



# 3M safety solutions for welding and grinding to help them give their best

## Welding and grinding hazards



### Welding fume hazards

Welding produces extremely small particles called “fume” which rise in a cloud of metal fume into workplace air. The effects of inhaling welding fume by workers are not immediately obvious but overexposure can cause serious health issues.

Since metalworking hazards include many different types of welding fume materials, selecting the appropriate respiratory protection is crucial. 3M is here to help.



### Noise exposure hazards

Noise-Induced Hearing Loss is one of the most common industrial illnesses in the world. It is often unnoticeable in the early stages and unfortunately is permanently irreversible.

That’s why working in hazardous and loud environment requires an appropriate hearing protection compatible with other PPE. 3M provides best in class hearing protection.



### Eye injury hazards

Eye injuries cost American companies around \$300M\* a year. Potential causes of eye and face injuries are flying particles from processes such as cutting, grinding, or scarfing and high levels of ultraviolet, infra-red and visible light generated by welding, cutting, melting, and pouring operations.

3M offers appropriate eye and face protection to help minimize workers’ exposure.

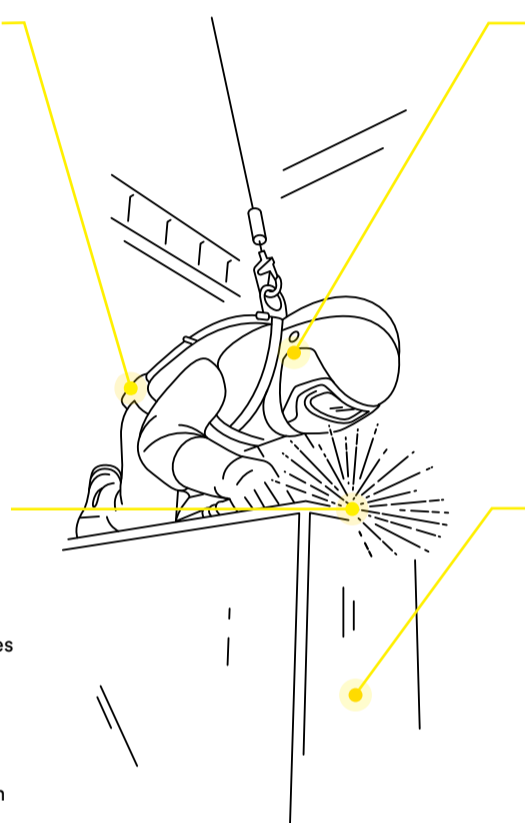
\*Source: [www.osha.gov/SLTC/eyefaceprotection](http://www.osha.gov/SLTC/eyefaceprotection)



### Working at heights hazard

You are working at height if you are above ground/another level or near an opening or fragile surface or you could fall from an edge. There are key challenges of working at heights: leading edge-sharp edges, fall clearance, and dropped objects.

Whether conducting a hazard assessment or developing a comprehensive fall protection plan, selecting the correct safety equipment before the work begins will help to prevent falls. 3M can advise on this.



## 3M safety solutions for welding and grinding hazards



### Welding fume hazards

Workers exposed to various types of welding fumes require appropriate respiratory protection. For welders, you can choose from many types of respirators such as Aura™, which protects from dusts and mists or Secure Click™ which allows easier communication while working. Some solutions also integrate a powered air purifying respiratory (PAPR) system.



Disposable respirators



PAPR



Reusable respirators



### Noise exposure hazards

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



Over-the-head earmuffs



Disposable earplugs



### Eye injury hazards

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



Eyewear



Welding helmet



Face shields



### Working at heights hazard

Having the right equipment for working at heights can make all the difference. Elevate your employees’ safety and comfort to new heights with 3M Fall Protection equipment, and our trusted 3M™ DBI-SALA® and Protecta® fall protection brands, also for use in high temperatures.



Protecta® fall protection



DBI-SALA® fall protection