

MSHA's Accident Prevention Program Miner's Tip



Welding Hazards

Category: Maintenance Mine Type: All Mines

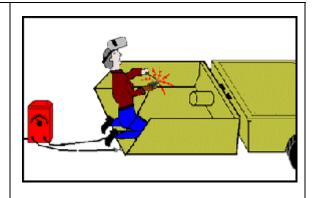
Electric shock from welding can kill!! Any electric welder, AC or DC, has the power to cause electrocution if the electrode touches your bare skin while you are grounded.

Two recent accidents have occurred when employees were using an electric arc welder. They received electrical shocks resulting in one fatality and a near-fatality.

To avoid electric shocks and possible electrocution, personnel should take the following precautions:

- Wear dry, insulated gloves in good condition and protective clothing. (Change as necessary to keep dry)
- Insulate yourself from the workpiece and ground by wearing rubber soled shoes or stand on a dry insulated mat. Do not touch the ground with any other part of your body.
- Use fully insulated electrode holders.
- Do not use worn, damaged, undersized or poorly spliced cables.
- Do not wrap cables carrying current around your body.
- Do not touch an energized electrode with bare hands.
- Turn off all equipment when not in use.
- Use only well maintained equipment. Repair or replace damaged parts before further use.
- Wet working conditions should be avoided. Even a person's perspiration can lower the body's resistance to electrical shock.

The avoidance of electrical shock is largely within the control of the welder. Therefore, it is especially important that the welder be thoroughly trained on safe welding procedures. Safe procedures must be observed at all times when working with equipment having voltages necessary for arc welding. These voltages can be dangerous to life. Even mild shocks can cause involuntary muscular contractions.





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