# SAFE WORK INSTRUCTION

**TUNGSTEN INERT GAS WELDER** 

#### PERSONAL PROTECTIVE EQUIPMENT



Safety glasses must be worn at all times.

Close fitting / protective

cothing to cover arms and



Safety footwear must be worn.



Long or loose hair must be contained.



Oil free leather gloves and spats must be worn.



Respiratory protection devices must be worn.



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

legs must be worn.



Rings and jewellery must not be worn.

## POTENTIAL RISKS

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

## DON'Ts

- Do not use faulty equipment. Immediately report suspect equipment to your supervisor
  - Never leave the welder running unattended.

#### PRE-OPERATIONAL SAFETY CHECKS

- Locate and ensure you are familiar with all machine operations and controls.
- Check workspaces and walkways to ensure you have not created slip/trip hazards.
- 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 your gloves, welding torch and work leads are in good condition.
- Ensure other people are protected from flashes by closing the curtain to the welding bay or erecting screens.
- Start the fume extraction unit is on before beginning to weld.
- Ensure work leads do not create a tripping hazard.

#### OPERATIONAL SAFETY CHECKS CONTINUED

- ✓ Turn off the power while changing tungsten electrodes.
- ✓ Take care to avoid flashes.

## ENDING OPERATIONS AND CLEANING UP

- Switch off the machine and fume extraction unit when work completed.
- ✓ Close the gas cylinder valve.
- Hang up welding gun and leads.
- Leave the work area in a safe, clean and tidy state.

### **OPERATIONAL SAFETY CHECKS**

- Ensure machine is correctly set up for current, voltage, and gas flow.
- Ensure work return earth cables make firm contact to provide a good electrical connection.
- ✓ Strike the arc before placing the tip of the filler wire in the weld zone.

This Safe Work Instruction 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



