

# AEROVENT

#### The Industrial Choice.



### Who We Are

A LEADING DESIGNER AND MANUFACTURER OF INDUSTRIAL VENTILATION SYSTEMS SINCE 1932.

#### High-Quality Products and Fully Customized Fan Solutions.

As a leading designer and manufacturer of high quality industrial air moving equipment, Aerovent sets the industry standard. Our broad range of technologies and expertise allow us to provide the most innovative and efficient air moving and ventilation products on the market. Since 1932, we have been supplying fans to industries covering many Fortune 500 companies, as well as small- and medium-sized companies that demand high-quality products with a wide range of features. We have completed thousands of successful installations worldwide and have a proven track record for tackling the most technically complex and unique applications.





#### **Extensive Industry Experience**

Aerovent has extensive industry experience and years of active research, offering customers flexibility in fan design and construction along with superior service and state-of-the-art technology. With an unmatched variety of centrifugal and axial impellers, every fan is built to your specific needs. This comprehensive selection of products and materials makes Aerovent the ideal choice for a diverse range of industry applications, including:

- > Pulp and Paper
- > Automotive
- > Foundry
- > Pharmaceutical
- > Mining
- > Marine

- > Paint Finishing Systems
- > Power Generation
- > Hazardous Locations (UL or ATEX)
- > Agricultural
- > Snow Making
- > Water Treatment





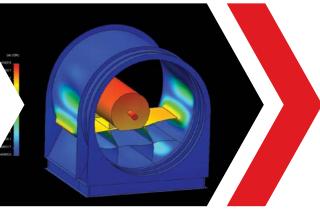


## **Leading-Edge Engineering**

Aerovent's engineering and application expertise is one of the many aspects that sets us apart from all the others. Our engineering group has earned a strong reputation for quickly responding to the needs of our customers. This often involves evaluating our customer's existing fan technology and, in some cases, requires us to redesign and prototype a fully-customized fan solution. That is why our customers repeatedly turn to us time and time again for their specific air moving needs. Simply put, give us a problem, we'll give you a solution.

When you choose Aerovent as your fan manufacturer, you can rest assured that our engineers are using the latest design technology and testing methods, including:

- ☑ Finite Element Analysis (FEA)
- ☑ Fracture Mechanics Calculations
- ☑ Fatigue Analysis Low and High Cycle
- ☑ Rotor Dynamics Calculations, Forced Response and Sensitivity
- Rotor Natural Frequencies and Modal Shape Determination
- Foundation Stiffness Requirement Calculations
- ☑ 3D Solid Modeling
- ☑ Vibration Analysis and FFT Spectrum Analysis
- $\ensuremath{\boxdot}$  Aerodynamic Design and Analysis
- ☑ Computational Fluid Dynamics



#### **5S Methodology**

The use of 5S methodology in our plants helps us maintain manufacturing excellence. In simple terms, the 5S methodology helps a workplace remove items that are no longer needed (SORT), designate a place for everything and put everything in its place (STRAIGHTEN), clean the area in order to more easily identify problems (SHINE), implement color coding and labels to stay consistent with other areas (STANDARDIZE) and develop behaviors that keep the workplace organized over the long term (SUSTAIN). Our 5S program is being used in addition to other lean manufacturing initiatives.



## **High-Quality Manufacturing**



Our experienced team combines a unique skill set and craftsmanship to build the best fans possible. By utilizing the highest quality materials and the most advanced equipment and manufacturing techniques, our product quality is unsurpassed in the air moving industry. We operate eight manufacturing facilities across the U.S. and strive for the highest quality at every step of the manufacturing process – fabrication, welding, machining, painting, assembly, testing and crating. We offer a wide choice of construction materials and accessories for specialty applications including composite, stainless steel, aluminum, hot-dip galvanized steel, abrasion and spark resistant alloys, along with numerous protective coatings.

Prior to manufacturing, our product designs are tested and validated in our in-house AMCA registered test laboratory. We conduct numerous types of tests for quality assurance, product certification and safety to ensure that our fans and air handling units meet or exceed our own stringent standards.

Model AMX with Clamshell Doors

## **State-of-the-Art Test Lab**

In today's business world, adapting to the needs of customers is more important than ever. That is why we continue to make substantial investments to greatly enhance our comprehensive testing capabilities.

With one of the most sophisticated research and development testing laboratories in the industry, only Aerovent has the collective experience and knowledge needed to tackle the most technically complex testing requirements for the most demanding environments.

The scope of Aerovent's testing capabilities covers a wide spectrum of in-house and on-site testing services. With this level of technology, we continue to provide our customers with proven solutions to their particular air movement needs while ensuring that they receive the highest quality product for their exact requirements and structural needs. This includes the evaluation of existing systems to optimize performance and reduce power consumption.

Some of Aerovent's available testing capabilities include:

- AMCA 204 Balance and Vibration Testing
- ☑ AMCA 210 Air Performance Testing
- ☑ AMCA 250 Jet Fan Thrust Testing
- ☑ AMCA 260 Induced Flow Testing
- ☑ AMCA 300 Sound Testing
- ☑ UL 705 Safety Testing
- ☑ High Temperature Testing
- ☑ Rotor Impact (Bump) Testing
- ☑ Overspeed Testing
- ☑ Strain Gauge Testing
- ☑ Operational Modal Testing
- ☑ Custom/OEM Designs



AMCA Accredited Reverberant Sound Room



AMCA 210 Air Performance Testing



#### **Field Services**

#### Start-Up Services

Having the peace of mind that your fan is installed and operating properly prior to start-up is crucial. Aerovent offers a wide range of start-up services and precision checks, including inlet and impeller operational clearances, torque verification, shaft alignment, balance and vibration testing. As part of our standard start-up services, Aerovent field personnel will conduct a variety of inspection checks to ensure that the fan is ready for start-up — all the way from the foundation bolts to the lubrication of the fan.

- ☑ Fan Assembly Inspection
- ☑ Vibration Checks
- ☑ Coupling and Sheave Laser Alignment
- ☑ Installation Assistance
- $\boxdot$  Commissioning



#### **Field Services**

Keeping existing fans operational is crucial to any business. At Aerovent, our on-site field service personnel can provide many types of service, including basic inspections, maintenance, troubleshooting, repairs and in-depth analysis. We'll keep your unit performing as it should to prevent costly down time.

- ☑ Vibration/Spectrum Analysis
- ☑ Motion Amplification
- ☑ Non-Destructive Evaluation (NDE)
- ☑ Balance & Alignment
- ☑ Preventive Maintenance
- ☑ Mechanical Inspections/Repair
- ☑ Troubleshooting/Technical Support



**Troubleshooting Support** 

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## **Product Families**

Air Make-Up Units Centrifugal Fans Axial Fans Roof Ventilators Wall Mounted Fans Inline Centrifugal & Mixed Flow Fans Plug & Plenum Fans Pressure Blowers Radial Bladed Fans Fiberglass Fans Fiberglass Fans Filtered Supply Fans Mancoolers OEM Products



Full Line Catalog



#### **Fan Selection Software**

Aerovent's Fan Selection Software is designed to raise the bar for fan system configurations. The software offers a dynamic interface that supports both standard and highly-engineered fans. Whether in the commercial or industrial market, Fan Selector is robust enough to handle the application. The software features an easy-to-use interface, multiple selection methods, performance curves, instant drawings and more. Our highly-intuitive software quickly allows the user to navigate through selection, configuration and quotation.



Fan Selection Software







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