

# RESPIRATORS PROTECT WHILE WELDING

Respirators are used to protect workers from gases, vapors, dusts, fumes, smoke, sprays and other hazardous materials. It can take years for some respiratory hazards, such as welding fumes, to make you sick after you have been exposed.

That is why it is *imperative* to use either a positive pressure respirator or half mask respirator while performing welding activities.

## What you should know:

- The chemical toxins welding fumes contain
- How to select the correct size and type of respirator
- How to conduct an annual respiratory fit test to ensure proper sealing
- How to prevent interference with the respirator seal
- How to care and maintain a respirator



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## WHAT WELDING FUMES CONTAIN

- Fluxes containing silica or fluoride produce amorphous silica, metallic silicates and fluoride fumes.
- Fumes from mild steel welding contain mostly iron with small amounts of additive metals (chromium, nickel, manganese, molybdenum, vanadium, titanium, cobalt, copper, etc).
- Stainless steel(s) can have larger amounts of chromium including hexavalent chromium, or nickel in the fumes and lesser amounts of iron.

## SELECTING THE CORRECT RESPIRATOR SIZE AND TYPE

When conducting welding activities, consider using a half mask respirator with the correct filters. For those with facial hair, use a positive pressure respirator device.

## CHECKING IF YOUR RESPIRATOR IS THE RIGHT FIT FOR YOU

Your respirator must fit correctly and form a good seal on your face to protect yourself properly. When it fits well it will prevent contaminated air from being inhaled by leaking past the sides, top or bottom of the respirator. A formal fit test is required and should be completed annually by a trained fit tester.

## CONDUCTING A SEAL CHECK ON YOUR RESPIRATOR

If you wear a respirator with a half-face piece or full-face piece, before each use, take the time to ensure your respirator fits properly and forms an effective seal over your face by conducting a proper seal check to your face.

## RESPIRATOR MAINTENANCE AND CARE

When using half mask respirators and positive pressure respirators, be sure to regularly check the filters as they can get plugged with smoke and fumes particulates. When the filters are plugged, they are less effective and it will be harder to breathe. Replace the filters regularly as required and store your respirator properly to prevent contaminants from getting into it.

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