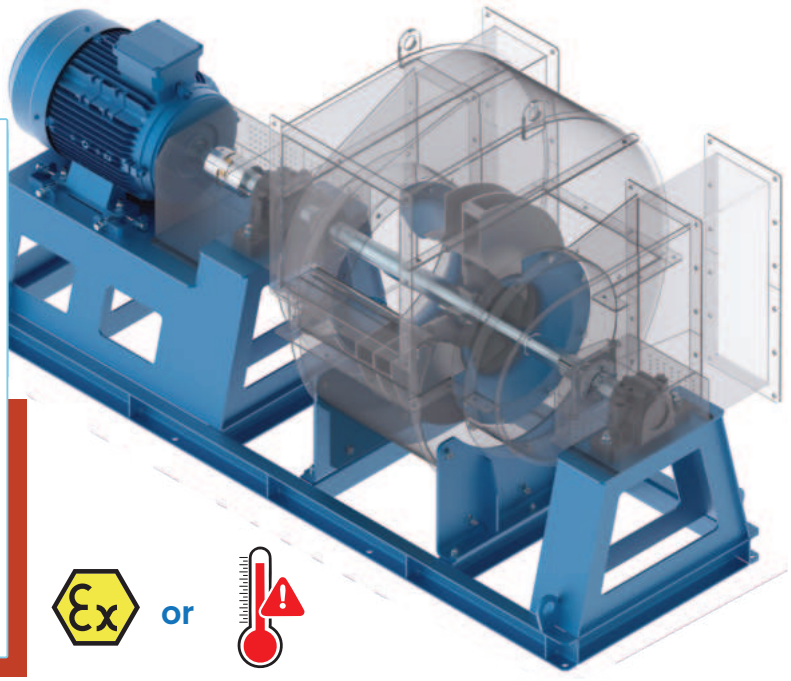
The direct drive guarantees reliable operation. This fan model is ideal for companies in need of an efficient machine for cutting and shredding a variety of materials, while offering reliability and operational safety.



Dual-flow fans:

Type D (Dual):

The dual-flow fan offers unique advantages that make it an indispensable product in many industrial applications. Most notably, these fans achieve very high efficiencies in relation to the pressure values, while maintaining smaller dimensions, particularly a smaller impeller diameter, compared to standard fans. As a result, they are more compact and easier to integrate into various systems.



or

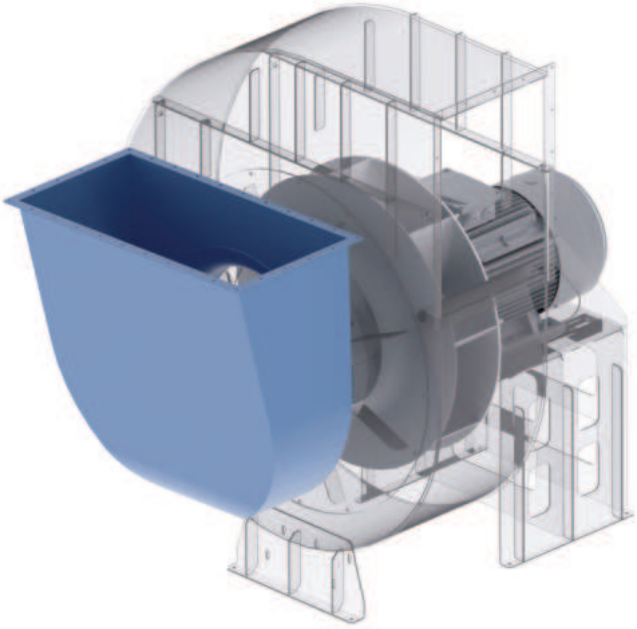
The dual-flow fan is fitted with an indirect clutch drive as standard, but there is also the option of an indirect belt drive, giving greater flexibility in the choice of setup. A distinctive feature of these fans is the two-way suction i.e. they have two inlets so that the fan can be connected via two inlet ducts. Thanks to such a design, air can be effectively sucked in from two sides, increasing operating efficiency.

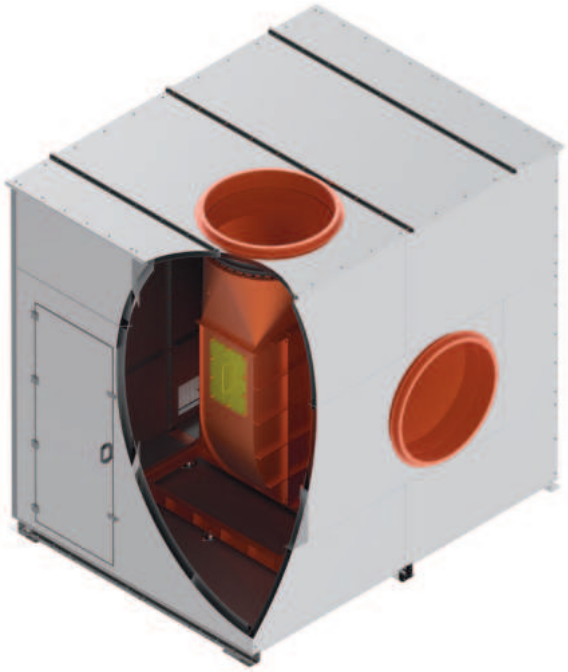
The robust design of the fan guarantees resistance to explosion, making it ideal for use in harsh and hazardous environments.

Fan accessories:

- Inlet duct

Inlet ducts for industrial fans are accessories that facilitate the connection and optimal adaptation of the fan to the existing installation.
They can be fitted to the inlet of various types of radial fans that have flanged connections with a circular opening. Such a connection ensures better integration of the unit into a ventilation system, resulting in improved operational efficiency and an easier installation process.





- Soundproof box

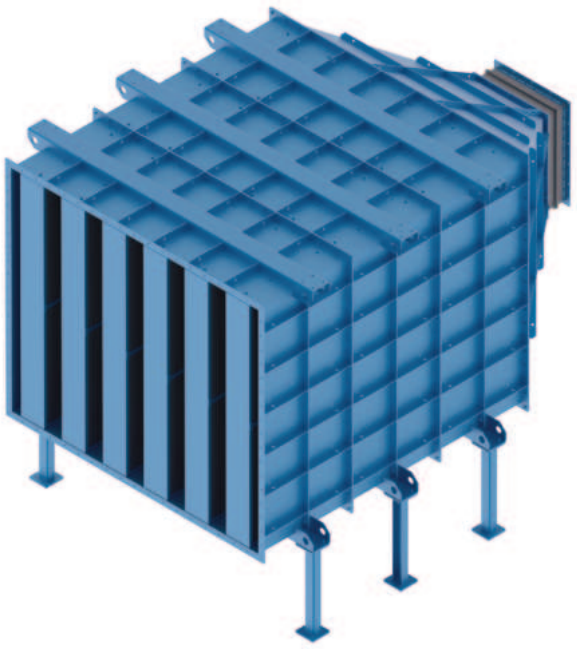
Soundproof boxes for industrial fans are an advanced solution designed to effectively dampen the noise generated by these units. Two versions are available: standard and economy, allowing the product to be tailored to the user's individual needs and budget.

The soundproof box is particularly useful in environments where noise reduction is crucial for comfort and safety at work. It is a great solution for minimising the impact of industrial plants on their immediate surroundings.

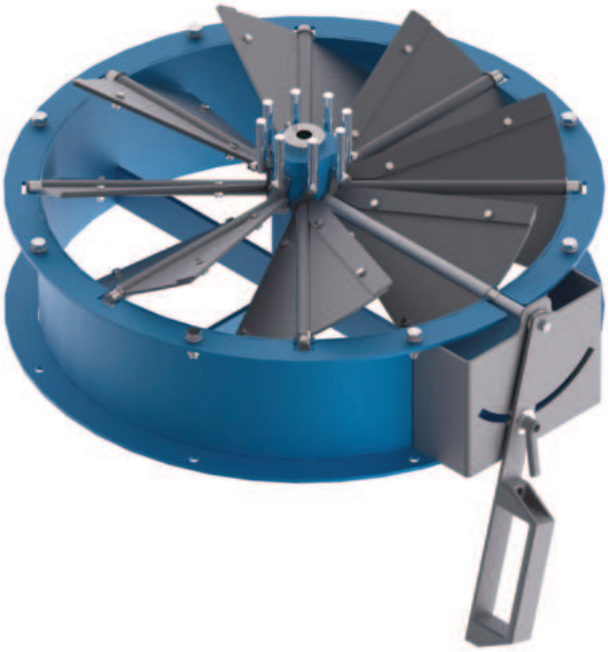
- Silencer

Silencers mounted on the outlet side of fans are the optimum solution for effectively reducing the noise of ventilation systems.
It is also possible to mount silencers on the inlet side, as an additional option.

The degree of noise reduction is aligned with individual needs to ensure adequate silencing performance for the specific requirements of the operating environment. Silencers are available in duct and pipe versions to offer flexibility in their application and integration into different types of industrial installations.



- Flow regulation wheel



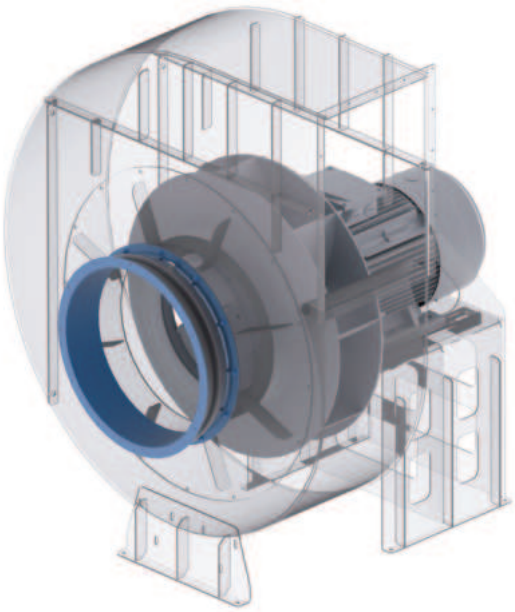
The Netecs flow regulation wheel for radial fans is made of S235 steel and is designed to handle medium temperatures up to 350°C. Manually adjustable as standard, but electric or pneumatic actuators can also be used.

Stainless steel 1.4301 (304) or acid resistant steel 1.4404 (316l) is available to customise the product to the requirements of customer specifications.

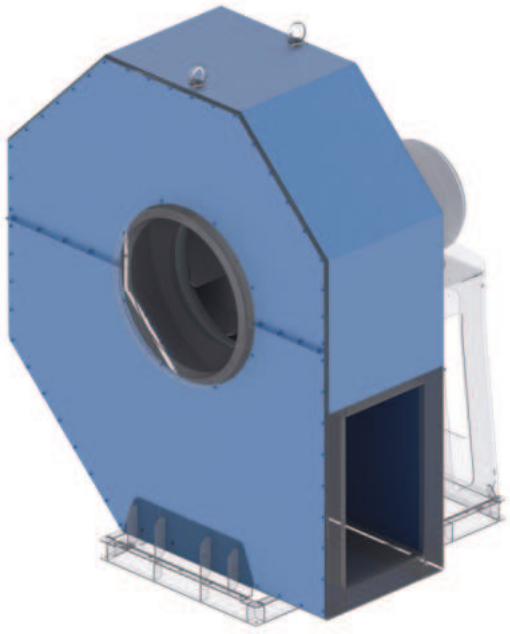
The flow regulation wheel is the ideal solution when it is necessary to regulate the air flow with minimal pressure drop.

- Flexible connection

Flexible connections mounted on the inlet or outlet side of the fan provide a convenient and efficient connection of the fan to the piping system.
Depending on the specification, they can be made with or without a metal casing.
Created from materials such as EPDM or Viton, they guarantee high durability and resistance to the medium temperatures of up to 350°C.
Each connection is precisely matched to the specific dimensions of the fan and pipeline, ensuring a perfect fit and reliable operation.



- Soundproofing of the housing



If there is a need to reduce the noise generated by the fan, we offer acoustic insulation for the fan housing.
This insulation also acts as thermal protection.
The insulation uses mineral wool, which is characterised by low thermal conductivity, high resistance to water vapour diffusion and excellent sound-absorbing properties.

Insulation is available in the following range of options:
- Thermal and acoustic insulation of the fan housing
- Sound insulation of the drive
- Sound insulation of the electric motor

Our reference projects:

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N2-J02

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PRODUCENT WENTYLATORÓW PRZEMYSŁOWYCH

CLEAN TOMORROW

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