








Safe Work Instruction - Welding - Arc

DO NOT use this plant* or complete this task unless you have been inducted in its safe use and operation by an Authorised Experienced Operator

This SWI may not cover all possible hazards and risks and should be referred to as a control measure in the risk assessment process. Additional training may be required for high risk plant/work. Site and task may change required PPE.

PERSONAL PROTECTIVE EQUIPMENT

-  Eye protection must be worn
-  Long and loose hair must be contained or covered.
-  Welding mask must be worn
-  Foot protection and spats must be worn
-  Hand protection must be worn
-  Protective body clothing must be worn
-  High visibility clothing must worn

POTENTIAL HAZARDS AND RISKS

- Explosion**
Explosion of gases, vapours or liquids
- Manual Task Injury**
Manual task injury from incorrect manual handling techniques
- Electrical shock or burn**
Electrical shock or burn from damaged or poorly maintained electrical leads and cables
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- Slips, Trips, Falls**
Slip, trip, fall due to uneven or slippery work surfaces
- Other**
Exposure to radiation
Burn injury
- Exposure to Dust/Fumes**
Exposure to other emissions released by the plant

PRE-OPERATIONAL SAFETY CHECKS

- ✓ Complete site specific risk assessment
- ✓ Complete a Hot Works Risk Assessment Checklist outside designated work area
- ✓ Complete visual plant check before operation
- ✓ Ensure you are familiar with plant operations and controls
- ✓ Ensure that guards are fitted, secured and functional in accordance with manufacturers guidelines
- ✓ Ensure welding mask lens is not damaged
- ✓ Keep area clean and free of grease, oil and any other contaminants
- ✓ Keep the welding equipment, work area and your gloves dry to avoid electric shocks
- ✓ Ensure all welding equipment is in good working order
- ✓ Start the fume extraction unit if required
- ✓ Ensure welding flash screens are in place before commencement of task if required

OPERATING PROCEDURES

- ✓ Ensure no person or animal is endangered when operating plant
- ✓ Keep welding leads as short as possible and uncoil 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
- ✓ Ensure workpiece has been prepared to be free of any contaminants
- ✓ Regularly inspect the tungsten electrode for damage. Turn all power off before changing electrode
- ✓ Before making adjustments bring plant to a complete standstill and isolate

ENDING OPERATIONS

- ✓ Allow plant to cool before performing any maintenance, refuelling or cleaning
- ✓ Remove electrode stub from the holder and switch off power source
- ✓ Ensure plant is in good working order and stored in the appropriate location

DO NOT

- ✗ Do not use if plant is faulty. Attach an Out of Service tag and report fault to your supervisor
- ✗ Do not operate in wet areas or if rain is pending
- ✗ Do not wear loose jewellery
- ✗ Do not use bare hands and never wrap electrode leads around yourself
- ✗ Do not use mobile phone while operating plant

*Plant in this SWI refers to any machinery, equipment, appliance, container, implement and tool.