



RISK ASSESSMENT

Document name: Welding & fabrication work (arc)
 Project name: Plant Air piping Work
 Customer, site: Endurance Technologies
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Severity	5	4	3	2	1
5	Fatality, permanent disability	Major injury or illness. Serious loss	Lost time accident	Minor injury or illness	Trivial illness or loss
Risk Rating Scale: High = 12 - 25 Medium = 6 - 10 Low = 5 & Below					
	Almost never (<5%)	Unlikely (5-20%)	Possible (20-50%)	Likely (50-90%)	Almost certain (>90%)
	1	2	3	4	5

No.	Phase	Activity & Exposure	Hazard	Current control measures	S	L	Risk	Likelihood					Responsibility
								RR	Ratio	1	2	3	
Work done by Hydro Pneumatic services													
1	General	Deployment of Manpower	Unaware about site hazards leads to body injury	1.Site Safety Induction training shall be given 2.Gate pass or identity card will be issued 3.Mandatory PPE's will be worn by workers in workplace	2	2	4	LOW					Supervisor/ Site Engineer/ Project Manager
2	General	Site Area Clearance	Existing Combustible materials in work area leads to fire	1.Area shall be cleared properly before starting the work to remove combustible material or other waste materials 2.Safe Access to the work area shall be provided 3.Tool Box Talk will be conducted prior to start work 4. Housekeeping shall be done at work place before work start.	2	2	4	LOW					Supervisor & Site Engineer
3	Moving & Positioning	Power tools(Grinding M/c, Drill M/c),Welding M/c handling and put in a particular place	1. Bodily injury 2. Cut injury	1.Tool Box talk shall be given to workmen about safe material handling 2.Work permit shall be taken from authority(ETL) 3.Cut Resistance hand gloves will be worn by workmen while handling the equipments	2	1	2	LOW					Supervisor & Site Engineer
4	Hot work	Hot work by using Grinding M/c, Welding m/c 1.Pipeline cutting and welding	1.Risk of fire due to spark 2.Risk of eye injury. 3.Cut injury due to moving part of the machine and Metal particle & dust. 4.Burn injury	1.Workers should be nows about equipment and work methods. 2.Correct use of PPE (Use of face shield, Nose mask,welding clothing). 3.Work permit shall be taken for hot work activity 4.Area shall be barricaded 5.Do not handle sharp objects in a bare hand 6.Fire extinguisher and fire blanket shall be provided at workplace where hot work is in progress 7.Welding m/c shall be inspected prior to use 8.ELCB shall be provided to M/c and in distribution board. 9.Inspection Tag shall be available on Welding m/c and other electrical equipment 10. Trolley with chain will be provided to Argon gas cylinder for movement	3	3	9	LOW					Supervisor & Site Engineer
5	Height work	1. Pipe line fabrication & Erection	1.Fall of person from height 2.Fall of tools and other materials 3.Burn injury 4.Leg injury	1.Full body safety harness shall be provided to workmen 2.Work permit shall be followed for height work 3.Obtain Height and Hot work permit 4.Safe work instruction will be followed 5.Combustible material will be removed from workplace prior to start work 6.Fire extinguisher and fire blanket will be provided 7.All tools and lifting equipments shall be inspected prior to used 8.Continuous supervision shall be provided 9. Area shall be barricaded. 10.Appropriate PPEs shall be provided to workmen(Face shield, Nose mask, Helmet, Safety shoes, reflected jacket, hand gloves etc)	3	3	9	LOW					Supervisor & Site Engineer
7	General	Housekeeping the Workplace	1.Slip, Trip & Fall hazard 2. cut injury due to contact with sharp edges. 3. hand & Foot injury	1.Remove all unwanted material from the work location 2.Put all the unwanted material in Designated bin 3.Hazardous waste and scrap segregated as per waste categories and staged in identified location designated by ETL.	2	2	4	LOW					Supervisor & Site Engineer



Severity	Description	L	M	H	H	H	H	H
		Almost	Unlikely	Possible	Likely	4	5	
5	Fatality, permanent disability	L	M	H	H	H	H	H
4	Major injury or illness. Serious loss	L	M	H	H	H	H	H
3	Lost time accident	L	M	M	M	H	H	H
2	Minor injury or illness	L	L	M	M	M	M	M
1	Trivial illness or loss	L	L	L	L	L	L	L
Risk Rating Scale: High = 12 - 25 Medium = 6 - 10 Low = 5 & Below		Almost	Unlikely	Possible	Likely	4	5	
		1	2	3	4	5		
Likelihood								

