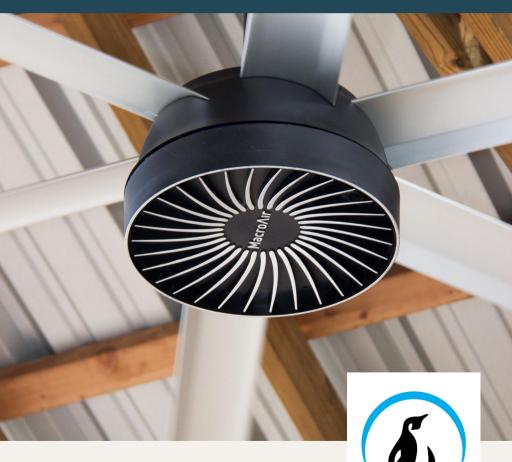
COMPLETE PRODUCT GUIDE

Find the Right Size Fan and Stay Cool



Macro \(\)

NorTex Sales & Service @nortexss

Table of Contents

Introduction	00
HVLS Technology	00
Products & Models	00
Value & Benefits	00
Applications & Industries	00
FAQ	00
Contact	00

INTRODUCTION

About MacroAir

In 1968 Walt & his son Eddy moved to California working as engineering consultants and product designers for a variety of unique clients and projects.

In 1998 they were tasked with a unique problem within the agriculture industry. Farmers needed a way to keep cows cool so they would continue to produce milk – when cows are too hot, they stop making milk.

Their solution to the problem lead to the invention of the HVLS (High-Volume Low-Speed) Fan and breaking ground into a brand-new industry.





In 1999 Walt & Eddy shipped their first container of HVI S Fans.

As the industry started to grow, they established MacroAir Technologies in 2003. In 2006 they developed and released its 6-blade technology. In 2014 they had a breakthrough in reinventing the motor making MacroAir Fans more technologically advanced, efficient, cost effective, and lighter than anything else on the market.

MacroAir continues to manufacture the most cost-efficient, quiet, and powerful commercial and industrial fans on the market today. INTRODUCTION

About HVLS Technology

What are HVLS Fan?

High-Volume Low-Speed Fans look like an ordinary ceiling fan, but the difference is the size. HVLS fans are much larger and operate at a slower speed.

They typically have a blade diameter greater than 7 ft and move a high volume of air at a low speed around 8 mph. This means that not only do they move more air efficiently, but they consume far less energy to function than other fans.





HVLS fans are generally ceiling fans although some are pole mounted. HVLS fans move slowly and distribute large amounts of air at low rotational speed.

They can mitigate condensation buildup through air movement. Up to 24' in diameter, HVLS fans have the power to move air throughout the entire space, from ceiling to floor and wall to wall.

MacroAir Airvolution



THE O.G.

MacroAirs original fan, the "OG" is the hardest working, most versatile cooling solution on the market.

Standard Features

- Integrated Gearmotor
- · Clearcoat anodized airfoil blades
- Variable Frequency Drive Forward, reverse, variable speed
- Capable of Building Automation Integration (with AirLynk upgrade) & fire alarm
- Digital wall controller with fault code access

Safety Components

- · Safety Cable
- · Universal mount with guy wires
- Blade Retainer Links

Includes

- 1.0 2.0 HP motor unit (diameter dependent)
- 8, 10, 12, 14, 16, 18, 20, or 24 ft blade set
- 6 Blades total

- Universal mount (structure/standard Ibeam for ceiling mounting)
- Installation hardware (hanging fan/standard I-beam hardware kit)
- Industrial grade VFD (Variable Frequency Drive)
- Digital wall control (control speed & direction, & on/off function)
- 100 ft of CAT5 cable (connecting wall control to the VFD)
- 25 ft of motor cable connecting fan motor to VFD)
- Installation/Operation manual

- Industrial/Commercial HVLS ceiling fan with 6 anodized aluminum blades (airfoils)
- 1.0 2.0 HP AC induction gearmotor with a sealed 2-stage helical gear box
- 171 270 lbs.
- Input voltage: 208 240-volt single phase, 50/60 Hz
- Most suitable for ceiling heights greater than 20 ft
- Rated for indoor & outdoor use. Digital controls area rated for indoor only.
- High voltage electric cable NOT included (*Needed for connecting VFD to building power/breaker panel)

MacroAir AirVolution-D3



THE SHOWSTOPPER

The 3-Blade MacroAir AirVolution is designed to be the optimal balance between form and function. Simplicity redefined. Confident, efficient airflow at a fraction of the price.

Standard Features

- · Direct Drive motor
- Clearcoat anodized airfoil blades with centrifugal cooling
- *Forward, reverse, variable speed
- Rated for indoor and outdoor use*
- Capable of Building Automation Integration (with AirLynk upgrade) & fire alarm
- Digital wall controller with fault code access

Safety Components

- · Safety Cable
- Universal mount with guy wires
- Blade Retainer Links

Includes

- .75 1.0 HP Direct Drive power unit
- 8, 10, 12, 14, 16, 18, 20, or 24 ft blade set (3 blades total)

- AVD Universal mount (standard Ibeam)
- Installation hardware (all hardware needed for hanging fan/standard Ibeam hardware kit)
- Drop tube (3 ft drop standard)
- 25 ft whip cable to connect to an existing power source
- 100 ft roll of CAT5 cable
- Digital keypad remote
- Installation/Operation manual

- Industrial/Commercial HVLS ceiling fan with 3 anodized aluminum blades (airfoils)
- .75 1.0 HP Equiv. Direct Drive Motor
- 102 142 lbs
- Input voltage: 208 240-volt single phase, 50/60 Hz
- Most suitable for ceiling heights greater than 12 ft
- Rated for indoor & outdoor use. Digital controls area rated for indoor use only.
- High voltage electric cable NOT included (needed for connecting the fan to building power/breaker panel)

MacroAir AirVolution-D 370



THE ICON

The next generation of air movement for maximum performance with peak efficiency. Ideal for ceiling heights as low as 12 ft. The AV-D 370 commercial ceiling fan is the perfect airflow solution for cooling your smaller spaces.

This sleek, iconic fan packs a punch! The AirVolution-D370 truly transforms any size space. Tailor-made comfort and refreshing style designed specifically for you.

Standard Features

- Ultra Efficient PMAC Direct Drive motor
- Revolutionary integrated drive/mount/enclosure system*Clearcoat anodized airfoil blades with centrifugal cooling
- *Forward, reverse, variable speed
- Rated for indoor and outdoor use*
- Capable of Building Automation Integration (with AirLynk upgrade) & fire alarm
- Digital wall controller with fault code
 access

Includes

- .75 1.0 HP Direct Drive motor unit
- 6, 8, 10, or 12 ft blade set (6 blades total)

- Rapid mount commercial (no guy wires needed)
- Installation hardware (all hardware needed for hanging fan/standard Ibeam hardware kit)
- Drop tube (2 ft drop standard)
- Industrial Grade VFD (Variable Frequency Drive)
- Digital wall controller with fault code access
- 50 ft of CAT5e cable
- 25 ft of motor cable (connecting fan motor to VFD)
- Installation/operation manual

- Industrial/Commercial HVLS ceiling fan with 6 anodized aluminum blades (airfoils)
- .75 HP Equiv.
- 71 93 lbs
- Input voltage: 208 240-volt single phase, 50/60 Hz
- Most suitable for smaller spaces and ceiling heights greater than 12 ft
- Rated for indoor & outdoor use. Digital controls area rated for indoor use only.
- High voltage electric cable NOT included (needed for connecting the fan to building power/breaker panel)

MacroAir AirVolution-DX



THE POWERHOUSE

This fan is far superior to any fan before. The AVDX is a true powerhouse that can endure the harshest industrial environments without breaking a sweat.

Standard Features

- Direct Drive motor, rated for indoor/outdoor use*
- Clearcoat anodized airfoil blades
- *Forward, reverse, variable speed
- Rated for indoor and outdoor use*
- Variable Frequency Drive Capable of Building Automation Integration (with AirLynk upgrade) & fire alarm
- Digital wall controller with fault code access

Safety Components

- · Safety Cable
- · Universal mount with guy wires
- Blade Retainer Links

Includes

- 1.0 2.0 HP Direct Drive motor unit
- 8, 10, 12, 14, 16, 18, 20, or 24 ft blade set (6 blades total)

- Universal mount (for mounting the fan to ceiling structure/standard I-beam)
- Installation hardware (all hardware needed for hanging fan/standard Ibeam hardware kit)
- Drop tube (3 ft drop standard)
- Industrial grade VFD (Variable Frequency Drive)
- Digital wall controller with fault code access
- 100 ft of CAT5 cable (connecting wall control to the VFD)
- 50 ft of motor cable (connecting fan motor to VFD)

- Industrial/Commercial HVLS ceiling fan with 6 anodized aluminum blades (airfoils)
- 1.0 2.0 HP Direct Drive motor (diameter dependent)
- 156 260 lbs.
- Input voltage: 208 240V single phase, 50/60 Hz
- Most suitable for ceiling heights greater than 20 ft.
- Rated for indoor and outdoor use.
 Digital controls area rated for indoor only.
- High voltage electric cable NOT included (needed for connecting the fan to building power/breaker panel)

CHAPTER II

The Benefits of HVLS Fans

BENEFITS OF HVLS FANS

- Improve Airflow & Air Quality
- Improve Overall Efficiency
- Improve Production
 - Boost Employee Productivity
- Manage/Control Temperature
 - Maintain a Comfortable Work Environment
- Reduce Warehouse Floor Condensation
 - Prevent & Eliminate Sweaty Slab Syndrome
- Reduce Operational Costs
- Reduce Energy Costs
- · Safeguard your Employees
- Save Money
- Quiet Operation

Value of HVLS Fans

A company's biggest asset is its employees. When employees are comfortable, engaged, feel valued, and happy, they are more productive. If your employees are not any of those things, then it's probably hurting your business.

One of the best solutions is to install a HVLS fan. Not only will it create a better and more comfortable work environment for your employees, but it can cut down on your energy costs. Isn't that what every business wants, a way to produce more while using/spending less?





CHAPTER III

Applications & Industries



Agriculture/Farming

As a farmer, your livestock is your lively hood and top priority. You invest a lot of time, energy, and money to care for them. With different seasons come different problems – summer heat, cold winters, stress, illness, etc.

Maybe you keep your livestock inside and have a few floor fans running so they aren't feeling the sun's rays and get some airflow. Maybe you have heaters all around the barn to keep them warm during winter. While this may seem like it works, it's not very efficient.

HVLS fans can provide effective evaporative cooling and in extreme heat conditions can act in conjunction with a fogmisting diffuser system to keep your livestock cool.



HVLS fans are also a great solution to providing the proper ventilation needed in barns. Without proper ventilation, you run the risk of moisture, heat, pathogens, and gases such as ammonia and hydrogen sulfide accumulating in barns and other livestock facilities.

If not properly managed this can be a health risk for the animals and any employees working in that environment. It can also affect your livestock behavior, stress levels, productive capacity, illness, weight gain, aggressive or self-destructive behavior, or even death in some cases.

MacroAir AirVolution D3 would be the perfect choice to install in any barn or livestock facility because they are quiet and powerful. They won't cause your animals any stress with loud noises or create unhealthy draft conditions.

Livestock & Heat Stress

Excessive heat stress in livestock can lead to weight loss, reproductive issues and can cause respiratory problems like pneumonia. Keeping livestock cool can prevent these problems but the cost of air-conditioning can cost a lot. An HVLS agricultural fan can efficiently cool your livestock at a fraction of the cost of alternative cooling options.

Specific Uses

- When cows are too warm they stop producing milk. Keeping them cool with an HVLS fan can increase milk production and protect your cows from heat stress.
- Poultry are very susceptible to heat stress because they don't sweat, they pant and
 rely on evaporation to cool down. In the summer using HVLS fans can keep your poultry
 facilities cool and control humidity levels while in the winter, you can run them in
 reverse to keep them warm.
- Pigs are very sensitive making it important to keep temperatures down to prevent heat stress in the summer months and moisture control year-round.
- HVLS fans can keep your seeds, fruits, and vegetables fresh and healthy longer. Overly warm air can cause spoilage.
- High-strung animals such as horses would appreciate a quiet operating fan that not
 only eliminates drafts and stagnant air but keeps them cool and comfortable all year
 round. Your horses will be happier and healthier due to better air quality.



Applications & Industries



Automotive & Fleet Managerment

People working in the automotive industry have to contend with some of the toughest working conditions, including noisy equipment and extreme temperatures. It's vital for those working in automotive fields to have efficient, reliable heating and cooling systems.

HVLS fans can lower energy consumption, reduce unnecessary equipment, and eliminate unsightly ductwork.

When you rely on one or more high-volume, low-speed fans, you can eliminate the need for smaller fans, window air conditioners, and, in some cases, even HVAC units.

Fewer pieces of equipment will naturally use less power as well. Plus, with HVLS fans, more air is circulated, so you're getting additional value for your money. This, in turn, reduces your overhead costs and makes it easier to realize better profits.



MacroAir AirVolution D3 would be the perfect choice to install in any dealership or automotive facility because they are quiet and powerful.

Applications & Industries



Aviation & Transportation

The aviation world requires diligent maintenance, careful inspections, and the absolute best safety oversight. The people working in aviation need to ensure their buildings are efficiently climate-controlled and up to the task of maintaining some of the largest, most complex, and most important vehicles in the world.

Aviation hangars are huge buildings, but they still require careful climate control. Climate control in such large buildings may seem like an impossible feat. Using HVLS fans can keep any size building compliant, comfortable, and ready for any aviation work at a fantastic cost of ownership.

MacroAir AirVolution D3 would be the perfect choice to install in any dealership or automotive facility because they are quiet and powerful.



The three-blade HVLS fan is designed to be the optimal balance between form and function. Simplicity redefined. Confident, efficient airflow at a fraction of the price.

Applications & Industries



Commercial & Hospitality

Keeping places like malls, shopping outlets, convention centers, places of worship, and other public spaces climate-controlled doesn't have to cost you an arm and a leg. High-volume, low-speed (HVLS) fans offer remarkable air circulation to keep commercial and public spaces comfortable day after day.

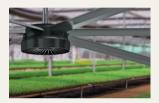
HVLS fans often provide a much more stable level of control than other, more traditional options, like small fans or even HVAC ductwork.

MacroAir AirVolution D3 would be the perfect choice to install in any dealership or automotive facility because they are quiet and powerful.

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Applications & Industries



Education & Municipal

When students are too hot or too cold, and distracted by noisy, inefficient fans, learning is difficult. It's much easier to learn in a comfortable climate, so educators need to ensure ineffective heating and cooling solutions aren't distracting students and diminishing learning.

One of the best answers to climate control in any size educational space is a high-volume, low-speed fan.

During warm weather, your MacroAir HVLS fan will push a consistent breeze to keep education centers comfortable. When the weather turns cold, it can run in reverse, redistributing rising warm air back down to ground level and producing more consistent temperatures throughout the space.



MacroAir offers HVLS fans in various sizes to fit the requirements of any educational center. Everything from elementary school gymnasiums to college lecture halls can have more efficient cooling and heating with a MacroAir HVLS fan.

MacroAir AirVolution-D 370 would be a perfect choice.

The AirVolution–D 370 commercial ceiling fan is ideal for ceiling heights as low as 12 ft and is the perfect airflow solution for cooling your smaller spaces. A sleek design and custom color options add to its appeal, making these fans the most attractive ceiling fans on the market.

Applications & Industries



Sports & Fitness

Cooling and air circulation are usually the top priority for business owners since most people in fitness centers, indoor sports arenas, and specialty gyms are already working up a sweat,

A gym/fitness center that has good air circulation will be able to keep its members happy, comfortable, and healthy. It can also mean the difference between walking into a gym that smells like sweat and one that smells fresh.

A bad-smelling gym could also be a sign of moisture and stagnant air which creates a breeding ground for disease.

With the power of HVLS fans, they can move large quantities of air with very little force. Direct drive motors provide unrivaled consistency, so MacroAir HVLS fans are ready for long-term, consistent use.



The HVLS fan will provide a consistent breeze throughout your facility and help circulate freshly conditioned air from your HVAC system. Prevent moisture accumulation and disease by keeping your fitness center air well-circulated and comfortable.

MacroAir AirVolution D3 would be the perfect choice to install in any dealership or automotive facility because they are quiet and powerful.

The three-blade HVLS fan is designed to be the optimal balance between form and function. Simplicity redefined. Confident, efficient airflow at a fraction of the price.

Applications & Industries



Industrial & Heavy Equipment

Climate control is one of the biggest challenges facing industrial operations such as manufacturing, distribution, and vehicle assembly. Loud machinery, ambient heat, hard manual labor, heavy equipment, and storage of sensitive goods all require air circulation and climate control.

Warehouses need to stay clean and dry. When too much moisture accumulates, the goods stored in the warehouse are at risk. Depending on the type of products being stored, this could correlate to a massive loss.

Additionally, poor climate control could cause some companies with industry regulations to fall out of compliance. This can lead to costly fines, or even closing your doors.



HVLS fans work to change the perceived temperature in your office, warehouse, or building.

As the blades of a MacroAir HVLS fan spin, the large volumes of air create a wind chill effect. This can make the indoor temperature feel up to 15 degrees cooler than it actually is, providing optimal comfort in hot working conditions.

MacroAir AirVolution DX would be the perfect choice to install in any large facility. The HVLS fan direct drive motors requires far less energy to operate, reducing your utility costs.

CHAPTER IV



How can HVLS fans keep you warm during the winter?

HVLS fans can reduce heating bills by pushing warm air trapped at the ceiling back down to the ground.

How can HVLS fans help with employee productivity?

Studies suggest that 69.8° - 71.6° is the "ideal room temperature." When you are too hot or too cold your body has to expend more energy which can be distracting because you're thinking about how cold or warm your body is, not the work at hand. HVLS can evenly distribute heat and cool air to keep your workspace at a comfortable temperature.

How do a Waste Oil Heater and HVLS Fan work together?

HVLS fans are an extremely cost-effective way to reduce heating bills in the frigid winter months because they resupply the room with the heat that typically stays trapped at the ceiling.

They utilize the heat potential already available in a space by pushing warm air back down to ground level with little effort.

They can also help increase the longevity and efficiency of existing cooling and heating systems because they won't have to work as hard or long, saving even more energy!



CONTACT

Contact

Contact us today about getting a MacroAir Airvolution HVLS Fan or stop by one of our locations.

We are happy to answer any questions you may have.

LOCATIONS:

(214) 630-7310 10205 N. WALTON WALKER BLVD DALLAS, TX 75220

> (903) 984-0099 3210 N. STATE HWY 135 KILGORE, TX 75662

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