HAZARD EVALUATION AND CONTROL

Description of Plant: Masonry Saw - Electric Model No: BE36S / BE36T

Assessed By: Evan Miller Company : Flextool (Aust) Pty Ltd Date: 18/11/97 Issue: A

Hazard Description	Hazard Y/N	Plant & / or Situation	Likelihood	Severity	Risk Control
A - ENTANGLEMENT 1 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?	Y	Entanglement with diamond saw blade/V belt while rotating	5	C	* Do not operate the machine unless all protective guards are in place. * Keep hands and feet clear of rotating and moving parts as they will cause injury if contacted. * Ensure that the electricity supply to the motor is disconnected/isolated before removing guards or making adjustments. * Wear snug fitting clothing and ensure no clothing, hair or jewellery can become entangled in the machine.
B - CRUSHING 1. Can anyone be crushed due to:-					
a. Material falling off the plant?	N				
b. Uncontrolled or unexpected movement of the plant or its load?	N				
c. Lack of capacity for the plant to be slowed, stopped or immobilised?	N				
d. The plant tipping or rolling over?	Y	In use on an incline	4	D	* Ensure both the machine and the operator are stable by setting up on level terrain and the machine will not tip over, slide or fall while in operation or unattended.
e. Parts of the plant collapsing?	N				
f. Coming in contact with moving parts of the plant during testing, inspection, operation, maintenance, cleaning or repair?	Y	Drawing in between rotating pulley and moving V-belt	5	C	* Do not operate the machine unless all protective guards are in place. * Keep hands and feet clear of rotating and moving parts as they will cause injury if contacted. * Ensure that the electricity supply to the motor is disconnected/isolated before removing guards or making adjustments.
g. Being thrown off or under the plant?	N				

* Refer to Flextool operating instructions.

Likelihood of Occurrence
1. Expected to Happen
2. Common
3. Sometimes
4. Rarely
5. Highly Unlikely

Severity of Result
A. Fatality
B. Permanent Disability
C. Lost Time Injury
D. Medical Treatment
E. First Aid Injury

HAZARD EVALUATION AND CONTROL

Hazard Description	Hazard Y/N	Plant & / or Situation	Likelihood	Severity	Risk Control
h. Being trapped between the plant and material or fixed structures?	N				
i. Other factors not mentioned?	N				
C. CUTTING, STABBING & PUNCTURING? 1. Can anyone be cut, stabbed or punctured due to:					
a. Coming in contact with sharp or flying objects?	Y	Ejection of parts or material	4	D	* Do not operate the machine unless all protective guards are in place. * Protective dust mask, goggles, clothing and footwear may also be necessary.
b. Coming in contact with moving parts of the plant during testing, inspection, operation, maintenance, cleaning or repair of the plant?	Y	Contact with diamond saw blade/belt while rotating	5	C	* Do not operate the machine unless all protective guards are in place. * Keep hands and feet clear of rotating and moving parts as they will cause injury if contacted. * Ensure that the electricity supply to the motor is disconnected/isolated before removing guards or making adjustments. * Do not leave the machine in operation while it is unattended.
c. The plant, parts of the plant or work pieces disintegrating?	Y	Disintegration of diamond segments	4	D	* Do not operate the machine unless all protective guards are in place. * Only use a diamond impregnated saw blade. Never use abrasive or woodworking blades.
d. Work pieces being ejected?	Y	Ejection of material	4	D	* Do not operate the machine unless all protective guards are in place. * Protective dust mask, goggles, clothing and footwear may also be necessary.
e. The mobility of the plant?	N				

* Refer to Flextool operating instructions.

Likelihood of Occurrence
1. Expected to Happen
2. Common
3. Sometimes
4. Rarely
5. Highly Unlikely

Severity of Result
A. Fatality
B. Permanent Disability
C. Lost Time Injury
D. Medical Treatment
E. First Aid Injury

HAZARD EVALUATION AND CONTROL

Hazard Description	Hazard Y/N	Plant & / or Situation	Likelihood	Severity	Risk Control
f. Uncontrolled or unexpected movement of the plant?	Y	Plant moving while unattended	4	D	* Ensure both the machine and the operator are stable by setting up on level terrain and the machine will not tip over, slide or fall while in operation or unattended. * Do not leave the machine in operation while it is unattended.
g. Other factors not mentioned?	N				
D. SHEARING 1. Can anyone's body parts be sheared between two parts of the plant, or material handled by the plant?	N				
E. FRICTION 1. Can anyone be burnt due to contact with moving parts or surfaces of the plant, or between a part of the plant and a work piece or structure?	Y	Contact between stationary object and moving belt or diamond blade	5	C	* Do not operate the machine unless all protective guards are in place. * Keep hands and feet clear of rotating and moving parts as they will cause injury if contacted. * Ensure that the electricity supply to the motor is disconnected/isolated before removing guards or making adjustments.
F. STRIKING 1. Can anyone be struck by moving objects due to :					
a. Uncontrolled or unexpected movement of the plant?	Y	Plant moving while unattended	4	D	* Ensure both the machine and the operator are stable by setting up on level terrain and the machine will not tip over, slide or fall while in operation or unattended. * Do not leave the machine in operation while it is unattended.
b. The plant, parts of the plant or work pieces disintegrating?	Y	Ejection of parts or material	4	D	* Do not operate the machine unless all protective guards are in place. * Protective dust mask, goggles, clothing and footwear may also be necessary.
c. Work pieces being ejected?	Y	Ejection of parts or material	4	D	* Do not operate the machine unless all protective guards are in place. * Protective dust mask, goggles, clothing and footwear may also be necessary.
d. Mobility of the plant?	N				

* Refer to Flextool operating instructions.

Likelihood of Occurrence
1. Expected to Happen
2. Common
3. Sometimes
4. Rarely
5. Highly Unlikely

Severity of Result
A. Fatality
B. Permanent Disability
C. Lost Time Injury
D. Medical Treatment
E. First Aid Injury

HAZARD EVALUATION AND CONTROL

Hazard Description	Hazard Y/N	Plant & / or Situation	Likelihood	Severity	Risk Control
e. Other factors not mentioned?	Y	Legs and table separating from plant	5	D	* Always remove the legs and the table before lifting the machine by crane to heights exceeding 2 metres.
G. HIGH PRESSURE SUBSTANCES 1. Can anyone come into contact with substances under high pressure, due to plant failure or misuse of the plant?	N				
H. ELECTRICAL 1. Can anyone be injured by electrical shock or burnt due to:					
a. The plant contacting live electrical conductors?	N				
b. The plant working in close proximity to electrical conductors?	N				
c. Overload of electrical circuits?	N				
d. Damaged or poorly maintained electrical leads and cables?	Y	Contact with live electrical conductors	5	A	* The risk of Sserious or lethal injury from electrical shock may arise from the combination of electricity and moisture. * Electrical hazards may be high due to the careless use of equipment and extension leads. * Use an eletrical supply equipped with a residual current device (RCD) for protection against electrocution. * Only use the motor with a correctly grounded outlet. * Inspect electrical leads, plugs and sockets regularly for damage. * Do not operate the machine using coiled or tangled extension leads. * Ensure that repairs to the electric motor and wiring are carried out immediately by qualified personnel. * Do not hose the machine while the electrical supply is connected.

* Refer to Flextool operating instructions.

Likelihood of Occurrence
1. Expected to Happen
2. Common
3. Sometimes
4. Rarely
5. Highly Unlikely

Severity of Result
A. Fatality
B. Permanent Disability
C. Lost Time Injury
D. Medical Treatment
E. First Aid Injury

HAZARD EVALUATION AND CONTROL

Hazard Description	Hazard Y/N	Plant & / or Situation	Likelihood	Severity	Risk Control
e. Damaged electrical switches?	Y	Contact with live electrical conductors	5	A	* The risk of Sserious or lethal injury from electrical shock may arise from the combination of electricity and moisture. * Electrical hazards may be high due to the careless use of equipment and extension leads. * Use an eletrical supply equipped with a residual current device (RCD) for protection against electrocution. * Only use the motor with a correctly grounded outlet. * Inspect electrical leads, plugs and sockets regularly for damage. * Do not operate the machine using coiled or tangled extension leads. * Ensure that repairs to the electric motor and wiring are carried out immediately by qualified personnel. * Do not hose the machine while the electrical supply is connected.
f. Water near electrical equipment?	Y	Contact with live electrical conductors	4	A	* The risk of Sserious or lethal injury from electrical shock may arise from the combination of electricity and moisture. * Electrical hazards may be high due to the careless use of equipment and extension leads. * Use an eletrical supply equipped with a residual current device (RCD) for protection against electrocution. * Only use the motor with a correctly grounded outlet. * Inspect electrical leads, plugs and sockets regularly for damage. * Do not operate the machine using coiled or tangled extension leads. * Ensure that repairs to the electric motor and wiring are carried out immediately by qualified personnel. * Do not hose the machine while the electrical supply is connected.
g. Lack of isolation procedures?	Y	Contact with live current	4	A	* Ensure that the electricity supply to the motor is disconnected/isolated before removing guards or making adjustments. * Use an eletrical supply equipped with a residual current device (RCD) for protection against electrocution. * Do not hose the machine while the electrical supply is connected.
h. Other factors not mentioned?	N				

* Refer to Flextool operating instructions.

Likelihood of Occurrence
1. Expected to Happen
2. Common
3. Sometimes
4. Rarely
5. Highly Unlikely

Severity of Result
A. Fatality
B. Permanent Disability
C. Lost Time Injury
D. Medical Treatment
E. First Aid Injury

HAZARD EVALUATION AND CONTROL

Hazard Description	Hazard Y/N	Plant & / or Situation	Likelihood	Severity	Risk Control
I. EXPLOSION 1. Can anyone be injured by explosion of gases, vapours, liquids, dusts or other substances, triggered by the operation of the plant or by material handled by the plant?	N				
J. SLIPPING, TRIPPING & FALLING 1. Can anyone using the plant, or in the vicinity of the plant, slip, trip or fall due to:					
a. Uneven or slippery work surfaces?	Y	Slip/Trip/Fall	3	E	* Slip/Trip/Fall is a major cause of serious injury or death. Beware of excess hose and water left on the walking or work surface. *Do not allow waste water to accumulate under foot.
b. Poor housekeeping, eg, swarf in the vicinity of the plant, spillage not Cleaned up?	Y	Slip/Trip/Fall	3	E	* Slip/Trip/Fall is a major cause of serious injury or death. Beware of excess hose and water left on the walking or work surface. * Do not allow waste water to accumulate under foot.
c. Obstacles being placed in the vicinity of the plant, other factors not mentioned?	Y	Slip/Trip/Fall	3	E	* Slip/Trip/Fall is a major cause of serious injury or death. Beware of excess hose and water left on the walking or work surface. * Do not allow waste water to accumulate under foot.
2. Can anyone fall from a height due to:					
a. Lack of proper work platform?	N				
b. Lack of proper stairs or ladders?	N				
c. Lack of guardrails or other suitable edge protection?	N				
d. Unprotected holes, penetrations or gaps?	N				
e. Poor floor or walking surfaces, such as the lack of a slip-resistant surface?	N				
f. Steep walking surfaces?	N				

* Refer to Flextool operating instructions.

Likelihood of Occurrence
1. Expected to Happen
2. Common
3. Sometimes
4. Rarely
5. Highly Unlikely

Severity of Result
A. Fatality
B. Permanent Disability
C. Lost Time Injury
D. Medical Treatment
E. First Aid Injury

HAZARD EVALUATION AND CONTROL

Hazard Description	Hazard Y/N	Plant & / or Situation	Likelihood	Severity	Risk Control
g. Collapse of the supporting structure?	N				
h. Other factors not mentioned?	N				
K. ERGONOMIC 1. Can anyone be injured due to:					
a. Poorly designated seating?	N				
b. Repetitive body movement?	N				
c. Constrained body posture or the need for excessive effort?	Y	Incorrect lifting of unit	3	C	* Brick saws are heavy units and should be positioned by two people of appropriate strength. Using the lifting handles provided on the machine, along with correct lifting techniques.
d. Inadequate or poorly placed lighting?	N				
e. Lack of consideration given to human error or human behaviour?	N				
f. Mismatch of the plant with human traits and natural limitations?	N				
g. Other factors not mentioned?	N				
L. SUFFOCATION 1. Can anyone be suffocated due to lack of oxygen, or atmospheric contamination?	N				
M. HIGH TEMPERATURE OR FIRE 1. Can anyone come into contact with objects at high temperature?	N				

* Refer to Flextool operating instructions.

Likelihood of Occurrence
1. Expected to Happen
2. Common
3. Sometimes
4. Rarely
5. Highly Unlikely

Severity of Result
A. Fatality
B. Permanent Disability
C. Lost Time Injury
D. Medical Treatment
E. First Aid Injury

HAZARD EVALUATION AND CONTROL

Hazard Description	Hazard Y/N	Plant & / or Situation	Likelihood	Severity	Risk Control
N. TEMPERATURE (THERMAL COMFORT) 1. Can anyone suffer ill health due to exposure to high or low temperatures?	N				
O. OTHER HAZARDS 1. Can anyone be injured or suffer ill health from exposure to:					
a. Chemicals?	N				
b. Toxic gases or vapours?	N				
c. Fumes?	N				
d. Dust?	N				
e. Noise?	Y	Diamond blade and motor operation	2	B	* Excessive noise can lead to temporary or permanent loss of hearing. * Wear an approved hearing protection device to limit noise exposure. As required by Occupational Health and Safety regulations. Noise levels in excess of 85dB(A) may be produced by diamond cutting blades.
f. Vibration?	N				
g. Radiation	N				
h. Other factors not mentioned?	N				

Likelihood of Occurrence
1. Expected to Happen
2. Common
3. Sometimes
4. Rarely
5. Highly Unlikely

Severity of Result
A. Fatality
B. Permanent Disability
C. Lost Time Injury
D. Medical Treatment
E. First Aid Injury