

New!

Superior Technology and Performance



FILTAIR™ Mobile Fume Extractor Systems

MWX-S (Self Cleaning) and MWX-D (Disposable Filter)

Source Capture Systems with Nanofiber Filter Technology for Extended Filter Life, Increased Efficiency and Cleaner Air

Breathe Easy

Two FILTAIR fume extractor models available—MWX-S and MWX-D provide industrial solutions designed specifically for welding applications.

- Superior nanofiber filter technology: Results in extended filter life and higher filter efficiency.
- Self-cleaning model: Features innovative cleaning mechanism, greatly extending filter life.
- Powerful 875 CFM (airflow): Internal tubing of the extraction arm is obstruction free to achieve maximum airflow.
- Extraction hood for 360° rotation: Large capture source provides better coverage and easy movement.
- Simplicity: Easy to operate, easy to replace or clean filter, easy to maintain.
- Rugged metal base designed to withstand tough shop conditions.

Cleaner Air

FILTAIR fume extractors effectively clean welding fumes from the air. Combining nanofiber filter technology, longer lasting airflow, and an optimized design results in a more powerful fume extraction system.

Extended Filter Life

Nanofiber filters feature superior surface loading and weld fume holding capacity, meaning your fume extractor can run up to twice as long as the competition before requiring filter cleaning or replacement.

Easy to Use

Saving operator downtime—from the hinged filter hatch that provides easy access to the filter and tool-free replacement, to a simple front panel and the easy-to-read gauge that tells the operator when it's time to clean or replace the filter.



NEW! MWX-S with 10 ft Extraction Arm shown.



MWX-D model with disposable filter also available.

Have a qualified person test the air in your facility to determine what equipment is required to provide adequate protection from contaminants.

FILTAIR Mobile Fume Extractors are the right choice for:

- Manufacturing and Production
- Fabrication Shops
- Maintenance and Repair Operations
- Schools/Educational Facilities

The best filter technology, longer lasting extraction power, and simplicity; combined with the industrial strength, quality, reliability and support you expect from Miller.

FILTAIR™ – Your Source Capture System

Benefits of Air Cleaning

- Promote employee health and wellness
- Comply with OSHA/EPA regulations*
- Save energy costs by re-circulating conditioned air
- Decrease shop cleaning

*OSHA has lowered the permissible exposure limit of hexavalent chromium to 5 micrograms per cubic meter of air per eight-hour, time-weighted average from the current 52 micrograms per cubic meter. The use of engineering controls to control exposure is required by May 30, 2010. Hexavalent chromium is used as a corrosion inhibitor in metals, such as stainless steel.

Filter Technology and Design

Nanofiber Benefits

Miller FILTAIR Nanofiber

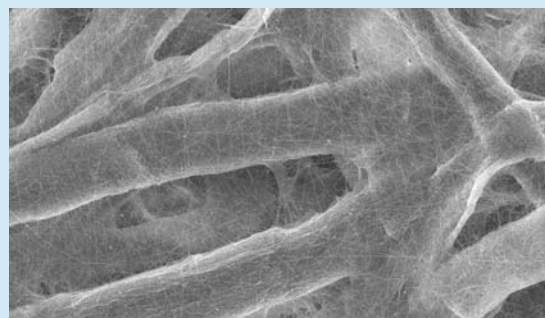
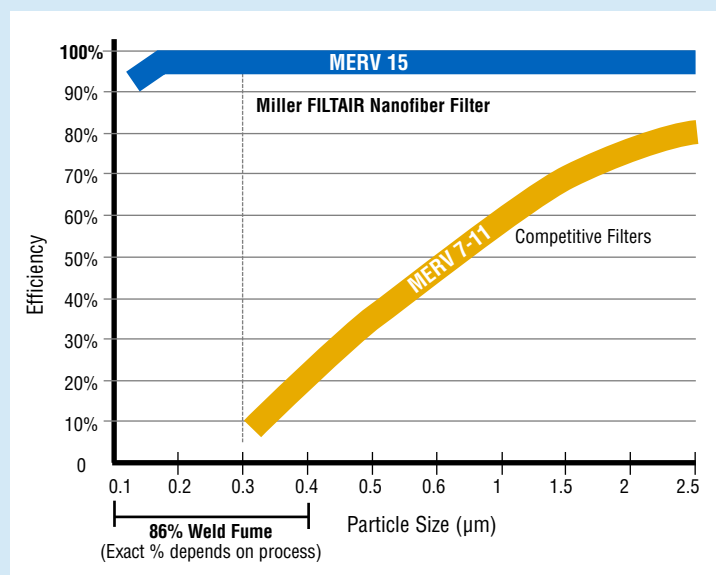
- FILTAIR nanofiber filter rated highest in industry at MERV 15.
- Efficient at capturing submicron particles found in welding, including hexavalent chrome.
- Up to 95% of weld fumes are submicron (0.3–1.0 μm). Miller has a filter designed to capture these submicron particles (see chart below).
- Captures more weld fumes—up to 6 times more holding capacity.

FILTAIR's key differentiator is filtering weld fumes vs. relocating them.

Competitors

- Most competitors claim 99% efficient. This is at 1.0 μm and larger (general dust).
- General dust collectors typically range MERV 7–10 which means they are less than 50% efficient on submicrons (they don't adequately capture fume particulate).
- Competitors may recommend a costly HEPA filter, which reduces airflow and increases replacement filter expenses. Disadvantages of a HEPA filter include:
 - CFM (airflow) drops off faster
 - Two filters to replace

Air-Cleaning Efficiency with Specific Particulate Sizes



Nanofiber at 600X

- Nanofiber cartridge filters use a surface webbing of very small fibers to capture weld fume particles of all sizes, including submicron (0.3 to 1 μm).

Key Features

Unit Design

- Extraction arm—External brackets for obstruction-free air movement and easier maintenance.
- Hood—Largest in the industry, bell shaped with 360° rotation to obtain best position over the weld.

The most extensive testing in the industry provides longer unit life and quality. Unit has passed Miller's rigid and rugged testing similar to all of our welding equipment. No other supplier performs this level of extensive testing.



Filter Life

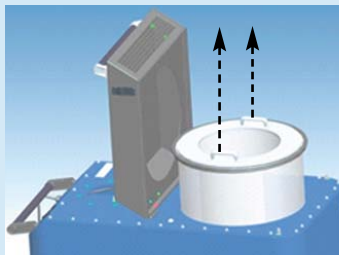
- Testing showed FILTAIR nanofibers last up to 3 times longer than competitors.



*Filter: 490 square feet of media.
Filter life can vary depending on the process,
electrode type, materials and coatings.*

Ease of Use

- Exclusive hinged filter hatch features a convenient locking mechanism for easy access to the filter and tool-free replacement.
- Filter handles allow easy replacement of dirty filter cartridge with less mess, minimizing downtime.



Airflow Capability

- FILTAIR maintains higher CFM after long periods of use resulting in longer lasting suction power.
- Test Results: Weld testing was conducted with 5 competitive machines—after 5 hours of Flux Cored welding, all competitors' CFM dropped to 500 or below. FILTAIR MWX-D remained above 500 CFM at 16+ hours of welding.

MWX-S Features

- One minute cleaning cycle greatly reduces downtime (competitive models can take up to 45 minutes).
- Up to 50% more media than competitive models means less cleaning and extended filter life.
- Nanofiber filter is surface loading meaning weld fume doesn't become embedded and is easily released off the filter during the pulse cleaning cycle.
- Disposal drawer provides convenient way to periodically remove fume particulate following automated cleaning cycles.



Service and Support

- Miller sets the industry standards for service and support. Behind every product stands the industry's most responsive team.

FILTAIR™ Mobile Fume Extractor Systems

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 Nanofiber	85–95%	≥90%	≥90%
16	≥95%	≥90%	≥90%
Percentage of Weld Fume Particle Size ³	75–95%	≤15%	≤10%

¹ASHRAE 52.2 Standard

²NAFA Guide

³Jenkins, Pierce, Edgar, Particle Size Distribution of GMAW and FCAW

Q&A:

What is a MERV rating?

A MERV (Minimal Efficiency Reporting Value) rating is an ASHRAE* standard used to classify filters based on their air-cleaning efficiency with specific particulate sizes. MERV ratings range from 1 to 16, with standard conventional filters rated between MERV 7 and 10, while Miller Nanofiber filters are MERV 15.

I've seen ratings of 99% filter efficiency on some models.

What does this mean?

Most standard conventional filter efficiencies are based on outdated test standards that use a coarse test dust. New test standards indicate that a filter's efficiency level will vary depending on the size of the particulate. For instance, welding fumes contain particulates of different sizes, 80% of which are smaller than 1 micron.

*American Society of Heating, Refrigerating and Air-Conditioning Engineers

The Power of Blue® Payoff

Long-Lasting Airflow	Powerful 875 CFM airflow delivers strong suction power throughout the life of the filter.
Ultra-Efficient Filter	Miller's Nanofiber filter is more efficient at capturing submicron particles found in most weld fume, while other conventional filters allow these particles to pass through. When purchasing a filter, buy one that is designed for weld fumes.
Durability	Industrial-grade metal cabinet design ensures Miller's long-lasting durability in an industrial environment.
Ease of Maintenance	Tool-free filter replacement takes less than a minute.
Highest Quality	Backed by the reliability and support you expect from Miller.

Accessories

Extraction Arms

Available in 7, 10 and 12 ft lengths. Standard length is 10 ft.



For more detailed product information, see literature #AY/3.0.

Package No. Description

#951 178	Mobile Weld Fume Extractor/Self Cleaning with 7 ft extraction arm
#951 179	Mobile Weld Fume Extractor/Self Cleaning with 10 ft extraction arm
#951 180	Mobile Weld Fume Extractor/Self Cleaning with 12 ft extraction arm
#951 143	Mobile Weld Fume Extractor/Disposable Filter with 7 ft extraction arm
#951 144	Mobile Weld Fume Extractor/Disposable Filter with 10 ft extraction arm
#951 145	Mobile Weld Fume Extractor/Disposable Filter with 12 ft extraction arm

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