# Molecular Filtration Full Line Brochure





## MANN+HUMMEL Air Filtration Americas



A division of the LS&E (Life Sciences & Environment) segment, MANN+HUMMEL - Air Filtration Americas is already one of the world's largest filtration companies, but our vision of "Leadership in Filtration" stands for much more than sales or size. Our vision keeps our core principles in the forefront:

- Tradition spanning over 80 years
- Commitment to innovation
- Extensive R&D activities
- Global presence
- Customer obsession
- FILTER values (Focus, Innovation, Leadership, Trust, Empowerment, Results)

Values are important because they underline how we want to achieve our goals. Values aren't just words. They're a statement of purpose. One Team. One Goal. One Voice.

#### INNOVATIVE FILTRATION SOLUTIONS

At MANN+HUMMEL, we take responsibility for our common goals as one global team. Together, we provide the filtration solutions that will make our common future cleaner. In the Air Filtration Americas division, MANN+HUMMEL uses the most technologically advanced manufacturing equipment in a sophisticated production facility. This ensures that the quality and performance of our high purity products are unrivaled in today's market. MANN+HUMMEL – Air Filtration Americas has implemented a stringent set of quality standards that will give you the confidence and assurance that you need for all applications.

### **Carbon Pleated Filters**







### MC PRIME LD/MD/HD

The MC Prime LD/MD/HD uses a fiber-to-carbon bonding that requires no adhesive. This allows virtually the entire carbon surface to be available to capture gases. In addition, the MC Prime LD/MD/HD utilizes a moisture resistance die cut frame with diagonal supports bonded to the media pack for extra strength to maintain proper pleat spacing and the pleat pack is bonded to a two piece frame.

- Available in LD, MD, and HD
- MERV 7, 8, & 10
- Moisture resistant, 100% reclaimed fiber die cut frame
- Low resistance
- Quality controlled manufacturing facility

### **MC PRIME 50/50**

The MC Prime 50/50 filter is a unique blend of molecular and particulate filtration that utilizes the CarbonWeb® media in a 50/50 blend of granular activated carbon and impregnated alumina to maximize the effectiveness against the broadest range of gaseous contaminants.

- 50/50 blend carbon and alumina
- MERV 7
- Available in 1", 2" and 4" depths
- Up to 300 g/sf carbon loading
- Easy retrofit

### MC PRIME 13

The MC Prime 13 is a pleated hybrid filter offering both particulate and molecular filtration. In addition to this high particle removal efficiency, MC Prime 13 packs 200 gsm of carbon into its robust frame. This carbon is a fine 20 x 50 mesh that delivers high removal performance on many common odors such as those from diesel exhaust, smoke, helicopter exhaust, cooking, and bathrooms.

- Particulate and molecular filtration
- MERV 13
- 200 gsm of high activity carbon
- 20 x 50 mesh carbon
- 28 point die cut frame

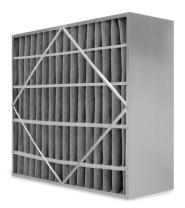
### Carbon Box Filters



### MC PROCELL/ MC PROCELL 50/50

The MC Procell 50/50 offers both molecular and particulate filtration and offers easy retrofit into existing systems. MC Procell 50/50 is offered in both a metal no header version and a metal single header version – this allows for easy interchange with existing filters without a costly retrofit of the HVAC unit.

- Rigid filters with carbon
- Bulk granulated carbon
- Available with a 50/50 blend
- Low resistance



### MC PROCELL15

The MC Procell15 filter is a molecular filter that offers MERV 15 particulate efficiency with low resistance and easy retrofit into current HVAC systems. The MC Procell 15 is offered in a variety of frame styles – single header and no header box style – this broad offering of frame styles allows for easy and convenient retrofit into most all housing/holding frame configurations.

- Single header or box style
- Up to 645 GSM of chemical media
- MERV 15

### Carbon Mini Pleat Filters



### MC TL SERIES

MC TL Series filters are thin line filters that provide both molecular and particulate filtration. Their thin profile, just 2 inches and 4 inches deep, allows easy use in current HVAC systems without the need for expensive modifications.

- Available in standard and diesel
- Available in 2" and 4" depths
- Molecular and particulate filtration
- Removes a wide range of odors and gases
- Double wall plastic frame



### **MC VB4 15**

MC VB4 15 packs 11.5 lbs of carbon into a nominal 24 x 24 x 12 inch sized filter. Unlike most carbon filters, MC VB4 15 utilizes a smaller mesh size, which exposes more of the carbon's surface area to the air flow. This larger open surface area translates into a higher removal efficiency of airborne molecular contaminants.

- MERV 15
- V-Bank filters with carbon
- All plastic frame
- 11.5lbs. of carbon in a 24x24x12 inch filter



### MC VB4 HC

MC VB4 HC is a V-Bank carbon filter that features special honeycomb panels. These panels hold 24 pounds of carbon per 24 x 24 x 12 inch filter—either 100% 6 x 12 mesh, industrial grade CTC high activity carbon, or a 50/50 blend of carbon and potassium permanganate.

- V-Bank filters with carbon
- 1 inch bed depth
- All plastic frame
- 24lbs. of carbon in a 24x24x12 inch filter

### Carbon Ring Panel Filters



### MC TRI-DEK® PANEL & LINKS

MC Tri-Dek® panel and links feature a unique and advanced carbon-to-fiber bonding method that allows for more precise carbon loadings and lower resistance. The net result is more carbon and a lower operating resistance for the cost.

- Available in panel or link configuration
- Designed to remove particulate and gaseous contaminants
- MERV 8/9 particulate filtration
- Internal wire support
- Eliminates air bypass

### **Loose Fill & Monoliths**



#### **HONEYCOMBS**

Honeycombs are monolithic, ceramic materials with a high plurality of parallel, square channels. The homogeneous and porous material facilitates the capture of molecular contaminants into the activated carbon pore system with very low resistance. Honeycombs can be provided in different geometric shapes, such as square, rectangular, or circular along with different cell densities and depths.

- Available in plastic, galvanized steel, or stainless steel frames
- Available in 2", 4", and 6" depths
- Low pressure drop that can be tuned for most applications



### **CANISTERS**

Canisters are filled with a wide variety of chemical media and they offer enough bed depth to remove higher concentrations while minimizing the pressure drop through them. Canisters seal on the downstream side, providing a reliable seal, maximizing their efficiency.

- Available in plastic, galvanized steel, or stainless steel frames
- Available in 10", 18", and 24" lengths
- 1" bed depth



### **CASSETTES**

Cassettes are a cost effective way to utilize loose fill chemical media in side access housings and HVAC units. Available in two different sizes, cassettes provide the value of bulk fill media with the ease of disposal of filters.

- 12x12x12" with a 3" bed depth
- 6x12x18" with a 1" bed depth
- Universal fit in competitive units



### **PANELS**

Panels offer a low cost alternative to other products to maximize the amount of chemical media within a given space. Panels can be installed in either flat filter housings or angled filter housings to achieve a higher face area and lower pressure drop. Panels are easily customizable with respect to their size, the chemical media they contain and their material of construction.

- Available in 1", 2", and 4" depths
- Various media types are available, including blends
- Available in disposable or refillable designs

### Other Carbon Filters



### MC SELECT SERIES

MC Select Series pads are available in either 300 gram (3225 grams/m2) or 600 gram (6450 grams/m2) per square foot loadings. MC Select Series pads utilize granular activated carbon while MC Select Series plus pads are a 50/50 blend of granular activated carbon and impregnated alumina. MC Select Series pads are covered with netting to minimize shedding. MC Select Series and MC Select Series Plus pads are also available in die cut frames.

- Disposable panel filters
- Carbon media with pre and post filters
- Designed to remove particulate and gaseous contaminants
- MERV 7



### MC BULK CARBON

A wide variety of chemical media types are available using activated carbon and alumina as the substrates. Chemical impregnants are applied as needed to remove contaminants that can only be removed through chemisorption. Blended medias are also available for applications that require multiple media types in a single pass of media.

- Available in one cubic foot boxes or 1100 pound bulk bags
- Many meet the requirements for UL certification
- Can be tested for remaining life



### MC MEDIA PADS & ROLLS

MC media pads & rolls offer excellent removal of odors and gaseous pollutants and are available in either pads or in bulk rolls. MC media pads & rolls is available in 20 grams/ft2 (215 grams/m2), 30 grams/ft2 (325 grams/m2), 45 grams/ft2 (485 grams/m2) and 90 grams/ft2 (970 grams/m2) loadings of 60% activity granular activated carbon.

- Available in four carbon loadings
- Impregnated polyester media
- Removes odors, gaseous pollutants
- Excellent for solving sudden odor issues
- Optional die cut frames

### Carbon Equipment



### MC MICROLOCK HOUSINGS

MC Microlock housings are engineered to meet the specific needs of each application. These units can house molecular filters only, or a broad range of both particulate and molecular filters. Additional features such as dampers, louvers, filter gauges, transitions, bases, weatherproofing, and fans are available as required.

- Available in galvanized steel, aluminum, and stainless steel
- Available in stitch welded for fully welded construction
- Horizontal or vertical air flow
- Single wall or double wall construction





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