



**Australian Government**

# **TLILIC3007 Licence to operate a portal boom crane**

**Release: 1**

# TLILIC3007 Licence to operate a portal boom crane

## 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 operate a portal boom crane safely. Portal boom crane means a boom crane or a jib crane that is mounted on a portal frame that, in turn, is supported on runways along which the crane travels.

A person performing this work is required to hold a portal boom crane high risk work (HRW) licence.

This unit requires a person operating a portal boom crane to plan the work, conduct routine checks, transfer load, mobile load, and shut down and secure crane.

### 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    Performance criteria describe the performance needed to demonstrate

essential outcomes. achievement of the element.

## **1 Plan work**

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

## **2 Conduct routine checks**

- 2.1 Appropriate hazard prevention/control measures are applied to work area in accordance with procedures in consultation with associated personnel
- 2.2 Crane is accessed in safe manner
- 2.3 Crane is visually checked for any damage or defects
- 2.4 All signage and labels are checked to ensure they are visible and legible in accordance with the appropriate standard
- 2.5 Routine pre-operational crane checks are carried out in accordance with procedures
- 2.6 All controls are located and identified
- 2.7 Crane service logbook is checked for compliance
- 2.8 Crane is started in accordance with procedures and is checked for any abnormal noises
- 2.9 All crane safety devices are tested in accordance with procedures
- 2.10 Post-start operational checks are carried out in accordance with procedures
- 2.11 All communications equipment is checked for serviceability
- 2.12 All damage and defects are reported and recorded in accordance

with procedures, and appropriate action is taken

### **3 Transfer load**

- 3.1 Lifts are confirmed to be within crane capacity in consultation with associated personnel
- 3.2 Boom/jib and hoist block is positioned over load following directions from associated personnel
- 3.3 Test lift is carried out in accordance with procedures to allow for checks to be safely made, in consultation with relevant personnel
- 3.4 Loads are transferred using all relevant crane movements in accordance with procedures and appropriate standards
- 3.5 All required communications signals are interpreted correctly in accordance with procedures and the appropriate standard
- 3.6 Crane is operated in accordance with procedures
- 3.7 Load movement is monitored constantly, to ensure safety of personnel and load, and structural stability
- 3.8 Unplanned and/or unsafe situations are responded to in accordance with procedures

### **4 Mobile load**

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

### **5 Shut down and secure crane**

- 5.1 Crane is placed in weathervane mode as required in accordance with procedures
- 5.2 Relevant motion locks and brakes are applied as required
- 5.3 Crane and equipment are secured correctly in accordance with procedures and the appropriate standard
- 5.4 Crane is shut down in accordance with procedures
- 5.5 Routine post-operational crane checks are carried out in accordance with procedures
- 5.6 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 portal boom crane 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 portal boom crane by incorporating learnings 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 portal boom crane in accordance with load and workplace conditions</li> <li>• load weight assessment, to ensure compliance with portal boom crane data plate specifications</li> <li>• controlling and monitoring instrument readings</li> </ul> </li> </ul> |
| Language skills to:            | <ul style="list-style-type: none"> <li>• use and interpret vocabulary specific to safely and efficiently operating a portal boom crane 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>• portal boom 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 portal boom 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**

This unit is equivalent to TLILIC3007A Licence to operate a portal boom crane.

## **Links**

TLI Transport and Logistics Training Package Companion Volume Implementation Guide at:  
- [http://companion\\_volumes.vetnet.education.gov.au/Pages/TrainingPackage.aspx?pid=23](http://companion_volumes.vetnet.education.gov.au/Pages/TrainingPackage.aspx?pid=23)