












Root & Branch	Risk Assessment In accordance the Management of Health and Safety Regulations 1999	Ref: RA 23 Date: 19 Aug 17
--------------------------	--	---

	Task: <i>Forge PowerTools - Grinding</i>	Location: <i>Root & Branch</i>	
	Name of Assessor: Jonathan de Wilton	Name of Reviewer: Stephen Coombs	
	Job Title: Trustee and Forge Supervisor	Job Title: R & B Health & Safety Officer	
	Signature: <i>Jonathan de Wilton</i>	Signature: <i>S Coombs</i>	
	Persons Potentially at Risk		
Operator	Other service users	Staff / Volunteers	Public /Other Contractors
Y	Y	Y	Y

Operative PPE requirements for this operation									
									
Safety Boots	Coveralls	Gloves	Eye Protection	Face Protection	Hearing Protection	Hi Viz Vest/ Clothing	Dust Mask	Wellington Boots	Hard Hats
Y	N	N	Y	(Y)	N	N	(Y)	N	N
Specific PPE comments or requirements Goggles and face protection are preferred to safety glasses because of the risk of flying debris, dust mask if grinding for extended periods or when plated or galvanised steel is being worked.									

Estimated Level of Risk (Based on Maximum Risk Identified)		
Low (1-4)	Medium (5-12)	High (13-25)
Yes	Yes, until properly trained	

Emergency Details			
Nearest A & E:	<i>Great Western Hospital Swindon</i>	Telephone No:	01793 604020
First Aid:	<i>First Aiders listed on board in lobby</i>	<i>First Aid Kit in Kitchen</i>	<i>Additional Kits in Forge and Wood Shop</i>

Likelihood - L	Rating Given	Severity of Outcome - S	Rating Given
Highly Unlikely	1	First Aid injury or minor property damage	1
Unlikely	2	Minor injury or property damage	2
Medium	3	Potential lost time injury or short term ill health	3
Likely, may occur regularly	4	Major illness or injury	4
Highly Likely, certain or almost certain to occur	5	Fatal or disabling injury or serious ill health	5

Apply a rating to both **likelihood** and **severity** and then multiply together to give actual risk rating of a particular hazard

Hazard	Risk	L	S	R	Control Measures	L	S	R	Further Action Required
Defective Equipment	Defective equipment presents a risk of injury	3	4	12	<p>Before use, carry out carry out visual inspection of equipment. If in doubt attach a defect tag to isolate from use (and if electrical remove fuse from plug).</p> <p>Record any defects in Forge Log, and record remedial action taken before bringing equipment back into service. Regularly service in accordance with manufacturers recommendations</p>	1	4	4	
Improper Use	Equipment used incorrectly can cause serious injury to operators and others	4	3	12	<p>Only trained operatives to use equipment, if you are unsure about this seek advice from Supervisor.</p> <p>Do not permit untrained persons to use equipment.</p> <p>Use equipment in full accordance with manufacturers recommendations as contained in the handbook</p>	1	3	3	Until operator can demonstrate competence, close supervision is required
Noise	Excessive noise exposure may contribute to noise induced hearing loss	2	4	8	<p>Report defective equipment and cease use immediately.</p> <p>Wear Ear protection with minimum SNR of 26</p>	1	4	4	
Injuries to others/ service users, staff, volunteers, public	Others may not understand or recognise the risk of using equipment	2	4	8	<p>Inform visitors (using signs) not to enter forge while people are working and to wait behind the yellow line until the supervisor notices and acknowledges the visitor.</p> <p>Check visitor footwear is appropriate , and issue with safety glasses on entry to forge.</p> <p>Never leave equipment running when unattended.</p>	1	4	4	
Faulty electrical installation and equipment	Electric shock, fire	2	4	8	<p>Ensure electrical installations are inspected according to legal requirements, and visually every month (record in forge log).</p> <p>All portable equipment to be PAT tested every year.</p> <p>Cables routed away from sharp corners or risk of abrasion.</p>	1	4	4	

Hazard	Risk	L	S	R	Control Measures	L	S	R	Further Action Required
Rotating wheels or disks	Abrasion, entrapment	3	4	12	No use without adequate instruction and supervision. Gap between grinding wheel and work rest plate not more than 3mm. Wait for wheel or disc to stop before touching. Treat rotating parts with respect.	1	4	4	Until operator can demonstrate competence, close supervision is required
Incorrectly mounted wheels or disks	Flying debris, causing injury	2	4	8	Disks and wheels only to be changed by supervisors. Wheels and disks checked for running true, before using for work. Ensure tool is switched off then unplugged.	1	4	4	
Unexpected rotating parts when tool is plugged into electricity supply because tool left switched on (particularly angle grinders)	Injury from rotating or flying parts, tool drops to floor and disk shatters	2	4	8	Ensure tool is switched off, with its own switch before unplugging. Ensure angle grinder is switched off by its own switch before connecting to power supply	1	4	4	
Hazardous substances	Dust from grinding	2	2	4	Wear dust mask when grinding especially if for extended periods or when grinding plated materials eg zinc galvanised. Ensure adequate ventilation, switch on extraction blower	1	2	2	Adjustable hood for gas extraction
Hot metal after grinding	Burns	3	3	9	Remember metal will be hot after working (even if not glowing). Before handling, leave adequate time for cooling. Check temperature with back of fingers close to, but not touching, ground areas.	1	3	3	
Behaviour, lack of skill or coordination of service user	Injury to self or others	2	4	8	Change activity within forge to simpler task eg use of hand tools rather than powered tools, cold working rather than hot. Switch off power and take a break.	1	2	2	Remember that the supervisor is authorised to, and in appropriate circumstances should, suspend activities.