



Australian Government

Department of Education, Employment and Workplace Relations

RIIHAN207A Operate personnel and materials hoists

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit covers the operation of personnel and material hoists in the resources and infrastructure industries. It includes planning and preparing for work, preparing personnel/material hoists, operating personnel/material hoists and performing post-operation activities. Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and industry sectors. Relevant information must be sourced prior to application of the unit.

Application of the Unit

This unit is appropriate for those working in an operational role at worksites within:

- Civil construction
- Coal mining
- Drilling
- Extractive industries
- Metalliferous mining

Licensing/Regulatory Information

Refer to Unit Descriptor.

Pre-Requisites

Not applicable.

Employability Skills Information

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.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan and prepare for work	1.1. Access, interpret and apply compliance documentation relevant to the work activity 1.2. Receive, interpret and clarify work instructions including shift changeover details, quality requirements, plans and specifications 1.3. Apply safety requirements throughout activity in accordance with site procedures and relevant legislation 1.4. Arrange signals and communication with other workers including barricade requirements 1.5. Identify, address and report potential hazards and environmental issues 1.6. Identify materials, equipment and tools required to complete work and check these for serviceability. Faults are reported 1.7. Conduct equipment pre-start checks in accordance with site procedures
2. Prepare personnel/material hoist	2.1. Inspect personnel cage/platform structure and SWL plate 2.2. Assess weather conditions for safe hoist operation 2.3. Conduct test run through full height of travel without a load, check mast and wall bolting 2.4. Check all safety systems including braking system 2.5. If required, ensure that attachment is lowered to ground safely and does not crush feet of personnel 2.6. If required, check personnel's lanyards/harnesses and anchors comply with relevant Australian standards and are securely fitted to railing/anchor points and personnel harness attachment points
3. Operate personnel/material hoist	3.1. Lift personnel cage/platform and test all equipment in range positions, operating controls smoothly and carefully, considering working clearances and potential crushing risks to workers

	3.2. Travel personnel cage/platform as low as possible and operating in low gear and low speed, ensuring maximum stability at all times 3.3. Remain seated at controls whenever workers are on/in attachment and in the raised position 3.4. Communicate with personnel cage/platform using recommended signals
4. Perform post-operation activities	4.1. Empty and park attachment in designated area 4.2. Clean, remove, inspect and store attachments and equipment correctly to standards required 4.3. Clean and leave attachment parked on level, secure, and safe position for use by next operator 4.4. Report location and state/condition of personnel cage/platform before going off shift 4.5. Complete all required records and documents

Required Skills and Knowledge

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

Required skills

Specific skills are required to achieve the Performance Criteria of this unit, particularly for its application in the various circumstances in which this unit may be used. This includes the ability to carry out the following as required to operate personnel and material hoists:

- apply legislative, organisation and site requirements and procedures for the operation of personnel and material hoists
- access, interpret and apply technical and safety information
- communicate and coordinate activities with others
- keep plant and equipment records
- apply diagnostic/faultfinding techniques
- comply with environmental requirements
- work at heights
- apply isolation procedures
- read and appreciate ground conditions
- conduct work area risk assessment techniques

Required knowledge

Specific knowledge is required to achieve the Performance Criteria of this unit, particularly for its application in the various circumstances in which this unit may be used. This includes knowledge of the following as required to operate personnel and material hoists:

- communication procedures and hand signals
- emergency shutdown procedures
- worksite inspections
- workplace and equipment safety requirements
- quality requirements
- plant, tools and equipment types, characteristics, uses and limitations
- hoist operation techniques
- personnel and material hoist equipment
- processes for the calculation of load mass requirements
- materials safety data sheet
- plans, drawings and specifications
- materials handling, storage and environmentally friendly waste management
- relevant acts, regulations and code of practice
- designs and functions of hoisting equipment
- signalling methods and communications
- fault finding and identification

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| <ul style="list-style-type: none">• working at heights procedures• emergency procedures (hoist specific)• JSA's/safe work method statements |
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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	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	The evidence required to demonstrate competency in this unit must be relevant to worksite operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit and include evidence of the following: • knowledge of the requirements, procedures and instructions for the operation of personnel and material hoists • implementation of requirements, procedures and techniques for the safe, effective and efficient operation of personnel and material hoists • working with others to undertake and complete the operation of personnel and material hoists that meet all of the required outcomes • consistent timely operation of personnel and material hoists that safely, effectively and efficiently meet the required outcomes
Context of and specific resources for assessment	• This unit must be assessed in the context of the work environment. Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated environment provided it is realistic and sufficiently rigorous to cover all aspects of workplace performance, including task skills, task management skills, contingency management skills and job role environment skills. • Assessment of this competency requires typical resources normally used in a resources and infrastructure sector environment. Selection and use of resources for particular worksites may differ due to the site circumstances. • The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.

	• Customisation of assessment and delivery environment should sensitively accommodate cultural diversity. • Aboriginal people and other people from a non English speaking background may have second language issues. • Where applicable, physical resources should include equipment modified for people with disabilities. Access must be provided to appropriate learning and/or assessment support when required.
Method of assessment	This unit may be assessed in a holistic way with other units of competency. The assessment strategy for this unit must verify required knowledge and skill and practical application using more than one of the following assessment methods: • written and/or oral assessment of the candidate's required knowledge • observed, documented and/or first hand testimonial evidence of the candidate's: • implementation of appropriate requirements, procedures and techniques for the safe, effective and efficient achievement of required outcomes • consistent achievement of required outcomes • first hand testimonial evidence of the candidate's: • working with others to undertake and complete the operation of personnel and material hoists
Guidance information for assessment	Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.

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.

Compliance documentation may include:	- legislative, organisation and site requirements and procedures including Acts and regulations dealing with: - worksite safety and health - mine inspection - OHS - explosives - environment - manufacturer's guidelines and specifications - Australian standards - Employment and workplace relations legislation - Equal Employment Opportunity and Disability Discrimination legislation
Safety requirements may include:	- fall restraint devices, lanyards, anchors, harnesses - safety glasses - hearing protection - gloves - cap lamps
Signals and communications could be hand, verbal or lights and may include:	- raising - lowering - stopping - slewing left - slewing right - moving forwards - moving backwards - creeping and 'dead' slow travel and movement speeds - ensuring all persons are clear on operations before starting job - discussion of job dangers/hazards
Potential hazards may include:	- unbalancing of raised attachment and load or bucket by rough and uneven ground - crushing of personnel against roofs, walls or

	- fixed objects - poor visibility - crushing of hands and fingers between top rail/ bucket lip and walls if personnel wrap their hand/ body parts over top rail - accidentally tipping personnel out by using tilt lever instead of lift - not securing attachment to bucket/ hitching system (QDS/ hook or similar) correctly can lead to crushing of personnel by platform as it slides forward and falls to ground on sudden stopping or tilting - personnel falling from attachment or bucket by over-reaching or standing on rails or bucket top edge incorrectly - incorrect procedures used at height - equipment falling or being knocked from attachment striking workers - personnel travelling in attachment at speeds above 10 KPH cannot secure themselves in a sudden braking situation and will be thrown out of basket or bucket if not wearing a lanyard/harness or restraint system - risk of being run over - ripping vent bag or causing damage to services with raised attachment - striking walls and other fixed objects due to dimensions of platform or attachment - inaccurate operation or lack of skills for attachment dimensions
Environmental issues may include:	- drainage - dust - emissions - flora and fauna - hazardous chemicals - noise - run-off - spills - waste management and disposal - water quality
Equipment may include:	- loader - personnel cage/platform/attachment - kibble - integrated tool carrier

	• crane • jumbo • harnesses/belts and lanyards for personnel in cage/ platform or attachment • working tools and equipment • barricades and signs • load restraint devices, tie-downs or straps
Inspections of personnel cage/platform may include:	• railings • floor • kick or toe boards • mesh infill in floor structure and sides • securing pins • gate/ door/ access/ chain damage • clear platform floor • even equipment stacking • safe working loads • general overall structural damage and condition considering protection integrity (cracks, welds, damage to main structural components)
Travel personnel cage/platform may include:	• no riders on attachment between jobs, levels or on declines • travelling at low speed • travelling at low height • travelling considering prevailing conditions

Unit Sector(s)

Load Handling

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.