

THE HVAC FACILITY CONNECTION

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FOR COMFORT AND EFFICIENCY IN YOUR BUILDING

BRADY

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THE IMPORTANCE OF AIR FILTRATION

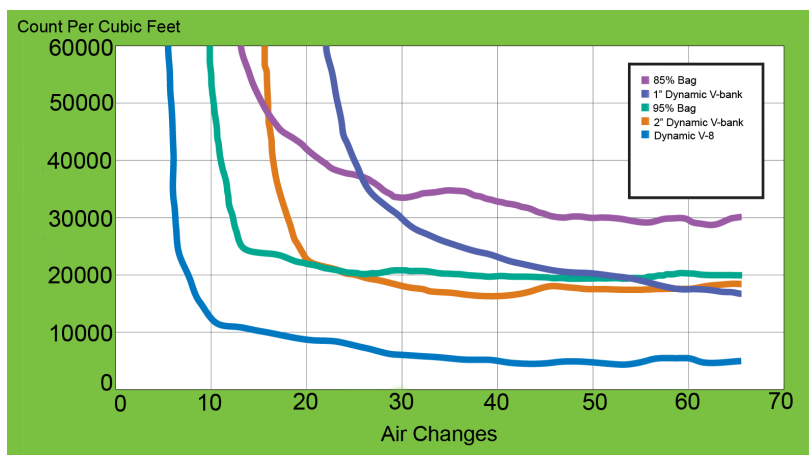
Dynamic Air Quality Solutions introduces the new standard in air cleaning: the V8. Designed to meet performance requirements for green buildings, hospitals, pharmaceutical and clean manufacturing facilities, the new V8 system couples maximum air cleaning effectiveness with unparalleled energy and operational cost savings.

In the past you had to choose between air quality and operating costs- now you don't have to.

A New Category of Air Cleaning: The V8 combines the principles of existing Dynamic technology and products with several key technological advances to create a system unlike anything on the market.

Like previous generations of Dynamic Air Cleaners, the V8 utilizes active-field polarized media technology to polarize both media fibers and airborne particles. Polarized particles are then drawn to other particles and the fibers of the media. The process brings about a deep cleaning of the air:

1. Particles- including the very smallest sub-micron particles- are agglomerated and captured.
2. Biological contaminants are captured- and with the Germicidal Systems- inactivated.



3. Reactive gas phase contaminants are absorbed more readily by the polarized particles and reduced significantly.

The V8 builds on this foundation with significant advances in design and technology that mean revolutionary performance and a new level of energy and operational savings.

A New Level of Performance: MERV 13-15 performance without ionizing or Ozone generation plus the agglomeration and VOC reduction that you have come to rely on from Dynamic Air Quality Solutions. The V8 can also be fine-tuned for a given application. The ASHRAE 52.2. MERV test is a test developed for passive filters (because carbon loading dust shorts out electronic air cleaners and is not typical of atmospheric dust). In the

absence of a universally applicable performance test for all electronic air cleaners, many tend to rely on ASHRAE 52. In the standard MERV test with the conductive loading dust, the V8 is a MERV 13. If MERV protocol is followed with non-conductive dust, the V8 achieves MERV 15. (And without ionizing, which can produce harmful Ozone.) Further, MERV results understate real-world effectiveness of the V8 as shown in the above figure.

The safest particle is one you never breathe.

A New level of Loading: The V8 can hold up to ten times higher dust load than passive filters. This is a critical component of a filter's ongoing associated costs and one that is often overlooked

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The Importance of Air Filtration

or not reported. Passive filters and ionizing air cleaners tend to load two dimensionally on the surface of the media. To increase loading, the media is pleated or made into deep bags. The V8 loads throughout the full depth of the media pad. This three-dimensional loading™ around each fiber of the pad makes the V8 unequalled in its ability to hold contaminants and because of the active field technology, they are held tightly and not shed back into the air-stream.

A New Level of Maintenance:

Superior loading means far less frequent media changes and typically no need for pre-filters. This greatly reduces your maintenance requirements and the burden on maintenance personnel. Less media changes also mean less disposal costs and a smaller environmental footprint for the building. Labor and disposal costs typically account for 7-9% of the operational cost of filtration.

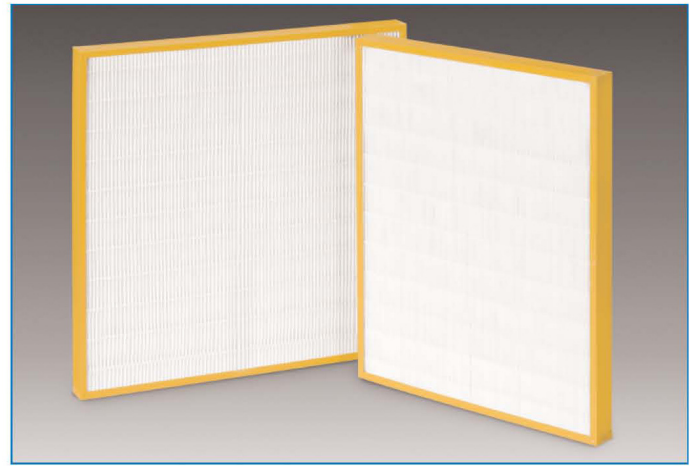
The least expensive filter is the one you never have to put in.

A New Level of Energy Savings:

Superior loading flattens the pressure drop curve to save typically over 1" of static pressure versus alternatives. This translates to big energy savings and potential for smaller fan selection. Energy costs are a major concern for facility managers because they can make up over three quarters of the total cost of filtration, far outweighing a filter's initial cost. The V8 can reduce energy costs as much as 75% when compared to a MERV 14 cartridge with pre-filter. On a 20,000 cfm air handler, that can mean savings of up to 30,000 kWh/ year.

The least expensive kilowatt is the one you never have to use.

A New Level of Payback: Energy, maintenance and disposal can account for over 90% of the cost of filtration. The V8 slashes all three to deliver operating costs that are 1/3 that of alternatives. This means generally less than a three-year payback.



The AeroStar® Nexfil™ high efficiency mini-pleat air filter is specifically designed to provide high levels of air filtration efficiency to remove pollens, molds, dust, and other airborne irritants. Nexfil filters can greatly increase indoor air quality by removing these fine particles from the air. The high level of efficiency protects humans, ductwork, cooling coils, as well as any vulnerable items in the conditioned air space.

Nexfil is constructed with a state-of-the-art synthetic media which is extremely durable. The media pack is adhered to a high impact plastic frame which is very resistant to moisture and high humidity installations.

The combination provides a tough filter that is nearly impervious to the damage often incurred during shipping, handling, and installation. The filter is lightweight, easy to transport, install, and can reduce disposal volume. Nexfil's compact 2" mini-pleat is designed to allow facility engineers to improve air quality and increase IAQ levels without system modification.

BENEFITS

The Nexfil high efficiency mini-pleat filter has independent test lab data confirming exceptionally high levels of airborne particulate removal in a compact 2" depth design.

- MERV 15 and MERV 13 styles available to meet efficiency requirements.
- Multiple sizes available to directly replace existing low efficiency filters.

At a Glance

Advanced media and design provide high efficiency filter in a compact design 100% synthetic media and frame

Removes pollen and airborne irritants from HVAC system

Protects humans and equipment from airborne dust

MERV 15 Nexfil removes over 85% of particles 0.3-1.0 micron size from the airstream

Durable construction eliminates damage during handling and installation

Available in multiple sizes and no system modification required

Low resistance to air flow saves energy costs

Long service life

- 100% synthetic media provides low resistance to air flow, lowering energy consumption.
- Robust materials and design create a very durable and damage resistant filter.
- Highly effective removing 0.3-1.0 micron particles from the airstream.

APPLICATIONS

- Commercial Buildings
- Healthcare Facilities
- Government Facilities
- Schools & Universities
- Hotel & Convention Centers

Trane Catalytic Air Cleaning System



Ever hear these comments?

I smell mold.

Can we get rid of the diesel or gas smell?

Can we do a better job in reducing airborne infection rates?

The Trane Catalytic Air Cleaning System could be your answer

Uses advanced PCO technology

Controls:

- Particulate contaminants (dust)
- Gases (odors)
- Biological particles (fungi, bacteria, viruses)

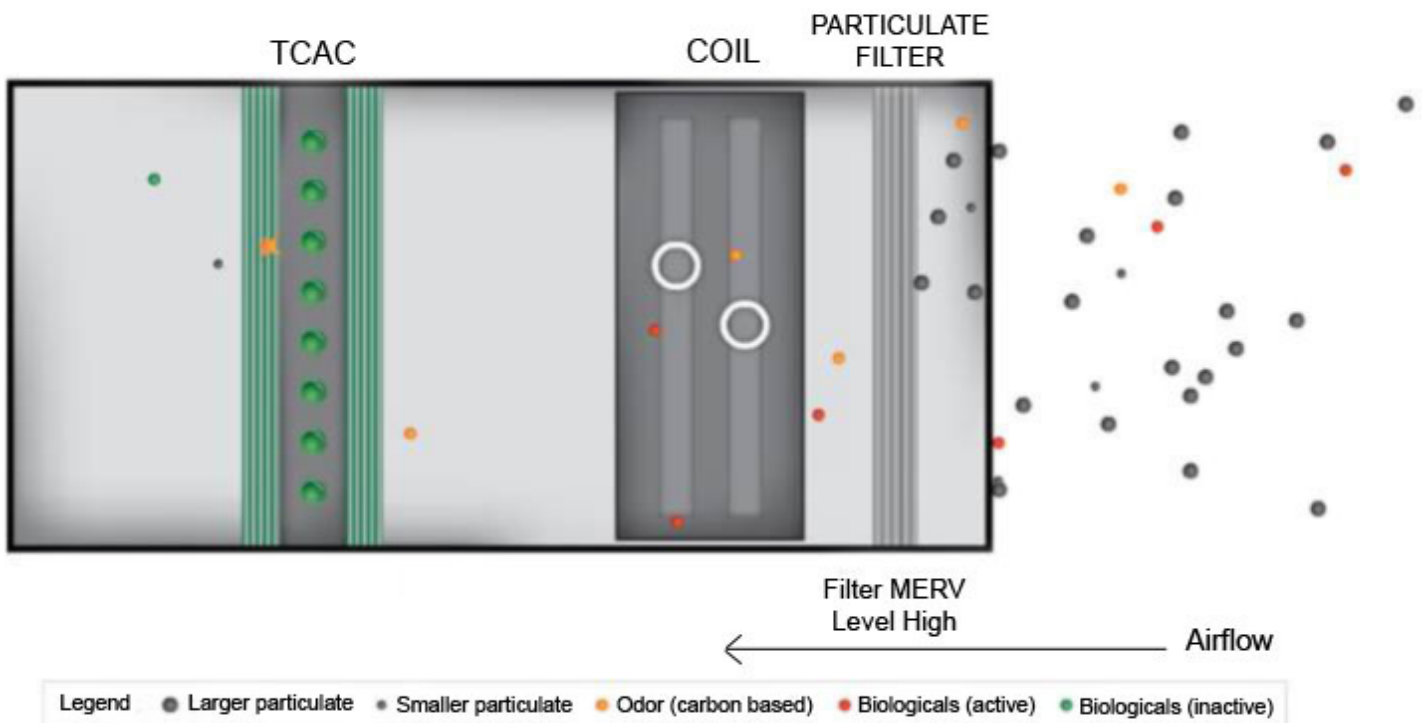
Environmentally friendly

- First stage- MERV 13 particulate filter
- Second stage- TCAC or Genesis Air PCO

A unique indoor air quality system to help control odors, biologicals, and VOC's



How It Works





TRANE®

Trane Catalytic Air Cleaning System



- Tested, unique and effective
- Reductions vary by contaminant and air speed
- Low .03" catalytic panel pressure drop
- Media life: 15 years
- UVc Bulbs = 15 months
- Merv Filters when dirty
- UL listed
- Can be turned off and on
- Trane Sales and Parts "exclusive for HVAC"

Ideal for

Healthcare

Education

Government Agencies

Entertainment Facilities

Industrial Applications



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