



Australian Government

TLID3044 Shift loads using cranes

Release: 1

TLID3044 Shift loads using cranes

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 involves the skills and knowledge required to shift loads using cranes in accordance with workplace and regulatory requirements, as part of work activities in the transport and logistics industry.

It includes planning work for the current working conditions, using controls and crane operating systems, locating and identifying load characteristics and safely moving loads. It also includes monitoring controls and stopping, shutting down and securing the crane after the completion of operations.

Work is performed under some supervision generally within a team environment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

D – Load Handling

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Plan work for the current working conditions

PERFORMANCE CRITERIA

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

- 1.1 Traffic flow and work area conditions are constantly assessed and anticipated to allow safe operation to ensure no injury to people, or damage to crane, loads or facilities
- 1.2 Load characteristics are taken into account to ensure appropriate attachments/gear are used to move load as

required

- 1.3 Occurrences in the work area that may affect the safety and efficiency of operations are reported to appropriate personnel
- 2 Use controls and crane operating systems**
 - 2.1 Crane is prepared for operation in accordance with manufacturer instructions and workplace procedures
 - 2.2 Crane is started in accordance with manufacturer guidelines
 - 2.3 Instruments and gauges are monitored during start up and operations to ensure operation is within manufacturer specifications and workplace/regulatory safety requirements
 - 2.4 Engine power is managed for efficiency of crane movement and economy of crane operations
 - 2.5 Crane operations are conducted within manufacturer specified torque range
 - 2.6 Faults or damage to crane are immediately reported to appropriate personnel
- 3 Locate load and identify load characteristics**
 - 3.1 Load is located and identified in accordance with instructions
 - 3.2 Requirements for safe working load (SWL) and working load limit (WLL) of the crane are identified
 - 3.3 Load weight and dimensions are checked to ensure they fall within the crane capacity
 - 3.4 Loading and unloading plans are followed to ensure efficiency and safety of operations
 - 3.5 Load characteristics are taken into account to ensure appropriate loading and unloading procedures are followed
 - 3.6 Hazardous cargo is identified and relevant procedures are taken into account when planning and conducting work
- 4 Safely move load**
 - 4.1 Crane is operated using smooth and controlled movements
 - 4.2 Manoeuvres are within crane limits and in line with manufacturer specifications
 - 4.3 Load is moved ensuring no injury to personnel or damage to crane or cargo
 - 4.4 Continuous communication is maintained with personnel assisting the operator in the load movement operations using

appropriate communications technology and procedures

4.5 In an incident or emergency, crane is immediately stopped and workplace emergency procedures are followed

4.6 Safety incidents and emergencies are reported in accordance with workplace procedures and regulatory requirements

5 Monitor controls

5.1 Crane controls are monitored and operated in accordance with manufacturer operating instructions

5.2 Control systems are confirmed and acted on in accordance with regulatory requirements, manufacturer guidelines and workplace procedures

5.3 Control faults are identified and reported in accordance with workplace guidelines

6 Stop, shut down and secure equipment

6.1 Crane is brought to a controlled halt within manufacturer guidelines and is shut down without injury to personnel or damage to equipment, loads or facilities in accordance with workplace procedures

6.2 Crane is secured after operations in accordance with manufacturer instructions and workplace procedures

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 can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLID3044A Shift loads using cranes.

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for TLID3044 Shift loads using cranes

Modification History

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- applying effective eye-hand coordination to operational tasks
- applying fatigue management knowledge and techniques
- applying precautions and required action to minimise, control or eliminate identified hazards
- applying relevant legislation and workplace procedures
- communicating effectively with others
- completing relevant documentation
- estimating size, shape and special requirements of loads
- identifying cargo, container and goods, coding, Australian Dangerous Goods (ADG) Code and International Maritime Dangerous Goods (IMDG) Code markings and, where applicable emergency information panels
- identifying, selecting and using relevant equipment, processes and procedures
- implementing contingency plans
- interpreting and following operational instructions and prioritising work
- monitoring performance of crane and its equipment and taking appropriate action as required
- monitoring work activities in terms of planned schedule
- operating and adapting to differences in equipment in accordance with operating procedures
- reading, interpreting and following relevant instructions, procedures, information and signs
- receiving, acknowledging and sending messages using appropriate communications equipment
- reporting and/or rectifying identified problems, faults or malfunctions promptly, in accordance with regulatory requirements and workplace procedures
- servicing equipment in terms of maintenance schedule and operating procedures
- working collaboratively with others
- working systematically with required attention to detail without injury to self or others, or damage to goods or equipment.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- Australian and international codes and regulations relevant for using cranes to shift loads, including the ADG Code and the IMDG Code
- operational work systems, equipment, management and site operating systems for using boom cranes to shift loads
- problems that may occur and appropriate action that can be taken to resolve these problems
- relevant bond, quarantine or other legislative requirements
- relevant safety codes and emergency procedures
- requirements for safe working load (SWL) and working load limit (WLL) of cranes
- types of boom cranes used to shift loads in terminals/wharves, their applications and procedures and precautions for their use
- workplace procedures and policies for using cranes to shift loads.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

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Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment include:

- a range of relevant exercises, case studies and/or simulations
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals
- relevant materials, tools, equipment and personal protective equipment currently used in industry.

Links

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