



RESPIRATORY SOLUTIONS

Industrial welding protection including Miller® PAPR II, SAR, and LPR-100™ Gen II Respirators are designed to help keep operators comfortable, productive and compliant in demanding applications

RESPIRATOR SELECTION

Factors to Consider When Selecting a Respirator	PAPR	SAR	Half Mask
Vortex Climate Control Options		X	
Tethered Air Supply Hose		X	
Frequent Filter Replacement	X		X
Not for Use in Immediately Dangerous to Life or Health Atmospheres	X	X	X
Rechargeable Battery Dependent	X		
APF	25 or 1,000*	25	10
Facial Hair Restrictions			X
Fit Testing			X
Medical Evaluation	X	X	X
Written Respiratory Program**	X	X	X

Other Key Considerations:

- Specific job
 - Materials being used
- Environment where job is performed
 - Cost
- Operator comfort & acceptance
 - Training

*With optional heavy-duty head seal
**A written respiratory program is dependent upon if a product is mandatory, voluntary or for emergency use. See page 3 for more information.

Which Half Mask Should I Use?

After completing an exposure assessment and understanding your environment, the applications, and users, you'll be ready to make the best selection.

Other factors to consider include:

- Fit – Utilize fit testing to select the correct size to ensure a tight seal
- Comfort – Features that allow the user to customize the fit for all-day comfort
- Design – Select a respirator that fits with other PPE, such as welding helmets, without interrupting field of vision



Not Resistant to Oil



Oil Proof

N = Not Oil Resistant

95 (up to 95% of airborne particulates)

P = Oil Proof

100 (up to 99.97% of airborne particulates)

NOTE: Only masks with a P rating can provide ample protection against solid and liquid aerosol particulates that may contain oil.

What is Nuisance Level OV Protection?

Nuisance level OV protection is for concentrations not exceeding OSHA PEL or other applicable government exposure limits, whichever is lower. Nuisance level OV protection features an added layer of carbon that helps remove nuisance level organic vapors.

Need help assessing your environment?

Contact us at weldingsafety@millervelds.com and we can help connect you with an Industrial Hygienist.

IS A WRITTEN RESPIRATORY PROGRAM NEEDED?

It's important to understand the difference between voluntary and mandatory respirator use in your work place and provide employees with details to help ensure they are properly protected and following necessary guidelines.

Mandatory or Emergency Use:

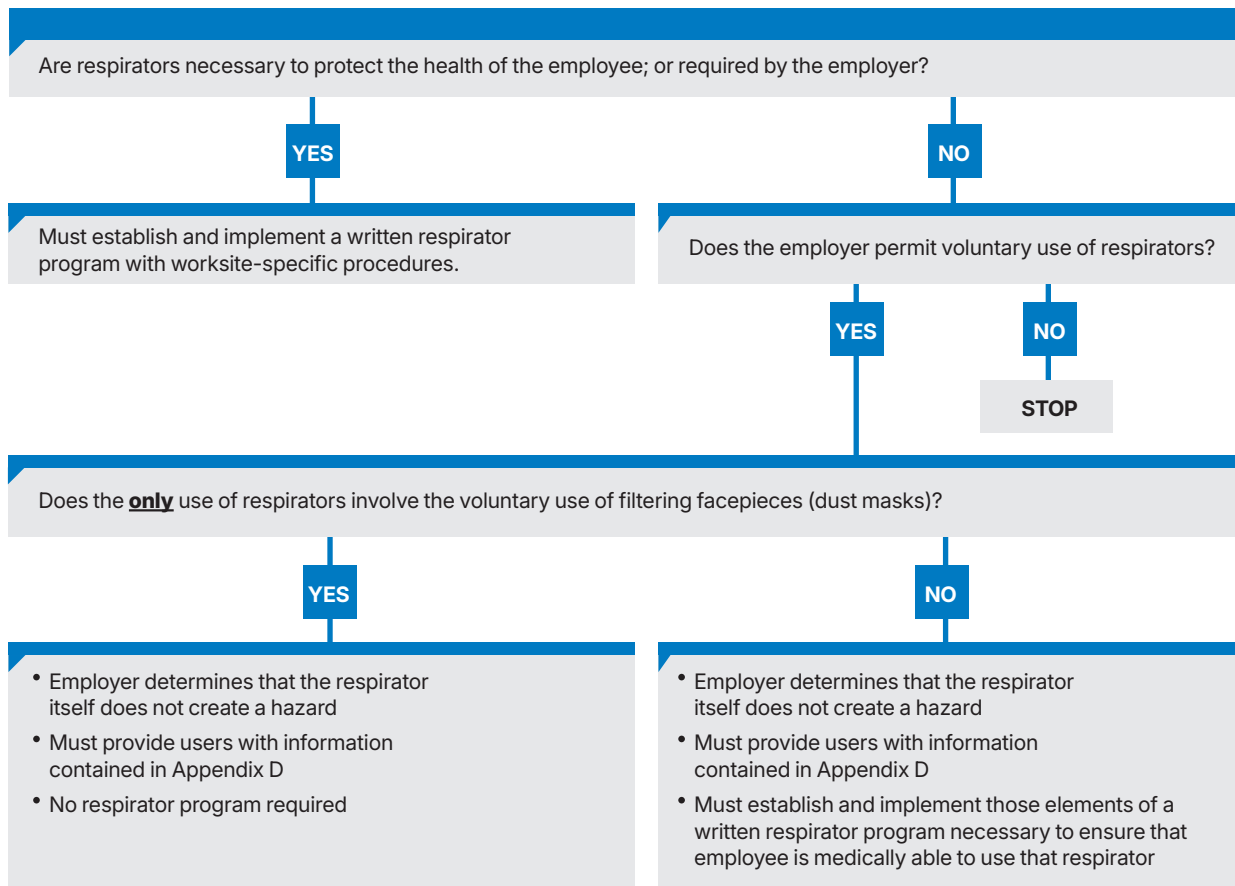
If a respirator is required to be worn as part of the job requirement or during an emergency, then the entire OSHA Standard 29 CFR 1910.134 applies. Along with the equipment, employers must establish and implement a written respirator program and specific workplace procedures.

Voluntary Use of a Respirator More than a Disposable Dust Mask:

For PAPRs, SARs, half masks, and full face cartridge respirators, employers must provide employees with Appendix D of OSHA Standard 29 CFR 1910.134, and also include other specific program requirements such as medical evaluations, designating a program administrator, and developing procedures for cleaning, storing and maintaining respiratory equipment so it does not present a hazard to the employee.

Voluntary Use of Filtering Facepiece (dust mask) Respirator:

The respirator must be stored and maintained so that its use does not present a health hazard to the user, and that the employer must provide employees with Appendix D of OSHA Standard 29 CFR 1910.134.



See the latest OSHA regulations for updated content.

T94™ SERIES RESPIRATORY HELMETS

T94-R™ industrial welding helmets are designed for optimal comfort and visibility so the operator keeps their system on throughout long work days, increasing arc-on time and helping maintain compliance.

1 Dualtec™ Manifold System

Patented technology optimizes airflow for high-performance output and maximum perceived cooling throughout the entire helmet assembly.

2 Low-Profile Breathing Tube

Tube is positioned at the bottom of the neck instead of the top of the head, like many traditional systems, providing balance and comfort for all-day wear.

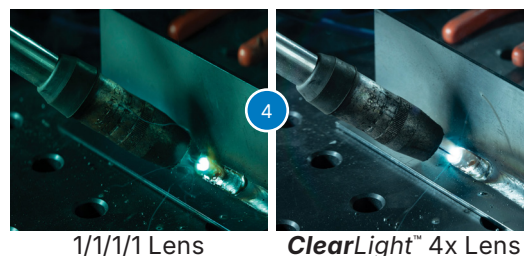
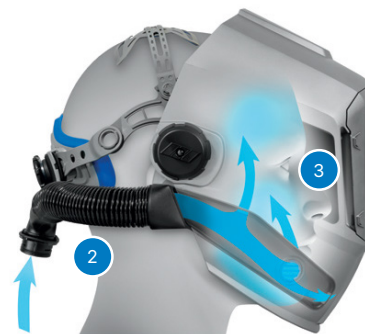
3 Six-Point Air Distribution

The Miller® Dualtec™ manifold evenly distributes air throughout the helmet. Operators can target the airflow for customized cooling to reduce dry eyes and nose.

4 ClearLight™ 4x Lens Technology*

Offering four times the clarity than traditional lenses, **ClearLight™ 4x** gives welders a more detailed view before, during, and after every weld.

**Not included with PAPR II with T94i™ XL nor the T94i™ XL helmet*



1/1/1 Lens

ClearLight™ 4x Lens

	T94-R™	T94i-R™	T94iH-R™	T94i™ XL	Face Shield
SAR		X	X	X	
PAPR	X	X	X	X	X
Lens	ClearLight™ 4x	ClearLight™ 4x	ClearLight™ 4x	ClearLight™ 2.0	
Lens Size	9 sq. in.	9 sq. in.	9 sq. in.	13 sq. in.	
Lift-to-Talk			X		
Integrated Grind Shield		X	X	X	
External Grind Button	X				
HDV	X	X	X	X	X
HD Head Seal*			X**		X

*Optional-1000 APF PAPR

**Required-SAR

POWERED AIR PURIFYING RESPIRATORS

Don't slow down when the work day is long. Miller® PAPR II Systems are designed to keep operators comfortable so the safety gear stays on – even in the most extreme welding applications. PAPR II Systems available with the T94-R™ Series head assemblies and Face Shield.



PAPR II Portfolio
T94-R™, T94i-R™,
T94i-R™ XL, T94iH-R™
Hard Hat, and Face Shield

NIOSH 42 CFR 84 Certified
APF = 25 or 1000*
ANSI Z87.1+2015 (Helmet)
ANSI/ISEA Z89.1, CSA Z94.1 (Hard Hat)
FILTER: HEPA, up to 99.97% Efficiency
OSHA Classification: Loose-fitting respirator. Fit testing not required.

* With optional heavy-duty head seal.

Motor Blower Assembly Features

- Lightweight blower reduces fatigue and keeps operators comfortable all day
- Lithium-ion battery provides long battery life (up to 10 hours), with no memory retention from frequent recharging (three-hour charging cycle); rated for 500 cycles (two batteries included with each system)
- Air volume can be adjusted for maximum user comfort with three air speeds
- Audible & vibrating alarms notify users of low battery or restricted airflow – even in noisy environments
- LCD display allows users to see fan speed, filter timer, battery level and current time

Optional Nuisance OV Pre-Filter

- Provides nuisance level relief from organic vapors**
- Extends life of main HEPA filter
- Part #268841

Integrated 3-Point Backpack-Style Shoulder Straps

- Distributes system weight to reduce lower back strain
- Quick-release belt for easy on/off



For detailed care and use of your PAPR Blower, visit
<https://www.youtube.com/watch?v=OB3KHgIBrc>

**Miller nuisance level OV relief respirators are designed for use with organic vapor concentrations not exceeding OSHA's PELs or other applicable government occupational exposure limits, whichever is lower.

SUPPLIED AIR RESPIRATORS

Industrial welding protection has never been more comfortable – keeping operators protected and performing at their best.

Miller® Supplied Air Respiratory Systems reduce heat stress while providing Grade D breathing air.

NIOSH 42 CFR 84 Certified
APF = 25
ANSI Z87.1+2015 (Helmet)
ANSI/Compressed Gas Association (CGA) G-7-1-1989) – Grade D Breathable Air
OSHA Classification: Loose-fitting respirator. Fit testing not required.



SAR Portfolio
T94i-R™, T94i-R™ XL
and T94iH-R™ Hard Hat

C50 Air Regulator

Operators stay comfortable all day with air that is cooled by up to 50 degrees Fahrenheit** – alleviating heat stress and fatigue. Air regulator can be positioned horizontally or vertically to align with the operator’s body in varied positions.

Swivel Connection

360 degree swivel air hose connection alleviates coiling so operators can continue working without needing to frequently stop and adjust the hose.

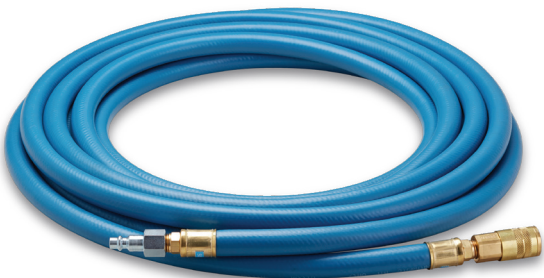
** Performance under different applications may vary.



Air Hoses

Available in straight and coiled options to best fit your application and environment. Comes with industrial interchange fittings. Schrader fitting option available for purchase.

 For detailed care and use of your SAR, visit <https://www.youtube.com/watch?v=5UcbWDpS0E>





BREATHEAIR™ FILTRATION SYSTEMS

The BreatheAir Filtration System provides Grade D air to the operator's breathing zone and monitors for CO during use to help ensure compliance and worker safety.

Filter Change Indicators

Operators are clearly notified when filters need to be changed, eliminating guesswork and amplifying unit performance.

- Simple filter change process is fast, minimizing downtime
- Automatic condensation drain extends filter life
- Continuous monitoring of carbon monoxide (CO) levels in the breathing air

External Warning Lights and Alarms

Operators are quickly notified of heightened CO levels.

Portable & Stationary Configurations

Depending on your environment and needs, select from a portable or stationary system. Both have the options to support two or four operators, with CO monitors set to either 10 PPM (USA) or 5 PPM (Canada).



THREE-STAGE FILTRATION PROCESS



1st Stage Filter - Particulate/Bulk Liquid Separation Filter: Removes up to 95 percent of liquids and particulate down to 5.0 microns.



2nd Stage Filter - Oil Coalescing & Ultra Fine Particulate Filter: Removes up to 99.97 percent of fine oil mists and particulate down to .01 microns in size.



3rd Stage Filter - Activated Charcoal Filter: Removes organic vapors, odors and tastes.



For step-by-step instruction on how to change BreatheAir™ filters visit <https://youtu.be/Ythm-S5ljCg>

Learn more about weld fume mitigation

Find weld fume solutions that fit your facility, workflow and safety needs. Explore fume extraction and respiratory protection options that help reduce exposure, support compliance efforts and create a cleaner environment for welding.



Explore weld fume control resources

Find practical guidance on welding fume exposure, extraction and respiratory protection. Learn how air monitoring, engineering controls and personal protective equipment can support a safer welding environment.



LPR-100™ SERIES RESPIRATORS

Extreme low-profile design provides maximum field of vision, doesn't interfere with protective eye-wear and fits comfortably under most welding helmets.



Provides up to 99.97% filtration of airborne particulates and aerosols, both oil-based and non-oil-based.



Exclusive filter design provides additional surface area to reduce breathing resistance while minimizing filter size.



Four-point head strap adjustments with integrated cushion for a customized and comfortable fit.



Large non-return exhaust valve reduces heat build-up and user fatigue.



Made with medical-grade materials – free of latex and silicone; odor-free and non-allergenic.

Gen II filters provide up to 55% less breathing resistance.

WHEN SHOULD I REPLACE MY LPR-100™ FILTER CARTRIDGES?

- ✓ It becomes difficult to breathe comfortably (this will vary from individual to individual)
- ✓ The filter becomes dirty or physical damage occurs
- ✓ For P-Series filters only when used in environments containing oil aerosol:
 - Dispose of P-Series filters after 40 hours of use or 30 days, whichever is first
- ✓ Organic Vapor cartridge should be changed according to user defined change out schedule.



LPR-100™ GEN II HALF MASK RESPIRATORS

Ideal for welding applications, the low-profile design fits comfortably under most welding helmets* with a downward facing exhaust valve to reduce heat buildup and lens fogging. **Available with Nuisance Level OV relief filters.**

* Fits under T94™, Digital Elite™, Classic and MP-10 welding helmets as well as the Weld-Mask™.



NIOSH 42 CFR 84 Certified	APF = 10
OSHA Classification: Tight-fitting respirator ¹	WEIGHT: 5.7 oz (162 g)
FILTER: Up to 99.97% Efficiency	



Gen II P100 Filters
Features an innovative filter media that will not deteriorate in humid conditions, extending filter life.



Gen II P100 Nuisance Level OV Relief Filters
Features an added layer of carbon that helps remove nuisance level organic vapor odors.



Inside view

Ergonomic mask design provides a more comfortable fit without compromising mask effectiveness.



LPR-100™ /OV REUSABLE RESPIRATOR

Ideal for welding, paint, weldment cleaning and general metal working clean-up. Features OV (organic vapor) cartridges to provide relief and help keep operators compliant where contaminants are above OSHA's permissible exposure limits (PEL). Fits comfortably under Miller® T94™ and Digital Elite™ Series welding helmets.

¹ Fit testing required for mandatory use.



NIOSH 42 CFR 84 Certified	APF = 10
OSHA Classification: Tight-fitting respirator ¹	WEIGHT: 12.5 oz (355 g)
FILTER: Up to 99.97% Efficiency, with organic vapor cartridge	



P100/OV (Organic Vapor) Filters
In addition to a P100 filter layer, product features activated carbon with a pore structure selected for maximum absorption efficiency.



Inside view

Oversized exhaust valve eases breathing.



ORDERING INFORMATION

Powered Air Purifying Respirators

292753	PAPR II with T94-R™
292754	PAPR II with T94i-R™
292755	PAPR II with T94i-R™ XL
287510	PAPR II with T94iH-R™ Hard Hat
288356	PAPR II with Face Shield



Supplied Air Respirators

292748	SAR with T94i-R™
292749	SAR with T94i-R™ XL
400463	SAR with T94iH-R™ Hard Hat



BreatheAir™ Boxes

275983	2 Person Box, 10 PPM (USA)
275984	2 Person Box, 5 PPM (Canada)
275985	4 Person Box, 10 PPM (USA)
275986	4 Person Box, 5 PPM (Canada)



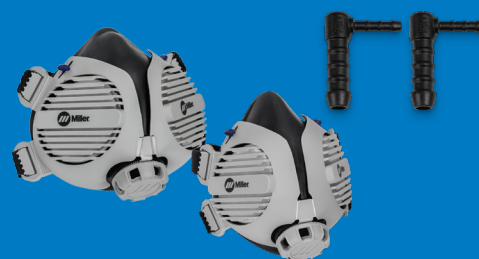
BreatheAir™ Panels

275961	2 Person Panel, 10 PPM (USA)
275963	2 Person Panel, 5 PPM (Canada)
275970	4 Person Panel, 10 PPM (USA)
275981	4 Person Panel, 5 PPM (Canada)



LPR-100™ Gen II Series Half Mask Respirators

294961	Small/medium respirator with P100 filters
294962	Medium/large respirator with P100 filters
295273	Small/medium respirator with P100 nuisance level OV relief filters
295274	Medium/large respirator with P100 nuisance level OV relief filters
298192	Quantitative fit test adapters (two pack)



LPR-100™ OV Half Mask Respirators

ML00996	Small/medium respirator with P100 organic vapor filters
ML00997	Medium/large respirator with P100 organic vapor filters
261086	Quantitative Face-Fit Test Kit

