

Hot Work Area Risk Assessment

High Risk - No Lone Working

Key: Who = Who might be harmed?

L = Likelihood

S = Severity

R = Risk Level without controls = S x L

LwC = Likelihood with controls

SwC = Severity with Controls

RwC = Risk Level with Controls = LwC x SwC

Hazard	Who	L	S	R	Rationale	Controls required	LwC	SwC	RwC
Electric Shock	Operators, Maintenaners	3	4	12	Contact with electrical equipment or damaged cables.	Regular equipment checks, use of PPE, electrical safety training.	1	2	2
Exposure to Fumes and Gases	Operators, Nearby members, Visitors	4	4	16	Welding and grinding produce harmful fumes.	Adequate ventilation, use of respirators, fume extractors.	2	2	4
Fire and Explosion	Operators, Nearby members, Visitors, Infrastructure	3	5	15	Sparks and hot workpieces can ignite flammable materials causing fire or explosion.	Clear away wood, fabric, cardboard and other flammable material before starting a welding job. In the event of fire, use the Co2 fire extinguishers available in the welding area.	1	3	3
Burns (Heat & Sparks)	Operators	5	4	20	Contact with hot surfaces, sparks, and UV radiation.	Protective clothing, proper training, welding curtains.	2	2	4
Eye Damage (UV Radiation & Sparks)	Operators, Nearby members, Visitors	5	4	20	UV radiation and flying sparks during welding/grinding.	Auto-darkening welding helmets, safety glasses, area screening.	2	2	4
Physical Injuries (Cuts, Abrasions)	Operators	4	3	12	Handling metal pieces, using grinding equipment.	Training, use of gloves and other PPE, machine guards.	2	2	4
Hearing Damage	Operators, Nearby members, Visitors	3	3	9	Noise from grinding and welding operations.	Use of ear protection, noise control measures.	1	2	2
Gas Cylinder Explosion/Leak	Operators, Nearby members, Visitors	2	5	10	Storing argon gas cylinders for welding.	Secure storage for gas cylinders, regular checks for leaks, proper handling training.	1	4	4
Slips, Trips, and Falls	Operators, Nearby members,	3	3	9	Cables, hoses, and debris in the work area.	Good housekeeping, cable management, clear walkways.	2	2	4

	Visitors								
Dust and Debris from Grinding	Operators, Nearby members, Visitors	4	2	8	Grinding operations generate dust and debris.	Use of dust extraction systems, regular cleaning, PPE.	2	2	4

Created by/date: Raul Watson, February 2024

Last reviewed by/date: