



007: Arc Welding

A misconception

Many people assume arc welding is inherently safe, because you don't have to deal with gas bottles and their attendant risk of fire and explosion. However, arc welding equipment has its own set of problems.

Non-welder cautions

If you see an arc from a welder, turn your head immediately. If you are walking when this happens, stop where you are until the welding has stopped or you can shield your eyes enough that you can see where you are going.

Never try to get the attention of the person doing the welding, unless there is an emergency.

Never touch something that has just been welded on. It is likely hot enough to cause a severe burn. The more massive the object, the longer it will stay hot.

Do not assume danger has passed just because the person welding set down the welding rod. The next step is likely to be hammer tapping on the weld or some other action that could send debris flying your way.

Welder cautions

Match your welder to a power source rated to supply that welder. Not all arc welder receptacles are the same.

Ensure the welder output is set right for the welding job you are doing. A setting that is too low is no safer than one that is too high.

Use the correct rod for the job. This reduces spattering and other hazards. It's safer, and more quality-conscious, to take the time to get the right rod than it is to "wing it" with the wrong rod.

Do not wear contact lenses.

Put your welding helmet on before turning the welder on (or, if it lacks a switch, plugging it in). This one simple step saves time while improving safety.

Lower your visor before touching the electrode to the part being welded. Not only will you prevent damage to your eyes, but also you will get a better weld.

Raise your visor only when the weld is done.

Turn the welder off before taking your helmet off.

Wear gloves suitable for arc welding and dress properly to avoid burns.

Grounding

Your welding unit's ground lead will complete the circuit—take care where you connect it.

Do not assume you can just hook your ground clamp to any metal surface.

Do not use the body of a motor as an attachment point. This will likely damage the motor, and could cause it to fly apart while you are welding.

One of the best places to ground is to structural steel, such as an I-beam.

Discussion leader duties for this session:

Obtain arc welding equipment, tools, guards, PPE, and supplies so you have props to help reinforce the message during the discussion.

What this Safety Talk covers:

The safe use of arc welding equipment.

Discussion notes :

