



**Australian Government**

# **TLILIC4011 Licence to operate a slewing mobile crane (over 100 tonnes)**

**Release: 1**

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## **Modification History**

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

## **Application**

This unit specifies the skills and knowledge required to safely operate a slewing mobile crane with a capacity over 100 tonnes.

Slewing mobile crane means a mobile crane incorporating a boom or jib that can be slewed, but does not include:

- a front-end loader or
- a backhoe or
- an excavator or
- other earth moving equipment, when configured for crane operation.

This unit applies to the activities of a person operating a slewing mobile crane with a capacity over 100 tonnes that is a:

- non-slewing mobile crane with a capacity exceeding 3 tonnes
- reach stacker
- slewing mobile crane with a capacity exceeding 100 tonnes
- vehicle loading crane with a capacity of 10 metre tonnes or more, excluding the application of load estimation and slinging techniques to move a load.

A person performing this work is required to hold a slewing mobile crane with a capacity over 100 tonnes high risk work (HRW) licence.

This unit requires a person operating a slewing mobile crane with a capacity over 100 tonnes to plan work, conduct routine checks, set up crane, transfer load, mobile load and shut down and secure crane after completing operations.

### **Licensing/Regulatory Information**

This unit is based on the licensing requirements of Part 4.5 of the Model Work Health and Safety (WHS) Regulations, HRW and meets Commonwealth, state and territory HRW licensing requirements.

Any alteration to this unit would result in a unit that would not be acceptable to Work Health and Safety (WHS)/occupational health and safety (OHS) regulators for the purpose of licensing.

## **Pre-requisite Unit**

Not applicable.

## Competency Field

LIC – Licensing

## Unit Sector

Not applicable.

## Elements and Performance Criteria

### ELEMENTS

### PERFORMANCE CRITERIA

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

#### 1 Plan work

- 1.1 Potential workplace hazards are identified
- 1.2 Hazard prevention/control measures are identified consistent with appropriate standards to ensure the safety of personnel and equipment
- 1.3 Weight of load is identified and estimated in consultation with relevant workplace personnel
- 1.4 Crane is appropriate to the load/s and workplace conditions
- 1.5 Appropriate path for moving load/s in work area is inspected and determined
- 1.6 Appropriate communications methods are identified in consultation with relevant personnel

#### 2 Conduct routine checks

- 2.1 Crane is visually checked for any damage or defects
- 2.2 Crane is accessed in a safe manner
- 2.3 All signage and labels are checked to ensure they are visible and legible in accordance with the appropriate standard
- 2.4 Routine pre-operational crane checks are carried out in accordance with procedures
- 2.5 All controls are located and identified
- 2.6 Crane service logbook is checked for compliance
- 2.7 Crane is started in accordance with procedures and checked for any abnormal noise
- 2.8 All crane safety devices are tested in accordance with

procedures

2.9 Post-start operational checks are carried out in accordance with procedures

2.10 All communications equipment is checked for serviceability

2.11 All damage and defects are reported and recorded in accordance with procedures, and appropriate action is taken

### **3 Set up crane**

3.1 Ground suitability is checked

3.2 Crane is driven to work area in accordance with procedures

3.3 Crane is positioned for work application and stability in accordance with procedures

3.4 Appropriate crane configuration for work task is determined as required in accordance with procedures

3.5 Boom/jib and counterweight configuration data is input into crane computer as required

3.6 Appropriate hazard prevention/control measures are applied to work area in accordance with procedures

3.7 All communications equipment is tested for functionality

### **4 Transfer load**

4.1 Lifts are determined within the capacity of the crane

4.2 Boom/jib and hoist block is positioned over load following directions from relevant workplace personnel

4.3 Test lift is carried out in accordance with procedures to allow for checks to be safely made, in consultation with relevant personnel

4.4 Loads are transferred using all relevant crane movements in accordance with procedures and the appropriate standard

4.5 All required communications signals are correctly interpreted in accordance with procedures and the appropriate standard

4.6 Crane is operated in accordance with procedures

4.7 Load movement is monitored constantly, to ensure safety of personnel and load, and crane stability

4.8 Unplanned and/or unsafe situations are responded to in accordance with procedures

**5 Mobile load**

- 5.1 Suitability of planned route for crane is checked in accordance with procedures
- 5.2 Crane is configured to mobile load in accordance with procedures
- 5.3 Load is moved using best mobile practice in accordance with the appropriate standard

**6 Shut down and secure crane**

- 6.1 Crane boom/jib and equipment are stowed and secured as required in accordance with procedures and the appropriate standard
- 6.2 Relevant motion locks and brakes are applied as required
- 6.3 Outriggers/stabilisers are stowed and secured in accordance with procedures
- 6.4 Crane is shut down in accordance with procedures
- 6.5 Plates or packing are stowed and secured
- 6.6 Routine post-operational crane checks are carried out in accordance with procedures
- 6.7 All damage and defects are reported and recorded in accordance with procedures, and appropriate action is taken

**Foundation Skills**

The language, literacy, numeracy and employment skills that are essential to performance that are not explicit in the unit are listed below.

| Skill                 | Performance feature                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Employment skills to: | <ul style="list-style-type: none"><li>• operate a slewing mobile crane over 100 tonnes in different types of workplaces transferring key principles of safe operation to different contexts</li><li>• improve own performance in safely and efficiently operating a slewing mobile crane by incorporating learning from different workplaces and different conditions into current performance</li></ul> |
| Numeracy skills to:   | <ul style="list-style-type: none"><li>• interpret numerical information including:<ul style="list-style-type: none"><li>• selecting appropriate slewing mobile crane in accordance with load and workplace conditions</li><li>• load weight assessment, to ensure compliance with slewing</li></ul></li></ul>                                                                                            |

| Skill                          | Performance feature                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                | mobile crane data plate specifications <ul style="list-style-type: none"> <li>controlling and monitoring instrument readings</li> </ul>                                                                                                                                                                                                                                                  |
| Language skills to:            | <ul style="list-style-type: none"> <li>use and interpret vocabulary specific to slewing mobile crane operations and workplace procedures to communicate with other workplace personnel</li> <li>use non-verbal feedback to support effective communication</li> <li>use relevant two-way radio conventions</li> </ul>                                                                    |
| Literacy (reading ) skills to: | <ul style="list-style-type: none"> <li>interpret documentation that includes technical specificity including:               <ul style="list-style-type: none"> <li>slewing mobile crane data plate</li> <li>plant operation manuals and manufacturer specifications</li> <li>workplace procedures, including emergency plan</li> <li>workplace signage and labels</li> </ul> </li> </ul> |
| Literacy (writing) skills to:  | <ul style="list-style-type: none"> <li>accurately record and maintain information relating to operating a slewing mobile crane, including:               <ul style="list-style-type: none"> <li>incident reports</li> <li>vehicle checking and maintenance records</li> </ul> </li> </ul>                                                                                                |
| Self-management skills to:     | <ul style="list-style-type: none"> <li>implement risk control measures</li> <li>initiate emergency management strategies</li> </ul>                                                                                                                                                                                                                                                      |

## Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

## Unit Mapping Information

### Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>