



Australian Government

Department of Education, Employment and Workplace Relations

MSAPMSUP205A Transfer loads

Revision Number: 1

MSAPMSUP205A Transfer loads

Modification History

Not applicable.

Unit Descriptor

Unit descriptor

This competency covers the movement of loads using cranes and gantries. It applies to all sectors of the industry. Licensing or certification may be required by local Worksafe or other regulatory authority.

Application of the Unit

Application of this unit

This competency applies to operators who move loads using cranes and gantries. The key factors are applying knowledge of the nature of the load to be shifted, safety precautions required and the capacity of load shifting equipment and relevant support structures. This competency is typically performed by operators working either independently or as part of a work team. It includes:

- planning the correct method to move the goods
- safely securing the materials/goods to be shifted
- ensuring that the movement pathway is clear of obstacles and personnel
- moving the goods safely without damage to the goods, personnel or equipment.

This unit does not cover the use of a forklift truck - see *TDTD1097 Operate a forklift*

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisites

This unit has **no** prerequisites, however appropriate licences may be required.

Employability Skills Information

Employability Skills

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

ELEMENT	PERFORMANCE CRITERIA
Elements describe the essential outcomes of a unit of competency	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 ELEMENT	PERFORMANCE CRITERIA Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.
1. Plan operation.	1.1 Correctly identify products, goods or material to be relocated. 1.2 Identify load characteristics including mass, volume, shape, balance and dimensions. 1.3 Identify most efficient and appropriate piece of equipment to be used. 1.4 Estimate points of balance. 1.5 Consider effect of moving contents which may be loose, liquid, dangerous or hazardous. 1.6 Determine location of storage. 1.7 Carry out risk analysis for job. 1.8 Complete required hazard controls. 1.9 Identify most efficient and appropriate movement route.
2. Prepare for lift.	2.1 Select appropriate lifting equipment 2.2 Check and test lifting gear as required 2.3 Calculate safe working load (SWL) or working load limit (WLL). 2.4 Clarify any non-standard requirements. 2.5 Report and replace any unsafe. 2.6 Secure movable/loose parts of load. 2.7 Attach load suitable for transfer.
3. Transfer load.	3.1 Prepare load destination to accept load. 3.2 Move load safely to required destination in accordance with planned procedure. 3.3 Use standard communication signals to coordinate safe movement of the load. 3.4 Remove equipment/gear/accessories safely from load. 3.5 Inspect equipment/gear/accessories for wear and damage, clean, maintain and store, and record usage and condition. 3.6 Complete site/job records.
4. Respond to routine	4.1 Monitor transfer frequently and critically throughout

ELEMENT	PERFORMANCE CRITERIA
ELEMENT	Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.
problems.	load shifting using measured/indicated data and senses (eg sight, hearing) as appropriate. 4.2 Recognise transfer problems. 4.3 Identify and take action on causes of routine faults. 4.4 Log problems as required. 4.5 Identify non-routine process and quality problems and take appropriate action.

Required Skills and Knowledge

This describes the essential skills and knowledge and their level required for this unit. Knowledge of the materials handling processes and requirements sufficient to recognise non-standard situations and then determine appropriate action which is consistent with operating guidelines. Knowledge of organisation procedures and relevant regulatory requirements along with the ability to implement them within appropriate time constraints and work standards.

Competence includes the ability for the practical completion of the job to:

- apply and/or describe:
- appropriate points for locations of slings
- estimation/ calculation of mass
- requirements for safe working loads (SWL) or working load limits (WLL)
- production workflow and requirements for load shifting.
- plan own work, including predicting consequences and identifying improvements
- identify when the operator is able to rectify problems, when assistance is required and who is the appropriate source for assistance
- identify and describe own role and role of others involved directly in the transferring loads with slings
- use PPE, safely handle products and materials, read relevant safety information and apply safety precautions appropriate to the task
- distinguish between causes of problems such as:
- balance points and behaviour of suspended loads
- incorrect use of equipment.

Language, literacy and numeracy requirements

This unit requires the ability to read and interpret typical product specifications, job sheets, procedures, material labels and safety information as provided to operators.

Writing is required to the level of completing workplace forms.

Numeracy is required to calculate loads and estimate balance points for slinging.

Evidence Guide

The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, required skills and knowledge, the Range Statement and the Assessment Guidelines for this Training Package.

Overview of assessment

A holistic approach should be taken to the assessment.

Assessors must be satisfied that the person can consistently perform the unit as a whole, as defined by the Elements, Performance Criteria and skills and knowledge.

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

It is essential that competence is demonstrated in the knowledge and skills defined in this unit. These may include the ability to:

- apply approved procedures

- take appropriate action to resolve problems or report problems to appropriate personnel.

Consistent performance should be demonstrated. For example, look to see that

- standards are met consistently
- upstream and downstream communication is timely and effective
- procedures and work instructions are read and interpreted correctly
- problems are identified and appropriate action is taken (ie the problem is fixed or reported)
- all safety procedures are followed.

Assessment method and context

Assessment will occur transferring industrial loads and will be undertaken in a work-like environment.

Competence in this unit may be assessed:

- on a processing plant, allowing for operation under all normal and a range of abnormal conditions
- in a situation allowing the generation of evidence of the ability to respond to problems
- by using a suitable simulation and/or a range of case studies/scenarios
- through a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment. Assessors need to be aware of any cultural issues that may affect responses to questions.

Assessment processes and techniques must be culturally appropriate and appropriate to the oracy, language and literacy capacity of the assessee and the work being performed.

Specific resources for assessment

This section should be read in conjunction with the Range Statement for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

Access must be provided to appropriate learning and/or assessment support when required.

Where applicable, physical resources should include equipment modified for people with disabilities.

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. Add any 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.

Where reference is made to industry codes of practice, and/or Australian/international standards, the latest version must be used.

Context

This competency applies to operators using load shifting equipment such as cranes and gantries, slings, ropes, shackles, eye bolts, spreader beams, equalising gear, clamps, pulley systems, winches, packs, rigging screws.

Procedures

All operations are performed in accordance with procedures.

Procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards. These may include:

- regulatory authority's licence or certification requirements
- original manufacturer instructions and guidelines for the safe use of the equipment
- relevant procedures relating to safe working practices prescribed for the equipment
- local OHS legislation and/or regulations
- site-specific instructions based on production requirements.

Tools and equipment

This competency includes use of equipment and tools such as:

- cranes and gantries
- slings, ropes, chains or nets
- block and tackle
- shackles, bolts or turnbuckles
- jemmy bars
- relevant personal protective equipment.

Hazards

Typical hazards include

- unpredicted movement of loads
- loose goods
- volatile or hazardous materials and products
- irregular shaped loads
- unlabelled goods, materials and products.

Hazard controls

Typical hazards controls include:

- obtaining a permit to work as required
- determining coordination requirements with other site personnel
- determining job method to include hazard prevention and controls,
- Australian standards for safety procedures, codes of practice and manufacturer specifications
- erecting barricades, warning signs, overhead protection to requirements.

Checking lifting gear

Checking lifting gear includes:

- checking pulleys and block and tackle for safe operation and load capacity.
- checking ropes, cable, net and chain systems before use for safe condition and conformity to specification.
- conducting testing of ropes, cable, net and chain system when required to ensure safe operating capacity
- checking sling material for conformity with equipment and safety requirements.

Problems

'Respond to routine problems' means 'apply known solutions to a limited range of predictable problems'. Typical process and product problems may include:

- variations in load capacities of various sling materials
- frayed or damaged slings
- bolt or shackle failure
- lifting equipment failure.

Variables

Key variables to be monitored include.

- type and condition of slings or ropes
- type of load to be shifted
- physical dimensions
- physical or area hazards
- type of lifting equipment
- weather conditions (if outdoors)
- lighting and visibility in the loading/unloading area.
-

Unit Sector(s)

Not applicable.