Risk Assessment Guidance

Title Portable Power Tools

This risk assessment guidance has been carried out for the general use of portable power tools, specific risk assessments have been carried out for grinders. This risk assessment covers the use of portable power tools within workshops.. This document is a general risk assessment only and should be reviewed by supervisors..

When individuals provide their own portable power tools they must ensure they are in good condition and meet the standards set out within this risk assessment.

This risk assessment should be reviewed fully by users of portable power tools prior to use of such equipment for the first time and in the event that it is not sufficient to control the risk then the user should report this to their supervisor.

Job Sequence	Hazard Identification	Controls
Conduct pre-operational checks	Poor condition of portable power tools. Damage to the machine or guards.	A log of use must be kept for all tools and where deemed necessary by the manufacturer's instructions. All portable power tools must be maintained and serviced by a competent person as per the manufacturer's suggested intervals. Portable power tools must be visually inspected before each use and damage reported to the workshop manager / supervisor and removed from use. Personal power tools which are damaged should be removed from the site.
Electricity	Electric shock.	Before using tools all cases, leads and plugs should be visually inspected. Where possible all portable power tools should be 110v or battery tools where practicable. If using 240v portable power tools, then an RCD should be used. All portable power tools must be pat tested. If working in environments where there is water, try to use battery tools only. Where this is not possible seek specialist advice.
Flammable/explosive atmosphere	Fire/Explosion.	Do not use heat generating equipment including grinders, heat guns and soldering irons without a Hot Work Permit Has to be issued by the designated person from the company. When using heat generating equipment ensure good housekeeping around the work area. Do not work near flammables, compressed gases, in explosive atmospheres or confined spaces without a specific risk assessment.

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Moving parts	Entanglement. Flying Objects.	Human contact with moving or rotating parts can cause cuts or abrasions and particles from the work process can enter the eye. Always keep loose clothing, jewellery, long hair or lanyards away from any moving parts. Always ensure that any guards supplied with portable power tools are in working order and in place. Work pieces can be thrown violently if not clamped / secured correctly, because of ‘‘kickback’’ or if the tools start unexpectedly.
Flying debris, swarf etc.	Eye, hand or face injury.	**Always use protective eyewear** or face shield, protective gloves and dust masks as required by the tool / task. Always ensure you keep your work area clean of debris and waste materials. Always ensure that any guards supplied with portable power tools are in working order and in place.
Noise	Hearing damage.	**Wear hearing protection** if noise levels are above 80dB(A) or if uncomfortably loud or you need to raise your voice to be heard then you should use ear protection (request assessment if in doubt). Where noisy portable power tools are being used for a prolonged period hearing protection should be used. People working adjacent to noisy works should be advised of these hazards. Supervisors should inform users of risks from noise.
Vibration	Hand/Arm Vibration Syndrome (HAVS). Carpal Tunnel Syndrome.	When buying or hiring portable power tools select power tools with lowest vibration levels. Minimise the time individuals use the equipment (e.g. job rotation) and restrict use of vibration inducing tools to recommended times (see HSE guidance, manufacturer’s information or label on equipment/ box). Ensure tools are properly stored, maintained and used according to manufacturer’s instructions. Where using drills or cutting disks ensure they are sharp and in good condition. Supervisors should inform users of risks from vibration. Where suitable ‘anti vibration gloves’ could be used. Supervisors should arrange health surveillance for those identified at risk from vibration.
Ergonomic	Muscular-skeletal injury.	Ensure there is adequate space to do the job. Minimise the time individuals use heavy equipment (e.g. job rotation). Use jigs and suspension systems to assist the handling of heavy equipment.

		Wear suitable footwear unless feet are protected by other means (e.g. sitting at a bench).
Slips, trips and falls	Minor injury. Major injury. Fatal injury.	Ensure the work environment is as free as possible from trailing cables, tools, materials, debris and spills. All work should be from a suitable and stable work platform. If using power tools at height ensure the area below is safe, that the tools can be operated safely and if tools jam or bind you are safe.
Dust	Respiratory illness. Reduced visibility. Skin irritation.	When the work process creates dust always wear a suitable dust mask (check for type and fit). Where practicable or where a lot of work is planned use a vacuum with a suitable filter connected to the tool. Increase ventilation to the work area (e.g. open windows, temporary extract etc.) Wear close-fitting safety goggles. Stop working if visibility is noticeably reduced. Wear suitable protective clothing (especially gloves). People working adjacent to dusty works should be advised of these hazards. Supervisors should inform users of risks from the dust produced. Clean work area regularly (e.g. sweep, vacuum, wash down). Ensure good personal hygiene.
Tool jamming or binding	Wrist/hand injury.	Check tool is appropriate for the job and used in accordance with the manufacturer's instructions. When using power tools with loose materials ensure they are suitably secured. Ensure tools are maintained according to manufacturer’s instructions.
Inappropriate use	All of the above.	Check tool is appropriate for the job and used in accordance with the manufacturer's instructions. Users shall be trained in the correct use of portable tools. Inexperienced power tool users should be supervised or observed when first using an unfamiliar item of equipment or in an unfamiliar environment. Power tools should be securely stored when not in use.
Work Environment	General environment, ventilation and lighting levels. Space to operate and handle materials safely.	Small power tools should not be used if there is a risk the operator could be distracted. There must be sufficient light to see the piece being worked clearly.

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	Housekeeping.	Ensure power cables are properly isolated from the moving blade.
First Aid		Make sure you are aware of the first aid provisions in place. All accidents & near misses must be reported to your Supervisor

All persons working with this equipment or within close vicinity must sign and show that they have read and understood the risk assessment guidance and that they will follow the above control measures set out whilst working.

Additional Guidance	COSHH Assessment	Method Statement	Other (Specify)
		N/A	**Only trained persons are allowed to operate this equipment.**
Name			
Signed			Date