

Location _____ Trainer _____ Date _____

ARC WELDING

Do you know the dangers associated with arc welding equipment? Do you know how to identify hazards related to your operation? Most arc welding equipment is designed to operate safely in high humidity, rainy and windy weather, and in the presence of vapors, corrosive fumes, dirt, dust and gases.

- Wet equipment or wet welders can spell disaster. Wet equipment should be dried off, but only **AFTER** the power source has been disconnected.
- Before using welding cables, check the insulation and lead cables for exposed conductors.
- Replace all weld lead spliced within 10 feet of the holder.
- To reduce the chance of shock, check the electrode holders for loose or exposed connections.
- If metal, inert-gas-shield welding is used, examine the gas hose for leaks.
- Never coil or loop electrode cable around any part of your body.
- Be sure the welding machine frame is properly grounded; double-check the ground connections.
- Never use pipelines carrying gases or flammable liquids or conduits carrying electrical conductors as grounds.
- Don't ground to a building structure that is a great distance from the weld.
- Wet floors are dangerous and can cause electrical shock. Special precautions must be taken. Make sure the insulation is sufficient on higher open-circuit voltage.
- If you are AC welding under wet conditions, including perspiration, be sure to have an automatic control to reduce the no-load voltage; this prevents electrical shock.
- Do not change the polarity switch contact surface and can seriously burn you.
- Make sure there is a power disconnect switch on the welding machine; never use a machine without one. This switch shuts down the machine immediately in an emergency.
- Electrode holders should be stored where they cannot make contact with personnel, conductors, fuels or compressed gas tanks.
- If you are not going to be welding for a few minutes, disconnect the power source and remove the electrodes.
- Never strike an arc on an industrial gas cylinder.
- Always keep electrodes and their holders and any other live parts away from gas cylinders.