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Company Name		Prepared by	
Functional Area /Activity	Carrying out several physical engineering tasks within the Mechanical Workshop areas such as drilling, fitting, welding, manual handling, guillotine, surface grinding, bandsaw, chop saw	Approved by	

S/N	Hazards	What are the Risks?	Who Might be Harmed	Initial Risk			What control measures are required to eliminate or reduce the risks?	Residual Risk		
				L	S	R		L	S	R
1	Using general mechanical workshop machinery including lathes, mills, grinders, guillotines, welding plants, Band saws	abrasions, cuts, burns, eye injury, entanglement in moving machinery, severance of limbs, crush injury	Technical Team including engineers, supervisors, technicians, housekeeping staff, staff, visitors, students	3	3	9	• Appropriate PPE must be worn • Access to the workshop machining areas is strictly restricted to authorized personnel only. • No one may operate workshop equipment unless they have received sufficient training and permission from the management. • Specific risk assessments for machinery and the generic risk assessment for power hand tools have been completed and safe systems of work issued to operatives. • Guards on the machines must be used. • All workshop equipment is regularly maintained and serviced. • Long hair must be completely covered and suitable eye protection worn • Weld curtains and anti-flash guards are used when deemed appropriate	1	3	3
2	Using power hand tools and associated electrical equipment for use on machine tools.	Electric shocks or burns from using faulty electrical equipment with possible electric seizure or fatality.	Technical Team including engineers, supervisors, technicians, housekeeping staff, staff, visitors, students	3	2	6	• Appropriate PPE must be worn • Access to the workshop's portable electrical equipment is restricted to certified personnel only.	2	1	2

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		Abrasions and eye injury.					- There is validated PAT testing for electrical safety on each portable appliance. Electrical cables and plugs should be regularly visually inspected by the user for damage. - Any defective equipment will be reported to the technician-in-charge and taken out of use until the repair has been affected. Electrical equipment is always operated following manufacturers' instructions			
3	Manual handling of heavy/bulky objects	Back injury, crush injury, Entrapment, damage to goods being lifted or transported	Technical Team including engineers, supervisors, technicians, housekeeping staff, staff, visitors, students	4	2	8	- A risk assessment must be completed for lifting heavy and bulky loads that present a risk of injury. - Training in lifting techniques will be provided for workshop staff who undertake the lifting of heavy loads. - Appropriate PPE for lifting operations must be worn. Appropriate lifting tackle used for a specific job. - Lifting equipment will be registered with the University's Engineering Insurers and annual inspections carried out. Records of the inspections must be kept in the safety file.	3	1	3
4	Use of Hazardous Substances such as solvents, coolants, and Chemicals asphyxiation	Irritating or hazardous vapors, skin sensitization, dermatitis, burns,	Technical Team including engineers, supervisors, technicians, housekeeping staff, staff, visitors, students	3	3	9	- A COSHH risk assessment will be completed for using substances that may present a hazard to health. - A Material Safety Data Sheet (MSDS) must be kept together with a risk assessment in the Workshop Safety File for future reference. - All containers used for storage of hazardous and non-hazardous substances must be suitably labeled indicating their contents	2	2	4
5	Fire	Burns, asphyxiation, death	Technical Team including engineers, supervisors, technicians, housekeeping staff, staff, visitors, students	2	5	10	- Workshop working areas must be kept clear of obstructions and the floor must be kept free from oil and swarf. - Any spillages should be cleaned up immediately.	3	2	6

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							- Any hazards such as trailing cables, defects to floor coverings and faulty lighting, etc. should be reported immediately to the technician- in-charge. - All areas are well lit.			
6	Slips and trips	Strains, bruising, limb breakages, concussion, laceration	Technical Team including engineers, supervisors, technicians, housekeeping staff, staff, visitors, students	4	2	8	- Equipment will be switched off when not in use for long periods. - All portable electrical equipment will be tested for electrical safety at correct intervals and labeled with the date of the test. - Flammable substances must be kept away from naked flames and ignition sources. - Flammable substances are kept in an appropriate fire-resistant metal cabinet. - The fire alarm system is installed, maintained, and tested. - Workshop users must be acquainted with the Fire Routine Procedure for the building. - Fire Stewards are appointed to cover the workshop area.	3	2	6
7	Working at height (fall from a stepladder)	Strains, bruising, limb breakages, concussion, lacerations	Technical Team including engineers, supervisors, technicians, housekeeping staff, staff, visitors, students	3	3	9	- Users must be familiar with the risk assessment and safe system of work for using stepladders. - A stepladder will have a visual - inspection by the user before use for damage. - Stepladders are individually - identified and formal inspections are carried out and records of inspection are kept. - Any defective stepladder will be clearly labeled and - immediately taken out of use.	2	3	6
8	Excessive Noise	Damage to hearing	Technical Team including engineers, supervisors,	2	4	8	If necessary, the noise risk assessment should be carried	2	3	6

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			technicians, housekeeping staff, staff, visitors, students				out and suitable hearing protection supplied.			
9	Lone / Out of Hours (LOOH) Working	Non-discovery of injured party when seriously injured.	Technical Team including engineers, supervisors, technicians, housekeeping staff, staff, visitors, students	2	4	8	- Lone working in the workshop is strictly prohibited. - A system to avoid lone working may be allowed that requires an extra person (buddy) to be present during certain machining processes. Permission must be granted by management. - Modern apprentice and non-experienced personnel must not be left unsupervised in workshop areas while machining work is in progress.	1	3	3
10	Gas Cylinder Usage and Storage	Crush injury, Explosion of gas, asphyxiation	Technical Team including engineers, supervisors, technicians, housekeeping staff, staff, visitors, students	2	4	8	- Appropriate storage of gas bottle cylinders by use of rack or cradle system. - Handling and moving cylinders with the correct bottle carrier. Equipment such as regulators, hosing, and piping are checked at regular intervals and replaced if required. - Required H&S knowledge and safe working practice of equipment being used.	2	3	6

1. EXAMPLE HAZARDS THAT MAY BE APPLICABLE TO THE JOB or WORK ACTIVITY			
Working at Height	Noise	Hand tools	Vibration
Falling objects	Extreme Heat/cold	Confined spaces	Repetitive hand/ arm movement
Slippery/ uneven/ worn floors	Radiation	Poor housekeeping/cleaning	Machine operation
Obstructions/ projections	Lighting	Vehicle movement	Electro Magnet

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Manual handling	Compressed air	Fire / explosion	Pressurized systems
Mechanical Lifting	Substances / materials	Electricity	Other (<i>specify on assessment</i>)

OSH Risk Matrix

Probability	Consequence				
	Insignificant (1)	Minor (2)	Moderate (3)	Major (4)	Catastrophic (5)
Rare (1)	1	2	3	4	5

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Possible (2)	2	4	6	8	10
Likely (3)	3	6	9	12	15
Often (4)	4	8	12	16	20
Frequent/Almost Certain (5)	5	10	15	20	25
15 - 25	Extreme Risk	Activity or Industry Should Not Proceed in Current Form			
8 - 12	High Risk	Activity or Industry should be modified to include remedial planning and action and be subject to a detailed OSH Assessment			
4 - 6	Moderate Risk	Activity or industry can operate subject to management & Modification			
1 - 3	Low Risk	No Action Required Unless Escalation of Risk is Possible			

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