



AIR-ROTATION 101



HOW DO I EXPLORE AIR-ROTATION ON MY PROJECT?

Johnson has an in-house engineering team to help design your entire project. Our inside engineering team will assist in running loads, system layout, unit configuration, and system optimization for your particular needs.

CONTACT JOHNSON AIR-ROTATION HVAC SYSTEMS

@ 1-800-325-1303

TO LEARN MORE VISIT JOHNSONAIRROTATION.COM

A FEW OF OUR CUSTOMERS



**INTERESTED IN A WEBINAR TO LEARN MORE?
EMAIL INFO@ARIZONCOMPANIES.COM**

**JOHNSONAIRROTATION.COM | 1-800-325-1303
11880 DORSETT ROAD, ST. LOUIS, MO 63043**

FAQs

WHERE CAN I LOCATE MY SYSTEMS?

Inside or outside - anywhere you want!
There's a lot of flexibility; your call!

HOW MUCH AREA CAN ONE SYSTEM COVER?

A lot! It's extremely common for a single Air-Rotation system to serve 100,000+ft².

HOW MUCH DO THEY COST?

Please contact us at 1-800-325-1303 and we can engineer / price a solution for your needs.

DO YOU HELP WITH BUILDING DESIGN/LOADS?

Absolutely! Our in-house engineers will work with you to ensure your facility is conditioned to your needs.

WHERE ARE THEY MADE?

St. Louis, MO
Proudly manufactured in the USA!

WANT TO LEARN MORE?

Contact Johnson Air-Rotation HVAC Systems at 1-800-325-1303 to chat and/or schedule a webinar at JohnsonAirRotation.com.

CAN YOU HANDLE OUTSIDE AIR – VENTILATION, MAKEUP AIR, & ECONOMIZERS?

All day, every day!

WHAT ARE MY CONTROL OPTIONS?

Standalone, DDC, or anything you want! You can even ship your own controls to us and we'll install and test them for you.

CAN I USE THEM IN AN EXISTING BUILDING?

Absolutely – retrofit or new construction are a great fit for Air-Rotation!

CAN I CUSTOMIZE MY UNIT?

We are a full custom outfit and can do special controls, sound attenuation packages, factory-piping, custom filters, and more!

CAN I VISIT THE FACTORY?

Heck yeah! Join the Arizon Factory Experience - Contact 1-800-325-1303.



HOW DO WE GET STARTED?

Call us at 1-800-325-1303 to get in contact with a member of our sales team or fill out our Quote/Design Assist Request form at JohnsonAirRotation.com.

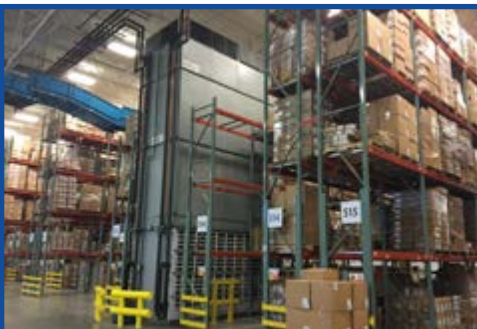


WHAT IS AIR-ROTATION?

Air-Rotation is a cost effective, efficient, and flexible HVAC system solution for large, open spaces. This ductless approach uses grade mounted, vertical air handlers to evenly condition large spaces.

WHERE IS AIR-ROTATION APPLICABLE?

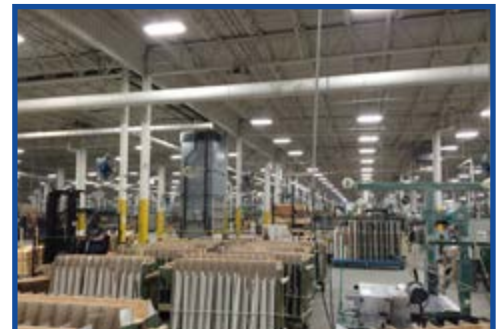
Any single zone space of at least 20,000ft², with 15-20ft.+ ceilings, is a potential Air-Rotation candidate. Some of the common applications are:



WAREHOUSES



DISTRIBUTION / FULFILLMENT CENTERS



MANUFACTURING / INDUSTRIAL SPACES



HANGARS



BIG BOX STORES



PHARMACEUTICAL STORAGE



FOOD / BEVERAGE DISTRIBUTION



SPORTS COMPLEXES



INDOOR AGRICULTURE FACILITIES



WHY USE AIR-ROTATION?

COST SAVINGS:



Air-Rotation eliminates much of the infrastructure needed for more conventional systems:

- Ductwork
- Structural Reinforcements & Roof Curbs
- Multiple Utility Connections
- Roof Penetrations
- Destratification / HVLS Fans
- Architectural Screens

Air-Rotation uses far fewer pieces of mechanical equipment to satisfy the design conditions. This system streamlining makes Air-Rotation the most cost effective way to address these large areas.

MAINTENANCE REDUCTION:



These grade mounted, vertical air handlers are maintained from ground level. This eliminates the need to send maintenance personnel onto the roof during inclement weather. In addition, Air Rotation greatly consolidates the amount of mechanical equipment needed to address design conditions. Fewer pieces of equipment equates to less maintenance time/cost.

EFFICIENCY:



- 1. Destratification:** Johnson Air-Rotation HVAC Systems introduces conditioned air near the roof deck and returns at the ground. This induces a “rotation” of the air, greatly minimizing any temperature gradient from floor to ceiling. It allows for wasted heat that typically floats to the roof deck to be utilized at occupant level, reducing utility consumption.
- 2. Airside HP Reduction:** Johnson Air-Rotation HVAC Systems utilize high efficiency prop fans. These fans are able to move a tremendous volume of air with very low HP requirements. This can yield massive electrical distribution and operational cost savings.

CONSISTENCY:

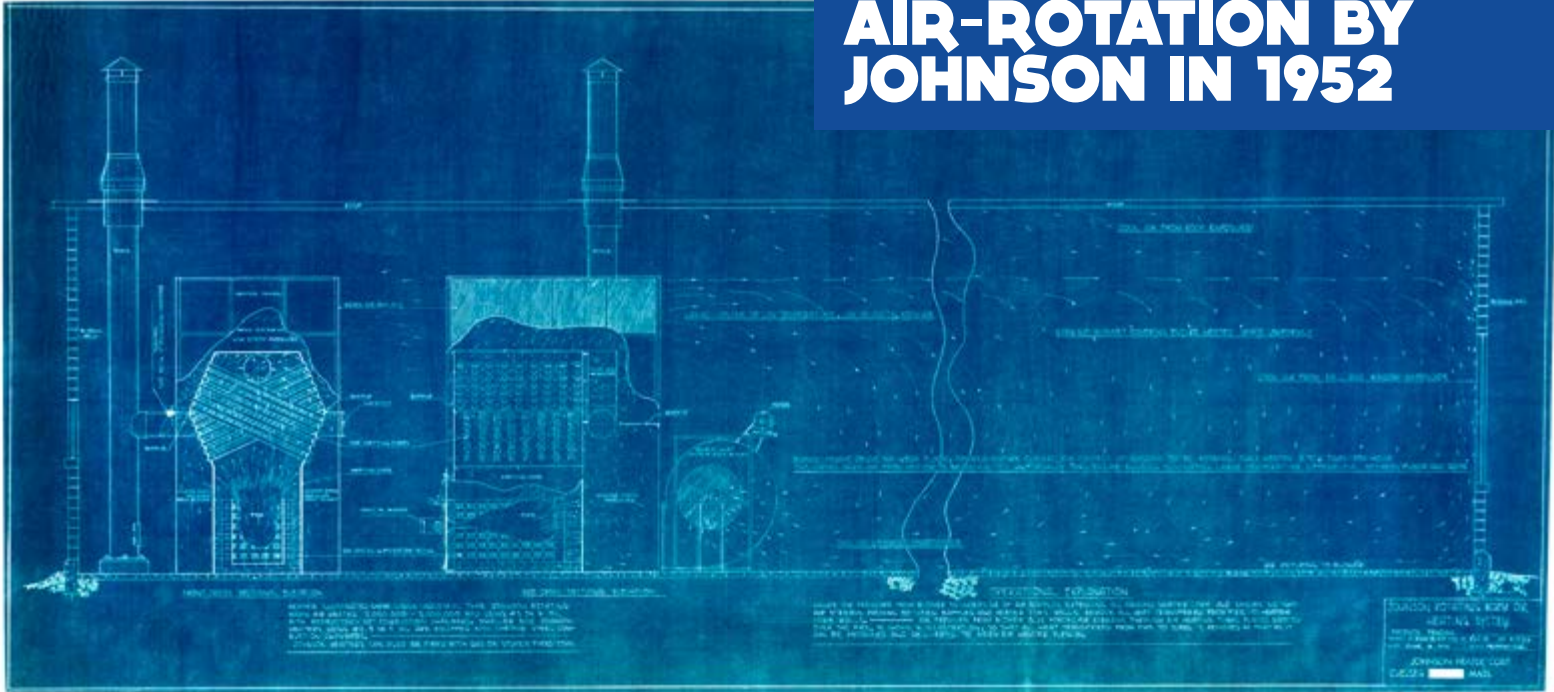


In many applications, temperature and humidity design criteria are critical. These facilities might include pharmaceutical storage, food/beverage distribution, precision manufacturing, and many more. Johnson Air-Rotation HVAC Systems can effectively condition these areas to extremely tight thresholds with minimal equipment necessary. Johnson can even guarantee system performance if required.

WHY JOHNSON?

Johnson Heater Corporation was founded in 1921 as a mechanical contractor involved in the design and install of HVAC systems throughout the New England area.

**THE ORIGINAL
BLUE PRINT FOR
THE CREATION OF
AIR-ROTATION BY
JOHNSON IN 1952**



SINCE 1921, Johnson Air-Rotation HVAC Systems has been a leading manufacturer of HVAC products for many other large, open-spaced industrial buildings. Johnson's revolutionary Air-Rotation technology provides the most energy efficient way to heat, cool and ventilate open-span buildings.

JOHNSON AIR-ROTATION HVAC SYSTEMS GENERAL SPECIFICATIONS

ONE JOHNSON SYSTEM CAN HANDLE

- 150,000 square feet conditioned with a single system
- Up to 6,250 MBH per heating system
- Up to 450 tons per cooling system (cooling and humidity control)
- Up to 170,000 CFM per system
- Full economizer capability, 0-100% outside air

AIR-ROTATION SYSTEM COOLING SOURCES

- DX
- Chilled water/glycol
- Evaporative cooling
- Ammonia

AIR-ROTATION SYSTEM HEATING SOURCES

- Natural gas
- Propane
- #2 Oil or dual fuel
- Steam
- Hot water
- Electric coil
- Heat pump