

VEHICLE LOADING CRANES

NATIONAL CERTIFICATE OF COMPETENCY

ASSESSMENT INSTRUMENT 2000

Disclaimer

This publication may contain occupational health and safety and workers compensation information. It may include some of your obligations under the various legislations that WorkCover NSW administers. To ensure you comply with your legal obligations you must refer to the appropriate legislation.

Information on the latest laws can be checked by visiting the NSW legislation website (www.legislation.nsw.gov.au) or by contacting the free hotline service on 02 9321 3333.

This publication does not represent a comprehensive statement of the law as it applies to particular problems or to individuals or as a substitute for legal advice. You should seek independent legal advice if you need assistance on the application of the law to your situation.

Cranes

Vehicle Loading Cranes

ASSESSMENT

Part 1	Performance
Part 2	Oral/Written
Part 3	Written

August 2000

Contents

	<i>Page</i>
Assessor Guidelines - General guidelines for Schedule B	1
Assessor Guidelines - Specific (Performance)	4
Part one - Performance Assessment	5
Relationship to the National Standard (Performance)	9
Assessor Guidelines - Specific (Oral/Written)	11
Part two - Oral/Written Assessment	12
Answers – Oral/Written	19
Load Chart R	23
Relationship to the National Standard (Oral/Written)	24
Assessment Summary	25

Note:

***Part three—Written Assessment for Cranes
—provided as a separate document.***

ASSESSOR GUIDELINES- GENERAL

1 Introduction

1.1 Scope

These general guidelines apply to all the assessment instruments for the certificates of competency prescribed by Schedule B of the *National Occupational Health and Safety Certification Standard for Users and Operators of Industrial Equipment*. (NOHSC: 1006)

Assessors should also be familiar with the publication *Assessment guidelines for National Occupational Health and Safety Certification Standard for users and operators of industrial equipment*.

1.2 Additional guidelines

Guidelines which provide additional specific information to certificate assessors are also included in each assessment instrument. Included, where appropriate, are specific instructions on the usefulness of training records (such as logbooks) and other certificates with overlapping competencies.

1.3 Evidence of competence

Evidence of competence is established in a number of ways. The methods used in the following instruments involve:

- Assessment of practical performance
- Written and/or oral answers to questions on underpinning knowledge.

2 Preparing for the assessment

2.1 Study the instruments

You need to read the assessment instruments and specific instructions carefully before beginning an assessment.

2.2 Confirm appointments

Prior to an assessment, you need to confirm the date, time and location of the assessment with the applicant and any other relevant people.

2.3 Equipment availability

The availability of equipment, materials and a suitable working area must be organised and confirmed, prior to the assessment.

2.4 Workplace factors

Because procedures and processes vary greatly between workplaces, it is important for assessors to plan their approaches to meet the requirements of the individual workplace.

Make sure you take the timeframe into account when planning the assessment and also make applicant aware of any time limits.

2.5 Selecting questions

Questions for the written/oral assessment should be randomly selected from each unit as indicated, either by hand or using the computer system, if applicable.

3 Conducting the assessment

3.1 Provide an explanation

Begin by explaining clearly to the applicant what is required of them. Check that applicant have provided (or have been provided with) the necessary tools and equipment.

3.2 Practical performance

Complete the performance checklist, as the applicant works through the required tasks. Wherever possible, this should be done in a normal working environment.

Do not ask the applicant questions while he or she is performing a task, as this can be distracting, and may affect the time taken to complete the assessment.

If, at any time, the applicant is endangering himself/herself or others,

stop the assessment immediately. This indicates that the applicant is not yet competent and may require further training, before being reassessed. Assessments should also be stopped, if equipment or property is likely to be damaged.

3.3 Knowledge

The oral/written assessment determines the applicants underpinning knowledge. The model answers provided with the oral/written assessment instruments are not necessarily exhaustive. Use your own judgement when scoring alternative answers.

3.4 Written assignment

Refer to the Written assessment instrument for cranes.

3.5 Recording responses

Each item and question on the assessment forms you use is accompanied by a box. Assessors must complete every box as follows:



✓

CORRECT
PERFORMANCE/ANSWER



X

NOT YET ACHIEVED



NA

NOT APPLICABLE

If a box is marked incorrectly, cross out the mistake, mark the correct response alongside, and initial the change.

4 Determining competencies

4.1 Assessment summary

A specific assessment summary is given for each certificate class. This is to be filled in and signed by the assessor, and countersigned by the applicant.

The original and duplicate are given to the applicant. The applicant provides

the original to the certifying authority. The triplicate is retained by the assessor.

4.2 Competency requirements

In order for you to deem an applicant competent, he or she must have completed each section of the assessment to the standard required. You should note any time constraints when arriving at your decision. The standard required for each instrument is specified in the specific guidelines and/or on the summary page at the end of each assessment. In the case of a re-assessment, the assessor can decide to apply the whole or only the part of the assessment that was not achieved.

4.3 Additional comments

Where an applicant fails to meet the standard of competence, you should add a written comment on the Assessment Summary, which briefly explains the problem. Advice to the applicant, on the appropriate remedial action should also be included. This will also assist the certificate assessor, in the event that the applicant undergoes future reassessment. Likewise, if an applicant demonstrates outstanding or remarkable performance, this should be noted.

4.4 Further investigation

As a certificate assessor, it is your role to determine whether or not an applicant has achieved the standard necessary for the certifying authority to be able to grant a certificate of competency.

Whenever you are unsure of the applicant's performance or knowledge, ask additional questions, and obtain additional evidence, before making your final decision.

National OHS Certification Standard

Cranes and Hoists

Vehicle Loading Cranes

Part 1

Performance Assessment

August 2000

ASSESSOR GUIDELINES - SPECIFIC (Performance)

1. The performance assessment comprises 9 areas of assessment covering the following 5 operating competencies-

- 1) Pre-operational checks
- 2) Site/job planning
- 3) Set up crane
- 4) Operate crane
- 5) Shut down crane

2. The applicant must undertake all performance criteria. An assessor must use his/her discretion in assessing competence under each criteria. The elements under each criteria must be marked with the appropriate tick, cross or n/a to indicate an applicant's competence level for that element.

Assessors Note: All performance criteria marked with a star ★ are compulsory/ critical. To determine a person's competence under each performance criteria, a prescribed number of elements are required to be demonstrated/answered under that criteria. The applicant must achieve the minimum specified number or more, of the performance elements to achieve competence for those criteria. To record the applicant's competence for the criteria a tick must be placed in the star.

3. Where a performance element cannot be performed the assessor can simulate or ask a question. The response must be recorded
4. The answers provided are only typical of this type of equipment, eg. in shutdown, the sequence varies between different types of crane.
5. The assessment should be conducted in an area –

- With sufficient space to operate freely, without obstruction.
 - With desirably undisturbed and level ground conditions.
6. The applicant should provide (or be provided with) appropriate personal protective equipment and clothing.
 7. In item 7, the assessor is to use the load chart for the crane being used for the assessment, and to select working conditions of the crane, and ask the applicant to determine the maximum load for 4 different crane configurations that cover the scope of operations for that crane.

OPERATIONAL AREA 1:-

PRE-OPERATIONAL CHECKS:

1. **Demonstrate checks that should be made before you start the motor - walk around check. (At least 9 elements demonstrated correctly)** ☆
- Tyre condition, pressure and obstructions between wheels
 - All oil levels eg. motor, gearbox, hydraulic & brakes
 - Power take off (PTO) is not engaged
 - Lubrication (grease) in accordance with manufacturer's specifications.
 - All notices eg, SWL, data plate of crane, powerlines
 - Load radius indicator (where applicable)
 - All ropes, wires, anchorages and splices where practicable
 - Stabilisers and packing
 - Lifting hook
 - Any structural damage to crane
 - Rope drums (where applicable)
 - Truck handbrake applied
 - Crane attachment to the truck has no loose bolts or damaged parts
 - Controls identified and use explained
 - Hydraulic hoses are not damaged or leaking
 - Fire extinguisher where applicable

2. **Demonstrate checks that should be made after you start the motor? (At least 3 elements demonstrated correctly)** ☆

- Identify all control levers and state their functions
- Engage the power take off
- Demonstrate the testing of stabiliser legs
- Demonstrate all operational function

3. **Knowledge of where to locate the service log book and of its function** ☆

- The applicant explains where to locate the service logbook and the service maintenance carried out and any defects found and repaired.

OPERATIONAL AREA 2:

SITE/JOB PLANNING:

Covered in knowledge assessment.

OPERATIONAL AREA 3:-

SET UP CRANE:

4. Set up and prepare your crane as if this was a new site. (At least 9 elements demonstrated correctly) ★
- The position of the vehicle is satisfactory in relation to the task to be undertaken
 - Apply vehicle parking brake (additional chocks may be required)
 - Vehicle gear lever in neutral
 - Identify controls as per vehicle manufacturer's instructions ie, throttle control instruments
 - Hydraulic pump engaged (PTO)
 - Stabilisers, extended and set up as per manufacturer's specification
 - Correct packing under stabiliser
 - Truck tray level
 - Slew lock disconnected (where applicable)
 - Operate and check all boom motions
 - Warning systems/devices (where applicable)
 - Hoist brake (where applicable)
 - Hoist limit (where applicable)

OPERATIONAL AREA 4:-

OPERATE CRANE:

5. Demonstrate all of the following signals correctly. ★
- Stop - hand
 - Stop - whistle
 - Hoist up - hand
 - Hoist up - whistle
 - Hoist down - hand
 - Luff boom down - whistle
 - Luff boom down - hand
 - Luff boom up - whistle
 - Luff boom up - hand
 - Slew left - whistle
 - Slew left - hand
 - Slew right - whistle
 - Slew right - hand
 - Creep - hand
 - Telescope in - whistle
 - Telescope in -hand
 - Telescope out - whistle
 - Telescope out - hand

Note: Assessor may use alternate approved signalling methods where appropriate

6. Using the cranes load chart ... explain the cranes load ratings given the following (note: if load chart in crane note available use load chart 'R')



LOAD _____

Working Radius

Crane Maximum Capacity

LOAD _____

Working Radius

Crane Maximum Capacity

LOAD _____

Working Radius

Crane Maximum Capacity

LOAD _____

Working Radius

Crane Maximum Capacity

Note:

An assessor can give the load and ask for the other items to be calculated or else give the working radius and ask for the load to be calculated.

7. Demonstrate *all* crane movements (if applicable).



- Secure load
- Load correctly slung
- Conduct trial lift
- Lift conforms with load chart
- Jib positioned over load correctly
- Hoist
- Move load
- Lower load
- Luff up
- Luff down
- Slew load
- Telescope boom
- All movements smooth/adequate speed
- Tag line used
- Signals interpreted correctly
- Load placed correctly on dunnage
- Load unslung
- Hook/slew boom raised to safe position.

SHUT DOWN CRANE:

- 8. Demonstrate the sequence of events in the shut-down, stowing and securing of load. (At least 4 elements demonstrated correctly)** ☆
- Raise, retract and pin stabilisers
 - Stow packing on vehicle
 - Stow boom in accordance with manufacturer's specifications.
 - Prepare for road travel
 - Disengage power take off
 - Secure any load on the vehicle and display warning flag on any oversize load
 - Secure hook as per manufacturer's specifications.

Vehicle Loading Crane - Performance

RELATIONSHIP TO THE NATIONAL CERTIFICATION STANDARD

THE UNITS OF COMPETENCE

The items in the practical performance assessment are intended to assess the competencies of the applicant in the safe use of Vehicle Loading Cranes as described in Schedule B of the *National Occupational Health and Safety Certification Standard for Users and Operators of Industrial Equipment*.

These are as follows:

- 1.0 Assess and secure equipment and work area.
- 2.0 Secure and transfer load.

Each unit of competence is subdivided into elements of competence, for which performance criteria are prescribed.

The applicant must undertake all performance items. All critical components must be demonstrated / answered correctly. An assessor must use his/her discretion in assessing competence in each area of competence. At least 75% of non-critical elements listed under each competency must be ticked for a competent person.

The questions in each section of the assessment cover the following competencies.

1. Pre-operational checks

Performance Criteria 1.1.1, 1.1.2, 1.1.3, 1.3.1, 1.3.2, 1.3.3.

2. Site/job planning

Covered in knowledge assessment

3. Set up crane

Performance Criteria 1.2.1, 1.2.2, 1.2.3, 1.2.6, 2.1.2, 2.2.1.

4. Operate crane

Performance Criteria 1.2.1, 1.2.2, 1.2.4, 1.2.6, 1.2.7, 1.3.1, 1.3.2, 1.3.5, 2.1.1, 2.1.2, 2.2.1, 2.2.2, 2.2.3, 2.2.5, 2.3.2, 2.3.3, 2.3.5.

5. Shut down crane

Performance Criteria 1.4.1, 1.4.3, 1.4.6.

THE RANGE STATEMENT

The performance assessment takes into account factors described in the range statements, including relevant standards and relevant State/Territory occupational health and safety legislation

National OHS Certification Standard

Cranes and Hoists

Vehicle Loading Cranes

PART 2 **Oral/Written Assessment**

August 2000

ASSESSOR GUIDELINES - SPECIFIC (Oral/Written)

1. The oral / written assessment consists of 68 questions, with 15 critical questions. The critical questions are identified under each operational area heading.

To satisfy the requirements for competency the applicant must correctly answer (either in writing or orally) all critical questions as indicated by a star and a minimum of 75% of the non-critical questions for each operational area.

Assessors note: The assessment summary specifies the appropriate number of non-critical questions to be achieved.

2. 15 questions from the other 53 questions are to be randomly selected (manually or by computer) with at least one question from each of the following operational areas -
 - 1) Pre-operational checks
 - 2) Site/job planning
 - 3) Set up crane
 - 4) Operate crane
 - 5) Shut down crane

The number of questions asked from each operational area should be in proportion to the overall number of non-critical questions in each area, as follows -

Operational area	No. critical questions	No. non-critical questions to select	Total questions selected
1	0	1	1
2	6	4	10
3	1	1	2
4	8	8	16
5	0	1	1
Total	15	15	30

3. The oral/written assessment may be given orally, or as a mixture of oral and written.
4. The oral/written section may take up to 1 hour to complete.

OPERATION AREA 1

PRE OPERATIONAL CHECKS: (Select 1 question).

- 1 What action would you take if you found any defective equipment?

- 2 If various drivers are operating the crane over numerous shifts, how would they know that the equipment was being checked in a uniform fashion?

- 3 What could flaking paintwork indicate on the boom, especially at welded intersections?

- 4 Who is responsible for servicing the crane?

- 5 How often should it be serviced?

- 6 What records are kept regarding servicing and maintenance and where would you find such records?

OPERATIONAL AREA 2

SITE/JOB PLANNING: (Select 10 including 6 with a star)

- 7 List four job and/or site procedures that should be considered before you set up a crane? ★

- 8 You are about to set up on site, List 6 hazards would you need to take into account in your crane set up plan? ★

- 9 List 5 methods of reducing hazards on site ★

- 10 Why is it important to consult with relevant workplace personnel, OHS officers, before commencing work on sites?

11 What is the importance of having workplace emergency procedures?

12 What precautions must be observed when working near overhead powerlines? ☆

13 What is the minimum distance any part of a crane or load is allowed to set-up near:
a) Distribution powerlines
b) High voltage transmission lines ☆

NOTE: Assessors must ensure that the applicant is aware of Start Authority regulations.

14 If you need to work closer to powerlines or high voltage transmission lines than the prescribed distances what should you do? ☆

15 What should be provided for crane operations working at night or in darkened areas?

16 What is the importance of taking lighting of the workplace into account when planning your job?

17 What type of loads commonly require the use of tag lines?

18 What is the minimum size diameter hand held tag line?


19 What factors should be considered when using tag lines? Give at least four examples.

20 What is the importance of cooperating with relevant workplace rules and procedures?

21 It begins to rain heavily and you have to stop operating the crane for a period of time. What checks would you make prior to re-commencing work?

OPERATIONAL AREA 3

**SET UP CRANE:
(Select 2 including 1 with a star)**

22 Who would be responsible for checking all lifting gear, for example chains and slings? 

23 Why is it important to separate (and tag) defective equipment?

24 If the stabiliser/outrigger footplates sink into the ground or surface, what has the vehicle loading crane operator failed to do prior to commencing work?

25 A stabiliser pad sinks when lifting a load on the crane. What immediate action should be taken?

26 What would you check for, when working on a building site where there is evidence of recently filled trenches?


27 What procedure must be followed when setting up a crane on a sloping surface?


28 When setting up in an area where the ground or soil value cannot be identified (eg: on bitumen or concrete road) – what precautionary methods would need to be taken?

OPERATIONAL AREA 4

**OPERATE CRANE:
(Select 15 including 8 with a star)**

29 When interference (tampering) is identified to whom should the crane operator report any faults?

30 Give 3 different ways in which the mass (weight) of a "load" can be determined? 

31 When operating a crane in a busy city street, what hazards need to be considered? 

32 If the load to be lifted has an uneven mass (weight) distribution, how would you check to ensure that the load has been slung correctly?

33 When the load is suspended just clear of the surface, what three observations or checks need to be made?

34 You experience a problem when conducting a trial lift. What should be done?

35 On a vehicle where the crane is mounted directly behind the cabin, are you permitted to lift a load from a position in front of the vehicle then slew to the side?

36 Why is it important to have the lifting point positioned correctly over the load?

37 What is the mass (weight) of a cubic metre of hardwood?

38 What is the mass (weight) of a cubic metre of water?

39 What is the mass (weight) of a cubic metre of aluminium?

40 What is the mass (weight) of dry sand?

41 What is the mass (weight) of one bag of cement?

42 You start to operate a hydraulic control lever and one of the high pressure flexible hoses starts to develop a bubble in the side. What action should you take?

43 You start to make a lift and the stabiliser starts to sink in soft ground, what should you do?

44 What would you do if there were personnel walking around in the area of crane operation?

45 Are you permitted to allow a person to ride upon the lifting hook, sling attachment or suspended load? Explain your answer.

46 Although it is not raining, a severe electrical storm is approaching what would you do?

47 Are you permitted to exceed the safe working load at a given radius of the crane?

48 If you found a defect, such as a loose hinge pin, or identified an abnormal noise in the crane, what action should you take?

49 State three reasons why you are not permitted to drag or snig a load?

50 If you were an owner driver and you found defects within the crane what action would you take?

51 Prior to loading and unloading, why is it important to check the area?

52 When slewing a crane operating at its maximum limits what precautions would you take?

53 If the boom is slewed suddenly, what may occur?

54 What defects would you look for on a fork attachment fitted to the crane?

55 What is the maximum wear allowable on the heel of the fork?

56 You are lifting a pallet of bricks and the grab attachment continuously slips, what would be the probable cause?

57 What checks would you make to the hinge points of lifting attachments?

58 What checks would be made to a wire coil lifting attachments, commonly known as a "C" hook?

59 Who would be responsible for checking the crane?

60 When should the load be assessed?

61 Who should be involved in the assessment of the load?

62 If a signal is given that is an unknown signal, what should you do as the crane operator?

63 What is load swing and what effect does it have on the crane?

64 If the hook has landed on the ground, causing a slack rope condition, what would be the procedure when re-spooling the rope?

65 If a signal is given but is interpreted incorrectly what should occur?

OPERATIONAL AREA 5

**SHUT DOWN CRANE:
(Select 1 question)**

66 Prior to transportation of the vehicle, what must be done with all the lifting gear and attachments?

67 Can any loads remain suspended from the hook following shut down or when crane is unattended? Explain your answer.

68 What post-operational checks need to be carried out to the equipment?

ANSWERS TO ORAL/WRITTEN QUESTIONS

OPERATIONAL AREA 1

PRE-OPERATIONAL CHECKS:

1. Discontinue use, tag and report the situation to an authorised person for replacement
2. Ensure that a checklist is provided, so that all operators are consistent in their checking of the equipment
3.
 - Possible overstressing of the boom, caused by over load
 - Weld defect
4. A competent person
5. At intervals as specified by the manufacturer.
6. All servicing and maintenance records are kept in the service log book.

OPERATIONAL AREA 2

SITE/JOB PLANNING:

7.
 - Job requirements,
 - Operational priorities,
 - Workplace rules,
 - Procedures,
 - Identified hazards and
 - Hazard control measures.
8.
 - Powerlines
 - Trees
 - Overhead service lines
 - Bridges
 - Surrounding structures
 - Obstructions
 - Facilities

- Other equipment
- Dangerous materials
- Underground services
- Soil conditions, eg ;recently filled trenches
- Vehicle traffic

9.

- Identify/detect site hazard
- PPE required to be worn by crane personnel
- Erect warning signs
- Erect barriers
- Traffic control
- Lighting
- Storage of dangerous & hazardous materials

10. To ensure that the operator is aware of any workplace and site rules and procedures

11. To lay out a sequence of steps that should be followed in case of an emergency.

12.

- Never work closer than the minimum distance specified in AS2550.1 or relevant State Regulation.
- Ensure that barriers/barricades are erected around the work area for public safety.
- Safety helmets need to be worn.
- Traffic signs/cones and barricades should be placed around the work site.

- 13.
- (a) **At least 2 metres or more from distribution overhead powerlines**
 - (b) **At least 6 metres or more from high voltage transmission lines**

NOTE: Assessors must ensure that the applicant is aware of Statutory Authority regulations.

14. Seek an approval from the relevant authority.

15. There should be sufficient lighting over the whole work area.

- 16.
- To make sure work can be undertaken safely.
 - To make sure artificial light sources are available at night.
 - Access and exit.
 - To make sure adequate natural or artificial lighting is provided to work safely (under all conditions)

17. Oversized or unusually shaped loads always require tag lines.

18. 16mm diameter dry fibre rope. To reduce electrical conductivity.

- 19.
- weather conditions
 - electrical hazards,
 - tag line change over may be required at designated point in the lift,
 - Person holding tag line should wear PPE
 - ensure that the line is not fouled.
 - Tag lines should be held correctly

20. To ensure that safe work systems are maintained and hazards controlled

21. Check crane set up is safe for operation and where necessary relocate crane to stable ground.

OPERATIONAL AREA 3 SET UP CRANE:

22. The crane operator, or person dogging the load or rigger if available.

23. To eliminate the possibility of further use of unsafe equipment

- 24.
- Failed to assess the site hazards.ie. Failed to identify unstable soil, backfilled trenches or excavations.
 - Failed to use sufficient packing under stabilisers/levellers to ensure load is distributed over a larger area.

25. Operator must lower the load and assess the situation.

26. Ensure that the recently filled trenches have been firmly packed down and use correct packing underneath working area.

27. Stabilisers on the lowest slope side to be set up first to level the truck tray

- 28.
- Calculate the bearing area required using lowest soil value
 - Check for subsidence before lifting
 - Ensure the footing is constantly checked; if there is any movement, repack the stabiliser
 - Ensure sufficient packing is used

**OPERATIONAL AREA 4
OPERATE CRANE:**

29. To an authorised person.
- 30.
- Delivery docket**
 - Public weigh bridge.**
 - The manufacturers information**
 - Weight may appear on the "load" itself**
 - Calculate**
- 31.
- Underground services both under the roadway and footpath**
 - Correct packing is used underneath stabilisers especially on bitumen surfaces**
 - Members of the public are not exposed to any danger, especially lifting over footpaths**
 - Be sure that all crane operating personnel cannot be struck by moving vehicular traffic.**
 - Clearance from overhead obstructions, ie: powerlines, shop awnings etc.**
32. Raise the load clear of the ground to allow for sling settlement and check the position of the lifting slings to ensure even weight distribution.
- 33.
- The load is correctly slung.
 - All crane equipment is functioning correctly.
 - Stabiliser footing is secure
34. Immediately lower the load back down, and take the necessary corrective action. Do not proceed any further until situation is rectified.
35. **Only in accordance with the load chart.**
36. **To reduce the risk of overloading or collapsing the crane and prevent load from swinging on lift.**
37. 1.1t or 1,100kg.
38. 1t or 1,000kg.
39. 2.7t or 2,700kg.
40. 2t or 2,000 kg.
41. 20kg.
42. Lower load to safe position. Stop work, tag and report the defect, wait until the hose is replaced.
- 43.
- Put the load down and increase the area of packing under the stabiliser
 - Relocate crane to firmer ground.
44. Stop operation, warn personnel. Have the relevant site personnel attend to the situation by barricading the area off to a suitable radius around working area.
45. **No. It is against regulations.**
46. Lower load, cease operation, pack up crane if required..
47. **No, not ever.**
48. Cease operation and report fault to authorised person for rectification prior to further use. Tag as required
- 49.
- Could cause structural damage to crane by exceeding the SWL of the crane.
 - Could cause load to swing.
 - Could cause load to topple.
50. **Stop operation. Assess the nature of defect. Continue operation if safe to do so or if not, cease operation and arrange for repair.**

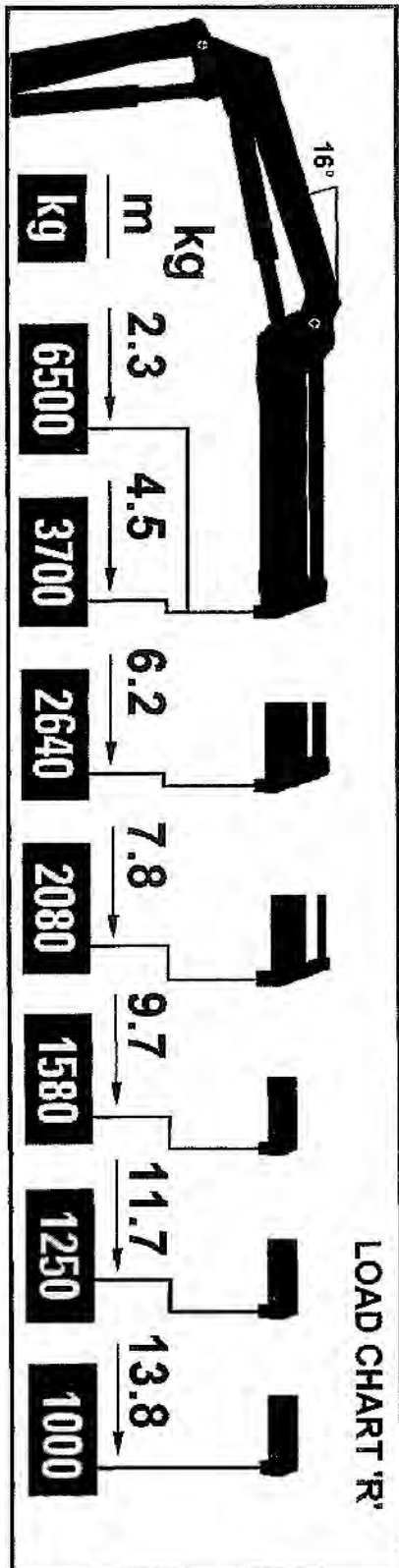
51. To ensure that there are no obstructions to interfere with the loading, or unloading operations.
52. **Ensure that the load is slewed smoothly by avoiding jerky movements of the controls.**
- 53.
- Structural damage to boom
 - Load could swing excessively
 - Load could topple
 - Destabilise truck
- 54.
- Bent forks
 - Cracks on the inside of the bend of the fork
 - Excessive wear under the heel of the fork
55. 10% of the thickness of the heel.
56. The cause would be a fault within the hydraulic system or with the grab attachment.
57. Make sure all pin locking devices are in place, make sure there is not excessive movement.
58. Make sure there is no distortion in the hook or no bending.
59. The crane operator and where necessary a competent person.
60. Prior to lifting.
61. The crane operator an/or other personnel assisting.
62. Stop operating and clarify the signal.
63. Load swing occurs when the crane is slewed or luffed suddenly. This can cause excessive loading on the boom and also cause the vehicle to tip due to load exceeding the specified radius.
64. The weight of the hook must be on the rope when re-spooling, this can be achieved by luffing the boom up or telescoping the boom outwards.
65. The person dogging the load should immediately inform the crane driver to “stop”. A repeat of an incorrect movement should result in a face to face meeting of the person and the crane driver.

OPERATIONAL AREA 5

SHUT DOWN CRANE:

66. Prior to transportation, all equipment used during the lift must be segregated and stowed in its correct location. Also any lifting attachments which have been used must be removed from the boom if necessary and securely attached to the correct position on the vehicle.
67. No. It is against regulations.
- 68.
- Condition of timbers provided for stabiliser packing
 - Check all hydraulic lines and cylinders for leaks or damage
 - Check the boom is correctly stored
 - Check entire length of boom for any signs of damage, paying particular attention for cracked or flaking paintwork at connections etc.
 - Check all hinge points of boom, looking for any defects to hinge pins and locking devices
 - Check base plate to stabiliser legs for damage
 - Test function of spotlight attached to crane (where applicable)

LOAD CHART R



Vehicle Loading Cranes - Oral/Written

RELATIONSHIP TO THE NATIONAL CERTIFICATION STANDARD

THE UNITS OF COMPETENCE

The items in the practical performance assessment are intended to assess the competencies of the applicant in the safe use of Vehicle Loading Cranes as described in Schedule B of the *National Occupational Health and Safety Certification Standard for Users and Operators of Industrial Equipment*.

These are as follows:

- 1.0 Assess and secure equipment and work area.
- 2.0 Secure and transfer load.

Each unit of competence is subdivided into elements of competence, for which performance criteria are prescribed. The questions in each section of the assessment cover the following competencies.

1. Pre-operational checks

Performance Criteria 1.1.1, 1.1.2, 1.1.3, 1.3.1, 1.3.2, 1.3.3.

2. Site/job planning

1.2.1, 1.2.2, 1.2.3, 1.2.5, 1.3.4.

3. Set up crane

Performance Criteria 1.2.5, 1.3.6.

4. Operate crane

Performance Criteria 1.2.1, 1.2.2, 1.2.4, 1.2.6, 1.2.7, 1.3.1, 1.3.2, 1.3.5, 2.1.1, 2.1.2, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.3.2, 2.3.3, 2.3.5.

5. Shut down crane

Performance criteria 1.4.4, 1.4.6.

THE RANGE STATEMENT

The performance assessment takes into account factors described in the range statements, including relevant standards and relevant State/Territory occupational health and safety legislation.

VEHICLE LOADING CRANE – ASSESSMENT SUMMARY

ORAL/WRITTEN ASSESSMENT

OPERAT- IONAL AREA	Number of critical criteria required	Number of critical criteria achieved	Number of non-critical criteria required	Number of non-critical criteria achieved
1	nil	<input type="text"/>	1	<input type="text"/>
2	6	<input type="text"/>	4	<input type="text"/>
3	1	<input type="text"/>	1	<input type="text"/>
4	7	<input type="text"/>	8	<input type="text"/>
5	nil	<input type="text"/>	1	<input type="text"/>
Assessment start time:		: am/pm	Finish time:	
		: am/pm		
Oral/Written Assessment completed within time allowed?				

Competent? (tick)	
<i>YES</i>	<i>NO</i>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

WRITTEN ASSESSMENT

OPERAT- IONAL AREA	Number of critical criteria required	Number of critical criteria achieved	Number of non-critical criteria required	Number of non-critical criteria achieved
A	0	<input type="text"/>	7	<input type="text"/>
B	0	<input type="text"/>	4	<input type="text"/>
C	0	<input type="text"/>	4	<input type="text"/>
D	0	<input type="text"/>	2	<input type="text"/>
E	0	<input type="text"/>	1	<input type="text"/>
F	2	<input type="text"/>	2	<input type="text"/>
Assessment start time:		: am/pm	Finish time:	
		: am/pm		
Written Assessment completed within time allowed?				

Competent? (tick)	
<i>YES</i>	<i>NO</i>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

Catalogue No. **WC00852** WorkCover Publications Hotline **1300 799 003**



WorkCover NSW 92-100 Donnison Street Gosford NSW 2250
Locked Bag 2906 Lisarow NSW 2252 WorkCover Assistance Service **13 10 50**
Website **www.workcover.nsw.gov.au**

©Copyright WorkCover NSW 0308