SAFE WORK INSTRUCTION
TUNGSTEN INERT GAS WELDER

PERSONAL PROTECTIVE EQUIPMENT
- Safety glasses must be worn at all times.
- Close fitting / protective clothing to cover arms and legs must be worn.
- A welding mask with correct grade lens for GTAW must be worn.
- Safety footwear must be worn.
- Oil free leather gloves and spats must be worn.
- Rings and jewellery must not be worn.
- Long or loose hair must be contained.
- Respiratory protection devices must be worn.

POTENTIAL RISKS
- Electric shock.
- Fumes.
- Radiation burns to eyes or body.
- Body burns due to hot or molten materials.
- 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
- 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.

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.