

WELDING SAFETY

Welding hazards pose an unusual combination of safety and health risks. By its nature, welding produces fumes and noise, gives off radiation, involves electricity or gases, and has the potential for burns, shock, fire, and explosions.

Some hazards are common to both electric arc and oxygen-fuel gas welding. If you work with or near a welding operation, the following general precautions should help you to work more safely:

- Weld only in designated areas.
- Only operate welding equipment you have been trained to use.
- Know what the substance is that's being welded and any coating on it.
- Wear protective clothing to cover all exposed areas of the body for protection sparks, hot spatter, and radiation.
- Protective clothing should be dry and free of holes, grease, oil, and other substances, which may burn.
- Wear flameproof gauntlet gloves, a leather or asbestos apron, and high-top shoes to provide good protection against sparks and spatter.
- Wear specifically designed, leak-proof helmets equipped with filter plates to protect against ultraviolet, infrared, and visible radiation.
- Never look at a flash, even for an instant.
- Keep your head away from the plume by staying back and to the side of the work.
- Use your helmet and head position to minimize fume inhalation in your breathing zone.
- Make sure there is good local exhaust ventilation to keep the air in your breathing zone clear.
- Don't weld in a confined space without adequate ventilation and a NIOSH-approved respirator.
- Don't weld in wet areas, wear wet or damp clothing or weld with wet hands.
- Don't weld on containers, which have held combustible materials or on drums, barrels or tanks until proper safety precautions have been taken to prevent explosions.
- If others are working in the area be sure they are warned and protected against arcs, fumes, sparks, and other welding hazards.
- Don't coil the electrode cable around your body.
- Ground both the frame of the welding equipment and metal being welded.
- Check for leaks in gas hoses using an inert gas.
- Check area around you before welding to be sure no flammable material or degreasing solvents are in the welding area.
- Keep a fire watch in the area during and after welding to be sure there are no smoldering materials, hot slag or live sparks which could start a fire.
- Locate the nearest fire extinguisher before welding.
- Deposit all scraps and electrode butts in proper waste container to avoid fire and toxic fumes.

If you have any questions about your welding operation relating to health and safety, talk to your supervisor or call the nearest office of the Cal/OSHA Consultation Service.

