

PLANT RISK ASSESSMENT - ATTACHMENT

Company	Ontrac	Risk Assessment Date:	14-Sep-2021	Expiry Date:	14-Sep-2022
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Risk Assessment Expired?

Call **0421 185 883** or email admin@cpsaust.com to arrange a new Risk Assessment ASAP

Company Details		
Address	2/20 Ravenhall Way, Ravenhall VIC 3023	
Contact	Adrian Atwood <adrian.a@ontracgroup.com.au>	
Contact Number	0448 022 609	

Plant Specifications					
Plant item	Chain drive cutting head		Plant ID	N/A	
Make	Kermroc		Model	EK110	
Serial Number	EK110250		ROPS Fitted/Standard	N/A	
Height [mm]	Unknown		Width [mm]	800	
Length [mm]	1900		Operating Weight [Kg]	2600	
Engine Make	N/A		Engine Model	N/A	
Fuel Capacity	N/A		Year Made	2021	
Current Hours	N/A	Last Service Hours	N/A	Next Service Hours	N/A

Specifications			
Hitch pin diameter [mm]	TBC	Working pressure [bar]	380
Hitch pin spacing [mm]	TBC	Working flow rate [LPM]	300
Max torque [Nm]	24500	Rated power [kW]	110

Noise Measurement			
Make/Model		Serial Number	
Reading at Operators Station	To be carried out once commissioned on host machine		
Reading for Bystanders Taken	Static environment - attachment not on machine		
Left		Right	
Front		Rear	



Plant Noise Levels [CPS noise levels to be taken in accordance with "Guide for assessing noise generated by plant in the work place" issued by National Acoustic Laboratories with reference to the WHS Act and Regulations 2011. Noise level readings at the operators station are conducted with cabin doors and windows closed at operating RPM]

Noise Warning: OPERATOR	Noise Warning: BYSTANDER
BELOW 85dB(a) No Hearing protectors required for short usage (less than 8 hours)	BELOW 85dB(a) No Hearing protectors required for short usage (less than 8 hours)

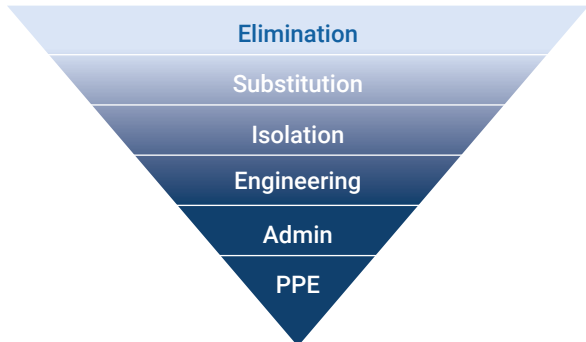
CONSEQUENCE & LIKELIHOOD

Consequence Rating	
Catastrophic 5	Potential to cause death. Irreversible environmental damage. Loss of business.
Serious 4	Potential to cause permanent disability. Major environment damage, major clean up required. Critical damage to property.
Moderate 3	Lost time injury [LTI]. Moderate environmental damage, clean up required. Limited damage to property.
Minor 2	Medical treatment injury [MTI]. Minor environmental damage, straight forward clean up. Slight damage to property.
Insignificant 1	No first aid required. Report incident. No harm done to environment. Insignificant damage to property.

RISK KEY
EXTREME Immediate response. Not acceptable as a residual risk!
HIGH Respond quickly. Not acceptable as a residual risk!
MODERATE Respond in reasonable time. Consider additional control measures
LOW Low Priority. Review control measures

Risk Formula $R = C \times P$		Likelihood Rating				
		Almost Certain	Likely	Possible	Unlikely	Rare
Consequence Rating	Catastrophic	Extreme 25	Extreme 20	Extreme 15	High 10	Moderate 5
	Serious	Extreme 20	Extreme 16	High 12	High 8	Moderate 4
	Moderate	Extreme 15	High 12	High 9	Moderate 6	Low 3
	Minor	High 10	High 8	Moderate 6	Low 3	Low 2
	Insignificant	Moderate 5	Moderate 4	Low 3	Low 2	Low 1

Likelihood Rating	
Almost Certain 5	Occurs more than twice a year. Reoccurring event during the lifetime of a project.
Likely 4	Occurs once or twice a year. May occur frequently during the lifetime of a project.
Possible 3	Typically occurs 1-10 years. May occur during the lifetime of a project.
Unlikely 2	Typically occurs in 10 - 100 years. Unlikely to occur during the lifetime of a project.
Rare 1	Greater than 100 year event. Very unlikely to occur during the life of a project.

Hierarchy of Controls	
Safe Place [Preferred]     Safe Person [Least preferred]	
Any hazard assessed as presenting a low and/or moderate risk level will be controlled using a combination of controls as appropriate. Any hazard assessed as presenting a high risk level must be controlled using a combination of at least one engineering control and lower level controls as appropriate. Where this is not possible workplace manager consultation must take place. Any hazard assessed as presenting an extreme risk level will be controlled using elimination and engineering as the primary source of controls. Where this is not possible workplace manager consultation must take place.	

SUMMARY OF RISKS IDENTIFIED

Item No	Hazard Category	Operation	Maintenance	Complies?		
1	Entanglement	☒	☐	☐ N/A	☒ Yes	☐ No
2	Crushing	☒	☒	☐ N/A	☒ Yes	☐ No
3	Cutting, stabbing or puncturing	☒	☒	☐ N/A	☒ Yes	☐ No
4	Shearing	☒	☒	☐ N/A	☒ Yes	☐ No
5	Striking	☒	☒	☐ N/A	☒ Yes	☐ No
6	High pressure fluid	☒	☒	☐ N/A	☒ Yes	☐ No
7	Electrical	☒	☒	☐ N/A	☒ Yes	☐ No
8	Explosion	☐	☒	☐ N/A	☒ Yes	☐ No
9	Slipping, tripping and falling	☒	☐	☐ N/A	☒ Yes	☐ No
10	Ergonomic	☒	☐	☐ N/A	☒ Yes	☐ No
11	Combination of hazards	☐	☐	☒ N/A	☐ Yes	☐ No
12	Runaway [Rail application only]	☐	☐	☒ N/A	☐ Yes	☐ No
13	Collision [Rail application only]	☐	☐	☒ N/A	☐ Yes	☐ No
14	Derailment including rollover [Rail application only]	☐	☐	☒ N/A	☐ Yes	☐ No
15	Machine configuration - height/width limitations [Applicable to rail and tunneling operations]	☐	☐	☒ N/A	☐ Yes	☐ No
16	Other hazards	☐	☐	☒ N/A	☐ Yes	☐ No
17	Have attachments been considered?			☐ N/A	☒ Yes	☐ No
18	Is foreseeable misuse considered?			☐ N/A	☒ Yes	☐ No
19	Is assessment of risk and effectiveness of controls consistent and realistic?			☐ N/A	☒ Yes	☐ No
20	Does the assesment demonstrate sufficient knowledge of the plant function and performance elements?			☐ N/A	☒ Yes	☐ No
21	Have machine limitations been clearly defined?			☐ N/A	☒ Yes	☐ No
22	Has the risk assessment been developed in conjunction with the OEM's documentation, relevant codes and legislation?			☐ N/A	☒ Yes	☐ No
23	Do the controls reflect the Heirachy of Control principals, with the most effective being attempted first?			☐ N/A	☒ Yes	☐ No
24	Does the risk assessment provide space for personnel to sign and acknowledge that they have read and understood the content?			☐ N/A	☒ Yes	☐ No

MINIMUM STANDARD

The below minimum standards are required to be in place prior to starting work.

These controls will alleviate foreseeable misuse, through ensuring only competent personnel operate and maintain this item of plant.

Generic Administrative controls

- ADM- Operator to have VOC/familiarised on operation of machine
- ADM- Daily inspection [pre-start] to be completed prior to every shift to identify any faults/hazards prior to operation [including daily inspection on attachments]
- ADM- Operator's manual specific to this item of plant is kept with the plant at all times
- ADM- Machine to be operated within limits specified in the operator's manual
- ADM- Maintenance/servicing to be carried out by qualified mechanic as per OEM preventative maintenance/repair requirements

Attachments considered

- N/A as this is the attachment to be fitted to the host machine

Attachments considered Legislation, Codes and Standards considered

- OHS Act 2004
- OHS Regulations 2017
- Victorian Plant Code of Practice 2019
- AS1418.8 Cranes, hoists and winches, Part 8: Special purpose
- AS4772-2008 Earth-moving machinery -Quickhitches for excavators
- AS4024-2014 Safety of machinery

RISK HAZARDS & CONTROLS

Possible Hazards	Initial Risk Rating	Controls in place	How are identified risks & hazards controlled?	Residual Risk Rating
ENTANGLEMENT Considerations <i>Can anyone's hair, clothing, gloves, neck tie, jewellery, cleaning brushes, rags or other materials become entangled with moving parts of the plant, or materials in motion?</i>	H12	☒ Elimination ☐ Substitution ☒ Isolation ☒ Engineering ☒ Admin ☐ PPE	Bystanders getting entangled in broom attachment: ADM- Operator to have VOC/ familiarized on operation of machine ADM- Pre-start to be completed prior to every shift to identify and faults hazards prior to operation (including pre-start on broom) ADM- Machine to be operated within limits specified in the operators manual ISO-Bystanders to maintain 15m exclusion zone to machine - only to approach once positive communication with operator is established ENG-Machine controls are self centering and stop as such if operator is to remove hands/ feet from function ENG-Operational horn MUST be fitted to machine to allow operator to alert by standers of intentions ADM- Operators manual specific to this item of plant is kept with the plant at all times ADM- Maintenance/ servicing to be carried out by qualified mechanic as per OEM preventative maintenance/ repair requirements Entanglement of maintenance personnel during maintenance activity: ELI-Remove attachment to carry out any maintenance ISO-If not practical to remove attachment, isolate parent machine and verify isolation	M4

Possible Hazards	Initial Risk Rating	Controls in place	How are identified risks & hazards controlled?	Residual Risk Rating
CRUSHING & STRIKING Considerations <i>Material falling off the plant?</i> <i>Uncontrolled or unexpected movement of the plant or its load?</i> <i>Lack of capacity for the plant to be slowed, stopped or immobilised?</i> <i>The plant tipping or rolling over?</i> <i>Parts of the plant collapsing?</i> <i>Coming in contact with moving parts of the plant during testing, inspection, operation, maintenance, cleaning or repair?</i> <i>Being thrown off or under the plant?</i> <i>Being trapped between the plant and materials or fixed structures?</i> <i>Other factors not mentioned?</i>	E15	☐ Elimination ☐ Substitution ☒ Isolation ☒ Engineering ☒ Admin ☐ PPE	Bystanders being struck by material ejected from attachment: ADM- Operator to have VOC/ familiarized on operation of machine ISO-Bystanders to maintain 15m exclusion zone to machine - only to approach once positive communication with operator is established ADM- Machine to be operated within limits specified in the operators manual ISO-Bystanders to maintain 15m exclusion zone to machine - only to approach once positive communication with operator is established ADM- Operator to only required RPM to achieve desired effect, DO NOTOVERSPEED ATTACHMENT Crushing of bystander from Excavator overturning: ENG-Excavator compliant with AS1418.8 s5, and as such fitted with AS4772 compliant quick hitch, hydraulic burst protection, single value load chart in cab, decals fitted to stick and level indicator - Machine WLL for pick and carry (66%) MUST be above tare weight of 2600KG Attachment disconnecting from quick hitch - crushing bystanders: ADM- Operator to have VOC/ familiarized on operation of machine ADM- Pre-start to be completed prior to every shift to identify and faults hazards prior to operation (including pre-start on attachment) ADM- Machine to be operated within limits specified in the operators manual ISO-Bystanders to maintain 15m exclusion zone to machine - only to approach once positive communication with operator is established ENG-Chain cutter attachment only ADM-Quick hitch to be regularly inspected to ensure wear/ operation acceptable ADM-only use buckets with correct pin centers/ spacing for quick hitch	M5

Possible Hazards	Initial Risk Rating	Controls in place	How are identified risks & hazards controlled?	Residual Risk Rating
CUTTING, STABBING AND PUNCTURING Considerations <i>Coming in contact with sharp or flying objects?</i> <i>Coming in contact with moving parts of the plant during testing, inspection, operation, maintenance, cleaning or repair?</i> <i>The plant, parts of the plant or work pieces disintegrating?</i> <i>Work pieces being ejected?</i> <i>The mobility of the plant?</i> <i>Uncontrolled or unexpected movement of the plant?</i> <i>Other factors not mentioned?</i>	M6	☐ Elimination ☐ Substitution ☒ Isolation ☒ Engineering ☐ Admin ☒ PPE	Bystanders being cut/ stabbed by material ejected from attachment: ADM- Operator to have VOC/ familiarized on operation of machine ISO-Bystanders to maintain 15m exclusion zone to machine - only to approach once positive communication with operator is established ADM- Machine to be operated within limits specified in the operators manual ISO-Bystanders to maintain 15m exclusion zone to machine - only to approach once positive communication with operator is established ADM- Operator to only required RPM to achieve desired effect, DO NOTOVERSPEED ATTACHMENT Attachment disconnecting from quick hitch - crushing bystanders: ADM- Operator to have VOC/ familiarized on operation of machine ADM- Pre-start to be completed prior to every shift to identify and faults hazards prior to operation (including pre-start on attachment) ADM- Machine to be operated within limits specified in the operators manual ISO-Bystanders to maintain 15m exclusion zone to machine - only to approach once positive communication with operator is established ENG-Chain cutter attachment only ADM-Quick hitch to be regularly inspected to ensure wear/ operation acceptable ADM-only use buckets with correct pin centers/ spacing for quick hitch	L3

Possible Hazards	Initial Risk Rating	Controls in place	How are identified risks & hazards controlled?	Residual Risk Rating
SHEARING Considerations <i>Can anyone's body parts be sheared between two parts of the plant, or between a part of the plant and a work piece or structure?</i>	E15	☐ Elimination ☐ Substitution ☒ Isolation ☒ Engineering ☒ Admin ☐ PPE	Bystanders being struck by material ejected from attachment: ADM- Operator to have VOC/ familiarized on operation of machine ISO-Bystanders to maintain 15m exclusion zone to machine - only to approach once positive communication with operator is established ADM- Machine to be operated within limits specified in the operators manual ISO-Bystanders to maintain 15m exclusion zone to machine - only to approach once positive communication with operator is established ADM- Operator to only required RPM to achieve desired effect, DO NOTOVERSPEED ATTACHMENT Crushing of bystander from Excavator overturning: ENG-Excavator compliant with AS1418.8 s5, and as such fitted with AS4772 compliant quick hitch, hydraulic burst protection, single value load chart in cab, decals fitted to stick and level indicator - Machine WLL for pick and carry (66%) MUST be above tare weight of 2600KG Attachment disconnecting from quick hitch - crushing bystanders: ADM- Operator to have VOC/ familiarized on operation of machine ADM- Pre-start to be completed prior to every shift to identify and faults hazards prior to operation (including pre-start on attachment) ADM- Machine to be operated within limits specified in the operators manual ISO-Bystanders to maintain 15m exclusion zone to machine - only to approach once positive communication with operator is established ENG-Chain cutter attachment only ADM-Quick hitch to be regularly inspected to ensure wear/ operation acceptable ADM-only use buckets with correct pin centers/ spacing for quick hitch	M5

Possible Hazards	Initial Risk Rating	Controls in place	How are identified risks & hazards controlled?	Residual Risk Rating
STORED ENERGY Considerations <i>Can anyone come into contact with fluids under high pressure, due to plant failure or misuse of the plant?</i> • High pressure gas • High pressure fluid • High pressure air • High pressure water	H12	☐ Elimination ☐ Substitution ☒ Isolation ☒ Engineering ☒ Admin ☒ PPE	Bystanders exposed to hydraulic oil from attachment hoses if hoses fail: ISO-Work area to be barricaded during operation with appropriate distanced exclusion zone ENG-Hose fitted to attachments to have working pressure above the maximum system pressure of the machine ENG-Sheaving fitted to all exposed hydraulic hoses ADM-Competent person only to connect / disconnect attachment hoses when fitting attachment (ensure taps turned off prior to connection/ disconnection) PPE-Gloves to be worn when connecting/ disconnecting attachment Maintenance of hydraulic system: ADM-All hydraulic system pressure to be removed prior to dismantling components - refer to OEM manual as required	M4

Possible Hazards	Initial Risk Rating	Controls in place	How are identified risks & hazards controlled?	Residual Risk Rating
ELECTRICAL Considerations <i>The plant contacting live electrical conductors?</i> <i>The plant working in close proximity to electrical conductors?</i> <i>Overload of electrical circuits?</i> <i>Damaged or poorly maintained electrical leads and cables?</i> <i>Damaged electrical switches?</i> <i>Water near electrical equipment?</i> <i>Lack of isolation procedures?</i> <i>Other factors not mentioned?</i>	E16	☒ Elimination ☐ Substitution ☐ Isolation ☐ Engineering ☒ Admin ☐ PPE	General operation of machine: ADM-Decals fitted to notify persons of overhead electrical hazards and approach distances ADM-Machine height decal MUST fitted in cab to detail the travel height of machine when traveling below power lines Striking underground services during general operation: ELI- All services to be located prior to penetrating any ground ADM- Electrical spotter to be used as required ADM- Dial before you dig decal fitted in cabin	M4

Possible Hazards	Initial Risk Rating	Controls in place	How are identified risks & hazards controlled?	Residual Risk Rating
HIGH/LOW TEMPERATURE/FIRE Considerations <i>Can anyone come into contact with objects at high temperatures?</i> <i>Can anyone be injured by fire?</i> <i>Can anyone suffer ill-health due to exposure to high temperatures?</i>	L3	☒ Elimination ☐ Substitution ☐ Isolation ☐ Engineering ☐ Admin ☐ PPE	Not applicable on cutter attachment	L3

Possible Hazards	Initial Risk Rating	Controls in place	How are identified risks & hazards controlled?	Residual Risk Rating
EXPLOSION Considerations <i>Can anyone be injured by explosion of gases, vapours, liquids, dusts, etc. triggered by the operation of the plant or by material handled by the plant?</i>	L3	☒ Elimination ☐ Substitution ☐ Isolation ☐ Engineering ☐ Admin ☐ PPE	Not applicable on cutter attachment	L3

Possible Hazards	Initial Risk Rating	Controls in place	How are identified risks & hazards controlled?	Residual Risk Rating
SLIPPING, TRIPPING AND FALLING Considerations <i>Uneven or slippery work surfaces?</i> <i>Poor housekeeping, eg spillage not cleaned up?</i> <i>Obstacles being placed in the vicinity of the plant?</i> <i>Lack of proper work platform?</i> <i>Lack of proper stairs or ladders?</i> <i>Lack of guard rails or other suitable edge protection?</i> <i>Unprotected holes, penetrations or gaps?</i> <i>Poor floor or walking surfaces, such as the lack of a slip-resistant surface?</i> <i>Steep walking surfaces?</i> <i>Collapse of the supporting structure?</i> <i>Mud/clay on steps/access ways.</i> <i>Other factors not mentioned?</i>	L3	☒ Elimination ☐ Substitution ☐ Isolation ☐ Engineering ☐ Admin ☐ PPE	Not applicable on cutter attachment	L3

Possible Hazards	Initial Risk Rating	Controls in place	How are identified risks & hazards controlled?	Residual Risk Rating
ERGONOMIC Considerations <i>Poorly designed seating?</i> <i>Repetitive body movement?</i> <i>Constrained body posture or the need for excessive effort?</i> <i>Design deficiency causing mental or psychological stress?</i> <i>Inadequate or poorly placed lighting?</i> <i>Lack of consideration given to human error or human behaviour?</i> <i>Mismatch of the plant with human traits and natural limitations?</i> <i>Other factors not mentioned?</i>	L3	☒ Elimination ☐ Substitution ☐ Isolation ☐ Engineering ☐ Admin ☐ PPE	Not applicable on cutter attachment	L3

Possible Hazards	Initial Risk Rating	Controls in place	How are identified risks & hazards controlled?	Residual Risk Rating
SUFFOCATION Considerations <i>Can anyone be suffocated due to lack of oxygen or atmospheric contamination?</i> <i>Other factors not mentioned?</i>	L3	☒ Elimination ☐ Substitution ☐ Isolation ☐ Engineering ☐ Admin ☐ PPE	Not applicable on cutter attachment	L3

Possible Hazards	Initial Risk Rating	Controls in place	How are identified risks & hazards controlled?	Residual Risk Rating
OTHER HAZARDS Considerations <i>Can anyone be injured or suffer ill-health from exposure to:</i> <i>Chemicals?</i> <i>Toxic gases or vapours?</i> <i>Fumes?</i> <i>Dust?</i> <i>Noise?</i> <i>Vibration?</i> <i>Radiation?</i> <i>Other factors not mentioned?</i>	L3	☒ Elimination ☐ Substitution ☐ Isolation ☐ Engineering ☐ Admin ☐ PPE	Not applicable on cutter attachment	L3

Possible Hazards	Initial Risk Rating	Controls in place	How are identified risks & hazards controlled?	Residual Risk Rating
COMBINATION OF HAZARDS Considerations	L3	☒ Elimination ☐ Substitution ☐ Isolation ☐ Engineering ☐ Admin ☐ PPE	Not applicable on cutter attachment	L3

RECOMMENDATION



CONSOLIDATED PLANT SERVICES

[illegible]

PRA PERSONNEL REVIEW

REVIEW DETAILS					
The review panels below are designed to document additional supplementary controls only [site specific etc], this tool does not remove your legal responsibility to carry out regular risk assessments as a whole; or if plant risk changes.					
Personnel		Personnel		Personnel	
Name	Date	Name	Date	Name	Date
Qualification	Review Date	Qualification	Review Date	Qualification	Review Date
Review Details:		Review Details:		Review Details:	
1		1		1	
2		2		2	
3		3		3	
4		4		4	
5		5		5	



Personnel consulted on development of PRA			
Name:	Signature:	Date:	Position:
Ben Horstmann		14/September/2021	Plant Inspector

We the Person/s below have read & understood the contract., confirm that the PRA nominated above has been explained and its contents are clearly understood. We also confirm that our required qualifications to undertake this activity are current. We also clearly understand that the controls in this PRA must be applied as documented, otherwise work is to cease immediately.

[illegible]

DISCLAIMER

This Plant Risk Assessment ["PRA"] is strictly confidential and provided for use only by the Company as set out on page 1. Unauthorised dissemination of this PRA is prohibited. CPS shall not be liable to any other person having relied or acted upon any information contained in this PRA.

The PRA relates solely to the condition and configuration of the Plant for its intended use. The CPS assessor makes various assumptions based on the design and manufacturing specifications. This PRA provides a summary of the risks apparent to the CPS assessor on the Risk Assessment Date, and suggested action to mitigate such risks, having regard to those assumptions and the circumstances and conditions present during inspection and testing. The Company acknowledges that the circumstances and conditions prevailing on the Risk Assessment Date may have prevented the CPS assessor from observing potential risk factors.

CPS recommends immediate action in relation to any safety hazard identified herein, notwithstanding any notation as to priority or classification of the risk.

The Company/Plant Owner remains solely responsible for the condition, configuration, maintenance, and safe operation of the Plant at all times. The Company/Plant Owner must carry out its own regular inspections, and ensure compliance with all applicable laws. CPS assumes no responsibility for, nor makes any warranty in relation to, the satisfaction of any legal obligation of the Company/Plant Owner by obtaining this PRA or in complying with any of the recommendations set out herein, or in relation to the condition, suitability, or safety of the Plant under any operating conditions.

Any warranty, guarantee, condition or other term arising out of or in connection with this PRA or the supply of services by CPS which might apply or which might be implied or incorporated into any contract between the Company/Plant Owner and CPS by statute, common law, or otherwise [including, without limitation, any implied term or guarantee as to fitness for purpose or acceptable care and skill] is hereby expressly excluded to the maximum extent permitted by law.

Any action taken in reliance upon the recommendations set out herein is taken at the Company/Plant Owner's risk. CPS recommends a further inspection on the making of any alteration to the Plant or operating methods.