

Australian Government

Department of Education, Employment and Workplace Relations

# TLID4307B Shift loads using gantry equipment

Release: 1



### TLID4307B Shift loads using gantry equipment

### **Modification History**

Not applicable.

### **Unit Descriptor**

This unit involves the skills and knowledge required to shift loads using gantry equipment in accordance with workplace and regulatory requirements, including planning the work for the prevailing working conditions; using the controls and operating systems to manage the operation of the equipment; locating the load and identifying the load characteristics; safely moving the load; monitoring the controls; and stopping, shutting down and securing the equipment after the completion of operations.

# **Application of the Unit**

Work must be carried out in compliance with the relevant regulations and workplace requirements concerning the shifting of loads using gantry equipment. Work is performed under some supervision generally within a team environment. It involves the application of workplace procedures and regulatory requirements when shifting loads using gantry equipment as part of work activities in the stevedoring, transport, distribution and allied industries.

## **Licensing/Regulatory Information**

Not applicable.

## **Pre-Requisites**

Not applicable.

## **Employability Skills Information**

The required outcomes described in this unit of competency contain applicable facets of Employability Skills. The Employability Skills Summary of the qualification in which this competency is packaged will assist in identifying employability skill requirements.

### **Elements and Performance Criteria Pre-Content**

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**

#### **Elements and Performance Criteria**

#### Element

#### **Performance Criteria**

1.1

- Plan work for the 1 prevailing working conditions
- 1.3 Any occurrences in the work area that may affect the safety and efficiency of operations are reported to the appropriate personnel

1.2 Characteristics of the load are taken into account to ensure that, where applicable, appropriate attachments/gear are used to move the load

Traffic flow, weather and work area conditions are

operation to ensure no injury to people, or damage

constantly assessed and anticipated to allow safe

to equipment, loads or facilities

- 2 Use controls and operating 2.1 Equipment is prepared and appropriate attachments systems to manage the operation of the equipment
  - fitted (where applicable)
  - 2.2 Gear and operational levers are checked to ensure that they are in the neutral position prior to inserting ignition key and starting engine
  - 2.3 Engine is started in accordance with manufacturers guidelines to bring the engine to speed
  - 2.4 Instruments and gauges are monitored during start-up and operations to ensure that operation is within manufacturers specifications and workplace and regulatory safety requirements
  - 2.5 Engine power is managed for efficiency of equipment movement and economy of equipment operations
  - 2.6 Equipment operations are conducted within manufacturers specified torque range
  - 2.7 Any faults or damage to equipment are immediately reported to the appropriate personnel
  - 3.1 Load is located and identified according to instructions
  - 3.2 Requirements for Safe Working Load (SWL) and Working Load Limit (WLL) of the gantry

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equipment are identified

	3.3	Load weight and dimensions are checked to ensure they fall within the capacity of the equipment
	3.4	Loading and unloading plans are followed to ensure efficiency and safety of operations
	3.5	Characteristics of the load are taken into account to ensure that appropriate loading and unloading procedures are followed
	3.6	Hazardous cargo is identified and relevant procedures are taken into account when planning and conducting the work
Safely move load	4.1	Equipment is operated and positioned using smooth and controlled movements
	4.2	Manoeuvres are within the limits of the equipment and in line with manufacturers specifications
	4.3	Load is moved ensuring no injury to personnel or damage to equipment or cargo
	4.4	Continuous communication is maintained with personnel assisting the operator in the load movement operations using appropriate communications technology and procedures
	4.5	In the event of a safety incident or emergency, the equipment is immediately stopped and workplace emergency procedures followed
	4.6	Safety incidents and emergencies are reported in accordance with workplace procedures and regulatory requirements
Monitor and operate controls	5.1	Equipment controls are monitored and operated in accordance with manufacturers operating instructions
	5.2	Control systems are understood and acted upon in accordance with regulatory requirements, manufacturers guidelines and workplace operating procedures
	5.3	Control faults are identified and reported in accordance with enterprise guidelines

- 5.4 Hazards in the work area are identified and appropriate measures are adopted to control the risks in accordance with regulatory requirements and workplace procedures
- 6 Stop, shut down and secure equipment
  6.1 Equipment is brought to a controlled halt and shut down without injury to personnel or damage to equipment, loads or facilities in accordance with manufacturers guidelines and workplace procedures
  - 6.2 Equipment is secured in accordance with manufacturers instructions and workplace procedures

### **Required Skills and Knowledge**

### **REQUIRED KNOWLEDGE AND SKILLS**

This describes the essential knowledge and skills and their level required for this unit.

#### **Required knowledge**:

Australian and international codes, regulations, licence/permit requirements relevant to the use of gantry equipment to shift loads

Relevant OH&S and environmental protection procedures and guidelines

Workplace procedures and policies for the use of gantry equipment to shift loads

Focus of operation of work systems, equipment, management and site operating systems for the use of gantry equipment to shift loads

Problems that may occur when using gantry equipment to shift loads and appropriate action that can be taken to resolve the problems

Relevant safety codes and emergency procedures

Types of gantry equipment used to shift loads in terminals/wharves, their applications and procedures and precautions for their use

Requirements for Safe Working Load (SWL) and Working Load Limit (WLL) of gantry equipment

The marking and numbering systems for cargo

Relevant bond, quarantine or other legislative requirements

#### **Required skills**:

Communicate effectively with others when shifting loads using gantry equipment

Read and interpret instructions, procedures, information and labels relevant to the shifting of loads using gantry equipment

Identify cargo, container and goods, coding, ADG and IMDG markings and where applicable emergency information panels

Interpret and follow operational instructions and prioritise work

Complete documentation related to the shifting of loads using gantry equipment

Receive, acknowledge and send messages with appropriate communications equipment

Estimate the size, shape and special requirements of loads

Work collaboratively with others when shifting loads using gantry equipment

Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others

Promptly report and/or rectify any identified problems, faults or malfunctions that may occur when shifting loads using gantry equipment in accordance with regulatory requirements and workplace procedures

Implement contingency plans for unanticipated situations that may arise when shifting loads using gantry equipment

Apply precautions and required action to minimise, control or eliminate hazards that may exist during the shifting of loads using gantry equipment

Monitor work activities in terms of planned schedule

Modify activities depending on differing operational contingencies, risk situations and environments

Apply fatigue management knowledge and techniques

Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment

Identify, select and use relevant equipment, processes and procedures when using gantry equipment to shift loads

Operate and adapt to differences in equipment in accordance with standard operating procedures

Apply effective eye-hand coordination to operational tasks

Monitor performance of equipment

Service equipment in terms of maintenance schedule and standard operating procedures

Check and replenish fluids and carry out lubrication processes in the course of work activities

Select and use required personal protective equipment conforming to industry and OH&S standards

### **Evidence Guide**

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

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 and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of applying:
	the underpinning knowledge and skills
	relevant legislation and workplace procedures
	other relevant aspects of the range statement
Context of and specific resources for assessment	Performance is demonstrated consistently over a period of time and in a suitable range of contexts
	Resources for assessment include:
	a range of relevant exercises, case studies and other simulated practical and knowledge assessment, and/or
	access to an appropriate range of relevant operational situations in the workplace
	In both real and simulated environments, access is required to:
	relevant and appropriate materials and/or equipment, and/or
	applicable documentation including workplace procedures, regulations, codes of practice and operation manuals
Method of assessment	Assessment of this unit must be undertaken by a registered training organisation
	As a minimum, assessment of knowledge must be conducted through appropriate written/oral tests
	Practical assessment must occur:
	through appropriately simulated activities at

the registered training organisation, and/or

in an appropriate range of situations in the workplace

### **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.

Work may be conducted:	in a range of work environments by day or night
Customers may be:	internal or external
Workplaces may comprise:	large, medium or small worksites
Work may be conducted in:	limited or restricted spaces exposed conditions controlled or open environments even or uneven surfaces wet or dry surfaces
Cargo/freight may include:	goods/containers with specialist requirements, including temperature controlled goods and dangerous goods
Range of equipment may include:	various types of bridge and gantry cranes
Hazards in the work area may include exposure to:	chemicals dangerous or hazardous substances movements of equipment, goods, materials and vehicular traffic
Personal protective equipment may include:	gloves safety headwear and footwear safety glasses two-way radios protective clothing high visibility clothing
Communication in the work area may include:	phone fax email electronic data transfer (EDI)

	RF systems
	radio
	oral, aural or signed communications
Personnel in work area may include:	workplace personnel
	site visitors
	contractors
	official representatives
Consultative processes may involve:	staff members
	management
	union representatives
	industrial relations, OH&S specialists
	other professional or technical staff
Depending on the type of organisation	company procedures
concerned and the local terminology used,	enterprise procedures
workplace procedures may include:	organisational procedures
	established procedures
Information/documents may include:	goods identification numbers and codes
mormation documents may menude.	manifests, bar codes, and container
	identification/serial number
	Australian and international codes of practice and regulations relevant to the shifting of loads using gantry equipment
	Australian and international regulations and codes of practice for the handling and transport of dangerous goods and hazardous substances
	operations manuals, job specifications and induction documentation
	manufacturers specifications for equipment
	workplace procedures and policies
	supplier and/or client instructions
	dangerous goods declarations and material safety data sheets
	award, enterprise bargaining agreement, other industrial arrangements

	relevant Australian standards and certification requirements
	quality assurance procedures
	emergency procedures
Applicable regulations and legislation may include:	relevant codes and regulations for the shifting of cargo/containers using gantry equipment
	Australian and international regulations and codes of practice for the handling of dangerous goods and hazardous substances, including:
	Australian and International Dangerous Goods Codes
	Australian Marine Orders and the International Maritime Dangerous Goods Code
	IATA Dangerous Goods by Air regulations
	Australian and International Explosives Codes
	relevant Australian Standards including AS 1418 and AS 2550
	licence, patent or copyright arrangements
	water and road use and licence arrangements
	export/import/quarantine/bond requirements
	marine orders
	relevant state/territory OH&S and environmental protection legislation
	workplace relations regulations
	workers compensation regulations

# **Unit Sector(s)**

Not applicable.

# **Competency Field**

D - Load Handling