



Australian Government

Assessment Requirements for TLILIC0012 Licence to operate a vehicle loading crane (capacity 10 metre tonnes and above)

Release: 1

Assessment Requirements for TLILIC0012 Licence to operate a vehicle loading crane (capacity 10 metre tonnes and above)

Modification History

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

Performance Evidence

A person who demonstrates competency in this unit must provide evidence of safely operating a vehicle loading crane with a capacity of 10 metre tonnes and above, and satisfy all of the elements, performance criteria and foundation skills requirements of the unit on at least one occasion including:

- applying appropriate mathematical procedures for estimating loads
- applying hazard prevention/control measures including:
 - adequate illumination
 - disconnecting power
 - insulated electric lines
 - moving obstructions
 - pedestrian controls
 - personal protective equipment
 - safety tags on electrical switches/isolators
 - using safety observer inside exclusion zone
 - traffic barricades and controls
 - trench covers
- applying risk assessment and hazard control strategies, including hierarchy of control as applied to positioning and safely operating vehicle loading crane
- assessing ground conditions to confirm site is suitable (e.g. firm, level and safe) to operate a vehicle loading crane
- communicating with other workplace personnel through:
 - using appropriate worksite protocols
 - bells
 - buzzers
 - listening
 - making and interpreting hand signals
 - questioning to confirm understanding
 - signage
 - two-way radios

- verbal and non-verbal language
- written instructions
- whistles
- complying with work health and safety (WHS)/occupational health and safety (OHS) licensing legislation
- demonstrating awareness of boom/jib movements and safe positioning of the operator for any lift
- operating a vehicle loading crane including all functions to their maximum extension when loading and unloading loads to the safe working rated capacity
- operating vehicle loading crane including all functions to their maximum extension when loading and unloading loads to the safe working rated capacity of the crane, in conjunction with other associated personnel, while applying relevant crane movements including:
 - knuckling
 - luffing
 - raising and lowering hoist
 - slewing
 - telescoping
- receiving and interpreting workplace instructions, safety information, emergency procedures
- recording and maintaining accurate information relating to crane operations
- shutting down a vehicle loading crane in accordance with manufacturer specifications and workplace procedures including:
 - folding boom/jib into the transport position
 - idling engine to stabilise temperature
 - locking and securing cabin as required
 - removing key from ignition as required
 - retracting boom/jib as required
 - retracting hoist rope and hook block
 - retracting outriggers/stabilisers
 - securing crane for travel
 - turning off engine as required
- stabilising a vehicle loading crane by:
 - correctly positioning plates or packing
 - deploying outriggers
 - establishing correct size plates or packing
- test-lifting the load just clear of the lifting plane to ensure:
 - adjustments to slinging can be made in a safe manner
 - all equipment is functioning properly
 - load measuring equipment can be used to verify calculated weight of load
 - loads of unusual shape or weight distribution are correctly slung
 - near capacity loads do not overload crane

- using and interpreting crane manufacturer specifications and data, including load charts to enable a vehicle loading crane to be configured for load
- using communications signals including:
 - stop – hand
 - stop – whistle
 - hoist up – hand
 - hoist up – whistle
 - hoist down – hand
 - hoist down – whistle
 - luff boom down – hand
 - luff boom down – whistle
 - luff boom up – hand
 - luff boom up – whistle
 - telescope out – hand
 - telescope out – whistle
 - telescope in – hand
 - telescope in – whistle
 - slew/articulate right – hand
 - slew/articulate right – whistle
 - slew/articulate left – hand
 - slew/articulate left – whistle
- using lifting equipment and basic slinging techniques suitable for loads to be loaded/unloaded as defined by workplace procedures
- verifying problems and equipment faults, and applying appropriate response procedures to unplanned and/or unsafe situations including:
 - environmental conditions (e.g. wind, lightning, storms)
 - failure/loss of control (e.g. brakes and steering)
 - failure of equipment (e.g. hydraulic system)
 - obstacles and obstructions
 - unusual or difficult terrains.

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:

- appropriate mathematical procedures for estimating and measuring loads
- assessment of ground conditions to confirm site is suitable (e.g. firm, level and safe) to operate crane
- Australian and industry standards relevant to operating a vehicle loading crane (capacity 10 metre tonnes and above)
- boom/jib movements and particularly the safe positioning of operator for any lift
- Commonwealth, state or territory WHS/OHS legislation, standards and codes of practice relevant to the full range of processes for the crane class
- defined techniques including fixed lifting points and basic reeved slings
- ground stability including:
 - backfilled ground
 - bitumen
 - concrete
 - hard compacted soil
 - rock
 - rough uneven ground
 - soft soils
- hazards including:
 - environmental conditions (e.g. wind, lightning, storms, etc.)
 - ground stability (e.g. ground condition, recently filled trenches, slopes)
 - insufficient lighting
 - other specific hazards (e.g. dangerous materials)
 - overhead hazards (e.g. electric lines, service pipes)
 - positioning of crane operator
 - traffic (e.g. pedestrians, vehicles, other plant)
- hierarchy of control:
 - elimination
 - substitution
 - isolation
 - engineering controls
 - administrative controls
 - personal protective equipment (PPE)
- organisational and workplace standards, requirements, policies and procedures for operating the crane class
- procedures for recording, reporting and maintaining workplace records and information
- rated capacity and working load limits (including use of crane load charts)
- risks associated with overhead electric lines/electrical cables, ground conditions, wind, pedestrians and tipping
- systematic process of eliminating or reducing risk to personnel and property through the application of controls
- typical routine problems encountered, and equipment and adjustments required for

correction

- use of lifting equipment and basic slinging techniques suitable for loads to be loaded/unloaded as defined by workplace procedures
- vehicle loading crane characteristics and capabilities to allow crane configuration to suit the range of loads.

Assessment Conditions

Assessments must be conducted by an assessor accredited for this high risk work (HRW) licence class in the Commonwealth/state/territory where the licence will be obtained (i.e. an assessor authorised by a Commonwealth/state/territory WHS/OHS regulator).

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

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and all assessment must be conducted in the English language.

Assessment of performance must be undertaken in the workplace and/or under realistic workplace conditions which typically reflect:

- performing tasks/activities within timelines that would be expected in a workplace
- standard and authorised work practices, safety requirements and environmental constraints
- using full-scale equipment

Vehicle loading crane (capacity 10 metre tonnes) and above operation assessment must be conducted in a working zone in accordance with state/territory arrangements.

If the working zone is located at a 'live' site, assessment should continue in all weather conditions unless the safety of the candidate or others could be compromised.

Simulators must **not** be used in the assessment of this unit of competency.

Accredited assessors are responsible for ensuring candidates have access to:

- appropriate vehicle loading crane with a capacity of 10 metre tonnes and above, and associated equipment in safe condition
- as required, appropriate personnel to sling and direct the loads including:
 - doggers
 - riggers
- communications equipment including:
 - bells

- buzzers
- two-way radios
- whistles
- controls including:
 - boom extension levers (where fitted)
 - hoisting and lowering levers
 - knuckling levers
 - luffing levers
 - slewing levers including brake
- lifting equipment including:
 - chain slings
 - eyebolts
 - shackles
 - wire and synthetic slings
- required personal protective equipment (PPE) for the purpose of the Performance Assessment
- safety devices including:
 - audible and visual warning devices
 - horns/sirens
 - lights
- signage and labels including:
 - crane decals
 - control labels
 - crane data plates/labels
 - load charts
- where appropriate, relevant workplace procedures and standards for operating a vehicle loading crane with a capacity of 10 metre tonnes and above including:
 - approved codes of practice and guidance material
 - relevant Australian Standards especially AS2550.1 Cranes, hoists and winches—Safe use (2011)
 - checklists
 - history record system for service and maintenance history
 - industry operating procedures
 - industry standards (where applicable)
 - logbook
 - manufacturer guidelines (instructions, specifications or checklists) for the purpose of the Performance Assessment
 - safe work method statement (SWMS), as required
 - service logbook.

Links

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