Australian Government

Department of Education, Employment and Workplace Relations

RIIHAN309A Conduct telescopic materials handler operations

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit covers conducting telescopic materials handler operations in the resources and infrastructure industries. It includes planning and preparing; conducting machine pre-operational checks; operating the telescopic materials handler; attaching, securing, lifting, carrying and placing materials; selecting, removing and fitting attachments; relocating the telescopic materials handler; carrying out machine operator maintenance; and cleaning up. 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.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan and prepare	1.1. Access, interpret and apply ***compliance documentation*** and ***safety requirements*** relevant to the work activity 1.2. Work instructions, including plans, and operational details are obtained, confirmed and applied to the allotted task 1.3. Signage requirements are identified and obtained from the project traffic management plan and implemented 1.4. Plant, ***tools and equipment*** selected to carry out tasks are consistent with the requirements of the job, and are checked for serviceability and any faults are rectified or reported 1.5. ***Environmental protection requirements*** are identified from the project environmental management plan, and are confirmed and applied
2. Conduct machine pre-operational checks	2.1. Pre-start, start-up, park-up and shutdown procedures are carried out 2.2. Telescopic materials handler controls , brakes, attachments and other implements are checked for manoeuvrability, serviceability and faults are rectified or reported
3. Operate telescopic materials handler	3.1. Site ***hazards*** associated with ***telescopic materials handler*** operations are identified and safe operating techniques are used to minimise risk 3.2. Operating techniques for telescopic materials handler are identified and applied to achieve optimum output while achieving specified tolerances 3.3. Telescopic materials handler is operated to work instructions in accordance with company operating procedures
4. Attach, secure, lift, carry and place materials	4.1. ***Communication*** practices associated with transportation and lifting of materials are conducted and continued between parties 4.2. Weight of load is established 4.3. Slings and lifting gear are selected,

	attached and used in accordance with ***safe working load requirements*** 4.4. Machinery is positioned ensuring stability and located to effectively shift materials according to job specifications 4.5. Load is shifted safely and effectively 4.6. Load is moved in accordance with conventional hand and audible signals
5. Select, remove and fit attachments	5.1. Attachment is selected for the task 5.2. Attachment is moved and fitted 5.3. Attachment is tested to ensure correct fitting and operation 5.4. Attachment is used in accordance with manufacturer's recommendations and design limits 5.5. Removed attachments are cleaned and stored in designated locations
6. Relocate the telescopic materials handler	6.1. Telescopic materials handler is moved safely between worksites, observing relevant codes and traffic management requirements 6.2. Telescopic materials handler is prepared for relocation in accordance with the manufacturer's specifications
7. Carry out machine operator maintenance	7.1. Telescopic materials handler is ***safely parked***, prepared for maintenance and shut down 7.2. Inspection and fault finding are conducted 7.3. Defective parts are removed and replaced safely and effectively 7.4. Regular programmed ***operator maintenance*** tasks are carried out
8. Clean up	8.1. Work area is cleared and materials disposed of or recycled 8.2. Plant, tools and equipment are cleaned, checked, maintained and stored

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 conduct telescopic materials handler operations:

- apply legislative, organisation and site requirements and procedures for conducting telescopic materials handler operations
- apply operational safety requirements
- access interpret and apply technical information
- calculate volume, weights
- maintain equipment records
- apply fault finding techniques
- comply with environmental requirements
- dispose of environmentally sensitive fluids and materials

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 conduct telescopic materials handler operations:

- telescopic materials handler types, characteristics, technical capabilities and limitations
- site and equipment safety requirements
- techniques for calculating safe working loads
- telescopic materials handler and attachment operating techniques related to essential tasks
- processes for interpreting drawings and sketches
- operational, maintenance and basic diagnostic procedures
- site isolation and traffic control responsibilities and authorities
- materials safety data sheet and materials handling methods
- project quality requirements
- methods of changing machine attachments
- safe operating techniques in all terrain
- basic earthworks calculations
- levelling techniques
- JSA's/safe work method statement

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 conducting telescopic materials handler operations • implementation of requirements, procedures and techniques for the safe, effective and efficient conduct of telescopic materials handler operations • working with others to undertake and conduct telescopic materials handler operations that meets all of the required outcomes • consistent timely conduct of materials handler operations that safely, effectively and efficiently meets 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 requirement, 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 conduct of telescopic materials handler operations

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 • manufacturer's guidelines and specifications • Australian standards • environmental requirements including those outlined in organisational/project environmental management plan, waste management, water quality protection, noise, vibration, dust and clean-up management • quality requirements including dimensions, tolerances, standards of work and material standards as detailed in the project drawings, specifications and project documentation to meet client satisfaction • graphical instructions, signage, work schedules/plans/specifications, work bulletins, charts and hand drawings, memos, maps, materials safety data sheet (MSDS) and diagrams or sketches • safe work procedures related to the operation of telescopic materials handlers on construction sites • regulatory/legislative requirements pertaining to telescopic materials handler operations and the environment • instructions issued by authorised organisational or external personnel • Employment and workplace relations legislation • Equal Employment Opportunity and Disability Discrimination legislation
Safety requirements may include:	• State or Territory legislation and regulations, organisational safety policies and procedures, and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, use of First Aid equipment,

	hazard control and hazardous materials and substances • personal protective equipment, which is to include that prescribed under legislation, regulation and workplace policies and practices • safe operating procedures, which are to include but not be limited to recognising and preventing hazards associated with underground and overhead services, other machines, personnel, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public • emergency procedures include but may not be limited to emergency shutdown and stopping, extinguishing fires, organisational First Aid requirements and evacuation
Tools and equipment may include:	• tools and equipment are to include hand tools, lifting equipment including chains and slings and maintenance equipment relevant to the telescopic materials handler
Attachments may include:	• various types of buckets, various types of material handling arms (jibs), various types of forklift attachments and carriages and lifting hooks
Hazards may include:	• but not be limited to uneven/unstable terrain, trees, fires, overhead and underground services, bridges, buildings, excavations, traffic, embankments, cuttings, structures and hazardous materials
Telescopic materials handler may include:	• (sometimes referred to as a 'telehandler') is a self-propelled wheeled machine with a hydraulically operated telescopic boom assembly. It is a versatile machine due to its manoeuvring capabilities, reach height and the varying types of attachments that may be fitted generally via the integral quick coupler. On some equipment there may also be outriggers fitted • tasks are to include lifting and carrying materials and may include forklift activities and working with front bucket attachments
Communication may include:	• communications are to include but not be limited to verbal instructions and fault reporting and may include two way radio, hand signals, mobile phone, site specific instructions,

	written instructions or instructions related to job/task • on site meeting processes may include notification/ scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Safe working load requirements may include:	• equipment load charts are provided for each attachment fitted to telescopic materials handlers. For each attachment utilised correct understanding and use of the applicable load chart is mandatory
Safely parked includes:	• ensuring access ways are clear, equipment/ machinery is away from overhangs and refuelling sites, safe distance from excavations, and secured from unauthorised access or movement
Operator maintenance may include:	• cleaning, authorised servicing and the monitoring, recording and reporting of faults. It may also include the conduct of authorised minor replacements and the provision of assistance to maintenance personnel during maintenance and repair activities

Unit Sector(s)

Load Handling

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.