



## RISK MANAGEMENT REPORT

<b>Report Number</b>	DYNA 20130725-1633
<b>Assessment Date</b>	25-July-2013
<b>Assessor</b>	Steve Stavrou
<b>Company</b>	Dynapac
<b>Make</b>	Dynapac
<b>Model</b>	CA6000D
<b>Type</b>	Rollers, Smooth Drum Self Propelled
<b>Identifier</b>	Not specified
<b>Identifier 2</b>	
<b>Location</b>	
<b>Lot Number</b>	
<b>Assessment Purpose</b>	Hire
<b>State</b>	QLD
<b>Assistant Assessor(s)</b>	

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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 - Images & Documents

Contains images & any relevant information entered by the assessor

**SECTION 1      IMPORTANT INFORMATION**

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      UNIT DETAILS**

**STANDARD SPECS**

**- Noise Test Results**

- 1. Manufacturers specified noise level dBA
- 2. Ambient noise level dBA
- 3. Noise level - Operator position (high idle) dBA
- 4. Noise level - Operator position (low idle) dBA
- 5. Noise level LHS dBA @ m (high idle)
- 6. Noise level Front dBA @ m (high idle)
- 7. Noise level RHS dBA @ m (high idle)
- 8. Noise level Rear dBA @ m (high idle)

**Body type**

Articulation, either side (deg)

**Brakes**

Service braking system

**Capacities**

Nominal amplitude, high+low (mm)

**Dimensions/Weights**

Height (mm)	2890
Length (mm)	6240
Operating weight (kg)	19800
Static weight on drum (kg)	
Turning circle diameter (mm)	
Width (mm)	2340

**Drives**

Drum drive

**Drums**

Drum width (mm)	2130
Static drum mass/lineal cm (kg)	

**Engine**

- Engine displacement (lit)
- Engine Hours
- Engine make & model
- Engine number
- Net power, SAE rated (kW@rpm)
- Number of cylinders

**General**

Centrifugal force, high + low amplitude (kN)

**UNIT DETAILS****Make  
Model  
Type**Dynapac  
CA6000D  
Rollers, Smooth Drum Self Propelled**Identifier  
Assessor  
Date**Not specified  
Steve Stavrou  
25-July-2013**Plant Classifications**

Class

Year

**Transmission**

Transmission type

**Work Capabilities**

Gradeability w/o vibration (%)

Vibratory frequency, max+min (Hz)

**EXTRAS**

DETAILS

Air Conditioning

ROPS Cabin

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	
<b>CRITICAL</b>	Act immediately to mitigate risk. Implement risk treatment(s) in accordance with the risk treatment table below.
<b>HIGH</b>	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.
<b>MEDIUM</b>	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.
<b>LOW</b>	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)	
<b>Eliminate</b>	Eliminate the risk source.
<b>Substitute</b>	Provide an alternative that is capable of performing the same task which is safer.
<b>Engineering</b>	Provide or construct a physical barrier or guard.
<b>Administrative</b>	Develop policies, procedures, practices and guidelines in consultation with employees to mitigate the risk. Provide training, instruction and supervision about the risk source.
<b>Personal protective</b>	Provide personal protective equipment to protect the individual from the risk source.

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: 25-Jul-13

Date Rectified: [ ] Initial: [ ]

Assessor Comments: As this unit may have multiple users. This assessment cannot be made

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 Loading/Unloading

Ensure that all operators follow these steps when loading and unloading this machine to and from a flat top truck or trailer, low loader or tilt tray -

Step 1

- Vehicle choice
- Vehicle load carrying capacity must be equal or greater than the sum of machine, attachments and any ancillary equipment
- Vehicle must have adequate space for the load
- Load carrying deck must be clean

Step 2

- Site selection
- Site for loading and unloading must meet the following criteria -
i. Be level in camber (to achieve this direction of carrier unit may need to be adjusted several times)
ii. Longitudinally the combined grade of site and loading ramps/elevated tilt tray must NEVER exceed the gradeability of machine being loaded
iii. Be stable enough to withstand combined weight of machine and carrier unit
iv. Be isolated from traffic movements via its location, barriers or administrative traffic controls
v. Be clear of overhead power lines

Step 3

- Loading
- FLAT TOP/LOW LOADER
i. Engage creep gear
ii. Clear bystanders from each side of the carrier unit and loading ramps
iii. Drive machine on slowly
iv. Place machine in transport/park configuration, apply brakes & shut off engine
v. Use extreme caution when egressing machine

- TILT TRAY

- i. Manoeuvre machine to adjacent tilt tray, NEVER drive machine onto a tilt tray
- ii. Place machine in park configuration, apply brakes & shut off engine
- iii. Attach winch cable to machine tow point
- iv. Clear bystanders from each side of the carrier unit and loading ramps
- v. Take up slack so that winch has weight of unit
- vi. Place machine in towing configuration (release brake, select neutral gear/disengage hydrostatic drive)
- vii. Egress machine, NEVER ride in or on machine whilst being winched onto a tilt tray
- viii. Winch machine on slowly
- ix. Place machine in transport/park configuration, apply brakes & shut off engine
- x. Use extreme caution when egressing machine
- xi. Engage any transit locks

Step 4

- Restraint
- See transport restraint guidelines



**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):** Crushing

**Relevant References:** ISO31000-2009 Risk Management, ISO3471-2008





**Preliminary Risk Rating:** HIGH 22

**Risk Treatment:** ROPS seat belt label

The advisory label stating that as a" ROPS is fitted seatbelts must be worn" must be followed at all times whilst operating this item of plant. This label must be present, clean and legible at all times.

**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:** ISO31000-2009 Risk Management



**Preliminary Risk Rating:** HIGH 22

**Risk Treatment:** Pre-op Checklist Roller Smooth Drum Self Propelled

A pre-operational checklist is available for this Roller, Smooth Drum Self Propelled. All operators must complete this checklist prior to operating this Roller, Smooth Drum Self Propelled.

**Hazard(s):** Incorrect Operation

**Relevant References:** ISO31000-2009 Risk Management



**Preliminary Risk Rating:** HIGH 22

**Risk Treatment:** SOP Roller, Smooth Drum Self Propelled

Safe Operation Procedures are available for this Roller, Smooth Drum Self Propelled. The information in the Safe Operation Procedures must be followed at all times whilst operating this Roller, Smooth Drum Self Propelled.

**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, Falling

**Relevant References:** AS1470, AS1636, AS2294, ISO31000-2009 Risk Management



**Preliminary Risk Rating:** HIGH 22

**Risk Treatment:** Passenger Seat Label

This item of plant is fitted with a clear hazard warning label re: Operator only, No passengers. Passengers must not be carried at anytime. This label must be clear and legible at all times whilst this item of plant is in operation.

Legislation: State Health & Safety Legislation & Regulation

**Hazard(s):** Crushing

**Relevant References:** AS1470, AS1636, AS2294, ISO31000-2009 Risk Management



**Preliminary Risk Rating:** HIGH 22

**Risk Treatment:** ROPS Label

The warning label stating that the ROPS must not be damaged at any time (including cuts, drill holes and welds) must be present, clean and legible 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)

**Hazard(s):** Burns, Entanglement, Shearing

**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.

## UNIT DETAILS

**Make Model Type**

Dynapac  
CA6000D  
Rollers, Smooth Drum Self Propelled

**Identifier Assessor Date**

Not specified  
Steve Stavrou  
25-July-2013

**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):** Crushing

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



**Preliminary Risk Rating:** MEDIUM 12

**Risk Treatment:** Water Filled Tyres Label

This item of plant has a hazard warning label adjacent the tyres re: water filled tyres. (These tyres are heavier than air filled only tyres, and have different stability characteristics). These must be present, clear and legible at all times. All operators must be aware of the contents of the tyres and the handling characteristics prior to operating this item of plant. Also all operators and maintenance staff must use the appropriate machinery when handling.

## Design Compliance

**Hazard(s):** Collision

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



**Preliminary Risk Rating:** HIGH 22

**Risk Treatment:** 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.

**Hazard(s):** Entrapment

**Relevant References:** AS1470, AS2153.7, AS2953, ISO31000-2009 Risk Management, ISO4252



**Preliminary Risk Rating:** HIGH 21

**Risk Treatment:** 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.

**Hazard(s):** Crushing

**Relevant References:** ISO24135.1-2006, ISO3776.1-2006, ISO6683-2005



**Preliminary Risk Rating:** HIGH 22

**Risk Treatment:** 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.

**Hazard(s):** Collision, Crushing

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



**Preliminary Risk Rating:** CRITICAL 24

**Risk Treatment:** Park Brake

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

**Hazard(s):** Crushing

**Relevant References:** AS2294, ISO3471-2008



**Preliminary Risk Rating:** HIGH 22

**Risk Treatment:** Earthmoving ROPS

A Roll Over Protective Structure (ROPS) to AS 2294, ISO 3471 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.

**Hazard(s):** Collision, Crushing

**Relevant References:** AS1470, AS4024, ISO31000-2009 Risk Management ISO7731-2003, ISO9533-2010



**Preliminary Risk Rating:** HIGH 22

**Risk Treatment:** 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.

**Hazard(s):** Crushing

**Relevant References:** AS1470, AS2153.3, ISO31000-2009 Risk Management



**Preliminary Risk Rating:** HIGH 22

**Risk Treatment:** 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.



**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.



**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):** Collision, Poor Visibility

**Relevant References:** AS1470, AS2153, ISO13564-1.2, ISO14401.1-2009, ISO31000-2009 Risk Management

**Preliminary Risk Rating:** MEDIUM 12

**Risk Treatment:** 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.



**Hazard(s):** Poor Visibility

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

**Preliminary Risk Rating:** HIGH 21

**Risk Treatment:** Windscreen Wipers

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



**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):** Falling, Slipping, Tripping

**Relevant References:** AS1470, AS2153.7, AS3868-1991, ISO31000-2009 Risk Management



**Preliminary Risk Rating:** MEDIUM 12

**Risk Treatment:** Engine Bay Access

Safe access and egress to the engine bay/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):** Burns, Electric Shock

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

**Preliminary Risk Rating:** MEDIUM 12

**Risk Treatment:** 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.



**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):** Incorrect Operation, Slipping

**Relevant References:** AS1470, AS2153.1, AS2153.6, AS2153.7, ISO31000-2009 Risk Management



**Preliminary Risk Rating:** MEDIUM 9

**Risk Treatment:** Operator Floor

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

Floor area must be 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.

**Hazard(s):** Dehydration, Heat Stroke

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



**Preliminary Risk Rating:** MEDIUM 9

**Risk Treatment:** 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.

**Hazard(s):** Collision, Crushing

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



**Preliminary Risk Rating:** HIGH 22

**Risk Treatment:** 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.

**Hazard(s):** Operational Malfunction

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



**Preliminary Risk Rating:** HIGH 22

**Risk Treatment:** Plant Modification

The plant is in original condition.

## UNIT DETAILS

**Make Model Type**

Dynapac  
CA6000D  
Rollers, Smooth Drum Self Propelled

**Identifier Assessor Date**

Not specified  
Steve Stavrou  
25-July-2013

**Hazard(s):** Strains

**Relevant References:** AS1470, AS2153.1, AS2153.2, AS2153.6, AS2153.7, AS2953, ISO31000-2009 Risk Management, ISO3691-1980



**Preliminary Risk Rating:** MEDIUM 9

**Risk Treatment:** 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.

## 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):** Crushing

**Relevant References:** AS1470, AS1636, AS2294, ISO31000-2009 Risk Management



**Preliminary Risk Rating:** HIGH 22

**Risk Treatment:** 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.

**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):** Collision, Instability

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



**Preliminary Risk Rating:** HIGH 22

**Risk Treatment:** 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.

**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):** Poor Visibility

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



**Preliminary Risk Rating:** MEDIUM 9

**Risk Treatment:** 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.

**Hazard(s):** Collision, Crushing

**Relevant References:** AS1470, AS2958, ISO31000-2009 Risk Management

## UNIT DETAILS

**Make** Dynapac  
**Model** CA6000D  
**Type** Rollers, Smooth Drum Self Propelled

**Identifier**  
**Assessor**  
**Date**

Not specified  
Steve Stavrou  
25-July-2013



**Preliminary Risk Rating:** CRITICAL 25

**Risk Treatment:** 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.

**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

## IMAGES AND DOCUMENTS

### NOTES

### IMAGES

There are no images

<END OF RISK ASSESSMENT REPORT>

**RISK MANAGEMENT REPORT**

**Report Number** DYNA 20130725-1633  
**Report Date** 25-July-2013  
**Assessor** Steve Stavrou  
**Company** Dynapac  
**Make** Dynapac  
**Model** CA6000D  
**Type** Rollers, Smooth Drum Self Propelled  
**Identifier** Not specified  
**Identifier 2**  
**Location**  
**Lot Number**  
**Assessment Purpose** Hire  
**State** QLD  
**Assistant Assessor(s)**

**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.

Name \_\_\_\_\_

Company Name \_\_\_\_\_

Position \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

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