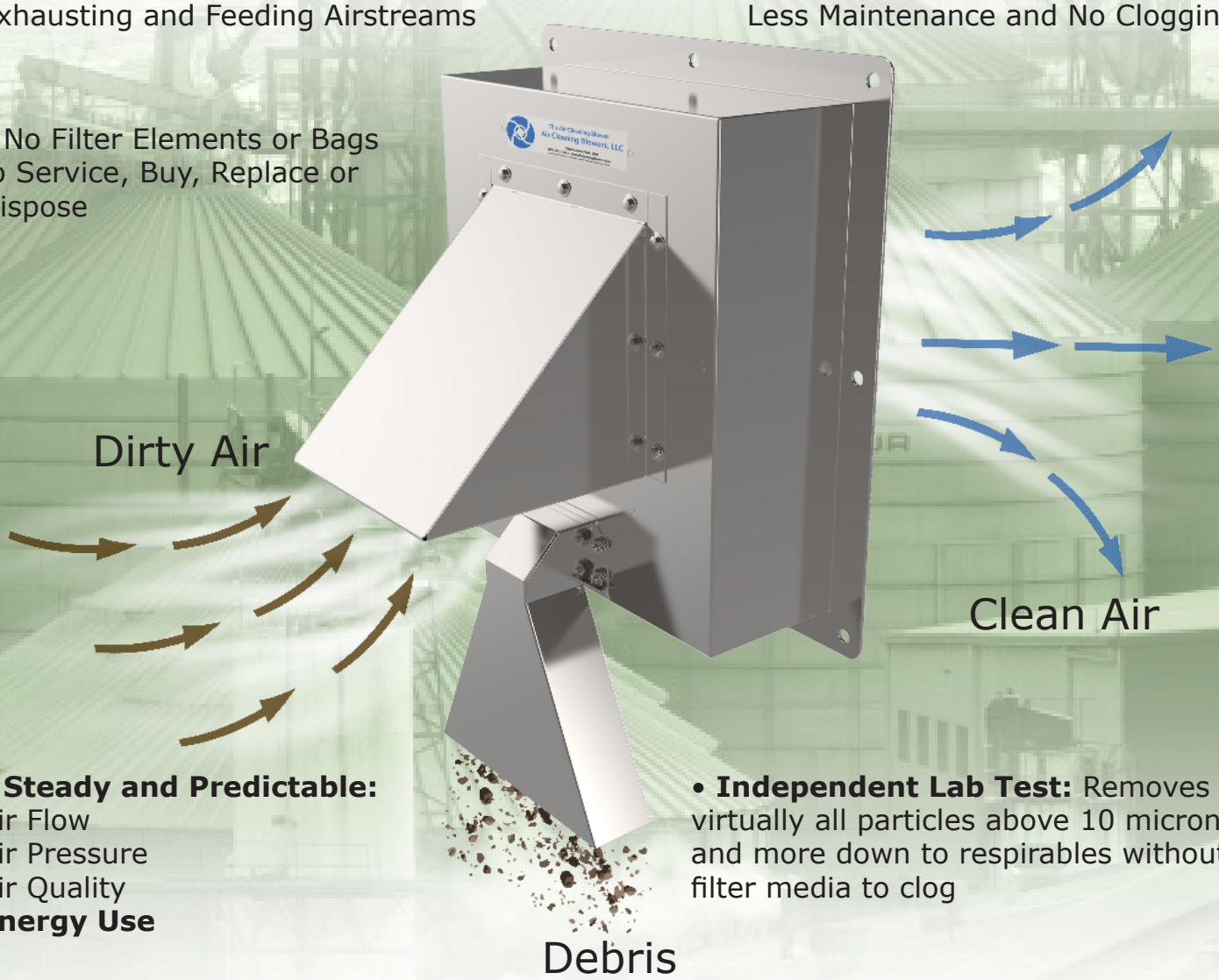
AIR-CLEANING BLOWERS

Clean and Blow Air:

- For Ventilation, Pressurization, Exhausting and Feeding Airstreams
- **No Filter Media Means:** 95% Less Maintenance and No Clogging
- No Filter Elements or Bags to Service, Buy, Replace or Dispose



- **Steady and Predictable:**
  Air Flow
  Air Pressure
  Air Quality
  Energy Use
- **Independent Lab Test:** Removes virtually all particles above 10 microns and more down to respirables without filter media to clog

Self-Cleaning Air Filter

The Air-Cleaning Blower™
Cleans Air – Never Clogs

www.AirCleaningBlowers.com

CUT MAINTENANCE. CUT ENERGY. CLEAN AIR!

The Air-Cleaning BlowerTM (ACB) separates dirt from air and other gases, using no filter media of any kind.

A powerful filter-blower, the ACB removes dust and other particles from the air without filter elements, bags or other media while maintaining constant airflow, pressure, quality and energy consumption.

Eliminating the media allows users to avoid most maintenance and save energy since they no longer have clogging filter elements to, reduce their airflow and increase pressure loss. Just an extra 0.5” of static pressure from a partially clogged filter can increase a traditional air-filtration fan motor’s amperage draw by over 50%.

Our patented technology leverages the momentum of the dirt particles along with that of the advancing air or other gas to fling them out of the housing and return them back into the surrounding atmosphere.

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. So little dust passes through them that it could take months or years to collect enough dust to become a blanket that could overheat a motor or cause a short-circuit in switches. ACBs also remove mist and rain.

...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 remaining tiny particles. In those 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 provide the further benefit of eliminating the need for additional fans and motors by supplying the airflow and pressure necessary to push the air through the post filters, thereby making the complete system compact.

The Air-Cleaning Blower™

Cleans Air – Never Clogs

HOW DO THEY WORK?

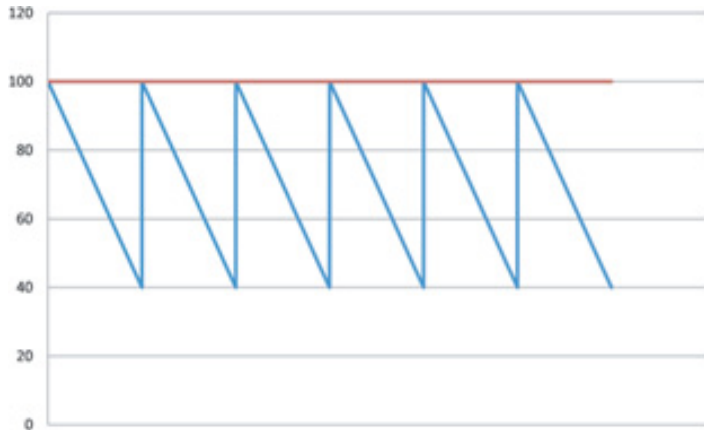
Like most blowers and fans, Air Cleaning Blowers™ have an impeller inside that pulls air—clean or dirty—into itself. That impeller, in combination with the design of its surrounding housing, rotates the air around itself as it pulls the air through the blower housing and then pushes it out the clean-air side.

The ACB's unique, multi-patented technology uses the momentum of the dirt, sand, pollen, grain husks, bugs, water drops, or other detritus suspended in the moving air or other gas to fling them out of the housing, normally back into the contaminated source atmosphere from where they came. The rest of the air, now cleansed of its load of contaminants, flows out of the Air-Cleaning Blower™ into buildings, electrical panels, vehicles and other applications. ACBs can also extract pollutants from air exhausted from a building or other enclosure leaving debris behind if regulations restrict discharging contaminated air outdoors.

ECO-FRIENDLY

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 It Clean!**

Hence, by collecting debris, ordinary filters that use elements to trap contaminants not only create maintenance expenses collecting debris nobody wants, as they do they clog, which slows airflow and reduces its pressure, both of which force the fans to work harder and consume more energy to compensate. In contrast, ACBs' maintain a virtually constant airflow and pressure and, therefore, experience little change in electrical consumption over time. This consistency and predictability of output eases design, control, and operation of heating, ventilation and air-conditioning systems. Some ACBs can go for years without service or cleaning because they have no filter media. As a result, ACBs qualify as the first **truly sustainable** air-filtration systems.

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

The Air-Cleaning Blower™

Cleans Air – Never Clogs

www.AirCleaningBlowers.com

Self-cleaning Air-Cleaning Blowers™

Blow and clean air simultaneously, and require no maintenance.

Since ACBs do not use filter media or collect unwanted dust and dirt—unlike old-fashioned filter systems do, ACBs sustain constant airflow, constant air pressure, constant air quality, and constant electrical consumption with little to no maintenance. They provide clean air for ventilation, pressurization, exhaust and feed air.

ACBs do not collect dust and other debris because: **Most Users Don't Want to Collect Dirt-They Just Want Clean Air!**

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

Who Needs ACB's

- Agricultural Equipment and Grain Elevators
- Air Compressors
- Bulk Solids and Powder Conveyors & Hoppers
- Cell Towers and Communications Relay Stations
- Clean Rooms
- Coal Mines and Coke Plants
- Conveyors and Silo Loaders
- Data Centers
- Evaporative (Swamp) Coolers
- Food Processing
- Foundries
- Hospitals—Modular and Traditional
- Hotels and Convention Centers
- Modular BuildingsElectrical Buildings/Enclosures
- Military Vehicles, Electronics and Magazines
- Mining and Tunneling Equipment
- Modular and Inflatable Buildings
- Motor Control Centers and Sub-Stations
- Office and Other LEEDs Buildings
- Pharmaceutical Production
- Power Plants—Fossil Fuel and Nuclear
- Control Rooms and Pulpits
- Locomotives and Passenger Rail Cars
- Recycling Facilities
- Sawmills
- Steel, Aluminum and Paper Mills
- Warehouses

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	450	115	1	60
ACB T5-L-F10-N-4A-M	450	208-230	1	50/60
ACB T5-G-F10-N-4T-M	450	208-230	3	50/60
ACB T5-M-F10-N-4T-M	450	460	3	50/60
ACB T10-L-F10-N-4T-M	1000	208-230	1	50/60
ACB T10-G-F10-N-4T-M	1000	208-230	3	50/60
ACB T10-M-F10-N-4T-M	1000	460	3	50/60
ACB T50-G-F10-N-4T-M	1000	208-230	3	50/60
ACB T50-M-F10-N-4T-M	1000	460	3	50/60

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. #10,493,390. Others pending. CAGE Code: 7DQF4

ALL MODELS MADE IN THE UNITED STATES OF AMERICA

AIR CLEANING BLOWERS, LLC

PO Box 803 Selkirk, New York 12158 U.S.A.
Telephone: 518-635-4169 I Marketing@AirCleaningBlowers.com

33T00-220302-ACB

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