



Australian Government

Department of Education, Employment and Workplace Relations

TLID3040A Control lift and movement of crane

Release: 1

TLID3040A Control lift and movement of crane

Modification History

Not Applicable

Unit Descriptor

Unit Descriptor

This unit involves the skills and knowledge required to direct the movement of a load when the load is out of the crane operator's view, including providing lift instructions to the crane operator using appropriate communication methods, monitoring the lift, and placing and securing load. 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 the operation of mobile cranes up to and including 20 tonnes.

Work is performed with limited or minimum supervision, and 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 control the lift and movement of a mobile crane 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 Provide lift instructions | <ul style="list-style-type: none">1.1 Load movement is performed in accordance with planned hazard prevention and control measures in line with appropriate Australian standards, codes of practice, guides and manufacturers specifications1.2 Agreed communication and signal methods are used to coordinate the load movement with safety1.3 Verbal communication and signals are clear, precise and concise so that they can be understood1.4 Instructions take into account all relevant parameters to ensure safe, stable and smooth lift |
| 2 Monitor lift | <ul style="list-style-type: none">2.1 Load is constantly monitored to ensure it remains stable2.2 Load conditions which may affect the continuing stability are identified and monitored2.3 Any temporary bracing and/or load support is maintained until continuing stability is ensured2.4 Unplanned situations are responded to according to workplace procedures in a manner that minimises risk to personnel and equipment2.5 Site emergency procedures are followed |
| 3 Place and secure load | <ul style="list-style-type: none">3.1 Appropriate materials for fixing and anchoring the load are checked and selected in line with manufacturers specifications3.2 Appropriate fixing methods are used to secure the load in line with manufacturers specifications and guides3.3 Temporary securing is installed where hazards and weather conditions may vary during the load movement |

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

REQUIRED KNOWLEDGE AND SKILLS

to eliminate or minimise the risk

- Workplace procedures concerning the controlling of the lift and movement of a mobile crane
- 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 directing and controlling the lift and movement of a mobile crane
- Read and interpret instructions, procedures, information, technical data, manuals and signs relevant to the control of the lift and movement of a mobile crane
- Complete documentation related to the lift and movement of a mobile crane
- Operate electronic communication equipment to required protocol
- Work collaboratively with others during the control of the lift and movement of 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 that may arise when directing and controlling the lift and movement of a mobile crane in accordance with regulatory requirements and workplace procedures
- Implement contingency plans for unanticipated situations that may occur when directing and controlling the lift and movement of a mobile crane
- Apply precautions and required action to minimise, control or eliminate hazards that may exist during the control of the lift and movement of 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
- Identify and correctly use equipment, processes and procedures
- 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

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 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/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

- 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 activities in an appropriately simulated environment 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 mobile crane 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

Load movements may include:

- luffing
- slewing
- hoisting
- telescoping boom

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:

RANGE STATEMENT

- Applicable procedures and codes may include:
- workplace agreements and awards
 - occupational health and safety procedures
 - standards and certification requirements
 - 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