



Australian Government

Department of Education, Employment and Workplace Relations

TLID3033A Operate a vehicle-mounted loading crane

Release: 1

TLID3033A Operate a vehicle-mounted loading crane

Modification History

Not Applicable

Unit Descriptor

Unit Descriptor

This unit involves the skills and knowledge required to operate a vehicle-mounted loading crane to shift loads, including positioning and stabilising the crane, operating the vehicle-mounted crane, monitoring lift conditions, packing up the 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 vehicle-mounted loading cranes.

Work is performed under general supervision. It involves the application of routine principles and procedures to the operation of a vehicle-mounted loading 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 Position and stabilise crane	<ul style="list-style-type: none">1.1 Crane is driven to position as per job plan to ensure safe operation in accordance with applicable Australian standards, codes of practice, manufacturers specifications and, where applicable, regulatory and local government requirements1.2 Where appropriate, barriers, fencing, temporary boundaries, signage and the like are used to isolate working area in accordance with safe working practice and lift requirements1.3 Ground is checked to ensure it is firm enough to bear the load1.4 Appropriate plates or packing are correctly used to adequately distribute the load1.5 Any outriggers and stabilisers are correctly deployed and positioned in accordance with manufacturers instructions and the appropriate Australian standard and other relevant statutory regulations or local authority requirements1.6 Outrigger packing is checked for adequacy prior to and after load is taken
2 Operate vehicle-mounted crane	<ul style="list-style-type: none">2.1 Planned hazard control strategies are implemented2.2 Required signals are correctly given, interpreted and followed in accordance with appropriate Australian standards2.3 Load mass is assessed and correlated with lifting capacity of crane throughout proposed radii of operation2.4 Appropriate lifting gear is selected and load secured2.5 Load is hoisted and lowered into position using crane movements in accordance with the appropriate Australian standard2.6 Crane controls are operated smoothly2.7 Crane is shut down and secured during periods of non-operation according to manufacturers specifications and workplace procedures
3 Monitor lift conditions	<ul style="list-style-type: none">3.1 Load is constantly monitored to ensure load and structural stability3.2 Conditions which may affect the continuing stability of the crane are identified and monitored3.3 Unplanned situations are responded to in line with workplace procedures in a manner that minimises risk to personnel and equipment3.4 Advice is sought from supervisor where there is doubt about correct response to unanticipated conditions, or conflict with customer request3.5 Supervisor/allocator is advised of any concern about completing the job within timeframe

ELEMENT**PERFORMANCE CRITERIA**

- 3.6 Shut-down procedures are implemented in accordance with manufacturers instructions in the event of an emergency
- 3.7 The relevant motion locks and brakes are applied
- 3.8 Crane is shut down using the correct sequence of procedures in accordance with manufacturers specifications and workplace procedures
- 3.9 Routine post-operational equipment checks are carried out in accordance with manufacturers specifications
- 4 Pack up crane**
- 4.1 All lifting equipment and crane components are checked for any signs of deterioration or damage in accordance with the appropriate Australian standard
- 4.2 Damaged or worn equipment is segregated and reported to an authorised person for testing/repair/destruction
- 4.3 Crane equipment is correctly stowed and secured in accordance with manufacturers instructions and the appropriate Australian standard
- 4.4 Crane is immobilised and secured for travel in accordance with manufacturers instructions, workplace guidelines and regulatory requirements
- 5 Complete job records**
- 5.1 Customer feedback is sought regarding satisfaction with the completed job and any areas of concern 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
- Operational procedures for crane crews
- Prioritising and multi-tasking work

REQUIRED KNOWLEDGE AND SKILLS

- Company work procedures concerning the setting up and rigging of a mobile crane at a work site
- Problems that may arise when operating a vehicle-mounted loading crane and actions that should be taken to prevent or solve them
- Focus of operation of work systems and equipment
- Application of relevant agreements, codes of practice or other legislative requirements

Required skills:

- Communicate effectively with others when operating a vehicle-mounted loading crane
- Read and interpret instructions, procedures, information and signs relevant to the operation of a vehicle-mounted loading crane
- Interpret and follow operational instructions and prioritise work
- Complete documentation related to the operation of a vehicle-mounted loading crane
- Operate electronic communication equipment to required protocol
- Work collaboratively with others when operating a vehicle-mounted loading 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 operating a vehicle-mounted loading crane in accordance with regulatory requirements and workplace procedures
- Implement contingency plans for unanticipated situations that may arise when operating a vehicle-mounted loading crane
- Apply precautions and required action to minimise, control or eliminate hazards that may exist during the operation of a vehicle-mounted loading crane
- Plan own work including predicting consequences and identifying improvements
- 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 crane and its equipment and take appropriate action where required
- 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 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:
- day or night
 - in a variety of weather conditions
- Environment may include movement of:
- equipment
 - goods
 - materials
 - vehicular traffic
- Customers may be:
- internal or external
- Mobile crane 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
- Consultative processes may involve:
- other employees and supervisors
 - management
 - union representatives
 - clients
 - industrial relations and OH&S specialists
 - other professional or technical staff

RANGE STATEMENT

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

Personal protective equipment may include:

- gloves
- safety headwear and footwear
- sunscreen, sunglasses and safety glasses
- two-way radios
- high visibility clothing

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:

- operations manuals for vehicle-mounted loading cranes
- Safe Working Load (SWL) and Working Load Limit (WLL)
- material safety data sheets
- induction documentation
- competency standards and training materials
- job specifications and procedures
- manufacturers specifications for vehicle-mounted loading cranes
- 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 vehicle-mounted loading cranes
 - 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