



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **TLID3307C Operate a vehicle-mounted loading crane**

**Release: 1**

## **TLID3307C Operate a vehicle-mounted loading crane**

### **Modification History**

Not applicable.

### **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.

### **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**

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
<b>1 Position and stabilise crane</b>	<ul style="list-style-type: none"><li>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 requirements</li><li>1.2 Where appropriate, barriers, fencing, temporary boundaries, signage and the like are used to isolate working area in accordance with safe working practice and lift requirements</li><li>1.3 Ground is checked to ensure it is firm enough to bear the load</li><li>1.4 Appropriate plates or packing are correctly used to adequately distribute the load</li><li>1.5 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 requirements</li><li>1.6 Outrigger packing is checked for adequacy prior to and after load is taken</li></ul>
<b>2 Operate vehicle-mounted crane</b>	<ul style="list-style-type: none"><li>2.1 Planned hazard control strategies are implemented</li><li>2.2 Required signals are correctly given, interpreted and followed in accordance with appropriate Australian standards</li><li>2.3 Load mass is assessed and correlated with lifting capacity of crane throughout proposed radii of operation</li><li>2.4 Appropriate lifting gear is selected and load secured</li><li>2.5 Load is hoisted and lowered into position using crane movements in accordance with the appropriate Australian standard</li></ul>

- 2.6 Crane controls are operated smoothly
- 2.7 Crane is shut down and secured during periods of non-operation according to manufacturers specifications and workplace procedures
- 3 **Monitor lift conditions**
  - 3.1 Load is constantly monitored to ensure load and structural stability
  - 3.2 Conditions which may affect the continuing stability of the crane are identified and monitored
  - 3.3 Unplanned situations are responded to in line with workplace procedures in a manner that minimises risk to personnel and equipment
  - 3.4 Advice is sought from supervisor where there is doubt about correct response to unanticipated conditions, or conflict with customer request
  - 3.5 Supervisor/allocator is advised of any concern about completing the job within timeframe
  - 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

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

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:	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
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

quality assurance procedures

emergency procedures

Applicable procedures and codes may include:

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**

D - Load Handling