

# SMSA – Safe Work Procedure

## ARC WELDER



**DO NOT use this equipment unless you have been instructed in its safe use and operation and have been given permission**

### PERSONAL PROTECTIVE EQUIPMENT



Safety glasses must be worn at all times in addition to welding mask.



A welding mask with correct grade lens for GMAW must be worn.



Oil free leather gloves and spats must be worn.



Sturdy footwear with rubber soles must be worn.



Long and loose hair must be contained.



Rings and jewellery must not be worn.



Respiratory protection devices may be required.



Close fitting/protective clothing to cover arms and legs must be worn.

### PRE-OPERATIONAL SAFETY CHECKS

- ✓ Locate and ensure you are familiar with all machine operations and controls.
- ✓ Check workspaces and walkways to ensure no slip/trip hazards are present.
- ✓ Ensure the work area is clean and clear of grease, oil and any flammable materials.
- ✓ Keep the welding equipment, work area and your gloves dry to avoid electric shocks.
- ✓ Ensure electrode holder and work leads are in good condition.
- ✓ Start the fume extraction unit before beginning to weld.
- ✓ Ensure other people are protected from flashes by closing the curtain to the welding bay or by erecting screens.

### OPERATIONAL SAFETY CHECKS

- ✓ Keep welding leads as short as possible and coil them to minimise inductance.
- ✓ Ensure work return earth cables make firm contact to provide a good electrical connection.
- ✓ Ensure the electrode holder has no electrode in it before turning on the welding machine.
- ✓ Ensure current is correctly set according to electrode selection.

### ENDING OPERATIONS AND CLEANING UP

- ✓ Switch off the machine and fume extraction unit when work is completed.
- ✓ Remove electrode stub from holder and switch off power source.
- ✓ Hang up electrode holder and welding cables. Leave the work area in a safe, clean and tidy state.

### POTENTIAL HAZARDS

- ⓘ Electric shock.
- ⓘ Fumes.
- ⓘ Radiation burns to eyes or body.
- ⓘ Body burns due to hot or molten materials.
- ⓘ Flying sparks.
- ⓘ Fire.

### DON'T

- ✗ Do not use faulty equipment. Immediately report suspect equipment.
- ✗ Do not use bare hands and never wrap electrode leads around yourself.

**This SWP does not necessarily cover all possible hazards associated with this equipment and should be used in conjunction with other references. It is designed as a guide to be used to compliment training and as a reminder to users prior to equipment use.**

*This information is provided by Frontline Safety*