

RISK MANAGEMENT REPORT

TYPE	Rollers, Smooth Drum Self Propelled
MAKE	Caterpillar
MODEL	CS-12 GC
SERIAL NUMBER	GCS00678
ASSET NUMBER	AHSH176



Report Number	AHH 20240212-1216
Date	12-Feb-2024
Created By	AHSH Service
Assessor	AHSH Service
Assist. Assessor(s)	
Completed By	AHSH Service
Owner	Australian Hammer Supplies Hire Pty Ltd
Assessment Purpose	Hire
State	NSW



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IMPORTANT INFORMATION

Contains information outlining the scope and any limitations applicable to this Risk Management Report

SECTION 2

MACHINE DETAILS

Contains standard machine specifications and details of any extras fitted

SECTION 3

RISK ANALYSIS, RISK EVALUATION & RISK TREATMENT

Contains details of the technique used to calculate risk ratings, time frame and risk treatments. Please refer to this information when reviewing and interpreting the information in section 4 & 5

RISK TREATMENTS REQUIRED

SECTION 4 Contains detailed information regarding the risk treatments to be implemented including hazard, risk rating, time frame, relevant standards & legislative references

RISK TREATMENTS IN PLACE

SECTION 5 Contains detailed information regarding the risk treatments in place including hazard, risk rating, relevant standards & legislative references

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IMAGES AND NOTES

Contains images & any relevant information entered by the assessor





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SECTION 1 IMPORTANT INFORMATION

This report generated by Plant Assessor™ © Online Safety Systems on Monday, 12 Feb 2024 12:24 PM

This report pertains to this item of plant as it appeared on the day of inspection.

It is the responsibility of the hirer to conform with the instructions and information contained within this report. Any change in condition of this item of plant should be reported to the hire company immediately.

Any information relating to the standard features have been supplied via the manufacturer and should be used as a guide only until verified.

For further information regarding this report contact Online Safety Systems on 1300 72 88 52

SECTION 2 MACHINE DETAILS

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1. Manufacturers specified noise level dBA 2. Ambient noise level dBA 3. Noise level - Operator position (high idle) dBA 3. Noise level - Operator position (low idle) dBA 5. Noise level - Operator position (low idle) dBA 5. Noise level LHS dBA @ m (high idle) 6. Noise level END dBA @ m (high idle) 7. Noise level Rad Rad Rad MBA & Moise level Rad			
3. Noise level - Operator position (high idle) dBA		Manufacturers specified noise level dBA	
- NOISE TEST RESULTS 4. Noise level - Operator position (low idle) dBA 5. Noise level LHS dBA @ m (high idle) 6. Noise level First dBA @ m (high idle) 7. Noise level RHS dBA @ m (high idle) 8. Noise level LHS dBA @ mish idle 8. Noise level LHS dBA @ mish idle 8. Noise level LHS dBA @ mish		2. Ambient noise level dBA	
S. Noise level LHS dBA @ m (high idle)		3. Noise level - Operator position (high idle) dBA	
S. Noise level Front 64A @ m (high idle)	NOISE TEST DESIILTS	4. Noise level - Operator position (low idle) dBA	
7. Noise level RHS dBA @ m (high idle)	- NOISE TEST RESULTS	5. Noise level LHS dBA @ m (high idle)	
BODY TYPE		6. Noise level Front dBA @ m (high idle)	
BODY TYPE		7. Noise level RHS dBA @ m (high idle)	
BRAKES Service Braking System		8. Noise level Rear dBA @ m (high idle)	
CAPACITIES	BODY TYPE	Articulation, either side (deg)	
Ground clearance (mm) 518 Height (mm) 3000 Length (mm) 5700 Operating weight (kg) 12653 Static weight on drum (kg) Turning circle diameter (mm) 3900 Wheelbase (mm) 3000 Width (mm) 2300 DRUMS Drum drive DRUMS Drum width (mm) 2134 Static drum mass/lineal cm (kg) Engine Displacement (Litres) Engine Hours Engine Hours Engine Make & Model Cat C4.4 Engine Number Net power, SAE rated (kW@rpm) 79.4 Number of Cylinders TRANSMISSION Transmission Type Tyre Size 23.1 x 26 WORK CAPABILITIES Carability w/o vibration (%) Nominal amplitude, high+low (mm)	BRAKES	Service Braking System	
Height (mm) 3000	CAPACITIES	Fuel Tank Capacity (Litres)	248
DIMENSIONS/WEIGHTS		Ground clearance (mm)	518
DIMENSIONS/WEIGHTS		Height (mm)	3000
Static weight on drum (kg) 3900		Length (mm)	5700
Static weight on drum (kg) Turning circle diameter (mm) 3900	DIMENSIONS/MEIGHTS	Operating weight (kg)	12653
Wheelbase (mm) 3000 Width (mm) 2300 DRIVES Drum drive DRUMS Drum width (mm) 2134 Static drum mass/lineal cm (kg) Engine Displacement (Litres) Engine Hours Engine Make & Model Cat C4.4 Engine Number Net power, SAE rated (kW@rpm) 79.4 Number of Cylinders TRANSMISSION Transmission Type TYRES Tyre Size 23.1 x 26 Centrifugal force, high/low amplitude (kN) Gradeability w/o vibration (%) Nominal amplitude, high+low (mm)	DIMENSIONS/WEIGHTS	Static weight on drum (kg)	
Width (mm) 2300		Turning circle diameter (mm)	3900
DRIVES Drum drive 2134 DRUMS Drum width (mm) 2134 Static drum mass/lineal cm (kg) 2134 Engine Displacement (Litres) 2134 Engine Displacement (Litres) 2134 Engine Hours 2134 Engine Hours 2134 Engine Hours 2134 Engine Hours 2134 Engine Make & Model Cat C4.4 Engine Number 79.4 Number of Cylinders 79.4 Class Year Year 774 TYRES Tyre Size 23.1 x 26 WORK CAPABILITIES Centrifugal force, high/low amplitude (kN) 23.1 x 26 WORK CAPABILITIES One trifugal force, high/low amplitude (kN) 34.2 cm WORK CAPABILITIES One trifugal force, high/low (mm) 34.2 cm		Wheelbase (mm)	3000
Drum width (mm) 2134		Width (mm)	2300
Static drum mass/lineal cm (kg)	DRIVES	Drum drive	
Engine Displacement (Litres)	DDIIMS	Drum width (mm)	2134
Engine Hours	DROWS	Static drum mass/lineal cm (kg)	
Engine Make & Model		Engine Displacement (Litres)	
Engine Number		Engine Hours	
Engine Number Net power, SAE rated (kW@rpm) 79.4	ENGINE	Engine Make & Model	Cat C4.4
Number of Cylinders Class Year TRANSMISSION Transmission Type Tyre Size 23.1 x 26	LINGINE	Engine Number	
PLANT CLASSIFICATIONS Class			79.4
TRANSMISSION Transmission Type TYRES Tyre Size Centrifugal force, high/low amplitude (kN) Gradeability w/o vibration (%) Nominal amplitude, high+low (mm)		Number of Cylinders	
TRANSMISSION Transmission Type TYRES Tyre Size Centrifugal force, high/low amplitude (kN) Gradeability w/o vibration (%) Nominal amplitude, high+low (mm)	PLANT CLASSIFICATIONS		
TYRES Tyre Size Centrifugal force, high/low amplitude (kN) Gradeability w/o vibration (%) Nominal amplitude, high+low (mm)	LANT CLASSII ICATIONS	Year	
WORK CAPABILITIES Centrifugal force, high/low amplitude (kN) Gradeability w/o vibration (%) Nominal amplitude, high+low (mm)	TRANSMISSION	Transmission Type	
WORK CAPABILITIES Gradeability w/o vibration (%) Nominal amplitude, high+low (mm)	TYRES	Tyre Size	23.1 x 26
Nominal amplitude, high+low (mm)			
Nominal amplitude, high+low (mm)	WORK CARABILITIES	Gradeability w/o vibration (%)	
Vibratory frequency, max+min (Hz) 30-33	WORK CAPABILITIES	Nominal amplitude, high+low (mm)	
vibratory inequation, maximin (112)		Vibratory frequency, max+min (Hz)	30-33
EVTDAC Air Conditioning	EVTDAC	Air Conditioning	
ROPS - Cabin	EXIKAS	ROPS - Cabin	





Make Caterpillar Model CS-12 GC

Type Rollers, Smooth Drum Self Propelled

SECTION 3 RISK ANALYSIS / RISK EVALUATION

RI:	RISK ANALYSIS						
Ĭ.◀	← CONSEQUENCE →						
LIKELIHOOD		1. INSIGNIFICANT Dealt with by in house first aid	2. MINOR Treated by medical professionals, hospital out patients	3. MODERATE Significant non permanent injury overnight hospital stay	4. MAJOR Extensive permanent injury eg. Loss of fingers, extended hospital stay	5. CATASTROPHIC Death, permanent disabling injury eg. Loss of hand, quadriplegia	
LIKELI	A. Almost certain to occur in most circumstances	MEDIUM 8	HIGH 16	HIGH 18	CRITICAL 23	CRITICAL 25	
+	B. Likely to occur frequently	MEDIUM 7	MEDIUM 10	HIGH 17	HIGH 20	CRITICAL 24	
	C. Possibly and likely to occur at sometime	LOW 3	MEDIUM 9	MEDIUM 12	HIGH 19	HIGH 22	
	D. Unlikely to occur but could happen	LOW 2	LOW 5	MEDIUM 11	MEDIUM 14	HIGH 21	
	E. May occur but only in rare circumstances	LOW 1	LOW 4	LOW 6	MEDIUM 13	MEDIUM 15	

LUATION	CRITICAL Act immediately to mitigate risk. Implement risk treatment(s) in accordance with the risk treatment table below.	
		Act immediately to mitigate risk. Implement risk treatment(s) in accordance with the risk treatment table below. If the appropriate risk treatments are not immediately accessible establish interim risk treatment strategies. Permanent risk treatments must be implemented within one week.
		Take reasonable steps to mitigate and monitor the risk. Implement risk treatment(s) in accordance with the risk treatment table below. Permanent risk treatments must be implemented within one month.
	LOW	Take reasonable steps to mitigate and monitor the risk. Implement risk treatment(s) in accordance with the risk treatment table below. Permanent risk treatments must be implemented within three months.

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RISKTREATMENT		st appropriate risk treatment option involves balancing the costs and efforts of implementation against the benefits ard to legal, regulatory and other requirements. (source AS/NZS ISO 31000:2009)
REAT	Eliminate	Eliminate the risk source.
RISKT	Substitute	Provide an alternative that is capable of performing the same task which is safer.
4	Engineering	Provide or construct a physical barrier or guard.
	Administration	Develop policies, procedures, practices and guidelines in consultation with employees to mitigate the risk. Provide training, instruction and supervision about the risk source.
	Personal protective	Provide personal protective equipment to protect the individual from the risk source.





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SECTION 4 RISK TREATMENTS REQUIRED

This section of the report pertains to hazards created by use of this item of plant which currently do not have risk treatments in place. The risk treatments recommended in this section have been developed based on relevant Australian Standards, health & safety legislation, the hierarchy of risk treatment in accordance with the guidelines set forth in AS/NZS ISO 31000 – Risk Management and various other sources. The recommended risk treatment measures must be developed, implemented and validated as effective prior to the operation, maintenance or testing of this item of plant. Treatments applied must be dated and initialled adjacent the recommendations. All operators must read and understand the entire contents of this section prior to operating this item of plant.

	HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating	Time Frame	Due Date	Date Rectified	Initial
NOMINATED OPERATOR ONLY	INCORRECT OPERATION	CRITICAL 24	MEDIUM 15	Immediate	12-Feb-24		

Risk Treatment Required: Operator Competency

OPERATION

Only persons who are qualified, trained and experienced and/or hold the relevant certification/license can operate this item of plant. If there is not a competent/licensed person available for operation of this item of plant then only persons who are supervised by a competent/licensed person can operate this item of plant.

Legislation: State Health & Safety Legislation & Regulation

References: Work Health & Safety Act & Regulations-, Occupational Health & Safety Act & Regulations

Assessor Comments: HIRER OF PLANT MUST ENSURE ON SITE OPERATORS OF EQUIPMENT MEET THESE REQUIREMENTS

SECTION 5 RISK TREATMENTS IN PLACE

This section of the report pertains to risk treatments currently in place on this item of plant. This section must be read in conjunction with the safety section of the manufacturers handbook. All operators must read and understand the entire contents of this section prior to operating this item of plant. These treatments or equivalent must remain in place at all times whilst this item of plant is in operation.

	HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating		
IVERY	CRUSHING	HIGH 22	MEDIUM 15		
DELIV	Ensure that all operators follow approved SWMS/SOP when loading and unloading this machine to and from a flat top truck or trailer, low loader or				
(References: Work Health & Safety Act & Regulations- , Occupational Health & Safety Act &	& Regulations			
	CRUSHING	HIGH 22	MEDIUM 15		
	Risk Treatments in Place: SWMS Load Restraint Ensure that all operators follow the approved SWMS/SOP when restraining this machine for References: Work Health & Safety Act & Regulations-, Occupational Health & Safety Act	•			
NO	INCORRECT OPERATION	HIGH 22	MEDIUM 15		
OPERATION					
	A complete risk assessment/Job Safety Analysis must be undertaken covering all operating plant. SWMS should be produced for specific tasks associated with use of this item of plant. References: Work Health & Safety Act & Regulations-, Occupational Health & Safety Act &		associated with this item of		





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HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating		
INCORRECT OPERATION	HIGH 22	MEDIUM 15		
Risk Treatments in Place: Pre-op Checklist Roller Smooth Drum Self Propelled A pre-operational checklist is available for this Roller, Smooth Drum Self Propelled. All opera Roller, Smooth Drum Self Propelled.	ators must complete this chec	klist prior to operating this		
References: Work Health & Safety Act & Regulations- , Occupational Health & Safety Act	& Regulations			
INCORRECT OPERATION	HIGH 22	MEDIUM 15		
Risk Treatments in Place: SOP Roller, Smooth Drum Self Propelled Safe Operation Procedures are available for this Roller, Smooth Drum Self Propelled. The ir followed at all times whilst operating this Roller, Smooth Drum Self Propelled.		on Procedures must be		
References: Work Health & Safety Act & Regulations- , Occupational Health & Safety Act	& Regulations	1		
INCORRECT OPERATION	HIGH 22	MEDIUM 15		
Risk Treatments in Place: Control Labels All controls including all levers, buttons, pedals, switches etc. are clearly labelled as to their maintained in a clean and serviceable condition at all times.	purpose and method of opera	tion. These labels must be		
References: AS/NZS4024.1905	T			
CRUSHING, FALLING	HIGH 22	MEDIUM 15		
Risk Treatments in Place: Passenger Seat Label This item of plant is fitted with a clear hazard warning label re: Operator only, No passengers must be clear and legible at all times whilst this item of plant is in operation. Legislation: State Health & Safety Legislation & Regulation	s. Passengers must not be ca	rried at anytime. This label		
References: AS1319-				
CRUSHING	HIGH 22	MEDIUM 15		
Risk Treatments in Place: ROPS Label The warning label stating that the ROPS must not be damaged at any time (including cuts, of at all times.	drill holes and welds) must be	present, clean and legible		
References: ISO3471				
CRUSHING	HIGH 22	MEDIUM 15		
Risk Treatments in Place: ROPS seat belt label This item of plant is fitted with a ROPS and has an advisory label stating that "seatbelts must be worn". This label must be present, clean and legible at all times. All operators and passengers must wear seatbelts whilst on this item of plant.				
References: AS2294, ISO3471				
INCORRECT OPERATION, NON COMPLIANCE	HIGH 22	MEDIUM 15		
Risk Treatments in Place: Emergency Stop Labelling The emergency stop(s) fitted to this item of plant are clearly labelled as to the purpose and method of operation. These labels must be maintained in a clean and serviceable condition at all times.				
References: ISO20474-13				
	I .			

Risk Treatments in Place: Phone Use label

COLLISION

This item of plant is fitted with an instruction label advising that mobile phones must not be used whilst operating this machine. Accordingly all operators must not use a mobile phone at any time whilst operating machine. If phone use is necessary then operator must place machine in park configuration in a safe position prior to phone use. Operators MUST adhere to this advice at all times.

This label must be clear and legible at all times whilst this item of plant is in operation.

References: AS1319-, ISO31000





HIGH 22

Serial Number

Assessed By

Date

MEDIUM 15



Risk Treatments in Place: Tank ID Label

The tank(s) on this item of plant have clear, legible label(s) identifying their contents, and if appropriate any necessary controls re: the contents. These must be present, clear and legible at all times. (this includes radiator, hydraulic and petrol/diesel tanks)

References: Work Health & Safety Act & Regulations-, Occupational Health & Safety Act & Regulations



FIRE

HIGH 21

MEDIUM 15

Risk Treatments in Place: Fire Extinguisher

This item of plant is fitted with an approved and maintained fire extinguisher. Fire extinguisher(s) must be present and fully functional at all times. They must be readily accessible to the operator. Regular inspections must also be carried out in accordance with the manufacturer's requirements and AS 1851 – 1995

References: AS10896.1, AS1851



CRUSHING

HIGH 21

MEDIUM 15

Risk Treatments in Place: Articulated Joint Crush Label

This item of plant has clear hazard warning labels re: crush zone, keep clear, that are attached to each side of the articulated joint. These must be present, clear and legible at all times whilst this item of plant is in operation.

References: AS/NZS4024.1201, ISO20474-



HEARING LOSS

HIGH 19

MEDIUM 14

Risk Treatments in Place: Hearing Protection Label - Bystanders

The hazard warning labels re: wearing of hearing protection for bystanders attached to this item of plant refer to the level of noise produced. Permanent hearing damage will result if hearing protection is not worn. These labels must be present, clear and legible at all times whilst this item of plant is in operation.

References: AS3781-, AS/NZS1269



HEARING LOSS

HIGH 19

MEDIUM 14

Risk Treatments in Place: Hearing Protection Label - Operator

The hazard warning label(s) re: wearing of hearing protection attached to this item of plant refer to the level of noise produced. Permanent hearing damage will result if hearing protection is not worn. These labels must be present, clear and legible at all times whilst this item of plant is in operation.

References: AS3781-, AS/NZS1269



CRUSHING, STRIKING, COLLISION

HIGH 19

MEDIUM 14

Risk Treatments in Place: Tail Swing Label

The rear of this item of plant has a hazard warning label re: general plant movement, tail swing, keep clear. It must be present and fully functional and serviceable at all times.

References: ISO20474-



ENTANGLEMENT, SHEARING, BURNS

MEDIUM 14

MEDIUM 13

Risk Treatments in Place: Engine Guard Label

The engine fan and alternator belts, pulleys and gears are guarded. These guards have clear legible hazard warning labels re do not open or remove guards while engine is running. These labels must be present, legible and easily seen at all times whilst this item of plant is in operation.

References: AS/NZS4024.1201, AS1319-



CRUSHING, COLLISION

MEDIUM 12

LOW 6

Risk Treatments in Place: Warning Device (horn)

This item of plant is fitted with a fully functional audible warning device such as a horn. This must be easily accessed by the operator, and easily identifiable by nearby pedestrians.

All operators should ensure the warning devices are functional at the start of each shift, by completing pre-start checklists. Warning devices should operate automatically where appropriate (eg reversing)

References: ISO7731, ISO9533





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HAZARD(S) Prelim. Risk Rating Residual Risk Rating CRUSHING, COLLISION CRITICAL 24 MEDIUM 15

Risk Treatments in Place: Park Brake

This item of plant is fitted with a fully functional park (hand) brake which meets the following requirements –

- 1. Is separate to the service brakes
- 2. Has a device which maintains the brake in the on position until intentionally disengaged

The park brake must be regularly inspected and tested. These inspections and tests must be documented as part of your plant safety programme.

References: AS3450



(6)

STRIKING, BURNS

HIGH 22

MEDIUM 15

Risk Treatments in Place: Hydraulic Hoses

This item of plant has hydraulic hoses. These hoses must be inspected each day or before each use for wear and tear. If there are visible signs of wear immediate action must be taken to control the risk arising from this wear. These inspections must be documented.

Hydraulic fluid at high pressure can penetrate the skin, never use any part of your body to check for leaks. If oil penetrates the skin seek medical advice immediately. Always use a piece of cardboard or similar to check for suspected leaks.

Hydraulic pressure can be stored and is a hazard. Before disconnection or connection of hydraulic hoses complete the following steps -

- 1. Stop engine
- 2. Keep all bystanders clear of the work area
- 3. Refer to operators manual as to methods to release pressure
- 4. Wait 5 minutes

References: AS4024, AS2671



CRUSHING, COLLISION

HIGH 22

MEDIUM 15

Risk Treatments in Place: Loose Items - Operator Work Area

All items that could cause harm to the operator in the event of a collision or rollover are securely restrained.

References: ISO31000



CRUSHING, ENTANGLEMENT, STRIKING, COLLISION

HIGH 22

MEDIUM 15

Risk Treatments in Place: Neutral Start

This item of plant has neutral start control in place. It must be fully functional and serviceable at all times whilst this item of plant is in operation.

References: AS4024.1603



CRUSHING

HIGH 22

MEDIUM 15

Risk Treatments in Place: Seat Belt

This item of plant is fitted with an operator seat belt. This seat belt must be free from damage, and permanently and sturdily attached at all times whilst this item of plant is in operation. Operators must use this seat belt at all times during operation.

References: ISO6683



POOR VISIBILITY, COLLISION

HIGH 22

MEDIUM 15

Risk Treatments in Place: Operator Mirrors

The operator rear view mirrors fitted to this item of plant must be fully functional and kept clean at all times. There must always be at least one mirror on each side to provide rear vision to the operator to avoid striking bystanders and objects.

References: AS/NZS4024.1201, ISO14401.1



CRUSHING

HIGH 22

MEDIUM 15

Risk Treatments in Place: Earthmoving ROPS

A Roll Over Protective Structure (ROPS) to AS 2294, ISO 3471, ISO 12117.1 or 2 or SAE J1040 is fitted to this item of plant. A permanent label stating this standard must be attached to the structure at all times. It must also carry a warning label re: wearing of seat belts at all times whilst this item of plant is in operation, and accordingly seat belts must be worn at all times during operation.

References: AS2294, ISO3471





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Risk Treatments in Place: Hydraulic Hose Failure Shield

This item of plant is fitted with a sturdy, permanent shield(s) between the hydraulic hoses and any body parts of the operator to provide protection during a hose or component failure. This shield(s) must be present and fully functional at all times whilst this item of plant is in operation.

References: AS4024, ISO4413, AS2671



CRUSHING, COLLISION

HIGH 22

MEDIUM 15

Risk Treatments in Place: Reverse Movement Alarm

A reverse movement sensor alarm is fitted to this item of plant. It must be fully functional and serviceable at all times whilst this item of plant is in operation.

References: ISO7731, ISO9533



ENTANGLEMENT, CUTTING, SHEARING

HIGH 22

MEDIUM 15

Risk Treatments in Place: Emergency Stop Device

This item of plant is fitted with an emergency stop device.

The emergency stop must meet all of the following criteria whilst this item of plant is in operation:

- 1. Is operational
- 2. Is coloured red with yellow background
- 3. Is easily accessible to the operator(s) at all times whilst operating this item of plant
- 4. Resetting of emergency stop does not automatically restart machine
- 5. Is located at each operator control station.

Note: All operators must be familiar with the use and effects of actuation of the emergency stop device.

References: ISO20474-13



POOR VISIBILITY, COLLISION

HIGH 22

MEDIUM 15

Risk Treatments in Place: Machine Lights

This item of plant is fitted with self contained lighting. All of these lights must be fully functional and serviceable whilst this item of plant is in operation in areas of reduced light. If any of these lights stop working the operation must cease immediately and the faulty light be repaired before operation can continue in the areas of reduced light.

References: ISO20474-



ENTANGLEMENT

HIGH 22

MEDIUM 15

Risk Treatments in Place: Engine Guards

The engine fan and alternator belts, pulleys and gears are guarded. These guards must be present and fully functional and serviceable at all times whilst this item of plant is in operation.

References: AS/NZS4024.1601



CRUSHING

HIGH 22

MEDIUM 15

Risk Treatments in Place: Articulated Joint Locking Device

This item of plant is fitted with a safety locking device to the articulated joint (either a locking arm or cylinder locking devices) and clear, legible instruction labels on both sides of the articulated joint which state that either of these devices must be engaged during any maintenance to the articulated joint. These must be present, serviceable and employed at all times whilst this item of plant is in operation.

References: AS/NZS4024.1201, AS1319-





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Risk Treatments in Place: Beacon

This item of plant is fitted with a safety beacon. This beacon must meet the following criteria at all times whilst this item of plant fitted is in operation -

- Is visible up to 200m in all directions (allowing for intermittent obstruction from the plant structure whilst the plant is in operation)
- Is fitted in the most appropriate location on machine to maximise visibility without risking continual damage

NOTE: more than one beacon may be fitted to meet these criteria.

References: ISO20474-

OPERATIONAL MALFUNCTION

HIGH 22

LOW 2

Risk Treatments in Place: Plant Modification

The plant is in original condition.

References: ISO31000



ENTRAPMENT

HIGH 21

MEDIUM 15

Risk Treatments in Place: Two Operator Exits

The operator cabin/work area on this item of plant has a minimum of two (2) possible exits. These must be functional and accessible at all times whenever the item of plant is manned, whether during operation or maintenance activities.

References: AS5327



ENTRAPMENT

HIGH 21

MEDIUM 15

Risk Treatments in Place: Emergency Exits

The emergency exits for this item of plant meet the following requirements -

- 1. Clearly and legibly labelled
- 2. Instructions for use are clear and legible and located adjacent the exit
- 3. Any required tools required for use are available e.g. Emergency hammers

These exits must be legibly labelled and fully functional at all times whenever the item of plant is manned, whether during operation or maintenance activities.

References: ISO31000



POOR VISIBILITY, COLLISION

HIGH 21

MEDIUM 15

Risk Treatments in Place: Windscreen Wipers

The windscreen wipers and washers fitted to this item of plant must be fully functional at all times.

References: AS/NZS4024.1201



INCORRECT OPERATION

HIGH 20

MEDIUM 14

Risk Treatments in Place: Intuitive Controls

The controls fitted to this item of plant are orientated so that the movement of the control is consistent with the action of the machine e.g. moving a control lever to the left results in the machine turning to the left. This design feature must be maintained at all times whilst this item of plant is in operation.

References: AS/NZS4024.1906



STRAINS

HIGH 19

LOW 5

Risk Treatments in Place: Controls Ergonomics

All controls including all levers, buttons, pedals, switches etc, are placed near the operator work position and are easy to reach and operate during the execution of the operator's normal duties. This applies for all persons within the 95th percentile of the normal population distribution.

References: AS/NZS4024.1901





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INCORRECT OPERATION, SLIPPING

HIGH 17

Prelim. Risk Rating

Residual Risk Rating

I OW 6

Risk Treatments in Place: Control Levers/Pedals/Buttons

All controls including all levers, buttons, pedals, switches etc. must be kept non-slip and free from damage at all times.

References: AS/NZS4024.1901



INCORRECT OPERATION, OPERATIONAL MALFUNCTION

HAZARD(S)

MEDIUM 14

MEDIUM 13

Risk Treatments in Place: Restricted Access Switches

This item of plant is fitted with a device to restrict operators. A code/key must only be given to those that have appropriate experience or training.

References: AS/NZS4024.1201



SLIPPING

MEDIUM 12

LOW 6

Risk Treatments in Place: Operator Work Area Access/Egress

Safe access and egress to the cabin/work area(s) must be maintained at all times whilst this item of plant is in operation. It must be non slip, free from damage, located at a height so as to not cause undue body stresses and strains with three points of contact available to personnel at all times.

All personnel must -

- 1. Always face the item of plant during access and egress.
- 2. Always maintain three points of contact during access and egress.
- 3. Never carry an object(s) in his/her hand(s) during access and egress.
- 4. Never jump off machine.

References: AS5327



FALLING, SLIPPING

MEDIUM 12

LOW 6

Risk Treatments in Place: Access/Egress Instruction Label

An instruction label is fitted adjacent access/egress areas to advise all personnel of the following -

- 1. Always face the item of plant during access and egress.
- 2. Always maintain three points of contact during access and egress.
- 3. Ensure the steps are clean.
- 4. Never jump off machine.

This label must be clear and legible at all times whilst this item of plant is in operation.

References: ISO31000



ELECTRIC SHOCK, BURNS

MEDIUM 12

LOW 6

Risk Treatments in Place: Battery Cover

All batteries fitted to this item of plant are constrained to prevent displacement & fitted with a permanent sturdy cover which allows for ventilation. The constraint and cover must be present and fully functional and serviceable at all times whilst this item of plant is in operation.

References: AS/NZS4024.1201



INCORRECT OPERATION, SLIPPING

MEDIUM 9

LOW 4

Risk Treatments in Place: Work Area Floors

All work area floors are non-slip and free from damage & debris.

Floor area must remain non-slip and free from damage & debris, including rubbish, tools and other items, at all times whilst this item of plant is in use

References: AS/NZS4024.1201, ISO20474-



NON COMPLIANCE, STRAINS

MEDIUM 9

LOW 1

Risk Treatments in Place: Operator Seat

The operator seat fitted to this item of plant must remain free from damage and tears, and be permanently and securely fitted at all times.

References: AS/NZS4024.1401, ISO20474-





Make Caterpillar Model CS-12 GC

ype Rollers, Smooth Drum Self Propelled

Serial Number Assessed By Date GCS00678 AHSH Service 12-Feb-2024

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HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
HEAT STROKE, DEHYDRATION	MEDIUM 9	LOW 4

Risk Treatments in Place: Air Conditioning

This item of plant is fitted with an air conditioned cabin. This air conditioned cabin helps control the air quality and temperature for the operator and also provides shade from the sun. The air conditioner must be fully functional and serviceable at all times whilst this item of plant is in operation.

References: ISO31000



BURNS MEDIUM 9 LOW 5

Risk Treatments in Place: Exhaust

The engine exhaust on this item of plant is fitted with a guard to prevent injury to any person and control the risk of initiating a fire. It must be present and fully functional and serviceable at all times whilst this item of plant is in operation.

References: AS/NZS4024.1201



CRUSHING, COLLISION

CRITICAL 25

MEDIUM 15

Risk Treatments in Place: Brakes

The brakes fitted to this item of plant must be fully functional at all times whilst this item of plant is in operation. The brakes must be regularly inspected and tested. These inspections and tests must be documented as part of your plant safety programme.

References: AS3450



CURRENT OR PREVIOUS STRUCTURAL DAMAGE

CRITICAL 25

MEDIUM 15

Risk Treatments in Place: Structural Integrity

Regular checks for structural damage must be undertaken. Look for cracks in frames/chassis (current or repaired), bends or damage to structural components, etc.

References: ISO31000



INCORRECT OPERATION

HIGH 22

MEDIUM 15

Risk Treatments in Place: Maintenance Manual

The manufacturer's maintenance manual(s) has been supplied for this item of plant

These manual(s) must be available at all times to all users and maintenance staff of this item of plant. All users and maintenance staff must read and be familiar with these handbook(s) prior to maintaining or repairing this item of plant.

A complete risk assessment/JSEA must be undertaken covering all inspection, maintenance, servicing and transportation requirements of this piece of plant prior to use.

A full assessment of the competence of people using the book(s) must also be undertaken

References: Work Health & Safety Act & Regulations-, Occupational Health & Safety Act & Regulations



INSTABILITY, COLLISION

HIGH 22

MEDIUM 15

Risk Treatments in Place: Tyres

The tyres and wheel components must be inspected as part of a "pre start" checklist. These inspections must be documented as part of your plant safety programme.

References: ISO31000



STRIKING, BURNS

HIGH 22

MEDIUM 15

Risk Treatments in Place: Hydraulic Damage

The hydraulic hoses to this item of plant are free from damage and protected against damage arising from contact with the plant structure. Ensure that hoses are free from damage and that protection is in place at all times whilst this item of plant is in operation. Inspection of the hydraulic hoses and protection system should be conducted regularly and documented as part of your plant safety programme.

References: AS4024, ISO4413, AS2671





Serial Number Assessed By Date



CRUSHING

HIGH 22

Prelim. Risk Rating

Residual Risk Rating MEDIUM 15

Risk Treatments in Place: ROPS Damage

The Roll Over Protective Structure (ROPS) fitted to this item of plant must remain free from damage at all times whilst this item of plant is in operation.

References: AS2294, ISO3471



OPERATIONAL MALFUNCTION

HAZARD(S)

HIGH 22

LOW 2

Risk Treatments in Place: Major Fluid Leaks

This item of plant must remain free from leaks at all times whilst in operation (this includes engine, transmission, cooling system, air, fuel, drive line, wheel hubs, steering and hydraulics). Development of a major leak will require this item of plant to be stood-down until repaired. Minor leaks detected must be repaired within 1-14 days.

References: ISO31000



OPERATIONAL MALFUNCTION

HIGH 21

MEDIUM 15

Risk Treatments in Place: Service Records

Service and maintenance records are available for this item of plant.

These records must continue to be managed and available at all times as part of your service and maintenance programme. (This programme includes the undertaking of regular inspections of the item of plant with specific reference to all OEM prescribed, scheduled and non scheduled service and maintenance requirements).

References: Work Health & Safety Act & Regulations-, Occupational Health & Safety Act & Regulations



POOR VISIBILITY, COLLISION

HIGH 21

MEDIUM 15

Risk Treatments in Place: Windows & Screens

Ensure the cabin/work area safety glass windows and screens are kept clean and free from cracks and other damage at all times whilst this item of plant is in use.

References: AS/NZS4024.1201, ISO20474-

SECTION 6 IMAGES AND NOTES

IMAGES

- No Images Available -

NOTES

- No Notes Available -







RISK MANAGEMENT REPORT

TYPE	Rollers, Smooth Drum Self Propelled	Report Number	AHH 20240212-1216
MAKE	Caterpillar	Date	12-Feb-2024
MODEL	CS-12 GC	Created By	AHSH Service
SERIAL NUMBER	gcs00678	Assessor	AHSH Service
ASSET NUMBER	ahsh176	Assist. Assessor(s)	
		Owner	Australian Hammer Supplies Hire Pty Ltd
		Assessment Purpose	Hire
		State	NSW

OPERATOR ACKNOWLEDGEMENT

I the undersigned acknowledge that I have read and understand the risk management report described above. I also acknowledge that I have received a copy of this risk management report.

<u>DATE</u>	<u>NAME</u>	COMPANY/POSITION	<u>SIGNATURE</u>



Date