TOOLBOX TALK: ARC WELDING

Hazards Associated with Arc Welding

Before beginning a welding job, it is important to identify the hazards for that particular welding operation. The hazards will depend on the type of welding, the materials (base metals, surface coatings, electrodes) to be welded, wet conditions or high humidity areas (these conditions may require the use of rubber pads or boots to protect against electric shock), and the environmental conditions (inside, outside or in a confined space). Ask for the safety data sheets (SDSs) to identify the hazardous materials used in welding and the fumes that may be generated. Make sure you know what you are welding before you start.

SAFETY PRECAUTIONS FOR ARC WELDING

Hoses showing leaks, burns, worn places, or other defects must be repaired or replaced. Position yourself while welding so that your head is not in the fumes. Remove all nearby flammable or combustible materials before striking an arc. Welding areas should be kept free of equipment and machines that could cause trips or falls. People next to the welding area must be protected by noncombustible or flameproof screens or be required to wear appropriate goggles. The booths or screens should permit circulation of air at the floor level.

Personal Protective Equipment (PPE):

The intense heat of welding and sparks can cause burns. Eye injuries have resulted from contact with hot slag, metal chips, sparks, and hot electrodes. Welding helmets, goggles, or other eye protectors must contain special filter plates or lenses for workers exposed to arc welding. Welders should wear protective clothing such as: fire-resistant gauntlet gloves, head cap, hard-toed shoes or high boots, leather apron, face shield, flame-retardant coveralls, and safety glasses.

Visible Light, and Ultraviolet and Infrared Radiation:

Invisible ultraviolet light (UV) from the arc can cause “welder’s flash” after even a brief exposure. The symptoms of welders flash usually occur hours after exposure to UV light, and include a feeling of sand or grit in the eye, blurred vision, intense pain, tearing, burning, and headache.

Welding Can Cause Fire or Explosion:

Welding sparks can cause fires. Have a fire extinguisher nearby. After completion of work, inspect area to ensure it is free of sparks, glowing embers, and flames.

Do not weld on drums, tanks, or any closed containers unless a qualified person has declared or prepared it to be safe. Containers with unknown contents should be assumed to be flammable or combustible.

We Are Here

Do you have a question about safety and health? Contact us and we can assist you in making your workplace safer. **safeatwork.mo.gov**

I understand the information presented and the hazards associated with arc welding.

COMPANY: _____ DATE: _____

EMPLOYEE NAME:	EMPLOYEE SIGNATURE:

Learn more ways to keep your workplace safe.
Visit safeatwork.mo.gov.

DEPARTMENT OF LABOR & INDUSTRIAL RELATIONS