



Australian Government

TLILIC0017 Licence to operate a derrick crane

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 operate a derrick crane safely. Competence in this unit, does not in itself result in a High-Risk Work Licence (HRWL) to operate this plant.

Derrick crane means a slewing strut-boom crane with its boom pivoted at the base of a mast that is:

- capable of luffing under load
- guyed (guy-derrick) or held by backstays (stiff-legged derrick).

This unit applies to the activities of a person operating a derrick crane.

A person performing this work is required to hold a derrick crane HRWL.

This unit requires a person operating a derrick crane to:

- plan for the work/task
- prepare for the work/task
- perform work/task
- 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.

Competency Field

LIC - Licencing Units.

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/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 derrick crane in accordance with workplace procedures
- 1.3 Derrick crane Rated Capacity (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 derrick 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
- 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 all crane and lifting operations are 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 Pre-start derrick crane checks are carried out and any damage and defects are reported, recorded and appropriate action is taken in accordance with safe work procedures and manufacturer requirements
- 2.4 Derrick crane is positioned and confirmed as correctly set up, including any lifting gear as per the lift plan, in accordance with relevant manufacturer requirements, including load chart/s and safe work procedures
- 2.5 Boom/jib and lifting gear set-up is confirmed, as required, in accordance with specific manufacturer requirements and safe work procedures
- 2.6 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
- 2.7 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
- 2.8 Weather and work environment conditions are assessed to determine any impact on derrick crane operations in accordance with manufacturer requirements and safe work procedures
- 2.9 Weight of load is identified or calculated

- 2.10** Derated WLL of lifting equipment resulting from selected slinging techniques is calculated and confirmed as suitable to meet the requirements of the lift plan
 - 2.11** Suitable lifting points and slinging techniques are identified
 - 2.12** Lifting equipment and gear is confirmed as ready for safe use
 - 2.13** Load destination stability is confirmed 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 derrick 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** Main hook, including any lifting gear where required, is 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 dogging and 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 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 Pack up**
 - 4.1** Crane boom/jib, lifting gear and associated equipment are stowed and secured as required in accordance with manufacturer requirements and safe work procedures
 - 4.2** Relevant motion locks and brakes are applied as required in accordance with manufacturer requirements and safe work procedures
 - 4.3** Crane is shut down and secured to prevent unauthorised access/use in accordance with safe work procedures
 - 4.4** Shutdown crane checks are carried out in accordance with 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

Supersedes and is equivalent to TLILIC0007 Licence to operate a derrick crane.

Links

Companion Volume Implementation Guides are found in VETNet -

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

