

Resources required

Machine	<ul style="list-style-type: none"> • Relevant lifting equipment for the endorsement
Area	<ul style="list-style-type: none"> • Ground, clear of hazards with: <ul style="list-style-type: none"> - sufficient area of at least the maximum operating radius of the lifting equipment (endorsements B and C) - sufficient area to allow the undertaking of pick and carry duties (endorsements A, D and E) - structure or below-ground level location for placing a load out-of-sight of the lifting equipment operator - a flat area to allow lifting and placing of loads - a zone of exclusion around each lifting operation area
Other equipment	<ul style="list-style-type: none"> • Measuring tape for measuring the maximum radius of the lifting equipment • Applicable lifting accessories for all loads with appropriate certification • Radios for verbal communication • Examples of the following for the identification activity: <ul style="list-style-type: none"> - 2 x unserviceable and 1 x serviceable web sling - 1 x unserviceable and 1 x serviceable chain sling - 1 x unserviceable and 1 x serviceable wire rope - 1 x out-of-date certificate • Marking equipment or tags to identify unserviceable lifting accessories
Loads	<ul style="list-style-type: none"> • LOAD 1 1 x balanced • LOAD 2 1 x unbalanced • LOAD 3 1 x bundled at least 4 metres in length

Resources required *(Continued)*

Notes

- The lifting equipment selected for the test must be in serviceable condition and meet the minimum following criteria
 - **Endorsement A** - be equipped with a drum hoist and rope, have 360 degree slew capability on a turntable, able to vary the operating radii from minimum to maximum, have the capability to carry out pick and carry duties and have a minimum operating radius of 20 metres, and having a minimum underhook height of 24 metres
 - **Endorsement B** - be equipped with a drum hoist and rope, have 360 degree slew capability on a turntable, able to vary the operating radii from minimum to maximum and have an operating radius of at least 14 metres, and have a minimum underhook height of 16 metres
 - **Endorsement C** - be equipped with multi-knuckle boom sections with an slew capability of at least 240 degrees, a minimum lifting capacity of 4 tonnes per metre with an operating radius of not less than 6 metres
 - **Endorsement D** - a tracked or wheeled 360 degree excavator of above 10 tonnes capable of carrying out pick and carry duties and configured for suspended loads operations
 - **Endorsement E** - a telescopic handler having a minimum operating height of at least 9 metres and configured for suspended loads operations
- Lifting equipment being used for the test must meet current legislation requirements for lifting operations
- Lifting equipment for Endorsement D must have a boom lowering control device on the raising (main) boom cylinder(s) and which meets the requirements of ISO 8643:1997 and an RCI or LMI
- Lifting equipment used for endorsements A, D and E must be approved for pick-and-carry duties
- The machine for Endorsement E include 360 slew type telehandlers where a hoist rope is not fitted
- The operator's manual must be with the lifting equipment
- Maximum radius equates to the configuration of the lifting equipment being used for the test
- For static lifting duties, additional area clear of hazards external to the operating radius must be available to allow a safe zone (3m) for the candidate and others involved in the test
- For pick-and-carry lifting duties, there should be sufficient ground to allow travel movement of the lifting equipment machine where a straight-line travel distance of not less than 25 metres can be carried out.
- The structure or below-ground level location chosen for the out-of-sight lift must be suitable for landing the load, but must be of sufficient height or depth so that the whole of the load and portion of the lower part of the lifting accessory cannot be seen from the lifting equipment operating position. If a below-ground landing place is chosen, it must be a safe environment for the slinger/signaller to handle

Resources required *(Continued)*

**Notes
*(Continued)***

- The lifting equipment operator must be certificated and competent
- For the test to be effective, the lifting equipment operator must follow the exact instructions (verbal and signals) given by the candidate, and only make all movements according to instructions given. The tester must maintain close observation of all activities and stop all movements when the candidate has failed to retrieve a situation for which the load (or machine) will contact structures/objects or be put into an unsafe situation
- All lifting accessories for LOADS 1, 2 and 3 must be fit for purpose, certificated and made available to the candidate
- The unserviceable lifting accessories selected for the identification activity must have at least one visual defect
- The weight of all loads must be known
- If additional personnel are used to relay signals or control loads, they must be competent in all activities
- A lift plan for all activities must have been constructed by a competent person and communicated to all those within the lifting team. Information within the plan that may assist the candidate during the test and compromise skills and understanding may be withheld at the discretion of the tester
- A hand or tag line must be used to control at least one of the loads on the test and may be used on all loads if deemed appropriate. The risk assessment and method statement must stipulate that:
 - the rope is at least 16mm in diameter
 - is free of knots, kinks, fraying or any form of damage
 - is of a suitable length allowing easy control of the load but with minimal excessive free length
 - is attached to the load and cannot unintentionally become free, with the parts of the rope secured by a shackle/ karabiner or other device with a sprung latch, and not tied in a knot
 - the free end of the rope does not have an eye or loop (although the secured end may require an eye to accommodate the shackle)
 - the free end is not wrapped around the hands or parts of the body

Activity instructions

Sequence	<ul style="list-style-type: none"> Activities 2 and 3 can be undertaken at any time during the test Activities 9 - 17 can be undertaken in any order <p>The test must be completed within a given time. The specifications' section gives further information</p>
Preparing for work	<ol style="list-style-type: none"> Check all lifting equipment for function and serviceability From two or more examples each of a web sling, chain sling and wire rope, identify the correct type of accessory and impound all unserviceable items From at least two examples of lifting equipment certification, identify certification not meeting current legislation or regulations
Setting up for work	<ol style="list-style-type: none"> Establish the weight and features of each load prior to lifting Establish communication methods (visual and with radios) with the lifting equipment operator Select the relevant lifting accessory for the load to be lifted Ensure and maintain an exclusion zone around the lifting operation
Working tasks <i>(refer to activity measurements)</i>	<ol style="list-style-type: none"> Attach the selected lifting accessory and prepare each load for lifting <p>Static duties – Endorsements A, B and D</p> <ol style="list-style-type: none"> Lift LOAD 2 from ground level, guide to maximum radius of the lifting equipment, slew for at least 180 degrees and land at a designated place which is at mid-radius. When landed, detach the accessory Lift LOAD 3 from ground level, guide to minimum radius of the lifting equipment, slew for at least 360 degrees and land at a designated place which involves a change of radius. When landed, detach the accessory <p>Static duties – Endorsement C</p> <ol style="list-style-type: none"> Lift LOAD 2 from ground level, guide to maximum radius of the lifting equipment, slew for at least 180 degrees and land at a designated place which is at mid-radius. When landed, detach the accessory Lift LOAD 3 from ground level, guide to minimum radius of the lifting equipment, slew for at least 180 degrees and land at a designated place which involves a change of radius. When landed, detach the accessory <p>Lift truck duties – Endorsement E</p> <ol style="list-style-type: none"> Guide the machine to LOAD 2. Lift the load from ground level and set to the machine's suspended load travel position. On completion, land the load, detach and guide the machine clear of the load. Guide the machine to LOAD 3. Lift the load from ground level and set to the machine's suspended load travel position. Travel the load for a minimum distance of 10 metres. On completion, land the load, detach and guide the machine clear of the load

Activity instructions (Continued)

<p>Working tasks (continued) (refer to activity measurements)</p>	<p>Pick and carry duties – Endorsements A, D and E</p> <p>15. Guide the machine to LOAD 1. Lift the load from ground level, position to a radius suitable for travel, and guide the load over a given route which includes a right or left hand turns. On completion, land at a given point and detach the accessory</p> <p>Out-of-sight lift – All endorsements</p> <p>16. Lift LOAD 1 from ground level, and land in a designated place out of sight of the lifting equipment operator. When landed, detach the load – the hook (static) or lifting equipment (mobile) must be moved away from the area before reattaching.</p> <p>17. Attach LOAD 1 from the out of sight area and return the load to the original start point, land at a designated place and detach the accessory</p>
<p>Completing work</p>	<p>18. All loads to be made safe following each activity</p> <p>19. Collect and store all lifting accessories</p>
<p>Notes</p>	<ul style="list-style-type: none"> • Each load must be lifted using a different type of lifting accessory. • At least one lift shall be undertaken using radio communication and at least one lift using hand signals • For the purposes of the test, all hand communication shall conform with BS 7121: Part 1 2000 • For activities 10 and 12, the minimum radius need not be less than 4 metres • The travel distance for activity 16 must be not less than the following: <ul style="list-style-type: none"> - Endorsement A = 15 metres - Endorsement D = 10 metres - Endorsement E = 15 metres • For activities 13, 14 and 15, the machine must be positioned at least 10 metres away from the load prior to starting each activity. • Load 3 must be slung using the double wrap method • For activity 15, the candidate will be provided with the lifting equipment’s required radius and configuration for travel prior to the lift being carried out by the lifting equipment operator • The out-of-sight lift (activity 16) must be such that the lifting equipment operator is unable to see the top of the load or lower half of the accessories • For activity 16, the lift shall be conducted using radios to place the load and hand signals to retrieve the load, or vice versa. • The tester may during the test ask the candidate to identify the type of type of lifting accessory being used • The tester cannot be involved in providing or relaying signals during the test except in emergency situations

Activity measurements

Load placing	<ul style="list-style-type: none">• To be landed within 100 mm of a designated place
Test timings	<ul style="list-style-type: none">• The test must be completed within:<ul style="list-style-type: none">- Endorsement A = 1 hour and 30 minutes- Endorsements B to E = 1 hour and 20 minutes

Basic details

Test ref:	Candidate name:
Tester ref:	Candidate ref:
Tester ref:	Date of test:
Endorsement: A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/>	Start time of test:
Make and model:	Duration:

Mandatory

	Correctly carried out during the test?	Y/N
Preparing	1 Checked all accessories for function and serviceability	
	2 Checked certification is in-date and applied to relevant accessory	
	3 Unserviceable accessories identified	
	4 Unserviceable accessories impounded/clearly marked	
	5 Certification not in date identified	
Setting up	6 Landing positions checked and safe prior to lifting and landing loads	
	7 Correct lifting accessory identified on request	
	8 Intended load travel route (Inc. pick-and-carry duties) clear of hazards	
	9 Communication procedures established with others involved with the lift	
	10 Weight and C of G of each load established	
	11 Relevant lifting accessories selected for each load	
Working tasks	12 Lifting accessories attached to each load	
	13 SWL or WLL of lifting accessories not exceeded at all times	
	14 Load integrity and stability maintained at all times	
	15 Loads did not contact any obstructions or the machine	
	16 Communication clear, precise and understood by all involved	
	17 Lifting equipment hoist line vertical as each lift commences (A and B)	
	18 Loads not damaged during lifting, moving and placing	
	19 Load kept under control during lifting, movement and travel	
	20 Loads secure and stable after removing accessories	
	21 Personnel kept clear of underside of loads	
	22 Load handler clear of moving machine during pick and carry duties	
Completing	23 Lifting accessories removed and stored	
Other	24 Legislation, manufacturers' and health and safety requirements complied with	
	25 Test completed within the given time	

All of these items must be awarded

Achieved / Not achieved

Faults

Candidate incorrectly carried out the following:

		Fault	Mark	Penalty
Travelling	1 Full observation before moving the load		2	
	2 Full observation whilst guiding and landing the load		2	
Working	3 Exclusion zone maintained		2	
	4 Load placing at the given points within the given tolerance		3	
	5 Lifting accessories kept clear of ground		2	
	6 Each load checking for integrity prior to moving (<i>by weight of load taken but not raised above ground level</i>)		3	
	7 Loads level during lifting and moving		2	
	8 Hand lines correctly fitted and used		3	
Not exceeded eight penalties			Total penalties	
				Achieved / Not achieved