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|-------------------|---------------------------------------|--|
| <b>SWP24</b>      | Welding with Mild Steel (Gas Welding) |  |
| <b>COMPANY</b>    | Company Name                          |  |
| <b>SITE</b>       | Site Location                         |  |
| <b>LOCATION</b>   | Workshop                              |  |
| <b>DATE</b>       | 07-Mar-19                             |  |
| <b>SAFETY REP</b> | Safety Reps Name                      |  |


| HAZARDS |   |
|---------|---|
|         | <ul style="list-style-type: none"> <li>• <b>Inhalation of Welding Fumes</b> - by operator and/or passersby, causing lung cancer and has the potential to cause kidney cancer.</li> <li>• <b>Burns</b> - Risk of burns from lit torches and hot work pieces.</li> <li>• <b>Eye Injury</b> - Risk of eye injuries from spatter if goggles are not worn.</li> <li>• <b>Fires and/or explosions</b> - if flashback arrestors are not used.</li> </ul> |


| PERMIT TO WORK  |   |
|---|---|
|  | • To be decided by the work supervisor and dependent on the tasks to be carried out |


| PPE REQUIRED   |  |  |  |  |   |  |  |
|--|--|--|--|--|---|--|--|
|    |  |  |  |  |  |  |  |
| YES  | YES  | YES  | YES  | As Required  | N/A   | N/A  | YES  |
| Welding goggles that comply with BS EN 175 and lenses with BS EN 169; in certain locations, or site conditions, other additional protective clothing may be obligatory, e.g. hard hats or ear defenders, plus breathing apparatus. |  |  |  |  |   |  |  |


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|  | <b>BEFORE</b> | <ul style="list-style-type: none"> <li>• All gas bottles to be mounted on a purpose-designed trolley.</li> <li>• All staff to wear the relevant PPE for the work to be carried out.</li> <li>• All staff to wear the relevant RPE for the welding activities undertaken outside in the open air.</li> <li>• Local exhaust ventilation (LEV) to be turned on and positioned to capture all welding fumes at source. If residual welding fumes persist then all staff in area <b>MUST</b> wear appropriate RPE.</li> <li>• Cutting torches, gas bottle gauges etc. to be checked to ensure they are in a safe working condition, e.g. with no leaks.</li> <li>• All combustible material of a portable nature to be removed from the site of operations and floors swept clean of combustible materials. Flammable substances such as paints and adhesives to be removed from the hot work area.</li> <li>• Combustible floors, walls, ceilings to be protected by either wetting down and covering with damp sand or covered or screened by sheets of non-combustible material, whichever is the most suitable.</li> <li>• Ensure a fire extinguishing equipment to be readily available in all working areas.</li> </ul> |
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| S<br>E<br>Q<br>U<br>E<br>N<br>C<br>E<br><br>O<br>F<br><br>W<br>O<br>R<br>K | <b>DURING</b> | <ul style="list-style-type: none"> <li>• Before fitting the hose to the blowpipe all threads and seats to be checked to ensure that they are in good condition and a small amount of gas to be bled through the hose to remove any obstruction.</li> <li>• A check to be made to ensure that the blowpipe is suitable for the gas and application to be used.</li> <li>• A check to be made to ensure that the nozzle is in good condition and is correct for the gas and process.</li> <li>• The oxygen cylinder valve to be opened slowly.</li> <li>• Before attempting to light the blowpipe, each hose to be purged separately to establish only oxygen or fuel gas in the appropriate hose, closing each blowpipe valve after the relevant hose has been purged. This operation to take place in a well-ventilated space away from any source of ignition.</li> <li>• The blowpipe to be lit and adjusted in accordance with the supplier's instructions.</li> </ul>  |
|  | <b>AFTER</b>  | <ul style="list-style-type: none"> <li>• Blowpipes to be extinguished in accordance with the manufacturer's operating instructions.</li> <li>• Cylinder valves to be closed.</li> <li>• Blowpipes to be opened to vent hoses separately to a safe area. A check to be made to ensure that the pressure gauges on the regulators have returned to zero. The blowpipe valves to then be re-closed.</li> <li>• The regulator pressure-adjusting screw to be returned to zero delivery position (by turning anti-clockwise).</li> <li>• All equipment and cylinders to be returned to a place of safe storage.</li> <li>• A final check to be made to ensure that the cylinder valves are properly closed and that there is no leakage of gas.</li> <li>• On completion or cessation of the hot work, the supervisor to confirm that the hot work area is safe and free from any source of ignition or signs of any smouldering materials, arrange for the work area to be tidied up and for the removal/replacement any fire fighting equipment. If a permit was issued, the supervisor to sign it off and return it to the permit issuer.</li> </ul> |

| TRAINING REQUIREMENTS   |   |
|---|---|
|  | <ul style="list-style-type: none"> <li>• All staff who use welding or cutting equipment to be competent to do so</li> </ul> |

| MAINTENANCE PROCEDURE   |   |
|---|---|
|  | <ul style="list-style-type: none"> <li>• <b>Report all defects to LINE MANAGER and/or SAFETY REPRESENTATIVE.</b></li> </ul> |

| ACCIDENT PROCEDURE and FIRST AID ARRANGMENTS  |  |
|---|--|
|  | <ul style="list-style-type: none"> <li>• Report all accidents/incidents to safety representative and/or First Aider. Complete an Accident/Incident form as required.</li> <li>• First aider(s): <b>Name of First Aider</b></li> <li>• Location of First Aid Kit(s): <b>Location of First Aid Kits</b></li> </ul> |

| OTHER RELEVANT DOCUMENTS  |  |
|---|--|
|  | <ul style="list-style-type: none"> <li>• Manufacturer's instructions to be followed when using and maintaining the machine.</li> <li>• Risk Assessment: (WE1)</li> <li>• Workplace Equipment Policy. (H&amp;S Policy - Pages 38,39)</li> </ul> |