



Australian Government

Department of Education, Employment and Workplace Relations

TLID3036A Lift and move load using a mobile crane

Release: 1

TLID3036A Lift and move load using a mobile crane

Modification History

Not Applicable

Unit Descriptor

Unit Descriptor

This unit involves the skills and knowledge required to lift and move a load using a non-slewing mobile crane or a slewing mobile crane. It includes operating the mobile crane to complete job requirements, monitoring lift conditions, implementing shut-down procedures, packing up crane after operations, and completing all required job records. Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Application of the Unit

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.

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 in a variety of operational contexts.

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Not Applicable

Employability Skills Information

Employability Skills This unit contains employability skills.

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

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 workplace procedures 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 workplace procedures 1.6 Crane controls are operated smoothly 1.7 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

ELEMENT**PERFORMANCE CRITERIA**

	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
- Read and interpret instructions, procedures, information and signs relevant to the lifting and moving of a load using a mobile crane

Required skills:

- Complete documentation related to the lifting and moving of a load using a mobile crane
- Operate electronic communication equipment to required protocol
- Work collaboratively with others when lifting and moving a load using a mobile crane
- 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 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
- 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
- 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**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

- 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

EVIDENCE GUIDE

unit

this unit and include demonstration of:

- applying the underpinning knowledge and skills
- applying relevant legislation and workplace procedures
- complying with OH&S licensing legislation
- applying risk assessment and management procedures for mobile crane operations
- effectively completing the pre-operational checks, positioning, stabilising, set-up, post-operational checks of a mobile crane
- using mathematical procedures to determine the weight of a load and the lifting equipment required for the lift
- using load charts to determine the limitations of the crane and/or crane set-up required
- operating the crane including all functions to their maximum extension in the lifting and moving of a load

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

Method of assessment

- 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 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	• other employees and supervisors

RANGE STATEMENT

involve:

- 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

RANGE STATEMENT

- Applicable procedures and codes may include:
- quality assurance procedures
 - emergency procedures
 - relevant state/territory regulations and licence/permit requirements pertaining to mobile cranes
 - 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

Competency Field D - Load Handling