

## Safe Operating Procedure #10 – Manual Grit Blasting

	Activities	Procedures	Hazards/Risks	Controls
1	Prepare to enter blast chamber and receive steel to be worked on	<p>Ensure work is received and placed securely on work platforms.</p> <p>Use crane or move rail trolley holding the work pieces into chamber</p> <p>Check that all items of protective gear are available and air hose and helmet and connections are sound. Ensure visor is clean. Put on protective equipment.</p>	<p>Work not stable and capable of moving. Manual handling injuries whilst trying to move work that is heavy.</p> <p>Manual Handling Injuries</p> <p>Not all protective equipment is available or is in sound condition. Slip or collapse in chamber can go unnoticed and lead to health complications. Filter not changed regularly can cause the failure of respiratory protection.</p>	<p>Ensure communication with crane operator to arrange movement of work to chamber and for him to know that you will be in the chamber and the approximate duration.</p> <p>If using rail trolley, use more than one person to push trolley</p> <p>If necessary to manually handle the work at all, assess the weight and where it has to go and only handle it alone if safe to do so. Use someone to assist you and use mechanical equipment where necessary.</p> <p>In the event of a fault, do not proceed until Supervisor instructs you to however Supervisor must document fault in Works Diary. Repair to be arranged and alternate safe-to-use equipment to be provided.</p> <p>Check that all items of protective gear are available and air hose and helmet and connections are sound. Ensure visor is clean. The filter should be changed monthly and the soles of footwear must be in sound condition to prevent slips. Put on protective equipment. Consult with Supervisor and ensure a system is in place for you to be monitored.</p>

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2	Operation of Compressor	Visual Inspections of Compressor	<p>Malfunctioning compressor resulting in oil and /or electric fires</p> <p>Collection of oil, papers, rags or other combustible materials being ignited by adjacent hot works.</p>	<p>Pre-operational safety check undertaken by operator to ensure:-</p> <ul style="list-style-type: none"> <li>- Operator familiar with operation including use of the emergency stop.</li> <li>- Fire extinguishers are readily available (ABE or CO2)</li> <li>- Air hoses are attached and in good condition.</li> <li>- Electrical leads are tested and tagged for the current period and in good condition.</li> <li>- Compressor service tag shows current maintenance</li> <li>- Regulator set to appropriate pressure.</li> <li>- Sufficient oil level</li> <li>- The inner compartments are clear of oil or any other combustible or flammable materials.</li> </ul> <p>During operation, operators to ensure:-</p> <ul style="list-style-type: none"> <li>- Operation of compressor is monitored for any oil leaks, sudden pressure changes.</li> <li>- The compressor is never left unattended.</li> </ul> <p>Before breaks or end of working day, operators are to ensure:-</p> <ul style="list-style-type: none"> <li>- Work areas are left clean and tidy</li> </ul> <p>Operator or fire-watch checks for any fires.</p>
3	Position work and turn it where necessary	Move or roll work on work platform	Manual handling injuries whilst trying to move work that is heavy	<p>Assess the weight and where it has to go and only handle it alone if safe to do so. Use someone to assist you and use mechanical equipment where necessary</p>

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		Rotating concrete mixer barrels	Various injuries caused by overexertion of the body	<p>Use mechanical aids such as a bar to reduce the physical effort required.</p> <p>A second-hand barrel may have dried concrete in it, making it heavier and more difficult to keep in place. If this is the case, inform the supervisor so that they can have the barrel sent back to be cleaned.</p>
4	Direct and shoot grit blast	Clean work surfaces with grit blast	<p>Noise from operation can damage hearing, grit can damage respiratory system and also cause bodily injuries.</p> <p>Working in isolation means that the operator could suffer an injury or health issue without being noticed or unable to communicate to others outside the chamber</p>	<p>Wear hearing protection, helmet with positive air supply and visor. Wear long sleeve shirt and long pants and gloves.</p> <p>Hoses should be trigger-activated so that they do not function if released. Should the operator need assistance or collapse, personal alarm will be activated. The trigger should be tested daily and the alarm tested weekly.</p>
5	Clear chamber or surrounding area of grit blast	Remove protective equipment and have work blasted removed from chamber	<p>Ensure blasting hose is stopped.</p> <p>Manual handling injuries whilst trying to move work that is heavy.</p>	<p>Ensure communication with crane operator to arrange movement of work from chamber.</p> <p>If necessary to manually handle the work at all, assess the weight and where it has to go and only handle it alone if safe to do so. Use someone to assist you and use mechanical equipment where necessary.</p>
6	Remove work pieces from chamber	Use crane or move rail trolley holding work pieces into chamber	Manual handling injuries	If using rail trolley, use more than one person to push trolley
7	Emptying dust container	Periodically empty dust container or bag placed under the dust collector	Risk of fire from sparks or from waste due to oil or shot creating combustible environment	The dust collector must be de-energised and the location of fire extinguishers must be identified. Sources of ignition must be kept away.

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- Personal Protective Equipment that must be used: helmet with air hose and visor, eye protection with side shields, leather gloves, steel capped footwear, long sleeve shirt and long pants, hearing protection, personal alarm device

This SOP has been developed in consultation with me and I agree to follow it and carry out tasks in a safe manner, reporting any problems to my immediate Supervisor.

Bundy Card	Name	Signature	Date