

PLANT RISK ASSESSMENT

REPORT

Created by:

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Assessed by:

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Assessed for:

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Machine Details:

Make: Wacker Neuson
Model: SM100
Serial Number: WNMU0101CM0001129

Date: Apr 5, 2023

Risk Analysis / Evaluation

Likelihood / Consequence	1 (Insignificant)	2 (Minor)	3 (Moderate)	4 (Major)	5 (Catastrophic)
A (Almost Certain)	Medium - 8	High - 16	High - 18	Extreme - 23	Extreme - 25
B (Likely)	Medium - 7	Medium - 10	High - 17	High - 20	Extreme - 24
C (Possible)	Low - 3	Medium - 9	Medium - 12	High - 19	High - 22
D (Unlikely)	Low - 2	Low - 5	Medium - 11	Medium - 14	High - 21
E (Rare)	Low - 1	Low - 4	Low - 6	Medium - 13	Medium - 15

Consequence	Definition
Catastrophic	Fatality or permanent disabling injury
Major	Serious injury requiring admission to hospital
Moderate	Medical treatment may be required
Minor	First Aid treatment required for minor injury
Insignificant	Near Hit/Miss - no injury

Likelihood	Definition
Almost Certain	Will occur in most circumstances when the activity is undertaken - greater than 90% chance of occurring
Likely	Will probably occur in most circumstances when the activity is undertaken - 51 to 90% chance of occurring
Possible	Might occur when the activity is undertaken - 21 to 50% chance of occurring
Unlikely	Could happen at sometime when the activity is undertaken - 1 to 20% chance of occurring
Rare	May happen only in exceptional circumstances when the activity is undertaken - less than 1% chance of occurring

Evaluation	Definition
Extreme	Act immediately to mitigate risk, risk treatments must be in place before operation of plant.
High	Act immediately to mitigate risk, if permanent appropriate risk treatments are not available, interim risk treatment strategies must be developed immediately. Permanent risk treatments should be established within one week.
Medium	Take appropriate steps to monitor and mitigate risk. Implement permanent risk treatments within one month.
Low	Take appropriate steps to monitor and mitigate risk. Implement permanent risk treatments within three months.

Risk Identification & Treatments

A. Entanglement

Risk	Risk Treatment	Yes	No	N/A	P.R	R.R
The engine belts, pulleys, gears and external moving parts pose an entanglement risk.	Belts are guarded.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	22	15
	Warning labels are present to inform operator, maintenance staff and bystanders of risk of moving parts.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Moving parts are covered by engine hood / bonnet.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Battery isolation switch present and functioning.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Emergency Stop Switch present and functioning	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		
The Boom / Arm with cylinders pose an entanglement risk to bystanders and maintenance staff.	Keep clear labels are present on moving parts of Boom / Arm.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	22	15
	Battery isolation switch present and functioning.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Emergency Stop Switch present and functioning	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		
The Wheels / Tracks pose and entanglement risk to bystanders and maintenance staff	Keep clear labels are present on moving parts adjacent to tracks / wheels	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	22	15
	Battery isolation switch present and functioning.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Emergency Stop Switch present and functioning	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		

B. Punctures

Risk	Risk Treatment	Yes	No	N/A	P.R	R.R
The plant, parts of the plant or work pieces disintegrating pose a puncturing risk to the operator and bystanders	The plant is regularly serviced and maintained with service records available.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	22	15
	All mechanical joints are in good working order without excessive wear.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	There are no visible cracks to welds structural components present.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Maintenance records are available, either digital access or hard copy.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Daily pre-inspection log book available and up to date.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		

C. Shearing

Risk	Risk Treatment	Yes	No	N/A	P.R	R.R
Moving Joints of the boom pose a shearing risk to the operator, bystanders and maintenance staff.	Operator station / controls located in a safe location isolated from all moving parts.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	22	15
	Loader arm prop fitted and functioning with instruction label.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Keep clear and warning labels present at all possible shearing locations.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Battery isolation switch present and functioning.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Neutral start switch present and functioning.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		

D. High Pressure Fluid

Risk	Risk Treatment	Yes	No	N/A	P.R	R.R
High pressure hydraulic fluids pose a penetration risk to the operator, maintenance staff and bystanders.	All exposed / visible hydraulic hoses inspected and free from visible damage.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	22	15
	Hoses fitted and restrained to the plant with a low risk of damage when in use.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	No high pressure hydraulic hoses / gauges fitted in operator station.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	No visible signs of hydraulic fluid leaks	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		

E. Crushing

Risk	Risk Treatment	Yes	No	N/A	P.R	R.R
Attachments or loads disengaging from plant pose a crush risk to the operator, maintenance staff and bystanders.	Automatic secondary retention device fitted to quick hitch (latch or spring on quick hitch or two independent levers).	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	22	15
	Instructional decal fitted for hitch operation.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>		
	Audible alarm fitted to quick hitch when disengagement activated.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>		
	Approved / rated lifting point fitted.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>		
Unexpected or uncontrolled movements of the plant pose a crush risk to the operator, maintenance staff and bystanders.	Machine controls are fitted with appropriate handles.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	22	15
	Hold to run controls fitted, controls inoperable without operator present.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Loader arm prop fitted and functioning with instruction label.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Neutral start switch present and functioning.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		

E. Crushing Cont.

Risk	Risk Treatment	Yes	No	N/A	P.R	R.R
	Crush decals fitted to all crush points on machine.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Emergency Stop Switch present and functioning.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		
	Keep clear / frequently reversing decals fitted to rear of machine.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Capacity for the plant to be slowed, stopped or immobilised poses a crush risk to the operator, maintenance staff and bystanders.	Park brake present and functioning.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	22	15
	Battery isolation switch present and functioning.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Emergency Stop Switch present and functioning	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		
	Service brake present and functioning.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Tipping and rolling over poses a crush risk to the operator.	Operation manual located in operators station and in legible condition, either digital access or hard copy.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	22	15
	"Danger read machine manual" label fitted and legible	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Parts of the plant collapsing pose a crush risk to the operator, maintenance staff and bystanders.	All mechanical joints are in good working order without excessive wear.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	21	15
	There are no visible cracks to welds structural components present.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Maintenance records are available, either digital access or hard copy.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Daily pre-inspection log book available and up to date.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Being thrown off or under the machine poses a crush risk to the operator.	Hold to run controls fitted, controls inoperable without operator present.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	22	15
	"Danger read machine manual" label fitted and legible	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		

F. Striking

Risk	Risk Treatment	Yes	No	N/A	P.R	R.R
Unexpected or uncontrolled movements of the plant pose a striking risk to maintenance staff and bystanders.	Hold to run controls fitted, controls inoperable without operator present.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	22	15
	Machine controls are fitted with appropriate handles.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Non-Slip Foot Pedals.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>		
	Neutral start switch present and functioning.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		
	"Danger read machine manual" label fitted and legible	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Isolating lever / switch on hydraulic controls present and functioning.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		

F. Striking Cont.

Risk	Risk Treatment	Yes	No	N/A	P.R	R.R
	Keep clear / frequently reversing decals fitted to rear of machine.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Controls identified.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Emergency Stop Switch present and functioning.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		
	Exterior lighting fitted and in working condition.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		
The plant, parts of the plant or work pieces disintegrating pose a striking risk to the operator and bystanders	All mechanical joints are in good working order without excessive wear.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	21	15
	There are no visible cracks to welds structural components present.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Maintenance records are available, either digital access or hard copy.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Daily pre-inspection log book available and up to date.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		

G. Explosion

Risk	Risk Treatment	Yes	No	N/A	P.R	R.R
The battery and fuel systems of the plant pose an explosion risk to the operator, maintenance staff and bystanders.	Fuel tank fitted with appropriate lid.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	21	15
	Emergency Stop Switch present and functioning.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		
	No visible signs of fuel leaks.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Battery(s) inspected and no signs of damage (cracks, corrosion, swelling).	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	No smoking decal fitted.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Battery isolation switch present and functioning.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		

H. Temperature (Thermal Comfort)

Risk	Risk Treatment	Yes	No	N/A	P.R	R.R
The environment the plant operates in can pose a high / low temperature risk to the operator.	"Sun-Protective Equipment must be worn" label fitted and legible	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	9	5

I. Electrical

Risk	Risk Treatment	Yes	No	N/A	P.R	R.R
The environment the plant operates in can pose an electrocution risk to the operator due to contact with live wires.	"Dial Before You Dig" decal fitted.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	22	15
	"Look up and Live" decal fitted.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	"Clearance for operating near power lines" decal fitted.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
The plant can pose an electrocution risk to the operator and maintenance staff.	Battery terminals and leads in good condition	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	5	4
	All exposed / visible electrical cables inspected and free from visible damage.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	All electrical switches inspected and free from visible damage.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Battery isolation switch present and functioning.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		

J. Slipping, Tripping & Falling

Risk	Risk Treatment	Yes	No	N/A	P.R	R.R
The plant poses a slipping and falling risk for the operator and maintenance staff.	Operation station flooring fitted with non-slip surfaces.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	19	13
	Hold to run controls fitted, controls inoperable without operator present.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	"3 Points of contact" entry decal located at entry point.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Any maintenance points not accessible from ground level fitted with appropriate steps / footings and guardrails.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	"Operator Only" label fitted and legible.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
The plant can pose a slipping, tripping and falling risk from poor housekeeping.	Steps / footings, entry points and and flooring clean and free of loose objects.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	14	13
	No visible signs of excess oil or lubricants at entry points.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		

K. Ergonomics / Strains

Risk	Risk Treatment	Yes	No	N/A	P.R	R.R
The plant can pose a risk to the operator for strains / RSI.	Controls, levers and pedals in comfortable position from operator station.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	19	13
	Controls, pedals and switches in serviceable condition.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		

L. Fire

Risk	Risk Treatment	Yes	No	N/A	P.R	R.R
The fuel system of the plant poses a fire risk to the operator, maintenance staff and bystanders.	Fuel tank fitted with appropriate lid.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	21	15
	Emergency Stop Switch present and functioning.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		
	No visible signs of fuel leaks.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	No smoking decal fitted.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Fire extinguisher fitted and in serviceable condition.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		
The exhaust system of the plant poses a fire risk to the operator, maintenance staff and bystanders.	Exhaust system in serviceable condition without modification.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	21	15
	Appropriate guarding fitted to exhaust system where necessary.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		

M. Noise

Risk	Risk Treatment	Yes	No	N/A	P.R	R.R
High noise levels from the plant can pose a risk to the operator, bystanders and maintenance staff	Noise levels tested to a safe level.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	19	13
	Hearing protection must be worn decal fitted	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		

N. Burns

Risk	Risk Treatment	Yes	No	N/A	P.R	R.R
The exhaust system of the machine creates a burn risk to the operator and maintenance staff	Exhaust located in an area isolated from the operator.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	19	13
	High Temperature warning labels in place.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Engine cooling system poses a burn risk to operator and maintenance staff.	Cooling system located in an area isolated from the operator.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	14	13
	High temp / under pressure warning labels present on radiator.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Hydraulic fluid reservoir poses a burn risk to operator and maintenance staff	Reservoir located in an area isolated from the operator.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	14	13
	High temp / under pressure warning labels present on reservoir.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Hydraulic hoses pose a burn risk to the operator, maintenance staff and bystanders.	All exposed / visible hydraulic hoses inspected and free from visible damage.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	19	13

N. Burns Cont.

Risk	Risk Treatment	Yes	No	N/A	P.R	R.R
	Hoses are fitted and restrained to the machine with a low risk of damage when in use.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	No high pressure hydraulic hoses / gauges fitted in operator station.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		

O. Operation

Risk	Risk Treatment	Yes	No	N/A	P.R	R.R
The plant poses risks as categorised above to the operator, maintenance staff and bystanders due to incorrect operation.	Operation manual located in operators station and in legible condition, either digital access or hard copy.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	22	15
	"Danger read machine manual" label fitted and legible.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Lifting chart decal fitted or available in operator manual.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Safe Working Load or Working Load Limit decal fitted to arm and in legible condition.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Controls identified.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		

P. Entrapment

Risk	Risk Treatment	Yes	No	N/A	P.R	R.R
The plant poses risks an entrapment risk to the operator and maintenance staff.	The operator station on the plant has a minimum of 2 exits functional and accessible at all times, including emergency exit.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	22	15
	Emergency exit functional and accessible, clearly labelled, instructional decal fitted and any tools required for use are available.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		

Yes = Treatment in place

No = Treatment not in place

N/A = Treatment not available for this piece of place

P.R = Pre-existing Risk

R.R = Residual Risk

Assessment Acceptance

Assessment Completed By:

Name: Jesse Dewhurst

Date: 05 / 04 / 2023



Signature:

It is recommended that the plant assessed in this report is re-assessed annually. "ACES" Australian Construction Equipment Sales accepts no liability for any Consequential Loss arising in connection with this report.

I acknowledge and confirm I have read and understand the risk assessment report written above. I acknowledge I am authorised to sign and accept this assessment as the owner or on behalf of the owner of the machine assessed above.

Assessment Accepted By:

Name:

Date:

Signature: