

Hazard Identification and Risk Assessment

Project Name: PLC Control Panel installation for Electroplating plant
 Activity: Installation and commissioning of control panel
 Activity Carried By: Ellantra Automation Pvt Ltd
 Plant Name: Endurance Technologies Ltd

Sr No	Sub-Activities	Hazard identified Generic and Task	Risk Involve People and Property	Pre-Risk Rating			Control Measures	Post-Risk Rating			Residual Risk	Action By
				Severity	Probability	RL		Severity	Probability	RL		
1	Man Power Mobilization	Lack of Awareness	Person Injury	2	1	2	Safety induction shall be provide before work start Work permit shall be taken before work start Ensure all employee team age above 18 Years before deploying Mandatory PPE shall be provide to all before work (Safety Shoes, Safety Helmet, Hand Gloves, Safety Google etc.) Continuous safety supervision shall be provided at workplace till work completion. Ensure all activities going as per HIRA approval.	2	2	4	Low	Engineer
2	Work area cleared for safe access	Sensor and cable burn Short circuit	Property Damage Injury to personal	3	3	9	Ensure work area well clean there are no dust and defective tools Ensure there are no defective tools and sensor Ensure all workers wear safety shoes	2	2	4	Low	Engineer
3	Unloading and shifting of Control Panel	Unauthorised, untrained work lifting failure Unsafe lifting	Fractures Property Damage Injury to personal	4	3	12	Ensure Workers are well trained and aware of the material Ensure lifting device is mechanically ok Ensure all workers wear safety shoes	2	2	4	Low	Engineer
4	Installing the Control Panel	Electrical shock Untrained workers	Fractures Property Damage	4	3	12	Ensure Main Power supply is switched off Ensure all workers wear safety shoes Ensure workers are well trained	2	2	4	Low	Engineer
5	Cable Laying	Electrical shock Untrained workers	Injury to personal Property Damage	3	2	6	Ensure Main Power supply is switched off and Ensure workers are well trained Ensure all safety precaution are taken	2	1	2	Low	Engineer
6	Connection as per electrical drawing	Short circuit Untrained workers	Injury to personal Property Damage	3	2	6	Ensure all the connection as per electrical drawing Ensure workers are well trained	2	1	2	Low	Engineer
7	Field Wiring	Electrical shock Untrained workers	Sensor Damage Injury to personal	3	2	6	Ensure Main Power supply is switched off ensure to handle existing sensors should be handled safely	2	1	2	Low	Engineer
8	Circuit re-energised	Electricity Conductors(water, metal etc.) broken wires Improper lugs	Burns and shocks Fire	4	3	12	Ensure only those persons who have been trained and experienced the work of electricity to allow for the same Provide Fire Extinguisher near work place. Ensure to Communicate to all persons about testing and commissioning Ensure main supply is disconnected before commissioning Ensure defective tools should not be used	3	2	6	Low	Engineer
		Unauthorized/ untrained Persn Improper identification	Electric shock an Cut and abrasion				Ensure Competent team involved to execute the activities Ensure Emergency procedure are briefed to all personnel.					

9	Final testing		4	3	12	3	2	6	Low	Engineer
Faulty Instruments		Ensure Emergency contact numbers shall be displayed at work location								
Electrocution		Ensure Communicate to all personnel about testing & commissioning								

PROBABILITY →

Very Likely - 5	4	10	15	20	25
Likely - 4	4	8	12	16	20
Possible - 3	3	6	9	12	15
Unlikely - 2	2	4	6	8	10
Very Unlikely - 1	1	2	3	4	5

← SEVERITY

Negligible	Slight	Moderate	High	Very High
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Risk Level
 Low Risk: May be acceptable but review task to see if risk can be reduced further.
 Medium Risk: Task should only be undertaken with appropriate management authorization after consultation with specialist personnel.
 High Risk: Task must not be undertaken until risk is reduced or further control measures put in place to reduce risk.



Ahmed
 - 22/3/24

Prepared by
 Name :
 Signature
 Date: