



by Online Safety Systems

RISK MANAGEMENT REPORT

Report Number	DYNA 20120612-1129
Assessment Date	12-June-2012
Assessor	Glenn Illingworth
Company	Dynapac
Make	Atlas Copco
Model	LP8504
Type	Rollers, pedestrian operated
Identifier	serial number
Lot Number	
Assessment Purpose	Sale
State	QLD

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Section 1 - Important Information

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

Section 2 - Unit Details

Contains standard unit 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

Section 4 part 1 - Risk Treatments Required

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

Section 4 part 2 - Risk Treatments in Place

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

Section 5 - Photos & Notes

Contains photos & any relevant information entered by the assessor

UNIT DETAILS

Make Model Type Atlas Copco LP8504 Rollers, pedestrian operated

Identifier Assessor Date serial number Glenn Illingworth 12-June-2012

SECTION 1 IMPORTANT INFORMATION

This Risk Management Report has been prepared for -

(insert recipient name/company name)

This document has been prepared to cover the sale or transfer of this item of plant between the Company identified on the front cover and their named recipient. This report must not be used for any subsequent sale or transfer.

This document is provided to meet duty of care obligations as set out in OH&S regulations for the supply of plant and the sale and transfer of plant.

The safety hazards associated with the operating and maintaining of this item of plant have been identified as far as practical by visual inspection. This item of plant is being sold in an "as-is" condition with known and unknown safety hazards. No physical testing has been conducted (eg. Wire rope tests, stress tests, structural/non-destructive tests, noise tests, vibration tests, brake tests, insulation tests etc.) unless stated otherwise in the notes.

This document is not intended to provide information on, nor warrant the mechanical, electrical or structural condition of this item of plant. Any information on standard features have been supplied through the manufacturer and should be used as a guide only until otherwise verified.

This item of plant should be further assessed, tested and inspected or dismantled as necessary to gauge any further hazards and /or risks relating to SPECIFIC WORKPLACE USE, which are currently unknown, in accordance with relevant standards, regulations and acts.

Under common law and OH&S acts, regulations and code of practice, there is a requirement for the plant owner, employer and operator to exercise a duty of care in the safe operation and maintenance of plant. Accordingly before this item of plant is supplied to, or used at any workplace it must be inspected to ensure it is in a fully operational, safe and serviceable condition and that operators and maintenance personnel are appropriately trained in the use & maintenance of this item of plant.

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

SECTION 2 UNIT DETAILS**STANDARD SPECS****- Noise Test Results**

1. Manufacturers specified noise level dBA	106
2. Ambient noise level dBA	104
3. Noise level - Operator position (high idle) dBA	92
4. Noise level - Operator position (low idle) dBA	NA
5. Noise level LHS dBA @ m (high idle)	NA
6. Noise level Front dBA @ m (high idle)	NA
7. Noise level RHS dBA @ m (high idle)	NA
8. Noise level Rear dBA @ m (high idle)	NA
Body type	
Articulated/Rigid	Rigid split drum
Brakes	
Service braking system	Hydrostatic
Capacities	
Nominal amplitude, high+low (mm)	1.1
Water sprinkler tank capacity (lit)	NA
Dimensions/Weights	
Centrifugal force, high amplitude + low amplitude (kN)	65
Height (mm)	1276

UNIT DETAILS**Make
Model
Type**Atlas Copco
LP8504
Rollers, pedestrian operated**Identifier
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Glenn Illingworth
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Length (mm)	2330
Operating weight (kg)	1675
Static linear load, front/rear (kg/cm)	13.5/13.5
Static weight on drums, front/rear (kg)	837/837
Turning circle diameter (mm)	NA
Width (mm)	850
Drives	
Drive: single drum/double drum	hydrostatic independant drums
Drums	
Drum widths front/rear (mm)	850
Vibration: single drum/double drum	Double
Engine	
Engine displacement (lit)	
Engine Hours	0
Engine make & model	Hatz 2G40
Engine number	
Engine power (kW@rpm)	12.5kW
Number of cylinders	2
Plant Classifications	
Class	Unclassified
Year	2012
Transmission	
Transmission type	Hydraulic hydrostatic
Work Capabilities	
Gradeability (%)	35
Vibratory frequency, max+min (Hz)	32

SECTION 3

Risk Analysis						
Consequence						
		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, e.g. Loss of fingers, extended hospital stay	5 Catastrophic Death, permanent disabling injury e.g. Loss of hand, quadriplegia
Likelihood	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 Possible 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

Risk Evaluation	
CRITICAL	Act immediately to mitigate risk. Implement risk treatment(s) in accordance with the risk treatment table below.
HIGH	Act immediately to mitigate risk. Implement risk treatment(s) in accordance with the risk treatment table below. If the appropriate permanent risk treatments are not immediately accessible establish interim risk treatment strategies. Permanent risk treatments must be implemented within one week.
MEDIUM	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.

Risk Treatment	
Selecting the most appropriate risk treatment option involves balancing the costs and efforts of implementation against the benefits derived, with regard to legal, regulatory and other requirements. (source AS/NZS ISO 31000:2009)	
Eliminate	Eliminate the risk source.
Substitute	Provide an alternative that is capable of performing the same task which is safer.
Engineering	Provide or construct a physical barrier or guard.
Administrative	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.

UNIT DETAILS

Make Model Type Atlas Copco LP8504 Rollers, pedestrian operated

Identifier Assessor Date serial number Glenn Illingworth 12-June-2012

SECTION 4 PART 1 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, 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.

Operation



Hazard(s): Incorrect Operation

Relevant References: AS1470, ISO31000-2009 Risk Management

Preliminary Risk Rating: CRITICAL 24

Time Frame: Immediate

Due Date: 12-Jun-12

Date Rectified:
Initial:

Risk Treatment Required: Operator Competency

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

SECTION 4 PART 2 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.

Delivery



Hazard(s): Crushing

Relevant References:

Preliminary Risk Rating: HIGH 22

Risk Treatment: SWMS Load Restraint

Ensure that all operators follow these steps when restraining this machine for transport -

Step 1

- Loading
- Load machine as per loading guidelines

Step 2

- Load placement
- Loads must be placed so that the centre of it's mass is in front of the centre of the rear axle/axle group

Step 3

- Lashing choice
- Always select lashings whose combined lashing capacity is –
i. In the forward direction equal to or greater than 2 x the weight of the load
ii. In the sideways direction equal to or greater than the weight of the load
iii. In the rearward direction equal to or greater than the weight of the load
- Always select tensioning devices whose capacity is equal to or greater than the chain/webbing lashing capacity

Step 4

- Lashing technique
- Lashing must be from tie down point on machine to dedicated attachment point on carrier truck or trailer (if no tie down points fitted machine must be tied down by axles or chassis)
- Lashing point on truck or trailer must have sufficient strength to hold machine weight
i. Minimum one chain per tie down point
ii. One tensioning device per chain
iii. Ratio of horizontal to vertical as close to 2:1 as possible
iv. Chains must not at right angles to the machine in any plane (unless two chains used per tie down point)

- Tips
 - NEVER USE FAULTY OR DAMAGED RESTRAINING EQUIPMENT
 - All machines must be restrained including any attachments and ancillary equipment
 - Chains may need to be tied forwards/backwards or across the truck/trailer to achieve the 2:1 ratio or angle less than 90 degrees to machine
 - More than one chain may be necessary per tie down point to achieve restraining capacity
 - Attach lashings to tie rail at rail support intersection

Operation



Hazard(s): Incorrect Operation **Relevant References:** AS1470, AS2153, ISO31000-2009 Risk Management
Preliminary Risk Rating: HIGH 22
Risk Treatment: Operation Handbook
 The manufacturer's operation handbook has been supplied for this item of plant.

This handbook must be available at all times to all potential operators and supervisory staff. All potential operators must read and be familiar with this handbook prior to operating.

A complete risk assessment/Job Safety Analysis must be undertaken covering all operating processes and environments associated with this item of plant. SWMS should be produced for specific tasks associated with use of this item of plant.



Hazard(s): Incorrect Operation **Relevant References:** AS1470, ISO31000-2009 Risk Management
Preliminary Risk Rating: HIGH 22
Risk Treatment: SOPs
 Safe Operation Procedures are available for this item of plant. The information in the Safe Operation Procedures must be followed at all times whilst operating this item of plant.



Hazard(s): Crushing **Relevant References:** ISO31000-2009 Risk Management
Preliminary Risk Rating: HIGH 22
Risk Treatment: Transport Procedures - Not SP
 Review the Safe Operation Procedures for transporting this item of plant to ensure they include the following as a minimum:

When transporting this item of plant by road, rail or sea -

1. Position wheel chocks at the front and rear of each tyre
2. Tether the item of plant with load rated chain using approved tie down points (if fitted) or at each corner over or through the axle, over the drawbar and tighten with an approved tightening device.

The load rating of the chain must be at least equal to the operating weight of the item of plant to be tethered.

A load restraint guide is available from the Nation Transport Commission web site at www.ntc.gov.au

Oversize items must be transported in accordance with the appropriate regulatory authorities requirements.



Hazard(s): Incorrect Operation **Relevant References:** AS1064, AS1470, AS2956, HB59, ISO31000-2009 Risk Management
Preliminary Risk Rating: HIGH 22
Risk Treatment: Control Labels
 All controls including all levers, buttons, pedals, switches etc. are clearly labelled as to their purpose and method of operation. These labels must be maintained in a clean and serviceable condition at all times.



Hazard(s): Crushing **Relevant References:** AS1470, AS2153.3, ISO31000-2009 Risk Management
Preliminary Risk Rating: HIGH 21
Risk Treatment: 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.



Hazard(s): Burns, Explosion, Poisoning **Relevant References:** AS1470, AS2153, ISO31000-2009 Risk Management
Preliminary Risk Rating: HIGH 22
Risk Treatment: 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 radiators and petrol/diesel tanks)

UNIT DETAILS

Make Model Type

Atlas Copco
LP8504
Rollers, pedestrian operated

Identifier Assessor Date

serial number
Glenn Illingworth
12-June-2012

Hazard(s): Hearing Loss

Relevant References: AS1269-2005 Occupational noise management, AS1470, AS2012, AS3781, ISO31000-2009 Risk Management



Preliminary Risk Rating: HIGH 19

Risk Treatment: Hearing Protection Label

The hazard warning labels 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.

Hazard(s): Burns, Cutting, Entanglement, Pinching,

Relevant References: AS1470, AS2153



Preliminary Risk Rating: HIGH 19

Risk Treatment: 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.

Hazard(s): Burns

Relevant References: AS1470, ISO31000-2009 Risk Management



Preliminary Risk Rating: MEDIUM 12

Risk Treatment: Open Cabin

Dust, exhaust fumes, chemical fumes, sunstroke and sunburn pose serious risk to the operator both short and long term. The appropriate controls for all of these hazards must always be available whilst this item of plant is in operation. If these controls e.g. hats, sunscreen, dust masks etc are not available then operation of this item of plant must cease until these are made available to all operators.

Hazard(s): Collision, Crushing

Relevant References: AS1470, AS2153, AS2359, ISO31000-2009 Risk Management



Preliminary Risk Rating: MEDIUM 12

Risk Treatment: 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)

Hazard(s): Fire

Relevant References: AS1470, AS1841, AS1851, AS2153.7, ISO31000-2009 Risk Management



Preliminary Risk Rating: MEDIUM 13

Risk Treatment: 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

Design Compliance

Hazard(s): Burns, Striking

Relevant References: AS2671-2002, ISO4413-1998



Preliminary Risk Rating: HIGH 22

Risk Treatment: 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

Hazard(s): Entanglement

Relevant References: AS2153.1-1997, AS2958.2-1998, AS4024.1-1996



Preliminary Risk Rating: HIGH 22

Risk Treatment: 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.

UNIT DETAILS

Make Model Type Atlas Copco LP8504 Rollers, pedestrian operated

Identifier Assessor Date serial number Glenn Illingworth 12-June-2012

Hazard(s): Incorrect Operation

Relevant References: AS4024.1906-2006, ISO31000-2009 Risk Management



Preliminary Risk Rating: HIGH 20

Risk Treatment: 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.

Hazard(s): Slipping

Relevant References: AS1470, AS1657-1992, AS2153.1, AS2153.3, AS2153.7, AS3868-1991, ISO31000-2009 Risk Management



Preliminary Risk Rating: MEDIUM 12

Risk Treatment: 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.

Hazard(s): Incorrect Operation, Slipping

Relevant References: AS1470, AS2153.3, AS2153.6, AS2153.7, AS2956, ISO31000-2009 Risk Management



Preliminary Risk Rating: HIGH 17

Risk Treatment: Control Levers/Pedals/Buttons

The control levers and foot controls must be kept non-slip and free from damage at all times.

Hazard(s): Burns, Electric Shock

Relevant References: AS1470, AS4024, ISO31000-2009 Risk Management



Preliminary Risk Rating: MEDIUM 12

Risk Treatment: Battery Cover

This item of plant has sturdy, permanently attached covers to all batteries. These must be present and fully functional and serviceable at all times whilst this item of plant is in operation.

Hazard(s): Strains

Relevant References: AS1064, AS1246, AS1470, AS2153.3, AS2956, HB59



Preliminary Risk Rating: HIGH 19

Risk Treatment: 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.

Hazard(s): Burns, Striking

Relevant References: AS1418.1-2002 Cranes - General requirements, AS2671-2002, AS4024, ISO31000-2009 Risk Management, ISO4413-1998



Preliminary Risk Rating: MEDIUM 14

Risk Treatment: Hydraulics 500mm

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

Hazard(s): Collision, Poor Visibility

Relevant References: AS1470, AS2153, AS4024, ISO31000-2009 Risk Management



Preliminary Risk Rating: HIGH 22

Risk Treatment: 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.

Hazard(s): Burns

Relevant References: AS1019, AS1470, AS2153, AS4024, ISO31000-2009 Risk Management



Preliminary Risk Rating: MEDIUM 9

Risk Treatment: 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.

Hazard(s): Operational Malfunction

Relevant References: AS1470, ISO31000-2009 Risk Management

UNIT DETAILS

Make Model Type Atlas Copco LP8504 Rollers, pedestrian operated

Identifier Assessor Date serial number Glenn Illingworth 12-June-2012



Preliminary Risk Rating: HIGH 22
Risk Treatment: Plant Modification
The plant is in original condition.

Maintenance



Hazard(s): Incorrect Operation **Relevant References:** AS1470, AS2153, ISO31000-2009 Risk Management
Preliminary Risk Rating: HIGH 22
Risk Treatment: 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



Hazard(s): Operational Malfunction **Relevant References:** AS1470, ISO31000-2009 Risk Management
Preliminary Risk Rating: HIGH 21
Risk Treatment: Service Records
Service and maintenance records are available for this item of plant.

These records must continue to be maintained and stored in a secure area as part of your plant safety management programme. This programme includes the undertaking of regular inspections concerning the general condition of the item of plant including (but not limited to) tyre condition, oil levels and wear and tear on critical items such as brakes and steering, etc. All OEM prescribed, scheduled and non scheduled maintenance must also be documented as part of these records and attended to within a risk management framework.

Hazard(s): Burns, Striking **Relevant References:** AS2550, AS2671-2002, ISO31000-2009 Risk Management, ISO4413-1998



Preliminary Risk Rating: HIGH 22
Risk Treatment: 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.



Hazard(s): Current or previous structural damage **Relevant References:** AS1470, ISO31000-2009 Risk Management
Preliminary Risk Rating: CRITICAL 25
Risk Treatment: 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.



Hazard(s): Operational Malfunction **Relevant References:**
Preliminary Risk Rating: HIGH 22
Risk Treatment: Major Fluid Leaks
This item of plant must remain free from major and minor 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.

SECTION 5

PHOTOS AND NOTES

NOTES

PHOTOS

There are no photos

<END OF RISK ASSESSMENT REPORT>

RISK MANAGEMENT REPORT

Report Number DYNA 20120612-1129
Assessment Date 12-June-2012
Assessor Glenn Illingworth
Company Dynapac
Make Atlas Copco
Model LP8504
Type Rollers, pedestrian operated
Identifier serial number
Lot Number
Assessment Purpose Sale
State QLD

PURCHASER 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.

I also acknowledge that I am authorised to sign on behalf of the purchaser.

Company Name _____

First Name _____ Surname _____

Address _____

Suburb/Town _____ State _____ Postcode _____

Phone _____ Fax _____ Mobile _____

Email Address _____

Signature _____ Date _____

Can Online Safety Systems contact the purchaser with important OH&S information ? (please tick one)
 Yes
 No

The manufacturers' operational & maintenance handbooks have been supplied, _____ (initial) (please tick one)
 Yes
 No

Please transfer this assessment to my Plant Assessor membership as a Hire / Plant in Use assessment (circle either)

My Plant Assessor username is _____