TLID4307B Shift loads using gantry equipment
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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

<table>
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<th>Element</th>
<th>Performance Criteria</th>
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| 1 Plan work for the prevailing working conditions | 1.1 Traffic flow, weather and work area conditions are constantly assessed and anticipated to allow safe operation to ensure no injury to people, or damage to equipment, loads or facilities  
1.2 Characteristics of the load are taken into account to ensure that, where applicable, appropriate attachments/gear are used to move the load  
1.3 Any occurrences in the work area that may affect the safety and efficiency of operations are reported to the appropriate personnel |
| 2 Use controls and operating systems to manage the operation of the equipment | 2.1 Equipment is prepared and appropriate attachments 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 Locate load and identify load characteristics | 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 |
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

4  **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

5  **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 concerned and the local terminology used,
workplace procedures may include:
company procedures
enterprise procedures
organisational procedures
established procedures

Information/documents may include:
goods identification numbers and codes
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
Applicable regulations and legislation may include:

- relevant Australian standards and certification requirements
- quality assurance procedures
- emergency procedures
- 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