Metal Working



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WHAT’S AT STAKE?

Metal working is a very dangerous work. Only the most experienced and trained can do this work. The risk of life shattering injuries is always present including fatalities.

WHAT’S THE DANGER?

The potential for injury from welding, grinding and cutting is significant. Eyes and skin can be burned by infrared, ultraviolet and visible radiation from the light rays of the welding arc. Loud noise can affect hearing. Electric shock can injure or kill. You can also be burned by hot metal, sparks and flying chips. If handled improperly, compressed welding gases stored in high pressure cylinders can cause harm to people and property. Various fumes and gases from welding processes can damage the respiratory system or cause asphyxiation.

HOW TO PROTECT YOURSELF

- It’s crucial to be cautious when welding, grinding or using powered cutting tools. It’s important to use approved equipment in good operating condition and to follow all safety procedure instructions.
- Your work area should be kept safe. You should also be on the lookout for potential fire, electrical, explosive and toxic gas hazards among others. Welding, cutting and gripping operations should never take place near flammable materials. Aisles and stairways should be kept clear of clutter. Other people should stay a safe distance away from welding and cutting operations.
- It’s essential to wear appropriate Personal Protective Equipment (PPE) while welding, grinding or power cutting.

Eye protection: Shield your eyes from sparks, heat, molten metal, flying chips and splatter. You can receive painful eye burns known as welder’s flash from exposure to ultraviolet and infrared light from the welding arc.

Other PPE & Clothing: Guard your body while welding, cutting or grinding. Use hearing protection such as earplugs or earmuffs when available, wear clothes made of heat-resistance materials. An apron made of leather or other fire resistant material provides extra protection.

Foot and hand protection: the right kind of foot and hand protection is an essential part of shop safety. Gloves should be made of leather or other strong, flame-resistant fabric.

Respiratory Protection: Choose the right kind of approved respirator when you work around toxic chemicals, gases and materials. This might involve anything from a simple face mask to a supplied-air respirator, depending on the hazards of the environment.

Here are some other tips for safe welding, cutting or grinding.

- Avoid fires and explosions. Do not weld near flammable or combustible materials, liquids, vapors and dusts. Know where the appropriate fire extinguishers are located. Report any smell of propane, acetylene or other flammable substances.
- Prevent electric shock. Inspect equipment for loose connections, bare wires or cables before operating.
- Handle compressed gas cylinders safely. Learn the proper procedures for using and storing cylinders.
- You should know where safety showers and eye wash stations are and how to use them. Get help immediately when an incident occurs.

FINAL WORD

Take responsibility for your own safety when you weld, cut or grind. Be familiar with the hazards. Wear the right PPE, maintain a safe environment and follow the safety rules.