

FILTAIR® 4000-12000

Industrial Centralized Systems

Welding Safety and Health 

Quick Specs

Industrial Applications

Manufacturing and fabrication
Schools and training centers

Processes

Stick (SMAW)
Flux-cored (FCAW)
MIG (GMAW)
TIG (GTAW)

Accu-Rated™ Airflow Varies by model (see page 5)

Sound Level 72-75 dBA at 5 ft. (1.5 m), peak pulse cleaning is 92.7 dBA at 5 ft. (1.5 m)

Compressed Air Requirements
80-100 psi

Input Power 230, 460 or 575 V, 3-phase, 60 Hz

Dimensions Varies by model (see page 5)

Weight Varies by model (see page 5)

Weld fume extractors designed for manufacturing – handheld and automation, fabrication shops, and training facilities.

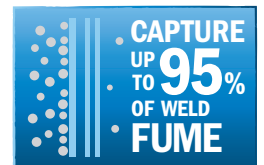
These models are part of an engineered system and offer the best filter and cleaning technologies to effectively manage weld fume particulate.



Takes up less shop, roof, or outdoor space.



Quieter for a safer, more productive work area



Standard high-efficiency filter designed to capture weld fume

Have a certified industrial hygienist test the air in your facility to determine equipment requirements and ensure adequate protection from contaminants.

FILTAIR 4000 model shown.
Other models available (6000, 8000, and 12000).
See page 5.



Fume extractor is warranted for two years, parts and labor.



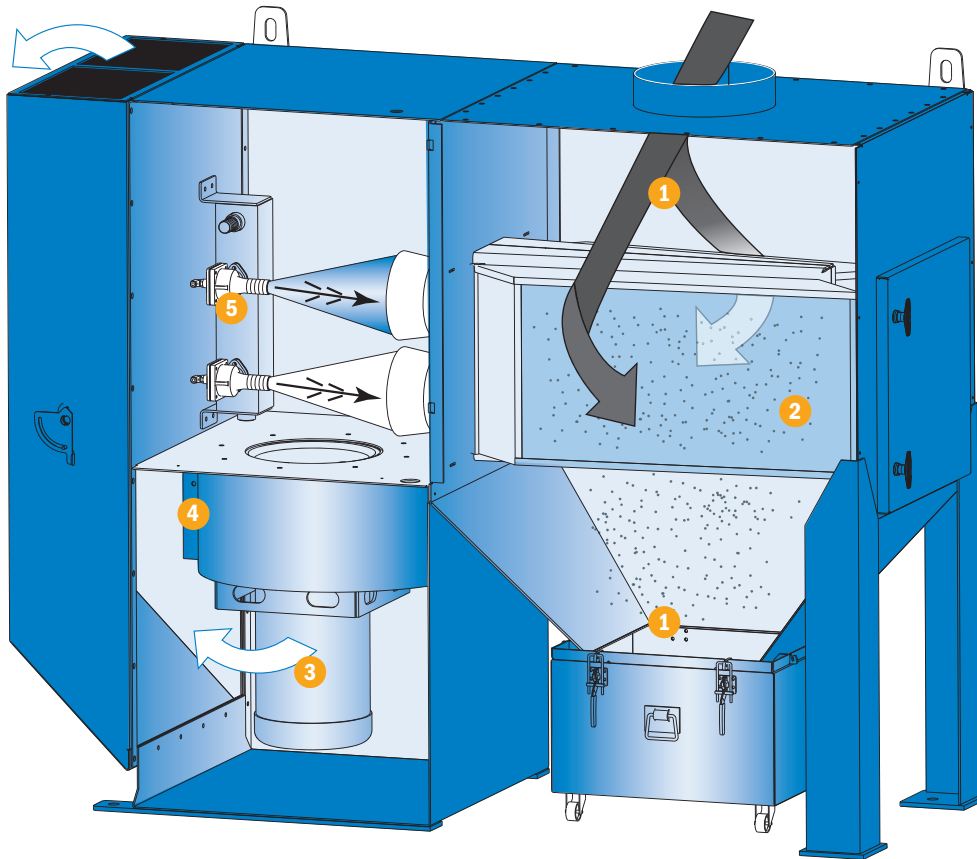
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The FILTAIR® Advantage



- 1 **Efficient design.** Dirty air is pulled down into the filter area which deposits fume particulate on the surface of the filter and into the 22-gallon particulate bin.



- 2 **Smaller size and fewer filters.** One FilTek XL filter replaces up to three cartridge-style filters increasing efficiency, reducing extractor size, and lowering operational costs.

- 3 **Maintenance free.** Premium high-efficiency motor with direct drive blower eliminates bearings and belts and ensures vibration free operation. Located in clean air for maximized life.



- 4 **Quiet operation.** Integrated silencer housing minimizes fan and motor noise.

- 5 **Longer filter life** is a result of our Linear Jet Automatic Cleaning System which delivers cleaning air in straight line paths through the filter media and easily pulses weld particulate off of the surface-loaded filter media. Easier cleaning results in longer filter life, better suction, and better efficiency.



FILTAIR units are up to 65 percent smaller than traditional cartridge filter collectors.

The FILTAIR® Advantage

Outdoor models come standard with wind load and seismic ratings.

Strong 3/16-inch to 12-gauge, all-welded steel structure compliant with IBC2006.

24 VDC motor start/stop feedback relay allows an external signal to automate the remote start of the collector fan from other equipment.



Integrated electrical controls. Control panel manages all of the collector functions, including the fan, the filter differential, and the pulse cleaning system.



Easy filter access and maintenance

FilTek® XL filter packs have easy-grip handles, weigh less than the 50-pound OSHA lift limit, and require no tools for maintenance.



Cleaner air with FilTek XL filters

The FilTek XL filter's higher MERV rating means unrivaled filtering performance.

Filters are rated on a MERV scale, which measures filter efficiency based on particle count. MERV ratings range from 1 to 16, with 16 being the best at filtering small particles — such as those found in weld fumes. The vast majority of weld fumes are less than one micron in diameter, or roughly 1/100th the width of a human hair.

Filters in common air filtration systems often have MERV ratings from 7 to 11. FilTek XL filters are rated at class-leading MERV 15 to capture up to 95 percent of weld fume particulates including those found in hexavalent chromium.

Filter media performance summary

FilTek XL filters have the highest efficiencies and lowest pressure drops to capture better, last longer, and lower operating costs.

MERV Comparison

Applicable Weld Fume MERV Rating Categories ¹	Particle Size Range Efficiency % ²		
	0.3 to 1 µm	1 to 3 µm	3 to 10 µm
10	Not rated	50–65%	85%
11	Not rated	65–80%	85%
12	Not rated	80–90%	85%
13	<75%	90%	90%
14	75–85%	90%	90%
15 Miller® FilTek XL	85–95%	90%	90%
16	≥95%	≥95%	≥95%
HEPA ³	≥99.7%	≥99.7%	≥99.7%
Weld Fume Composition ⁴	75–95%	≤15%	≤10%

¹American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) 52.2

²National Air Filtration Association (NAFA) Guide

³HEPA filters are depth loading and have high restrictions to air flow, reducing system performance versus FilTek XL filters.

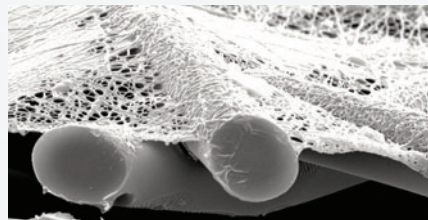
⁴Jenkins, Pierce, Edgar, Particle Size Distribution of GMAW and FCAW

Filter Media Type	Weld Fume Capture Efficiency	Pressure Drop	Relative Cost
Cellulose	Very low	Low	\$
Cellulose blend	Low	Moderate	\$
Spunbond polyester	Moderate/high	High	\$\$\$
Meltblown composite	High	High	\$\$
Miller FilTek XL	High	Low	\$\$

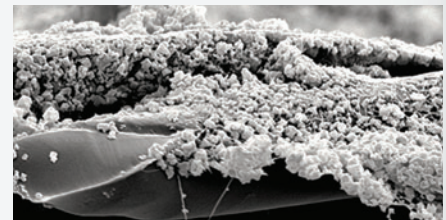
FilTek XL filters provide high efficiencies and low operating pressure to out-filter, outperform, and outlast all the rest.

Not just filters — FilTek XL filters

The FilTek XL filter media design results in extended filter life, higher efficiency and stronger suction, resulting in a cleaner work space and improved weld fume capture. Filter media from FilTek XL high-volume filters are made up of a durable substrate with an engineered fiber designed to capture even the smallest of weld fume particles, while maintaining the highest level of efficiency.



Clean FilTek XL media

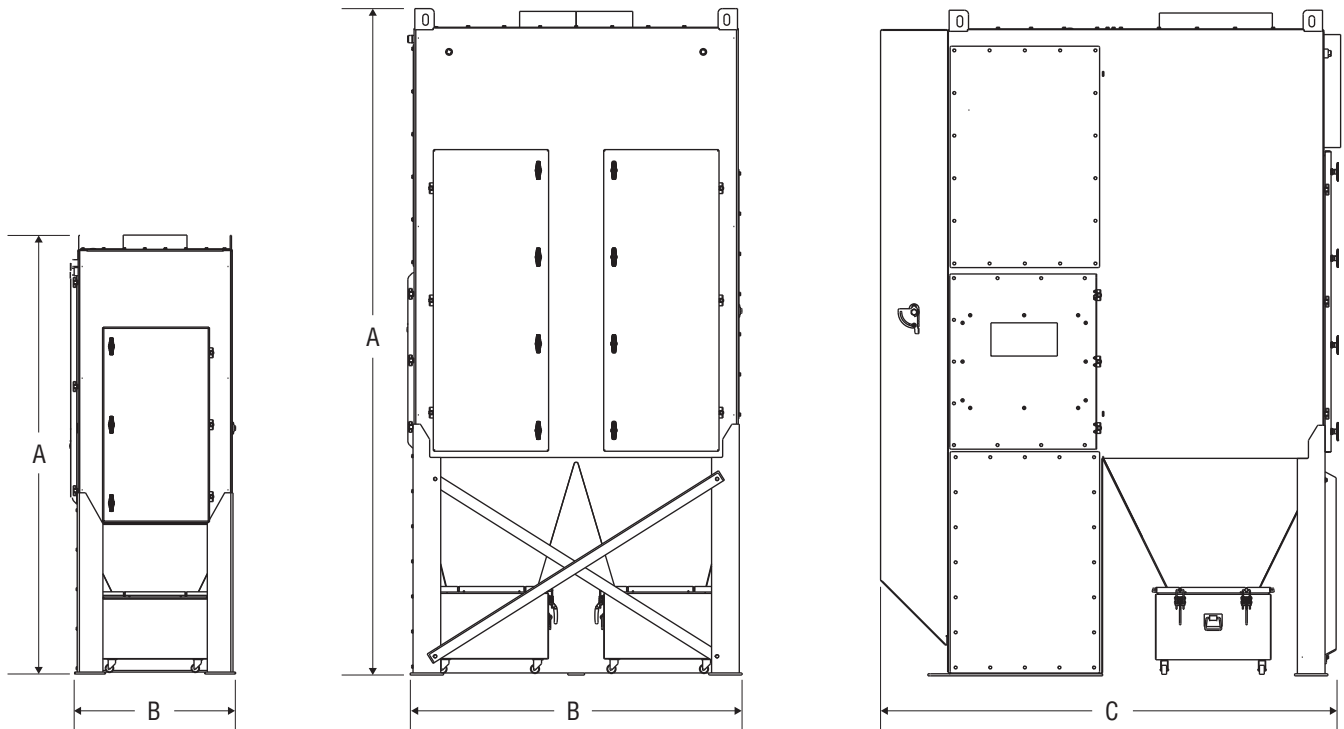


Surface loaded FilTek XL media (substrate still clean)

Specifications (Subject to change without notice.)

Model	Nominal Airflow Range*	Number of Filter Packs	Number of Valves	Sound Level	Input Power	Dimensions**			Shipping Weight
						A***	B	C	
FILTAIR® 4000	2,000–4,800 cfm (944–2,265 L/sec.)	4	4	72–75 dBA at 5 ft. (1.5 m) Peak pulse cleaning is 92.7 dBA at 5 ft. (1.5 m)	230, 460 or 575 V, 3-phase, 60 Hz	86.1 in. (2,187 mm)	31.2 in. (792 mm)	83.2 in. (2,113 mm)	1,600 lb. (726 kg)
FILTAIR® 6000	2,300–6,600 cfm (1,085–3,115 L/sec.)	6	6			117.2 in. (2,977 mm)	31.2 in. (792 mm)	83.2 in. (2,113 mm)	2,250 lb. (1,021 kg)
FILTAIR® 8000	2,500–7,000 cfm (1,180–3,304 L/sec.)	8	8			135 in. (3,429 mm)	37.2 in. (945 mm)	83.2 in. (2,113 mm)	2,900 lb. (1,315 kg)
FILTAIR® 12000	4,000–10,500 cfm (1,888–4,955 L/sec.)	12	12			120.3 in. (3,056 mm)	59.7 in. (1,516 mm)	83.2 in. (2,113 mm)	3,900 lb. (1,769 kg)

*Based on clean filters. **Dimensions for base models without factory options. ***Includes 3.5-inch (89 mm) lifting lug.



Front View
FILTAIR 4000 (shown), 6000, 8000

Front View
FILTAIR 12000

Side View
FILTAIR 4000, 6000, 8000, 12000

Typical Installations

- Indoor
- Rooftop
- Outdoor pad

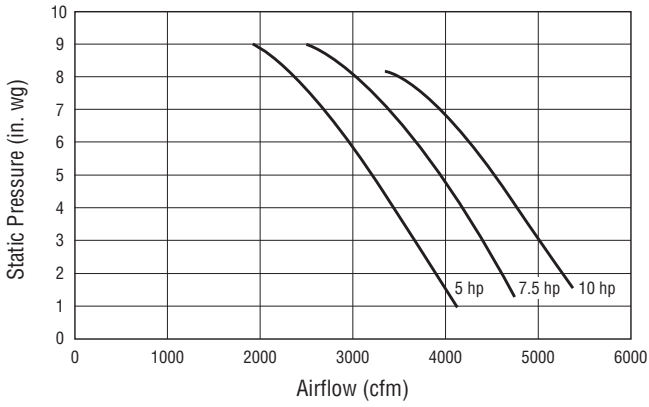
Outdoor Packages Include

- Remote mounted control box
- Optional weather hood

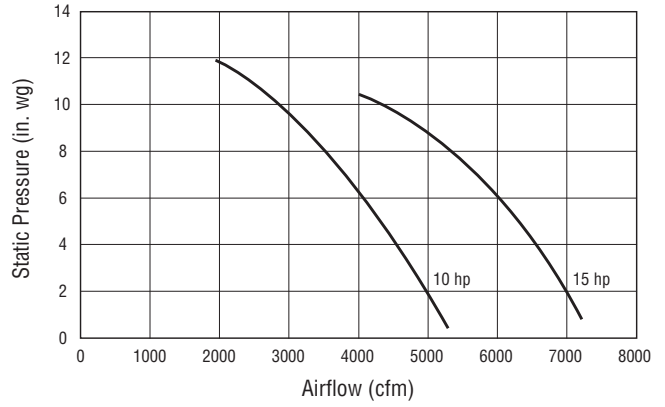
Performance Data

The system performance graphs below show the fan performance with clean filters. The curve indicates available external static pressure to the unit.

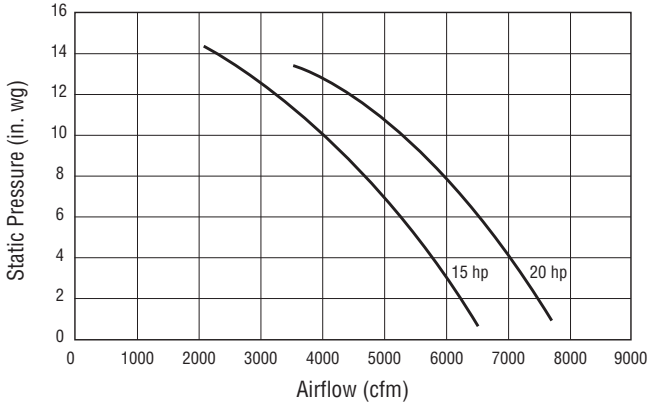
FILTAIR 4000



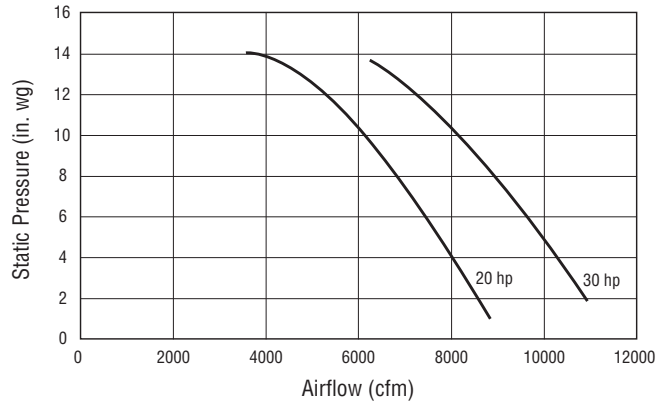
FILTAIR 6000



FILTAIR 8000



FILTAIR 12000



Genuine Miller® Accessories

Miller offers a full line of accessories for complete system solutions and turnkey installation.

Easy-to-operate, pre-assembled extraction arms and mounting equipment.

- **Telescoping arms** are designed to fit small booth spaces used in training centers and educational booths. Telescopes from 3 to 4.5 feet with a wide range of motion to cover all positions.
- **Standard arms** are designed to cover larger spaces and are available in 7-, 10-, and 12-foot versions. External brackets and adjustments allow air to pass through with less resistance giving you stronger cfm (airflow).
- **ZoneFlow™ arms** are designed to cover larger spaces and are available in 10- and 12-foot versions. ZoneFlow arms create a negative pressure zone that funnels air to the center of the arm from greater distances. External brackets and adjustments allow air to pass through with less resistance giving you stronger cfm (airflow).
- **Arm mounting bracket and ducting kit** includes a supporting bracket and collar for connecting an extraction arm to ductwork.



Telescoping arm



Standard arm



ZoneFlow arm



Arm mounting bracket and ducting kit

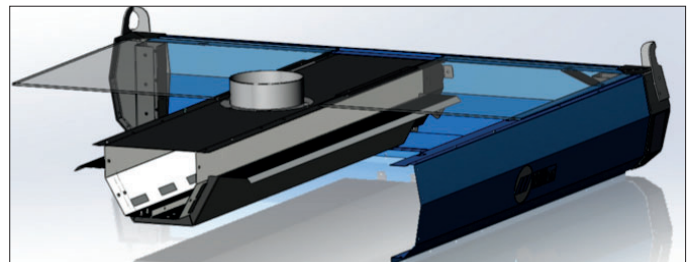
Spark Cooler®

- Cools sparks using the fume extractor's airflow.
- Very efficient — maximizes the extractor's power.
- Simple design is easy to install.



FILTAIR low profile hood

- Available in sizes from 4 x 4 feet up to 16 x 16 feet in one-foot increments.
- Exclusive design — capture velocity zone is maximized and distributed over the work area.
- Hood airflow design reduces sound for better communication.
- Unique airflow offers spark abatement in the extraction rail, and also in the recommended Spark Cooler.
- Clear, UV-protected polycarbonate ceiling panels allow maximum light into the cell.
- Corner lift hooks are convenient for installing or hanging over a work area. The hood can also be placed on an existing cell enclosure or supported with post assemblies.



Ordering Information

Fume Extractor and Options	Stock No.	Description	Qty.	Price
FILTAIR® 4000 FILTAIR® 6000 FILTAIR® 8000 FILTAIR® 12000		Extractors come with MERV 15 high-efficiency filters standard, configured with top OR front air inlet, and also configured for indoor OR outdoor mounting. (Note: outdoor models are wind load and seismic rated and include remote-mounted control box and optional weather hood)		
Weather Hood		For outdoor mounting with outdoor exhaust		
Accessories				
Telescoping Extraction Arms	301242	6 in. diameter, 3–4.5 ft. length		
	301237	8 in. diameter, 3–4.5 ft. length		
Standard Extraction Arms	300953	6 in. diameter, 7 ft. length		
	300954	6 in. diameter, 10 ft. length		
	300955	6 in. diameter, 12 ft. length		
	300980	8 in. diameter, 7 ft. length		
	300981	8 in. diameter, 10 ft. length		
	300982	8 in. diameter, 12 ft. length		
ZoneFlow™ Extraction Arms and ZoneFlow Motor Control Box	951810	6 in. diameter, 10 ft. length		
	951811	6 in. diameter, 12 ft. length		
	951758	8 in. diameter, 10 ft. length		
	951759	8 in. diameter, 12 ft. length		
Arm Mounting Bracket and Ducting Kits	300952	For 6 in. diameter arms		
	300771	For 8 in. diameter arms		
FILTAIR Low Profile Hood		Available in sizes 4 x 4 feet up to 16 x 16 feet in one-foot increments		
Spark Cooler®				
Ducting		Quick-fit clamp-together style		
Installation Services				
Replacement High-Efficiency Filter	300927	All models		
Replacement HEPA Filter	300933	All models with HEPA filter option		

Date:

Total Quoted Price:

Distributed by:

