

USSL Risk Assessment

Risk Assessment No		Activity		Grit Blasting		Locations		Site Works		
Assessment Undertaken by		Assessment Date		Risk Rating		Review Date		Review Date		
Persons at risk (PAR)		Severity / Harm Rating (S)		Risk Rating		Likelihood (L)				
E	Employers / Contractors	1	Negligible injury or no injury	1	Extremely unlikely to occur at any time	1		1		
M	Members of Public	2	Minor injury requiring First Aid	2	A rare combination of factors would be required for an incident to occur	2		2		
V	Visitors	3	Last time injury	3	Could happen, but considered unlikely under normal circumstances	3		3		
C	Clients	4	Single serious injury or single death	4	Not certain, but an additional factor may result in an incident	4		4		
		5	Multiple deaths and/or serious injuries	5	Almost inevitable that an incident will result - Highly likely to occur	5		5		
Colour coding										
13 - 25	DANGER - Task/activity should not proceed. Further control measures are to be put in place to reduce risk. When in place the level of risk should be re-assessed for adequacy before the work recommences.									
7 - 14	SIGNIFICANT RISK is attached to this task/activity. Look critically at ways of reducing the level of risk to a more tolerable level by improving existing control measures or by introducing new controls.									
1 - 6	TOLERABLE RISK - Consider if risk is "as low as reasonably practicable", if not try to reduce risk further by improving control measures. Keep under review and continue with task/activity, but with caution									
NB. Full PPE will be utilised as a matter of course during any works undertaken										
Initial Assessment No controls					Risk Mitigation Measures					
Item No	Hazard Identification	PAR	S	L	Score	Control Measures	S	L	Risk Acceptable	
1	Untrained Personnel	E	3	4	12	Grit Blasting Operations must only be carried out by suitably trained personnel or Contractors. A Site Based Method Statements and Risk Assessments should be provided for the operation. The use of NON-Silica Grit should be used to avoid long term irreversible lung damage from silica dust. Consideration should be given to selecting and using less hazardous abrasive materials. Use only Company Approved substances. Ensure COSHH Assessments have been carried out, and the finds are recorded. Only use the equipment or substances for the purpose for which they were designed. Do not use, touch or smell unknown or unidentified materials of containers.	3	1	3	Yes
2	Occupational Diseases	E	4	4	16	Ensure overall eye worn to prevent contact with abrasive materials. Ensure good hygiene practices are followed, any exposed skin areas need to be washed and cleaned. Inspect your skin at the end of each shift, and report any problems or concerns to your supervisor or manager.	4	2	8	Yes
3	Skin Damage	E	3	4	12	Ear protection MUST be worn at all times during grit blasting operations.	3	2	6	Yes
4	Noise	E	3	4	12	All blast-cleaning enclosures must be adequately ventilated. Abrasive blasting rooms, portable blast-cleaning equipment, and temporary containment structures must have sufficient exhaust ventilation to: i) prevent a build-up of dust-laden air and reduce the concentrations of hazardous air contaminants; ii) increase operator visibility; iii) prevent any leakage of dust to the outside. Exhaust ventilation systems must be constructed, installed, inspected, and maintained according to the COSHH Ventilation standard for abrasive blasting. The exhaust air from blast-cleaning equipment must be discharged to the outside through an appropriate dust collector to protect the workplace, the environment and the surrounding community from hazardous air contaminants. The dust collector should be set up so that the accumulated dust can be emptied and removed without contaminating work areas.	3	1	3	Yes
5	Dust/ Ventilation.	E	3	4	12	Air Sampling to be conducted, to measure employee exposure, selecting appropriate PPE. Evaluate the effectiveness of engineering controls. PPE MUST be worn at all times. A suitable respirator must be worn which is suitable to protect against the abrasive material being used, eye and face protection should be worn, suitable proban treated clothing to be worn, a protective helmet and safety boots should also be worn, hearing protection, and fall arrest equipment should be used if there is any risk from falling during the blasting operation. Isolation and enclosure areas should be used during blasting operations to minimise exposure to employees and prevent exposure to others in the work area environment. * Grit Blasting Operations should be rotated with other suitable trained members of staff to reduce the effects of working with vibration equipment. * All equipment should be maintained and records kept for inspection. * Operators are advised not to grip the equipment too tightly. * Operators must keep their hands and arms warm (e.g. wear gloves and suitable clothing in order to maintain blood supply to the hands, fingers and arms). * Select the right equipment for the job. * Always check tools before use, ensure tools are properly maintained. * Remember to exercise fingers/hand after using vibration tools.	4	2	8	Yes
6	Dust/ Ventilation. Continued	E,P,V,C	4	4	16	* Working at height should be avoided where ever possible, if this is not possible then a site specific risk assessment should be carried to identify the hazard * Working at height should only be carried out from a scaffold and not a ladder. * Fall Arrest should be used during the blasting operation. * Operators should be trained in safe working at height techniques and the safe use of safety harnesses. PPE MUST be worn at all times. A suitable respirator must be worn which is suitable to protect against the abrasive material being used, eye and face protection should be worn, suitable proban treated clothing to be worn, A protective helmet and safety boots should also be worn. Exclusion zones should be established to protect members of the public and others in the vicinity from exposure to elevated levels of hazardous air born contaminants. Never point blast nozzles at any person or part of the body. Use a dead man control device at the nozzle end of the blasting hose. Ensure where possible that only one employee operates each blast nozzle. Install guards to protect the operator from high speed particles.	4	2	8	Yes
7	Working at Height	E	4	4	16	Areas where grit blasting operations are to take place should be checked for gas leakage using suitably tested equipment prior to the commencement of any work and continuously during the operation. Mechanical dust extraction should be used to reduce build up of air born dust. Atmospheric testing should be carried out during the blasting operation. Fire Fighting equipment must be provided and staff trained in fire fighting and emergency procedures. NIOMEX Proban treated clothing to be worn.	4	2	8	Yes
8	Contact with grit blast debris	E	4	3	12	Any grit blasting work to be carried out in a confined space must be in conjunction with a confined space permit to work system. Areas where grit blasting operations are to take place should be checked for gas leakage using suitably tested equipment prior to the commencement of any work and continuously during the operation. Atmospheric testing should be carried out during the blasting operation, records of testing should be kept. Only trained, authorised personnel are permitted to enter a confined space. Ensure all tanks, vessels and pipes have been purged and declared safe to work on. Areas where grit blasting operations are to take place should Check to see if additional ventilation or breathing apparatus is required. IF IN DOUBT SEEK ADVICE FROM YOUR SUPERVISOR.	3	1	3	Yes
9	Contact Lead Based Paints	E	3	3	9	Only trained personnel to use any compressor equipment. Connections must be checked for tightness before pressurising. Visually examine hoses and connections. Any defects or damage must be reported. IT IS NOT SAFE TO USE DO NOT START WORK UNTIL REPLACEMENT EQUIPMENT HAS BEEN OBTAINED. Fit locking collars and anti whip lash chains to restrain hoses. Ensure the correct source pressure is used and compressed air system is protected by adequate relief valves, maintain and inspected at regular intervals. Post hazard warning notices. Wear the appropriate PPE, Gloves, hearing protection, eye protection, safety footwear etc. DO NOT point the hose line at any other person or any part of the body. Ensure rubber gaffer on air pack to be kept as close to work as possible to reduce scatter of debris. Ensure that system pressure is relieved prior to disconnecting pressurised oil, gas, air, and water hoses. Ensure compressor is free from any oil or fuel leaks, if in doubt contact the supervisor.	3	1	3	Yes
10	Fire /Explosion	E	5	4	20	Assessment of adjacent structures needs to be made. Adjacent structures need to be protected with sheeting or suitable protection. Warning signs posted and members of the public should be removed.	4	1	4	Yes
11	Manual Handling	E	3	3	9	Do not allow any material to enter all watercourse. Clean up paint chips, dust, and abrasive material daily, or as soon as possible after blasting has finished. All waste material to be placed in the appropriate receptacle in the designated storage area.	2	2	4	Yes
12	Confined Space Working	E	3	4	12	All materials and equipment to be stored safely. Work area to be kept clear and free from hazards. Ensure all hoses and electrical cables are stored away from walkways, entry and exit routes. Adequate lighting using 110v should be provided. Operatives to report unsafe equipment and dangerous equipment.	3	2	6	Yes
13	Use of Compressors/ air powered tools	E	4	4	16					
14	Damage to adjacent structures	E	4	4	16					
15	Damage to the environment	E	2	4	8					
16	Slips, Trips and Falls	E	3	4	12					