

Safe Work Instruction

Welding and Cutting



INTRODUCTION:

Only suitably trained or qualified persons are to operate welding and cutting equipment.

WORK INSTRUCTION:

- Gas cylinders must always be treated with the utmost care and never be used as rollers, supports or jacks.
- Valves, regulators and cylinder threads must be kept clean and, never handled with greasy or dirty hands or rags.
- Check equipment regularly and thoroughly for leaks and ensure all joints are tight prior to starting work.

Note: Never use a naked flame to check for leaks, always use soapy water.

- Check bottles, hand-pieces, hoses, regulators, gauges, cutting tips, flash-back prevention valves etc. are in good working order.

Note: A qualified person should carry out any necessary repairs.

- Gas cylinders must be stored, used and handled on trolleys or cradles, must be used in an upright position, secured, protected from extreme heat and from being struck by falling objects and moving equipment.
- If transported by crane or hoist, gas cylinders must be secured in a suitable cradle, net or skip box, never moved by wire or fibre rope, web or chain sling or by dragging.

Note: Regulators shall be removed during transport.

- Oxygen cylinders must never be stored near combustibles, flammable materials, oil and grease, or near fuel gas cylinders.
- Always wear suitable protective clothing and the appropriate PPE (ear muffs, eye protection, gloves etc.) when welding or cutting.
- Be aware of the danger of fire during welding and cutting operations:
 - Keep fire extinguishers close by;
 - Know the emergency procedures;
 - Ensure area is free from combustibles (oils etc.);
 - Cover combustibles with a fire blanket if they can't be moved.

- Always purge the hoses before starting work to ensure there is no gas mixture in the hoses.

- When working above ground on a scaffold or temporary work platform:
 - Protect people below from sparks (use screens, welding curtains or other enclosures);
 - Erect warning signs (Dangerous fumes etc.);
 - Secure cylinders to prevent from falling.

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- Where possible hoses should be suspended above head height.
 - Ensure the work area is well ventilated or wear a respirator that fits inside the welding helmet.
 - Depending on the task to be performed ensure the correct flux; tips, pressure settings etc. are used.
 - If cutting in a confined space air extraction units are to be used (refer Operations Manual – Confined Spaces).
 - Preferably light the blowpipe / torch using a flint gun.
 - Mark completed work “hot” with white chalk.
 - Empty cylinders must be marked “Empty” and have the caps replaced.