

MATERIAL HANDLING

Safe Working Practices:

SWP- 30 Carrying and Working with Welding Gases

Before doing any type of work you must carry out an assessment of the task to be undertaken. This will include the equipment to be worked on, the task itself, Personal Protective Equipment requirements, the work area and environment, plus the tools and equipment required to carry out the job safely. Consult your team leader if you are not satisfied the job can be carried out in a safe manner.

WHEN YOU PREPARE FOR WORK

- 1.0 Check that each cylinder is labelled and is the gas that you want.
- 1.1 Check that the system you are connecting to is designed to take the gas pressure. Any equipment used in conjunction with gas should be operated in accordance with the manufacturer's/supplier's instructions.
- 1.2 Take precautions to prevent cylinders from falling, when in use, in store or being transported - beware of free standing cylinders.
- 1.3 Take precautions to prevent back feed of other products into gas cylinders.

WHEN YOU ARE USING GAS

- 2.0 Make sure that all oxygen fittings are free of oil, grease and any combustible materials. Keep equipment clean when not in use.
- 2.1 Check all connections and equipment for leaks, using leak detection spray, and possible damage to threads and seatings:-
 - i. Regulators and their integral protective devices.
 - ii. Flashback Arrestors and their integral cut off valves.
 - iii. Hose assemblies (including non-return valves)
 - iv. Blowpipes.
- 2.2 Use eye protection when handling gases and wear the appropriate protective clothing.

WHEN YOU HAVE FINISHED

- 3.0 Always turn off the gas supply at the cylinder when the job is finished. Disconnect equipment (regulators, hoses, blowpipes) before transporting cylinders on vehicles, or putting them in store.
- 3.1 Store cylinders upright, in a designated and controlled place. This should be well ventilated and not exposed to direct sunlight with the temperature not exceeding 50°C

WHEN YOU ARE TRANSPORTING CYLINDERS

- 4.0 The specification for vehicles supplied to our mobile welding team was determined after thorough review and risk assessment, see procedure "Welding Control" in the P6 manual.
- 4.1 The following instructions have been formulated to ensure that compressed welding gases are transported and handled safely.

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- 4.2 Always check cylinders for leaks before placing them in closed vehicles and ensure there is plenty of ventilation whilst the cylinders remain in the vehicle. **DO NOT SMOKE** as stated in driver guidance and Safety booklet
- i. Always wear safety footwear, gloves and eye protection when handling cylinders.
 - ii. Do not remove or deface labels provided by the supplier for the identification of cylinder contents.
 - iii. Do not drop cylinders or throw them into the vehicle.
 - iv. Secure cylinders properly and ensure they do not project beyond the sides or ends of the vehicle.
 - v. Cylinder valves must be closed whilst in transit and any connected equipment de-pressurised.
 - vi. When carrying flammable gas (LPG, Hydrogen, Acetylene etc.) or oxygen in cylinders, do not smoke or expose cylinders to sources of ignition.
 - vii. Protect carbon dioxide cylinders from direct sunlight and all cylinders from heat.
 - viii. LPG cylinders should be carried in the vertical position with valves uppermost.
 - ix. If at any time a cylinder is suspected of leaking, park the vehicle in a safe place and ventilate by all possible means. Investigate and take all reasonable steps to rectify the escape, if this is unsuccessful contact the supplier for advice
 - x. If you are involved in a road accident and the emergency services are summoned, advise those concerned that cylinders are being carried, and show them any information relating to the products on the vehicle, e.g. Safety Data Sheets, TREM cards etc.
 - xi. Return empty cylinders to the supplier as soon as possible.
 - xii. All mobile welding vehicles are equipped with two fire extinguishers. If one is used it should be returned immediately to Leicester Stores and a replacement requested. Under no circumstance should the user allow both extinguishers to be discharged before ordering a replacement. See the P6 procedure "Welding Control" on the requirement for annual inspection service of fire extinguishers.

AT ALL TIMES

- 5.0 Report any cylinder damage to the supplier. Never attempt to repair or disguise such damage.
- 5.1 Have suitable and sufficient fire extinguishers available in case of fire. The type may depend more on the surroundings than on the welding processes/Gases involved.
- 5.2 Make sure that you have read and understood the COSHH hazard data sheets provided and that they are readily to hand if required.

CHILDREN AND YOUNG PERSONS

- 6.0 See Safety & Environmental Manual procedure "Employment of Young Persons" for precise definitions on children and young persons.
- 6.1 "Children" will not be involved in any task involving welding gasses. They may be allowed to observe such operations and work practices, but must take no active part, be kept at a safe distance and under the constant supervision of a competent person.
- 6.2 "Young Persons" may be allowed to undertake tasks involving welding gases subject to the conditions imposed above and only when being trained under the constant supervision of a competent person.
- 6.3 See also Manual Handling SWP. Section "Children and Young Persons".