TLID3307C Operate a vehicle-mounted loading crane
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

<table>
<thead>
<tr>
<th>Element</th>
<th>Performance Criteria</th>
</tr>
</thead>
</table>
| **1** Position and stabilise crane | 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  
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  
1.3 Ground is checked to ensure it is firm enough to bear the load  
1.4 Appropriate plates or packing are correctly used to adequately distribute the load  
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  
1.6 Outrigger packing is checked for adequacy prior to and after load is taken |
| **2** Operate vehicle-mounted crane | 2.1 Planned hazard control strategies are implemented  
2.2 Required signals are correctly given, interpreted and followed in accordance with appropriate Australian standards  
2.3 Load mass is assessed and correlated with lifting capacity of crane throughout proposed radii of operation  
2.4 Appropriate lifting gear is selected and load secured  
2.5 Load is hoisted and lowered into position using crane movements in accordance with the appropriate Australian standard |
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