SAFE OPERATING PROCEDURES

MIG Welder

DO NOT use this machine unless you have received authorization from the Shop Manager

- Eye protection must be worn at all times.
- Long and loose hair must be contained.
- Oil-free leather gloves must be worn.
- A hood with the correct shade lens must be worn when welding.
- Appropriate protective clothing must be worn.
- Rings and jewelry must not be worn.
- Respiratory protection may be required.
- Sturdy closed-toe footwear must be worn.
- Pants must not be rolled up nor tucked into boots.

POTENTIAL HAZARDS AND INJURIES

- Electric shock
- Fumes (respiratory hazard)
- Radiation (eye & skin damage)
- Molten metal/Hot surfaces (burn hazard)
- Flying sparks (burn hazard)
- Fire

PRE-OPERATIONAL SAFETY CHECKS

- Locate and ensure you are familiar with all machine operations and controls.
- Check workspaces, walkways, and routing of welding cables to ensure no slip/trip hazards are present.
- Ensure the work area is clean and clear of grease, oil and any flammable or combustible materials.
- Ensure the welding equipment, work area, your gloves and other PPE are dry to avoid electric shocks.
- Ensure your jacket, gloves, MIG gun and welding cables are in good condition.
- Ensure other people are protected from flashes by closing the curtain to the welding bay or erecting screens.
- Ensure the fume extraction unit is operating properly before welding. (In some cases, the Fire Marshal has allowed welding in areas without fume extraction.)
- Verify lens function if using an auto-darkening hood.
- Review the SDS for the wire and gas to be used.
- Ensure personal hydration as PPE and direct exposure to heat can increase risk of heat illness.

SAFE OPERATING PRACTICES

- Ensure machine is correctly set up (e.g., voltage, wire speed, and gas flow).
- Ensure good connection of ground cable to workpiece or table.
- Say “EYES” or “COVER” before initiating arc.
- Turn off the power before removing contact tip or accessing wire spool and drive roll area.
- Lay gun with care to avoid inadvertent triggering.

ENDING OPERATIONS AND CLEANING UP

- Turn off the machine and fume extraction unit when work is completed.
- Close the gas cylinder valve.
- Hang up the MIG gun and leads.
- Inspect area for fire risk, and label any hot items.
- Leave the work are in a safe, clean and tidy state.

DON’T

- Don’t use faulty equipment; report it immediately.
- Don’t leave the welder running unattended.
- Don’t drape cables over body.
- Don’t weld on drums, tanks, painted or plated materials, etc. without permission.

4/17 *SOP to be used in conjunction with an effective training program  UC Davis