

TOTAL FAN VALUE

An overview of a fan's full scope of features and user benefits.

POWERFOIL® X3.0



As expected from the world's best-selling HVLS fan, Powerfoil X3.0 performs strongly across all categories. With a powerful motor and purpose-built gearbox, Powerfoil X3.0 moves more air than any HVLS fan and is the ideal choice for facilities that demand maximum airflow. The fan's multi-patented design includes an unrivaled array of safety features and is backed by an unprecedented 15-year warranty, ensuring smooth, efficient air movement and long-term reliability. Factor in its range of premium options, customizable features, and easy integration with building automation systems, and it's clear why Powerfoil X3.0 is considered the ultimate choice in HVLS technology.

		Points
 Performance	Airflow and efficiency metrics quantify how the fan will impact comfort and energy costs in the space.	25 / ₂₅
 Quality	The fan's materials and manufacturing process determine its durability and longevity.	25 / ₂₅
 Safety	Strong redundant safety features and verified product testing are essential for secure, consistent operation.	25 / ₂₅
 Customer Experience	Product specification, customization, and customer support make or break the ownership experience.	25 / ₂₅
 Total Fan Value	Use this score to compare models and make sure the fan meets the requirements for the space.	100 / ₁₀₀

POWERFOIL X3.0

PERFORMANCE

Airflow Performance

5/5



Powerfoil X3.0's powerful motor, purpose-built gearbox, and patented eight-blade airfoil system create more airflow than any Big Ass fan, moving up to nearly 250,000 cubic feet per minute (118 cubic meters per second) of air. The airfoils' aerodynamic design, cuffed winglets, and AirFences™ reduce wind turbulence and noise, keeping airflow consistent throughout the coverage area.

Airflow Coverage Area

5/5



In open, unobstructed spaces, Powerfoil X3.0 can effectively deliver air speeds of at least 85 feet per minute (0.43 meters per second) to occupant levels over an area of more than 30,000 square feet (2,787 square meters). The fan's range of diameters and variety of mounting options, combined with Big Ass Fans' proprietary application design tools and expertise, ensure ideal airflow coverage for virtually any space.

Annual Energy Use

5/5



Offering the perfect balance of power and energy conservation, Powerfoil X3.0's 0.75-1.5 kilowatt motor delivers the best CFM/watt in its class, efficiently circulating airflow over a wide area and lowering the need for A/C. In winter, the fan equalizes temperatures from floor to ceiling, making heaters more efficient. This improvement in efficiency can reduce HVAC costs by up to 30%, which more than offsets the fan's modest DOE-estimated annual operational cost of US\$300—about \$0.85 per 12 hours of daily operation.

Controls

5/5



Both Powerfoil X3.0's standard digital touchscreen controller and the more advanced BAFCon option allow users to turn fans on and off, adjust speed, set password protection, and run fan diagnostics from an easy-to-use interface. Easy to install, the controls include a wall bracket and durable housing and require a single RJ45 connection.

Sound Level

5/5



Powerfoil X3.0 measures quieter than most ambient processes in industrial applications, which typically measure 40-60 dBA. When run at low speeds for destratification, the fan's operational sound is imperceptible at occupant level.



PERFORMANCE

25/25

POWERFOIL X3.0

QUALITY

Durability

5/5



Like all Big Ass industrial overhead fans, Powerfoil X3.0 features airfoil and hub systems made from extruded aluminum, which offers greater flexibility and protection from impacts than cast aluminum. The fan's hermetically sealed gearbox and 19-inch (483-millimeter) hub—the industry's largest—ensure reliable, low-maintenance operation. Powerfoil X3.0's wide range of protection for voltage sag/swell make it an excellent choice for industrial facilities that experience fluctuations in power quality.

Warranty

5/5



Powerfoil X3.0 features a non-prorated 15-year mechanical and 7-year electrical warranty (15-year electrical with Big Ass Fans' factory-certified installation), giving it the longest and most thorough coverage in the HVLS industry. Big Ass Fans' warranties are noteworthy for their straightforward terms, avoiding abundant fine print and exclusions and adding to customer confidence.

Performance Certifications

5/5



Powerfoil X3.0 has undergone extensive third-party testing by the U.S. Department of Energy and passed the Certified Ratings Program at AMCA International—the world's leading authority on airflow product testing—to guarantee accurate performance claims that adhere to industry regulations and standards.

Required Maintenance

5/5



Powerfoil X3.0's hermetically sealed gearbox uses synthetic oil designed to keep the fan running with minimal maintenance for the entire life of the fan. Should unforeseen events require motor replacement, the C-face motor attachment allows technicians to perform in-field service quickly without uninstalling the fan. As with all our overhead fans, Big Ass Fans offers a preventive maintenance program to ensure your Powerfoil X3.0 maintains peak performance and efficiency.

Motor and Drive Protection

5/5



The standard Powerfoil X3.0 model is rated IP43 for protection against small solids and falling sprays of water and its digital touchscreen controller is rated an industry-leading IP55. For greater ingress protection, Powerfoil X3.0's Washdown (IP56) and Harsh Environment (IP55) motor packages are available for facilities with food-grade processes or humid, dusty work conditions.



QUALITY

25/25

POWERFOIL X3.0

SAFETY

Static Safety Features



Powerfoil X3.0 includes a heavy-duty mounting system rated to withstand 40,000 pounds-force (18,144 kilograms-force) and uses a two-axis design to ensure a naturally plumb hang with no need for rebalancing. Extremely durable Grade 8 hardware secures attachment points, and there are no critical welds, so all mount welds have an additional means of security. Dual galvanized steel aircraft cables tested to support the full weight of the fan provide additional backup safety.

Dynamic Safety Features



Powerfoil X3.0 is the safest HVLS fan on the market, ensuring maximum operational safety with dynamic features that keep all fan parts secured to the assembly in the event of an impact. Each airfoil sports interlocking retainers and a full-length airfoil restraint system, while the extruded aluminum spar hub system features two flexible plates with an aluminum spacer, 1/4-inch (6.35-millimeter) steel retainers, and pin and collar rivet fasteners to more evenly distribute force load and reduce fatigue at attachment points. As with all Big Ass overhead fans, Powerfoil X3.0 integrates with fire suppression systems.

Safety Certifications



Powerfoil X3.0's best-in-class safety is proven through rigorous testing. The fan holds an international CB Test Certificate for passing CB Scheme safety certification and is ETL-listed to UL507 and CSA Standard 22.2 No. 113. At Big Ass Fans' research lab, the fan has undergone successful impact testing, mount tensile testing to 28,000 pounds-force (12,700 kilograms-force), and stress testing of hub and airfoil systems, the results of which far surpass competitor testing in scope and performance.

Facility Integration



Like other Big Ass overhead fans, Powerfoil X3.0 integrates with most third-party building automation systems, offering fan control, grouping, and fire relay integration using Modbus-RTU protocol and 0-10 VDC. With Powerfoil X3.0's premium BAFCon controller, built-in BACnet capability makes integration even easier with plug-and-play operation and no additional equipment required.

Patented and Proprietary Features



Holding 27 patents and numerous design awards, Powerfoil X3.0 has earned its reputation as the world's best big fan. Its hub and airfoil systems set the industry standard for engineering quality and safety, while its NitroSeal™ gearbox carries the banner for durability and efficiency.



SAFETY

25 / 25

POWERFOIL X3.0

CUSTOMER EXPERIENCE

Product Specification

5/5



Using proprietary airflow data from Big Ass Fans' research lab, the company's SpecLab® software plots fans in a 3D model of customers' facilities and simulates the airflow they provide. This unique tool ensures that customers receive an accurate specification for the Big Ass fans best suited for their space.

Ease of Installation

5/5



With a versatile mount and on-board VFD, Powerfoil X3.0 installs into a wide variety of applications. Given the technical know-how required, Big Ass Fans offers the industry's most reliable and extensive team of factory-certified installers as well as support for customer-performed installation.

Customer Support

5/5



Big Ass Fans' customer support team is composed of experienced problem solvers who complete ongoing training with product managers and applications engineers. Big Ass Fans' Net Promoter Score—a measure of customer satisfaction—consistently ranks as the highest in the HVLS industry.

Customization

5/5



With diameters from 12 to 24 feet (3.7 to 7.3 meters), mounting options for different ceiling structures, and special motor packages, Powerfoil X3.0 is adaptable for use in a wide variety of facilities. For spaces looking to match or improve their visual aesthetic, Big Ass Fans offers full- and partial-fan color customization.

Optional Accessories

5/5



Powerfoil X3.0 offers a variety of optional features to suit customers: an LED kit with outputs of 9,000-20,000 lumens; Plus winglets; occupancy sensor; and premium BAFCon and Dewtect automated controls.



CUSTOMER
EXPERIENCE

25
/25