

# Safe Operating Procedure



## PPE Required



## General Safety Instructions

- Complete pre-start checklist
- Read Manufacturers Operation Manual ([www.spwgroup.com.au](http://www.spwgroup.com.au))
- Report any faults or damage to SPW 1300WELDER (1300 935337)
- Do not wear loose clothing or jewellery
- Do not operate equipment near pedestrians or people
- Do not operate without the appropriate PPE as detailed
- Do not operate equipment under the influence of drugs or alcohol

## General Electricity Safety

- Ensure all electrical equipment has a current test tag within 3 months
- Do not operate equipment in or around water or damp environments
- It is recommended to use a safety switch to power this equipment
- Ensure the power lead is well stowed and do not present trip hazards
- Isolate the power by removing the plug prior to performing any work on the equipment including prior to changing leads or tools or bits

## Oxy-Fuel Gas welding, cutting, heating

MS10-3.9.17.3\_SOP\_Oxy Fuel Gas weld cut heat-SPW



## Risk Assessment

- Assess the immediate work area for any hazards
- Control or eliminate all the risks associated with the hazards
- Hazards to check for that may require risk control-
  - Overhead power lines
  - Working at height
  - Digging
  - Falling objects
  - Confined space
  - High Voltage
  - Traffic & moving machinery
  - Any stored energy
  - Stored energy – air, hydraulic, electricity, pressure

## Operating Safety Instructions

Operators should familiarise themselves with the equipment	Only qualified personnel to perform maintenance and repairs
Always wear appropriate clothing as Arc Rays can cause significant burns in very short times	Only use flame resistant clothing when welding
Always use arc screens to protect people and objects near by from Rays and sparks. Ensure no flammable substances nearby	Always wear the appropriate welding lenses when welding for the type of welding being performed. Refer ANSI Z87
Fumes emitted are dangerous and can vary depending on the consumable being used or the steel being cut or welded. Always wear breathing apparatus or operate in well ventilated areas. Keep exposure as low as possible and below Threshold Limit Values (TLV)	Always read the MSDS of the welding consumable being used to familiarise yourself with the appropriate protection required and keep. Precautions should also be taken when welding, heating or cutting Galvanised steel
Do not weld or cut pipes, tanks or vessels that contain pressure or flammable substances	Ensure the equipment is fitted with current tested Flashback arrestors on the Oxy and Fuel source and at regulator and torch
Ensure Gas hoses are in good condition, free from defects or deterioration and that fittings are sound	Ensure work area is free of grease, oils or flammable substances
Ensure Regulators are in good condition and free from defects and are fitted securely to the correct cylinder – Oxygen regulator must be fitted to Oxygen cylinder and fuel gas regulator must be fitted to fuel cylinder	Check that the cylinders are in good condition, free from defects and ensure they are well secured and not free standing. Never puncture, cut, weld or dispose of gas cylinders. If faults found, immediately contact the gas manufacturer
<b>Pressure Setting</b> <ul style="list-style-type: none"> <li>•Loosen off the regulator adjusting knobs prior to opening cylinder</li> <li>•Check blowpipe valves are closed</li> <li>•Slowly open the cylinder valve</li> <li>•Slowly screw in the regulator knob to the desired pressure</li> <li>•Slightly purge the gas at the blowpipe to ensure flow</li> <li>•Close of the valve</li> <li>•Repeat for both Oxy and fuel separately</li> </ul>	<b>Lighting up</b> <ul style="list-style-type: none"> <li>•Slightly open the fuel gas valve and light the fuel with a flint light</li> <li>•Never use matches or a fluid lighter</li> <li>•For acetylene open until the flame no longer produces soot</li> <li>•Slowly open the oxy valve until you have the desired flame</li> <li>•Adjust valves accordingly to optimize flame</li> <li>•For cutting attachments test the oxy cutting valve</li> </ul>
<b>Heating</b> <ul style="list-style-type: none"> <li>•Only used approved heating attachments and not a cutting attachment</li> <li>•Some heating attachments both fuel/oxy and fuel/air can produce considerable heat so ensure preparation and planning is in place with a clear non flammable area marked out and fire fighting apparatus on hand</li> </ul>	<b>Shutting down</b> <ul style="list-style-type: none"> <li>•Always turn the fuel gas valve off first</li> <li>•Then turn the oxy valve off</li> <li>•Close valves on both cylinders</li> <li>•Bleed lines by opening the valves on the blowpipe one by one</li> </ul>
Never use gas apparatus as a hammer	In the event of a fire near the cylinder evacuate a minimum area of 100M and call the fire brigade