Australian Government

Department of Education, Employment and Workplace Relations

# UEPOPS213A Perform Intermediate Rigging Work

**Release: 1**

## UEPOPS213A Perform Intermediate Rigging Work

# Modification History

Not Applicable

# Unit Descriptor

- **Unit Descriptor** **1**)

  This unit deals with the skills and knowledge required to undertake rigging work associated with, but not limited to, movement of plant and equipment, all hoists, rigging of cranes, dual lifts, demolition.

# Application of the Unit

- **Application of the Unit** **3**)

  This unit is intended to augment formally acquired competencies. It is suitable for employment-based programs under an approved contract of training.

**License to practise** **3.1**)

The skills and knowledge described in this unit may require a licence to practise in the workplace in some States or Territories. There may also be additional assessment activities required by regulatory authorities for the issue of the licence to practise.

Practice in this unit is subject to regulations directly related to Occupational Health and Safety and where applicable contracts of training such as apprenticeships and the like.

# Licensing/Regulatory Information

Not Applicable

# Pre-Requisites

- **Prerequisite Unit(s)** **2)**

**Competencies** **2.1)**

Competency in this unit shall be assessed only after the following competencies have been acquired.

UEPOPS212A Perform Basic Rigging Work

# Employability Skills Information

Refer to the Evidence Guide

# Elements and Performance Criteria Pre-Content

**5)** Elements describe the essential outcomes of a competency standard unit.

Performance Criteria describe the required performance needed to demonstrate achievement of the Element. Assessment of performance is to be consistent with the Evidence Guide.

# Elements and Performance Criteria

| • ELEMENT | • PERFORMANCE CRITERIA |
|---|---|
| 1 Plan and prepare for the work | 1.1 Work requirements are identified from request/work orders or equivalent and clarified/confirmed with appropriate parties or by site inspection |
| | 1.2 Occupational Health and Safety standards, statutory requirements, relevant Australian standards, codes of practice, manufacturers' specifications, environmental requirements and enterprise procedures are identified, applied and monitored throughout the work procedure |
| | 1.3 Resources required to satisfy the work plan are identified, obtained and inspected for compliance with the job specifications |
| | 1.4 Relevant plans, drawings and texts are selected |

| • ELEMENT | • PERFORMANCE CRITERIA | |
|---|---|---|
| | | and interpreted in accordance with the work plan |
| | 1.5 | Correct size, type and quantity of materials/components are determined, obtained and inspected for compliance with the job specifications |
| | 1.6 | Work is planned in detail including sequencing and prioritising and considerations made where appropriate for the maintenance of plant security and capacity in accordance with system/site requirements. |
| | 1.7 | Co-ordination requirements, including requests for isolations where appropriate, are resolved with others involved, affected or required by the work |
| | 1.8 | Potential hazards are identified and prevention and/or control measures are selected in accordance with the work plan and site procedures |
| | 1.9 | Work area is prepared in accordance with work requirements and site procedures |
| 2 Perform intermediate rigging operations | 2.1 | Load weight calculated/determined and confirmed in accordance with the work plan |
| | 2.2 | Appropriate lifting or pulling devices for the movement of load are assembled or erected in accordance with the work plan |
| | 2.3 | Loads are connected to movement device using appropriate techniques and load connection equipment in accordance with the work plan |
| | 2.4 | Loads are lifted/moved in accordance with appropriate methods, techniques, planned hazard prevention and control measures, and manufacturer's recommendations and/or specifications |
| | 2.5 | Communications and signal methods appropriate to the work are selected and used in accordance with relevant Australian standards |
| | 2.6 | Load is directed to required position using |

| • ELEMENT | • PERFORMANCE CRITERIA | |
|---|---|---|
| | | appropriate signals in accordance with Australian standards |
| | 2.7 | Load is lowered to required position and fixed/anchored in position using appropriate methods in accordance with manufacturer's specifications and the work plan |
| | 2.8 | Load shifting equipment is dismantled, removed and inspected for wear in accordance with accepted codes of practice and the work plan |
| 3 Complete the work | 3.1 | Work is completed and appropriate personnel notified in accordance with site/enterprise requirements |
| | 3.2 | Work area is cleared of waste, cleaned, restored and secured in accordance with site/enterprise procedures |
| | 3.3 | Plant, tools and equipment are maintained and stored in accordance with site/enterprise procedures |
| | 3.4 | Work completion details are finalised in accordance with site/enterprise procedures |

# Required Skills and Knowledge

- **REQUIRED SKILLS AND KNOWLEDGE**

**6**) This describes the essential skills and knowledge and their level, required for this unit.

Evidence shall show that knowledge has been acquired of performing intermediate rigging work.

The extent of the Essential Knowledge and Associated Skills required follows:

Evidence shall show that knowledge has been acquired for safe working practices of:

- Occupational Health and Safety standards
- Relevant standards, legislative requirements and codes of practice
- Various types of slings and chains and their

- **REQUIRED SKILLS AND KNOWLEDGE**

safe working load

- Slinging techniques
- Lifting gear/equipment
- Hazard identification and control techniques
- Load calculation techniques
- Steel fixing techniques
- Various cranes and hoists and their limitations
- Various bolts and their tightening procedures
- Safety equipment
- Signalling methods
- Demolition rigging techniques;
  Communication principles

Specific skills needed to achieve the Performance Criteria:

- Apply Occupational Health and Safety standards
- Apply relevant standards, legislative requirements and codes of practice
- Interpret and apply plans and procedures
- Select and assemble lifting gear
- Sling and direct loads
- Calculate load weights
- Identify and apply hazard control measures
- Use hand tools
- Bolt and fix steel work
- Work at heights
- Interpret and apply appropriate signalling techniques
- Apply anchoring techniques
- Carry out work completion details
- Apply intermediate rigging techniques
- Apply demolition rigging techniques
- Communicate effectively.

# Evidence Guide

- **EVIDENCE GUIDE**

**8**) This provides essential advice for assessment of the competency standard unit and must be read in conjunction with the Performance Criteria and the Range Statement of the competency standard unit and the Training Package Assessment Guidelines.

The Evidence Guide forms an integral part of this competency standard unit and shall be used in conjunction with all components parts of this unit and, performed in accordance with the Assessment Guidelines of this Training Package.

**Overview of Assessment**

**8**.**1**)

Longitudinal competency development approaches to assessment, such as Profiling, require data to be reliably gathered in a form that can be consistently interpreted over time. This approach is best utilised in Apprenticeship programs and reduces assessment intervention. It is the Industry's preferred model for apprenticeships. However, where summative (or final) assessment is used it is to include the application of the competency in the normal work environment or, at a minimum, the application of the competency in a realistically simulated work environment. It is recognised that, in some circumstances, assessment in part or full can occur outside the workplace. However, it must be in accord with Industry and, Regulatory policy in this regard.

Methods chosen for a particular assessment will be influenced by various factors. These include the extent of the assessment, the most effective locations for the assessment activities to take place, access to physical resources, additional safety measures that may be required and the critical nature of the competencies being assessed.

The critical safety nature of working with electricity, electrical equipment, gas or any other hazardous substance/material carries risk in deeming a person competent. Hence, sources of evidence need to be 'rich' in nature so as to minimise error in judgment.

Activities associated with normal every day work have a bearing on the decision as to how much and how detailed the data gathered will contribute to its 'richness'. Some skills are more critical to safety and operational requirements while the same skills may be more or less frequently practised. These points are raised for the assessors to consider when choosing an assessment method and developing assessment instruments. Sample assessment instruments are included for Assessors in

the Assessment Guidelines of this Training Package.

**Critical aspects of evidence required to demonstrate competency in this unit**

**8.2**)

Before the critical aspects of evidence are considered all prerequisites shall be met.

Evidence for competence in this unit shall be considered holistically. Each Element and associated Performance Criteria shall be demonstrated on at least two occasions in accordance with the "Assessment Guidelines - UEP06". Evidence shall also comprise:

- A representative body of Performance Criteria demonstrated within the timeframes typically expected of the discipline, work function and industrial environment. In particular this shall incorporate evidence that shows a candidate is able to:

- Implement Occupational Health and Safety workplace procedures and practices including the use of risk control measures as specified in the Performance Criteria and Range Statement
- Apply sustainable energy principles and practices as specified in the Performance Criteria and Range Statement
- Demonstrate an understanding of the Essential Knowledge and Associated Skills as described in 6) Essential Knowledge and Associated Skills of this unit
- Demonstrate an appropriate level of skills enabling employment
- Conduct work observing the relevant Anti Discrimination legislation, regulations, polices and workplace procedures

- Demonstrated performance across a representative range of contexts from the prescribed items below:
  - Knowledge and application of relevant sections of: Occupational, health and safety legislation, Statutory legislation; Enterprise/site safety procedures, Enterprise/site emergency procedures
  - Selecting and assembling lifting gear
  - Slinging and directing loads
  - Calculating load weights
  - Applying anchoring techniques
  - Applying intermediate rigging techniques
  - Applying demolition rigging techniques
  - Dealing with an unplanned event by drawing on Essential Knowledge and Skills to provide appropriate solutions incorporated in the holistic assessment with the above listed items.

**Context of and specific resources for assessment**

**8.3)**

This unit should be assessed as it relates to normal work practice using procedures, information and resources typical of a workplace. This should include:

- OHS policy and work procedures and instructions.
- Suitable work environment, facilities, equipment and materials to undertake actual work as prescribed by this competency standard unit.

Competency Standards should be assessed in the workplace or simulated workplace and under the normal range of workplace

conditions.

Assessment of this unit will be supported with documentary evidence, by means of endorsement stating type and application of work.

In addition to the resources listed above in Context of assessment', evidence should show competency working in confined spaces, with different structural/construction types and method and in a variety of environments.

**Method of assessment**

**8.4**)

This unit shall be assessed by methods given in Volume 1, Part 3 Assessment Guidelines.

Note:
Competent performance with inherent safe working practices is expected in the Industry to which this competency standard unit applies. This requires that the specified Essential Knowledge and Associated Skills are assessed in a structured environment which is primarily intended for learning/assessment and incorporates all necessary equipment and facilities for learners to develop and demonstrate the Essential Knowledge and Skills described in this unit.

**Concurrent assessment and relationship with other units**

**8.5**)

There are no recommended concurrent assessments with this unit, however in some cases efficiencies may be gained in terms of learning and assessment effort being concurrently managed with allied competency standard units where listed.

UEPOPS302A Perform Advanced Rigging Work.

**Key competencies**

**8.6**)

Evidence that particular key competencies have been achieved within this competency standard unit is in the context of the following Performance Criteria of evidence. See Volume 2, Part 4 for an explanation of Key competencies and levels of this Training Package.

| **Key competencies** | **Example of Application** | **Performance Level** |
|---|---|---|
| How are ideas and information communicated within this | Refer to the following example of application:<br><br>Sharing information orally or in writing in simple English to confirm work requirements. | 1 |

| | | |
|---|---|---|
| competency? | Discussion may take place with supervisors or others in the work group. | |
| How can information be collected, analysed and organised? | Refer to the following example of application:<br><br>Accessing information required for operating the plant / equipment, including operating procedures and work instructions. | 1 |
| How are activities planned and organised? | Refer to the following example of application:<br><br>Planning the required activity, to include co-ordination and use of equipment, materials and tools to avoid backtracking and rework. | 1 |
| How is team work used within this competency? | Refer to the following example of application:<br><br>Teamwork may be applied in communicating the methods and procedures for the operation of the plant and equipment. | 1 |
| How are mathematical ideas and techniques used? | Refer to the following example of application:<br><br>Calculation of time to complete tasks, estimation of distances, levels, loads and material requirements. | 1 |
| How are problem solving skills applied? | Refer to the following example of application:<br><br>Follow established operational procedures. | 1 |

| | | |
|---|---|---|
| How is use of technology applied? | Refer to the following example of application:<br><br>Access, communicate, measure and record information with regard to operations and performance of plant and equipment. | 1 |

**Skills Enabling Employment**

**8.7**)

Evidence that competency in this unit incorporates skills enabling employment is in the context of the following performance. See Volume 2, Part 5 for definitions and an explanation of skills enabling employment.

| **Skills for Employment** | | **Example of Application** |
|---|---|---|
| 1 | Developing and using skills within a real workplace | Refer to the following example of application:<br><br>Completion of tasks within an acceptable timeframe and performance under supervision. |
| 2 | Learning to learn in the workplace | Refer to the following example of application:<br><br>Recalling of knowledge and development of practical skills. |
| 3 | Reflecting on the outcome and process of work task | Refer to the following example of application:<br><br>Recognition that performance of a work task meets the accepted standard. |
| 4 | Interacting and understanding of the context of the work task | Refer to the following example of application:<br><br>Completion of work tasks to meet the team's goals. |
| 5 | Planning and organising the meaningful work task | Refer to the following example of application:<br><br>Achievement of work tasks in a timely manner which contributes to the team's objectives. |
| 6 | Performing the work task in non-routine or contingent situations | Refer to the following example of application:<br><br>Complete the assigned work task to meet timelines and to seek supervisor assistance as required. |

# Range Statement

- **RANGE STATEMENT**

**7**) This relates to the competency standard unit as a whole providing the range of contexts and conditions to which the Performance Criteria apply. It allows for different work environments and situations that will affect performance.

Correct size of equipment may be determined by calculating safe working loads using load charts and standard calculation rules.

Potential hazards may include overhead services such as steam, gas, water, telephone and power cables, uneven or unstable ground, trees, underground services, buildings and structures, other personnel and environmental influences such as lighting, noise, temperature and wind.

Tools and equipment may include spanners, hammers, pinch bars, clamps, pulleys, chain blocks, and pull lifts, winches, jacks, skids, rollers, cradle timbers, chocks and wedges, packers, fish plates and bolts, feeler gauges, turfers and turn buckles.

Lifting equipment may include chains, spreader beams, ropes, wire ropes, shackles and eye bolts.

Appropriate signals and communication methods may include verbal, hand signals, whistles, hooters, two way radio and lights (all to the relevant Australian standard).

Resources may include cranes, hoists, drawings/plans and personnel.

Fixing and anchoring methods may include bolting, wedging, riveting and tying.

Intermediate rigging work may include movement of plant and equipment, steel erection, particular hoists, placement of pre-cast concrete, safety nets and static lines, mast climbers, perimeter safety screens and shutters, cantilevered crane loading platforms, slinging and directing of loads, rigging of cranes, conveyors, dredges and excavators, tilt slabs, demotion and dual lifts.

Hazards which may affect demolition may include corroded members, impact forces, undermined foundations, hidden voids, unidentified services, hazardous substances and unstable structures.

Work completion details may include plant and maintenance records, job cards, check sheets, updates and reporting and/or documenting equipment defects.

Generic terms are used throughout this Training Package for vocational standard shall be regarded as part of the Range Statement in which competency is demonstrated. The definition of these and other terms are given in Volume 2, Part 1

# Unit Sector(s)

Not Applicable

# Literacy and numeracy skills

**Literacy and numeracy skills** **2.2**)

Participants are best equipped to achieve this unit if they have reading, writing and numeracy skills indicated by the following scales. Description of each scale is given in Volume 2, Part 3 Literacy and Numeracy

Reading 2 Writing 2 Numeracy 2

# Competency Field

**Competency Field** **4**)

Operations.