# Safe Work Procedure – Mig Welder

Authorised by HR Manager

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**DO NOT use this equipment unless you are authorised to use it and, have been instructed in its safe use and operation**

- Safety glasses must be worn at all times in work areas
- Sturdy footwear with rubber soles must be worn.
- Respiratory protection devices may be required for some operations.
- Rings and jewellery must not be worn.
- Long and loose hair must be contained
- Close fitting/protective clothing to cover arms and legs must be worn as well as a leather
- Oil free leather gloves must be worn when welding.
- A welding mask with correct grade lens for GTAW must be worn.

## POTENTIAL HAZARDS:

- Includes fire hazards, respiratory hazards, eye's and skin burns, ultraviolet light, electric shock, fumes, radiation burns to eyes or body, body burns due to hot or molten materials, flying sparks and fire.

## PRE-OPERATIONAL SAFETY CHECKS

- Ensure there are no slip/trip hazards present in workspaces and walkways
- Ensure the work area is clean and clear of grease, oil, and any flammable materials
- Make sure a fire extinguisher is easily accessible
- Check the welding mask is in good condition and right for the job
- Check the power cord is safely routed and in good condition
- Familiarise yourself with the operating procedure and control functions
- Check the work area and remove any hazards/obstacles that may interfere with your work
- Make sure the guards are fitted and welder cables routed correctly and in good condition
- Alert people in the area of potential hazards and place shields and/or curtains in place
- Ensure the parts to be welded are secured in place
- Make sure welded component is clean and well prepared
- Only carry out the work in a dry environment - avoid water as it is an electrocution hazard

## OPERATIONAL SAFETY

- Do not look at the welding process with unprotected eyes
- Use the correct settings to suit the job being carried out
- Make sure the welding area is well ventilated
- Have a good clean earth close to the area being welded
- Never leave the welder running unattended
- Take care to avoid flashes

## POST-Operation:

- Keep the equipment in good operating condition
- Report any faults

## TIP - INFORMATION

**IMPORTANT:** A MIG welder is a type of shielded metal arc welder that uses high-voltage electricity to melt and form a metal wire that's fed through the welding torch and applied to the point of the weld. When cool, the metal forms a bond between the two welded objects. To protect the weld from oxidation, an inert shielding gas is typically fed through the torch that protects the welding zone. In another variation, the shielding gas is generated by a coating on the wire itself (flux-cored wiring), but the arc and the gas shield are characteristic of all MIG welding.