AIRFLOW TO THE PEOPLE.

Competitive Selling Guide // 08.20

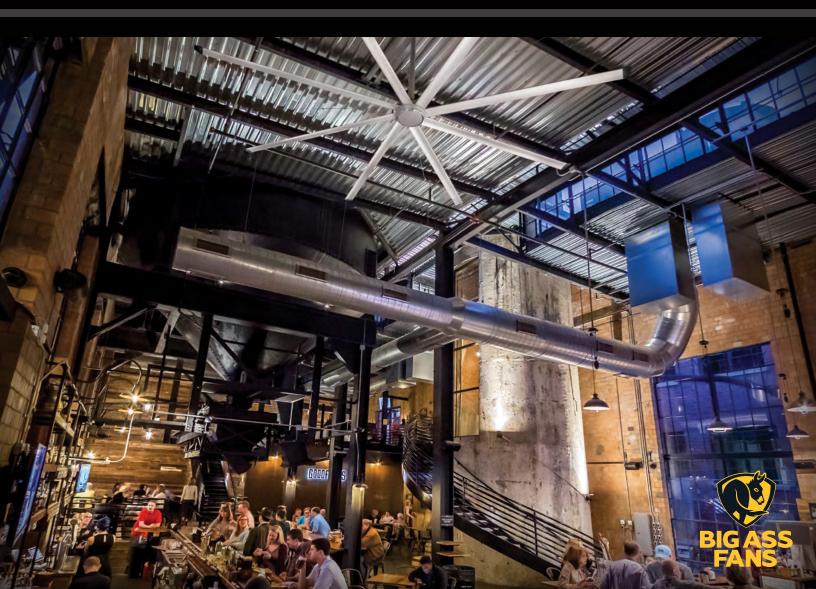


Table of Contents





Introduction3
Why HVLS Fans?4-5
Why Big Ass Fans?6
Big Ass Fans Differentiating Features
How To Spec A Big Ass Fan9
Spec Phase 10-14
Bid Phase 15-18
Conclusion 19
Appendix

Appenaix

Big Ass Fans Product Sheets	. 20
Competitor Overview	21

• **QUESTIONS:** For more information, please contact your Big Ass Fans account manager or visit **bok.bigassfans.com.**



Introduction: WORLD'S #1 FAN CHOICE FOR A REASON



Welcome to the Big Ass Fans competitive selling guide. Your resource for specifying and selling Big Ass Fans. As you read through the subsequent pages, you will discover why Big Ass Fans is the ultimate authority on high-volume, low-speed (HVLS) fans.

We have over 20 years of experience in fan engineering, technology, and safety. Plus, we are continuously innovating new solutions for our customers to provide them with a complete suite of the most technologically advanced airflow products available. We are Big Ass Fans. And there's no competition.





Why HVLS Fans: SAVING ENERGY. SUPPLYING COMFORT.



In industrial and commercial facilities, tackling hot, cold, humid, and / or dusty conditions isn't quite as easy as cracking a window or adjusting the thermostat.

Fortunately, for those who do business in large or unconditioned spaces, Big Ass Fans has created cost-effective and energy-efficient solutions in the form of high-volume, lowspeed (HVLS) fans. HVLS fans are a practical solution in both unconditioned and conditioned spaces.

WHY HVLS FANS (Continued)



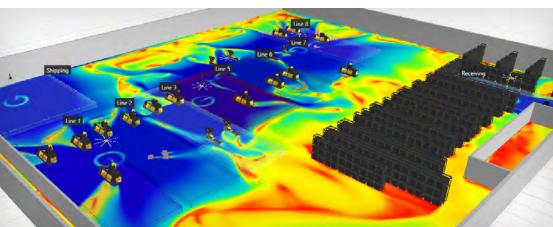


HVLS fans utilize efficient, relatively small horsepower drive units along with large airfoils to deliver big airflow over a very large area – at a modest and safe RPM. Thanks to their precise aerodynamic design, Big Ass Fans efficiently move massive air volumes and dramatically improve comfort even in harsh environments.

The cooling effect of an HVLS fan's breeze across the skin makes people feel up to 10 °F (6 °C) cooler and assists the flow of fresh air. In colder months, HVLS fans gently recirculate hot air trapped at the ceiling, delivering it to occupants at ground level and saving as much as 30 percent on heating costs.

The Opportunity

Integrating HVLS fans with HVAC systems will help improve comfort and air distribution and reduce energy consumption.



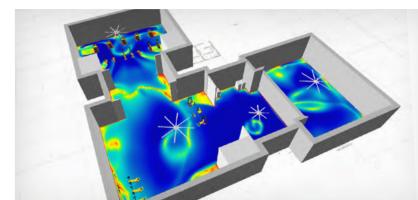
WHY BIGASS FANS





With more than 20 years of experience, customers in 175 countries, and the best-selling big fans in the world, no one knows high-volume, low-speed airflow better than Big Ass Fans.

Big Ass Fans is redefining comfort and efficiency in spaces all over the world. From large manufacturing plants and distribution centers to stylish homes and schools, our fans keep workers comfortable, students engaged, and operations cost-effective. On top of all of that, our engineering expertise, innovation, product testing, airflow analysis, and safety features make us the most trusted resource to get the best results from a fan solution.





THE DNA OF A BIG ASS FAN

Big Ass Fans products are best-in-class, and the following three features make Big Ass Fans products safer and better engineered than the competition.



Industry-Leading Engineering

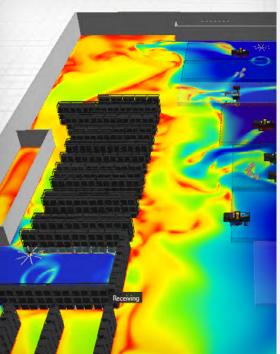
Our Exceptionally Engineered standards require a continuous loop of research and development that leads to the customer getting the safest and most durable product on the market, which makes our fans the best in the industry. Plus, the rotating assembly includes our patented Airfoil Restraint system, one of eight redundant safety features on the fans moving parts that make our products the safest in the world.



VIEW MORE INFO

THE DNA OF A BIG ASS FAN (Continued)











Computational Fluid Dynamics

Every space and owner will have different needs, variables, and goals regarding airflow. Our industry-leading SpecLab[™] tool gives you a custom 3D airflow analysis of your facility. SpecLab[™] begins with a drawing of your building's space taking into account inventory, obstructions, working spaces, machinery, and more. Then, we're able to layer in your fan solution to demonstrate exactly how Big Ass Fans will transform the airflow within your space.

VIEW MORE INFO

Tailored Technology

We know workspaces are hot, harsh, and demanding. And our fans are built with that mind. Instead of using off-the-shelf components, we have perfected the fan by custom designing critical systems such as the Motor, VFD, and gearbox to far exceed the durability and capabilities of contractor-grade equipment. Our Powerfoil® D fan has a custom-built direct-drive motor that withstands the harshest indoor conditions and operates nearly silently. Our Powerfoil® X3.0 is purposefully made with a NitroSeal[™] drive gearbox that requires no maintenance. And our custom-engineered ¼" powder-coated steel mounting hardware contains no critical welds and is tested to withstand 29,000 pounds of force.

VIEW MORE INFO



HOW TO SPECIFY BIG ASS FANS

To specify the correct Big Ass Fans for the job, the following points should be considered.

IDENTIFY THE FANS' PURPOSE

Check to see if the fans will provide year-round benefits (cooling in the summer and destratification in the winter) or if they are functioning as only cooling or destratification equipment.

2

CHOOSE THE RIGHT FAN FOR THE JOB

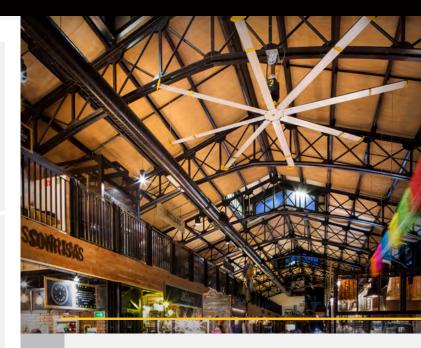
Determine if the fan will be for industrial, commercial, or residential use. Then select the appropriate fan model for the environmental conditions and airflow needs of the space.



SELECT THE NUMBER OF FANS, FAN SPACING, AND AIRFOIL HEIGHT

Follow Steps A through E in the "Industrial and Commercial Fan Quick Selection Guides."







CHECK THE FAN'S SAFETY SYSTEMS

Starting with the rotating assembly, look for fans with features that allow the fan to operate for decades without worrying about long-term fatigue failures or parts becoming unattached at high speeds.

VIEW MORE INFO

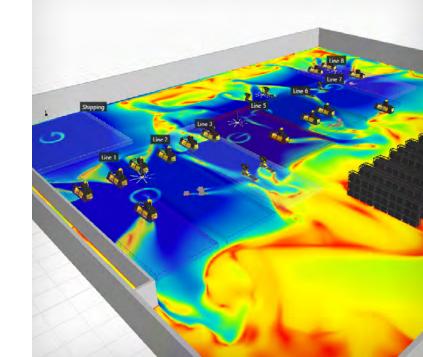
Spec Phase: SPECIFY LIKE A PRO





Specifying the right Big Ass Fans system custom-designed for the customers unique application will result in better performance, fewer mistakes, and safer work environments.

Big Ass Fans has all the tools you need to write a specification that makes it difficult for others to provide "equal" equipment. 3-part specifications, technical cut sheets, .dwg and .rvt files, a custom submittals template, and "torture test" videos can all be submitted to help you defend Big Ass Fans' premium and differentiating features and benefits.



SPEC PHASE (Continued)

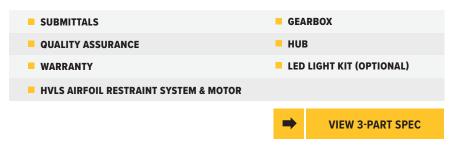




Powerfoil[®] X3.0

When you need the most powerful and durable industrial fan on the market, Powerfoil X3.0 is the fan for the job. This best-selling big fan's superior hub and airfoil systems deliver unmatched airflow to big spaces, powered by a purpose-built NitroSeal[™] drive system and supported by world-class safety features. With premium materials and precise engineering, Powerfoil X3.0 offers the custom fit to improve comfort, safety, and efficiency in any application.

The following sections within the 3-part spec provide Big Ass Fans with an incomparable advantage.





Powerfoil[®] D

For environments that are sensitive to noise, the direct Drive PFD is as close to silent as an HVLS fan can get. Additionally, the Powerfoil D has been designed to withstand the most challenging applications with an IP66 (dust-tight and able to be pressure washed) motor and VFD rating, and an ambient operating temp of 131 °F ensuring the fan is cooling even on the hottest summer days.

The following sections within the 3-part spec provide Big Ass Fans with an incomparable advantage.

SUBMITTALS	GEARBOX
QUALITY ASSURANCE	HUB
WARRANTY	LED LIGHT KIT (OPTIONAL)
HVLS AIRFOIL RESTRAINT SYSTEM & MOTOR	

VIEW 3-PART SPEC

SPEC PHASE (Continued)





Powerfoil[®] 8

Powerfoil 8 tackles stifling heat in the toughest environments. Want a more comfortable environment, better indoor air quality, and year-round energy savings? Over the last 20 years, we've built our business by revolutionizing tens of thousands of facilities with these fans that started it all. We have installed a multitude of fans just like PF8 all over the world; they are the workhorses of industrial environments and help protect people, products, and property.

The following sections within the 3-part spec provide Big Ass Fans with an incomparable advantage.





Basic 6°

Conquer extreme temperatures and stagnant air with the economical Basic 6. Its durable design and smooth, powerful performance keep challenging work conditions from holding your business down. Backed by Big Ass Fans' world-class customer support and in-field services, Basic 6 is your best entry-level option for airflow that sets your people up for success.

The following sections within the 3-part spec provide Big Ass Fans with an incomparable advantage.



SPEC PHASE COMMERCIAL





Essence[®]

Engineered with the same uncompromising standards for performance and durability as our industrial fans, Big Ass Fans' commercial lineup showcases award-winning design and functionality. The Essence's premium-quality airfoils, virtually silent direct-drive motors, and a range of sizes and finishes provide airflow that delivers proven comfort and savings for spaces that look great and feel even better.

The following sections within the 3-part spec provide Big Ass Fans with an incomparable advantage.





i6®

Comfort can look strong. Give spaces the signature Big Ass Fans treatment with i6, the iconic modern industrial fan design in an affordable commercial fan package. Developed with our uncompromising standards for dynamic design and powerful performance, i6 offers the industry's best airflow in a contemporary package that's packed with quality, smooth in operation, and soothing to all.

The following sections within the 3-part spec provide Big Ass Fans with an incomparable advantage.

- SUBMITTALS (CFD ANALYSIS)
- AIRCRAFT-GRADE ALUMINUM AIRFOILS
- SAFETY CABLE
- ECM MOTOR & EFFICIENCY
- BMS INTEGRATION VIA 0-10V WARRANTY LED LIGHT KIT (OPTIONAL)
 - HAND BALANCED
 - VIEW 3-PART SPEC

SPEC PHASE COMMERCIAL & RESIDENTIAL



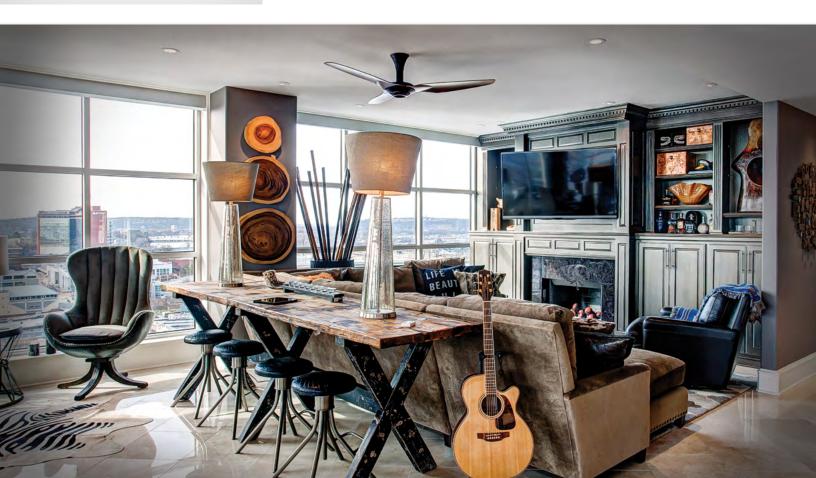


Haiku®

The world's most efficient ceiling fan, Haiku elevates the design of any space with premium aluminum or Moso bamboo finish options. Its patented EC motor sets the industry standard for efficient, silent, maintenance-free operation. Containing proprietary SenseMe[™] technology, Haiku itself is a smart device that can personalize and automate your desired fan settings along with integrating seamlessly with Amazon Alexa and Google Assistant Smart Thermostats.

The following sections within the 3-part spec provide Big Ass Fans with an incomparable advantage.

SUBMITTALS (CFD ANALYSIS)	ECM MOTOR & EFFICIENCY	
BMS INTEGRATION VIA 0-10V	AIRCRAFT-GRADE ALUMINUM OR SU	STAINABLE-BAMBOO AIRFOILS
SAFETY CABLE	LED UPLIGHT, DOWNLIGHT & DISINFECTION (OPTIONAL)	
HAND BALANCED		
		VIEW 3-PART SPEC





Bid Phase: WINNING EVERY PROJECT



If the Big Ass Fans 3-part spec was included within the Spec Phase, Big Ass Fans products should be the basis of the design. However, if competitive products have made their way into the fold, use the following head-to-head information to show the customer how Big Ass Fans win out on value, performance, engineering, and safety every single time.



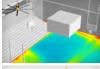
BID PHASE (Continued)



Powerfoil[®] X3.0

THE BELOW ATTRIBUTES WILL ELIMINATE ALL COMPETITION FROM THE CONSIDERATION SET

work with the NitroSeal[™] drive gearbox.



CFD AIRFLOW ANALYSIS: A CFD analysis with performance at 4", 24", 43", and 67" AFF, and PMV, PPD, and SET per ASHRAE Standard 55 must be provided along with taking into account major airflow obstructions at ground level.



20- to 24-ft (6- to 7.3-m) diameter fans to provide redundant safety between the ends of the airfoils and the fan hub. The Airfoil Restraint System is to be available as an option on smaller diameter fans. **ZERO DOWNTIME WITH C-FACE MOTOR:** The motor must have a C-face attachment that enables

technicians to detach the motor for easy field service. The C-face motor adapter must be designed to

SUPERIOR SAFETY FEATURES: The Airfoil Restraint System comes as a standard safety feature on all

- <u>38</u>, + -

INTUITIVE CONTROLS: The BAFCon control can manage up to 8 fans on one control with integrated BACnet BMS tie-in in addition to local control.



DURABLE GEARBOX: The NitroSeal[™] drive gearbox design is lubricated for the life of the product (no oil changes required). The gearbox is equipped with a hollow shaft threaded to accept a ³/₄" NPT fitting in which wiring, piping, etc., can be routed to below the fan. A standard junction box can be affixed to this hollow shaft.

HUB: The fan hub shall be 19" (48 cm) in diameter and shall be made of precision-cut aluminum for high strength and light weight.

Whom this impacts: Fans with cast hubs such as Go Fan Yourself, MacroAir, and Envira-North are all impacted along with fans with small, rigid hubs such as MacroAir, Hunter, SkyBlade, and Humongous Fans.



SAFETY FEATURES: Eight redundant safety features including interlocking Airfoil Retention brackets must come standard.

Whom this impacts: MacroAir, Greenheck, Hunter, Rite-Hite, Go Fan Yourself, Entrematic, and Patterson.

THE ADDITIONAL ATTRIBUTES BELOW WILL SPECIFICALLY IMPACT THE FOLLOWING COMPETITORS



REGISTRATION: Registered and in compliance with the Jan. 21, 2020, DOE ceiling fan regulations. **Whom this impacts:** MacroAir, Rite-Hite, Go Fan Yourself, Entrematic, and Patterson.

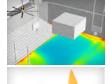
MOUNTING BOLTS: All mounting bolts shall be SAE Grade 8 or equivalent. **Whom this impacts:** MacroAir, Humongous Fans, SkyBlade, Enivra-North, and Hunter frequently use weaker, less expensive Grade 5 bolts.

BID PHASE (Continued)



Powerfoil[®] D

THE BELOW ATTRIBUTES WILL ELIMINATE ALL COMPETITION FROM THE CONSIDERATION SET



CFD AIRFLOW ANALYSIS: A CFD analysis with performance at 4", 24", 43" and 67" AFF, and PMV, PPD, and SET per ASHRAE Standard 55 must be provided along with taking into account major airflow obstructions at ground level.

SUPERIOR SAFETY FEATURES: The Airfoil Restraint System comes as a standard safety feature on all 20- to 24-ft (6- to 7.3-m) diameter fans to provide redundant safety between the ends of the airfoils and the fan hub. The Airfoil Restraint System is to be available as an option on smaller diameter fans.



MAINTENANCE-FREE MOTOR: The totally enclosed fan motor and VFD must both be rated as IP66.



INTUITIVE CONTROLS: The BAFCon control can manage up to eight fans on one control with integrated BACnet BMS tie-in in addition to local control.



SAFETY FEATURES: Eight redundant safety features including interlocking Airfoil Retention brackets must come standard. **Whom this impacts:** MacroAir, Greenheck, Hunter, Rite-Hite, Go Fan Yourself, Entrematic, and Patterson.

RELIABLE OPERABILITY: The fan is capable of continuous operation in -4 $^{\circ}$ F to 131 $^{\circ}$ F (-20 $^{\circ}$ C to 55 $^{\circ}$ C) ambient conditions.

THE ADDITIONAL ATTRIBUTES BELOW WILL SPECIFICALLY IMPACT THE FOLLOWING COMPETITORS



REGISTRATION: Registered and in compliance with the Jan. 21, 2020, DOE ceiling fan regulations. **Whom this impacts:** MacroAir, Rite-Hite, Go Fan Yourself, Entrematic, and Patterson.

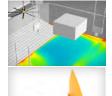
MOUNTING BOLTS: All mounting bolts shall be SAE Grade 8 or equivalent. **Whom this impacts:** MacroAir, Humongous Fans, SkyBlade, Enivra-North, and Hunter frequently use weaker, less expensive Grade 5 bolts.

BID PHASE (Continued)



Powerfoil[®] 8 / Basic 6[®]

THE BELOW ATTRIBUTES WILL ELIMINATE ALL COMPETITION FROM THE CONSIDERATION SET



CFD AIRFLOW ANALYSIS: A CFD analysis with performance at 4", 24", 43", and 67" AFF, and PMV, PPD, and SET per ASHRAE Standard 55 must be provided along with taking into account major airflow obstructions at ground level.

SUPERIOR SAFETY FEATURES: The Airfoil Restraint System comes as a standard safety feature on all 20- to 24-ft (6- to 7.3-m) diameter fans to provide redundant safety between the ends of the airfoils and the fan hub. The Airfoil Restraint System is to be available as an option on smaller diameter fans.



HUB: The fan hub shall be 19" (48 cm) in diameter and shall be made of precision-cut aluminum for high strength and light weight.

Whom this impacts: Fans with cast hubs such as Go Fan Yourself, MacroAir, Envira-North are all impacted along with fans with small, rigid hubs such as MacroAir, Hunter, SkyBlade, and Humongous Fans.

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MOUNTING BOLTS: All mounting bolts shall be SAE Grade 8 or equivalent. **Whom this impacts:** MacroAir, Humongous Fans, SkyBlade, Enivra-North, and Hunter frequently use weaker, less expensive, Grade 5 bolts.



Conclusion: THERE IS NO COMPETITION. PERIOD.

When it comes to the best HLVS solutions for any space, there is no comparison to Big Ass Fans. Our products live up to our name by being bigger, better, and bolder. By being tested beyond belief to ensure powerful performance and superior safety. By using the latest innovation to create products that are smarter, stronger, and more efficient. By offering bestin-class customer support and the industry's most extensive warranty coverage. Because you deserve the best. And that's all we ever give. Big Ass Fans. Exceptionally Engineered.

Appendix: **PRODUCT SHEETS**



Powerfoil[®] X3.0

-	VIEW CUT SHEET
-	VIEW 3-PART SPEC
-	VIEW SOLE SOURCE DOC
-	APPLICABLE ACCESSORIES
•	VIEW O&Ms

Basic 6[®]

-	VIEW CUT SHEET
-	VIEW 3-PART SPEC
-	VIEW SOLE SOURCE DOC
•	APPLICABLE ACCESSORIES

Haiku®



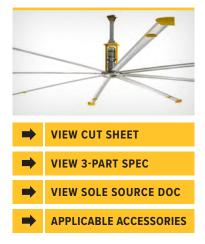
Powerfoil[®] D



Essence[®]



Powerfoil[®] 8



i6®



Appendix: COMPETITOR OVERVIEW





For an in-depth competitive overview, please visit The Big Ass Book Of Knowledge Competition Section: https://bok.bigassfans.com/competitor-guide/

Here, you will find how Big Ass Fans' exceptionally engineered products compare to like products from the competition in various tear-down examples; however, below you will find a few key areas where Big Ass Fans products are more exceptionally engineered than the competition:

BIG ASS FANS REMAINS THE LEADER AND INNOVATOR OF HVLS FANS WORLDWIDE.

Better Expertise

We have over 20 years of industry experience. Plus, we have customers in 175 countries, are the #1 Big Fan Manufacturer in the world, and the #1 choice for businesses everywhere. No one knows high-volume, low-speed airflow better than Big Ass Fans.

Safety

Big Ass fans feature more redundant safety measures than any other industrial fan, ensuring that they remain intact and overhead, even in the event of a collision.

Innovation

Big Ass fans has secured 307 patents and has over 147 patents pending. It also has the world's only 45,000 sq. ft. LEED-certified research lab for testing airflow.

Durability

Instead of using off-the-shelf components, we have perfected the fan by custom designing critical systems such as the Motor, VFD, and gearbox to far exceed the durability and capabilities of contractor-grade equipment.

Superior Warranty Coverage

Standard 5-year coverage on industrial fan models vs. short-term or tiered warranties with basic coverage and extra costs for extended warranties.

3D SpecLab Design Support

Free custom CFD airflow simulations by Big Ass Fans experts for ideal cooling vs. no custom CFD Analysis.

Service

We have an unmatched customer service experience with a net promoter score of 84%.



EXCEPTIONALLY ENGINEERED

QUESTIONS: For more information, please contact your
Big Ass Fans account manager or visit bok.bigassfans.com.