Maintenance, repair, and operations hazards



Vapor/particulate hazard

When you weld, you generate so much heat that you actually vaporize the metal. As soon as the metal vapor leaves the heat of the arc, it recondenses back into an extremely small particle called a "fume". These microscopic bits of hot metal are small enough and buoyant enough to be released from the welding arc and rise in a cloud of metal fume into workplace air. These fumes can then be inhaled by the welder or others close to the source.

The effects of welding fume are not typically immediately obvious, like heat that can burn your skin or radiation that can affect your eyes. Since metalworking hazards include many different types of welding fume materials, picking the appropriate respiratory protection as part of your metal/fabrication PPE choices is crucial.

3M offers various types of respiratory protection.





Noise exposure hazards

Certain MRO operations and tools may generate high noise levels. But do they have to? Equipment and processes can be designed or altered to be quieter.

When that's not feasible, 3M provides a wide range of hearing protectors. Earplugs, muffs, and even protective communication systems can play an important role in conserving worker hearing. They must be comfortable, fit properly and provide adequate protection for the environment. Compatibility with other PPE and the workers' ability to communicate must also be considered. 3M has a full range of solutions to help protect your workers.



Eye injury hazards

Flying particles from certain MRO processes are potential causes of eve and face injury Appropriate guarding and the use of eye and face protection are needed to help minimize exposure for your workers. In addition, welding operations may generate high levels of ultraviolet, infra-red and visible light requiring appropriate eye and face PPE to minimize exposure for the welders. 3M offers a wide range of eye and face protection to help make workers safe at work.

3M safety solutions for maintenance, repair and operations



Vapor/particulate hazard

Workers exposed to various types of vapors and particulates may require appropriate respiratory protection, you can choose from many types of respirators such as the Aura™ series filtering facepiece respirators, which protects from dusts and mists or Secure Click™ reusable respirator which allows easier communication while working. Some solutions also integrate a powered air purifying respiratory (PAPR) system.









Noise exposure hazards

Noise-induced hearing loss is 100% preventable. Select the right solution for your workers to help protect their hearing. Discover a wide range of 3M innovative hearing protectors, such as the E-A-R™ earplugs or PELTOR™ earmuff designed for fitting under helmets.



Protective







Eye injury hazards

Appropriate eye and face protection may be needed to help minimize exposure to your workers. 3M offers SecureFit™ series safety glasses that protect eye from foreign body injuries and Speedglass™ welding helmet - adequate protection against high levels of ultraviolet, infra-red and visible light.





Welding helmet



Face shields