

Risk Assessment

RA014 – Welding Operations



ABI Equipment Ltd	Creation Date: 28/09/2012
Welding Operations	

Main Hazards are:	
Fire and explosion from the ignition of gas cylinders.	Ignition of other flammable materials whilst welding operations are under way.
Prolonged exposure to heat.	Exposure to fumes.
Metal spatter.	Exposure to noise.
Hot work pieces.	
Persons / Property affected	
All Employees	General Public
Company Visitors	

Assessment of Risk:	Severity	4	X	Likelihood	2	= Risk	8
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Control Measures already in Place					PPE Required			
1. Where possible all welding should take place inside the welding bay with doors shut.					Safety helmets			
2. Only trained personnel are allowed to carry out welding operations.					Hi-Vis Jackets			
3. Where possible all flammable material should be removed from the welding operations area.					Safety footwear			
4. Fire resisting sheets should be used to protect the surroundings from flame and spatter.					Eye protection			
5. Personal protective equipment (PPE) should be worn.					Dust masks			
6. The welding bay extraction unit should be switched on to provide general ventilation and be positioned correctly.					Ear plugs			
7. The personal respirator should be used by the individual carrying out the welding.					Earmuffs			
8. Reduced time exposure should be considered.					Gloves			
9. Effective fume control equipment should be provided.					Protective overalls			
10. The workplace must be checked for a minimum of 30 minutes after completion of the work to check for any remaining fire hazards or remaining ignition sources.					Gauntlets			
11. Correct PPE to be used and all work to be carried out by a Permit which meets the requirements of the MALA insurers.					Harnesses			
12. Hot permit to work to be completed.					Breathing apparatus			
					Face masks			
					Welding Mask			
Assessment of Risk:		Severity	4	X	Likelihood	1	= Risk	4

Additional Controls required	PPE/Equipment
All personnel involved in the work should be trained to perform their duties with due regard to the health and safety of themselves and anyone else who could be affected.	All personnel MUST wear the appropriate level of PPE for the activity they are involved with or area they are in.
The employee must be adequately trained and competent to operate the tools/equipment they are to use.	
Newly trained staff should be supervised until a suitable level of competency has been achieved.	

Assessment of Risk:	Severity	4	X	Likelihood	1	= Risk	4
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Approval and Review		
Prepared by:	Cathy Sheehan	28/09/2012
Updated by	Ash Soliman	16/09/2024
Review by:	Ash Soliman	16/09/2024

RISK RATING = L x S			Hazard Severity (S)				
			1	2	3	4	5
			Negligible	Slight	Moderate	High	Very High
Likelihood (L)	1	Very Unlikely	LOW	LOW	LOW	LOW	LOW
	2	Unlikely	LOW	LOW	LOW	MEDIUM	MEDIUM
	3	Possible	LOW	LOW	MEDIUM	HIGH	HIGH
	4	Likely	LOW	MEDIUM	HIGH	HIGH	HIGH
	5	Very Likely	LOW	MEDIUM	HIGH	HIGH	HIGH

Likelihood	
1. Very Unlikely	A freak combination of factors would be required for an accident/incident to occur
2. Unlikely	A rare combination of factors would be required for an accident/incident to occur
3. Possible	Could happen when accidental factors are present but otherwise unlikely
4. Likely	Not certain to happen but an additional factor may result in an accident/incident
5. Very Likely	Almost inevitable that an accident/incident would occur
Hazard Severity	
1. Negligible	Negligible injury, no absence from work
2. Slight	Minor injury requiring first aid
3. Moderate	Injury leading to a lost time accident
4. High	Involving a single person with a serious injury / death
5. Very High	Multiple persons with serious injury / death
Outcomes	
LOW	Score (1-6) May be acceptable. Annual Review to see if risks can be reduced further
MEDIUM	Score (8-10) Identify controls must be identified or specific method statement required
HIGH	Score (12-25) Task must not proceed. Senior Management to consider if the risks can be reduced by purchase of additional training, additional equipment, additional staff, additional signage, safe system of work, permit to work or radical changes in method.

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