

PRODUCT OVERVIEW

- Great for removing
 - VOCs
 - Diesel Exhaust
 - Acid Gas
 - Ammonia and Amines

- Styles available
 - HEGA 2" and 4" Die cut beverage board
 - HEGA 12" Galvanized Steel
 - HEGA 2", 4" and 12" are Available in High-Impact Polystyrene Frame

- Ideal for use in
 - Hospitals
 - Hotels, Casinos & Offices
 - Data Centers
 - Airports & Train Stations
 - Cleanrooms and Specialty manufacturing
 - Schools & Museums
 - Restaurants



AEROSTAR HEGA[®] FILTERS

WHY THE HEGA FILTERS?

- Remove gaseous air contaminants and undesirable odors, giving your occupants and processes the indoor air quality that they require
- Enhanced carbon-loaded nonwoven media using 100% synthetic fibers that do not support microbial growth and high activity virgin activated carbon
- Patented media structure maximizes the carbon surface area available for absorption
- Non-dusting media
- Broad solution capability of traditional adsorption along with chemisorbents designed for specific gases and applications.



HEGA® FILTERS

GRADE 653 FOR VOCS

Specifications

- 480 grams/sq meter media loading
- High Activity Carbon (85% CTC)
- Works on physisorption and catalysis

Removes

- Volatile Organic Compounds (VOCs)
- Food and cooking odors
- Ozone
- Chlorine

GRADE 651 FOR DIESEL EXHAUST

Specifications

- 480 grams/sq meter media loading
- Blend of activated carbon and impregnated carbon
- Works with chemisorption and physisorption

Removes

- Vehicle exhaust
- Formaldehyde (HCOH) and Aldehydes
- Sulfur compounds (H₂S)

GRADE 876 FOR ACID GAS

Specifications

- 600 grams/sq meter media loading
- High Activity Carbon with impregnation
- Works on chemisorption

Removes

- Sulfur compounds (H₂S and SO₂)
- Nitrogen Oxides (NO_x including NO, NO₂)
- Acid gases

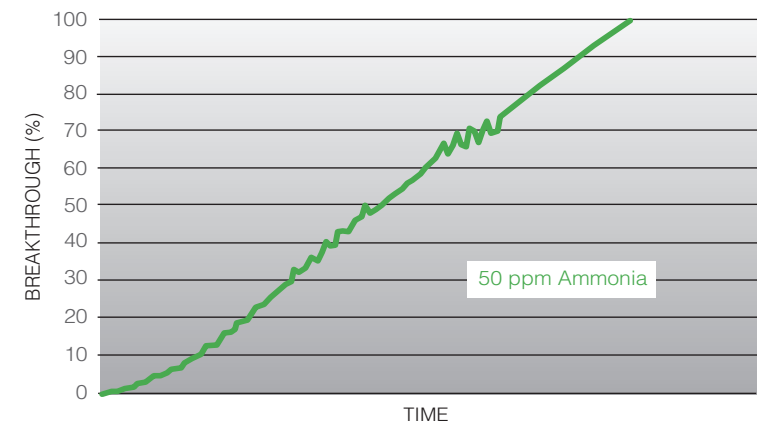
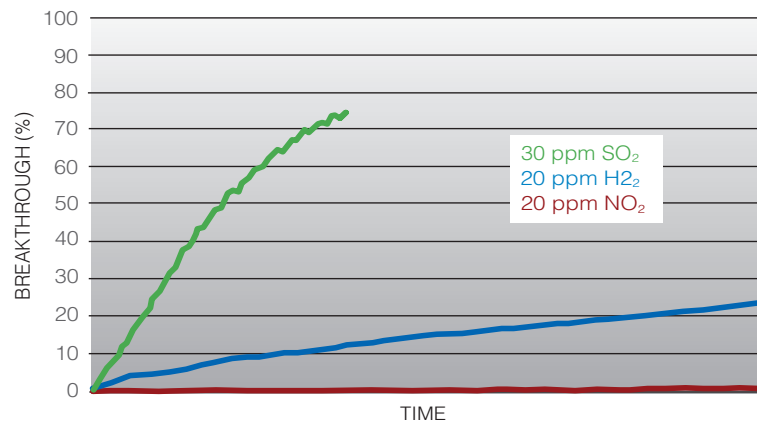
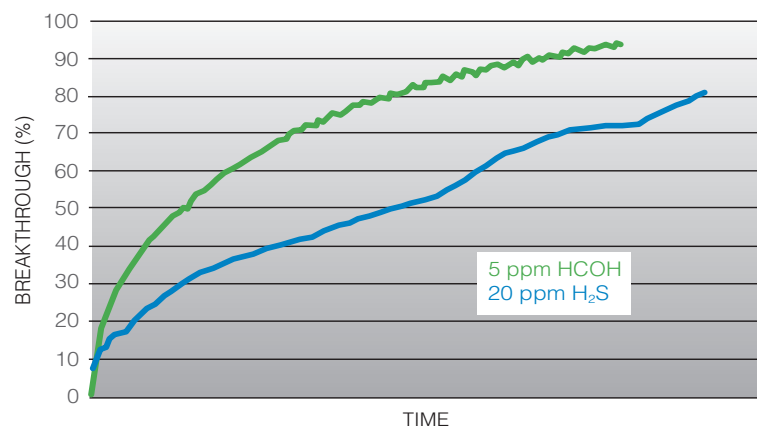
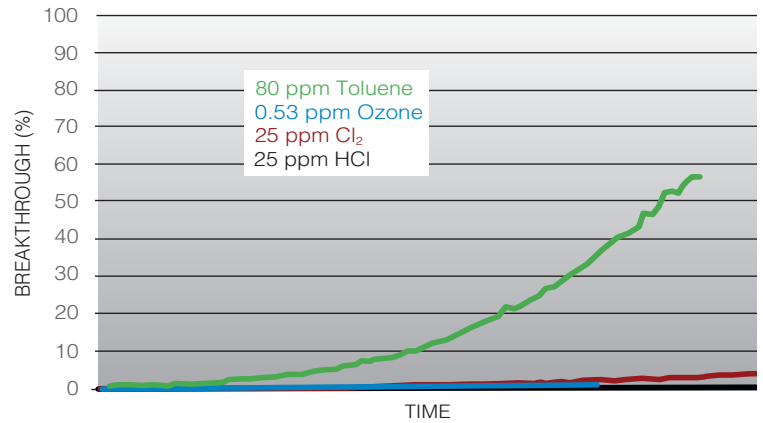
GRADE 147 FOR AMMONIA AND AMINES

Specifications

- 480 grams/sq meter media loading
- High Activity Carbon with impregnation
- Works on chemisorption

Removes

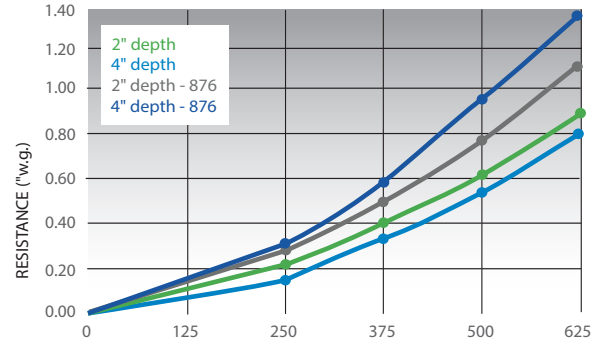
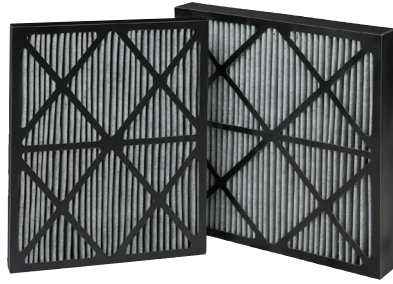
- Ammonia and Amines
- Bathroom odors
- Animal odors





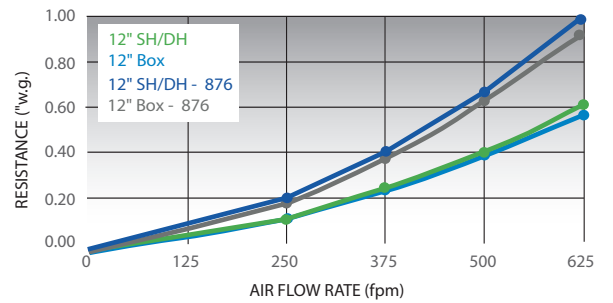
SERIES 1000 (DIE CUT)

- Beverage board die cuts
- 2" and 4" nominal depths
- 1.6 pleats per inch
- Custom sizes available



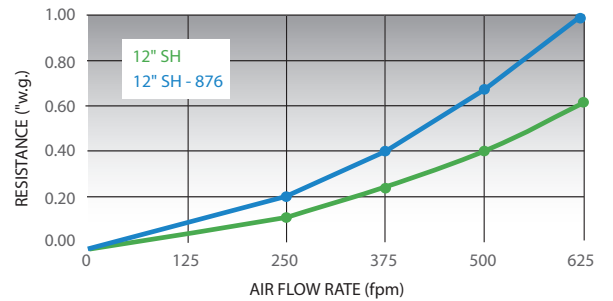
SERIES 2000 (GALVANIZED FRAME)

- Galvanized frame
- Box style, single (SH) and double (DH) header
- 12" nominal depth
- 1.6 pleats per inch with stabilizers
- Special sizes and depths available



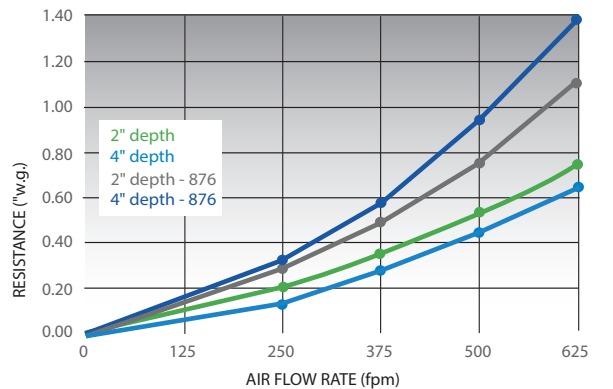
SERIES 3000 (PLASTIC FRAME)

- Injection-molded Hi Impact Polystyrene (HIPS)
- Single (SH) header style
- 1.6 pleats per inch with stabilizers
- No sharp edges
- Ideal for harsh environments



2" AND 4" NOMINAL DEPTH (PLASTIC FRAME)

- Injection-molded Hi Impact Polystyrene (HIPS)
- Box style
- 1.6 pleats per inch with stabilizers





MEDIA SELECTION GUIDE BY COMMON NAME

GROUP OR COMMON NAME LISTING	PREFERRED MEDIA
Adhesives	653
Alcoholic Beverages	653
Ammonia	147
Animal Odors*	147 or 653
Antiseptics	653
Asphalt Fumes	653
Bathroom Smells*	147 or 653
Bleaching Solutions	876
Body Odors	653
Burned Flesh	653
Burned Food	653
Burning Fat	653
Cancer Odor	653
Cheese	653
Cleaning Compounds (non-ammonia)	653
CS ₂ (Carbon Disulfide)	876
Decaying Substances	653
Detergents	653
Diesel Exhaust	651
Diesel Fumes (Fuel)**	653
Embalming Odors	653

GROUP OR COMMON NAME LISTING	PREFERRED MEDIA
Film Processing Odors	653
Food Aromas	653
Fruits	653
Gasoline Fumes	653
Hydrogen Sulfide	876
Kerosene	653
Moth Balls	653
Paint Odor	653
Pastes and Glues	653
Perfumes, Cosmetics	653
Plastics	653
Rubber	653
Sewer Odors	653
Smog	876
Swimming Pool (Chlorine)	876
Tar	653
Tobacco Smoke Odors	653
Turpentine	653
Urea	653
Varnish Fumes	653
Vinegar (acetic acid)	876

* If Ammonia is the strongest of the odors use 147 media.

** If fumes are generated via a combustion process, e.g. automobile exhaust and gasoline vapor, use 651 media.

ENGINEERING SPECIFICATIONS

1.0 General

- 1.1 Filters shall be Aerostar® Purafilter® HEGA Series odor removal pleated air filters as manufactured by Filtration Group or approved equivalent.
- 1.2 Filters shall be available in nominal depth of 2", 4" and 12".
- 1.3 Actual filter height and width shall be 5/8" less than the nominal dimensions.

2.0 Filter Materials of Construction

- 2.1 Media shall be a carbon-loaded nonwoven consisting of 100% synthetic fibers that do not support microbial growth. Media shall be loaded with at least 480 g/m² of coconut shell activated carbon with at least 1100 m²/g of available surface area and appropriate chemical enhancement as noted below. Media shall have no other adhesives that reduce the available surface area of the sorbent.
 - HEGA 653 – 480 g/m² loading; 1500 m²/g surface area; no impregnation
 - HEGA 651 – 480 g/m² loading; 1100 m²/g surface area; impregnation for removal of formaldehyde and components found in diesel and aircraft exhaust.
 - HEGA 876 – 600 g/m² loading; 1500 m²/g surface area; base impregnation
 - HEGA 147 – 480 g/m² loading; 1500 m²/g surface area; acid impregnation

- 2.2 2" and 4" Frame shall be of rigid, injection-molded, high impact polystyrene (HIPS) construction. Support members of HIPS material shall be bonded to the frame and the media to ensure pleat separation and filter integrity.

12" Frame shall be headered of rigid, injection-molded, high impact polystyrene (HIPS) construction. Pleat separators composed of high impact polystyrene (HIPS) shall be inserted at regular intervals on both upstream and downstream sides to ensure pleats remain open to air flow.

- 2.3 A sealant shall be used to bond the media to the frame to prevent bypass.
 - 2.4 A low off-gassing sealant shall be used to encapsulate the media within the frame to prevent bypass.
 - 2.5 Filters shall be sealed in a non-porous bag to inhibit contamination during shipment and storage.
- ### 3.0 Filter Performance
- 3.1 Filter initial pressure drop shall not exceed 0.63" w.g. for 2" deep filters, 0.55" w.g. for 4" deep filters, 0.43" w.g. for 12" deep filters when tested at 500 fpm. Filters shall have a recommended final resistance of 1.25" w.g.
 - 3.2 Filter shall demonstrate high efficiency performance against the following contaminants:
 - HEGA 653 – Toluene and other VOCs and Ozone
 - HEGA 651 – Formaldehyde and components found in diesel and aircraft exhaust
 - HEGA 876 – Acid gases (e.g. H₂S, SO₂, and others)
 - HEGA 147 – Ammonia and other alkalines
 - 3.3 Filters shall be rated to withstand a continuous operating temperature of at least 120°F