



# AIR-CLEANING BLOWERS

*Clean and Blow Air with No Filter Element!*

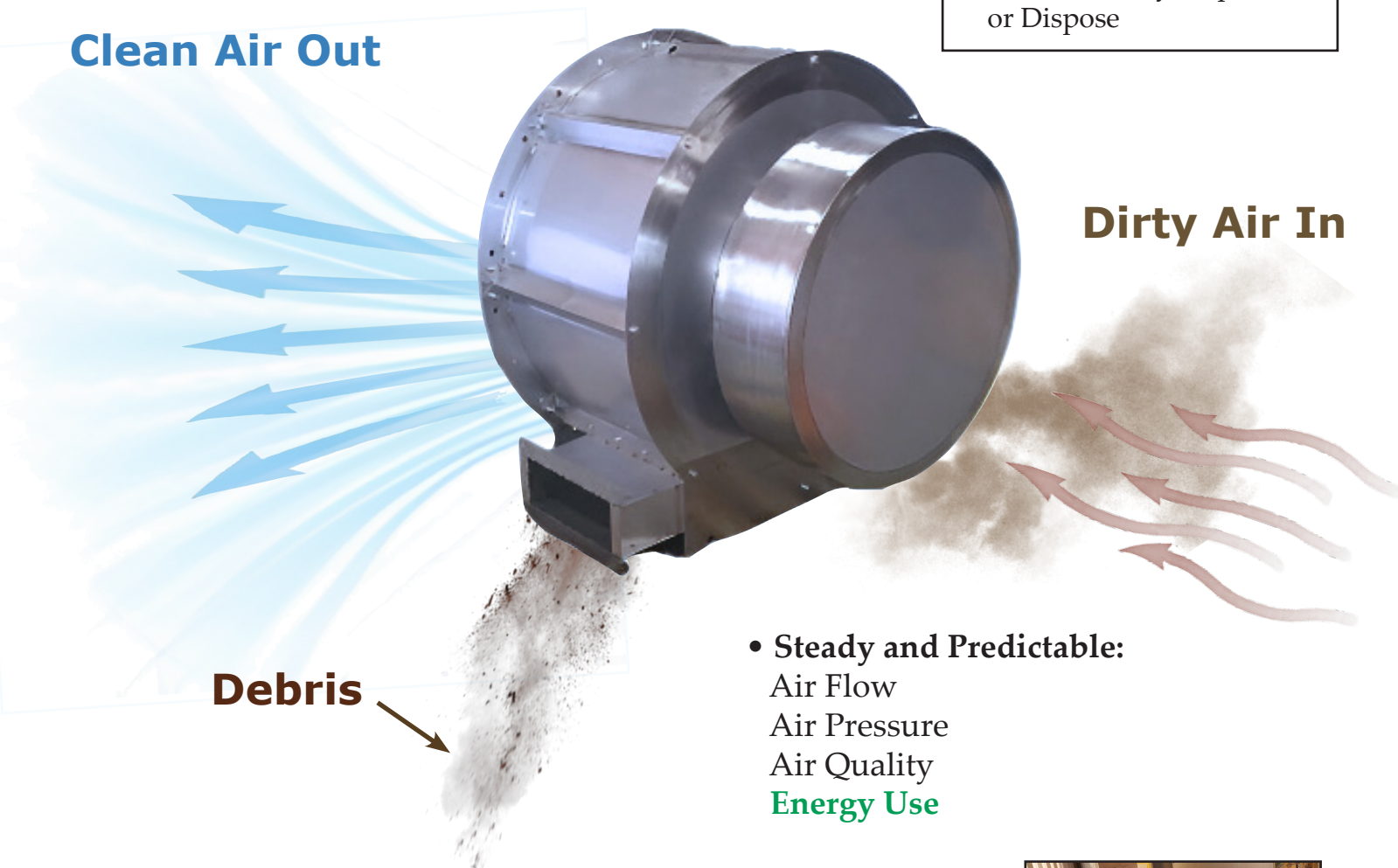
- Clean Air For:  
Ventilation  
Pressurization  
Exhausting  
Feeding Airstreams

- *Independent Lab Test:*  
Removes nearly all particles larger than 10 microns, as well as smaller respirable particles, *without filter elements to clog*

- **No Filter Media Means:**  
95% Less Maintenance  
and No Clogging

- No Filter Elements or Bags  
to Service, Buy, Replace  
or Dispose

**Clean Air Out**



- **Steady and Predictable:**  
Air Flow  
Air Pressure  
Air Quality  
**Energy Use**



**Self-Cleaning Air Filter**

**The Air-Cleaning Blower™**  
Cleans Air – Never Clogs



# LESS MAINTENANCE + LESS ENERGY = MORE SAVINGS + CLEAN AIR!

The Air-Cleaning Blower™ (ACB) separates Particles and Liquids from air and other gases using no filter media of any kind.

The ACB is a powerful filter-blower that removes dust and other particles from the air without the need for filter elements, bags, or other media which clog. Without clogging, ACBs maintain consistent airflow, pressure, air quality, and energy consumption PERMANENTLY.

By eliminating filter media, users significantly reduce maintenance and save energy, as there are no clogging filter elements to restrict airflow or increase pressure loss. Even an additional 0.5" of static pressure from a partially clogged filter can raise the amperage draw of a traditional air-filtration fan motor by more than 50%.



A mine where ACB units are installed.

Our multi-patented technology harnesses the momentum of dirt particles, combined with the advancing and rotating airflow, to eject them from the housing and return them to the surrounding atmosphere.



ACB T-50 unit installed at a Recycling Plant.



Outside view of an ACB unit mounted to the wall at a mine.

The ACB, as a self-cleaning filter-blower, removes up to 99% of the mass of dust in the air. An independent testing lab established that ACBs remove essentially all particles larger than 10 microns, and almost 40% of those between 3.5 and 10 microns, plus a good portion of those between 0.75 and 1 micron. In fact, so little dust passes through them that it could take months, or even years, to collect enough dust to build a blanket that could overheat a motor or cause a short-circuit in switches. ACBs also remove mist, rain and other liquids to keep downstream filters and equipment dry.

*...the air filter-blower that separates dirt from air, using no filter media...*

If extremely clean air is required, downstream HEPA, carbon or other elements can remove gases and the small mass of any remaining tiny particles. In such cases, the ACBs will extend the life of the post filters by removing most of the debris before it reaches the expensive media.

Being blowers, ACBs offer the added advantage of eliminating the need for extra fans and motors. They supply the necessary airflow and pressure to push air through the post filters, resulting in a more compact overall system.

**Eagle Mine**  
a subsidiary of **lundin mining**



**AK**  
AKSteel

**GP**  
Georgia-Pacific

**P** POWELL

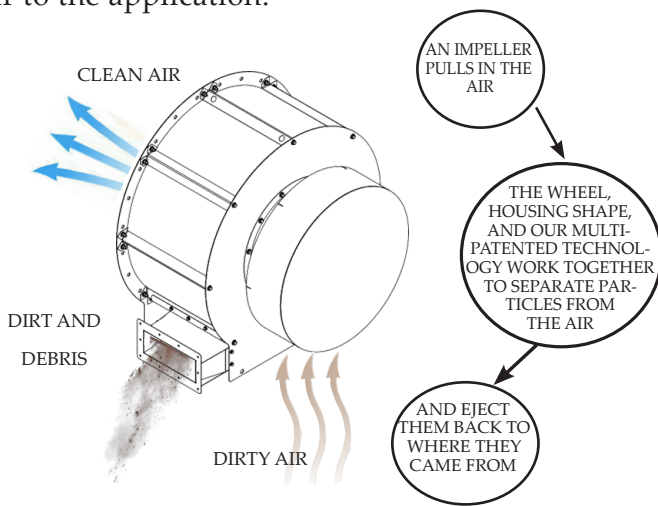
**NUCOR**

# HOW DO THEY WORK?



View of the same ACB mounted to the wall from the clean-air side.

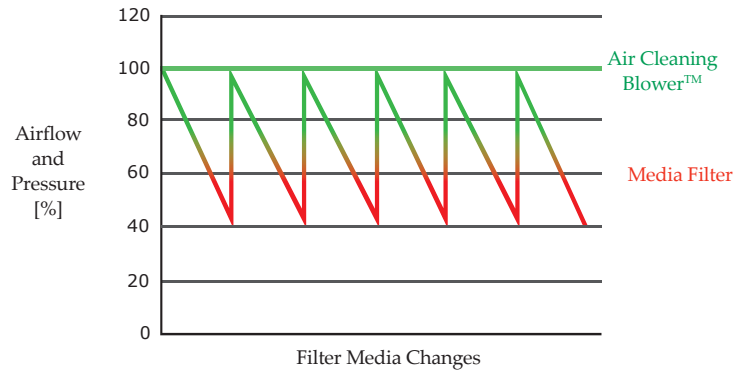
Like most blowers and fans, Air Cleaning Blowers™ feature an impeller that pulls air—whether clean or dirty—into the unit. However, unlike conventional blowers, ACB's proprietary, multi-patented design combines specially engineered impellers with optimally designed housing. This unique configuration causes the air to rotate, separate out the solids and liquids, eject them, and then push the cleaned dried air to the application.



The cleaned air then flows into buildings, electrical panels, vehicles, and other applications. ACBs can also remove pollutants from exhaust air, retaining debris when regulations prohibit outdoor discharge.

## ACBs Provide Constant Airflow and Air Pressure

Media Filters, even "self-cleaning" models, Cause Wide Variations in Airflow, Air Pressure and Energy Consumption.



Most users do not want to collect the dirt in the air – **They Just Want Clean Air!**

Traditional filters, which trap contaminants by collecting debris, not only generate maintenance costs but also become clogged, slowing airflow and reducing pressure. This forces fans to work harder and consume more energy to compensate. In contrast, ACBs maintain a virtually constant airflow and pressure, resulting in minimal changes in energy consumption over time.

The consistent and predictable output of ACBs simplifies the design, control, and operation of heating, ventilation, and air-conditioning systems. Since ACBs have no filter media, some can operate for years without needing service or cleaning. As a result, ACBs qualify as the first **truly sustainable** air-filtration systems.

...unlike media filters that clog, often quickly, Air Cleaning Blowers can go years without needing maintenance making them **truly sustainable!**

## ECO-FRIENDLY



# Self-cleaning Air-Cleaning Blowers™

Blow and clean air simultaneously, and require little maintenance.

## Construction

- Interior frame & wall sleeve constructed of stainless steel
  - Type 304 or 316 – or aluminum alloy.
- Variable or constant speed models.
- Many power sources: A/C (50 or 60 Hz, single and 3 phase) and D/C current, motor shafts, direct drive or pulleys.
- Units meet NEMA 4, NEMA 4X, IP54 and IP55 standards.

## Additional Features

- Units can include corrosion-resistant, heavy-duty electrical-resistance heating elements as option.
- Units can be made suitable for hazardous (explosive) locations whether the hazards are caused by gases or dusts - ALL Classes, Groups and Divisions.

## Who Needs ACBs

Who	Where
Agriculture & Food Processing	Agricultural Equipment, Grain Elevators, Food Processing, Bulk Solids, Powder Conveyors & Hoppers
Mining & Industrial Facilities	Mines, Coke Plants, Foundries, Steel, Aluminum & Paper Mills, Recycling Facilities, Sawmills, Air Compressors
Energy & Power Systems	Power Plants (Fossil Fuel & Nuclear), Control Rooms, Motor Control Centers, Sub-Stations, Electrical Buildings/Enclosures
Healthcare & Clean Environments	Hospitals, Clean Rooms, Pharmaceutical Production, Nursing Homes
Telecom & Data Centers	Cell Towers, Communications Relay Stations, Data Centers
Military & Transportation	Military Vehicles, Electronics, Magazines, Locomotives, Passenger Rail Cars (Do not make Hazardous Hot Spots)
Commercial, Residential & Modular Buildings	Hotels, Convention Centers, Office Buildings, Modular & Inflatable Buildings, LEEDs Buildings, Schools, Houses, Apartments

## Typical Model Options For Air-Cleaning Blowers™

Basic Model	CFM	Volt	Phase	Hertz
ACB T3-A-F10-N-4A-M	225	115	1	60
ACB T3-L-F10-N-4A-M	225	208-230	1	50/60
ACB T3-G-F10-N-4T-M	225	208-230	3	50/60
ACB T3-M-F10-N-4T-M	225	460	3	50/60
ACB T5-A-F10-N-4A-M	400-500	115	1	60
ACB T5-L-F10-N-4A-M	400-500	208-230	1	50/60
ACB T5-G-F10-N-4T-M	400-500	208-230	3	50/60
ACB T5-M-F10-N-4T-M	400-500	460	3	50/60
ACB T7-A-F10-N-4A-M	650-750	115	1	60
ACB T7-L-F10-N-4A-M	650-750	208-230	1	50/60
ACB T7-G-F10-N-4T-M	650-750	208-230	3	50/60
ACB T7-M-F10-N-4T-M	650-750	460	3	60
ACB T10-L-F10-N-4T-M	850-1400	208-230	1	50/60
ACB T10-G-F10-N-4T-M	850-1400	208-230	3	50/60
ACB T10-M-F10-N-4T-M	850-1400	460	3	60
ACB T20-L-F10-N-4T-M	1800-2500	208-230	1	50/60
ACB T20-G-F10-N-4T-M	1800-2500	208-230	3	50/60
ACB T20-M-F10-N-4T-M	1800-2500	460	3	60
ACB T35-G-F10-N-4T-M	2500-4500	208-230	3	50/60
ACB T35-M-F10-N-4T-M	2500-4500	460	3	60
ACB T50-G-F10-N-4T-M	4500-6000	208-230	3	50/60
ACB T50-M-F10-N-4T-M	4500-6000	460	3	60

Visit  
Our Website!



ACB adds models to its line regularly in the range of 50 CFM to 10,000 CFM and from 0.5" w.g. to 10" w.g. In addition, custom designs are available for OEM and other special applications.

Patent #9,259,675. #10,118,115. Others pending. CAGE Code: 7ZFFZ0

**ALL MODELS MADE IN THE UNITED STATES OF AMERICA**  
**AIR CLEANING BLOWERS, LLC**

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