

FILTAIR® Capture 5

Welding Safety and Health 

Quick Specs

Industrial Applications

Heavy equipment manufacturing
Fabrication
Maintenance and repair operations

Processes

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

Filter Media 452 sq. ft. (42 sq. m)

Accu-Rated™ Airflow

Measured at the hood: 900 cfm (425 L/sec.)

Extraction Arm 10 in. (254 mm) diameter
10 and 12 ft. (3 and 3.7 m) lengths

Sound Level at 5 ft. (1.5 m)

Approximately 77 dBA

Motor Specifications 3 hp, 3,450 rpm

Input Power 208/230 V, 1-phase, 60 Hz
or 460 V, 3-phase, 60 Hz

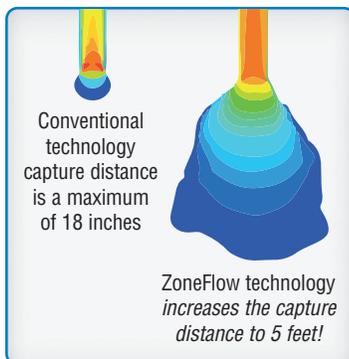
Dimensions H: 43 in. (1,092 mm)
W: 36 in. (915 mm)
D: 48 in. (1,219 mm)

Net Weight 660 lb. (300 kg)
for extractor with 12 ft. arm

The capture zone redefined.

Innovative, extended-capture fume extraction system designed specifically for welding.

The Capture 5 features exclusive ZoneFlow™ technology, which creates a much larger capture area than existing source-capture products and minimizes arm interactions.



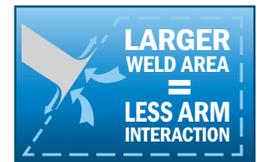
Have a certified industrial hygienist test the air in your facility to determine equipment requirements and ensure adequate protection from contaminants.



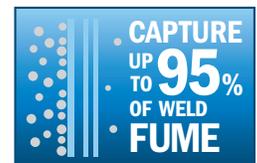
Exclusive ZoneFlow™ technology extends weld fume capture area



Filters air for welder and facility



Better protection, more welding



High-efficiency filter designed to capture weld fume



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



Conforms to ANSI UL Std. 507
Certified to CSA Std. C22.2 No. 113



Miller Electric Mfg. LLC
An ITW Welding Company
1635 West Spencer Street
P.O. Box 1079
Appleton, WI 54912-1079 USA

Equipment Sales US and Canada
Phone: 866-931-9730
FAX: 800-637-2315
International Phone: 920-735-4554
International FAX: 920-735-4125

MillerWelds.com



The FILTAIR® Advantage

Accu-Rated™ performance summary

- The Capture 5 design and ratings are specific to weld fume capture.
- While most fume extractors have cfm rated at the blower, the Capture 5 is rated at 900 cfm at the capture hood which is where suction is needed to capture weld fume.
- The Capture 5 is designed to exceed the ACGIH recommended weld fume transport velocity of 2,000 feet per minute.

This results in the Capture 5 having stronger suction power for a cleaner work space.

Easy-to-operate extraction arm with external adjustments 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. Pre-assembled extraction arms are available in 10- and 12-foot lengths.

Metal cabinet design ensures long-lasting durability in a manufacturing environment.

Large rear wheels allow for easy movement from one work area to another.

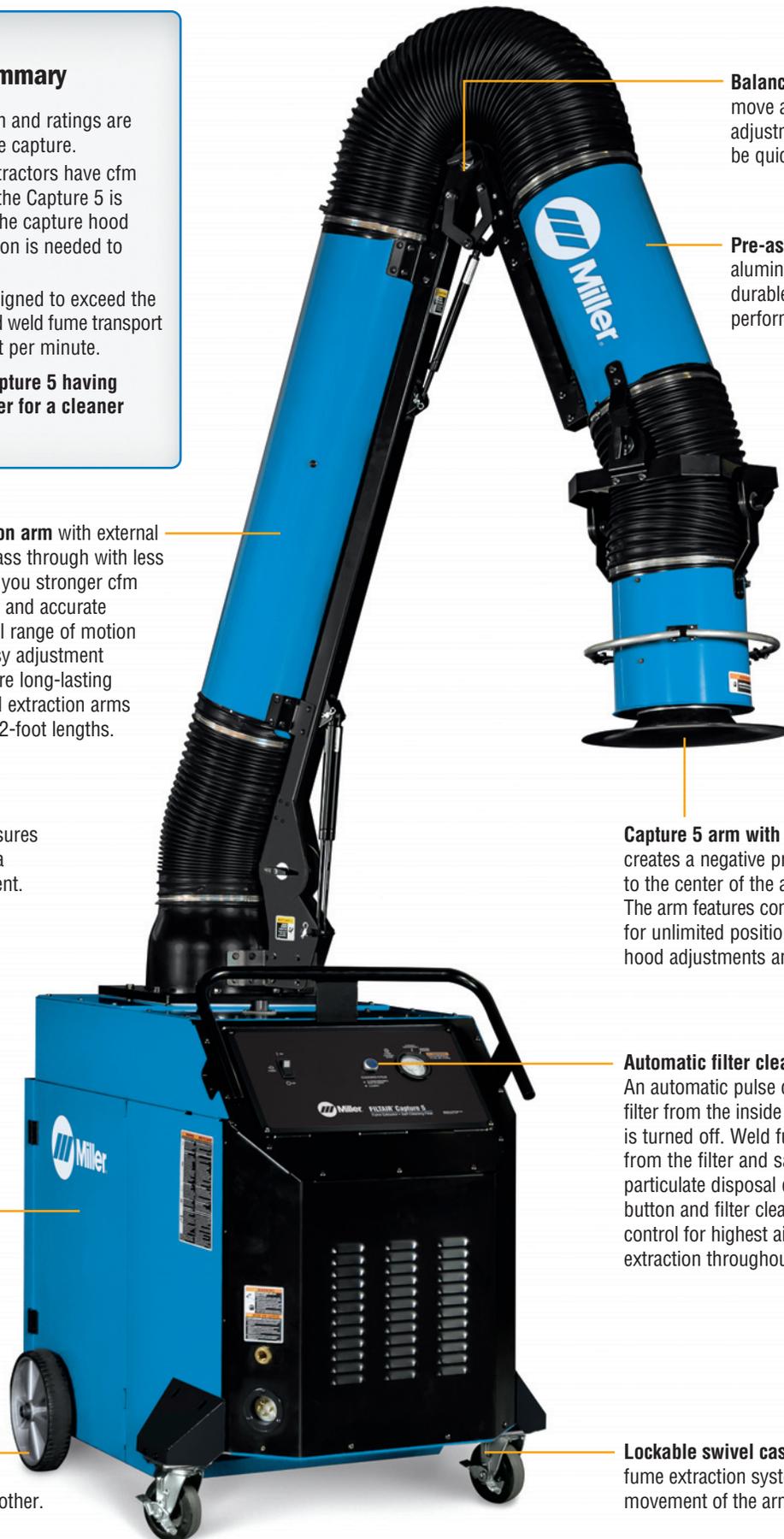
Balanced arm design is easy to move and stays in position. All adjustments are toolless and can be quickly adjusted by hand.

Pre-assembled arm made of aluminum and steel is extremely durable for long-lasting performance.

Capture 5 arm with ZoneFlow technology creates a negative pressure zone that funnels air to the center of the arm from greater distances. The arm features convenient 360-degree rotation for unlimited positioning, which means fewer hood adjustments and extended welding time.

Automatic filter cleaning extends filter life. An automatic pulse cleaning cycle cleans the filter from the inside out every time the machine is turned off. Weld fume particulate is removed from the filter and safely deposited in the particulate disposal drawer. The manual push button and filter cleaning gauge ensures full control for highest airflow and consistent fume extraction throughout the life of the filter.

Lockable swivel casters allow users to keep fume extraction system stationary during movement of the arm.



The FILTAIR® Advantage

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

Convenient air connection for dry compressed air supply.

Note: Compressed air required to operate cleaning mechanism.

208/230 V, 1-phase or 460 V, 3-phase receptacle. Mating connector is included.



Filter pressure gauge is easy to read, and indicates when pressure drop increases and cartridge filter needs to be replaced.



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

Particulate disposal bin provides easy and convenient access to empty out collected particulate. Handles release drawer allowing it to slide out.

Miller®-Exclusive ZoneFlow™ Technology

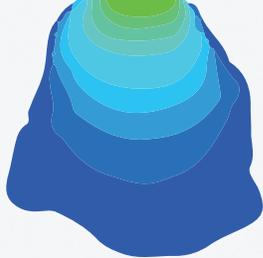
Extend your fume capture zone

Capturing fume at the source is critical to maintaining a clean breathing zone for the welder and keeping the facility clean.

The Capture 5 offers up to five feet of fume extraction versus up to 18 inches from conventional source capture extractors. By increasing the area of weld fume capture, it dramatically reduces the amount of interaction a welder has with an arm.



Conventional technology capture zone is a maximum of 18 inches

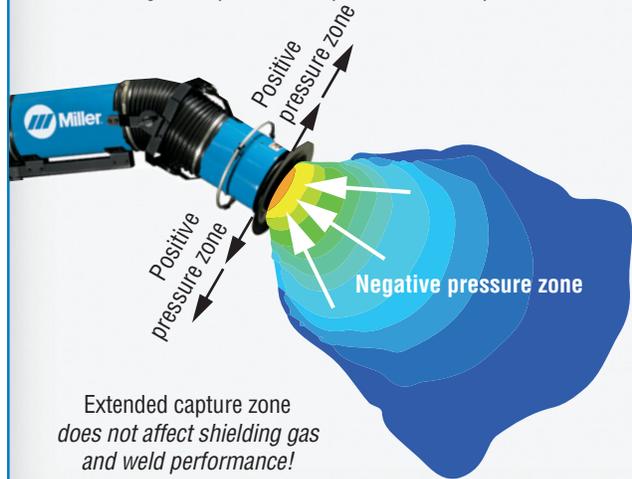


ZoneFlow technology increases the capture zone to 5 feet!

ZoneFlow tech talk

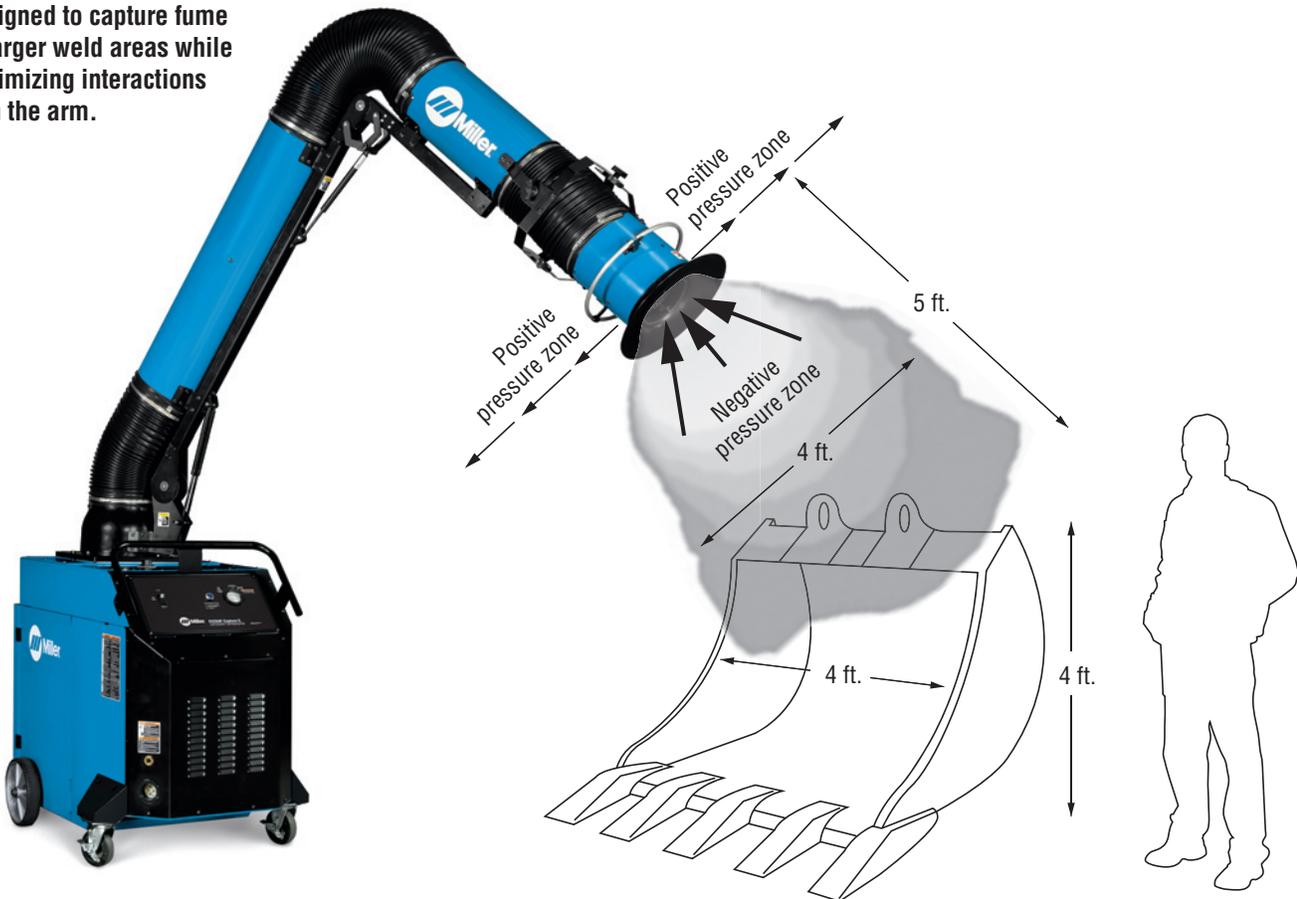
ZoneFlow technology creates a negative pressure zone that extends the weld particulate capture distance.

Air moving into the arm is still about 900 cfm. However, ZoneFlow technology also moves clean, filtered air out of the arm at approximately a 90-degree angle which creates a large negative pressure zone. This negative pressure zone forms a type of curtain that funnels the weld fume particulate towards the center of the arm, maximizing capture and extending the capture zone up to five feet deep and four feet wide.



Extended capture zone does not affect shielding gas and weld performance!

Designed to capture fume in larger weld areas while minimizing interactions with the arm.



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.

Filters in common air filtration systems often have MERV ratings from 7 to 11. FILTAIR Capture 5 FilTek XL filters are rated at class-leading MERV 15 to capture up to 95 percent of weld fume particulate.

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%
16		≥95%	≥95%
HEPA ³	≥99.97%	≥99.97%	≥99.97%
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

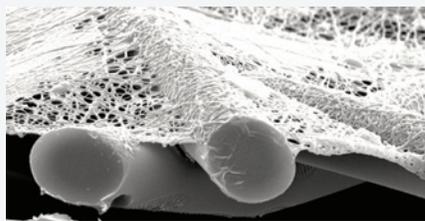
Filter media performance summary

FilTek XL filters have high efficiencies and low pressure drops to capture better, last longer, and lower operating costs.

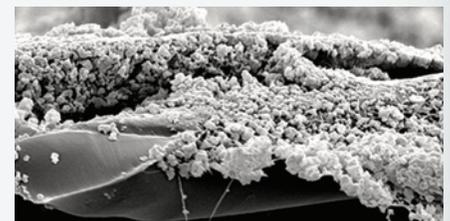
Filter Media Type	Weld Fume Capture Efficiency	Pressure Drop
Cellulose	Very low	Low
Cellulose blend	Low	Moderate
Spunbond polyester	Moderate/high	High
Meltblown composite	High	High
Miller FilTek XL	High	Low

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

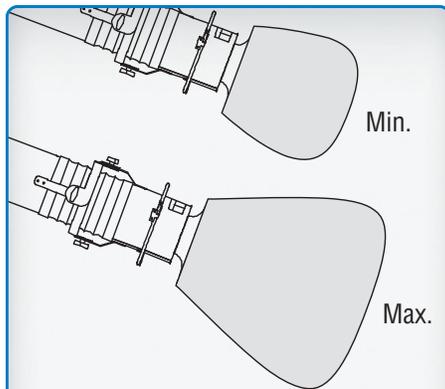


Surface loaded FilTek XL media (substrate still clean)

FILTAIR® Capture 5 Set-Up Guide

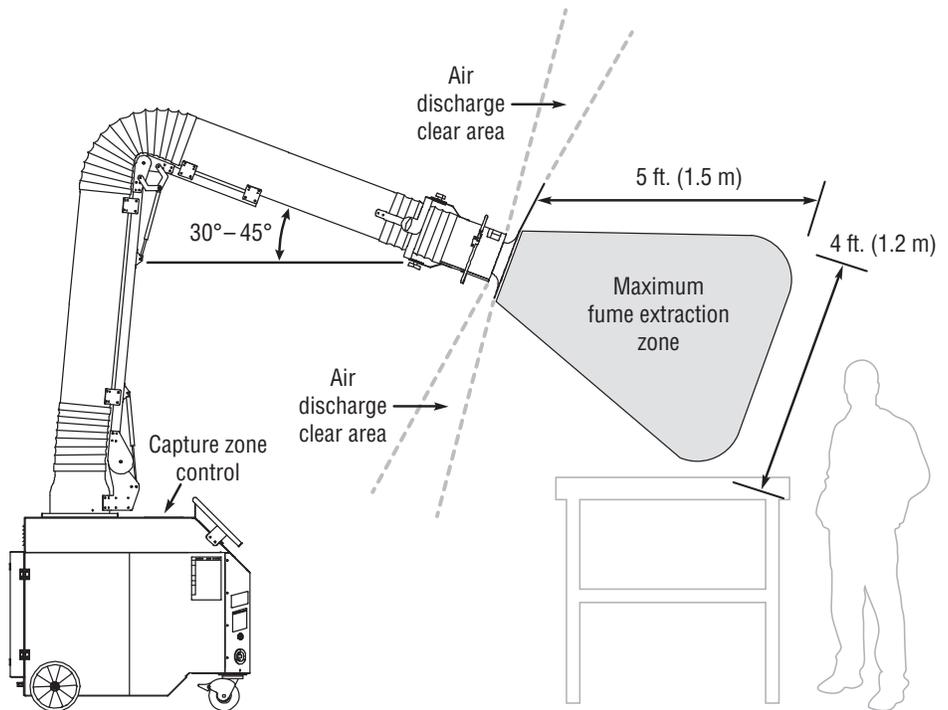
1. The fume extraction zone

The FILTAIR® Capture 5 with exclusive ZoneFlow™ technology is designed to create a large, effective weld fume extraction zone. It will operate most effectively in areas where air currents or turbulence are minimal. When used properly, it will capture a large percentage of the fumes at the source, and the larger capture area will allow a welder to complete more welding while reducing interaction with the arm.



Capture zone control

Use the capture zone control to help maintain effective fume extraction in tighter spaces, or while working on smaller weldments where a smaller fume extraction area is desired. Use this control to manage the size of the fume extraction zone. Minimizing the zone effectively reduces the air discharge, while increasing the suction.



Air discharge clear area

To maximize the fume extraction zone, DO NOT OBSTRUCT AIR DISCHARGE from the arm. 5 ft. (1.5 m) 5 ft. (1.5 m)

The arm discharges clean, filtered air just behind the hood at approximately a 90-degree angle, creating an “air curtain” that funnels the weld fumes towards the center of the arm, maximizing capture. Maintain at least a 5-foot clear area ON ALL SIDES of the hood to avoid disturbing this air discharge. Disrupting the flow will reduce the amount and distance of fume captured.

2. Hood position and operator safety

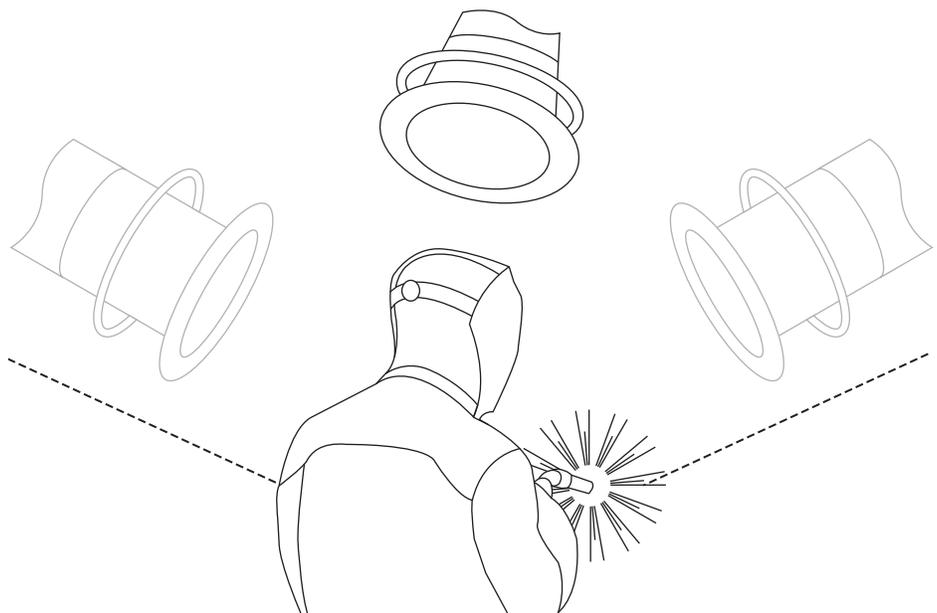
The Capture 5 is designed to help protect the user from welding-specific airborne contaminants but must be used correctly to be fully effective.

Position the hood in front of or at side of the weld area in order to draw weld fumes AWAY from the operator. To maximize the extraction zone the angle of arm should be 30–45 degrees off horizontal.

DO NOT position the hood behind the welder, or in any other place that will cause the weld fumes to be pulled across the welder or through his breathing space.

BE AWARE that air turbulence or movement may disrupt the effectiveness or position of the fume extraction zone and increase the possibility that the welder may encounter weld fumes.

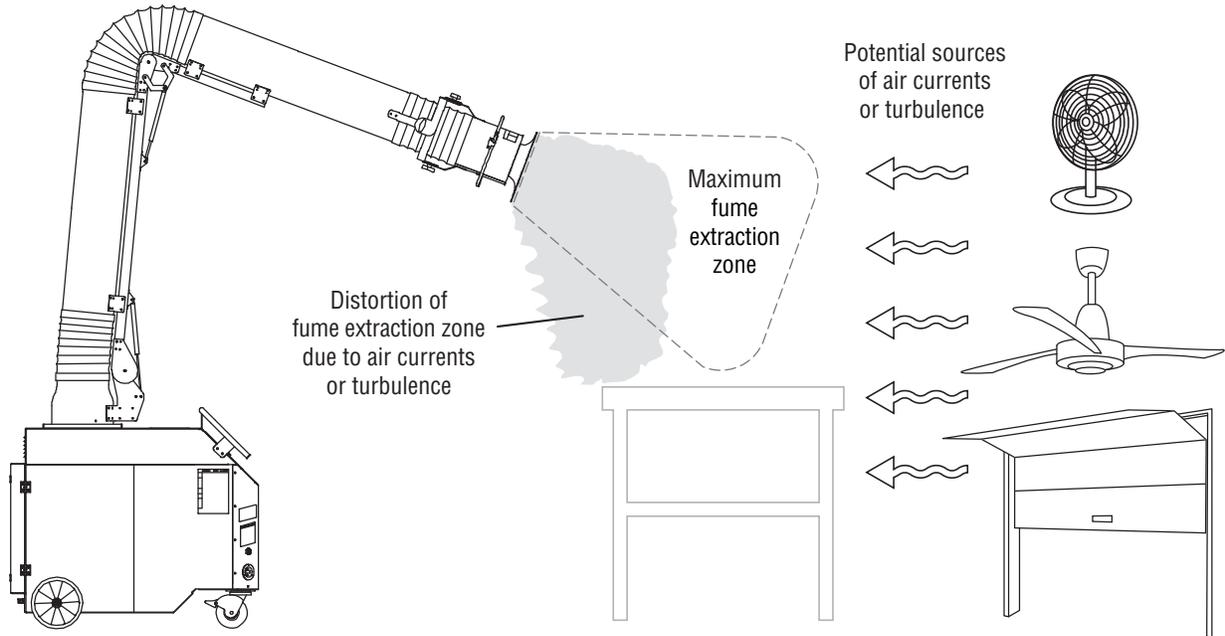
KEEP HEAD OUT OF FUMES!



FILTAIR® Capture 5 Set-Up Guide

3. The effects of air currents or turbulence

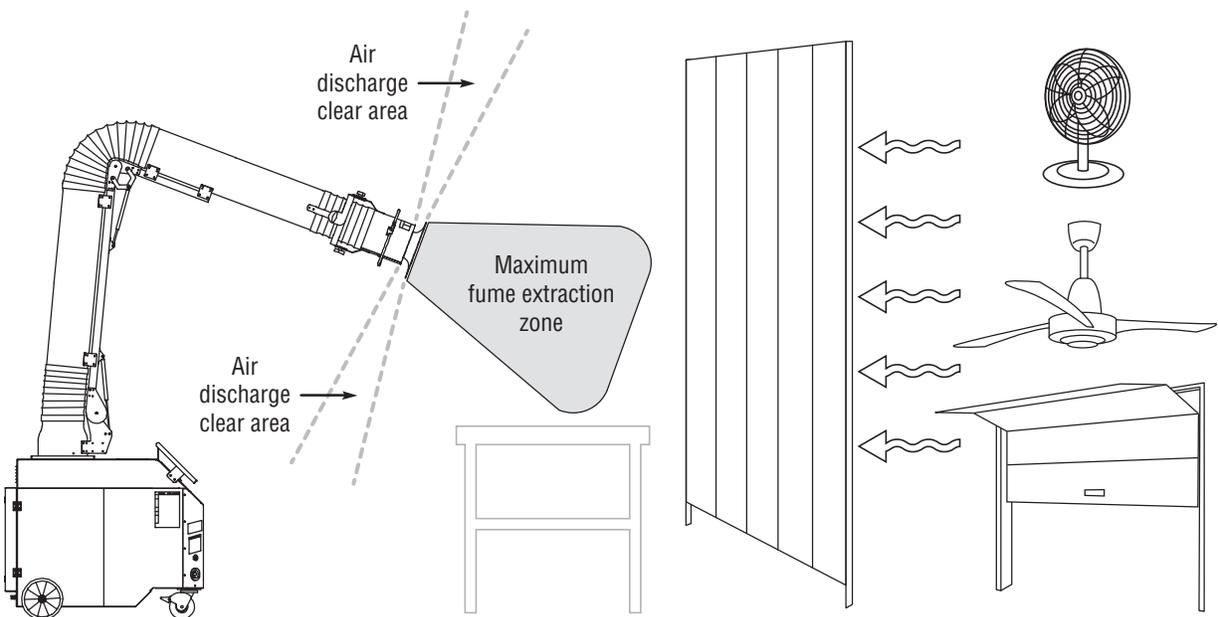
The FILTAIR® Capture 5 is designed to operate most effectively in areas where air currents or turbulence are minimal.



The effectiveness, size and location of the fume extraction zone will be affected by air currents or turbulence in the work space. It is important to be aware of this and to manage the position of the zone by relocating the hood or the entire Capture 5 unit. Take advantage of any air-current patterns to move the fumes away from the operator and into the fume extraction zone.

4. Compensate for air currents using screens or curtains

For the most efficient fume extraction in some environments, it may be necessary to actively manage the air currents to establish more predictable and stationary air space.



Use common welding screens or curtains or other partitions to manage the air movement in the weld area. Position any partition to block the source of air movement while also maintaining at least a 5-foot clear area ON ALL SIDES of the hood to avoid disturbing the air discharge clear area.

Specifications (Subject to change without notice.)

Filter Media	Accu-Rated™ Airflow	Extraction Arm	Sound Level	Motor	Input Power	Dimensions	Net Weight	Shipping Weight
452 sq. ft. (42 sq. m)	900 cfm (425 L/sec.)	10 in. (254 mm) diameter 10 and 12 ft. (3 and 3.7 m) lengths	Approximately 77 dBA at 5 ft. (1.5 m)	3 hp, 3,450 rpm	208/230 V, 1-phase, 60 Hz at 13.5 A 460 V, 3-phase, 60 Hz at 3.7 A	H: 43 in. (1,092 mm) W: 36 in. (915 mm) D: 48 in. (1,219 mm)	660 lb. (300 kg) for extractor with 12 ft. arm	Extractor: 610 lb. (277 kg) 10 ft arm: 180 lb. (82 kg) 12 ft arm: 184 lb. (84 kg)

Genuine Miller® Accessories



**FilTek® XL
Replacement
Filter
301106**

Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
FILTAIR® Capture 5 (Includes mobile extractor, self-cleaning filter and 10 in. diameter arm)	951639	208/230 V with 10 ft. extraction arm		
	951640	208/230 V with 12 ft. extraction arm		
	951574	460 V with 10 ft. extraction arm		
	951575	460 V with 12 ft. extraction arm		
Base Components				
Extractor (without arm)	301097	208/230 V, 1-phase		
	301093	460 V, 3-phase		
Pre-Assembled Extraction Arms	301082	10 ft. length, 10 in. diameter		
	301083	12 ft. length, 10 in. diameter		
FilTek® XL Replacement Filter	301106	Self-cleaning filter		

Date:

Total Quoted Price:

**Please email FILTAIR@millerwelds.com
for information on fume extraction solutions.**

Distributed by:

