

FILTAIR™ Series

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Fume
Extractor 

Quick Specs

Industrial Applications

Manufacturing and
Fabrication
Maintenance and
Repair Operations
School and
Training Centers

Processes

Stick (SMAW)
Flux Cored (FCAW)
MIG (GMAW)
TIG (GTAW)

Filter Media 490 ft² (45.52 m²)

Nominal Airflow 875 CFM (413 L/sec)

Sound Level Approximately 70 dBA
at 5 ft (1.5 m)

Motor Specifications 1 HP, 3450 RPM

Input Power 115 V/1-Ph/60 Hz
at approx. 12.5 A

Dimensions H: 34-3/4 in (883 mm)

W: 31-3/4 in (794 mm)

D: 48 in (1219 mm)

Extraction Arm 8 in (203 mm) diameter

7, 10, 12 ft lengths

Weight MWX-S 300 lb (136 kg)

MWX-D 238 lb (108 kg)

The Power of Blue.®

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

Designed exclusively for welding applications.

MWX-S Model Self-Cleaning Filter Technology

Miller's FILTAIR MWX-S features an innovative filter cleaning mechanism designed to increase productivity and greatly extend filter life. A fast, one minute cleaning cycle is all it takes to remove weld fume particles from the filter.

Because Miller's nanofiber filter is surface loading, weld fume does not penetrate deep into the filter. This enables particles to be easily released during the cleaning process and keeps pressure drop low.

Superior Filter Efficiency

Miller's exclusive MERV 15 nanofiber filter ensures capture of submicron weld fumes, more holding capacity and the ability to maintain low pressure drop—resulting in a longer lasting filter and a cleaner work space.

Strong Suction Power

Powerful 875 CFM system delivers long-lasting airflow throughout the life of the filter.

Reliable Extraction Arm

Optimally-designed extraction arm stays in position and will not slouch over time. Arm also comes partially assembled to reduce set up time.

Saves Operator Downtime

From easy set up, simple front panel, quick, convenient, and tool-free filter replacement, FILTAIR is easy to use.

Durable Construction

Industrial-grade metal cabinet and extraction arm withstand the demands of everyday welding.

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

New!

MWX-S with 10 ft
Extraction Arm shown.



MWX-D model with disposable filter also available.

TRUE BLUE
WARRANTY

Fume extractor is warranted for 1 year, parts and labor.

MADE IN **USA**



Miller Electric Mfg. Co.

An Illinois Tool Works Company
1635 West Spencer Street
Appleton, WI 54914 USA

Equipment Sales US and Canada

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International Phone: 920-735-4554
International FAX: 920-735-4125

Web Site

www.MillerWelds.com



The FILTAIR Advantage

Filter Handles allow easy replacement of dirty filter cartridge with less mess, minimizing downtime.



◀ **Filter: 490 square feet of media**

Easy-to-Operate Extraction Arm is obstruction free so air can pass through with less airflow resistance, giving you stronger CFM (airflow). It offers reliable and accurate positioning across the full range of motion of the arm, as well as easy adjustment and maintenance to ensure long-lasting operation. Extraction arms are available in 7, 10 and 12 ft lengths.

Positional Airflow Damper Knob enables welders to adjust the airflow to the extraction requirements for the welding operation at hand. Especially helpful where TIG applications are used.

Nanofiber Cartridge Filter features an ultra-thin surface webbing of tiny fibers to capture weld fumes on the surface of the filter instead of within. This extends the filter life, maintains longer lasting air flow, and lengthens your maintenance intervals. FILTAIR's MERV 15* filter provides higher efficiency and longer filter life overall.

*MERV (Minimum Efficiency Reporting Value) is between 1 and 16. A higher MERV indicates a more efficient filter and is more effective against submicron-sized particles .30 to 1.0 micron.

Built-In Tool Tray provides workers with a convenient area to place their tools without them rolling off of the unit.

Exclusive Hinged Filter Hatch features a convenient locking mechanism for easy access to the filter and tool-free replacement.

Metal Cabinet Design ensures Miller's long-lasting durability in a manufacturing environment.

Large Rear Wheels allow for easy movement over weld cables and from one work cell to another.

Dust Disposal Drawer (MWX-S only) provides easy and convenient access to empty out collected dust. Handle releases drawer allowing it to slide out.

Convenient Air Nozzle (MWX-S only) for compressed air supply. *Note: Compressed air required to operate cleaning mechanism.*

Durable Bellmouth-Shaped Hood features a convenient 360° rotation for unlimited positioning. One of the largest in the industry, FILTAIR's extraction hood captures weld fumes at a greater distance from the source than other hood designs. This also means less hood adjustments for longer welds.

Power Switch is conveniently located for easy on/off access.



Filter Pressure Gauge with easy-to-read color code indicates when pressure drop increases and cartridge filter needs to be replaced.

Self-Cleaning Mechanism (MWX-S only) is easy to use. Just push button on control panel to activate the pulse cleaning cycle that cleans the filter from the inside out. Weld fume particulate is removed from the filter and safely deposited in the dust disposal drawer.

Lockable Swivel Casters allow users to keep fume extraction system stationary for the most precise welding applications.

20 ft (6 m) Power Cord enables welders to freely move fume extractor.

Technology

MERV

Minimum Efficiency Reporting Value

- ASHRAE* Standard 52.2
- Fractional efficiency based on particle count
- Groups particle sizes into (3) ranges
 - 0.3–1 µm
 - 1–3 µm
 - 3–10 µm

MERV ratings range from 1 to 16, with standard conventional filters rated between MERV 7 to 11, while Miller Nanofiber filters are rated MERV 15. Welding fumes contain particulates of different sizes, up to 95% of which are smaller than 1 micron. Standard conventional filters are not effective in this size range and therefore do not have a rating.

Filter Technology

Nanofiber cartridge filters use a surface webbing of very small fibers to capture weld fumes, including submicron particles, which is what more than 80% of what weld fume applications generate.

A nanofiber filter is surface loading, meaning it keeps the particles on the surface of the filter, instead of becoming embedded deep within the filter. Nanofiber filters last up to twice as long as standard conventional or pre-treated cellulose filters.

Filter life can vary depending on the welding process, electrode type used, materials, and coatings.

MERV Comparison

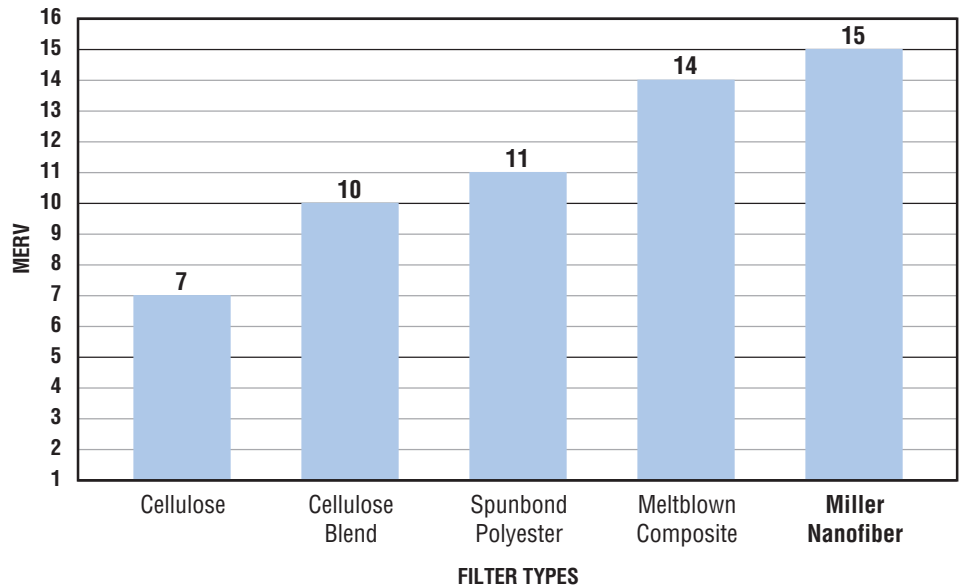
Applicable Weld Fume MERV Rating Categories ¹	Particle Size Range Efficiency % ²		
	0.3 to 1 µm	1 to 3 µm	3 to 10 µm
10	Not Rated	50–65%	≥85%
11	Not Rated	65–80%	≥85%
12	Not Rated	80–90%	≥85%
13	<75%	≥90%	≥90%
14	75–85%	≥90%	≥90%
15 Miller Nanofiber	85–95%	≥90%	≥90%
16	≥95%	≥90%	≥90%
Percentage of Weld Fume Particle Size³	75–95%	≤15%	≤10%

¹ASHRAE 52.2 Standard

²NAFA Guide

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

MERV Rating Comparison



Performance

Media Performance Summary

The MWX was designed specifically to meet the ACGIH* recommended minimum transport velocity for weld fumes at 2000 FPM (feet per minute).

What does this mean?

Most fume extractors rate the CFM at the cabinet opening without the arm attached. Miller's powerful 875 CFM is REAL at the source capture hood.

*American Conference of Governmental Industrial Hygienists

Media Type	Efficiency	Pressure Drop	Relative Cost
Cellulose	Very Low	Low	\$
Cellulose Blend	Low	Moderate	\$
Spunbond Polyester	Moderate	High	\$\$\$
Meltblown Composite	High	High	\$\$
Miller Nanofiber	High	Low	\$\$

Nanofiber filtration provides high efficiencies and low operating pressure for an economical price.

Specifications (Subject to change without notice.)

Filter Media	Nominal Airflow	Extraction Arm Diameter	Sound Level	Motor	Power	Dimensions	MWX-S Weight	MWX-D Weight
490 ft ² (45.52 m ²)	875 CFM (413 L/sec)	8 in (203 mm)	Approximately 70 dBA at 5 ft (1.5 m)	1 HP, 3450 RPM	115 V/1-Ph/60 Hz at approximately 12.5 A	H: 34-3/4 in (883 mm) W: 31-3/4 in (806 mm) D: 48 in (1,219 mm)	Net: 300 lb (136 kg) Shipping: 340 lb (154 kg)	Net: 238 lb (108 kg) Shipping: 285 lb (129 kg)

Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
MWX-S / SA-807 (7 ft Arm)	#951 178	Mobile Weld Fume Extractor/Self Cleaning with 7 ft extraction arm		
MWX-S / SA-810 (10 ft Arm)	#951 179	Mobile Weld Fume Extractor/Self Cleaning with 10 ft extraction arm		
MWX-S / SA-812 (12 ft Arm)	#951 180	Mobile Weld Fume Extractor/Self Cleaning with 12 ft extraction arm		
MWX-D / SA-807 (7 ft Arm)	#951 143	Mobile Weld Fume Extractor/Disposable Filter with 7 ft extraction arm		
MWX-D / SA-810 (10 ft Arm)	#951 144	Mobile Weld Fume Extractor/Disposable Filter with 10 ft extraction arm		
MWX-D / SA-812 (12 ft Arm)	#951 145	Mobile Weld Fume Extractor/Disposable Filter with 12 ft extraction arm		
Base Product				
MWX-S (Base Unit)	#300 531	Mobile Weld Fume Extractor/Self Cleaning		
MWX-D (Base Unit)	#300 502	Mobile Weld Fume Extractor/Disposable Filter		
Arm				
SA-807	#300 503	7 ft Extraction Arm		
SA-810	#300 504	10 ft Extraction Arm		
SA-812	#300 505	12 ft Extraction Arm		
Replacement Filters				
Self-Cleaning Filter (MWX-S)	#300 540	Replacement Filter for MWX-S		
Disposable Filter (MWX-D)	#300 539	Replacement Filter for MWX-D		

Date:

Total Quoted Price:



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