Australian Government

Department of Education, Employment and Workplace Relations

CPCCLRG4001A Licence to perform rigging advanced level

Release: 1

CPCCLRG4001A Licence to perform rigging advanced level

Modification History

Not Applicable

Unit Descriptor

Unit descriptor This unit specifies the outcomes required to perform rigging work at the advanced level, which includes all the outcomes for rigging work at the basic and intermediate levels, and also includes rigging of gin poles and shear legs, flying foxes and cable ways, guyed derricks and structures, and suspended scaffolds and fabricated hung scaffolds for licensing purposes.

Application of the Unit

Application of the unit

This unit requires the applicant to be able plan the work, select and inspect equipment, set up task, erect structures and plant and dismantle structures and plant.

This unit is based upon the National Standard for Licensing Persons Performing High Risk Work.

This unit in its current form meets state and territory licensing requirements. Any alteration will result in a unit which is not acceptable to regulators for the purpose of licensing.

This unit has a pre-requisite requirement. This requirement may be met by either the successful completion of the unit *CPCCLRG3002A Licence to perform rigging intermediate level* or holding a valid licence for intermediate rigging.

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Prerequisite units

CPCCLRG3002A	Licence to perform rigging intermediate level

Employability Skills Information

Employability skills This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan job.	1.1. Task to be undertaken is assessed. 1.2. Potential workplace ***hazards*** are identified. 1.3. ***Hazard control measures*** are identified consistent with ***appropriate standards*** to ensure the safety of personnel and equipment. 1.4. Site information is obtained. 1.5. All ***forces and loads*** associated with erecting and dismantling ***associated plant*** are considered in consultation with ***appropriate personnel***. 1.6. ***Rigging equipment*** and ***associated equipment*** are identified in consultation with appropriate personnel according to ***procedures*** and site information. 1.7. ***Safety equipment*** is identified. 1.8. Appropriate communication methods are identified with appropriate personnel.
2. Select and inspect equipment.	2.1. Rigging equipment and associated equipment are selected and inspected according to procedures and the appropriate standard. 2.2. Safety equipment is selected and inspected according to procedures. 2.3. All defective rigging equipment, associated equipment and safety equipment is isolated, reported and recorded according to procedures. 2.4. ***Communication equipment*** is selected and inspected for serviceability (where applicable)
3. Prepare site and equipment.	3.1. Appropriate ***hazard prevention***/***control measures*** are applied to the work area according to procedures. 3.2. ***Ground suitability*** is inspected and checked (where appropriate). 3.3. Site information is reviewed interpreted and communicated to appropriate personnel and appropriate personnel. 3.4. All forces and loads associated with erecting and dismantling associated plant are determined in consultation with appropriate personnel. 3.5. Safety equipment is fitted and worn correctly (where appropriate). 3.6. Rigging equipment and associated plant are positioned for work application and stability according to procedures.

ELEMENT	PERFORMANCE CRITERIA
	3.7. Methods of applying ***temporary connections*** using fibre rope are applied according to procedures and the appropriate standard.
4. Erect structures and plant.	4.1. Associated plant is erected according to procedures and site information.
	4.2. Stability of associated plant is maintained during erection according to procedures.
	4.3. Work is conducted safely at heights including safe and effective use of safety equipment.
	4.4. Appropriate communication methods and communication equipment, are used to co-ordinate the tasks.
	4.5. Temporary guys, ties, propping and shoring, including ***flexible steel wire rope***, and tubing, are connected where required.
	4.6. Associated plant and rigging equipment is used according to procedures and the appropriate standard.
	4.7. Associated equipment is used in a safe and appropriate manner.
	4.8. The completed task is inspected according to the appropriate standard.
	4.9. Excess materials are removed from the work area (where applicable)
5. Dismantle structures and plant.	5.1. Associated plant is dismantled according to procedures and the appropriate standard.
	5.2. Work is conducted safely at heights including safe and effective use of safety equipment.
	5.3. Stability of associated plant is maintained during dismantling according to procedures.
	5.4. Rigging equipment, associated equipment, safety equipment and associated plant are inspected for damage and defects
	5.5. All defective rigging equipment, associated equipment, associated plant and safety equipment are isolated reported and recorded according to procedures.
	5.6. Rigging equipment and associated equipment are stored according to procedures and the appropriate standard.
	5.7. Hazard prevention/control measures are removed (where appropriate)

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Required skills for this unit are:

- ability to calculate Safe Working Load (SWL) and Working Load Limit (WLL)
- ability to erect and dismantle, level, plumb and stabilise associated plant
- ability to work safely at heights including the correct application of safety equipment.
- accurate interpretation of structural charts and structural plans (Site information)
- applying methods for making temporary connections of ropes using fibre and synthetic types
- correct application and use of all rigging and associated equipment
- risk assessment and hazard control strategies
- interpersonal and communication skills at a level sufficient to site/workplace requirements. This includes the relevant communication methods and equipment.
- verify problems and equipment faults and demonstrate appropriate response.

Required knowledge

Required knowledge for this unit is:

- appropriate mathematical procedures for estimation and measurement of loads
- ability to interpret manufacturer's specifications for all plant and equipment use in rigging operations
- knowledge of principles relating to all plant, equipment and structural stability
- knowledge of the types and functions of rigging, safety and associated equipment including an understanding of their limitations
- organisational and workplace standards, requirements, policies and procedures for rigging
- understanding of the hierarchy of hazard identification and control
- relevant Commonwealth, state or territory and local government OHS legislation, standards and codes of practice for undertaking rigging activities
- understanding of inspection and maintenance requirements of a wide range of appropriate plant and equipment in line with Australian Standards or manufacturer's specifications
- estimation of ground bearing pressures of the full range of soil types and associated ground conditions for setting up plant and equipment.

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Successful assessment of this unit meets the competency requirement of the National Standard for licensing Persons Performing High Risk Work.

State/Territory OHS regulators have mandated the use of Assessment Instruments and Instructions for Assessment for this unit which have been endorsed by the national body responsible for OHS matters

Critical aspects for assessment and evidence required to demonstrate competency in this unit

A person who demonstrates competency in this unit must be able to provide evidence of the ability to:

- comply with OHS licensing legislation.
- effectively communicate and work safely with others in the work area.
- effectively conduct risk assessment and management procedures.
- effectively complete the following tasks:
  - rig a span rope, or
  - rig a flying fox, and
  - install a swinging stage, or
  - install a bosuns chair, and
  - set up a gin pole and conduct a lift with a powered winch, and
  - erect and dismantle a hung or suspended scaffold

NB: All specifications for these performance tasks are detailed in the endorsed assessment instrument.

- effectively demonstrate the following knots, bends and hitches:
  - Alpine hitch
  - Bosun chair hitch
  - Prusik hitch
  - Figure eight
- effectively conduct pre and post operational

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	checks of advanced rigging equipment.
Context of and specific resources for assessment	Assessment of the safe and effective application of knowledge and skill to workplace tasks (performance) must be undertaken using the endorsed Assessment Instrument. Assessment of performance must be undertaken either in the workplace or in a realistically simulated workplace setting. Assessors must ensure that the assessment in the workplace is organised to ensure that all the required equipment and materials and a suitable working area is made available to suit the assessment and the workplace. Assessment must occur under standard and authorised work practices, safety requirements and environmental constraints. Assessment is to comply with relevant appropriate standard requirements. Applicants must have access to: • personal protective equipment (PPE) for the purpose of the Performance Assessment • appropriate safety equipment is safe condition • Appropriate rigging equipment, associated equipment associated plant in safe condition as described in the endorsed assessment instrument • communication equipment (e.g. radios) where applicable • appropriate materials as required for safe erection and dismantling of performance tasks • appropriate materials for conducting fibre rope knots, bends and hitches.
Method of assessment	Assessment must be conducted using the endorsed Assessment Instruments. These Instruments provide advice on their application. The use of **'simulators'** in the assessment of this unit of competency is **not acceptable**. Assessment may be in conjunction with the assessment of other units of competency. Assessment methods must confirm consistency

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	and accuracy of performance together with application of underpinning knowledge. Assessment must confirm a reasonable inference that competency is not only able to be satisfied under the particular circumstance, but is able to be transferred to other circumstances.
Guidance information for assessment	Further information about endorsed Assessment Instruments may be obtained from state/territory OHS regulators.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Hazards may include but are not limited to:	• ground stability (e.g. ground condition, recently filled trenches, slopes) • overhead hazards (e.g. power lines, service pipes) (**NB**: Minimum clearance distance from powerlines or electrical equipment as determined by relevant state authority or electrical supply authority) • traffic (e.g. pedestrians, vehicles, other plant) • insufficient lighting • environmental conditions (e.g. wind, lightning, storms) • other specific hazards (e.g. dangerous materials).
Hazard control measures:	Refers to the systematic process of eliminating or reducing the risk to personnel and property through the application of controls. It includes the application of the hierarchy of control, the six-step preference of control measures to manage and control risk:

RANGE STATEMENT

	• elimination • substitution • isolation • engineering control measures • using safe work practices • personal protective equipment.
Appropriate standards may include:	• codes of practice • legislation • Australian Standards • manufacturer's specifications • industry standards (where applicable).
Site information may include but is not limited to:	• local conditions such as access and egress • work method statements • site-specific job safety analyses and other site specific documentation as required • task plans /schedules and structural plans.
Forces and loads may include but are not limited to:	• dead loads • live loads • static load • dynamic loads • wind loads.
Associated plant may include but is not limited to:	• gin poles • flying foxes • shear legs • cable ways • guyed derricks • structures, and • suspended scaffolds • fabricated hung scaffolds.
Appropriate personnel may include but not limited to:	• engineers • supervisors • colleagues • managers who are authorised to take responsibility for the workplace or operations.
Rigging equipment may include but is not limited to:	• scaffolds • elevated work platforms • stages • personnel box • cantilevered crane loading platforms • mast climbers

RANGE STATEMENT

	• safety screens and shutters
	• cranes including but not limited to:
	  • non-slewing cranes
	  • mobile slewing cranes
	  • vehicle loading cranes
	  • tower cranes
	  • self-erecting tower cranes
	  • portal boom cranes
	  • derrick cranes
	  • bridge and gantry.

Associated equipment may include but not limited to:	• all associated equipment at the basic and intermediate rigging level.
Procedures may include but not limited to:	• manufacturer's guidelines (instructions, specifications or checklists) • industry operating procedures, relevant codes of practice • workplace procedures (work instructions, operating procedures, checklists).
Safety equipment may include but not limited to:	• safety harness • energy absorber • lanyard • inertia reel • safety nets • static lines.
Communication methods may include but are not limited to:	• verbal and non-verbal language • written instructions • signage • hand signals • listening • questioning to confirm understanding • appropriate worksite protocol. **NB**: Mobile phones are not to be used for signalling purposes during the rigging process.
Appropriate personnel may include but are not limited to:	• other riggers • doggers • crane operators.
Communication equipment may include but is not limited to:	• fixed channel two-way radios.

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Hazard prevention/control measures may include but are not limited to:	• safety tags on electrical switches/isolators • powerlines are insulated • safety observer used inside exclusion zone • power disconnected • traffic barricades and control • pedestrian barricades • trench covers • movement of obstructions • personal protective equipment • adequate illumination.
Ground suitability may include but not limited to:	• rough uneven ground • backfilled ground • soft soils • hard compacted soil • rock • bitumen • concrete • suspended concrete floors • building roofs • landings • ground bearing pressure.
Temporary connections may include but not limited to:	• knots • bends • hitches • whipping.
Flexible Steel Wire Rope (***FSWR***) ***includes***:	• identification, uses and connections. May include termination for: • static lines • guys • purchase systems • lashing • cranes • hoist and winch ropes.

Unit Sector(s)

Unit sector Construction

Co-requisite units

Co-requisite units Nil

Functional area

Functional area