VolumeAir HVLS decoating fans

With GoGaS VolumeAir, energy consumption can be reduced by up to 45 %¹

Industrial fans that provide more independence, comfort and safety all year round Reduce energy consumption, optimize indoor climate, increase well-being, protect the environment

VolumeAir HVLS decoating fans are five-time winners:

1. Reduce energy consumption

- Save up to 30%² on cooling costs in summer
- Save up to 45%¹ on heating costs in winter

2. Improve air quality

- Move large volumes of air at low speed quiet and draft-free
- Provide efficient air circulation in large and high rooms

3. Increase well-being

- Optimization of the indoor air quality of the working environment
- Increase comfort and safety for staff and guestse

4. Protect environment

- Significant reduction in heating costs and energy consumption
- Active contribution to CO2 reduction and climate protection

5. Protection from mold

- Moving air protects against mold growth and thus protects the building fabric
- Pollutant-free rooms guarantee a good working climate and increase productivity

B2B real estate: the indoor climate is a high economic asset

"Every kilowatt counts!" Economics Minister Robert Habeck puts it in a nutshell - we need to save electricity and gas. The increasingly threatening climate change and the tense geopolitical world situation require concrete measures. Economical energy consumption protects the environment, slows global warming and makes us less dependent on crisis-related raw material bottlenecks. This is particularly true of industry, logistics and commerce. Whether



production, logistics, storage or exhibition halls, factories, industrial plants, hotels, train stations, hangars or airport terminals: B2B real estate with generous floor space and ceiling heights has a corresponding volume of air that must be brought to a comfortable indoor climate in summer and winter - an intensive cost factor in terms of energy!

Always turn slowly

GoGaS, a leading provider of sustainable building technologies, offers a complete range of innovative industrial fans that not only ensure an optimal indoor climate, but also significantly reduce energy consumption in the building - all year round. The VolumeAir HVLS (High Volume Low Speed) is an innovative ceiling fan that rotates at maximum speed and extremely quietly. The particularly aerodynamic rotor blades of the VolumeAir HVLS are shaped according to the latest findings of NASA and are moved by a sophisticated motor with stepless direct drive. In high rooms (from 5 meters ceiling height), the VolumeAir HVLS creates an even, pleasant room climate and at the same time reduces energy consumption highly efficiently all year round - already with the first rotation! By the way: The efficiency of the VolumeAir HVLS has been proven in several independent studies.

Save up to 30%² on cooling costs in summer

At higher temperatures in summer, the VolumeAir HVLS provides a constant, gentle air flow that is perceived as a pleasantly cool breeze (wind chill effect). The temperature in the room is perceived as several degrees-Celsius cooler and the VolumeAir HVLS can reduce the required cooling capacity of air conditioners by up to 30%². As a result, the ceiling fan operates much more cost-effectively and sustainably than air conditioning systems. The VolumeAir HVLS not only saves money and reduces energy consumption - it even protects the health of your employees and guests, because too intensive air conditioning can lead to colds.

Save up to 45%1 on heating costs in winter

Physically, warm air rises and collects as an unused heat cushion under the ceiling. For example, if the temperature when heating a hall is around 20 °C, there may be around 26 °C under the hall roof. In winter, the VolumeAir HVLS moves these warm air cushions downwards, distributes them evenly in the room and ensures a pleasant, homogeneous temperature (destratification principle). The heating system has to work less and heating costs and CO₂ can be saved. In combination with highly efficient, decentralized heating systems, energy savings of up to 45 percent¹ are thus possible - the VolumeAir HVLS fan ensures climate-friendly operation in summer and winter alike!

More comfort and safety all year round

Almost three quarters of all female employees state that air quality is the most desired wellness factor in the workplace. Whether comforting warmth or pleasant coolness: The VolumeAir HVLS always ensures an optimal feel-good climate: Employees work better here, visitors like to come back here - this increases productivity, gives your company a competitive edge and ultimately increases the dividend! The VolumeAir HVLS is also a winner in terms of health protection: The ceiling fan moves large volumes of air without stirring up allergens and dust. It can even prevent the spread of viruses in a building, because the VolumeAir HVLS ensures that the air does not stagnate.

This effect also minimizes the effects of condensation: If air does not move sufficiently, the moisture in the room air settles uncontrollably on floors, walls and machines. On floors, this increases the risk of slipping, which can lead to accidents. On walls and machines, this can lead to the formation of mold. The VolumeAir HVLS creates just the right air movement to dry out the condensation - and eliminates all related problems in one fell swoop!

Solo or in series a win

VolumeAir HVLS fans are suitable both for stand-alone operation and for operation in series. If several fans are used,



appropriate minimum distances between the fans ensure optimum air circulation. For the connection to a building control system, the combination with the ClimateControl control system is recommended. The control system operates according to room temperature, temperature gradient and time program and further increases efficiency. ClimateControl is also equipped with an interface for connecting solar air collectors as well as heat recovery and air distribution systems.

On the ceiling, ready, go!

The VolumeAir HVLS not only works extremely efficiently and quietly - it is also a real lightweight, yet durable and robust. Its maintenance-free direct drive moves more air for less money and is quite uncomplicated to operate. Installation is simple and operation is intuitive - so the VolumeAir HVLS pays for itself from day one and has amortized its initial cost in no time at all. Start the rotor and save money!

All advantages at a glance

- Complete series, up to 7 meters in diameter
- Moves large volumes of air at low speed (High Volume and Low Speed)
- Provides efficient air circulation quiet and draft-free
- Ideal for large and high spaces
- Cooling in summer the output of air conditioners can be reduced
- High saving potential in winter warm air is optimally distributed in the room
- Significant reduction of energy consumption
- Active contribution to CO2 reduction and climate protection
- Lower operating costs and savings all year round
- Suitable for stand-alone operation and in series connection
- Direct drive without friction losses (forward and reverse operation possible)
- Rotation speed adjustable from 5 revolutions per minute
- Maintenance-free, gearless motor (no risk of oil leakage)
- Safe operation even in sensitive areas such as production and logistics
- Digitally controllable, fully automatic stop when sprinkler is activated
- Simple installation
- Low noise due to low speeds
- High quality and long service life
- Elegant design
- Forward and reverse operation
- 1) Research project University of Liverpool by H.T. Lyons. The height of the bottom flow is one quarter of the fan diameter.
- 2) Practice Study by H.T. Lyons



This is GoGaS

Founded in 1946, GoGaS is today a leading innovation and technology partner for many industries and customers. Whether building technology or manufacturing processes: GoGaS offers sustainable, environmentally friendly, innovative and turnkey solutions with a focus on CO2-neutral and fossil-free operation. GoGaS' unique portfolio includes a wide range of IR, UV, UV-C, air conditioning, heating, cooling, ventilation and solar systems. GoGaS system solutions reduce CO2 emissions, enable emission-free operation of plants and buildings, reduce the number of interfaces, eliminate delays in supply chains and optimize processes - all including lifetime warranty and reliable support service! The extensive portfolio includes light and dark radiators, solar air collectors, heat pumps, hydrogen burners, as well as air distribution systems such as the innovative HVLS series. GoGaS system solutions are optimized for stationary as well as mobile applications.

GoGaS is active in several standardization committees, defines the next generation of technology standards such as TGA+, is involved in important EU research programs and supports industrial technology partners with know-how. Our company is a stakeholder in leading trade associations and initiatives, e.g. Verband Deutscher Maschinen- und Anlagenbau e.V. (VDMA), figawa, Exportinitiative Energie, ELVHIS, as well as the German Data Center Association (GDA). As an active partner of the Blue Competence sustainability initiative, GoGaS is driving the future of environmentally friendly and energy-efficient design, construction and operation of B2B buildings. Technology from GoGaS optimizes carbon footprint while delivering the highest possible asset valuation, ESG, ROI and TCO. This pays off for investors, owners, operators and tenants alike!

GoGaS Goch GmbH & Co. KG

Zum Ihnedieck 18 44265 Dortmund Germany

T +49 231 46505-0 F +49 231 46505-88

news@gogas.com

