



Australian Government

Department of Education, Employment and Workplace Relations

TLID3607C Lift and move load using mobile crane up to and including 20 tonnes

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit involves the skills and knowledge required to lift and move a load using a mobile crane up to and including 20 tonnes, including operating mobile crane to complete job requirements, monitoring lift conditions, implementing shut-down procedures, packing up crane after operations, and completing all required job records.

Application of the Unit

Work must be carried out in compliance with the licence/permit requirements and regulations of the relevant state/territory authorities pertaining to operations of mobile cranes up to and including 20 tonnes.

Work is performed with limited or minimum supervision, with limited accountability and responsibility for self and others in achieving the prescribed outcomes. It involves the application of routine principles, procedures and regulations to lift and move loads using slewing and non-slewing mobile cranes up to and including 20 tonnes in a variety of operational contexts.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

The required outcomes described in this unit of competency contain applicable facets of Employability Skills. The Employability Skills Summary of the qualification in which this competency is packaged will assist in identifying employability skill requirements.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

Elements and Performance Criteria

| Element | Performance Criteria |
|----------------------------------|---|
| 1 Operate mobile crane | 1.1 In ascent and descent to/from crane correct use is made of the means provided in accordance with codes of practice and workplace procedures |
| | 1.2 Planned hazard control strategies are implemented |
| | 1.3 Required signals are correctly given, interpreted and followed in accordance with appropriate Australian standards |
| | 1.4 Boom is positioned to ensure load to be lifted is plumbed under hook |
| | 1.5 Load is hoisted and lowered into position using crane movements in accordance with the appropriate Australian standard |
| | 1.6 Crane controls are operated smoothly |
| | 1.7 Where necessary, crane is mobiled according to manufacturers specifications, appropriate Australian standards, workplace procedures |
| | 1.8 Crane is shut down and secured during periods of non-operation according to manufacturers specifications and workplace procedures |
| 2 Monitor lift conditions | 2.1 Load is constantly monitored to ensure load and structural stability |
| | 2.2 Conditions which may affect the continuing stability of the crane are identified and monitored |
| | 2.3 Unplanned situations are responded to in line with workplace procedures in a manner that minimises risk to personnel and equipment |

- 2.4 Dogger is advised of any new information which affects the lift
 - 2.5 Any necessary changes to job plan are discussed and confirmed with rest of crew
 - 2.6 Advice is sought from supervisor where there is doubt about correct response to unanticipated conditions, or conflict with customer request
 - 2.7 Supervisor/allocator is advised of any concern about completing the job within timeframe
- 3 Implement shut-down procedures**
- 3.1 The relevant motion locks and brakes are applied
 - 3.2 Crane is shut down using the correct sequence of procedures in accordance with manufacturers specifications and workplace procedures
 - 3.3 Routine post-operational equipment checks are carried out in accordance with manufacturers specifications
- 4 Pack up crane**
- 4.1 Crane is de-rigged with other crane personnel in accordance with manufacturers instructions
 - 4.2 All lifting equipment and crane components are checked in consultation with crane personnel for any signs of deterioration or damage in accordance with the appropriate Australian standard
 - 4.3 Damaged or worn equipment is segregated and reported to an authorised person for testing/repair/destruction
 - 4.4 Crane and equipment are correctly stowed and secured in accordance with manufacturers instructions and the appropriate Australian standard
- 5 Complete job records**
- 5.1 Customer feedback is sought regarding satisfaction with the completed job, and any areas of concern are reported according to workplace procedures
 - 5.2 Customer's signature on job completion documentation is obtained
 - 5.3 Required workplace records are updated accurately and promptly and processed according to workplace procedures

Required Skills and Knowledge

REQUIRED KNOWLEDGE AND SKILLS

This describes the essential knowledge and skills and their level required for this unit.

Required knowledge:

Relevant road rules, regulations, permit and licence requirements pertaining to mobile crane operation

Relevant OH&S and environmental procedures and regulations

Mobile crane applications, capacities, configurations, safety hazards and control mechanisms

Risks and hazards involved in mobile crane operation and associated action that can be taken to eliminate or minimise the risk

Workplace procedures concerning the operation of a mobile crane at a worksite

Problems that may occur during a lift and associated action that can be taken to address the problems concerned

Communication systems used during a lift

Focus of operation of work systems and equipment

Required skills:

Communicate effectively with others when lifting and moving a load using a mobile crane up to and including 20 tonnes

Read and interpret instructions, procedures, information and signs relevant to the lifting and moving of a load using a mobile crane up to and including 20 tonnes

Complete documentation related to the lifting and moving of a load using a mobile crane up to and including 20 tonnes

Operate electronic communication equipment to required protocol

Work collaboratively with others when lifting and moving a load using a mobile crane up to and including 20 tonnes

Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others

Promptly report and/or rectify any identified problems, faults or malfunctions that may occur when lifting and moving a load using a mobile crane up to and including 20 tonnes in

accordance with regulatory requirements and workplace procedures

Implement contingency plans for unanticipated situations that may arise when lifting and moving a load using a mobile crane up to and including 20 tonnes

Apply precautions and required action to minimise, control or eliminate hazards that may exist during the lifting and moving of a load using a mobile crane up to and including 20 tonnes

Plan own work including predicting consequences and identifying improvements

Prioritise and multi-task work

Monitor work activities in terms of planned schedule

Modify activities depending on differing operational contingencies, risk situations and environments

Apply fatigue management knowledge and techniques

Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment

Operate and adapt to differences in equipment in accordance with standard operating procedures

Select and use required personal protective equipment conforming to industry and OH&S standards

Monitor performance of equipment

Service equipment in terms of maintenance schedule and standard operating procedures

Check and replenish fluids and carry out lubrication processes in the course of work activities

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and skills, the range statement and the assessment guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of applying:

- the underpinning knowledge and skills
- relevant legislation and workplace procedures
- other relevant aspects of the range statement

Context of and specific resources for assessment

Performance is demonstrated consistently over a period of time and in a suitable range of contexts

Resources for assessment include:

- a range of relevant exercises, case studies and other simulated practical and knowledge assessment, and/or
- access to an appropriate range of relevant operational situations in the workplace

In both real and simulated environments, access is required to:

- relevant and appropriate materials and/or equipment, and/or
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals

Method of assessment

Assessment of this unit must be undertaken by a registered training organisation

As a minimum, assessment of knowledge must be conducted through appropriate written/oral tests

Practical assessment must occur:

- through appropriately simulated activities at the registered training organisation, and/or
- in an appropriate range of situations in the workplace

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

| | |
|---|---|
| Operations may be conducted: | by day or night in a variety of weather conditions |
| Environment may include movement of: | equipment goods materials and vehicular traffic |
| Customers may be: | internal or external |
| Mobile crane may be any slewing and non-slewing crane up to and including 20 tonne capacity and may be involved in work in a range of industry sectors including: | construction and demolition manufacturing waterfront mining primary industry utilities (electricity, gas, water) arboricultural swimming pool quarrying |
| Hazards may include: | power lines noise, light, energy sources overhead service lines surrounding buildings, structures, facilities underground services obstructions uneven or unstable ground and recently filled trenches stationary and moving machinery and equipment hazardous or dangerous materials traffic hazards and congestion |
| Hazard management is consistent with: | the principle of hierarchy of control with elimination, substitution, isolation and engineering control measures being selected before safe working practices and personal protective equipment |
| Personal protective equipment may include: | gloves safety headwear and footwear sunscreen, sunglasses and safety glasses two-way radios |

high visibility clothing

| | |
|---|---|
| Consultative processes may involve: | other employees and supervisors management union representatives clients industrial relations and OH&S specialists other professional or technical staff |
| Requirements for access and/or lift may include: | site restrictions and procedures authorities and permits hours of operation induction slings, chains, nets, brackets and other specialised lifting equipment noise restrictions personal protective equipment support trucks additional gear and equipment communications equipment |
| Depending on the type of organisation concerned and the local terminology used, workplace procedures may include: | company procedures enterprise procedures organisational procedures established procedures site procedures |
| Documentation/records may include: | site plans Safe Working Load (SWL) and Working Load Limit (WLL) operations manuals including load charts and crane and rigging manuals induction documentation competency standards and training materials job specifications and procedures manufacturers specifications workplace operating procedures and policies supplier and/or client instructions communications technology equipment, oral, aural or signed communications personal and work area work procedures and practices conditions of service, legislation and industrial agreements including: workplace agreements and awards occupational health and safety procedures standards and certification requirements quality assurance procedures emergency procedures |

Applicable procedures and codes may include:

relevant state/territory regulations and licence/permit requirements pertaining to mobile cranes up to and including 20 tonnes
relevant Australian standards and certification requirements
relevant state/territory road rules
relevant state/territory OH&S legislation
relevant state/territory fatigue management regulations
relevant state/territory environmental protection legislation

Unit Sector(s)

Not applicable.

Competency Field

D - Load Handling