

# TLILIC0040 Licence to operate a non-slewing mobile crane (greater than 3 tonnes capacity)

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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 operate a non-slewing mobile crane with a Rated Capacity (RC) exceeding three tonnes safely, in accordance with all relevant legislative responsibilities. Competence in this unit, does not in itself result in a High Risk Work Licence (HRWL) to operate this plant. Competence in this unit does not allow for driving an articulated mobile crane on a main or public road. In order to drive on a main or public road, a valid heavy vehicle licence, issued by a transport regulator, is required.

Non-slewing mobile crane means a mobile crane incorporating a boom or jib that cannot be slewed, and includes:

- an articulated mobile crane
- a locomotive crane
- but does not include vehicle tow trucks.

A person performing this work is required to hold a non-slewing mobile crane HRWL.

This unit requires a person operating non-slewing mobile crane with an RC exceeding three tonnes to:

- plan the work/task
- prepare for the work/task
- perform work/task
- prepare to drive an articulated mobile crane on road
- drive an articulated mobile crane
- pack up.

#### Licensing/Regulatory Information

Legislative and regulatory requirements are applicable to this unit of competency. This unit is based on the licensing requirements of Part 4.5 of the Model Work Health and Safety (WHS) Regulations and meets Commonwealth, state and territory HRWL requirements.

The National Assessment Instrument (NAI) is the mandated assessment for the HRWL to operate the relevant licensing class as detailed in this unit.

# Pre-requisite Unit

Not applicable.

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# **Competency Field**

LIC - Licencing Units.

#### **Unit Sector**

Not applicable.

## **Elements and Performance Criteria**

#### **ELEMENTS**

#### PERFORMANCE CRITERIA

outcomes.

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

#### 1 Plan work/task

- 1.1 Task requirements are identified from work orders or equivalent, a lift plan is confirmed with associated personnel and a site inspection is conducted in accordance with workplace procedures
- 1.2 Work area operating surface is confirmed to determine the quality of ground suitability for operational use of non-slewing mobile crane in accordance with workplace procedures
- 1.3 Non-slewing mobile crane RC and the lifting gear working load limit (WLL) are established for the load/s and work/task requirements in accordance with manufacturer requirements and workplace procedures
- 1.4 Appropriate paths for operating the mobile crane and moving and placing load/s in work area are assessed and determined in accordance with workplace procedures
- 1.5 Relevant hazard identification and risk elimination/control measures are applied and advised to associated personnel in accordance with workplace procedures
- 1.6 Traffic management plan implementation is confirmed and followed in accordance with workplace procedures
- 1.7 Appropriate communication procedures are identified and tested with associated personnel in accordance with workplace procedures

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- 1.8 All tasks are confirmed to ensure requirements for the relevant work area in accordance with a lift plan and workplace procedures
- 1.9 Information required to ensure that lifting equipment and gear inspection, use, maintenance and storage complies with manufacturer requirements is obtained and interpreted

### 2 Prepare for work/task

- 2.1 Consultation with workplace personnel is established and maintained to ensure lift plan is clear and consistent with site requirements in accordance with a lift plan and workplace procedures
- 2.2 Risk control measures for hazards identified are checked for implementation in accordance with the lift plan and safe work procedures
- 2.3 Non-slewing mobile crane is accessed safely in accordance with manufacturer requirements and safe work procedures
- 2.4 Pre-start crane checks are carried out and any damage and defects are reported, recorded and appropriate action is taken in accordance with manufacturer requirements and safe work procedures
- 2.5 Mobile crane is set up correctly with any lifting gear in accordance with lift plan, relevant manufacturer requirements, including load charts, and safe work procedures
- 2.6 Fly jib (if fitted) is set up as required in accordance with specific manufacturer requirements and safe work procedures
- 2.7 Operational checks are carried out and any damage and defects are reported, recorded and appropriate action is taken in accordance with manufacturer requirements and safe work procedures
- 2.8 Crane logbook is checked to confirm current compliance is correct for the crane type, is completed and signed and required rectifications have been signed-off in accordance with manufacturer requirements and safe work procedures
- **2.9** Weather and work environment conditions are assessed to determine any impact on mobile crane operations in

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- accordance with manufacturer requirements and safe work procedures
- **2.10** Weight of load is identified, calculated or estimated
- **2.11** Derated WLL of lifting equipment resulting from selected slinging techniques is calculated
- **2.12** Suitable lifting points and slinging techniques are identified
- 2.13 Lifting equipment and gear are prepared for safe use
- **2.14** Load destination is confirmed for stability ensuring it is able to bear the load and is prepared for safe access and landing
- 3 Perform work/task
- 3.1 Lifts are determined within the RC of the non-slewing mobile crane in accordance with the load chart/s and lift plan
- 3.2 Boom/jib and hook block are safely positioned over the load following directions from associated personnel in accordance with the lift plan and safe work procedures
- 3.3 Lifting equipment and gear, where required, are connected to the load and used safely in accordance with the lift plan, safe work procedures and manufacturer requirements
- **3.4** Test lift is carried out in accordance with safe work procedures
- 3.5 Loads are transferred using relevant crane movements and tag lines, as required, in accordance with lift plan and safe work procedures
- 3.6 Load and crane movement is monitored constantly and crane is operated safely in accordance with lift plan and safe work procedures
- 3.7 All required communication signals are correctly interpreted and followed whilst crane is operated in accordance with the lift plan and safe work procedures
- 3.8 Load is lowered and landed safely in accordance with lift plan and safe work procedures
- 3.9 Lifting gear is disconnected from load and crane is positioned safely and efficiently for next task in

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accordance with lift plan and safe work procedures

- 3.10 Lifting equipment and gear are inspected for defects, and defective items are isolated, tagged and reported
- 4 Prepare to drive an articulated mobile crane
- 4.1 Any items on the crane body are safely and effectively restrained and loose components are stored in storage areas
- 4.2 Pre-operational checks, including registrations and approvals, are completed for driving according to manufacturer instructions
- **4.3** Tyre pressures and suspension settings are checked and set for driving and counterweights are positioned for road travel
- **4.4** Boom and fall block are positioned for driving
- 4.5 Appropriate signage, lights and equipment are checked for operational effectiveness and for conformity to prescribed traffic regulations or site traffic management plan
- 5 Drive an articulated mobile crane
- 5.1 Articulated mobile crane is started, steered, manoeuvred, positioned and stopped in accordance with regulations, manufacturer instructions and relevant vehicle handling procedures and allowing for forward overhang of the boom
- 5.2 Steering is maintained utilising 'turn-in-turn-out'
- 5.3 One-handed steering techniques are applied
- 5.4 Braking system of articulated mobile crane is managed and operated efficiently to ensure effective control of vehicle under all conditions and allowing for greater stopping distance due to size, weight and forward projection of the boom
- 5.5 Driving hazards are identified and/or anticipated and avoided or controlled through low risk driving

6 Pack up

- 6.1 Crane boom/jib, lifting gear and associated equipment are stowed and secured as required in accordance with manufacturer requirements and safe work procedures
- Relevant motion locks and brakes are applied as required in accordance with manufacturer requirements and safe

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work procedures

- 6.3 Crane is shut down and secured to prevent unauthorised access/use in accordance with safe work procedures
- 6.4 Post-operational crane checks are carried out in accordance with legislative responsibilities, safe work procedures and manufacturer requirements

#### **Foundation Skills**

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

# **Range of Conditions**

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

Non-essential conditions may be found in the TLI Transport and Logistics Training Package Companion Volume Implementation Guide.

# **Unit Mapping Information**

This unit replaces but is not equivalent to TLILIC0018 Licence to operate a non-slewing mobile crane (greater than 3 tonnes capacity).

# Links

Companion Volume Implementation Guides are found in VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851

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