

<b>Equipment Location:</b>	Hired From All Master Hire Stores	<b>Equipment:</b>	Concrete Trowel Machine		Approved By:	Steven Jose
			<b>Manufacturer Details</b>	Various		Signature:
Hazard	Action Required Yes/No	Risk Level (Refer to risk matrix)	Hierarchy of Control	Hazard and Risk Treatment (Complete Hazard Report Form)	Risk Level after Risk Treatment (Refer to risk matrix)	
<b>Entanglement</b>						
Can anyone's hair, clothing, gloves, necktie, jewellery, cleaning brushes, rags or other materials become entangled with moving parts of the plant, or materials in motion?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	MEDIUM	<input checked="" type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Do not lean or reach over motor area with motor running</i> <i>Do not do any servicing or maintenance with motor running</i> <i>Wear appropriate PPE whilst operating this machine</i> <i>Do not remove guards</i>	LOW	
<b>Crushing</b>						
Can anyone be crushed due to: <ul style="list-style-type: none"> <li>▪ Material falling off the plant?</li> <li>▪ Uncontrolled or unexpected movement of the plant or its load?</li> <li>▪ Lack of capacity for the plant to be slowed, stopped or immobilized?</li> <li>▪ The plant tipping or rolling over?</li> <li>▪ Parts of the plant collapsing?</li> <li>▪ Coming in contact with moving parts of the plant during testing, inspection, use, maintenance, cleaning or repair?</li> <li>▪ Being thrown off or under the plant?</li> <li>▪ Being trapped between the plant and materials or fixed structures?</li> <li>• Other factors?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	MEDIUM	<input checked="" type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Ensure travel of moving machine (forward or reversing) is free of all personnel except operator</i> <i>Ensure both the machine and the operator are stable – use on flat level surface</i> <i>Do not operate the machine unless all protective guards are in place</i> <i>Keep hands and feet clear of rotating and moving parts as they will cause injury if contacted</i> <i>Ensure centrifugal cut out switch is fully operational at idle</i>	LOW	

				<i>Ensure that the motor operation switch is in the off position before removing guards or making adjustments</i>	
<b>Cutting, Stabbing and Puncturing</b>					
<p>Can anyone be cut, stabbed or punctured due to?</p> <ul style="list-style-type: none"> <li>▪ Coming in contact with sharp or flying objects?</li> <li>▪ Coming in contact with moving parts of the plant during testing, inspection, operation, maintenance, cleaning or repair of the plant?</li> <li>▪ Plant, parts of the plant or work pieces disintegrating?</li> <li>▪ Work pieces being ejected?</li> <li>▪ The mobility of the plant?</li> <li>▪ Uncontrolled or unexpected movement of the plant?</li> <li>▪ Other factors?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>MEDIUM</b>	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input checked="" type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<p><i>Follow manufacturers' instructions</i></p> <p><i>Obey all warning decals</i></p> <p><i>Do not lean or reach over motor area with motor running</i></p> <p><i>Do not do any servicing or maintenance with motor running</i></p> <p><i>Ensure all guards and fixtures are in place</i></p> <p><i>Ensure machine is switched off before replacing blades</i></p> <p><i>Ensure guards cover the entire width of the rotating parts</i></p> <p><i>Ensure appropriate PPEs are used (e.g. protection for eyes, hearing, hands and footwear)</i></p>	<b>LOW</b>
<b>Shearing</b>					
<p>Can anyone's body parts be:</p> <ul style="list-style-type: none"> <li>▪ Sheared between two or more parts of the plant, or between a part of the plant and a work piece or structure?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>medium</b>	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input checked="" type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<p><i>Follow manufacturers' instructions</i></p> <p><i>Obey all warning decals</i></p> <p><i>Do not lean or reach over motor area with motor running</i></p> <p><i>Do not do any servicing or maintenance with motor running</i></p> <p><i>Ensure all guards and fixtures are in place</i></p> <p><i>Ensure machine is switched off before replacing blades</i></p> <p><i>Ensure guards cover the entire width of the rotating parts</i></p> <p><i>Ensure appropriate PPEs are used at all times (e.g. protection for eyes, hearing, hands and footwear)</i></p>	<b>MEDIUM</b>

<b>Friction</b>					
Can anyone be burnt, gain abrasions etc. due to: <ul style="list-style-type: none"> <li>▪ Contact with moving parts or surfaces of the plant, or material handled by the plant?</li> </ul>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input type="checkbox"/> Administration <input type="checkbox"/> PPE		
<b>Striking</b>					
Can anyone be struck by moving objects due to: <ul style="list-style-type: none"> <li>▪ Uncontrolled or unexpected movement of the plant or material handled by the plant?</li> <li>▪ Plant, parts of the plant or work pieces disintegrating?</li> <li>▪ Work pieces being ejected?</li> <li>▪ Mobility of the plant?</li> <li>▪ Other factors?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>MEDIUM</b>	<input checked="" type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Ensure travel of moving machine (forward or reversing) is free of all personnel except operator</i> <i>Use spotter in restricted areas</i> <i>Ensure all loads are placed and secured within tray of vehicle</i> <i>Ensure exclusion zone in and around vehicle while loaded using mechanical aids</i> <i>Ensure centrifugal cut out switch is fully operational at idle</i> <i>Ensure appropriate PPE is worn when operating this machine</i>	<b>LOW</b>
<b>High Pressure Fluid</b>					
Can anyone come into contact with? <ul style="list-style-type: none"> <li>▪ Fluids under high pressure in normal use, in the instance of plant failure?</li> </ul>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input type="checkbox"/> Administration <input type="checkbox"/> PPE		
<b>Electrical</b>					
Can anyone be injured by electrical shock or burnt due to: <ul style="list-style-type: none"> <li>▪ The plant contacting live electrical conductors?</li> <li>▪ Plant working close to electrical conductors?</li> <li>▪ Overload of electrical circuits?</li> <li>▪ Damaged or poorly maintenance electrical leads or cables?</li> <li>▪ Damaged electrical switches?</li> <li>▪ Water near electrical equipment?</li> <li>▪ Lack of isolation procedures?</li> <li>▪ Other factors</li> </ul>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input type="checkbox"/> Administration <input type="checkbox"/> PPE		

# SAFETY MANAGEMENT SYSTEM

## Plant and Equipment Risk Assessment

<b>Explosion</b>					
Can anyone be injured by fuels such as gases, vapors, liquids, dusts or other substances being ignited triggered by the operation of the plant or by materials handled by the plant?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>MEDIUM</b>	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input checked="" type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input type="checkbox"/> PPE	<i>Follow manufacturers' instructions Obey all warning decals Do not operate in areas where fuels or gases are present Turn machine off and allow to cool before refuelling</i>	<b>LOW</b>
<b>Slipping, tripping and Falling</b>					
Can anyone using the plant, or in the vicinity of the plant, slip, trip or fall due to: <ul style="list-style-type: none"> <li>▪ Uneven or slippery work surfaces?</li> <li>▪ Poor housekeeping, such as shavings in the vicinity of the plant, spillage not cleaned up?</li> <li>▪ Obstacles being placed in the vicinity of the plant?</li> <li>▪ Other factors?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>MEDIUM</b>	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<i>Follow manufacturers' instructions Obey all warning decals Keep work area clean and free of debris Wear appropriate footwear</i>	<b>LOW</b>
<b>High Temperature</b>					
Can anyone: <ul style="list-style-type: none"> <li>▪ Come into contact with objects at high temperature?</li> <li>▪ Come into contact with hot fluids?</li> <li>▪ Be injured by fire?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>LOW</b>	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input checked="" type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<i>Follow manufacturers' instructions Obey all warning decals Do not touch blade and other working parts with exposed/unprotected body parts Do not do any servicing or maintenance with motor running Allow motor and other components to cool before servicing Wear appropriate PPE whilst operating this machine</i>	<b>LOW</b>
<b>Temperature and Thermal Comfort</b>					
Can anyone suffer ill-health due to: <ul style="list-style-type: none"> <li>▪ Exposure to high or low temperatures?</li> <li>▪ Failure of air conditioning equipment?</li> </ul>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input type="checkbox"/> Administration <input type="checkbox"/> PPE		

## Plant and Equipment Risk Assessment

<b>Suffocation</b>					
Can anyone be suffocated due to: <ul style="list-style-type: none"> <li>▪ Lack of oxygen, or atmospheric contamination?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>MEDIUM</b>	<input checked="" type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<i>Always and only operate in a well-ventilated area</i>	<b>LOW</b>
<b>Ergonomics</b>					
Can anyone be injured due to: <ul style="list-style-type: none"> <li>▪ Poorly designed seating?</li> <li>▪ Repetitive body movements?</li> <li>▪ Constrained body posture or the need for excessive effort?</li> <li>▪ Design deficiency causing physical or personal stress?</li> <li>▪ Inadequate or poorly placed lighting?</li> <li>▪ Lack of consideration given to human error or human behavior?</li> <li>▪ Mismatch of the plant with human traits and natural limitations?</li> <li>▪ Other factors?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>LOW</b>	<input checked="" type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input type="checkbox"/> PPE	<i>Follow manufacturers' instructions                  Obey all warning decals                  Take regular breaks/rests                  Exercise/stretch regularly                  Do not operate beyond your personal capabilities                  Use suitably designed and secured loading/unloading procedures including crane, hoist, ramps etc.                  Observe and use proper manual handling techniques</i>	<b>LOW</b>
<b>Transportation</b>					
Can anyone be injured by this equipment falling or driven off vehicle or trailer while loading, unloading or transportation?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>MEDIUM</b>	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<i>Follow manufacturers' instructions                  Obey all warning decals                  Ensure equipment, attachments and sundry items are securely tied down                  Apply/use chocks if necessary                  Maintain vehicle and/or equipment in good working order - report any malfunction or damage to Master Hire immediately and stop using equipment where it is reasonable to foresee further risk to persons or damage to equipment                  Always wear the appropriate PPE when operating this machine</i>	<b>LOW</b>
<b>Operational</b>					
Can anyone be injured by this equipment	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>MEDIUM</b>	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<i>Follow manufacturers' instructions                  Obey all warning decals                  Ensure equipment is on stable ground and clear of obstructions                  Ensure adequate ventilation</i>	<b>LOW</b>

				<i>Ensure all safety guards and fixtures are in place</i> <i>Ensure machine is switched off before making any adjusts</i> <i>Ensure hold-to-run controls provided for machine are working and used properly</i> <i>Ensure handles and other adjustable parts are set right for the operator</i> <i>Ensure guards cover the entire width of the rotating parts</i> <i>Ensure appropriate PPEs are used (e.g. protection for eyes, hearing, hands and footwear)</i>	
<b>Other Hazards</b>					
Can anyone be injured or suffer ill-health from exposure to: <ul style="list-style-type: none"> <li>• Chemicals?</li> <li>• Toxic gases or vapors?</li> <li>• Fumes?</li> <li>• Dust?</li> <li>• Noise?</li> <li>• Vibration?</li> <li>• Radiation?</li> <li>• Other Factors?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	LOW	<input checked="" type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Operate in well-ventilated areas only</i> <i>Ensure equipment is appropriately labeled and meet the relevant State Legislative requirements</i> <i>Maintain vehicle and/or equipment in good working order - report any malfunction or damage to Master Hire immediately and stop using equipment where it is reasonable to foresee further risk to persons or damage to equipment</i> <i>Always wear the appropriate PPE whilst operating this machine – this includes safety hat, safety gloves, shoes, hearing and respiratory protection</i>	LOW
<b>Further Comments:</b>	<b>A Specific Risk Assessment on site must be undertaken prior to plant operation?</b> <b>This equipment must only be driven/operated by competent persons and holders of the appropriate license</b>				
<b>Checklist:</b>	<input checked="" type="checkbox"/> <i>Manufacturers' manuals referenced</i> <input checked="" type="checkbox"/> <i>Copy kept in Master Hires' Risk Management File</i>		<input type="checkbox"/> <i>Copy given to SRT for final review</i> <input checked="" type="checkbox"/> <i>Appropriate Risk Assessment considered for "Other Hazards"</i>		

### Hazard / Risk Matrix

Reference: Workplace Health and Safety Queensland - Risk Assessment - Supplement 2  
Risk Management Code of Practice 2007

**Step 1 Determine Likelihood – What is the possibility of the event happening?**

	Criteria	Description
<b>Almost certain</b>	Expected in most circumstances.	Event is a common problem
<b>Likely</b>	Will probably occur in most circumstances.	Event is known to have occurred at this site or it has happened
<b>Possible</b>	Might occur at some time	Event could occur at the site or I've heard of it happening
<b>Unlikely</b>	Could occur at some time	Event is not likely to occur at the site or I have not heard of it happening
<b>Rare</b>	May occur only in exceptional circumstances	Event is practically impossible.

**Step 2 Determine Consequence - What will be the result if it happens?**

Classification	Example detail description
<b>Insignificant</b>	No injuries
<b>Minor</b>	First aid treatment only; spillage contained at site.
<b>Moderate</b>	Medical treatment; spillage contained but with outside help.
<b>Major</b>	Extensive injuries; loss of production
<b>Catastrophic</b>	Death; toxic release of chemicals

**Step 3 Determine the risk score**

LIKELIHOOD	CONSEQUENCE				
	Insignificant	Minor	Moderate	Major	Catastrophic
<b>Almost certain</b>	<b>3 High</b>	<b>3 High</b>	<b>4 Acute</b>	<b>4 Acute</b>	<b>4 Acute</b>
<b>Likely</b>	<b>2 Medium</b>	<b>3 High</b>	<b>3 High</b>	<b>4 Acute</b>	<b>4 Acute</b>
<b>Possible</b>	<b>1 Low</b>	<b>2 Medium</b>	<b>3 High</b>	<b>4 Acute</b>	<b>4 Acute</b>
<b>Unlikely</b>	<b>1 Low</b>	<b>1 Low</b>	<b>2 Medium</b>	<b>3 High</b>	<b>4 Acute</b>
<b>Rare</b>	<b>1 Low</b>	<b>1 Low</b>	<b>2 Medium</b>	<b>3 High</b>	<b>3 High</b>

**Step 4 Record risk score against the job sequence steps**

(Note – Risk scores have no absolute value and should only be used for comparison and to engender discussion.)

Score	Action
<b>4 A: Acute</b>	<b>ACT NOW – Urgent – do something about the risks immediately. Requires immediate attention.</b>
<b>3 H: High</b>	<b>Highest management decision is required urgently.</b>
<b>2 M: Medium</b>	<b>Follow management instructions.</b>
<b>1 L: Low</b>	<b>OK for now. Record and review if any equipment/ people/ materials/ work processes or procedures change.</b>