The breadth of the Allegro ventilation blower line has set it apart from the competition for over three decades! Made from high-quality products, our fully certified blowers are the safest and most reliable solutions for any type of work environment or application while adhering to the OSHA standard.

## Features

- > Most comprehensive product line on the market!
- > Solutions designed for a wide range of applications and industries
- Industry-leading innovation
- CE certified and CSA approved options
- ▷ Made from high-quality, reliable, and durable materials
- Stackable products for ease of storage
- ▷ Lightweight solutions
- ▷ E-version options wired to meet international standards
- > Options designed to fit American Petroleum Institute (API) standard tanks

# Benefits

- ▷ Longer blower life helps lower total cost of ownership
- *Easy transport to and from the job site*
- Complete blower systems ensure you have everything you need to keep your space well ventilated
- > Expert technical support and service

		About	Features	When To Use
AXIAL		<ul> <li>Designed for high airflow with lower pressure*</li> <li>Plastic and metal versions offered</li> <li>Can be used with in-line axial booster blowers as a velocity accelerator for longer duct distances</li> </ul>	<ul><li>Lightweight</li><li>Low-cost</li></ul>	<ul> <li>When portability and cost are major factors</li> <li>When working in smaller confined spaces</li> <li>Best for short distances with minimal ducting and bends</li> </ul>
Centrifugal	Ó	<ul> <li>Uses a "squirrel cage" design creating high amounts of CFM with very high air pressure*</li> <li>They are typically heavier than axial blowers</li> </ul>	Air does not cross over motor, minimizing contamination risk	<ul> <li>Best for moving air longer distances, using long or multiple lengths of duct and more 90° bends</li> </ul>
VENTURI	J	<ul> <li>Operates with compressed air being pushed through a pneumatic hose</li> <li>Generates very high amount of CFM*</li> <li>No fan or moving parts</li> </ul>	<ul> <li>Low maintenance</li> <li>Designed to fit American Petroleum Institute (API) standard tanks</li> </ul>	<ul> <li>Best for tanks</li> <li>Used for pushing or removing air from tanks or other large areas to rapidly remove gases prior to entry</li> </ul>
<b>JET FANS</b>	63	<ul> <li>Operate with compressed air being pushed through a pneumatic air hose</li> <li>Generates very high CFM*</li> </ul>	Designed to fit American     Petroleum Institute (API)     standard tanks	<ul> <li>Best for tanks or other large areas</li> <li>Used for pushing or removing air from tanks or other large areas to rapidly remove gases prior to entry</li> </ul>

\*When selecting a blower, all ventilators have two characteristics to consider: 1. Air pressure – Force of air volume is measured by inch of water gauge (WG) 2. Airflow – Air volume delivered and measured by cubic feet per minute (CFM)

# HOW TO CHOOSE YOUR ALLEGRO BLOWER





Scan this code to access our Blower CFM calculator.



# VENTILATION AIR EXCHANGE CHART

Allegro Industries recommends air exchange at a rate of at least 20 times per hour.

Confined Space Volume Cubic Feet)	Blower Cubic Feet Per Min. (CFM) Output Needed*	
1000	333	
2000	667	
3000	1000	
4000	1333	
5000	1667	
6000	2000	
7000	2333	
8000	2667	
9000	3000	
10000	3333	

\*Take into account 90° bends of ducting. See specifications under each blower description.



## USE OF ALIGNMENT CHART:

- Place straightedge on manhole volume (left scale).
   Place other end of
- straightedge on blower capacity (right scale).Read required purging time, in
- Head required parging time, in minutes, on diagonal scale.
   If two blowers are used,
- add the two capacities, then proceed as above.
- When toxic gases are encountered, increase purging time 50%.
- Effective blower capacity is measured with one, or two 90° bends in standard 15-foot blower hose. See chart.



VENTILATION NOMOGRAPH

# HAZARDOUS LOCATION INFORMATION

Reference: Explosion-Proof Blowers: 9503, 9509-01, 9513-05, 9514-05, 9514-06, 9515-01, 9515-50EX, 9525-01, 9525-50EX, 9538, 9538-15, 9538-25, 9538-50, 9539-12EX, 9539-12EX, 9548, 9548-15, 9548-25, 9558, 9558-15, 9558-25\* National Electrical Code (NEC) A hazardous location is an area where the possibility of explosion and fire is created by the presence of flammable gases, vapors, dusts, fibers or flyings. NOTE: Fibers and flyings are not likely to be suspended in the air, but can collect around machinery or on lighting fixtures and where heat, a spark or hot metal can ignite them.

#### CLASS I

(NEC-500-5) Those areas in which flammable gases or vapors may be present in the air in sufficient quantities to be explosive or ignitable.

#### **DIVISION I**

(NEC-800-5, 6, 7) In the normal situation, hazard would be expected to be present in everyday production operations or during frequent repair and maintenance activity.

#### **TYPICAL CLASS I LOCATIONS**

- Petroleum refineries, and gasoline storage and dispensing areas.
- Industrial firms that use flammable liquids in dip tanks for parts cleaning or other operations.
- Petrochemical companies that manufacture chemicals from gas and oil.
- Dry cleaning plants where vapors from cleaning fluids can be present.
- Companies that have spraying areas where they coat product with paint or plastics.
- Aircraft hangers and fuel servicing areas.
- Utility gas plants, and operations involving storage and handling or liquefied petroleum gas or natural gas.

#### CLASS II (NEC-500-6)

(NEC-500-6) Those areas made hazardous by the presence of combustible dust.

#### **DIVISION 2**

(NEC-500-5, 6, 7) In the abnormal situation, material is expected to be confined within closed containers or closed systems and will be present only through accidental rupture, breakage or unusual faulty operation.

### TYPICAL CLASS II LOCATIONS

- Grain elevators, flour and feed mills.
  Plants that manufacture, use or store magnesium or aluminum powders.
- Plants that have chemical or metallurgical processes, producers of plastics, medicines, and fireworks, etc.
- Producers of starch or candies.
- · Spice-grinding plants, sugar plants and cocoa
- Plants.
  Coal preparation plants and other carbon-handling or processing areas.

# CLASS III

(NEC-500-7) Those areas in which there are easily ignitable fibers or flyings present, due to type of material being handled, stored, or processed.

#### GROUPS

(NEC-500-3) The gases and vapors of Class I locations are broken

into four groups by the code: A, B, C, and D. These materials are grouped according to the ignition temperature of the substance, its explosion pressure and other flammable characteristics. The dust locations of Class II are designated E, F, and G. These groups are classified according to the ignition temperature and the conductivity of the hazardous substance.

NOTE: For detailed group descriptions refer to NEC-500-3.

#### TYPICAL CLASS III LOCATIONS

- Textile mills, cotton gins, cotton seed mills and flax processing plants.
- Any plant that shapes, pulverizes or cuts wood and creates sawdust or flyings.

\* WARNING: Explosion-proof blowers must be used with statically conductive ducting.

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