



Risk Assessment – Use of Gas Cylinders.

Company:	SES Engineering (Newark) Ltd	Date:	16.05.2022	Review Date:	16.05.2023	Ref:	SES/0039
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Operation:	Use of Gas Cylinders.			Persons at risk:	Employees, 3 rd parties		
HAZARD	Assessment			CONTROL MEASURES TO REDUCE THE RISK	Re-assessment		
	S	L	R		S	L	R
Fire.	4	4	16	<p>Operatives to be fully trained in the use of all equipment involved. Remove any combustible materials from within 10 metres of work area. Protect any combustible materials that cannot be moved to a safe distance with suitable covers/guards (e.g., fire retardant blankets). Ventilate spaces where vapours could accumulate. Maintain a continuous fire watch during the period of the work and for an hour afterwards. Keep fire extinguishers nearby. Never allow oil or grease to come into contact with oxygen valves or cylinder fittings. Never use oxygen with equipment not designed for it.</p> <p>Never use oxy/fuel gas blowpipe on a drum or tank that has contained or may have contained flammable materials unless you know it has been made safe. If in doubt – ask! Never weld or flame cut wheels to which tyres are fitted. Always remove the tyre.</p> <p>Keep hoses clear of sharp edges and abrasive surfaces or where vehicles can run over them. Do not allow hot metal or spatter to fall on hoses. Secure cylinders in an upright position. Maintain all equipment and keep in good condition. Regularly check all conditions and equipment for faults and leaks. Always provide adequate ventilation.</p> <p>Do not hold blowpipe too close to the work piece. Check nozzle for blockages before work commences.</p> <p>Use the correct lighting up procedure. Ensure the blowpipe is fitted with spring-loaded non-return valves to prevent a backflow of gas into hoses. Use correct pressures and nozzle size for the job. Maintain equipment in good condition. Flashback arrestors fitted to protect cylinders.</p> <p>Work in a safe location away from other people. Wear protective clothing, gauntlets, and eye protection. Shut off blowpipe when not in use. Clamp the work piece. Keep hoses away from the working area. Secure cylinders to trolley or against wall, to prevent crushing injuries and instability of cylinders. Keep upright at all times.</p>	4	1	4
Explosion.	4	4	16		4	1	4
Gas leaks.	4	4	16		4	1	4
Backfire.	4	3	12		4	1	4
Flashbacks.	4	3	12		4	1	4
Injury to personnel.	4	4	16		4	1	4



Likelihood →	Likely (5)	Probable (4)	Possible (3)	Unlikely (2)	Very unlikely (1)
↓ Severity					
Death (4)	20	16	12	8	4
Major Injury (3)	15	12	9	6	3
Minor Injury (2)	10	8	6	4	2
No Injury (1)	5	4	3	2	1

KEY: S = Severity

L = Likelihood

R = Risk rating

12-20 High risk
8-10 Medium risk
1-6 Low risk

PPE Required:

Hard hat	As necessary
High vis clothing & boots	Y
Eye/ ear protection	Y
Suitable gloves	Y
Respiratory equipment	As necessary
Safety harness	As necessary

Risk assessment to be reviewed every 12 months or following an accident / incident.