




The Safety Company

# How Advanced Welding PPE Can Help Mitigate Safety Risks


Welding isn't just a job—it's the backbone of industry. It's tough, it's demanding, and it comes with real risks. According to the Bureau of Labor Statistics, 12,270 injuries to workers while welding, soldering, or brazing occurred between 2021 and 2022<sup>1</sup>. Welding injuries can involve the eyes, skin, and respiratory system.

## 4


GENERAL WELDING INJURY CATEGORIES




Incineration by hot metal slag.



Injuries caused by flying particles.



Damage to the eyes or skin from UV and infrared radiation.



Irritation by aggressive welding smoke, gases, or chemicals.

See what you can do with the latest innovation in welding safety from industry leaders MSA and optrel.

## Meet the optrel® Helix Pure Air Powered Air-Purifying Respirator (PAPR)

The optrel® Helix Pure Air PAPR is designed to help protect workers in welding applications from eye, face, and respiratory safety risks.

### HELIX PURE AIR KEY FEATURES

The Helix Pure Air Welding Helmet features an innovative slide-up design to seamlessly switch from welding to grinding that ensures balance, minimizes weight and allows for overhead welding.



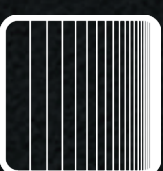
**“Slide Up” Grinding Mode**

Innovative internal slide-up technology allows the user to seamlessly go from welding to grinding without removing the helmet or changing the profile of the welding hood. This allows for better access in tight spaces and helps to reduce neck strain for the user.



**Crystal Lens Technology**

Goodbye, green tint! With Optrel's Crystal Lens Technology, see what's happening before, during, and after welding in almost perfect color— with your hood on! The Crystal Lens Technology offers a 2.0 protection level with an inactive-state light transmission level of 31% for a clear, unclouded view of the weld pool.<sup>2</sup>



**Fadetric**

User adjustable delay allowing up to 2 seconds in transition from welding to the light state, helps to reduce eye strain and mitigate the effects of flash and afterglow when welding is completed.



**Patented Nose Cut Out**

Ensures a large, panoramic field of view and helps to eliminate tunnel view.



**Shadetric**

Automatically adapts shade level based on the intensity of the welding arc.



**Overhead Welding**

External lens curvature deflects spatter and sparks, allowing for overhead welding.



### e3000X PAPR KEY FEATURES



**Long-Lasting Rechargeable Battery**

The rechargeable lithium-ion battery can achieve up to 14 hours of runtime on a single charge and is designed to last for 500 charge cycles. The e3000x will also alert the user to low battery levels.



**NIOSH-Certified**

Certified by NIOSH for meeting NIOSH approval for welding applications.



**Premium Filtration**

Modular respiratory protection includes a type HE/HEPA filter with spark guard, with optional Mountain Breeze nuisance level odor and ozone filtration. It is ATEX approved for safety and reliability in a multitude of environments.



**Multiple Blower Speeds**

The e3000X offers three blower speeds to better accommodate your airflow needs and will alert the welder if a low flow rate is detected



#### Sources

- (1) <https://www.bls.gov/iif/nonfatal-injuries-and-illnesses-tables/case-and-demographic-characteristics-table-r44-2021-2022.xlsx>
- (2) <https://www.optrel.com/en/technologie/funktionen-features/crystal-lens-technology>



**WE KNOW WHAT'S AT STAKE.**