



Australian Government

Department of Education, Employment and Workplace Relations

TLID3044A Shift loads using cranes

Release: 1

TLID3044A Shift loads using cranes

Modification History

Not Applicable

Unit Descriptor

Unit Descriptor

This unit involves the skills and knowledge required to shift loads using cranes 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 crane; locating the load and identifying load characteristics; safely moving the load; monitoring the controls; and stopping, shutting down and securing the crane after the completion of operations. Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Application of the Unit

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Work must be carried out in compliance with the relevant regulations and workplace requirements concerning the shifting of loads using cranes.

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 cranes as part of work activities in the stevedoring, transport, distribution and allied industries.

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Not Applicable

Employability Skills Information

Employability Skills 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 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	PERFORMANCE CRITERIA
1 Plan work for the current working conditions	1.1 Traffic flow and work area conditions are constantly assessed and anticipated to allow safe operation to ensure no injury to people, or damage to crane, 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 crane operating systems	2.1 Crane is prepared for operation in accordance with manufacturers instructions and workplace procedures 2.2 Crane is started in accordance with manufacturers guidelines 2.3 Instruments and gauges are monitored during start-up and operations to ensure that operation is within manufacturers specifications and workplace/regulatory safety requirements 2.4 Engine power is managed for efficiency of crane movement and economy of crane operations 2.5 Crane operations are conducted within manufacturers specified torque range 2.6 Any faults or damage to crane 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 crane are identified 3.3 Load weight and dimensions are checked to ensure they fall within the capacity of the crane 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 Crane is operated using smooth and controlled movements 4.2 Manoeuvres are within the limits of the crane and in line with manufacturers specifications 4.3 Load is moved ensuring no injury to personnel or damage to crane or cargo 4.4 Continuous communication is maintained with personnel assisting the operator in the load movement operations using appropriate communications technology and procedures

ELEMENT**PERFORMANCE CRITERIA**

	4.5 In the event of a safety incident or emergency, the crane 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 controls	5.1 Crane 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 procedures
	5.3 Control faults are identified and reported in accordance with workplace guidelines
6 Stop, shut down and secure equipment	6.1 Crane is brought to a controlled halt within manufacturers guidelines and shut down without injury to personnel or damage to equipment, loads or facilities in accordance with workplace procedures
	6.2 Crane is secured after operations 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 and regulations relevant to the use of cranes to shift loads, including the Australian and International Dangerous Goods Codes
- Relevant OH&S and environmental protection procedures and guidelines
- Workplace procedures and policies for the use of cranes to shift loads
- Focus of operation of work systems, equipment, management and site operating systems for the use of boom cranes to shift loads
- Problems that may occur when using cranes to shift loads and appropriate action that can be taken to resolve the problems
- Relevant safety codes and emergency procedures
- Types of boom cranes 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 cranes
- Relevant bond, quarantine or other legislative requirements

Required skills:

- Communicate effectively with others when shifting loads using cranes
- Read and interpret instructions, procedures, information and labels relevant to the shifting of loads using cranes
- 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 cranes
- 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 cranes
- 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 cranes in accordance with regulatory requirements and workplace procedures
- Implement contingency plans for unanticipated situations that may arise when shifting loads using cranes
- Apply precautions and required action to minimise, control or eliminate hazards that may exist during the shifting of loads using cranes
- 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 cranes to shift loads
- Operate and adapt to differences in equipment in accordance with standard operating procedures
- Select and use required personal protective equipment conforming to industry and OH&S standards
- Monitor performance of crane and its equipment and take appropriate action where required
- Apply effective eye-hand coordination to operational tasks
- Service equipment in terms of maintenance schedule and standard operating procedures

Evidence Guide

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/or 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 equipment, and
 - 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 activities in an appropriately simulated environment at the registered training organisation, and/or
 - in an appropriate range of situations in the workplace

Range Statement

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.

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|---|--|
| Work may be conducted: | <ul style="list-style-type: none">• in a range of work environments• by day or night |
| Customers may be: | <ul style="list-style-type: none">• internal or external |
| Workplaces may comprise: | <ul style="list-style-type: none">• large, medium or small worksites |
| Work may be conducted in: | <ul style="list-style-type: none">• limited or restricted spaces• exposed conditions• controlled or open environments |
| Cargo/freight may include: | <ul style="list-style-type: none">• goods/containers with specialist requirements, including temperature controlled goods and dangerous goods |
| Cranes may include: | <ul style="list-style-type: none">• boom cranes in use at transport, rail or shipping terminals |
| Hazards in the work area may include exposure to: | <ul style="list-style-type: none">• chemicals• dangerous or hazardous substances• movements of equipment, goods, materials and vehicular traffic |
| Personal protective equipment may include: | <ul style="list-style-type: none">• gloves• safety headwear and footwear• safety glasses• two-way radios• protective clothing• high visibility clothing |
| Communication in the work area may include: | <ul style="list-style-type: none">• phone• fax• email• electronic data transfer (EDI)• RF systems• radio• oral, aural or signed communications |
| Personnel in work area may include: | <ul style="list-style-type: none">• workplace personnel• site visitors• contractors• official representatives |
| Consultative processes may involve: | <ul style="list-style-type: none">• staff members• management• union representatives• industrial relations, OH&S specialists |

RANGE STATEMENT

Depending on the type of organisation concerned and the local terminology used, workplace procedures may include:

Information/documents may include:

Applicable regulations and legislation may include:

- other professional or technical staff
- company procedures
- enterprise procedures
- organisational procedures
- established procedures
- 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 cranes
- 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
- relevant codes and regulations for the shifting of cargo/containers using cranes
- Australian and international regulations and codes of practice for the handling and transport 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 AS2550
- licence, patent or copyright arrangements
- water and road use and licence arrangements
- export/import/quarantine/bond requirements
- marine orders

RANGE STATEMENT

- relevant state/territory OH&S and environmental protection legislation
- workplace relations regulations
- workers compensation regulations

Unit Sector(s)

Not Applicable

Competency Field

Competency Field D - Load Handling