

Mapping

TLILIC0018 Licence to operate a non-slewing mobile crane
(greater than 3 tonnes capacity)



The information and questions contained in the learner guide and PowerPoint presentation have been mapped to the elements, performance criteria, and knowledge evidence for the unit of competency TLLIC0018 Licence to operate a non-slewing mobile crane (greater than 3 tonnes capacity).

Elements and performance criteria

Element 1 - Plan work / task			
Performance Criteria	Learner guide and PowerPoint	Learner Workbook – Theory and Practical	Review Questions / Practical tasks
1.1 Task requirements are identified from work orders or equivalent and a lift plan is confirmed with associated personnel and a site inspection is conducted in accordance with workplace procedures	<ul style="list-style-type: none"> • Question 9, 11, 29, 83 • Question 113 	Theory Training Task 4 Theory Training Task 8.2	Question12
1.2 Work area operating surface is confirmed to determine the quality of ground suitability for operational use of non-slewing mobile crane in accordance with workplace procedures	<ul style="list-style-type: none"> • Why you need packing • How soil types affect packing • Soil bearing pressure • Bearing capacity of different types of ground • Packing formula • Question 73, 74, 75, 76, 81, 82, 139, 140 • Question 39, 79, 80 	Theory Training Task 32 Theory Training Task 33 Theory Training Task 34 Theory Training Task 35.1 Theory Training Task 37 Theory Training Task 39 Practical Training Task 5 Theory Training Task 6	Question 34
1.3 Non-slewing mobile crane rated capacity (RC) and the lifting gear Working Load Limit (WLL) are established for the load/s and work/task requirements in accordance with manufacturer requirements and workplace procedures	<ul style="list-style-type: none"> • Question 26, 27, 28, 30, 31, 32, 33, 34, 100, 101 	Theory Training Task 25 Theory Training Task 26 Theory Training Task 27 Theory Training Task 40 Theory Training Task 42, 43, 44, 45, 46, 48, 50 Practical Training Task 5, 6, 7	Question 31 Question 38

<p>1.4 Appropriate paths for operating the mobile crane and moving and placing load/s in work area are assessed and determined in accordance with workplace procedures</p>	<ul style="list-style-type: none"> • Question 29, 35, 36 	<p>Theory Training Task 31 Theory Training Task 60 Practical Training Task 5 Practical Training Task 6 Practical Training Task 7</p>	<p>Question 33 Question 47</p>
<p>1.5 Relevant hazard identification and risk elimination/control measures are applied and advised to associated personnel in accordance with workplace procedures</p>	<ul style="list-style-type: none"> • Overhead powerlines on poles (National Standard) • Overhead powerlines on towers (National Standard) • Question 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 25, 112.9 	<p>Theory Training Task 1 Theory Training Task 2 Theory Training Task 3,5, 7, 8 Practical Training Task 1 Practical Training Task 2</p>	<p>Question 7 Question 8 Question 9 Question 11 Question 33</p>
<p>1.6 Traffic management plan implementation is confirmed and followed in accordance with workplace procedures</p>	<ul style="list-style-type: none"> • Question 21, 22, 23, 8.2 	<p>Theory Training Task 6 Theory Training Task 36</p>	<p>Question 35</p>
<p>1.7 Appropriate communication procedures are identified and tested with associated personnel in accordance with workplace procedures</p>	<ul style="list-style-type: none"> • Question 23, 24, 37, 38, 39, 40, 41, 68, 69, 107 	<p>Theory Training Task 9 Theory Training Task 10 Theory Training Task 11 Practical Training Task 3</p>	<p>Question 13 Question 14 Question 15 Question 16</p>
<p>1.8 All tasks are confirmed to ensure requirements for the relevant work area in accordance with a lift plan and workplace procedures</p>	<ul style="list-style-type: none"> • Question 35 	<p>Practical Training Task 1 Practical Training Task 3 Practical Training Task 4</p>	<p>Question 18</p>
<p>1.9 Information required to ensure that lifting equipment and gear inspection, use, maintenance and storage complies with manufacturer requirements is obtained and interpreted</p>	<ul style="list-style-type: none"> • Question 46.2, 46.3 	<p>Theory Training Task 8.2 Practical Training Task 4</p>	

Element 2 - Prepare for work / task			
Performance Criteria	Learner guide and PowerPoint	Learner Workbook – Theory and Practical	Review Questions / Practical tasks
2.1 Consultation with workplace personnel is established and maintained to ensure lift plan is clear and consistent with site requirements in accordance with a lift plan and workplace procedures	<ul style="list-style-type: none"> Question 28, 37 	Theory Training Task 2 Theory Training Task 24 Theory Training Task 25 Practical Training Task 5	Question 18
2.2 Risk control measures for hazards identified are checked for implementation in accordance with the lift plan and safe work procedures	<ul style="list-style-type: none"> Question 79, 102, 106, 138 	Theory Training Task 1 Theory Training Task 2 Theory Training Task 3 Theory Training Task 4 Theory Training Task 5 Theory Training Task 7 Theory Training Task 8 Theory Training Task 36 Theory Training Task 38 Practical Training Task 1 Practical Training Task 2	Question 9 Question 11 Question 13

<p>2.3 Non-slewing mobile crane is accessed safely in accordance with manufacturer requirements and safe work procedures</p>	<ul style="list-style-type: none"> • Question 45, 46.1 	<p>Theory Training Task 47 Practical Training Task 7</p>	<p>Question 39</p>
<p>2.4 Pre-start crane checks are carried out and any damage and defects are reported, recorded and appropriate action is taken in accordance with manufacturer requirements and safe work procedures</p>	<ul style="list-style-type: none"> • Question 42, 43, 44, 47, 48, 49, 50, 51, 52, 72, 84, 85, 86, 87, 88, 89, 94 	<p>Theory Training Task 13 Theory Training Task 14 Theory Training Task 15 Theory Training Task 16 Theory Training Task 17 Theory Training Task 18 Theory Training Task 24 Practical Training Task 4</p>	<p>Question 19 Question 20 Question 21 Question 22 Question 29</p>
<p>2.5 Mobile crane is set up correctly with any lifting gear as per the lift plan in accordance with relevant manufacturer requirements including load chart/s and safe work procedures</p>	<ul style="list-style-type: none"> • Question 53, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 98, 99 	<p>Theory Training Task 28 Theory Training Task 29 Theory Training Task 38 Theory Training Task 39 Theory Training Task 42 Theory Training Task 43, 44, 45, 46, 48, 49, 50, 57 Practical Training Task 5 Practical Training Task 6 Practical Training Task 7</p>	<p>Question 40</p>
<p>2.6 Fly jib (if fitted) is set up as required in accordance with specific manufacturer requirements and safe work procedures</p>	<ul style="list-style-type: none"> • Question 95, 96, 97 	<p>Theory Training Task 27</p>	<p>Question 22</p>
<p>2.7 Operational checks are carried out and any damage and defects are reported, recorded and appropriate action is taken in</p>	<ul style="list-style-type: none"> • Question 54, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 135.1 79, 80, 81 	<p>Theory Training Task 19 Theory Training Task 21 Theory Training Task 22</p>	<p>Question 23 Question 26 Question 27</p>

accordance with manufacturer requirements and safe work procedures		Theory Training Task 23 Theory Training Task 24 Practical Training Task 4	Question 28 Question 29 Question 44 Question 46
2.8 Crane logbook is checked to confirm current compliance, is correct for the crane type, is completed and signed and required rectifications have been signed off in accordance with manufacturer requirements and safe work procedures	<ul style="list-style-type: none"> Question 55, 56, 57, 58 	Theory Training Task 20 Practical Training Task 4	Question 24 Question 25
2.9 Weather and work environment conditions are assessed to determine any impact on mobile crane operations in accordance with manufacturer requirements and safe work procedures	<ul style="list-style-type: none"> Question 103, 127, Question 135.2, 135.3, 135.4, 135.5, 135.6 	Theory Training Task 30	Question 24 Question 25
2.10 Weight of load is identified, calculated or estimated	<ul style="list-style-type: none"> Question 26.1, 26.2 	Theory Training Task 35.2 Practical Training task 5	
2.11 Derated WLL of lifting equipment resulting from selected slinging techniques is calculated	<ul style="list-style-type: none"> Question 112.2, 112.3, 112.4 	Theory Training Task 35.3 a, b, c, d Practical Training task 5	
2.12 Suitable lifting points and slinging techniques are identified	<ul style="list-style-type: none"> Question 112.5, 112.6, 112.7, 112.8, 112.9 	Theory Training Task 35.4, 35.7 b Practical Training task 5	
2.13 Lifting equipment and gear are prepared for safe use	<ul style="list-style-type: none"> Question 112.8, 112.9, 112.10, 112.11 	Theory Training Task 35.5, 35.6 Practical Training task 5	
2.14 Load destination is confirmed for stability ensuring it is able to bear the load and is prepared for safe access and landing	<ul style="list-style-type: none"> Question 112.12, 112.13 	Theory Training Task 35.7 a Practical Training task 5	

Element 3 – Perform work / task			
Performance Criteria	Learner guide and PowerPoint	Learner Workbook – Theory and Practical	Review Questions / Practical tasks
3.1 Lifts are determined within the RC of the non-slewing mobile crane in accordance with the load chart/s and lift plan	<ul style="list-style-type: none"> • Question 108, 109, 110, 111, 112, 112.9, 114, 115, • Crane configuration and the load chart • Load chart 	Theory Training Task 28 Theory Training Task 29 Theory Training Task 44 Theory Training Task 45 Theory Training Task 46.1 Theory Training Task 48 Theory Training Task 49 Theory Training Task 50 Practical Training Task 6	Question 21 Question 22 Question 32
3.2 Boom/jib and hook block is safely positioned over the load following directions from associated personnel in accordance with the lift plan and safe work procedures	<ul style="list-style-type: none"> • Question 116 	Theory Training Task 51 Practical Training Task 7	Question 41
3.3 Lifting gear where required is connected to the load and used safely in accordance with the lift plan, safe work procedures and manufacturer requirements	<ul style="list-style-type: none"> • Question 122, 123, 129, 130, Question 112.8 	Theory Training Task 28	Question 42
3.4 Test lift is carried out in accordance with dogging and safe work procedures	<ul style="list-style-type: none"> • Question 117, 118, 119 	Theory Training Task 53 Theory Training Task 54 Practical Training Task 7	Question 42
3.5 Loads are transferred using relevant crane movements and tag lines as required, in	<ul style="list-style-type: none"> • Question 104, 105, 141, 142, 143, 144, 135.4, 145.1, 145.2 	Theory Training Task 55 Theory Training Task 61 Theory Training Task 62	Question 36 Question 48 Question 49

accordance with lift plan and safe work procedures		Theory Training Task 63 Practical Training Task 7	
3.6 Load and crane movement is monitored constantly and crane is operated safely in accordance with lift plan and safe work procedures	<ul style="list-style-type: none"> Question 120, 121, 128, 131, 132, 133, 134, 136, 137, 135.3, 135.4, 138, 139, 140, 141, 142 	Theory Training Task 6 Theory Training Task 55 Theory Training Task 58 Theory Training Task 59 Theory Training Task 61 Theory Training Task 62 Theory Training Task 63 Practical Training Task 7	Question 45 Question 49
3.7 All required communication signals are correctly interpreted and followed whilst crane is operated in accordance with the lift plan and safe work procedures	<ul style="list-style-type: none"> Question 125, 126, Question 129.2, 129.1 	Theory Training Task 10 Theory Training Task 12 Practical Training Task 3	Question 13 Question 17
3.8 Load is lowered and landed safely in accordance with lift plan and safe work procedures	<ul style="list-style-type: none"> Question 119, 120, 135.4, 135.3 	Theory Training Task 55 Theory Training Task 56 Theory Training Task 7	Question 43
3.9 Lifting gear is disconnected from load and crane is positioned safely and efficiently for next task in accordance with lift plan and safe work procedures	<ul style="list-style-type: none"> Question 124 	Practical Training Task 7	Question 50
3.10 Lifting equipment and gear are inspected for defects, and defective items are isolated, tagged and reported	<ul style="list-style-type: none"> Question 137, 138, 139, 140, 141, 147.2 	Theory Training Task 55 Practical Training Task 7	

Element 4 – Pack up

Performance Criteria	Learner guide and PowerPoint	Learner Workbook – Theory and Practical	Review Questions / Practical tasks
4.1 Crane boom/jib, lifting gear and associated equipment is stowed and secured as required in accordance with manufacturer requirements and safe work procedures	<ul style="list-style-type: none"> Question 145.1, 145.2, 148, 152, 147.5, 147.6 	Theory Training Task 36 Theory Training Task 64 Theory Training Task 66 Theory Training Task 67 Theory Training Task 70 Practical Training Task 8	Question 51 Question 53 Question 54 Question 56
4.2 Relevant motion locks and brakes are applied as required in accordance with manufacturer requirements and safe work procedures	<ul style="list-style-type: none"> Question 147.1, 147.5 	Theory Training Task 65 Theory Training Task 67 Practical Training Task 8	Question 54
4.3 Crane is shut down and secured to prevent unauthorised access/use in accordance with safe work procedures	<ul style="list-style-type: none"> Question 146, 149, 147.4, 147.5, 154, 147.7, 153.1 	Theory Training Task 67 Theory Training Task 68 Practical Training Task 8	Question 52
4.4 Post-operational crane checks are carried out in accordance with legislative responsibilities, safe work procedures and manufacturer requirements	<ul style="list-style-type: none"> Question 151, 153.1, 153.2, 147.3, 147.5 	Theory Training Task 67 Theory Training Task 69 Practical Training Task 8	Question 54

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements and performance criteria on at least one occasion and include:

Requirement	Review Questions / Formative Assessment	Learner Guide Quiz Questions
<p>1 applying relevant mathematical calculations in conjunction with lift plan and load chart, radius requirements and relevant lifting gear to perform work/task to enable crane to be configured for load including:</p> <ul style="list-style-type: none"> - Boom - fly-jib (where fitted) - line pull - mobiling - type of hook - side slope derations - articulation derations 	<p>Task one: Hazard identification and risk control measures.</p> <p>The assessor will provide you with a lift plan that you are required to fill out and complete.</p>	<p>Theory Training Task 35.2 Theory Training Task 26, 27</p>
<p>2. applying relevant crane movements including:</p> <ul style="list-style-type: none"> - boom/jib up and down (luffing) - positioning and using main and auxiliary hook and lifting gear to connect to load safely - raise and lower hoist - telescope in and out - travel and articulating (as required) 	<p>Task four: Safe moving of loads</p>	
<p>3. communicating with other workplace personnel through using appropriate worksite procedures including:</p>	<p>Task five: Interpret and act on communications</p>	

<ul style="list-style-type: none"> - 2-way radio - Listening - making and interpreting hand signals - questioning to confirm understanding - signage - verbal language - visual aids - whistles - written instructions 		
<p>4 complying with Commonwealth, state and territory Work Health and Safety (WHS)/Occupational Health and Safety (OHS)/Occupational Safety and Health (OSH) legislation and safe work procedures</p>	<ul style="list-style-type: none"> • Assessor and Candidate Declaration • Part 2: Calculations assessments 	
<p>5. completing the pre-start check including:</p> <ul style="list-style-type: none"> - battery power level as required by manufacturer requirements - engine / mechanical fluid level checks as required by manufacturer requirements - presence of correct logbook - evidence of damage - fluid leaks - lights work effectively - locating, identifying and confirming all controls - mirrors and seat are adjusted appropriately - safety equipment checks - signage and labels to ensure they are visible and legible - checking for signs of paint separation and stressed welds indicating potential structural weakness - tyres and wheels for damage/wear and correct inflation (Water/Air) - updating records as required - visual damage or equipment faults 	<p>Task two: Pre-start checks (crane visual inspection).</p>	

<p>6. conducting and applying risk and hazard strategies including:</p> <ul style="list-style-type: none"> - confirming work area operating surface suitability based on crane and task requirements - articulation of crane - dynamic loads - ground conditions including surface and slopes - impact of tyre inflation/condition - load swing - overloading - pick and placement of load - asymmetric loads - overhead hazards - restricted site/s and poorly ventilated area/s - risk of collision with people, moving plant and fixed structures - adequate lighting - weather conditions 	<p>Task one: Hazard identification and risk control measures.</p>	
<p>7. completing operational checks ensuring:</p> <ul style="list-style-type: none"> - all controls are located, identified and tested for functionality - all hydraulic functions are operated - lifting gear movements and control functions are smooth and comply with lift plan 	<p>Task three: Conduct operational checks.</p>	
<p>7. 4 hazard warning systems, safety, audible and visual warning devices are checked to ensure they are functional including:</p> <ul style="list-style-type: none"> - reversing beepers - lights - horns - crane computer alarm (where fitted) - anti-two block alarms (where fitted) 	<p>Task three: Conduct operational checks.</p>	

7.10 start-up is in accordance with manufacturer requirements and workplace procedures	Task three: Operational checks.	
7.11 there are no unusual noises	Task three: Operational checks.	
7.12 steering, transmission and brake functions comply with operating requirements	Task three: Operational checks.	
8 confirming and following traffic management plan procedures relevant to crane operator role in the work area	Task five: Interpret and act on communications.	
9. identifying hazards and using appropriate risk controls and safety measures and equipment relevant to slinging loads	Practical Training Task 1	Question 112.9 Theory training task 35.8
10. confirming appropriate lifting gear and slinging techniques to the type of load, its mass and centre of gravity	Practical Training Task 1	Theory training task 35.4
11 confirming the Working Load Limit (WLL) tags of the lifting equipment and gear and calculating the deration of the WLL resulting from the slinging techniques applied	Practical Training Task 1	Theory training task 35.3
12. determining any defects or faults with operation of crane and reporting to relevant person/s	Task three: Operational checks.	
13. ensuring risk control measures within the work area are effective as per workplace procedures	Task one: Hazard identification and risk control measures.	
14 ensuring stability of load and avoidance of hazards by applying best mobile practice including: - allowing for boom deflection	Task one: Hazard identification and risk control measures.	

<ul style="list-style-type: none"> - boom/jib as low as possible - boom/jib in line with crane - carrying load near to ground surface - crane stability whilst manoeuvring load into position with drive/steering wheels and articulating as required - gently accelerating and braking to minimise load swing - lowering load safely and stably onto appropriate dunnage taking into consideration swing and restrictions of area - minimum boom/jib length - minimum speed - using handheld taglines/bridling 	<p>Task four: Safe moving of loads</p>	
<p>15 following directions of dogger or rigger</p>	<p>Task four: Safe moving of loads Engage in effective and safe communications with Dogger</p>	
<p>16 interpreting and confirming relevant documentation for the work task and relevant area</p>	<p>Task one: Hazard identification and risk control measures</p>	
<p>17 inputting crane configuration into crane computer (where fitted) and checking operation to accurately reflect crane configuration</p>	<p>Task three: Operational checks</p>	
<p>18 interpreting and acting on communications signals including:</p> <ul style="list-style-type: none"> - hoist down - hand and whistle and radio - hoist up - hand and whistle and radio - luff boom down - hand and whistle and radio - luff boom up - hand and whistle and radio - articulate left - hand and whistle and radio - articulate right - hand and whistle and radio 	<p>Task four: Safe moving of loads Task five: Interpret and act on communications</p>	

<ul style="list-style-type: none"> - stop - hand and whistle and radio - telescope in - hand and whistle and 2-way radio (where manufacturer requirements allow) - telescope out - hand and whistle and 2-way radio (where manufacturer requirements allow) - travel - hand and radio 		
<p>19 maintaining three points of contact whilst accessing crane and ensure rungs / steps are free of hazards</p>	<p>Task two: Conduct pre-start checks (crane visual inspection) Access (and enter) the crane in a safe manner, maintaining three points of contact</p>	
<p>20 monitoring load disconnection from hook is safe and ensuring no movement of controls</p>	<p>Task four: Safe moving of loads Place load correctly and safely</p>	
<p>21 observing relevant communication signals from relevant person</p>	<p>Task four: Safe moving of loads Interpret signals correctly</p>	
<p>22 operating an articulated non-slewing mobile crane with a rated capacity (RC) of 12 tonnes or greater to lift four different loads using the main hook through an obstacle course using all crane operational controls while the load is in full view of the crane operator. Loads must consist of:</p> <ul style="list-style-type: none"> - a load of >50% of the Rated Capacity (RC) of the crane with a boom length of >75%, and - a round load with a minimum diameter of 300 mm and minimum length of 3 m that requires a dogger to sling, and 	<p>Task four: Safe moving of loads</p>	

<ul style="list-style-type: none"> - an asymmetrical load that requires a dogger to sling, and - travelling with a load of stillage containing at least ten scaffolding standards or containing a load of steel pipes of equivalent weight that requires a dogger to sling and a boom length of <75% - 		
<p>23 positioning the non-slewing mobile crane for safe operation for:</p> <ul style="list-style-type: none"> - application of the task - manoeuvring in the workplace - aligning of crane boom to the load - stability of the non-slewing mobile crane and the load whilst driving to load set down position 	<p>Task four: Safe moving of loads</p>	
<p>24 recording and maintaining accurate information relating to crane operations</p>	<p>Task six: Shut down and secure crane Add faults into logbook</p>	
<p>25 reporting to relevant person/s on site risk control measures that are not in place or deficient</p>	<p>Task one: Hazard identification and risk control measures</p>	
<p>26 setting up of:</p> <ul style="list-style-type: none"> - fly jib (where fitted) - manual boom section (where fitted) 	<p>Task three: Conduct operational checks</p>	
<p>27 setting up and validating an exclusion zone</p>	<p>Task one: Hazard identification and risk control measures Set up or confirm an exclusion zone where required</p>	

<p>28 shutting down a non-slewing mobile crane in accordance with manufacturer requirements and workplace procedures</p>	<p>Task six: Shut down and secure crane</p>	
<p>29 planning for and managing load stability, including:</p>		
<p>29.1 confirming and inspecting appropriate lifting gear and applying slinging techniques appropriate to the type of load, its mass and centre of gravity</p>	<p>Practical Training Task 5</p>	
<p>29.2 confirming the WLL tags of the lifting equipment and gear and calculating the deration of the WLL resulting from the slinging techniques applied</p>	<p>Practical Training Task 5</p>	
<p>30 stabilising a non-slewing mobile crane for operation by ensuring level and articulation (if required) is checked and within deration load chart requirements</p>	<p>Task three: Conduct operational checks</p>	
<p>31 test-lifting load just clear of lifting plane to allow for checks to be safely made in consultation with associated personnel to ensure:</p> <ul style="list-style-type: none"> - slinging is correct - all crane equipment is functioning properly - load centre of gravity is correct - loads of unusual shape or weight distribution are correctly slung 	<p>Task four: Safe moving of loads Conduct test lift</p>	
<p>32 test-lifting load just clear of lifting plane to allow for checks of crane computer (where fitted) to ensure:</p> <ul style="list-style-type: none"> - load measuring equipment can be used to verify calculated weight of load - near capacity loads do not overload crane 	<p>Task four: Safe moving of loads Conduct test lift</p>	

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements and performance criteria of this unit. This includes:

Requirement	Review Questions / Formative assessment
1.0 appropriate worksite communication procedures including:	Question 39 Question 42
<ul style="list-style-type: none"> ○ listening 	
<ul style="list-style-type: none"> ○ Hand signals 	
<ul style="list-style-type: none"> ○ Questioning techniques 	
<ul style="list-style-type: none"> ○ Signage 	
<ul style="list-style-type: none"> ○ Two-way radios 	
<ul style="list-style-type: none"> ○ Written instructions ○ whistles 	
2.0 Crane configuration mathematical calculations to:	Question 15 Question 30 Question 32 Question 83 Question 87 Question 88
<ul style="list-style-type: none"> ○ Estimate loads 	
<ul style="list-style-type: none"> • Estimate counterweight/s requirements (where fitted) 	
<ul style="list-style-type: none"> • Radius requirements 	
<ul style="list-style-type: none"> • Relevant lifting gear to perform work / task 	
3.0 relevant lifting gear to perform work/task	Question 46.2, 46.3, Question 112.8, 112.9, 112.10, 112.11, Question 112.5, 112.6, 112.7, 112.8, Question 112.2, 112.3, 112.4
4.0 characteristics and impact of factors affecting non-slewing mobile crane stability whilst mobilising loads including:	Question 9 Question 10
<ul style="list-style-type: none"> • Side slope derations 	

<ul style="list-style-type: none"> • Articulations derations of crane 	Question 74
<ul style="list-style-type: none"> • Correct tyre pressure (inflation condition) 	Question 89
<ul style="list-style-type: none"> • Driving safely on roadways 	Question 32
<ul style="list-style-type: none"> • Pick up and carry the load 	Question 71
<ul style="list-style-type: none"> • crane and lifting gear load chart/s and manufacturer requirements 	Question 72
5.0 crane and lifting gear load chart/s and manufacturer requirements	Question 46.2, 46.3
<p>6.0 lift impacting factors including:</p> <ul style="list-style-type: none"> - centre of gravity - dynamic nature of load - deflection of boom - length - radius of lift - weight - side slope derations - articulation derations of crane - tyre inflation pressures 	<p>Question 10</p> <p>Question 15</p> <p>Question 71</p> <p>Question 77</p> <p>Question 32</p> <p>Question 30</p> <p>Question 83</p> <p>Question 45</p>
<p>7.0 hazards including:</p> <ul style="list-style-type: none"> - pack up and crane stability, crane tipping and demolition sites - ground stability including ground condition, recently filled trenches and slopes - insufficient lighting - obstacles or obstruction catching load swing appropriately - other specific hazards and dangerous materials 	<p>Question 8</p> <p>Question 10</p> <p>Question 23</p> <p>Question 71</p> <p>Question 93</p> <p>Question 1, 2</p> <p>Hazards – controls and planning – Questions 8 – 30</p> <p>Question 112.9</p>
7.7 overhead hazards including:	Question 10

<ul style="list-style-type: none"> - electric lines - service pipes - fixed structures - Vegetation (Trees) 	<p>Question 17 Question 18 Question 19 Question 21 Question 30</p>
<p>7.8 traffic including pedestrians, vehicles and other plant operations on unusual, uneven or difficult terrains</p>	<p>Question 10 Question 26 Question 73 Question 76</p>
<p>8.0 impact of factors affecting non-slewing mobile crane stability including:</p> <ul style="list-style-type: none"> - Overloading - pick up and placement of load - unbalanced loads - articulation of crane - correct tyre pressures (inflation/condition) - side slope derations 	<p>Question 9 Question 10 Question 30 Question 32 Question 37 Question 38 Question 82 Question 83</p>
<p>9.0 manufacturer requirements and instructions on shutting down and packing up crane</p>	<p>Question 5 Shut down Questions 90 - 94</p>
<p>10 mobile non-slewing crane characteristics and capabilities to allow crane configuration to suit a range of loads</p>	<p>Question15 Question 32 Question 35 Question 77 Question 83</p>
<p>11 relevant workplace instructions, safety information, emergency procedures</p>	<p>Question 60 Question 5 Question 36</p>

	<p>Question 73 Question 83</p>
<p>12 relevant documentation requirements and procedures for recording, reporting and maintaining workplace records and information</p>	<p>Question 5 Question 8 Question 15 Question 21 Question 68</p>
<p>13 risk assessment management and mitigation strategies including hierarchy of control: elimination substitution isolation engineering controls administrative controls personal protective equipment (PPE)</p>	<p>Question 2 Question 6 Question 11 Question 14 Question 27 Question 93 Question 112.9</p>
<p>14 roles and responsibilities of duty holders as per legislative obligations of Work Health and Safety (WHS)/Occupational health and Safety (OHS)/Occupational Safety and Health (OSH) requirements and safe work/workplace procedures</p>	<p>Question 3 Question 5</p>
<p>15 hazards commonly encountered while slinging: note: instability of landing surfaces overhead and underground hazards insufficient lighting traffic weather pedestrian traffic work at heights</p>	<p>Question 118, Question 112.12, 112.13</p> <ul style="list-style-type: none"> • Overhead powerlines on poles (National Standard) • Overhead powerlines on towers (National Standard) <p>Question 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 25, 32, 35 Question 109, 110, 111, 40, 33, 42, 43, 44, 144, 145.1, 112.9</p>

<p>16 selection, inspection, care, handling, application, limitations and storage of lifting equipment and gear:</p> <ul style="list-style-type: none"> flexible steel wire rope (FSWR) sling synthetic sling chain sling (including shortener) spreader bar or lifting beam tag line shackles eyebolts 	<p>Question 112.5, 112.6, 112.7, 112.8 Question 112.8, 112.9, 112.10, 112.11</p>
<p>17 methods of making temporary connections to loads using fibre and synthetic ropes:</p> <ul style="list-style-type: none"> single sheet bend clove hitch rolling hitch bowline 	<p>Question 112.8</p>
<p>18. prestart and operational checks required for a non-slewing mobile crane</p>	<p>Question 40 Pre-start inspection Questions 43 - 59</p>
<p>19 starting procedure of crane as per manufacturer requirements</p>	<p>Question 5 Question 45 Question 25 Question 53 Question 35 Question 54 Question 36 Question 65 Question 37 Question 73 Question 38 Question 75</p>
<p>20 set up of:</p>	<p>Question 74</p>

<p>jib fly jib (where fitted) manual boom section (where fitted)</p>	<p>Question 30 Question 80</p>
<p>21 weather bureau forecasts and environmental conditions that could impact operation</p>	<p>Question 6 Question 10</p>
<p>22 workplace standards, requirements, policies and procedures for conducting operations for the mobile non-slewing crane</p>	<p>Question 5 Question 8 Question 15 Question 21 Question 68</p>
<p>23 problems and applying appropriate response procedures to unplanned and/or unsafe situations and environmental conditions</p>	<p>Question 28 Question 68</p>
<p>24 work area suitability based on relevant ground reports including:</p> <ul style="list-style-type: none"> - backfilled ground - bitumen - concrete - hard compacted soil - pre-contaminated soils - rock - rough uneven ground - soft soils 	<p>Question 31</p>

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in simulated workplace operational situations that reflect workplace conditions.

Simulators must not be used in the assessment of this unit of competency.

Resources for assessment must include access to:

- non-slewing articulated mobile crane with an MRC greater than 12 tonnes in safe/serviceable working order in accordance with manufacturer specifications

- appropriate loads as outlined in the performance evidence requirements

- associated personnel to sling and direct loads including:

 - dogger or rigger

- communications equipment including:

 - two-way radios

 - whistles

- personal protective equipment (PPE)

- relevant documentation for operating a non-slewing mobile crane over 3 tonnes including:

 - approved codes of practice and guidance

 - Australian Standards

 - checklists

 - industry operating procedures

 - relevant industry standards (where applicable)

logbook

manufacturer guidelines (instructions, specifications or checklists)

Links

Companion Volume Implementation Guide - <https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>