



Australian Government

Department of Education, Employment and Workplace Relations

TLIB3011A Set up and rig crane for lift

Release: 1

TLIB3011A Set up and rig crane for lift

Modification History

Not Applicable

Unit Descriptor

Unit Descriptor

This unit involves the skills and knowledge required to set up and rig a mobile crane for a lift, including the systematic positioning and stabilisation of the crane and its assembly. 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 licence/permit requirements and regulations of the relevant state/territory authorities pertaining to mobile crane operations.

Work is performed with limited or minimum supervision, with limited accountability and responsibility for self and others in achieving the prescribed outcomes. It involves the application of routine principles and procedures to the setting up and rigging of a crane prior to lift in a variety of operational contexts.

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 Position and stabilise crane	1.1 Crane is directed to position as per job plan to ensure safe operation in accordance with applicable Australian Standards, codes of practice and manufacturers specifications 1.2 Ground is checked to ensure it is firm enough to bear the load 1.3 Appropriate plates or packing are correctly used to adequately distribute the load 1.4 Any outriggers and stabilisers are correctly deployed and positioned in accordance with manufacturers instructions and the appropriate Australian Standard and other relevant statutory regulations 1.5 Outrigger packing is checked for adequacy prior to and after lift is taken
2 Assemble crane	2.1 The block is reeved in accordance with manufacturers instructions 2.2 Any counterweights are installed to manufacturers specifications 2.3 Any attachments are set up in accordance with manufacturers instructions 2.4 A qualified rigger is consulted and other personnel are assisted as necessary to ensure efficient and safe assembly and set-up of crane 2.5 Straight fly jibs and luffing fly jibs are assembled and fitted in accordance with manufacturers instructions

Required Skills and Knowledge

REQUIRED KNOWLEDGE AND SKILLS

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

Required knowledge:

- Relevant road rules, regulations, permit and licence requirements pertaining to mobile crane operation and rigging of mobile cranes
- Relevant OH&S and environmental procedures and regulations
- Mobile crane applications, capacities, configurations, safety hazards and control mechanisms
- Operational procedures for crane crews
- Procedures for prioritising and multi-tasking work
- Procedures for fitting attachments and fly jibs

REQUIRED KNOWLEDGE AND SKILLS

- Company work procedures concerning the setting up and rigging of a mobile crane at a worksite
- Focus of operation of work systems and equipment
- Application of relevant agreements, codes of practice or other legislative requirements
- Procedures for the identification and correct use of equipment, processes and procedures

Required skills:

- Communicate effectively with others when setting up and rigging a crane for a lift
- Read and interpret instructions, procedures, information and signs relevant to the setting up and rigging of a crane for a lift
- Interpret and follow operational instructions and prioritise work
- Complete documentation related to the setting up and rigging of a crane for a lift
- Operate electronic communication equipment to required protocol
- Work collaboratively with others when setting up and rigging a crane for a lift
- 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 in accordance with regulatory requirements and workplace procedures
- Implement contingency plans for unexpected events
- Apply precautions and required action to minimise, control or eliminate hazards that may exist when setting up and rigging a crane for a lift
- Monitor work activities in terms of planned schedule
- Modify activities depending on differing operational contingencies, risk situations and environments
- Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment
- 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 condition of equipment
- Fit fly jibs and attachments

Evidence Guide

EVIDENCE GUIDE

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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
 - applying relevant legislation and workplace procedures
 - applying procedures for fitting attachments and fly jibs
 - demonstrating an understanding of the consultation processes

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

- 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

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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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| Operations may be conducted: | <ul style="list-style-type: none">• by day or night• in a variety of weather conditions• using a workcage/workbox• using a superlift attachment (300t and over cranes) |
| Environment may include: | <ul style="list-style-type: none">• movement of equipment, goods, materials and vehicular traffic |
| Customers may be: | <ul style="list-style-type: none">• internal or external |
| Mobile crane may be involved in work in a range of industry sectors including: | <ul style="list-style-type: none">• construction and demolition• manufacturing• waterfront• mining• primary industry• utilities (electricity, gas, water)• arboricultural• swimming pool• quarrying |
| Hazards may include: | <ul style="list-style-type: none">• power lines• noise, light, energy sources• overhead service lines• surrounding buildings, structures, facilities• underground services• obstructions• uneven or unstable ground and recently filled trenches• stationary and moving machinery and equipment• hazardous or dangerous materials• traffic hazards and congestion• other vehicles and personnel |
| Hazard management is: | <ul style="list-style-type: none">• consistent with the principle of hierarchy of control with elimination, substitution, isolation and engineering control measures being selected before safe working practices and personal protective equipment |
| Consultative processes may involve: | <ul style="list-style-type: none">• other employees and supervisors• management• union representatives• clients• industrial relations and OH&S specialists• other professional or technical staff |

RANGE STATEMENT

Requirements for access and/or lift may include:	• dogman/rigger • site restrictions and procedures • authorities and permits • hours of operation • induction • slings, chains, nets, brackets and other specialised lifting equipment • noise restrictions • personal protective equipment • support trucks • additional gear and equipment • communications equipment
Personal protective equipment may include:	• gloves • safety headwear and footwear • sunscreen, sunglasses and safety glasses • two-way radios • high visibility clothing
Documentation/records may include:	• site plans • Safe Working Load (SWL) and Working Load Limit (WLL) • operations manuals including load charts and crane and rigging manuals • induction documentation • competency standards and training materials • job specifications and procedures • manufacturers specifications • workplace operating procedures and policies • supplier and/or client instructions • communications technology equipment, oral, aural or signed communications • personal and work area work procedures and practices • conditions of service, legislation and industrial agreements including: • workplace agreements and awards • occupational health&safety procedures • standards and certification requirements • quality assurance procedures • emergency procedures
Applicable regulations and legislation may include:	• relevant state/territory regulations and licence/permit requirements pertaining to mobile cranes

RANGE STATEMENT

- relevant state/territory road rules
- relevant state/territory OH&S legislation
- relevant state/territory environmental protection legislation

Unit Sector(s)

Not Applicable

Competency Field

Competency Field B - Equipment Checking and Maintenance