Standard Practical Contents inc. Transitional Assessments

To view a specific Practical Specification click on the title of the category in the Category Description column. To return to the Contents page click on the CPCS Logo within the Practical Specification (1st page of each specification only).

Category	Catagony Description	Test time	Version
Code			Date
-	Sign Off Sheet	-	03-Dec-18
A41	Loader Compressor	1:15	01-Jul-15
A42	Crusher	1:30	01-Jul-15
A43	Screener	1:15	01-Jul-15
A44	Concrete Pump Trailer Mounted	1:30	26-Sep-18
A45	Piling Rig – Driven below 20 tonnes	2:00	29-Jan-16
A46	Piling Rig – Driven above 20 tonnes	2:00	29-Jan-16
A47	Piling Rig – Bored below 20 tonnes	2:00	29-Jan-16
A48	Piling Rig – Bored above 20 tonnes	2:00	29-Jan-16
A49	Loader/ Securer – non STGO	2:00	01-Jul-15
A50	Loader/ Securer – STGO	2:00	01-Jul-15
A56	Dump Truck – Articulated Chassis	1:30	25-Nov-16
A57	Dump Truck – Rigid Chassis	1:30	01-Jul-15
A58	Excavator 360 ^o below 10 tonnes - Endorsements A or B	2:30	01-Jul-15
A58	Excavator 360 ^o below 10 tonnes - Endorsements A or B Inc. C	3:00	01-Jul-15
A58	Excavator 360 ^o below 10 tonnes - Endorsement C	0:40	01-Jul-15
A59	Excavator 360 ^o above 10 tonnes - Endorsements A or B	2:45	01-Jul-15
A59	Excavator 360 ^o above 10 tonnes - Endorsements A or B Inc. C	3:15	01-Jul-15
A59	Excavator 360º above 10 tonnes - Endorsement C	0:40	01-Jul-15
A60	Mobile Crane	3:00	04-Dec-17
A61	Appointed Person - Lifting Operations	6:45	12-Jan-15
A62	Crane/Lifting Operations Supervisor	1:30	01-Jul-15
A64	Overhead Travelling Crane	1:10	01-Jul-15
A66	Compact Crane	1:45	04-Dec-17
A67	Tunnel Locomotive	1:30	01-Jul-15
A68	Plant Driving - Non Operational	0:20	01-Jul-15
A68	Plant Driving - Non Operational & Loading/Unloading	0:35	01-Jul-15
A68	Plant Driving - Loading/Unloading	0:15	01-Jul-15
A71	Soil Stabiliser - Endorsements A or B	2:00	01-Jul-15
A71	Soil Stabiliser - Endorsement C	1:00	01-Jul-15
A72	Stationary Concrete Placing Boom	2:00	01-Jul-15
A73	Plant and Vehicle Marshaller	0:50	29-Jan-16
A74	Piling Rig Attendant	2:20	29-Jan-16
A75	Conveying Pump	1:10	12-Jan-15
A77	Telescopic Handler 360 slew	3:00	28-Mar-18
A77 (A89)	Telescopic Handler 360 slew - Transitional Assessment Inc. Sign Off Sheet	2:00	28-Mar-18
A78	Vacuum Excavator	3:00	04-Dec-17
A78 (A93)	Vacuum Excavator - Transitional Assessment Inc. Sign Off Sheet	0:45	28-Mar-18
D90	Demolition Plant - Endorsements A to E	2:00	12-Jan-15
D90	Demolition Plant - Endorsements A to E Inc. F	2:30	12-Jan-15
D90	Demolition Plant - Endorsement F	0:40	12-Jan-15
D91	Demolition Plant – Pedestrian Operated	1:45	01-Jul-15
D92	Demolition Operations – Skid Steer Tool Carrier	1:30	01-Jul-15

Technical test - practical Sign-off sheet (All categories)

Basic Details

Test Ref:	Test Level: Standard Advanced	(Place a tick in the relevant box)
Tester Name:	Tester Ref:	
Candidate Name:	Candidate Ref:	
Category Code:	Date of Test:	
Make and Model:	Endorsement Code:	
Notified Test Time:	Actual Start Time:	Actual Duration:

Supporting operator details (if applicable)

Supporting Operator Name:	Signature:
Machine Make:	Machine Model:
Confirmed Certificated & Competent (as per scheme rules) : Yes No (Place a tick in the relevant box)	

Tester feedback

Note: Please ensure both sides of this form are complete.

Technical test - practical Sign-off sheet (All categories)

Basic Details

Test Ref: (from overleaf)

Candidate feedback (Optional)

Sign off

I confirm that I, the Tester have carried out the Practical Test in accordance with CPCS Requirements and that the candidate has: Achieved Not Achieved (<i>Please tick the relevant box</i>)
Tester Signature:Date:
Monitor Signature (Advanced Test):
I confirm that I, the candidate have received the ACoD Induction and Completion scripts, undertaken the Practical Test and I, agree // disagree // (<i>Please tick the relevant box</i>) with the feedback given by the Tester.
Candidate Signature:Date:
Test centre grading and sign off sheet validation (Ref: 5.2.7. Scheme Booklet for Test centres)
I confirm that I have checked the grading and sign-off sheet and found it to be in accordance with the CPCS
Practical Test Procedures contained in the CPCS Approved Code of Delivery: Yes: No: (Please tick the relevant box)
Name and Signature:
Date:
<i>Note:</i> If incorrect, please state what action has been taken:

Note: Please ensure both sides of this form are complete.

	Purpose built Loader/Compressor with:
Machine	- a general purpose bucket
Machine	- compressor
	- ROPS and seat belt equipped
Area	• Ground, clear of hazards which must include a straight run for reversing
	Load-carrying vehicle for spoil/material
Other	 Stockpile of material for loading purposes and spread material for retrieval purposes
equipment	 Pneumatic-operated breaker, hoses and fittings compatible with the compressor
	Items to create restrictions for manoeuvring
	• The machine selected for the test must be in serviceable condition and conform with current legislation
	• The operator's manual must be with the machine
Notes	• The load-carrying vehicle must have a minimum capacity equivalent to 4 full bucket loads of the loader/compressor being used for the test
	Sufficient quantity of material for the activities
	• The straight run must be at least 20 metres in length

Activity instructions

	Activity 1 must be undertaken at the start of the test
	Activities 3 and 7 can be undertaken at any time during the test
Sequence	Activity 9 must be undertaken at the end of the test
	The test must be completed within a given time. The specifications' section gives further information
Preparing for work	1. Complete all manufacturers' pre-start and running checks and prepare the loader/compressor for travel
Travelling &	2. Travel to the work area and pass through a restriction
(refer to specifications)	3. Reverse the machine with a fully loaded bucket in a straight line
Setting up for work	4. Prepare and set the loader/compressor for the relevant work
	 Load the vehicle to capacity using material from the stockpile. On completion, this material to be re-deposited at the original place and spread
(refer to specifications)	6. Load the vehicle to capacity using the spread material. On completion, this material to be deposited at the stockpile
	7. Position the compressor at a given point and prepare the breaker for work. Test run the breaker. On completion, dismantle the breaker
Completing work	8. Clean and tidy the work area, stow all equipment and ready the machine for transport
Shutting down	 Park the loader/compressor and carry out shut-down and securing procedures
Notes	• If the machine is hot, checks unable to be carried out (i.e. coolant) may be assessed by the Tester using verbal questions

Travel restrictions	• 800 mm
Reversing length	Minimum of 20 metres
Breaker / compressor distance	• At least 1.5 times the width of the bucket
Test timings	• The test must be completed within 1 hour and 15 minutes

CP Construction PlantTechnical test - PracticalCS Competence SchemeLoader compressor - A41

Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Make and model:	Start time of test:
	Duration:

Mandatory

Mandatory		Correctly carried out during the test?	Y/N
Preparing	1	All pre-start and running checks (or responses to relevant questions)	
Travelling	2	Loader compressor set for travel and all equipment securely stowed	
	3	Seatbelt worn	
Travening	4	Restrictions and hazards cleared	
	5	Straight line kept during reversing activity	
	6	Allocated area checked and clear of hazards prior to extracting and loading	
	7	Sited for compressor operations	
	8	Machine immobilised for compressor operations	
Setting up	9	Condition of hoses and connectors checked	
Setting up	10	SWP of system checked for compatibility for tool and hoses	
	11	Checked compressor/receiver and SWP of system	
	12	Air hose routed safely and connected securely to tool and compressor	
	13	Compressor engaged following required procedures	
	14	Ensured no digging below ground level	
	15	Loading vehicle positioning prior to loading	
	16	Vehicle loaded to capacity	
Working	17	Vehicle evenly loaded	
	18	Spillage of material kept to minimum	
	19	Tool checked for functionality	
	20	Loader compressor stable during loading activities	
	21	Working area cleaned after loading	
Completing	22	Shut down procedures on the compressor	
	23	Tools, hoses equipment dismantled and securely stowed/stored	
Shutdown	24	All shutdown and securing procedures	
Other	25	Legislation, manufacturers' and health and safety requirements complied with	
Other	26	Test completed within the given time	

All of these items must be awarded

Faults	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
	1 Loader compressor mounting and dismounting		1	
	2 Full observation before moving and reversing		3	
Travelling	3 Full observation whilst travelling		2	
	4 Transmission drive engaged smoothly		1	
	5 Travel speed matched to the ground type and conditions		1	
Working	6 Bucket kept low at all times (except during loading work)		2	
	7 Wheel spin minimised		1	
	8 Full bucket loads maintained (except for cleaning work)		2	
	9 Material cleanly placed into the loading vehicle		2	
	10 Contact with vehicle avoided when loading		2	
	11 Use of steering/braking/hydraulic controls		1	
	Not exceeded eight penalties	Total p	enalties	
		Achieve	d / Not ac	hieved

Machine	Mobile or Static Crusher
	Ground, clear of hazards able to accommodate the:
	- crusher
Area	- loading method
	- unprocessed material
	- processed material
	Sufficient material fit for processing
Other	Method of loading material into the crusher
equipment	Assistance for loading
	Harnesses and other specific PPE
	• The machine selected for the test must not be less than 10 tonnes operating weight, be in serviceable condition and conform with current legislation
Notes	• The operator's manual must be with the crusher
Notes	• A specification for processed stone must be made available to the candidate
	• The crusher may be used in combination with a screener allowing a combined test

Activity instructions

	Activity 2 must be undertaken at the start of the test		
Sequence	Activity 11 must be undertaken at the end of the test		
	The test must be completed within a given time. The specifications' section gives further information		
Preparing for	1. Certify that the crusher is sited appropriately, stable, level and configured for crushing duties		
WORK	2. Complete all manufacturers' pre-start checks		
Setting up for work	3. Ensure the material is suitable for crushing and set the crusher for the given specification		
	 Ensure discharge area(s) is(are) suitable for receiving processed material 		
	Agree the work process and signals with others involved in the crushing process		
	6. Start the crusher and engage all systems		
	7. Convert uncrushed material into processed material		
Working tasks (refer to	8. Operate the crusher until a stockpile is produced that is 75% of the discharge conveyer height		
specifications)	During the crushing process, carry out an emergency stop of operations		
Completing work	10. Clear all material from the crusher and immediate area		
Shutting down	11. Carry out shut-down and securing procedures		
Notes	 If this category is being used in combination with a screener, the work activity is complete only when a stockpile is produced that is 75% of the screener's discharge conveyer height (a combined tests exists for categories A42 and A43) 		
	 If the machine is hot, checks unable to be carried out (i.e. coolant) may be assessed by the Tester using verbal questions 		

Capacity	•	75% of maximum working capacity (for the relevant material to be processed)
Test timings	•	The test must be completed within 1 hour and 30 minutes

Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Make and model:	Start time of test:
	Duration:

Mandatory

Mandatory		Correctly carried out during the test?	Y/N
	1	Positioned in relevant location	
	2	Checked for stability, security and configured for processing duties	
Preparing	3	All pre-start and running checks (or responses to relevant questions)	
	4	Function of emergency stop	
	5	Positioning and security of safety rails and other devices	
	6	Checked discharge area for hazards prior to processing	
	7	Crusher set to meet given specification	
Catting	8	Communication systems coordinated with others involved in the processing	
Setting up	9	Crusher started and all systems engaged in required sequence	
	10	Harness worn and attached	
	11	All systems checked for function prior to processing	
	12	Power unit set to required speed	
	13	Material flow to crushing chamber controlled to prevent overloading	
	14	Output of processed material kept above 75% of maximum operating capacity	
Morking	15	Effective communication with others used during processing	
working	16	Emergency stop demonstrated during processing	
	17	Used appropriate procedures if blockages occurred	
	18	Operator stayed in a safe place during work	
	19	No contact of discharge stockpile with the crusher	
Completing	20	Crusher cleared of material and disposed of following guidelines/regulations	
Shutdown	21	All shutdown and securing procedures	
011	22	Legislation, manufacturers' and health and safety requirements complied with	
Other	23	Test completed within the given time	

	All of these items must be awarded	ed Achieved / Not achieved		
Faults	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
Travelling	1 Crusher mounting and dismounting		1	
	2 Full observation before starting and during processing		2	
	3 Unsuitable items removed before and during processing		3	
Working	4 Sequence of using controls		2	
	5 Smooth use of all controls		2	
	Not exceeded eight penalties	Total p	enalties	

Machine	Mobile or Static Screener having at least three discharge points		
	• Ground, clear of hazards able to accommodate the:		
	- screener		
Area	- loading method		
	- unscreened material		
	- screened material		
	Sufficient material fit for processing		
Other equipment	Method of loading material into the screener		
	Assistance for loading		
	Harness (if required) and other specific PPE		
Notes	• The machine selected for the test must be not less than 10 tonnes operating weight, in serviceable condition and conform with current legislation		
	• The operator's manual must be with the screener		
	• A specification for screened material must be made available to the candidate		
	• The screener may be used in combination with a crusher allowing a combined test		

Activity instructions

Sequence	Activity 2 must be undertaken at the start of the test	
	Activity 11 must be undertaken at the end of the test	
	The test must be completed within a given time. The specifications' section gives further information	
Preparing for	 Certify that the screener is sited appropriately, stable, level and configured for screening duties 	
WOIK	2. Complete all manufacturers' pre-start checks	
	3. Ensure the material is suitable for screening and set the screener for the given specification	
Setting up for work	 Ensure discharge area(s) is(are) suitable for receiving screened material 	
	5. Agree the work process and signals with others involved in the screening process	
	6. Start the screener and engage all systems	
	7. Screen material into at least three different sizes	
Working tasks (refer to specifications)	8. Operate the screener until a stockpile is produced that is 75% of the discharge conveyer height	
	9. During the screening process, carry out an emergency stop	
Completing work	10. Clear all material from the screener and immediate area	
Shutting down	11. Carry out shut-down and securing procedures	
Notes	• If this category is being used in combination with a screener, the work activity is complete only when a stockpile is produced that is 75% of the screener's discharge conveyer height (a combined test exists for categories A42 and A43)	
	 If the machine is hot, checks unable to be carried out (i.e. coolant) may be assessed by the Tester using verbal questions 	

Capacity	•	75% of maximum working capacity (for the relevant material to be screened)
Test timings	•	The test must be completed within 1 hour and 15 minutes

Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Make and model:	Start time of test:
	Duration:

Mandatory

Mandato	ry	Correctly carried out during the test?	Y/N
	1	Positioned in relevant location	
	2	Checked for stability, security and configured for screening duties	
Preparing	3	All pre-start and running checks (or responses to relevant questions)	
	4	Function of emergency stop	
	5	Positioning and security of safety rails and other devices	
	6	Checked discharge area for hazards prior to screened	
	7	Checked reject screen was clear	
	8	Screener set to meet given specification	
Setting up	9	Communication systems coordinated with others involved in the process	
	10	Screener started and all systems engaged in required sequence	
	11	Harness donned and attached	
	12	All systems checked for function prior to screening	
	13	Engine set to required speed	
	14	Material flow controlled to prevent overloading	
	15	Output of screened material kept above 75% of maximum operating capacity	
	16	Maintained the screen head height	
Working	17	Effective communication with others used during screening	
	18	Emergency stop during screening	
	19	Used appropriate procedures if blockages occurred	
	20	Candidate stayed in a safe place during work	
	21	No contact of discharge stockpile with the screener	
Completing	22	Screener cleared of material and disposed of following guidelines / regulations	
Shutdown	23	All shutdown and securing procedures	
Other	24	Legislation, manufacturers' and health and safety requirements complied with	
Other	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 Screener mounting and dismounting		1	
	2 Full observation before starting and during screening		2	
Working	3 Unsuitable items removed before and during screening		3	
	4 Sequence of using controls		2	
	5 Smooth use of all controls		2	
	Not exceeded eight penalties	Total p	enalties	

Trailer mounted

Machine	Trailer mounted concrete pump
	Ground, clear of hazards which must include:
Area	- place to receive poured material
	- wash-out point
	• Pipe sections, taper and bends, including incorrect sized versions
	Ground lines with couplings, seals, packing and anchors
Other equipment	Pipe cleaning equipment
	Supply of concrete suitable for pumping
	Signaller assistance
	• The machine selected for the test must have all controls clearly marked, be in serviceable condition and conform with current legislation
	• The operator's manual must be with the machine
Notes	• A pipeline specification must be constructed for the activity, requiring a pipe length of at least 10 metres consisting of steel tubes and flexible hosing.
	Couplings must be fitted with locking facilities
	• The pumpable material must be deposited into the hopper from a self-propelled vehicle i.e. mixer

Trailer mounted

Activity instructions

Sequence	 Due to the nature of the equipment, all activities can be undertaken on different pumps, locations and different days. CPCS must be informed prior to any tests taking place and be given full details of any divided tests The test must be completed collectively within a given time. The specifications' particular is for a specification. 	
	section gives further information	
Preparing for	1. Complete all manufacturers' pre-start and running checks	
work	2. Ensure that the trailer is secure and segregate the working area	
	3. Prepare for the relevant work following the given pipeline specification	
Setting up for work	4. Lubricate the pipes and placing hoses with a suitable primer	
	5. Direct the material-carrying vehicle into position	
Working tasks (refer to specifications)	6. Pump the material to the pour location whilst following signals	
	7. Stop and restart the pour during work	
	8. Clean all pumping system components	
Completing work	9. Dismantle and store all components and ready the trailer for movement	
Shutting down	10. Carry out shut-down and securing procedures	
Notes	• For activity 3 - Where part of the test is integrated with production activities, the pipeline specification using steel pipes and securing requirements may be simulated	
	• For activity 5 - The material carrying vehicle may be guided to position and the load discharged into a pre-installed mixer unit	

Pumping duration	Minimum of 15 minutes
Test timings	• The test must collectively be completed within 1 hour and 30 minutes

Technical test - Practical Concrete pump - A44

Trailer mounted

Basic details

Test ref:	Candidate name:	
Tester name:	Candidate ref:	
Tester ref:	Date of test:	
Make and model:	Start time of test:	
	Duration:	

Mandatory

Mandato	ry	Correctly carried out during the test?	Y/N
	1	All pre-start and running checks (or responses to relevant questions)	
Preparing	2	Function of emergency stop	
	3	Positioned in relevant location	
	4	Allocated area checked and clear of hazards prior to pumping	
	5	Trailer level and secure prior to pumping	
	6	Outriggers set for pumping duties (as applicable)	
	7	Relevant piping selected	
Setting up	8	Pipeline extended to work area avoiding hazards	
	9	Couplings compatible with, connected and locked to piping	
	10	Flexible piping checked for condition	
	11	Pipeline anchored, supported and secured	
	12	Pipeline conformed with specification	
	13	Pump engaged following required sequence	
	14	Pump function checked	
	15	Engine set to required speed	
working	16	Pipeline grouted and lubricated with appropriate mix	
	17	Mix conformed with specification	
	18	Material pumped to required location at the desired time	
Completing	19	Waste material disposed of following guidelines and regulations	
Completing	20	All components dismantled and stored	
Shutdown	21	All shutdown and securing procedures	
Other	22	Legislation, manufacturers' and health and safety requirements complied with	
Other	23	Test completed within the given time	

	All of these items must be awarded	Achieve	d / Not ac	hieved
Faults	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
	1 Full observation before moving and during pumping		2	
	2 Material-carrying vehicle positioned to allow unloading of material		3	
Working	3 Followed signaller's instructions		2	
	4 Components and trailer thoroughly cleaned after use		2	
	5 Sequence of using controls		2	
	6 Smooth use of all controls		2	
	Not exceeded eight penalties	Total p	enalties	

Machine	Piling rig configured for driven operations
A m = m	Facilities for rig travel and parking
Area	• Flat area to driven works to take place
	Driving equipment to install displacement piles
	Crane for lifting operations (if required)
Other equipment	Suitable personnel to assist with the operations
	Applicable lifting accessories for all loads (if required)
	Items to create restrictions for manoeuvring
	• At least one of the following pile types:
	- steel casings
	- steel box section
Piles	- steel 'H' section
	- timber section
	- concrete section
	Other pile types may be used depending on contract requirements
	• The machine selected for the test must be in serviceable condition and conform with current legislation
	• Pile sizes to be at least 150 mm (or as specified for working operations)
	• Depth of all piles to be 6 metres (or as specified for working operations)
Notes	• The operator's manual must be with the rig
	All lifting accessories must be fit for purpose and certificated
	The weight of all loads must be known
	Specification detailing location, type and depth of piles

Driven below 20 tonnes

Activity instructions

Sequence	 Due to the nature of the equipment, piling activities can be undertaken on different rigs (of the same category), locations and different days if required. CPCS must be informed prior to any tests taking place and be given full details of any divided tests Activity 1 must be undertaken at the start of the test Activity 8 must be undertaken at the end of the test The test must be completed collectively within a given time. The specifications' section gives further information
Preparing for work	1. Complete all manufacturers' pre-start and running checks and prepare the rig for travel
Travelling & manoeuvring	2. Travel to the work area
(refer to specifications)	3. Manoeuvre through a restriction
Setting up for work	4. Configure, prepare and set the rig for driven works
Working tasks (refer to	5. Install given displacement piles to the requisite specification
specifications)	6. Ensure the pile is plumb throughout the driving activity
Completing work	7. On completion of all piling activities, configure the rig for travel
Shutting down	8. Park the rig and carry out shut-down and securing procedures
Notes	• The test may be carried out during actual work and discrepancies allowed for compared to the stated activities and pile types including time needed to move to a new pile position.
	• A minimum of 4 piles must be placed to completion. Should ground conditions or the pile type prevent the placing of the stated minimum, a reduced number may be placed but at least one pile must be inserted to completion
	 If the machine is hot, checks unable to be carried out (i.e. coolant) may be assessed by the Tester using verbal questions

Manoeuvring restriction	• Maximum of the width of the rig plus 800 mm
Pile placing	• Within 100 mm of the given position
Pile measurement	Maximum of 10 degrees from vertical
Pile depth	• At least 6 metres and within 100 mm of the given depth
Test timings	• The test must be completed collectively within 2 hours

Technical test - Practical Piling rig - A45

Correctly carried out during the test?

Driven below 20 tonnes

Y/N

Basic details

Test ref:	Candidate name:	
Tester name:	Candidate ref:	
Tester ref:	Date of test:	
Make and model:	Start time of test:	
	Duration:	

Mandatory

1 All pre-start and running checks (or responses to relevant questions)	
2 Set the rig correctly for travel	
3 Restrictions cleared	
4 Faced the direction of travel	
5 Encountered hazards cleared	
6 Area checked and safe prior to setting up for driven works	
7 Rig positioned accurately prior to driven works	
8 Ensured rig was level prior to driven works	
9 RCI programmed for all duties (if fitted)	
10 Communication arrangements confirmed with the signaller	
11 Placed the pile in the frame/rig and aligned for driving	
12 Drove each pile to the specification	
13 Did not exceed rig's capacity	
14 Rig stability maintained	
15 Instructions conformed with	
16 Rig re-configured from piling to travelling duties	
17 Parked in appropriate place	
18 All shut down and securing procedures	
19 Legislation, manufacturers' and health and safety requirements complied with	
20 Test completed within the given time	
	1All pre-start and running checks (or responses to relevant questions)2Set the rig correctly for travel3Restrictions cleared4Faced the direction of travel5Encountered hazards cleared6Area checked and safe prior to setting up for driven works7Rig positioned accurately prior to driven works8Ensured rig was level prior to driven works9RCI programmed for all duties (if fitted)10Communication arrangements confirmed with the signaller11Placed the pile in the frame/rig and aligned for driving12Drove each pile to the specification13Did not exceed rig's capacity14Rig stability maintained15Instructions conformed with16Rig re-configured from piling to travelling duties17Parked in appropriate place18All shut down and securing procedures19Legislation, manufacturers' and health and safety requirements complied with20Test completed within the given time

	All of these items must be awarded	Achieve	d / Not ac	chieved
Faults	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
	1 Rig mounting and dismounting		1	
	2 Full observation before moving and reversing		3	
	3 Full observation whilst travelling		2	
Travelling	4 Full observation before slewing the upper structure		2	
	5 Drive sprockets kept to the rear when travelling		1	
	6 Matching travel speed to ground types		1	
	7 Piling hammer setting for travel		2	
Working	8 Minimal manoeuvring maintained during work		2	
	9 Using planned cycles of operation		2	
	10 Sequence of using driving (piling) controls		1	
	11 Smooth use of steering controls		1	
	Not exceeded eight penalties	Total p	enalties	

Machine	Piling rig configured for driven operations
Area	Facilities for rig travel and parking
Area	• Flat area to driven works to take place
	Driving equipment to install displacement piles
	Crane for lifting operations (if required)
Other equipment	Suitable personnel to assist with the operations
	Applicable lifting accessories for all loads (if required)
	Items to create restrictions for manoeuvring
	At least one of the following:
	- steel casings
	- steel box section
Piles	- steel 'H' section
	- timber section
	- concrete section
	Other pile types may be used depending on contract requirements
	• The machine selected for the test must be in serviceable condition and conform with current legislation
	• Depth of all piles to be 6 metres (or as specified for working operations)
Notes	• The operator's manual must be with the rig
	All lifting accessories must be fit for purpose and certificated
	The weight of all loads must be known
	• Specification detailing location, type and depth of piles

Driven above 20 tonnes

Activity instructions

Sequence	 Due to the nature of the equipment, piling activities can be undertaken on different rigs (of the same category), locations and different days if required. CPCS must be informed prior to any tests taking place and be given full details of any divided tests Activity 1 must be undertaken at the start of the test Activity 8 must be undertaken at the end of the test The test must be completed collectively within a given time. The specifications' section gives further information 		
Preparing for work	1. Complete all manufacturers' pre-start and running checks and prepare the rig for travel		
Travelling &	2. Travel to the work area		
(refer to specifications)	3. Manoeuvre through a restriction		
Setting up for work	4. Configure, prepare and set the rig for driven works		
Working tasks	5. Install given displacement piles to the requisite specification		
(refer to	6. Ensure the pile is plumb throughout the driving activity		
specifications	7. On completion of all piling activities, configure the rig for travel		
Shutting down	8. Park the rig and carry out shut-down and securing procedures		
Notes	• The test may be carried out during actual work and discrepancies allowed for compared to the stated activities and pile types including time needed to move to a new pile position.		
	• A minimum of 4 piles must be placed to completion. Should ground conditions or the pile type prevent the placing of the stated minimum, a reduced number may be placed but at least one pile must be inserted to completion		
	 If the machine is hot, checks unable to be carried out (i.e. coolant) may be assessed by the Tester using verbal questions 		

Manoeuvring restriction	Maximum of the width of the rig plus 800 mm
Pile placing	Within 100 mm of the given position
Pile measurement	Maximum of 10 degrees from vertical
Pile depth	• At least 6 metres and within 100 mm of the given depth
Test timings	• The test must be completed collectively within 2 hours

Technical test - Practical Piling rig - A46

Correctly carried out during the test?

Driven above 20 tonnes

Y/N

Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Make and model:	Start time of test:
	Duration:

Mandatory

1 All pre-start and running checks (or responses to relevant questions)	
2 Set the rig correctly for travel	
3 Restrictions cleared	
4 Faced the direction of travel	
5 Encountered hazards cleared	
6 Area checked and safe prior to setting up for driven works	
7 Rig positioned accurately prior to driven works	
8 Ensured rig was level prior driven works	
9 RCI programmed for all duties (if fitted)	
10 Communication arrangements confirmed with the signaller	
11 Placed the pile in the frame/rig and aligned for driving	
12 Drove each pile to the specification	
13 Did not exceed rig's capacity	
14 Rig stability maintained	
15 Instructions conformed with	
16 Rig re-configured from piling to travelling duties	
17 Parked in appropriate place	
18 All shut down and securing procedures	
19 Legislation, manufacturers' and health and safety requirements complied with	
20 Test completed within the given time	
	Image: 1All pre-start and running checks (or responses to relevant questions)1All pre-start and running checks (or responses to relevant questions)2Set the rig correctly for travel3Restrictions cleared4Faced the direction of travel5Encountered hazards cleared6Area checked and safe prior to setting up for driven works7Rig positioned accurately prior to driven works8Ensured rig was level prior driven works9RCI programmed for all duties (if fitted)10Communication arrangements confirmed with the signaller11Placed the pile in the frame/rig and aligned for driving12Drove each pile to the specification13Did not exceed rig's capacity14Rig stability maintained15Instructions conformed with16Rig re-configured from piling to travelling duties17Parked in appropriate place18All shut down and securing procedures19Legislation, manufacturers' and health and safety requirements complied with20Test completed within the given time

All of these items must be awarded Ad

Achieved / Not achieved

Faults	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
Travelling	1 Rig mounting and dismounting		1	
	2 Full observation before moving and reversing		3	
	3 Full observation whilst travelling		2	
	4 Full observation before slewing the upper structure		2	
	5 Drive sprockets kept to the rear when travelling		1	
	6 Matching travel speed to ground types		1	
	7 Piling hammer setting for travel		2	
Working	8 Minimal manoeuvring maintained during work		2	
	9 Using planned cycles of operation		2	
	10 Sequence of using driving (piling) controls		1	
	11 Smooth use of steering controls		1	
	Not exceeded eight penalties	Total p	enalties	

Machine	Piling rig configured for boring operations			
Arros	Facilities for rig travel and parking			
Area	Flat area to bored works to take place			
	Boring equipment to meet the specification			
	Equipment to create piles			
	Equipment to remove spoil at the boring location			
Other equipment	Crane for lifting operations (if required)			
	Suitable personnel to assist with the operations			
	Applicable lifting accessories for all loads (if required)			
	Items to create restrictions for manoeuvring			
Pile specification	Diameter of 150 mm (or as per working specification)			
	• The machine selected for the test must be in serviceable condition and conform with current legislation			
	• Depth of all piles to be 6 metres (or as specified for working operations)			
Notes	• The operator's manual must be with the rig			
	All lifting accessories must be fit for purpose and certificated			
	• The weight of all loads must be known			
	• Specification detailing location, type and depth of completed piles			

Bored below 20 tonnes

Activity instructions

Sequence	 Due to the nature of the equipment, piling activities can be undertaken on different rigs (of the same category), locations and different days if required. CPCS must be informed prior to any tests taking place and be given full details of any divided tests Activity 1 must be undertaken at the start of the test Activity 8 must be undertaken at the end of the test The test must be completed collectively within a given time. The specifications' section gives further information 		
Preparing for work	 Complete all manufacturers' pre-start and running checks and prepare the rig for travel 		
Travelling & manoeuvring	2. Travel to the work area		
(refer to specifications)	3. Manoeuvre through a restriction		
Setting up for work	4. Configure, prepare and set the rig for bored works		
Working tasks	5. Form bored piles to specification		
specifications)	6. Ensure the bore is plumb throughout the boring activity		
Completing work	7. On completion of all piling activities, configure the rig for travel		
Shutting down	8. Park the rig and carry out shut-down and securing procedures		
	• The test may be carried out during actual work and discrepancies allowed for compared to the stated activities and pile types including time needed to move to a new pile position.		
Notes	• A minimum of 4 piles must be formed to completion. Should ground conditions or the pile type prevent the forming of the stated minimum, a reduced number may be formed d but at least one pile must be formed to completion		
	 If the machine is hot, checks unable to be carried out (i.e. coolant) may be assessed by the Tester using verbal questions 		

Manoeuvring restriction	• Maximum of the width of the rig plus 800 mm
Bore placing	• Within 100 mm of the given position
Bore measurement	Maximum of 10 degrees from vertical
Bore depth	• At least 6 metres and within 100 mm of the given depth
Test timings	• The test must be completed collectively within 2 hours

Technical test - Practical Piling rig - A47

Correctly carried out during the test?

Bored below 20 tonnes

Y/N

Basic details

Test ref:	Candidate name:	
Tester name:	Candidate ref:	
Tester ref:	Date of test:	
Make and model:	Start time of test:	
	Duration:	

Mandatory

All of these items must be awarded

Achieved / Not achieved

Faults	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
Travelling	1 Rig mounting and dismounting		1	
	2 Full observation before moving and reversing		3	
	3 Full observation whilst travelling		2	
	4 Full observation before slewing the upper structure		2	
	5 Drive sprockets kept to the rear when travelling		1	
	6 Matched travel speed to ground types		1	
	7 Auger motor and flight setting for travel		2	
Working	8 Minimal manoeuvring maintained during work		2	
	9 Used planned cycles of operation		2	
	10 Sequence of using boring (piling) controls		1	
	11 Smooth use of steering controls		1	
	Not exceeded eight penalties	Total p	enalties	

Machine	Piling rig configured for boring operations			
A ** = =	Facilities for rig travel and parking			
Area	Flat area for bored works to take place			
	Boring equipment to meet the specification			
	Equipment to create piles			
	Equipment to remove spoil at the boring location			
Other equipment	Crane for lifting operations (if required)			
	Suitable personnel to assist with the operations			
	Applicable lifting accessories for all loads (if required)			
	Items to create restrictions for manoeuvring			
Pile specification	Diameter of 300 mm (or as per working specification)			
	• The machine selected for the test must be in serviceable condition and conform with current legislation			
	• Depth of all piles to be 6 metres (or as specified for working operations)			
Notes	• The operator's manual must be with the rig			
	All lifting accessories must be fit for purpose and certificated			
	• The weight of all loads must be known			
	• Specification detailing location, type and depth of completed piles			

Bored above 20 tonnes

Activity instructions

Sequence	 Due to the nature of the equipment, piling activities can be undertaken on different rigs (of the same category), locations and different days if required. CPCS must be informed prior to any tests taking place and be given full details of any divided tests Activity 1 must be undertaken at the start of the test Activity 8 must be undertaken at the end of the test The test must be completed collectively within a given time. The specifications' section gives further information
Preparing for work	1. Complete all manufacturers' pre-start and running checks and prepare the rig for travel
Travelling &	2. Travel to the work area
(refer to specifications)	3. Manoeuvre through a restriction
Setting up for work	4. Configure, prepare and set the rig for bored works
Working tacks	5. Form bored piles to specification
(refer to	6. Ensure the bore is plumb throughout the boring activity
specifications	7. On completion of all piling activities, configure the rig for travel
Shutting down	8. Park the rig and carry out shut-down and securing procedures
Notes	• The test may be carried out during actual work and discrepancies allowed for compared to the stated activities and pile types including time needed to move to a new pile position.
	• A minimum of 4 piles must be formed to completion. Should ground conditions or the pile type prevent the forming of the stated minimum, a reduced number may be formed d but at least one pile must be formed to completion
	 If the machine is hot, checks unable to be carried out (i.e. coolant) may be assessed by the Tester using verbal questions

Manoeuvring restriction	• Maximum of the width of the rig plus 800 mm
Bore placing	• Within 100 mm of the given position
Bore measurement	Maximum of 10 degrees from vertical
Bore depth	• At least 6 metres and within 100 mm of the given depth
Test timings	• The test must be completed collectively within 2 hours

Technical test - Practical Piling rig - A48

Correctly carried out during the test?

Bored above 20 tonnes

Y/N

Basic details

Test ref:	Candidate name:	
Tester name:	Candidate ref:	
Tester ref:	Date of test:	
Make and model:	Start time of test:	
	Duration:	

Mandatory

	1	
Preparing	1 All pre-start and running checks (or responses to relevant questions)	
	2 Set the rig correctly for travel	
Turnelling	3 Restrictions cleared	
Travelling	4 Faced the direction of travel	
	5 Encountered hazards cleared	
	6 Area checked and safe prior to setting up for bored works	
	7 Rig positioned accurately prior to bored works	
Setting up	8 Ensured rig was level prior bored works	
	9 RCI programmed for all duties (if fitted)	
	10 Communication arrangements confirmed with the signaller	
	11 Aligned the flight for the required bore angle	
	12 Created each bore to the specification	
	13 Soil spun of flight in the agreed area (if applicable)	
Working	14 Formed pile to the specification	
WORKINg	15 Did not exceed rig's capacity	
	16 Rig stability maintained	
	17 Instructions conformed with	
	18 Rig reconfigured from piling to travelling duties	
Shutdown	19 Parked in appropriate place	
Shutdown	20 All shut down and securing procedures	
Othor	21 Legislation, manufacturers' and health and safety requirements complied with	
Other	22 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
	1 Rig mounting and dismounting		1	
	2 Full observation before moving and reversing		3	
	3 Full observation whilst travelling		2	
Travelling	4 Full observation before slewing the upper structure		2	
	5 Drive sprockets kept to the rear when travelling		1	
	6 Matching travel speed to ground types		1	
	7 Auger motor and flight setting for travel		2	
Working	8 Minimal manoeuvring maintained during work		2	
	9 Using planned cycles of operation		2	
	10 Sequence of using boring (piling) controls		1	
	11 Smooth use of steering controls		1	
	Not exceeded eight penalties	Total p	enalties	

Technical test - Practical Loader/securer - A49 Non-STGO

Machine	Transporter:				
	- rigid load-carrying vehicle or load-carrying trailer				
A 100	Facilities for transporter travel and parking				
Area	• Flat firm area clear of hazards to allow loading and unloading of loads				
	Items for the loading, unloading, stowage and transportation of loads				
Other equipment	 Securing/restraining accessories for each type of load 				
- 1	• Plant Operator for driving plant on and off the transporter (if required)				
	LOAD 1				
	Non-LGV - 1 x track type item of construction-related plant				
	LGV - 1 x track type item of construction-related plant above 5 tonnes				
	LOAD 2				
Loads	Non-LGV - 1 x wheeled type item of construction-related plant				
	LGV - 1 x wheeled type item of construction-related plant above 3 tonnes				
	LOAD 3				
	Non-LGV - 1 x ride-on roller				
	LGV - 1 x ride-on roller above 1 tonne				
	• The transporter selected for the test must meet the specification for the required endorsement, be in serviceable condition and conform with current legislation				
	• The transporter selected for the test must be able to carry and transport the required loads either individually or in multiples				
Notes	 The operator's manuals for both the transporter and each item of plant must be available 				
	The operator used to drive each item of plant must have received appropriate training for the activity and be accordingly certificated				
	All securing accessories must be fit for purposes				
	• The weight of all loads must be known				

Technical test - Practical Loader/securer - A49

Non-STGO

Activity instructions

	• Activity 1 must be undertaken at the start of the test
	Activities 2 and 3 must follow activity 7
Sequence	• Activities 6, 7 and 8 must be undertaken with each item of plant. All other activities need only be undertaken once during the test
	• Activity 10 must be undertaken at the end of the test
	The test must be completed within a given time. The specifications' section gives further information
Preparing for work	1. Complete all manufacturers' pre-start and running checks
Travelling &	2. Prepare the transporter for road travel (loaded and unloaded)
(refer to specifications)	3. Travel to the loading and unloading area
Setting up for work	 Position, prepare and set the transporter for receiving and removing loads
	5. Establish the communication methods and loading arrangement with the plant operator (if applicable)
	6. Place or guide each load onto the transporter bed
Working tasks	7. Position and secure all loads in preparation for travel
specifications)	8. Remove or guide loads from the transporter
	9. Stow all equipment and return the transporter to the park position
Shutting down	10. Park the transporter and carry out shut-down and securing procedures
Notes	• For activity 6, each item of plant must be loaded and unloaded during the test but may be loaded individually or in multiples
Notes	• If the transporter is hot, checks unable to be carried out (i.e. coolant) may be assessed by the Tester using verbal questions

Load placing	Positioned so as not to exceed axle loadings
Test timings	• The test must be completed within 2 hours

Technical test - Practical Loader/securer - A49

Non-STGO

Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Endorsement: A B	Start time of test:
Make and model:	Duration:

Mandator

Mandatory		Correctly carried out during the test?	Y/N
Preparing	1	All pre-start and running checks (or responses to relevant questions)	
Travelling	2	Ensured transporter complies with RTA prior to travel	
	3	Ascertained height of load prior to travel	
	4	Cleared encountered hazards	
	5	Checked area safe prior to setting up for loading and unloading	
	6	Transporter positioned prior to loading and unloading	
Satting up	7	Loading and unloading area secured	
Setting up	8	Ensured transporter was set, level and secure for loading and unloading	
	9	Selected and assessed the appropriate securing accessories	
	10	Employed outriggers (as necessary)	
	11	Drove or guided each item of plant onto the transporter	
	12	Positioned each item of plant on transporter	
	13	Ensured axle loadings not exceeded	
	14	Positioned on trailer ensuring cutting edges not facing travel direction	
Working	15	Immobilised each item of plant and ensured all hydraulic systems disabled	
WORKINg	16	Applied plant transportation (slew/articulation) locks	
	17	Secured/restrained item of plant ensuring no movement during transportation	
	18	Marked load overhangs accordingly (in compliance with CoP)	
	19	Secured/restrained plant in compliance with CoP	
	20	Stowed all securing/restraining equipment	
Shutdown	21	Parked in appropriate place	
Shutdown	22	All shutdown and securing procedures	
Other	23	Legislation, manufacturers' and health and safety requirements complied with	
Other	24	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
	1 Transporter mounting and dismounting		2	
	2 Full observation before moving and reversing		3	
Travelling	3 Full observation whilst travelling		2	
	4 Minimising positioning for loading and unloading		2	
	5 Ensuring travel speeds match ground conditions		1	
Working	6 Checking transporter anchor points prior to loading		3	
	7 Using appropriate number of anchorage points for each load		2	
	8 Using appropriate type of securing/restraining accessories for each load		2	
	9 Using chocks where needed		2	
	10 Using matting/traction aids where needed		2	
	Not exceeded eight penalties	Total p	enalties	

Machine	STGO compliant transporter		
Arros	Facilities for transporter travel and parking		
Area	• Flat firm area clear of hazards to allow loading and unloading of loads		
	Items for the loading, unloading, stowage and transportation of loads		
Other equipment	Securing/restraining accessories for each type of load		
	• Plant Operator for driving plant on and off the transporter (if required)		
	• LOAD 1		
	1 x track type item of construction-related plant above 10 tonnes		
Loada	• LOAD 2		
LUdus	1 x wheeled type item of construction-related plant above 10 tonnes		
	• LOAD 3		
	1 x ride-on roller above 10 tonnes		
	• required loads either individually or in multiples, be in serviceable condition and conform with current legislation		
	• The operator's manuals for both the transporter and each item of plant must be available		
Notes	• The operator used to drive each item of plant must have received appropriate training for the activity and be accordingly certificated		
	All securing accessories must be fit for purposes		
	• The weight of all loads must be known		

Activity instructions

Sequence	Activity 1 must be undertaken at the start of the test
	Activities 2 and 3 must follow activity 7
	• Activities 6, 7 and 8 must be undertaken with each item of plant. All other activities need only be undertaken once during the test
	• Activity 10 must be undertaken at the end of the test
	The test must be completed within a given time. The specifications' section gives further information
Preparing for work	1. Complete all manufacturers' pre-start and running checks
Travelling & manoeuvring (refer to specifications)	2. Prepare the transporter for road travel (loaded and unloaded)
	3. Travel to the loading and unloading area
Setting up for	4. Position, prepare and set the transporter for receiving and removing loads
work	5. Establish the communication methods and loading arrangement with the plant operator (if applicable)
	6. Place or guide each load onto the transporter bed
Working tasks	7. Position and secure all loads in preparation for travel
specifications)	8. Remove or guide loads from the transporter
	9. Stow all equipment and return the transporter to the park position
Shutting down	10. Park the transporter and carry out shut-down and securing procedures
Notes	• For activity 6, each item of plant must be loaded and unloaded during the test but may be loaded individually or in multiples
	 If the transporter is hot, checks unable to be carried out (i.e. coolant) may be assessed by the Tester using verbal questions

Load placing	Positioned so as not to exceed axle loadings
Test timings	The test must be completed within 2 hours

Technical test - Practical Loader/securer - A50 STGO

Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Make and model:	Start time of test:
	Duration:

Mandatory

Mandatory		Correctly carried out during the test?	Y/N
Preparing	1	All pre-start and running checks (or responses to relevant questions – transporter)	
Travelling	2	Ensured transporter complies with RTA prior to travel	
	3	Ascertained height of load prior to travel	
	4	Cleared encountered hazards	
	5	Checked area safe prior to setting up for loading and unloading	
	6	Transporter positioned prior to loading and unloading	
Sotting up	7	Loading and unloading area secured	
Setting up	8	Ensured transporter was set, level and secure for loading and unloading	
	9	Selected and assessed the appropriate securing accessories	
	10	Employed outriggers (as necessary)	
	11	Drove or guided each item of plant onto the transporter	
	12	Positioned each item of plant on transporter	
	13	Ensured axle loadings not exceeded	
	14	Positioned on trailer ensuring cutting edges not facing travel direction	
Working	15	Immobilised each item of plant and ensured all hydraulic systems disabled	
WORKINg	16	Applied plant transportation (slew/articulation) locks	
	17	Secured/restrained item of plant ensuring no movement during transportation	
	18	Marked load overhangs accordingly (in compliance with CoP)	
	19	Secured/restrained plant in compliance with CoP	
	20	Stowed all securing/restraining equipment	
Shutdown	21	Parked in appropriate place	
Silutuowii	22	All shutdown and securing procedures	
Other	23	Legislation, manufacturers' and health and safety requirements complied with	
	24	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 Transporter mounting and dismounting		2	
	2 Full observation before moving and reversing		3	
	3 Full observation whilst travelling		2	
	4 Minimising positioning for loading and unloading		2	
	5 Ensuring travel speeds match ground conditions		1	
	6 Checking transporter anchor points prior to loading		3	
Working	7 Using appropriate number of anchorage points for each load		2	
	8 Using appropriate type of securing/restraining accessories for each load		2	
	9 Using chocks where needed		2	
	10 Using matting/traction aids where needed		2	
Not exceeded eight penalties		Total p	enalties	

Machine	Articulated rear-tipping dump truck	
	Ground, clear of hazards which must include:	
Area	- rough undulating terrain	
	- Slope or slopes	
	- A stockpile of material for loading	
	- A straight run for reversing	
	- Trench or edge for unloading purposes*	
	Machine to load material	
Other equipment	Edge protection	
	Items to create restrictions for manoeuvring	
Loads	Suitable and sufficient material for loading and discharging	
	• The machine selected for the test must meet the specification for the required endorsement, be in serviceable condition and conform with current legislation	
	• The operator's manual must be with the dump truck	
	• The slope must have at least an 18% (1:5.5) incline with sufficient manoeuvring room at the top, or a straight ramp with an up and down route with a flat area at the summit	
Notos	• The straight run for reversing must be at least 50 metres long	
Notes	• The trench or an edge must be at least 1 x metre deep and a minimum of 3 x the machine's width*	
	• Edge protection must be of substantial build to restrain a machine from inadvertently entering the trench/exceeding the edge	
	• *In situations where operations do not allow tipping over edges, or the formation of trenches because of the nature of the ground, a pre-formed stockpile of adequate size may be used but which has a defined edge for tipping over and appropriate edge protection. Three loads need to be discharged but need not be 3 x the machine's width	

Articulated chassis

Activity instructions

Sequence	Activity 1 must be undertaken at the start of the test	
	 Activity 2 may be spread over the period of the test 	
	Activity 7 must be undertaken at the end of the test	
	The test must be completed within a given time. The specifications' section gives	
	further information	
Preparing for work	 Complete all manufacturers' pre-start and running checks and prepare the dump truck for travel 	
	2. In a loaded and unloaded state:	
	- travel up and down the slope	
	 stop and start on the slope in the up direction 	
Travelling &	 stop and start on the slope in the down direction 	
manoeuvring (refer to specifications)	 stop on the slope in the down direction and reverse back up for a minimum of 5 metres 	
specifications	 drive through a restriction (unladen only) 	
	- travel over rough terrain	
	 reverse (loaded only) in a straight line for a minimum of 50 metres and pass through a restriction at the end of the run 	
Setting up for work	3. Position dump truck for loading	
Working tasks	4. Receive a load which fills the body to capacity	
(refer to specifications)	5. Discharge the load over the edge or into the excavation	
Completing work	6. Clean out the body fully	
Shutting down	7. Park the dump truck and carry out shut-down and securing procedures	
Notes	• The candidate is to ensure that suitable edge protection is in place prior to discharging the load (as per Mandatory point 10 on grading sheet)	
	 If the machine is hot, checks unable to be carried out (i.e. coolant) may be assessed by the Tester using verbal questions 	

Travelling restriction	• 800 mm
Reversing direction	• 1 metre
Discharging	Minimum of 3 times (activity 5)
Test timings	• The test must be completed within 1 hour and 30 minutes

Technical test - Practical Dump truck - A56

Articulated chassis

.

Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Endorsement: A B	Start time of test:
Make and model:	Duration:

Mandatory

Mandator	Y Correctly carried out during the test?	Y/N
Preparing	1 All pre-start and running checks (or responses to relevant questions)	
Travelling	2 Dump truck set for travel	
	3 Restrictions and hazards cleared	
	4 Full control maintained when ascending and descending slopes	
	5 No opposite movement of intended direction when restarting on slopes	
	6 Straight line kept for loaded reversing activity	
Setting up	7 Allocated area checked and clear of hazards prior to being loaded	
	8 Safe place selected during loading	
	9 Appropriate speed used when reversing to the discharge point	
	10 Edge protection applied or checked and used prior to discharging load	
Working	11 Load discharged cleanly over edge protection	
	12 Parking brake applied and neutral selected before discharging loads	
	13 Vehicle marginally moved forward after discharging to clear body	
	14 Body fully lowered before leaving discharge point	
Completing	15 Body clean of material	
Shutdown	16 All shutdown and securing procedures	
Other	17 Legislation, manufacturers' and health and safety requirements complied with	
Other	18 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 1 Dump truck mounting and dismounting 1 2 Full observation before moving and reversing 3 3 Full observation whilst travelling 2 Travelling 2 4 Travel speed matched to the ground type and conditions 5 Transmission drive engaged smoothly from rest 2 6 Gear ratios matched to ground speed 1 7 Dump truck positioned correctly for loading 2 Dump truck positioned square to the discharge edge prior to 8 2 discharging Working 9 Body fully emptied after discharging 2 10 Smooth use of steering and braking controls 1 Not exceeded eight penalties **Total penalties**
Resources required

Machine	Rigid rear-tipping dump truck
	Ground, clear of hazards which must include:
	- rough undulating terrain
A m = m	- slope or slopes
Area	- a stockpile of material for loading
	- a straight run for reversing
	- trench or edge for unloading purposes
	Machine to load material
Other equipment	Edge protection
	Items to create restrictions for manoeuvring
Loads	Suitable and sufficient material for loading and discharging
	• The machine selected for the test must meet the specification for the required endorsement, be in serviceable condition and conform with current legislation
	• The operator's manual must be with the dump truck
	• The slope must have at least an 18% (1:5.5) incline with sufficient manoeuvring room at the top, or a straight ramp with an up and down route with a flat area at the summit
Notos	• The straight run for reversing must be at least 50 metres long
Notes	 The trench or an edge must be at least 1 x metre deep and a minimum of 3 x the machine's width*
	 Edge protection must be of substantial build to restrain a machine from inadvertently entering the trench
	 * in situations where operations do not allow tipping over edges, or the formation of trenches because of the nature of the ground, a pre-formed stockpile of adequate size may be used but which has a defined edge for tipping over and appropriate edge protection. Three loads need to be discharged but need not be 3 x the machine's width

Activity instructions

Sequence	Activity 1 must be undertaken at the start of the test
	• Activity 2 may be spread over the period of the test
	Activity 7 must be undertaken at the end of the test
	The test must be completed within a given time. The specifications' section gives further information
Preparing for work	1. Complete all manufacturers' pre-start and running checks and prepare the dump truck for travel
	2. In a loaded and unloaded state:
	- travel up and down the slope
	- stop and start on the slope in the up direction
Travelling &	- stop and start on the slope in the down direction
manoeuvring (refer to	 stop on the slope in the down direction and reverse back up for a minimum of 5 metres
	- drive through a restriction (unladen only)
	- travel over rough terrain
	 reverse (loaded only) in a straight line for a minimum of 50 metres and pass through a restriction at the end of the run
Setting up for work	3. Position dump truck for loading
Working tasks	4. Receive a load which fills the body to capacity
specifications)	5. Discharge the load over the edge or into the excavation
Completing work	6. Clean out the body fully
Shutting down	7. Park the dump truck and carry out shut-down and securing procedures
Notes	 If the machine is hot, checks unable to be carried out (i.e. coolant) may be assessed by the Tester using verbal questions

Activity measurements

Travelling restriction	• 800 mm
Reversing restriction	• 1 metre
Discharging	Minimum of 3 times (activity 5)
Test timings	• The test must be completed within 1 hour and 30 minutes

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Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Endorsement: A B C D	Start time of test:
Make and model:	Duration:

N/a calata w

Mandatory		Correctly carried out during the test?	Y/N
Preparing	1	All pre-start and running checks (or responses to relevant questions)	
	2	Dump truck set for travel	
	3	Restrictions cleared	
Travelling	4	Encountered hazards cleared	
navening	5	Full control maintained when ascending and descending slopes	
	6	No opposite movement of intended direction when restarting on slopes	
	7	Straight line kept for loaded reversing activity	
Setting up	8	Allocated area checked and clear of hazards prior to being loaded	
	9	Safe place selected during loading	
	10	Appropriate speed used when reversing to the discharge point	
Working	11	Edge protection applied or checked and used prior to discharging load	
WORKINg	12	Parking brake applied and neutral selected before discharging loads	
	13	Vehicle marginally moved forward after discharging to clear body	
	14	Body fully lowered before leaving discharge point	
Completing	15	Body clean of material	
Shutdown	16	All shutdown and securing procedures	
Othor	17	Legislation, manufacturers' and health and safety requirements complied with	
Other	18	Test completed within the given time	

Faults Candidate incorrectly carried out the following: Fault Mark Penalty 1 Dump truck mounting and dismounting 1 2 Full observation before moving and reversing 3 3 Full observation whilst travelling 2 Travelling 4 Transmission drive engaged smoothly from rest 2 5 Travel speed matched to the ground type and conditions 2 Gear ratios matched to ground speed 1 6 Dump truck positioned correctly for loading 2 7 8 Dump truck positioned square to the discharge edge prior to 2 discharging Working 9 Body fully emptied after discharging 2 10 Smooth use of steering and braking controls 3 Not exceeded eight penalties Total penalties

All of these items must be awarded

Achieved / Not achieved

Achieved / Not achieved

below 10 tonnes

Resources required

Machine	 360 excavator equipped with a grading blade and fitted with a standard excavating bucket or quick hitch (endorsements A and B)
Area	 Ground, clear of hazards, which must include: level area for excavating (A and B), and lifting operations (C) if applicable rough terrain (A - C) slope or slopes (A and B)
	- spoil/material to load vehicles (A and B)
Other equipment	 Load-carrying vehicle for spoil/material A replacement bucket for reinstating and changing activities Items to create restrictions for manoeuvring Laser-equipped measuring equipment to ensure trench specifications are met
Notes	 The machine selected for the test must meet the specification for the required endorsement, be in serviceable condition and conform with current legislation The operator's manual must be with the excavator The slope must have at least an 18% (1:5.5) incline with sufficient manoeuvring room at the top, or a straight ramp with an up and down route with a flat area at the summit The nominated area must be safe to allow excavations up to 2 m deep The load-carrying vehicle must have a minimum capacity equivalent to six full bucket loads of the excavator being used for the test The same bucket may be used for reinstating and changing purposes

Additional resources required – Endorsement C

Machine	 360 excavator capable of lifting the requisite slung loads, fitted with check valves*, an RCI/LMI* and have a suitable lifting/accessory attachment point
Loads (Optional)	 LOAD A 1 x load, able to be slung and weighing not less than 60% of the machine's maximum lifting/object handling capacity at full radius
	• LOAD B 1 x load able to be slung being at least:
	- 1 m in length for machines up to 5 tonnes
	- 2 m in length for machine 5 tonnes and above
	• LOAD C 1 x load able to be placed behind a structure or below ground level

Technical test - Practical Excavator 360 – A58

below 10 tonnes

Additional resources required – Endorsement C (Continued)

Other equipment	Multi-legged lifting accessories suitable for each load
	Measuring tape for measuring the maximum radius of the excavator
	Slinger and signaller assistance
	• A structure or below-ground level location for placing a load out-of-sight of the operator
	• Items to facilitate the load handling exercise in Activity 12
	All lifting accessories must be fit for purpose and certificated
	• The weight of all loads must be known
	• The rated load/object handling capacity chart must be available for reference by the candidate
	• The slinger/signaller must be certificated and competent
	• The width of the obstacle for Activity 12 must be minimal allowing the load to be returned to ground level before full radius is reached
Notes Lifting Operations only	• The structure or below-ground level location chosen for LOAD C 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 operating position. If a below-ground landing place is chosen, it must be a safe environment for the slinger/signaller to handle the load. If a ground-level structure is chosen, it must be of sufficient strength to resist movement should the load inadvertently contact the structure
	• Care must be taken if the machine is fitted with a quick-hitch type coupler as the accessory attachment point may extend the working radius of the machine and exceed the manufacturer's maximum rated lift/object handling capacity
	• If the rated lifting capacity for the excavator on the test is greater than 1 tonne (or the overturning moment is greater than 40,000 Nm) then the machine must be fitted with:
	a) a boom lowering control device on the raising (main) boom cylinder(s) and meet the requirements of ISO8643:1997
	b) an RCI* or LMI*
	* An RCI is deemed as a device that meet the requirements of LOLER 1998 in terms of a device that provides acoustic or visual warnings, which indicates to the operator when the object handling capacity or corresponding load moment is reached

Technical test - Practical Excavator 360 – A58

below 10 tonnes

Activity instructions – Endorsements A and B

Sequence	• Activity 1 must be undertaken at the start of the test.
	• Activities 2, 4 and 5, 6, and 7 can be undertaken at any time during the test.
	• Activity 9 must be undertaken at the end of the test.
	The test must be completed within a given time. The specifications section gives further information
Preparing for work	1. Complete all manufacturers' pre-start and running checks and prepare the excavator for travel
	2. Travel to the work area and:
Travelling & manoeuvring	- travel up and down the slope
(refer to	- pass through a restriction
specificationsy	- travel over rough terrain
Setting up for work	3. Prepare and set the excavator for the relevant work
Working tasks (refer to specifications)	4. Produce a vertical trench to the specified dimensions
	5. Produce 2 x straight trenches to form a 'T' pattern with square starts and finishes
	6. Load material into a vehicle
	7. Change the bucket
	8. Reinstate the work area back to the original state
Shutting down	9. Park the excavator and carry out shut-down and securing procedures
	 For Activity 2 wheeled excavators must pass through the restriction in a forward and reverse direction
Notes	• For Activity 7 the dipper must be raised and slewed away from the bucket before attaching, if using the same bucket
	For Activity 8 the grading blade shall be employed
	 If the machine is hot, any checks that are unable to be carried out (i.e. coolant) may be assessed by the tester using verbal questions

Activity measurements – Endorsements A and B

Travel restrictions	• 600 mm (Activity 2)	
Trench depths	• 0.5 m ± 35 mm and straight within ± 60 mm	
Trench length	• Up to 5 tonnes = 5 m and 2 m	
	• Above 5 tonnes = 10 m and 4 m	
Test timings	• The test must be completed within two hours and 30 minutes	

Technical test - Practical Excavator 360 – A58

below 10 tonnes

Activity measurements – Endorsement C

Sequence	• Activities 11 to 15 can be undertaken in any order during the test.
Preparing for work	10. Prepare and set the excavator for each lifting operation
Lifting Operations	 11. Lift LOAD A from minimum radius, position the load at 75% of full radius and rotate for a minimum of 180 degrees. On completion, land the load at a different radius 12. Lift LOAD A and place at minimum radius. Reposition the load to full radius whilst following ground contours. At a point halfway along the load travel route, pass over an obstacle whilst following the contours of that obstacle. When at full radius, slew the load for approximately 10 degrees (left or right) and return the load to the start point following ground contours 13. Lift LOAD A and travel for a minimum given distance following a route that includes: passing through a restriction travelling over rough terrain executing right and left hand turns 14. Lift LOAD B and position the dipper arm vertically. Rotate the load for a minimum of 180 degrees and return back to the start point via the same route
Notes	 Activities 1 and 9 need to be undertaken by existing CPCS cardholders holding category A58 seeking Endorsement C in addition to Activities 10 to 15.

Activity measurements – Endorsements C

Load movement	• Maximum height of underside of the load = 1 m (except Activity 12)
Load	• Maximum height of underside of the load from ground contours = 100 mm
(Activity 12)	• Maximum distance from obstacle = 500 mm
Obstacle Height (Activity 12)	• Minimum of 1 m (adjustments may be made for smaller excavators if the reach is limited)
Load placing	• 100 mm of a given position
Travelling with load	At least 8 m distance
Test timings	• The test must be completed in a total time of 3 hours if combining Endorsement C with Endorsements A or B, or
	 The test must be completed within 40 minutes if a stand-alone test for existing cardholders adding Endorsement C only

Note: The lifting operations activities must follow the requirements laid out in the joint industry 'Guidance on Lifting Operations in the Construction Sector When Using Excavators', published by the Construction-plant Association and can be downloaded free-of-charge from <u>www.cpa.uk.net</u>

Technical test - Practical Excavator 360 – A58

below 10 tonnes

Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Endorsement: A B C	Start time of test:
Make and model:	Duration:

Mandatory

Mandator	Y Correctly carried out during the test?	Y/N
Preparing	1. All pre-start and running checks (or responses to relevant questions)	
	2. Restrictions cleared	
	3. Excavator set for travel	
Travelling	4. Encountered hazards cleared	
	5. Boom/dipper arm position when ascending and descending inclines	
	6. Faced direction of travel whilst moving	
Setting up	7. Allocated area checked and clear of hazards prior to each activity	
	8. Excavator laterally level whilst excavating	
	9. Excavated material clear of trench	
	10. Trenches conform to the stated sizes and tolerances	
	11. Full bucket loads when excavating (except for finishing work) and loading	
Working	12. Loading vehicle and excavator position prior to loading	
	13. Vehicle evenly loaded but not overloaded	
	14. Existing bucket removed and replacement bucket installed	
	15. Excavated area reinstated back to the original contours	
	16. Grading blade utilised for reinstating work	
Shutdown	17. All shutdown and securing procedures	
Othor	18. Legislation, manufacturers' and health and safety requirements complied with	
Other	19. Test completed within the given time	

	All of these items must be awarded	Achieve	d / Not ac	hieved
Faults	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
	1. Excavator mounting and dismounting		1	
	2. Full observation before moving		2	
	3. Full observation whilst travelling		2	
Travelling	4. Observation before slewing upper structure		2	
	5. Drive sprockets kept to the rear when travelling		1	
	6. Travel speed matched to the ground type and conditions		1	
	7. Minimising ground damage when turning (tracked machines only)		1	
	8. Site and set for excavating		2	
	9. Trench excavated in layer.		1	
	10. Sideswiping with bucket		1	
Working	11. Edges of the excavations clean and clear		2	
	12. Material cleanly placed into the loading vehicle		1	
	13. Contact with vehicle avoided when loading		1	
	14. Use of steering/hydraulic controls		1	
	Not exceeded eight penalties	Total p	enalties	
		Achieve	d / Not ac	hieved

Note: Mandatory item17 - the candidate must ground the bucket, stop the engine and remove the key before exiting the cab; this must be adhered to at all times during the test.

Technical test - Practical Excavator 360 – A58

below 10 tonnes

Basic details – Endorsement C

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Endorsement: A B C	Start time of test:
Make and model:	Duration:

Mandatory

Mandatory Correctly carried out during the test? Y		Y/N
Preparing	20. All pre-start and running checks (or responses to relevant questions)	
Travelling with load	21. Excavator set for travel	
	22. Encountered hazards cleared	
	23. Boom/dipper arm position when ascending and descending inclines	
	24. Faced direction of travel when moving	
	25. Allocated area checked and clear of hazards prior to lifting activity	
Cotting up	26. Communication arrangements confirmed with slinger/signaller	
Setting up	27. Excavator positioning correct prior to lifting loads	
	28. Excavator level prior to lifting and placing loads	
	29. No contact between load and excavator and/or other obstructions	
	30. Lifted, moved and lowered load in a controlled manner	
	31. Route assessed and travelled with the slung load in a controlled manner	
Lifting	32. Instructions conformed with	
operations	33. Stability of the machine maintained at all times	
operations	34. SWL not exceeded at any time	
	35. Load remains freely suspended (except during lifting and placing)	
	36. Machine controls isolated when loads being attached/disconnected	
	37. Personnel clear of the 'danger' zone when lifting and moving loads	
Shutdown	38. All shutdown and securing procedures	
Othor	39. Legislation, manufacturers', and health and safety requirements complied with	
Other	40. Test completed within the given time	

	All of these items must be awarded	Achieve	d / Not ad	chieved
Faults	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
	15. Excavator mounting and dismounting		1	
	16. Full observation before moving		2	
	17. Full observation whilst travelling with slung load		2	
Travelling	18. Observation before slewing upper structure		2	
with loads	19. Drive sprockets kept to the rear when travelling		1	
	20. Travel speed matched to the ground type and conditions		1	
	 Minimising ground damage when turning with slung load (tracked machines only) 		1	
	22. All loads vertically lifted (for example load not dragged)		2	
	23. Each load lifted clear of surface and checked for integrity		1	
Lifting	24. Load swings minimised during travel and static lifts		2	
operations	25. Keeping load height within given tolerance		1	
	26. All loads placed at given points within the given tolerance		2	
	27. Use of steering/hydraulic controls		1	
	Not exceeded eight penalties	Total p	enalties	

Achieved / Not achieved

Note:

- Mandatory items 20, 38 and 40, and item 15 in the faults section need not be marked if combining Endorsement C with . Endorsements A or B.
- Existing CPCS cardholders holding Category A58 seeking Endorsement C need to be measured against all marking items in Endorsement C.
- Mandatory item 36 If the candidate does not isolate the operating controls during the load attaching/detaching activity, the tester must immediately inform the candidate to do so. The candidate has the option to continue the test but be informed they have not achieved on the test at this time.

above 10 tonnes

Resources required

Machine	• 360 excavator fitted with a standard excavating bucket using a quick hitch coupling system(endorsements A and B)
	Ground, clear of hazards, which must include:
	- level area for excavating (A and B), and lifting operations (C) if applicable
Area	- rough terrain (A - C)
	- slope or slopes (A and B)
	- spoil/material to load vehicles (A and B)
	Load-carrying vehicle for spoil/material
Other	A replacement bucket for reinstating and changing activities
equipment	Items to create restrictions for manoeuvring
	Laser-equipped measuring equipment to ensure trench specifications are met
	• The machine selected for the test must meet the specification for the required endorsement, be in serviceable condition and conform with current legislation
	The operator's manual must be with the excavator
	• The slope must have at least an 18% (1:5.5) incline with sufficient manoeuvring room at the top, or a straight ramp with an up and down route with a flat area at the summit
Notes	• The nominated area must be safe to allow excavations up to 2 m deep
	• The load-carrying vehicle must have a minimum capacity equivalent to six full bucket loads of the excavator being used for the test
	Minimum bucket sizes apply, as follows:
	- machines up to 20 tonnes – 24 inches (600 mm equivalent)
	- machines above 20 tonnes – 36 inches (900 mm equivalent)
	The same bucket may be used for reinstating and changing purposes

Additional resources required – Endorsement C

Machine	 360 excavator capable of lifting the requisite slung loads, fitted with check valves*, an RCI/LMI* and have a suitable lifting/accessory attachment point
loads	• LOAD A 1 x load, able to be slung and weighing not less than 60% of the machine's maximum lifting/object handling capacity at full radius
(Optional)	• LOAD B 1 x load able to be slung being at least 3 m in length.
	• LOAD C 1 x load able to be placed behind a structure or below ground level

Technical test - Practical Excavator 360 – A59

above 10 tonnes

Additional resources required – Endorsement C (Continued)

	Multi-legged lifting accessories suitable for each load
	Measuring tape for measuring the maximum radius of the excavator
Other	Slinger and signaller assistance
equipment	• A structure or below-ground level location for placing a load out-of-sight of the operator
	• Items to facilitate the load handling exercise in Activity 12
	All lifting accessories must be fit for purpose and certificated
	• The weight of all loads must be known
	• The rated load/object handling capacity chart must be available for reference by the candidate
	• The slinger/signaller must be certificated and competent
	• The width of the obstacle for Activity 12 must be minimal allowing the load to be returned to ground level before full radius is reached
	• The structure or below-ground level location chosen for LOAD C 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 operating position. If a below-ground landing place is chosen, it must be a safe environment for the slinger/signaller to handle
Notes Lifting Operations only	• The load: If a ground level structure is chosen, it must be of sufficient strength to resist movement should the load inadvertently contact the structure
	• Care must be taken if the machine is fitted with a quick-hitch type coupler as the accessory attachment point may extend the working radius of the machine and exceed the manufacturer's maximum rated lift/object handling capacity
	Machines being used for the test must have:
	a) a boom lowering control device on the raising (main) boom cylinder(s) and meet the requirements of ISO8643:1997
	b) an RCI* or LMI*
	* An RCI is deemed as a device that meet the requirements of LOLER 1998 in terms of a device that provides acoustic or visual warnings, which indicates to the operator when the object handling capacity or corresponding load moment is reached

Technical test - Practical Excavator 360 – A59

above 10 tonnes

Activity instructions – Endorsements A and B

Sequence	Activity 1 must be undertaken at the start of the test.
	• Activities 2, 4 and 5, 6 and 11 to 14 can be undertaken at any time during the
	test.
	 Activity 9 must be undertaken at the end of the test.
	The test must be completed within a given time. The specification section gives
	further information
Preparing for	1. Complete all manufacturers' pre-start and running checks and prepare
work	the excavator for travel
Travelling &	2. Travel to the work area and:
manoeuvring	 travel up and down the slope
(refer to	 pass through a restriction
specifications	 travel over rough terrain
Setting up for	3. Prepare and set the excavator for the relevant work
WOIK	A Produce a vertical trench to the specified dimensions
	 Complete a square evenuation with vertical sides at the end of the dug
Working tasks (refer to	trench
specifications)	6. Load material into a vehicle
	7. Change the bucket
Completing work	8. Reinstate the work area back to the original state
Shutting down	9. Park the excavator and carry out shut-down and securing procedures
	• For Activity 2, wheeled excavators must pass through the restriction in a
	forward and reverse direction
Notes	 For Activity 7, the dipper must be raised and slewed away from the bucket before attaching, if using the same bucket
	 If the machine is hot, checks unable to be carried out (such as coolant) may be assessed by the tester using verbal questions

Activity measurements – Endorsements A and B

Travel restrictions	• 800 mm (Activity 2)
Trench depth	• 1 m ± 35 mm and straight within ± 60 mm
Trench length	 Machine weight: 10 - 20 tonnes = 15m Over 20 tonnes = 20m
Square excavation	• 3 x buckets wide and a depth of 1.5 m ± 35 mm
Loading vehicle	Loaded to capacity
Test timings	• The test must be completed within 2 hours and 45 minutes for Endorsements A or B only

Technical test - Practical Excavator 360 – A59

above 10 tonnes

Activity measurements – Endorsement C

Sequence	• Activities 11 to 15 can be undertaken in any order during the test
Preparing for work	10. Prepare and set the excavator for each lifting operation
Travelling & manoeuvring (refer to specifications)	 11. Lift LOAD A from minimum radius, position the load at 75% of full radius and rotate for a minimum of 180 degrees. On completion, land the load at a different radius 12. Lift LOAD A and place at minimum radius. Reposition the load to full radius whilst following ground contours. At a point halfway along the load travel route, pass over an obstacle whilst following the contours of that obstacle. When at full radius, slew the load for approximately 10 degrees (left or right) and return the load to the start point following ground contours 13. Lift LOAD A and travel for a minimum given distance following a route that includes: passing through a restriction travelling over rough terrain executing right and left hand turns 14. Lift LOAD B and position the dipper arm vertically. Rotate the load for a minimum of 180 degrees and return back to the start point via the same route
Notes	 Activities 1 and 9 need to be undertaken by existing CPCS cardholders holding category A59 seeking Endorsement C in addition to Activities 10 to 15

Activity measurements – Endorsements C

Load movement	• Maximum height of underside of the load = 1 m (except Activity 12)
Load	• Maximum height of underside of the load from ground contours = 100 mm
(Activity 12)	• Maximum distance from obstacle = 500 mm
Obstacle Height (Activity 12)	Minimum of 1 m
Load placing (All activities)	• 100 mm of a given position
Travelling with load	At least 12 m distance
Test timings	 The test must be completed in a total time of 3 hours and 15 minutes if combining Endorsement C with Endorsements A or B, or The test must be completed within 40 minutes if a stand-alone test for existing cardholders adding Endorsement C only

Note: The lifting operations activities must follow the requirements laid out in the joint industry 'Guidance on Lifting Operations in the Construction Sector When Using Excavators', published by the Construction-plant Association and can be downloaded free-of-charge from <u>www.cpa.uk.net</u>

Technical test - Practical Excavator 360 – A59

Correctly carried out during the test?

above 10 tonnes

Y/N

Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Endorsement: A B C	Start time of test:
Make and model:	Duration:

Mandatory

1. All pre-start and running checks (or responses to relevant questions)	
2. Restrictions cleared	
3. Excavator set for travel	
4. Encountered hazards cleared	
5. Boom/dipper arm position when ascending and descending inclines	
6. Faced direction of travel whilst moving	
7. Allocated area checked and clear of hazards prior to each activity	
8. Excavator laterally level whilst excavating	
9. Excavated material clear of trench	
10. Trenches conform to the stated sizes and tolerances	
11. Full bucket loads when excavating (except for finishing work) and loading	
12. Loading vehicle and excavator position prior to loading	
13. Vehicle evenly loaded but not overloaded	
14. Existing bucket removed and replacement bucket installed	
15. Excavated area reinstated back to the original contours	
16. All shutdown and securing procedures	
17. Legislation, manufacturers' and health and safety requirements complied with	
18. Test completed within the given time	
	 All pre-start and running checks (or responses to relevant questions) Restrictions cleared Excavator set for travel Encountered hazards cleared Boom/dipper arm position when ascending and descending inclines Faced direction of travel whilst moving Allocated area checked and clear of hazards prior to each activity Excavator laterally level whilst excavating Excavated material clear of trench Trenches conform to the stated sizes and tolerances Full bucket loads when excavating (except for finishing work) and loading Loading vehicle and excavator position prior to loading Vehicle evenly loaded but not overloaded Excavated area reinstated back to the original contours All shutdown and securing procedures Legislation, manufacturers' and health and safety requirements complied within the given time

All of these items must be awarded

Achieved / Not achieved

Faults	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
	1. Excavator mounting and dismounting		1	
	2. Full observation before moving		2	
	3. Full observation whilst travelling		2	
Travelling	4. Observation before slewing upper structure		2	
	5. Drive sprockets kept to the rear when travelling		1	
	6. Travel speed matched to the ground type and conditions		1	
	7. Minimising ground damage when turning (tracked machines only)		1	
	8. Site and set for excavating		2	
	9. Trench excavated in layers		1	
	10. Sideswiping with bucket		1	
Working	11. Edges of the excavations clean and clear		2	
	12. Material cleanly placed into the loading vehicle		1	
	13. Contact with vehicle avoided when loading		2	
	14. Use of steering/hydraulic controls		1	
	Not exceeded eight penalties	Total p	enalties	
		Achieve	d / Not ac	hieved

Note: Mandatory item17 – the candidate must ground the bucket, stop the engine and remove the key before exiting the cab; this must be adhered to at all times during the test.

Technical test - Practical Excavator 360 – A59

above 10 tonnes

Basic details – Endorsement C

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Endorsement: A B C	Start time of test:
Make and model:	Duration:

Mandatory

Mandato	Correctly carried out during the test?	Y/N
Preparing	19. All pre-start and running checks (or responses to relevant questions)	
	20. Excavator set for travel	
Travelling	21. Encountered hazards cleared	
with load	22. Boom/dipper arm position when ascending and descending inclines	
	23. Faced direction of travel when moving	
	24. Allocated area checked and clear of hazards prior to lifting activity	
Satting up	25. Communication arrangements confirmed with slinger/signaller	
Setting up	26. Excavator positioning prior to lifting loads	
	27. Excavator level prior to lifting and placing loads	
	28. No contact between load and excavator and/or other obstructions	
	29. Lifted, moved and lowered load in a controlled manner	
	30. Route assessed and travelled with the slung load in a controlled manner	
Lifting	31. Instructions conformed with	
oporations	32. Stability of the machine maintained at all times	
operations	33. SWL not exceeded at any time	
	34. Load remains freely suspended (except during lifting and placing)	
	35. Machine controls isolated when loads being attached/disconnected	
	36. Personnel clear of the 'danger' zone when lifting and moving loads	
Shutdown	37. All shutdown and securing procedures	
Othor	38. Legislation, manufacturers' and health and safety requirements complied with	
Other	39. Test completed within the given time	

	All of these items must be awarded		d / Not ac	hieved
Faults	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
	15. Excavator mounting and dismounting		1	
	16. Full observation before moving		2	
	17. Full observation whilst travelling with slung load		2	
Travelling	18. Observation before slewing upper structure		2	
with loads	19. Drive sprockets kept to the rear when travelling		1	
	20. Travel speed matched to the ground type and conditions		1	
	21. Minimising ground damage when turning with slung load (tracked machines only)		1	
	22. All loads vertically lifted (load not dragged)		2	
	23. Each load lifted clear of surface and checked for integrity		1	
Lifting	24. Load swings minimised during travel and static lifts		2	
operations	25. Keeping load height within given tolerance		1	
	26. All loads placed at given points within the given tolerance		2	
	27. Use of steering/hydraulic controls		1	
	Not exceeded eight penalties	Total p	enalties	

Achieved / Not achieved

Note:

- Mandatory Items 19, 37 and 39, and Item 15 in the faults section need not be marked if combining Endorsement C with . Endorsements A or B.
- Existing CPCS cardholders holding Category A59 seeking Endorsement C need to be measured against all marking items in Endorsement C.
- Mandatory Item 35 If the candidate does not isolate the operating controls during the load attaching/detaching activity, the tester must immediately inform the candidate to do so. The candidate has the option to continue the test but be informed they have not achieved on the test at this time.

Resources required

Machine	 Mobile Crane Endorsement A - 4 outriggers minimum Blocked Duties Endorsement B - capability for pick and carry duties Pick & Carry Duties Endorsement C - 4 outriggers minimum All duties - capability for pick and carry duties 	
Area	Facilities for crane travel and parking Flat area to allow lifting and placing of loads Facilities for out-of-sight lifts to take place	
Other equipment	Measuring tape for measuring the maximum radius of the crane Slinger and Signaller Applicable lifting accessories for all loads Radio communication Items to create restrictions for manoeuvring	
Loads	 LOAD 1 1 x load being a minimum 50% load at 75% full radius of the crane LOAD 2 1 x load being within the duties chart for 2 falls of rope LOAD 3 1 x load being within the duties chart for 3 falls of rope LOAD 4 1 x load being a tube or structure not less than 6 metres in length 	
Notes	 The machine selected for the test must meet the specification for the required endorsement, be in serviceable condition and conform with current legislation The operator's manual must be with the crane Duties charts for the crane being used for the test must be available for use The slinger and signaller must be certificated and competent All lifting accessories must be fit for purpose and certificated The weight of all loads must be known 	

Activity instructions

Sequence	Activity 1 must be undertaken at the start of the test	
	Activities 5–10 can be undertaken in any order	
	 Activities 8 and 10 may be incorporated during activities 5–7 	
	Activity 15 must be undertaken at the end of the test	
	The test must be completed within a given time. The specifications' section gives further information	
Preparing for work	1. Complete all manufacturers' pre-start and running checks and prepare the crane for travel	
Travelling &	2. Travel to the work area	
(refer to specifications)	3. Reverse into a confined space	
Setting up for	4. Prepare and set the crane for each lift	
work	5. Change the number of falls on the hook block from 2 to 3 or 3 to 2	
	6. Lift LOAD 1 which must be at 75% of maximum radius, and land at a designated place at minimum radius. Once landed, move back to at least 75% of maximum radius and rotate for at least 360 degrees. Land the load at mid-radius at a designated place	
	 Lift LOAD 2 and simulate a concrete pouring exercise by travelling the load in a straight line for a distance of not less than 6 metres. Land the load at a designated place 	
Working tasks (refer to	8. Lift LOAD 3 using 3 falls of rope, rotate for at least 270 degrees, and land in a designated place	
specifications)	 Endorsements B and C – Lift LOAD 2 from a designated position and travel with the load suspended for at least 10 metres. Land the load at a designated place 	
	10. Lift LOAD 4 using a minimum radius and rotate maintaining minimum radius for at least 360 degrees. Land the load at a designated place	
	11. Lift a load from a given position and land in a designated place out-of-sight of the Candidate	
	12. Recover simulated 2 metre load swings	
Completing	13. All loads to be made safe following each activity	
work	14. On completion of all lifting activities, configure the crane for travel	
Shutting down	15. Park the crane and carry out shut-down and securing procedures	

Activity instructions (Continued)

	• The instructor must check that the candidate has programmed the RCI correctly before carrying out each activity
	 On activities 6, 7, 8 and 10, the load must follow the ground contours and able to be handled by the slinger/signaller
	 On activity 7, the line must be angled so that both slew and radius change functions are used simultaneously
Notes	• Activity 12 shall consist of a minimum of 1 x swing in a left to right plane and a minimum of 1 x swing in a forward to reverse plane
	 Activity 11 must be undertaken twice – once using hand signals and once using radio communication. All other lifts may be undertaken using either radio or hand signals
	• For the purposes of the test, all hand signals shall conform with BS 7121 Part 1:2016
	 If the machine is hot, checks unable to be carried out (i.e. coolant) may be assessed by the Tester using verbal questions

Activity measurements

Reversing specification	• No wider than the width of the crane plus 900 mm
Load placing	• To be landed within 100 mm of a designated place
Load swing	• To be corrected within 3 moves
Test timings	The test must be completed within 3 hours

Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Endorsement: A B C	Start time of test:
Make and model:	Duration:

Mandatory

Mandato	ry	Correctly carried out during the test?	Y/N
Preparing	1	All pre-start and running checks (or responses to relevant questions)	
	2	Crane set for travel	
Travelling	3	Restrictions cleared	
	4	Encountered hazards cleared	
	5	Area checked and safe prior to setting up for lifting and depositing loads	
Mandato Preparing Travelling Setting up Working Completing Shutdown Other	6	Crane positioned prior to lifting loads	
	7	Stabilisers set (A & C only)	
Setting up	8	Ensured crane was level prior to lifting loads	
	9	RCI programmed for all lifting duties	
	10	Hook blocked re-reeved to requested number of falls	
	11	Communication arrangements confirmed with the signaller	
	12	Turntable locked/braked prior to travelling with a suspended load (B and C only)	
	13	SWL not exceeded at all times	
Morking	14	Load integrity and stability maintained at all times	
	15	Loads did not contact any obstructions	
WORKINg	16	Lifted, moved and lowered all loads in a controlled manner	
	17	Route assessed and travelled with the suspended load in a controlled manner (B & C only)	
	18	Instructions conformed with	
Completing	19	Crane re-configured from lifting to travelling duties	
Shutdown	20	Parked in appropriate place	
Shutuowi	21	All shutdown and securing procedures	
Other	22	Legislation, manufacturers' and health and safety requirements complied with	
Other	23	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
	1 Crane mounting and dismounting		1	
	2 Full observation before moving and reversing		3	
Travalling	3 Full observation whilst travelling		2	
Travening	4 Full observation before slewing the upper structure		2	
	5 Lifting accessories kept clear of the ground		1	
	6 Load swings kept within 0.5 of a metre / rectified swinging		2	
	7 All loads placed at the given points within the given tolerance		2	
Working	8 Each load lifted clear of surface and checking for integrity		2	
	9 All loads vertically lifted		2	
	10 Sequence of using hydraulic/lifting controls		2	
	11 Smooth use of the steering, braking and hydraulic controls		1	
	Not exceeded eight penalties	Total p	enalties	
		Achieve	d / Not ac	hieved

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Resources required

Area	Quiet room having desks and seating arrangements for each candidate
	CPCS supplied Risk Assessment/Method Statement
	CPCS supplied Lifting Scenarios 1–8
	Copies of LOLER 1998
	Copies of PUWER 1998
	• Copies of BS 7121 parts 1, 2 and 3
Other equipment	SFPSG Guidance on Ground Conditions
	Range of mobile crane specifications
	Copies of Lifting accessory catalogues
	Copies of mobile crane outrigger point loading charts (preferable)
	 Drawing and writing and measuring (rulers etc.) equipment
	• A2 or A3 white paper for drawings
	• There must be a minimum of five mobile crane specifications for each scenario. One crane must be the ideal, two within 25% of the ideal, and one specification being out of capacity for the scenario
	• For CPCS test purposes, an ideal crane is one that is deemed as working to 80% of its capacity for the radius, height and ground conditions for each scenario, relative to the load chart that has been selected and used by the candidate. This is important as Candidates must take commercial considerations into account and not select too large a crane
Notes	PLEASE NOTE THE 80% REQUIRMENT DOES NOT CONSTITUTE A FACTOR OF SAFETY BUT PURELY FOR CRANE SELECTION PURPOSES
	• Candidates must be supplied with information regarding outrigger point loadings. Crane manufacturer's outrigger point-loading charts must, as far as is reasonably practical, be used
	• The Strategic Forum Plant Safety Group SFPSG) have produced guidance on Ground Conditions for Construction Plant (Inc. lifting equipment), which provides guidance (in Annex E) on ground loading and outrigger pads
	 Up to 8 candidates may be assessed providing sufficient resources are available
Sequence	• The Technical Test theory question paper or lift scenario may be attempted in any order by the candidate. However, the theory question paper, once started, must be completed by the Candidate before a comfort/refreshment break can be taken
	The test must be completed within a given time. The specifications' section gives further information

Activity instructions

	• The tester will issue a lift scenario each Candidate. Each Candidate will have a different scenario and each Candidate must have access to the equipment identified within the resources section
	• A suitable factor of safety must be determined and applied to the accessories and crane for each scenario by the candidate. The factor of safety determined must be justified and relevant to the operation
	• The standards of the practical test grading sheet must be explained to the Candidates prior to starting the test. It is recommended to allow Candidates sight of the marking sheet
	 Rigged weight must include information on any additional counterweights used
	• To be successful on the test, candidates must pay particular attention to detail. Information stated on the drawing MUST be replicated correspondingly in the risk assessment/method statement and vice-versa
Brief	• For CPCS testing purposes only, the following formula* (or an agreed formula with the tester) must be used if manufacturers' exact criteria is not available. Candidates must indicate which method has been used in the risk assessment/method statement
	(0.75 x gross weight of crane) + gross weight of load = Total weight
	<u>Total weight</u> = answer 1
	25000 (kg- ground support in each scenario) Square root of answer 1 = Area of mat size required (m ²)
	Note:
	1. Gross weight of the load includes accessories and the hook block
	 This calculation can used to calculate worst case scenario outrigger loadings on cranes up to approximately 80 tonnes. Above 80 tonnes, manufacturer's data must be used
	PLEASE NOTE THAT THIS FORMULA CANNOT BE USED OR RELIED ON FOR ACTIVITIES OUTSIDE OF THE CPCS TEST FOR A61

Activity measurements

Standards	Identified on the grading form
Test timings	• The overall time of the test must be completed within 6 hours and 45 minutes

Risk assessment

Note: This form can only be used for the purposes of CPCS appointed person and crane supervisor training, assessments and testing, and is used with kind permission of the Construction Plant-Hire Association. A drawing showing the lift details must accompany this form. All boxes **MUST** be completed with either the required information or marked N/A.

Drawings must show plan and elevation and be in an identifiable scale Important – All submitted data must be in metric units.

Assessment scenario No:	Date of assessment:
Candidate Name:	Location of assessment

1. General details

Customer:				
Site contact:	Telephone:			
Site location:				
Description of lift:				

2. Details of load

Weight:	Net			
	Gross			
Dimensions				
Position of C of G:				
Height of lift				
Max radius				

3. Details of crane

Make and model:	
Capacity:	

Technical test - Practical Appointed person - A61 Lifting operations

Details of crane (Continued)

Boom length required:

Fly jib length and angle (if required) or N/A:

Outrigger spread: (show dimensions on drawing)

Mat/Pad size: (show all calculations)

Rigged weight of crane (Indicate ballast used):

4. Ground conditions

Access/egress for crane and transport:

Lifting position:

5. Lifting accessories

Sling (wire rope):	Slings (webbing):
Slings (chains):	Shackles:
Other accessories:	

6. A: Identifications of hazards (proximity)

Proximity hazards	Present?	Proximity hazards	Present?
Overhead power lines	Yes/No	Confined working area	Yes/No
Other overhead obstacles	Yes/No	Restricted access – width	Yes/No
Underground services	Yes/No	Restricted access – height	Yes/No
Excavations	Yes/No	Other vehicles	Yes/No
Unstable/Soft ground	Yes/No	Other Hazards identified	Yes/No
Hazardous chemicals/materials	Yes/No		

6. B: Identifications of hazards (load)

Load hazard	Present?	Load hazard	Present?
Slinging difficulties	Yes/No	Sharp edges	Yes/No
Top heavy	Yes/No	Other hazards identified	Yes/No

Technical test - Practical Appointed person - A61

Lifting operations

7. Assessment of risk

Hazard present	Risk	Action to avoid or reduce risk

Continue on separate sheet if needed.

Technical test - Practical Appointed person - A61 Lifting operations

8. Operational requirements

What crane should come equipped with:

9. Customer provisions

Method statement

10. Personnel

The following personnel (please state) will be provided, complete with relevant personal protective equipment. The duties of these people will be as defined in British Standard 7121:

Title	Responsibility	Required PPE

Continue on separate sheet if needed.

Technical test - Practical Appointed person - A61 Lifting operations

11. Lifting accessories

The lifting accessories will be provided by: (please name).....

12. Weather conditions

The lifting operation can only take place if the weather conditions are within the limits recommended by:

(please state).....

13. Ground conditions

The ground bearings are (please state).....and I have obtained assurances that the ground can withstand the load.

14. Sequence of operations

Please start at 1 and number each action consecutively.

No	Description

Technical test - Practical Appointed person - A61

Lifting operations

No	Description
1	



Technical test - Practical Appointed person - A61

Lifting operations

No	Description

Continue on separate sheet if needed.

Technical test - Practical Appointed person - A61

15. Contingency statement

Lifting operations

16. Candidate's confirmation*

I confirm that I have prepared the Risk assessment and Method statement, and the lift has been planned in accordance with current legislation and British Standard 7121

Signed: Dated:

Note:* For the purposes of Crane Supervisor Training and Testing, the Instructor shall sign this section.

Technical test - Practical Appointed person - A61

Lifting operations

Scenario 1: Lift an airport radar unit

- 1. Lift and lower a radar unit onto a transporter. The airfield is active and the worksite is located at the eastern corner of the airport.
- 2. There are 4 lifting points at the top of the radar unit, fitted with eye bolts with link.
- 3. A dedicated lifting frame (supplied by the clients) must be used being 0.4 t with wire rope slings, with a single lift point (to the crane) and 3.5 m from lifting ring to attaching points.
- 4. Weight of unit 646 Kg.
- 5. Height of unit 1.8 m.
- 6. Diameter of unit 4.8 m
- 7. Diameter of tower 3.0 m
- 8. Platform is 6.7 m dia and has rail height of 1.4 m.
- 9. Radar unit has been prepared for lifting by client and is ready to lift.
- 10. There is an internal stairway to the platform for maintenance purposes.
- 11. Customer Dundrodd Airport Authority. Site Zone 1, Dundrodd Airport. Site Contact L Wade, 01744 98 65 87
- 12. Good access and egress roads to work site.
- 13. Trailer for transporting load to be positioned as close to tower as feasibly possible.
- 14. Ground bearing pressure not to exceed 25t/ m²



Scenario 2: Lift a Wind turbine generator/housing

- 1. From a transporter, lift and place into position a wind turbine generator/housing unit.
- 2. There are 2 integral lifting points at the top of the generator housing
- 3. Diameter of column base = 5.0 m, top = 3.0 m
- 4. Weight of generator and housing 3.8 t
- 5. Diameter of housing 2.6 m (note: housing locates horizontally on tower)
- 6. Length of housing 4.5 m
- 7. Housing to be bolted to tower by turntable with 8 x bolts.
- 8. There is an internal stairway to turbine housing for maintenance purposes.
- 9. Platform (temporary) diameter 5.0 m, height 1.2 m (platform to be rigged/derigged by client)
- 10. Customer Wind Energy Inc. Site Glenshire Wind Farm. Site Contact N Hubband, 01334 765 775
- 11. Good access and egress roads to site.
- 12. Trailer with load to be positioned close to tower as feasibly possible.
- **13.**Ground bearing pressure not to exceed 25t/m²



Technical test - Practical Appointed person - A61 Lifting operations

Scenario 3: Lift and place a section of footpath bridge



Scenario 4: Lift and place a tank onto a barge



Scenario 5: Lift and place a vessel into position

Candidate's notes:

- 1. Lift a vessel from an existing position and place into an open steel support structure. The plant is under construction.
- 2. Vessel weight: 22 t.
- 3. Support steelwork: 11.5 m high x 7 m x 7 m.
- 4. Vessel dimensions Height (Inc. legs) 11 m, Diameter 6.8 m.
- Vessel exists on site in vertical orientation.
- Pipebridge height (to underside) 8.8 m.
- Pipebridge dimensions 2.7 m x 2.7 m.
- 8. Height of building 7 m with flat roof. Dimensions 20 x 20 m.
- 9. Tank has 2 x fixed lifting points, has 4 x legs spaced radially, and 1 x central leg. The tank is to be bolted to the supporting steelwork by the client.
- Customer East-South Water Ltd. Site Northern Grange Treatment Works. Site Contact – S Loggan 07735 345 554
- 11. Gravelled area to south of pipebridge. Concreted area to north of pipebridge.
- 12. Ground bearing pressure not to exceed 25 t/m^2
- **13.** Good access and egress road to work site.

Important – This drawing is NOT to scale. All dimensions are in metric units.





Technical test - Practical Appointed person - A61 Lifting operations

Important – This drawing is NOT to scale. All

dimensions are in metric

Scenario 6: Lift and place an air conditioning unit

- 1. Air Conditioning to be lifted from transporter and placed on top of the building, 12 m from the front of the building. The site is a new build and not occupied by the client.
- 2. Weight of the unit– 6.4 t and has a lifting point in each corner.
- 3. The Unit is 3.25 m high x 2.4 m x 2.4 m.
- 4. The building is 33 m high, 20 m wide and 30 m in length.
- 5. The road is 18 m wide with the end wall 2.4 m high.
- 6. The footpath and borders surrounding the building are 6 m wide and contain various underground services.
- 7. The manhole covers are 1 m x 1 m in size.
- 8. Customer NHS. Site Priestley Hospital. Site Contact J Oremand, 01207 885 586
- 9. Trailer for transporting load to be positioned close to building as feasibly possible.
- 10. Ground bearing pressure not to exceed 25 t/m^2


Technical test - Practical Appointed person - A61 Lifting operations

Scenario 7: Lift and land a (lift) motor-unit

Candidate's notes:

- 1. Unit located in top of a disused factory. Unit to be placed onto truck for transportation.
- 2. There are 4 x integral eye bolts in each corner on top of the motor.
- 3. Weight of motor -4.8 t
- 4. Length of the motor 5.0 m
- 5. Height of motor 1.5 m
- 6. Width of the motor -3.0 m
- 7. Roadway constructed of concrete and has no underground services.
- 8. Length of roadway 40 m, with clear access at both ends.
- 9. Length of Building A and B 20 m x 20 m $\,$
- 10. Access to roof is via internal stairs.
- 11. Safety rail along building 1.5 m high.
- 12. Customer D Hunt Demolition. Site Kimmins Sweets. Site Contact R Wakeman, 07855 845 6655
- 13. Ground bearing pressure not to exceed 25 t/m2
- 14. Trailer for transporting load to be positioned close as feasibly possible.



Technical test - Practical Appointed person - A61 Lifting operations

Scenario 8: Lift and place a lift base-support unit

Candidate's notes:

- 1. From a transporter, lift and lower the base-support unit down the lift shaft of this building being constructed. The unit is to be located at the bottom of the shaft.
- 2. The elevator shaft is 2 m x 2 m.
- 3. Weight of base-support unit 0.7 t and is mounted on a pallet. Support unit must remain on pallet until located in basement.
- Dimensions of base-support unit Length 1m, Width 1m, Height 0.9m. 4.
- The building is 30 m long (front to rear) x 50 m wide. The shaft is located as per the diagram and midway between 5. the two sides of the building. There is no hard standing at the sides of the building – only at the front.
- Underground basement has separate maintenance access. 6.
- Scaffolding extends 1.5 m from the building. 7.
- Scaffolding handrails are 1.5 m high with one set encircling the shaft. 8.
- 9. Underground ducting runs parallel to the front of the building and is 1 m wide and 1/2 metre deep.
- 10. Concrete area extends 15 m from the front of the building. Ground conditions on each side and the rear of the building are unsuitable for lifting purposes.
- 11. Customer Meteor Construction. Site RSB Headquarters. Site Contact A Holbetts, 01788 674 7483
- 12. Ground bearing pressure not to exceed 25 t/m^2

Important - This drawing is NOT to scale. All dimensions are in metric units.



Basic details

Test ref:	Candidate name:
Tester ref:	Candidate ref:
Tester ref:	Date of test:
Make and model:	Start time of test:
	Duration:

The Candidate must achieve all asterisked items and a minimum of eight of the remaining items to be successful on the test.

	Criteria	Standard	Y/N
	1 Customer	as stated in given scenario	
(1) etails	2 Name of site contact	as stated in given scenario	
ion A ral d	3 Phone number of contact	as stated in given scenario	
Sect Gene	4 Site location	full description as stated in given scenario	
	5 The description of lift	as stated in given scenario	
	6 The net weight of the load/loads*	as stated in given scenario	
; (2)	7 The gross weight of the load/loads*	calculated as weight offload/ hook block and lifting accessories with a minimum FOS identified	
ion B Loads	8 Dimensions of the load/loads*	as stated in given scenario	
Sect	9 Position of the C of G	as calculated (load is uniform or central)	
	10 Height of the lift*	from ground level to bottom of load	
	11 Maximum radius*	of load at any given point during the lift	
	12 Make and model*	as identified	
	13 The required capacity*	must be the predetermined ideal size & type	
3)	14 Main boom length required	as per selected crane specifications	
on C (ane	15 Fly jib length and angle (if required)	as per selected crane specifications	
Secti	16 Outrigger spread*	as per selected crane specifications	
	17 Mat/pad size*	as calculated	
	18 Rigged weight of crane*	as per manufacturers' specifications	
	19 Additional counterweights (if required)	as per manufacturers' specification	
d d nns	20 Access and egress points for the crane*	as stated in given scenario	
ion D iroun nditia	21 Access and egress points for other transport	as stated in given scenario	
Sect	22 The required lifting position*	as stated in given scenario	
(5)	23 The type and length required*	suitable type(s) identified	
tion E ifting essor	24 Correct WLL identified*	accurate	
Sect L acc	25 The number of lifting accessories required*	number identified	

Technical test - Practical Appointed person - A61

Lifting operations

	Criteria	Standard	Y/N
	26 Overhead power lines*	identified as yes or no	
	27 Other types of overhead obstacles*	identified as yes or no	
	28 Underground services*	identified as yes or no	
S	29 Excavations*	identified as yes or no	
(6a) azard able)	30 Unstable/soft ground*	identified as yes or no	
ion F iity hi pplice	31 Hazardous chemicals/materials	identified as yes or no	
Sect roxin (as a	32 Confined working areas*	identified as yes or no	
4	33 Restricted access – width*	identified as yes or no	
	34 Restricted access – height*	identified as yes or no	
	35 Other vehicles	identified as yes or no	
	36 Other hazards*	identified as yes or no	
(d Is	37 Slinging difficulties*	identified as yes or no	
ı G (6l azard	38 Top heavy loads*	identified as yes or no	
ection oad h	39 Sharp edged loads*	identified as yes or no	
Se	40 Other hazards*	identified as yes or no	
	41 Hazards (not included in items 26-40)*	identified	
7) f risk	42 Risk s against the hazards in item 41*	identified	
tion H (; ment of	43 Action to be taken to avoid/reduce risk as in item 41*	identified	
Sec	44 Risk s against the hazards in items $26-40^*$	identified	
<	45 Action to be taken to avoid/reduce risk as in items 26-36*	identified	
Section I (8)	46 The equipment the crane must come equipped with	identified (must state if information is contained in method statement)	
Section J (9)	47 Customer provisions	identified (must state if information is contained in method statement)	
10) el	48 The number of additional personnel required*	must be minimum of 2 noted – lifting at height or depth requires minimum of 3	
tion K (ersonne	49 The type and responsibilities of personnel required*	identified	
Sec	50 Any PPE that personnel must be equipped with*	identified	
Section L (11) Lifting accessories	51 Supplier of lifting accessories	identified	

Technical test - Practical Appointed person - A61

Lifting operations

	Criteria	Standard	Y/N
M (12) vironmental conditions	52 Conditions when the lifting operation must be shut down	as per crane manufacturers' recommendations	
Section I Weather / Em and ground	53 Maximum wind speed for load, and instruction to check wind speed at point of lift*	identified	
Section N (13) Ground conditions	54 Ground conditions, and stated all precautions to be taken*	identified	
Section O (14) Sequence of operations	55 The sequence of operations*	logical order, does not cause incident or greater, is without confusion	
Section P (15) Contingency statement	56 Include a contingency statement*	In case of interruption of lift etc.	
	57 Did the drawings (plan and elevation) show the positioning of the crane?*	clear and identifiable	
Section Q Drawing	58 Did the drawings correctly show the positioning of the crane, load (before and after lift), slinging arrangements and ancillaries?*	clear and identifiable	
	59 Clearly marked to scale*	scale clearly identified, matched to drawing and suitable to show detail	
Section R Additional	60 Were the contents of the method statement understandable to others who may be involved in the lift?*	clear, decipherable and coherent	

The Candidate must achieve all asterisked items and a minimum of 8 of the remaining items to be successful on the test

Achieved / Not Achieved

CP Construction Plant CS Competence Scheme Operations supervisor- A62

Resources required

Machine	Lifting equipment (crane) having a varying radii and slewing facility
Area	• Ground, clear of hazards which must include facilities/obstruction to enable a load to be placed out of sight of the crane operator
Other	• A selection of serviceable certificated lifting accessories, in excess of what is required for the load
equipment	An anemometer
	• A pre-constructed lift plan
Loads	• 1 x bundled load that does not have fixed lifting points
	• The crane selected for the test must be not less than 25 tonnes lift capacity, hoist rope equipped, be in a serviceable condition and conform with current legislation
	All lifting accessories must be fit-for-purpose and certificated
	The weight of all loads must be known
	 The crane operator and the slinger and signaller must be certificated and competent
Notes	• The Instructor conducting this test must construct a lift plan using the CPCS Lifting Operations Risk Assessment/Method Statement template. The plan must be constructed incorporating the working area, type of lifting equipment (crane) and the requirements of the exercises detailed in the activity and must:
	 involve a boom angle change of not less than 30 degrees and slewed at least through 180 degrees. The load will be landed at a different point from the pick-up point and within a location that is out-of-site of the crane operator
	- contain the actual lifting accessories required for the load
	- state that the working area must be cordoned off
	- contain a maximum wind speed for operations shut down
	 The completed lift plan must then be passed to the candidate at the start of the test

Technical test - Practical CP Construction Plant Crane / Lifting CS Competence Scheme Operations supervisor- A62

Activity instructions

	• The sequence of events shall be in numerical order
Sequence	The test must be completed within a given time. The specifications' section gives further information
	1. Receive and study the lift plan
Preparation of work area	2. Ensure all personnel involved in the lifting operation are suitably qualified, suitable attired and inform them of their duties
	3. Prepare the area of operation
	 Mark the position of the crane and guide the crane from the site entry point to the required location (the crane must be a minimum of 10 metres away from the lift point)
Setting up for work	5. Ensure that the crane is fit-for-purpose and suitably certificated
	6. Identify the weight of the load and its characteristic
	7. Check landing area and mark exact position for landing the load
	8. Indicate to the slinger the position of lifting accessories on the load
	9. Ensure accessories attached as per lift plan
Working tasks (refer to	10. Check integrity of the load
specifications))	11. Ensure load is moved and landed as per lift plan
	12. During the moving of the load, demonstrate the action of an emergency stop
	13. Ensure load is safe and accessories returned to storage
Completing work	14. Debrief all personnel involved in the lifting operation, and verbally report aspects of the lift to the Appointed Person
	15. Guide the crane from the lift position back to the site access point
Notes	• During the test, the Tester will undertake the role of the Appointed Person
Notes	• All hand signals must conform with BS 7121 Part 1

Activity measurements

Test timings • The test must be completed within 1 hour and 30 minutes	
------------------------------------------------------------------------	--

CP Construction Plant CS Competence Scheme Operations supervisor- A62

Risk assessment

Note: This form can only be used for the purposes of CPCS appointed person and crane supervisor training, assessments and testing, and is used with kind permission of the Construction Plant-Hire Association. A drawing showing the lift details must accompany this form. All boxes **MUST** be completed with either the required information or marked N/A.

Drawings must show plan and elevation and be in an identifiable scale Important – All submitted data must be in metric units.

Assessment scenario No:	Date of assessment:
Candidate Name:	Location of assessment

1. General details

Customer:		
Site contact:	Telephone:	
Site location:		
Description of lift:		

2. Details of load

Weight:	Net
	Gross
Dimensions	
Position of C of G:	
Height of lift	
Max radius	

3. Details of crane

Make and model:	
Capacity:	

CP Construction Plant CS Competence Scheme Operations supervisor- A62

Details of crane (Continued)

Boom length required:

Fly jib length and angle (if required) or N/A:

Outrigger spread: (show dimensions on drawing)

Mat/Pad size: (show all calculations)

Rigged weight of crane (Inc. extra ballast):

4. Ground conditions

Access/egress for crane and transport:

Lifting position:

5. Lifting accessories

Sling (wire rope):	Slings (webbing):
Slings (chains):	Shackles:
Other accessories:	

6. A: Identifications of hazards (proximity)

Proximity hazards	Present?	Proximity hazards	Present?
Overhead power lines	Yes/No	Confined working area	Yes/No
Other overhead obstacles	Yes/No	Restricted access – width	Yes/No
Underground services	Yes/No	Restricted access – height	Yes/No
Excavations	Yes/No	Other vehicles	Yes/No
Unstable/Soft ground	Yes/No	Other Hazards identified	Yes/No
Hazardous chemicals/materials	Yes/No		

6. B: Identifications of hazards (load)

Load hazard	Present?	Load hazard	Present?
Slinging difficulties	Yes/No	Sharp edges	Yes/No
Top heavy	Yes/No	Other hazards identified	Yes/No

CP Construction Plant Crane / Lifting CS Competence Scheme Operations supervisor- A62

Technical test - Practical

7. Assessment of risk

Hazard present	Risk	Action to avoid or reduce risk

Continue on separate sheet if needed.

CP Construction Plant **CS** Competence Scheme Operations supervisor- A62

8. Operational requirements

What crane should come equipped with:

9. Customer provisions

Method statement

10. Personnel

The following personnel (please state) will be provided, complete with relevant personal protective equipment. The duties of these people will be as defined in British Standard 7121:

Title	Responsibility	Required PPE

Continue on separate sheet if needed.

CP Construction Plant CS Competence Scheme Operations supervisor- A62

Technical test - Practical Crane / Lifting

11. Lifting accessories

The lifting accessories will be provided by: (please name).....

12. Weather conditions

The lifting operation can only take place if the weather conditions are within the limits recommended by:

(please state).....

13. Ground conditions

The ground bearings are (please state).....and I have obtained assurances that the ground can withstand the load.

14. Sequence of operations

Please start at 1 and number each action consecutively.

No	Description

Technical test - Practical CP Construction Plant Crane / Lifting CS Competence Scheme Operations supervisor- A62

No	Description

Technical test - Practical CP Construction Plant **CS** Competence Scheme Operations supervisor- A62 **Crane / Lifting**

No Description

Continue on separate sheet if needed.

CP Construction Plant CS Competence Scheme Operations supervisor- A62

15. Contingency statement

16. Candidate's confirmation*

I confirm that I have prepared the Risk assessment and Method statement, and the lift has been planned in accordance with current legislation and British Standard 7121

Signed: Dated:

Note:* For the purposes of Crane Supervisor Training and Testing, the Instructor shall sign this section.

Technical test - Practical CP Construction Plant Crane / Lifting CS Competence Scheme Operations supervisor- A62

Basic details

Test ref:	Candidate name:	
Tester name:	Candidate ref:	
Tester ref:	Date of test:	
Make and model:	Start time of test:	
	Duration:	

Mandato	Y Correctly carried out during the test?	Y/N
	1 Prepared and ensured area is safe and prepared for work	
Duonovina	2 Fully briefed all additional personnel on the details of the lift	
Preparing	3 Agreed the signal codes with all personnel involved with the lift	
	4 Checked the suitability and qualifications of additional personnel	
	5 Marked the position of the crane	
	6 Guided the crane to the exact position for setting up	
	7 Checked the landing area prior to the lift taking place	
	8 Verified the set-up configuration of the crane	
Setting up	9 Verified relevant certification for the crane and lifting accessories	
	10 Verified the RCI settings with the load and radius	
	11 Checked the route for hazards and ensured the area was safe	
	12 Identified the weight and centre of gravity of the load	
	13 Checked the environmental conditions prior to the lift taking place	
	14 Ensured that the lifting accessory(ies) attached to the load	
Moulting	15 Used effective hand signals that conformed to the agreed code	
working	16 Ensured that the load landed where required	
	17 Ensured load integrity	
Completing	18 Ensured all lifting accessories removed and stored	
	19 Complied with Lift plan requirements	
Other	20 Conformed with legislation, regulations and Codes of Practice	
	21 Test completed within the given time	

	All of these items must be awarded	Achieve	d / Not ad	chieved
Faults	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
	1 Guide the crane to the site access point		3	
Working	2 Tag lines were deployed and used		2	
	3 Check that all personnel have correct PPE		5	
	4 Debriefing not carried out to all personnel		3	
	5 No report aspects of the lift to the AP		2	
	Not exceeded eight penalties	Total p	enalties	

Achieved / Not achieved

Г

Resources required

Machine	Overhead travelling crane suitable for the relevant endorsement
Area	 Area of at least 100m² to allow the lifting, travelling and placing of all loads
	 Working area that is segregated from personnel/moving plant
	Slinger and signaller assistance
Other equipment / resources	Appropriate lifting accessories for all loads
	Radio communication
	Equipment to facilitate out-of-sight lifts
	 LOAD 1 x load being at least 2 tonnes in weight
Loads	 LOAD 2 x load being unbalanced
LUdus	 LOAD 3 x load of at least 4 metres in length
	 LOAD 4 2 x equal-sized loads able to be stacked one upon the other
	 The crane selected must be powered in all planes and equipped with a powered hoisting system and have an under hook height of at least 3 metres
	 Cranes selected for endorsement A may be either pendant control or radio control operated.
	• The working area for the lifting and placing of loads must have a beam travel distance of at least 15 metres but not exceeding 30 metres, and a trolley travel distance of at least 7 metres
	• The operator's manual must be with the crane
Notes	• The crane and all lifting accessories must be fit-for-purpose and have a thorough examination certificate (or declaration of conformity)
	The weight of all loads must be known
	• The width of Load 3 must not exceed 10% of its length
	• Load 4 must have a minimum size of 1m ³
	• The person selected for slinger and signaller duties must be certificated and competent
	• The tester may NOT undertake the role of slinger/signaller

Activity instructions - Pre-use checks

Sequence	Activities 1 to 3 must be undertaken at the start of the test
	1. Using the operator's manual, convey (to the tester) the pre-use or daily checks stipulated by the crane manufacturer
Preparing for work	Complete all manufacturers' pre-start checks with a supporting commentary
	3. Complete full pre-use running checks and prepare the crane for lifting operations
	 The candidate must provide a running commentary to pre-start checks being carried out in order to provide supporting information to visual checks (e.g. components) and physical checks (e.g. checking travel limits) being made. The tester may prompt the candidate to outline specific information but not ask direct questions that requires a technical answer. The operator's manual must be referenced during activity 2 and 3 All pre-use checks must conform to BS 7121 2-7 and should include the following:
	1. All types:
Notes	 All types: operation of emergency stop controls operation of all crane motion controls operation of electrical isolator switch operation of motion limit switches operation of any braking system operation of audible warning devices (where fitted) general condition of the crane structure and mechanisms including ropes, sheaves, hook unusual noises or erratic movement during operation debris or other obstructions on the track obstructions in the path of travel of the crane (or that adequate precautions are in place to prevent collisions) Cab controlled cranes and cranes with access to the bridge: work areas on the crane are tidy and free from any item which might fall access and egress from the cab availability of appropriate fire-fighting equipment condition of the cab controls Remote operation types pendant and associated cables or remote control station as appropriate

Activity instructions - Operational

	 Activities 7 – 11 can be undertaken in any order
	• Activities 11, 12 and 13 may be incorporated with activities 7 - 10
Sequence	 Activity 15 must be undertaken at the end of the test
	The test must be completed within a given time. The specifications'
	section gives further information
Preparing for	 Ensure working area hazards controlled effectively and trip hazards identified
work	5 Ensure working area is suitable segregated
Setting up for	
work	6. Prepare and set the crane for each lift
	7. Lift LOAD 1 , travel and place the load which requires the beam to
	the trolley's travel distance. The load must be placed at mid-point of
	the working area. On completion, the load must be detached
	8. Lift LOAD 2 and travel the load over at least half of the total travel of
	the beam. At a suitable point, negotiate an obstruction. Place the load
	9 Lift LOAD 3 and travel in a diagonal direction for at least one third of
Working tasks	distance of the working area and place at a given point. On
(refer to	completion, the load must be detached
specificationsy	10. Lift 1 x LOAD 4 and land on top of the remaining LOAD 4. On
	completion, place the load back to ground level. After being placed, the load must be detached
	11. Recover simulated 2 metre load swings
	12. Lift a load from a given position, and land in a designated place out-of-
	sight of the candidate
	13. Carry out an emergency stop
	14. Ensure all loads are safe following each activity
Shutting down	15. Place the crane in the out-of-service mode and carry out securing procedures
	 For endorsement A, if the crane is only equipped with a radio control
	unit, the candidate must simulate the use of a pendant control unit by
	being within near proximity to the hook/trolley, but sufficiently clear of
	the load, for both attaching, detaching and travelling purposes
Notes	 If the crane is equipped with both a pendant and radio remote, then only the pendant will be used on the test
	 Prior to the first load to be lifted, the beam must be situated at one
	end of the working area, with the trolley situated at either end of the
	beam

Activity instructions – Operational (*Continued***)**

	 On activities 8 and 9, the load must follow the ground contours and able to be handled
	 For activities 7, 8 and 9 – where the crane has a working area of less than 150m², the beam with a load must be travelled the full length of travel before landing the load according to each activity
	• On activity 8, the obstruction should be not less than 2 metres high
Notes (Continued)	 On activity 9, both beam and trolley travel functions must be used simultaneously
	• On activity 11, the tester shall induce the load swing in a forward and backward movement and side to side movement
	 Activity 12 must be undertaken twice – once using hand signals and once using radio communication. All other lifts may be undertaken using either radio or hand signals
	All loads should be equipped with suitable hand lines
	• The slinger/signaller shall be used for all load handling requirements and for the purposes of the test, all hand signals shall conform with BS7121 : part 1

Activity measurements

Load placing	• To be landed within 100 mm of a designated place
Load swing	• To be corrected within 3 moves
Load height (activities 8 & 9)	Maximum of 100mm from underside of the load
Test timings	• The test must be completed within 1 hour and 10 minutes

Basic details

Test ref:	Candidate name:
Tester ref:	Candidate ref:
Tester ref:	Date of test:
Endorsement: A B	Start time of test:
Make and model:	Duration:

Mandato	ry	- Pre-use checks	Correctly carried out during the test?	Y/N
	1	All pre-start and running checks identified from operator's	manual	
Preparing	2	Full pre-start checks carried out		
	3	Full pre-use running checks carried out including all crane of	operations and limit switches checked	

Mandato	ry ·	- Operational Correctly	carried out during the test?	Y/N
Bronaring	4	Suitable control measures for hazards in working area identified		
Preparing	5	Area checked and safe prior to setting up for lifting and depositing loads		
	6	Hook positioning prior to loads being attached		
Setting up	7	Crane programmed for all lifting duties (where relevant)		
	8	Communication arrangements confirmed with the signaller		
	9	SWL not exceeded at all times		
	10	Load integrity and stability maintained at all times		
	11	Loads did not contact any obstructions		
	12	Lifted, moved and lowered all loads in a controlled manner		
Working	13	All crane movements intentional		
	14	No shock loading during operations		
	15	Combined control use demonstrated during diagonal movement		
	16	Instructions conformed with		
	17	Loads left in a safe situation		
Shutdown	18	All shutting down and securing procedures		
Shutdown	19	Crane/hook parked in suitable location and in a safe situation		
Other	20	Legislation, manufacturers' and health and safety requirements complied	l with	
Other	21	Test completed within the given time		

All of these items must be awarded Achieved / Not achieved

Faults - Pro	e-use checks Candidate incorrectly carried out the following:	Fault	Mark	Penalty
	1 Insufficient narrative of visual checks		1	
- ·	2 Minor errors during narrative of visual checks		3	
Preparing	3 Content of narrative on visual checks with some error		2	
	4 Narrative of visual checks of sufficient content but some technical errors		2	
Faults - o _f	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
	5 Accessing and egressing cab/platform (where relevant)		2	
	6 Full observation prior to moving loads		2	
Travelling	7 Full observation maintained during travel		2	
	8 Walking route continually checked for hazards (endorsement B)		1	
	9 Lifting accessories kept clear of the ground		1	
	10 Load swings kept within 0.5 of a metre / rectify swinging		2	
	11 All loads placed at the given points within the given tolerance		2	
	12 Each load lifted clear of surface and checked for integrity		2	
Working	13 All loads lifted vertically (maximum sway – 250 mm)		2	
	14 All loads landed vertically (maximum sway – 250 mm)		2	
	15 Sequence of using controls		2	
	16 Smooth use of controls		1	
	Not exceeded eight penalties	Total	penalties	
		Achieve	ed / Not acl	nieved

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Resources required

	•	Compact crane having:		
		Endorsement A:	- 4 outriggers minimum	
		Static-stabilisers	- 360 degree slewing upper structure	
			- Telescopic boom	
			- Hoist rope	
		Endorsement B:	- Capability for pick-and-carry duties	
		Mobile Industrial	- Wheeled or tracked chassis	
			 Non-slewing Telescopic boom 	
Machine		Endorsement C:	- Trailer or vehicle mounted	
Wachine		Luffing static duties	- 4 outriggers minimum	
			- 360 degree slewing upper structure	
			- Telescopic boom with luffing extension	
			- Hoist rope	
		Endorsement D:	- Telescopic boom	
		360 – Pick and Carry	- 360 degree slewing upper structure	
			- Wheeled or tracked chassis	
			- Capability for static and pick-and-carry duties	
			- Hoist rope	
	•	Facilities for crane trave	el and parking	
Aroa	•	Flat area to allow lifting and placing of loads		
Alea	•	Facilities for out-of-sight lifts to take place		
	•	Incline or inclines (for Endorsements A and D only)		
	٠	Measuring tape for measuring the maximum radius of the crane		
	•	Slinger and Signaller		
Other	•	Applicable lifting accessories for all loads		
equipment	•	Radio communication		
	•	Items to create restrictions manoeuvring		
	•	LOAD 1		
		1 x load being a minimum 50% load at 75% full radius of the crane (excluding the extension)		
Loads	•	LOAD 2		
		1 x load being a tube or structure not less than 4 metres in length		
	•	LOAD 3		
		1 x load being at least	75% of the crane's rated capacity	

Resources required (*Continued***)**

	• The machine selected for the test must meet the specification for the required endorsement, be in serviceable condition and conform with current legislation
	The operator's manual must be with the crane
	• Duties charts for the crane being used for the test must be available for use
Notes	The slinger/signaller must be certificated and competent
	All lifting accessories must be fit for purpose and certificated
	The weight of all loads must be known
	• The incline must be narrow and not less than 18%, with a defined fulcrum between the horizontal and the angled planes, and no more than 100 mm clearance between the machine and the sides of the incline

Activity instructions

	Activity 1 must be undertaken at the start of the test
	Activities 6–11 can be undertaken in any order
	• Activities 3 and 4 may be undertaken before or after activities 6–11
Sequence	 Activity 11 may be incorporated within activities 6–10
	Activity 16 must be undertaken at the end of the test
	The test must be completed within a given time. The specifications' section gives further information
Preparing for work	1. Complete all manufacturers' pre-start and running checks and prepare the crane for travel
Travelling &	2. Travel or manoeuvre to the work area
manoeuvring (refer to specifications)	3. Endorsement A and D – travel up and down the incline
Setting up for work	 Endorsement B – manoeuvre through a chicane executing full right- and left-hand turns of at least 90 degrees in a forward and reverse direction
	 Endorsements A and D – execute full right- and left-hand turns of at least 90 degrees
	6. Position, prepare and set the crane for each lift

Activity instructions (*Continued***)**

	 All endorsements – lift LOAD 1 which must be at 75% of maximum radius, and land at minimum radius at a designated place
	 Endorsements A and D only – lift LOAD 2 which must be at ground level and minimum radius, rotate for at least 270 degrees keeping the load at a constant height and land in a designated place. On completion return the load to the original start place and land in a designated place
	 Endorsement B only – lift LOAD 2 and travel with the load suspended for a minimum distance of 15 metres whilst travelling the route as in activity 4 in both forward and reverse directions
Working task (refer to specifications)	10. Endorsement C only – lift LOAD 1 and land at a designated place at two different places using the full reach of the luffing jib. On completion on landing the load, return the load to the original start place
	 Endorsements A and D only – lift LOAD 3 from a designated position, rotate for at least 270 degrees, and land at a designated place which involves a change of radius
	12. Endorsements B and D only – lift LOAD 3 and travel with the load suspended for a minimum distance of 10 metres whilst executing turns as in activity 4 or 5 respectively
	13. Endorsements A, C and D only – lift and move a load from a given position and land in a designated place out-of-sight of the Candidate
	14. All loads to be made safe following each activity
	15. On completion of all lifting activities, configure the crane for travel
Shutting down	16. Park the crane and carry out shut-down and securing procedures
	• The Tester must ensure that the Candidate has programmed the RCI or LMI correctly before carrying out each activity
	• On activities 7, 8, 11 and 13, the load must follow the ground contours and able to be handled by the slinger/signaller
Notes	 Activity 13 must be undertaken twice – once using hand signals and once using radio communication. All other lifts may be undertaken using either radio or hand signals
	• For the purposes of the test, all hand signals shall conform with BS 7121 Part 1:2016
	• Activity 13 may be incorporated with activities 7, 8, 10 or 11
	 If the machine is hot, checks unable to be carried out (i.e. coolant) may be assessed by the Tester using verbal questions

Technical test - Practical Compact crane - A66 up to 10 tonnes

Activity measurements

Manoeuvring	 Activity 9 – maximum clearance less than 100 mm or 10% of the machine's width (the greater applies) between the chicane sides and the crane, when undertaking each turn
Load placing	• To be landed within 100 mm of a given position
Load swing	To be corrected within 3 moves
Test timings	• The test must be completed within 1 hour and 45 minutes

Technical test - Practical Compact crane - A66

up to 10 tonnes

Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Endorsement: A B B C D	Start time of test:
Make and model:	Duration:

Mandatory

Mandato	Correctly carried out during the test?	Y/N
Preparing	1 All pre-start and running checks (or responses to relevant questions)	
	2 Setting the crane correctly for travel	
Travelling	3 Restrictions cleared	
	4 Encountered hazards cleared	
	5 Area checked and safe prior to setting up for lifting and depositing loads	
	6 Crane positioned prior to lifting loads	
Sotting up	7 Stabilisers set (A & C only)	
Setting up	8 Ensured crane was level prior to lifting loads	
	9 RCI/LMI programmed for all lifting duties	
	10 Communication arrangements confirmed with the signaller	
	11 SWL not exceeded at all times	
	12 Load integrity and stability maintained at all times	
	13 Loads did not contact any obstructions	
Working	14 Lift, move and lower all loads in a controlled manner	
WORKING	15 Route assessed and travelled with the suspended load in a controlled manner (Endorsements B and D only)	
	16 Instructions conformed with	
	17 Crane re-configured from lifting to travelling duties	
Shutdown	18 Parked in appropriate place	
Shutdown	19 All shutdown and securing procedures	
Other	20 Legislation, manufacturers' and health and safety requirements complied with	
Other	21 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
	1 Crane mounting and dismounting (ride-on units)		1	
	2 Full observation before moving and reversing		3	
Travelling	3 Full observation whilst travelling		2	
Travening	4 Full observation before slewing the upper structure or telescoping boom		2	
	5 Lifting accessories kept clear of the ground		1	
	6 Load swings kept within 0.5 of a metre / rectify swinging		2	
	7 All loads placed at the given points within the given tolerance		2	
Working	8 Each load lifted clear of surface and checked for integrity		2	
working	9 All loads lifted vertically		2	
	10 Sequence of using lifting controls		2	
	11 Smooth use of steering and lifting controls		1	
	Not exceeded eight penalties	Total p	enalties	

Achieved / Not achieved

Resources required

Machine	Tunnel locomotive
	 Suitable training track of the following lengths and areas: A distance of at least 60 metres (endorsements A and C) A distance of at least 100 metres (endorsements B, D and E)
Area	 1 x change in gradient and 1 x shunt or crossover (points) A safe area to allow loading and discharging/unloading of materials and personnel - underground and/or above ground Restrictions for travelling
Other equipment	 Machine to load material or resources Signalling and communication devices A rolling stock/train specification that includes skip bogies, segment bogies and a man-rider Person(s) for transportation Additional personnel (designated person) for signalling/communicating duties and for man-rider boarding/disembarking operations
Loads	 Suitable and sufficient tunnelling-type materials or resources for loading and discharging/unloading
Notes	 The locomotive selected for the test must meet the specification for the required endorsement, be in serviceable condition and conform with current legislation The operator's manual must be with the locomotive The tester cannot act as the passenger or the additional person for signalling duties The person selected for signalling and shunting duties must be competent in those activities The person undertaken the shunting duties shall be restricted to those duties only

Activity instructions

Sequence	Activity 1 must be undertaken at the start of the test
	Activity 3 may be spread over the period of the test
	• Activities 7 to 10 may be taken at any time during the test
	Activity 20 must be undertaken at the end of the test
	This test can be undertaken at different times and at different locations. The test must be completed within a given collective time. The specification section gives further information
	 Complete all manufacturers' pre-start and running checks and prepare the tunnel locomotive for travel
	2. Agree communication/signalling codes with the additional person
Dronoving for	3. Couple up the following types of rolling stock to form a train from a given specification:
work	- Skip bogie
	- Segment bogie
	- Man-rider
	4. Couple the rolling stock
	5. Configure and set the train for travel
	6. Travel the train to a loading point
- III o	7. Travel whilst pushing and pulling loaded and unloaded rolling stock
Travelling & manoeuvring	8. Negotiate crossings and a restriction loaded and unloaded
(refer to specifications)	9. Travel through a restriction
	10. Carry out an emergency braking activity
	11. Travel whilst carrying passengers
	12. Position the tunnel locomotive for loading following given signals
	13. Receive loads
Working tasks	14. Discharge/remove loads into given locations following given signals
(refer to	15. Load the passenger(s) and prepare for train travel
	16. Disembark the passenger(s) at given location
	17. Communicate with the designated person during loading/unloading following given instructions
Completing	18. Park the train following given instructions
work	19. Disconnect the locomotive from the rolling stock and park
Shutting down	20. Carry out shut-down and securing procedures

Activity instructions (*Continued***)**

	 If the machine is hot (diesel units), checks unable to be carried out (i.e. coolant) may be assessed by the Tester using verbal questions
Notes	 Emergency braking must be carried out at the site's permitted maximum speed appropriately loaded
	Passengers must be boarded and disembarked at suitable safe locations
	 At least two methods of signalling and/or communicating shall be used during the test

Activity measurements

	Maximum of 300 mm refuge side
Travelling restrictions	Maximum of 300 mm above cab
	Maximum of 300 mm rib side (other)
Braking distance	Maximum of 60 metres
Travelling with loads and passengers	Minimum distance of 60 metres
Loading	• Rolling stock to be loaded with suitable tunneling-type materials or resources
Discharging / unloading of loads	Minimum of two difference locations (Activity 14)
Test timings	• This test must collectively be completed within 1 hour and 30 minutes

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Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Endorsement: A B B C D E	Start time of test:
Make and model:	Duration:

Mandatory

Mandato	Y Correctly carried out during the test?	Y/N
Dronaring	1. All pre-start and running checks (or responses to relevant questions)	
	2. Locomotive set for travel	
	3. Signal/communication codes agreed with signaller	
Preparing	4. Restrictions and hazards cleared	
	5. Rolling stock coupled as per given specification	
	6. Train set for travel	
	7. Crossing/points approached and negotiated	
	8 Rolling stock pushed and pulled smoothly	
	9. Control maintained when carrying out emergency braking and within specified distance	
	10. Comply with given speed limits	
The second House	11. Candidate fully within operating cab/area	
I ravelling	12. Safe place selected during loading/unloading	
tasks	12. Appropriate speed used when approaching loading and discharging points	
	14. Instructions followed during loading/unloading	
	15. Signals adhered to at all times	
	16. Communicated effectively with relevant personnel during all activities	
	17. Safety systems procedures followed	
	18. Ensured loads are secure	
	19. Train parked in given location following given signals	
Completing	20. Uncouple locomotive from rolling stock at given location	
work	21. Ensured uncoupled rolling stock left in safe situation	
	22. Locomotive parked according to given instructions	
Shutdown	23. All shutdown and securing procedures	
Other	24. Legislation, manufacturers' and health and safety requirements complied with	
Other	25. Test completed within the given time	

	All of these items must be awarded	Achieve	d / Not ac	hieved
Faults	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
	1. Tunnel locomotive mounting and dismounting		1	
	2. Full observation before moving and reversing		3	
Travelling	3. Full observation whilst travelling		2	
	4. ravel speed matched to the track type and conditions		3	
	5. Transmission drive engaged smoothly from rest		2	
Working	6. Train positioned correctly for loading and unloading		2	
	7. Use of directional lights		2	
	8. Smooth use of braking controls		1	
	Not exceeded eight penalties	Total p	enalties	

Achieved / Not achieved

Resources required - All Endorsements

Machine	Suitable for the relevant endorsement or endorsements	
	Flat surface for travelling and manoeuvring	
	 Rough undulating terrain (not applicable for non-rough terrain plant, see matrix on activity page) 	
Area	 Slopes or slopes (not applicable for certain items of plant, see matrix on activity page) 	
	• Clear straight runs not less than the required length for the machine grouping (see matrix on activity page)	
	Flat surface for travelling and manoeuvring	
	The Operator's manual must be with the machine	
Notes	• The slope must have at least an 18% (1:5:5) incline with a sufficient manoeuvring area at the top, or a straight ramp with and up and down route with a flat area at the summit	
	 For Endorsement A68S (A31 – Ride on roller) there only needs to be a gentle gradient 	

Resources required - Loading/unloading Endorsements

Transporter	 Transporter (rigid load carrying vehicle or trailer) suitable for the item of items of plant being loaded and equipped with suitable ramps 	
Area	 Flat area clear of hazards with sufficient room to allow the loading and unloading of the relevant item or item of plant 	
Other equipment	Items for the loading and unloading of plant	
	• The operator/drivers manual or other suitable information source for both the transporter and/or trailer must be available (to determine load capacities, axle loadings etc.)	
	The weight of all types of plant to be loaded must be known	
	• The transporter or trailer used for the test must meet the following minimum specification:	
	- bed height (un-laden) - at least 885 mm	
Notes	 ramp angle of gradient – at least 9 degrees from horizontal Defined headboard or gooseneck 	
	• There must be a defined fulcrum (pivot point) between the ramp and trailer bed (or bed-to-bed if the rear portion of the trailer is angled)	
	 A safe system of work must be devised for the accessing and egressing machine's operating position/cab when on the transporter bed 	
	• The Construction Plant-Hire Association HSE supported Guidance on Working at Height Loading and Unloading Transport is available free-of-charge from www.cpa.uk.net	

Activity instructions - All Endorsements

	 Activity 1 must be undertaken at the start of the test.
Sequence	• Activity 4 must be undertaken at the end of the test.
	The test must be completed within a given time. The specifications' section gives further information
Preparing for work	1. Complete all manufacturers' pre-start and running checks.
	2. Drive the machine for a minimum specified distance.
	3. Carry out one or more of the following manoeuvring exercises:
	3a: travel up and down the slope
Travelling &	3b: travel over rough terrain
(refer to	3c: undertake left hand and right hand turns through a restriction
specifications)	3d: drive in a straight line for a specified distance and pass through a restriction at the end of the run
	3e: reverse in a straight line for a specified distance and pass through a restriction at the end of the run
Shutting down	4. Park the machine and carry out shut-down and securing procedures.
Notes	 If the machine is hot, any checks that are unable to be carried out (i.e. coolant) may be assessed by the tester using verbal questions

Code	3a	3b	Зc	3d	3e	L/U	Code	3a	3b	Зc	3d	3e	L/U
A02B	Х	Х	Х	Х		Х	A32	Х	Х	Х	Х	Х	Х
A05	Х	Х	Х	Х		Х	A33	Х	Х	Х	Х	Х	Х
A06			Х	Х	Х		A34	Х	Х	Х	Х	Х	Х
A09	Х	Х	Х	Х	Х	Х	A35	Х	Х	Х	Х	Х	Х
A10/12	Х	Х	Х	Х	Х	Х	A36			Х	Х	Х	
A14	Х	Х	Х	Х	Х	Х	A37	Х	Х	Х	Х	Х	Х
A15			Х	Х	Х	Х	A39			Х	Х	Х	
A16			Х	Х	Х	Х	A41		Х	Х	Х	Х	Х
A17	Х	Х	Х	Х	Х	Х	A45/46		Х	Х	Х		Х
A18			Х	Х	Х	Х	A47/48		Х	Х	Х		Х
A19	Х	Х	Х	Х	Х	Х	A56	Х	Х	Х	Х	Х	Х
A21	Х	Х	Х	Х	Х	Х	A57	Х	Х	Х	Х	Х	Х
A22	Х	Х	Х	Х	Х	Х	A58/59	Х	Х	Х	Х		Х
A23	Х	Х	Х	Х	Х	Х	A60			Х	Х	Х	
A24	Х	Х	Х	Х	Х	Х	A65	Х	Х	Х	Х		Х
A25			Х	Х		х	A66A & D	Х	Х	Х	Х		Х
A26A			Х	Х	Х		A66B			Х	Х	Х	Х
A26B	Х	Х	Х	Х		Х							
A31	Х	Х	Х	Х	Х	Х]						

Note: Code L/U refers to loading and unloading requirement (if chosen)

Activity instructions - Loading/unloading Endorsements

Setting up for work	5. Ensure the area is clear of hazards and segregate the working area
	6. Ensure the transporters is set and prepared for receiving and removing the machine
	7. Establish the communication methods and loading arrangement with the transporter driver (if applicable)
	8. Place the machine onto the transporter bed
(refer to	9. Configure the machine for transport and shut down
specifications)	10. Remove the machine from the transporter
Notes	• The position of the machine on the transporter and the configuration for transport must be relayed to the candidate at the start of the activities
	• The candidate must exit the cab/operating position and dismount from the bed of the transporter between loading and unloading exercises
	 Current CPCS cardholders adding the loading/unloading endorsement need to undertake activities 1 and 4 in addition to 5 – 10

Activity measurements - All Endorsements

Travel restrictions	• 800 mm					
	• Wheeled rigid and articulated up to 15 tonnes – total of at least 100 m					
Driving	Wheeled rigid and articulated over 15 tonnes – total of at least 200 m					
distances	• Tracked plant up to 10 tonnes – total of at least 40 m					
(totals)	• Tracked plant over 10 tonnes – total of at least 60 m					
	• Ride-on Roller – total of at least 40 m					
	• Wheeled rigid and articulated up to 15 tonnes – minimum of 25 m					
	• Wheeled rigid and articulated over 15 tonnes – minimum of 40 m					
Straight line driving	• Tracked plant up to 10 tonnes – minimum of 10 m					
	• Tracked plant over 10 tonnes – minimum of 20 m					
	• Ride-on Roller – minimum of 20 m					
	• Wheeled rigid and articulated up to 15 tonnes – minimum of 12 m					
	• Wheeled rigid and articulated over 15 tonnes – minimum of 20 m					
Reversing	• Tracked plant up to 10 tonnes – minimum of 7 m					
	• Tracked plant over 10 tonnes – minimum of 15 m					
	• Ride-on Roller – minimum of 10 m					
	• The test must be completed within 20 minutes (non-operational only).					
Test timings	 The test must be completed within 35 minutes (non-operational and loading/unloading) 					

Activity measurements - Loading/unloading Endorsements

Machine placing	•	Positioned so that axle loadings are not exceeded
Test timings	•	The test must be completed within 15 minutes (loading/unloading only)

Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Endorsement Code:	Start time of test:
Make and model:	Duration:

Mandato	ry - All Endorsements	Correctly carried out during the test?	Y/N			
Preparing	1. All pre-start and running checks (or responses to relevant questions)					
	2. Machine set/configured for travel					
	3. Restrictions and hazards cleared					
	4. Boom/dipper/blade/bucket position when transporter ramps	ascending and descending inclines and/or				
	5. Faced (360 slew types) or looked in direction	on of travel when moving				
Travelling	6. Straight line kept for reversing activity (plan	nt driving only)				
	7. Full control maintained when ascending an	d descending inclines and/or transporter				
	8. Use of steering controls					
	9. Use of driving controls					
Shutdown	10. All shutdown and securing procedures					
Other	11. Legislation, manufacturers' and health and	safety requirements complied with				
	12. Test completed within the given time					

Mandatory - Loading/unloading

Setting up	13. Checked area safe prior to setting up for loading and unloading	
	14. Transporter positioning checked prior to loading and unloading (mobile transporters)	
	15. Loading and unloading area secured	
	 Ensured transporter was set, level and secure for loading and unloading mobile transporters) 	
	17. Ensured ramps were located and positioned according to plant type	
	18 Checked condition of transporter bed/ramps	
Loading / unloading	19. Drove item of plant onto and off the transporter	
	20. Positioned item of plant on transporter ensuring axle loadings not exceeded	
	21 Immobilised each item of plant and ensured all hydraulic systems disabled	
	22 Followed given instructions and signals (where relevant)	

All of these items must be awarded

Achieved / Not achieved

Y/N

Correctly carried out during the test?
Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Endorsement Code:	Start time of test:
Make and model:	Duration:

Faults	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
	1. Mounting and dismounting the cab/operating position.		2	
	2. Full observation before moving and reversing.		3	
	3. Full observation whilst travelling.		2	
Travelling	4. Smooth use of controls.		2	
	5. Ensuring travel speeds match ground conditions and type.		1	
	6. Transmission drive engaged smoothly from rest.		2	
	7. Gear ratios matched to ground speed.		2	

Faults	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
	8. Egressing from the cab/driving position and trailer/transporter.		3	
Loading / unloading	9. Mounting the trailer/transporter and accessing the cab/driving position.		3	
	10. Use of matting/traction aids (where needed).		3	
	Not exceeded eight penalties	Total p	enalties	

Achieved / Not achieved

Marking protocol

For the **Non-Operational** endorsement, only items 1 to 12 within the Mandatory section and items and 1 to 7 within the Faults section need to be scored.

For the **Non-Operational** and/or the **Loading/Unloading** endorsement, all items need to be scored.

Where the **Loading/Unloading** endorsement is being added during a standard technical test for an item of plant, all items need to be scored. However matching criteria from the plant test marking sheet may be transposed onto the marking for this category (e.g. pre-start checks etc.)

Resources required

Machine	• Soil stabiliser or spreader that meet the relevant endorsement description	
	 Ground, clear of hazards which must include: 	
Area	- rough undulating terrain	
	- level working area for incorporation or spreading activities	
	• Sufficient material able to be spread (Endorsement C)	
Other	• Means of loading the mix material into the hopper (Endorsement C)	
equipment	Items to create restrictions for travelling and manoeuvring	
	Specification for the incorporation or spreading process	
	• The machine selected for the test must meet be in serviceable condition and conform with current legislation	
	• For Endorsement B, an Agricultural-based Tractor may be used but with the stabilisation unit attached and ready for operation	
Notes	• There must be sufficient area and material to allow incorporation as specified by the activity measurements	
	• The operator's manual must be with the stabiliser or spreader	
	• The specification shall incorporate the depth to be achieved	
	• The width of the drum must be a minimum of 1.5 metres	

Activity instructions

	Activity 1 must be undertaken at the start of the test
	Activity 2 may be spread over the period of the test
Sequence	Activity 4 may be combined with activity 5 for self-propelled units
	Activity 8 must be undertaken at the end of the test
	The test must be completed within a given time. The specifications' section gives further information
Preparing for work	1. Complete all manufacturers' pre-start and running checks and prepare the stabiliser or spreader for travel
	2. With the machine:
Travelling &	travel over rough terrain
manoeuvring (refer to	 pass through a chicane executing full right-hand and left-hand
specifications)	turns
	 reverse through a restriction
Setting up for work	3. Prepare the stabiliser or spreader for work
Working tasks	4. Incorporate materials to the given specification for the specified
(refer to	minimum working area (Endorsements A & B)
specifications	5. Spread materials to a given specification (Endorsement C)
Completing	6. Clear the mixing chamber or spreading box of loose material
work	7. Complete all manufacturers' post-operational maintenance procedures
Shutting down	8. Park the machine and carry out shut-down and securing procedures
	 If the machine is hot, checks unable to be carried out (i.e. coolant) may be assessed by the Tester using verbal questions
Notes	 The mixing and/or spreading may be combined with productive work with timings accumulated accordingly

Activity measurements

Travelling restriction	• 300 mm
Reversing restriction	• 800 mm
Area to be incorporated or spread	• 6 overlaps for a minimum of 30 metres per rip/run
Mixing Overlap	• Maximum of 300mm and not less than 200mm (Spreading = +/-100mm)
Mixing specification (depth)	According to site requirements
Test timings	 The test must be completed within: Endorsements A and B = 2 hours Endorsement C = 1 hour

Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Endorsement: A B C	Start time of test:
Make and model:	Duration:

Mandatory

Mandato	Correctly carried out during the test?	Y/N
Preparing	1. All pre-start and running checks (or responses to relevant questions)	
	2. Machine set for travel	
Travelling	3. Restrictions and hazards cleared	
	4. Straight line kept during reversing	
	5. Allocated area checked and clear of hazards prior to work	
Setting up	6. Positioned the stabiliser/spreader for the relevant work	
	7. Machine prepared for stabilising and/or spreading duties	
	8. Working speed matched according to specification	
	91.Setting of rotor speed	
	10. Materials incorporated according to specification (Endorsements A and B)	
	11. Depth of incorporation to specification and consistent	
Working	12. Overlaps within the given specification	
	13. Given area fully incorporated (Endorsements A and B)	
	14. Material spread according to specification (Endorsement C)	
	15. Material evenly spread with full coverage (Endorsement C)	
	16. Sequence of starting and stopping the spreading or mixing unit	
Completing	17. Mixing chamber fully cleared of loose material	
work	18. All post-maintenance procedures	
Shutdown	19. All shutdown and securing procedures	
Other	20. Legislation, manufacturers' and health and safety requirements complied with	
Other	21. 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
	1. Machine mounting and dismounting		1	
Travelling	2. Full observation before moving		2	
	3. Full observation whilst travelling		2	
	4. Full observation before and during reversing		3	
	5. Transmission drive engaged smoothly from rest		1	
	6. Travel speed matches ground type and conditions		2	
Working	7. Gear ratios match ground speed		1	
	8. Sequence of using hydraulic controls		1	
	9. Smooth use of steering and braking controls		1	
	Not exceeded eight penalties	Total p	enalties	

Achieved / Not achieved

Resources required

Machine	Placing boom fixed to a relevant structure
	Working area clear of hazards which must include:
Area	- place to receive poured material
	- wash-out point
	• Pipe sections, taper and bends, including incorrect sized versions.
	Ground lines with clips/couplings, seals, packing and anchors.
	Pipe cleaning equipment.
Other	• Concrete pump able to supply a flow of suitable material with a competent operator.
equipment	Sufficient supply of concrete suitable for pumping.
	Pipeline configuration.
	Signaller assistance.
	Radios for communication purposes.
	Assistance to handle the placing hose and provide signals
	• The boom selected for the test must be hydraulically operated via electrically- driven motor.
	• The boom must be able to be used both with direct-operated levers and remotely using a pendant or transmittable control unit.
	• The boom must have all controls (both fixed or remote control) clearly marked, be in serviceable condition and conform with current legislation.
Notes	• The operator's manual for the boom must be accessible during the test.
	• A pipeline specification must be constructed for the activity, requiring a pipe length of at least 15 metres consisting of steel tubes and flexible hosing.
	• Couplings must be fitted with locking facilities/safety securing equipment.
	• The Tester cannot provide signals or control the placing hose.
	• The risk assessment for the test must include working at height requirements for accessing the platform

Activity instructions

Sequence	 Due to the nature of the equipment, all activities can be undertaken on different booms, locations and different days. CPCS must be informed prior to any tests taking place and be given full details of any divided tests.
	section gives further information
Droporing for	1. Complete all manufacturers' pre use checks
work	Ensure that the boom radius working area is clear of hazards and segregate the working area
	3. Configure the boom to the given pour point/area
Setting up for	4. Prepare a pipeline to the given specification
work	Arrange the signalling procedures with the pump operator and at the pour point
Working tasks	 Place pumped materials to the pour location whilst following given signals
(refer to specifications)	7. Stop and restart the pour during work
	8. Carry out appropriate communication with the pump operator
Completing	9. Clean all pumping system components
work	10. Demonstrate verbally the sequence of clearing blockages
Shutting down	11. Carry out shut-down and securing procedures
	• There must be a change in radius of at least 10 metres and a change in rotation of at least 45 degrees
	• For activity 4, where part of the test is integrated with production activities, the pipeline specification using steel pipes and securing requirements may be simulated
Notes	• At least 15 minutes of the pour must be undertaken using radios whilst the remaining time undertaken using hand signals
	• The boom must be operated during the test using both the levers and the remote unit and all boom movements must be demonstrated
	 Manual operation (of the levers) can be undertaken during folding procedures following the pouring activity

Activity measurements

Placing Hose Height	Maximum of 1 metre (during pour)
Pour duration	Minimum of 30 minutes
Test timings	• The test must collectively be completed within 2 hours. Additional time may be given at the discretion of the Tester for boom cleaning functions

Technical test - Practical Stationary concrete placing boom - A72

Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Endorsement: A B	Start time of test:
Make and model:	Duration:

Mandatory

Mandato	Y Correctly carried out during the test?	Y/N
	1. All pre use checks including support and stabilisation	
	2. Accessing and egressing the work platform/area	
Droporing	3. Function of emergency systems (if applicable)	
Preparing	4. Working areas checked for hazards	
(BOOIII)	5. Boom hydraulics functional checks	
	6. Functional checks of remote operating unit	
	7. Remote box/controls isolated during preparation work	
	8. Configuration of the boom for the given working area	
	9. Boom extended to work area avoiding hazards and structures	
	10. Sequence of unfolding and folding of boom	
	11. Relevant piping selected	
Setting up	12. Piping checked for condition	
Setting up	13. Couplings compatible with, connected and locked to piping	
	14. Pipeline anchored, supported and secured	
	15. Pipeline conformed with specification	
	16. Fitment of safety strap	
	17. Arranged communicating procedure with pump operator and at pour point	
	18. Material pumped to required location at the given point	
	19. Operator positioning during pour	
Working	20. Repositioning of boom during and between pours followed given instructions	
	21. Measures taken to minimise falling material from placing hose during hose repositioning	
	22. Waste material disposed of following guidelines and regulations	
Completing	23. Cleaning procedures followed	
work	24. Sequence of clearing blockages explained	
Shutdown	25. All shutdown and securing procedures	
Othor	26. Legislation, manufacturers' and health and safety requirements complied with	
Other	27. 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
Working	1. Full observation before starting placing work		3	
	2. Full observation during boom movements		3	
	3. Following instructions from pour point and pump operator		3	
	4. Providing instructions to the pour point and pump operator		2	
	5. Maximum height of placing hose not exceeded during pour		2	
	6. Components and pipework thoroughly cleaned after use		4	
	7. Sequence of using controls		2	
	8. Smooth use of all controls		2	
	Not exceeded eight penalties	Total p	enalties	

Achieved / Not achieved

Resources required – Communication

Equipment	• 1 x set of two-way communication radios		
Other resources	Written verbal instructions able to be read by the candidate in a script format		
	The script must contain the following information:		
	 given call signs e.g. marshaller 1 and vehicle 1 		
	 radio checks for transmission effectiveness 		
	 instructions to start operations 		
	 instructions to move the vehicle 		
Notes	 instructions to turn left and turn right 		
	o instructions to reverse the vehicle		
	 instructions to halt the vehicle 		
	 instructions to stop the vehicle in an emergency 		
	 end of operations 		

Resources required – Practical

Vehicle	• 1 x wheeled plant or vehicle with an unladen or net weight of at least 10 tonnes	
Area	 Level surface for travelling and manoeuvring Sufficient area to accommodate a segregated working area for manoeuvring activities 	
Other equipment	 Equipment for segregating a working area e.g. barriers, cones, marker tape etc. Equipment to facilitate the manoeuvring and reversing of the selected vehicles including through, into and from restricted areas Appropriate high visibility clothing to identify both the candidate and others involved in the test 	
Notes	 The vehicle/item of plant selected for the test must be of a design such as a twin or more axled machine where the design of the vehicle/plant is both physically large and which minimises available all-round visibility for the driver/operator. This makes the test challenging for the candidate and an ideal type of machine for the test would be a large goods-type vehicle or dump truck 	

Resources required – Practical (*Continued***)**

	 Plant such as telehandlers or forward-tipping dumpers etc. irrespective of weight are not acceptable for the test due to the operator having reasonable, effective all-round visibility and not being physically large means that the candidate may not be daunted by the vehicle and that the test is not challenging for them
	• A wheeled 360 degree excavator may be used where the following conditions are met in order to replicate a fixed chassis machine:
	- The machine must be of at least 13 tonnes weight
	- The dipper arm of the machine must be in the vertical position with the bucket (or jib end) no more than 300mm above ground level, and cannot be raised above this height for the duration of the test.
	 Where a two-piece boom is fitted, the machine must be configured so boom is unfolded so that the dipper is at the furthest reach but remaining in a vertical position and at the correct height above ground level
	- Front steer only must be selected
	 The front of the upper structure must be facing the steering wheels and locked in that position at all times. At no point can the cab/upper structure be slewed during the test
	 Fitted stabilisers and/or blades need to remain in the raised position and locked where available
Notes (Continued)	 The distance from the vertical jib to the rear of the machine constitutes the full length of the machine for which the complete entity needs to be manoeuvred between the relevant markers, and determines the distance between the markers as per the test specification – diagram A
	Note: 360 tracked excavators cannot be used for this test
	IMPORTANT – CPCS has allowed the concession for a 360 excavator ONLY for the purposes of this test, which is conducted in a fully controlled test environment which minimises risks to those in the area, and of the machine and operator
	Testers must make extremely clear to all candidates on completion that outside of this test, 360 degree excavators (tracked or wheeled) must only ever be travelled where the operator is facing the direction of travel. The only time an exception to this rule can be made is when the machine is in an area of very restricted room where the upper structure cannot be slewed
	• The vehicle used for the test must be equipped with fit-for-purpose side mounted rear view mirrors, and a clear view through cab-fitted glass
	• In addition to rear view mirrors, the vehicle must be fitted with a reversing audible warning system. Rear-facing CCTV equipment must be disabled or the screen out of the view of the driver.
	• The vehicle must be driven by a competent and certificated operator
	• The operator's/driver's manual must be with the vehicle

Resources required – Practical (*Continued***)**

	• The total test area required for the test must be at least 70 metres x 35 metres (as per Scheme Booklet for Test Centres)
	• A risk assessment and method statement detailing a safe system of work must be devised specific to the test area based on the test activities, and must identify safe zones for the candidate and tester
	 Information from the method statement must be communicated to all involved in the test prior to the test starting. However, information relating to the working area needed to be identified by the candidate on the test need not be disclosed to them
	• Prior to the start of the test, the movement area must be pre-segregated with appropriate barriers, with a suitable entry/exit gate or gates
Notes (Continued)	• The vehicle must be parked outside and away from the segregated working area at a distance not less than 15 metres travelling distance from the working area entry gate
	The Tester cannot assume the role of vehicle driver/operator
	• For the test to be effective, the vehicle driver/operator must follow the exact instructions (verbal and signals) given by the candidate, and only make direction, speed or steering adjustments according to instructions given. The tester must maintain close observation of all movements and stop the vehicle when the candidate has failed to retrieve a situation for which the vehicle has or is about to contact structures, pedestrians or other vehicles/machines
	 Once the test has commenced, all communication and instructions to the driver/operator must come from the candidate (except for emergency reasons) until completion of the test

Activity instructions - Communication

	1. The candidate will demonstrate the following hand signals:		
	Start operations		
	Move forwards*		
	Move backwards*		
	Turn right*		
	• Turn left*		
Hand signals	 Distance (horizontal) approaching stopping point* 		
	• Stop*		
	• Raise		
	• Lower		
	Distance (vertical)		
	Emergency stop*		
	End of operations		
Radio use	2. The candidate will relay the provided script using the hand-held radio		
	 Signals denoted by * must be correctly demonstrated 		
Notes – Hand signals	• For the hand signals activity, the candidate must be positioned at a distance of 20 metres from the tester but in full sight and in hearing range of each other		
	 Hand signals will conform to those listed in the HSE guidance document L64 - Safety signs and signals regulations 1995. 		
	• For radio use, the candidate must be located at least 25 metres from the tester		
Notes – Radio	• For radio use, there must be a transmission break in between each instruction. On receiving each instruction, the tester must confirm receipt of transmission to the candidate and inform them to proceed to relay the next instruction		
use	 For radio use, radio protocol requirements will need to be followed and including: 		
	 The call signs preceding each instruction 		
	 The end of transmission of each sent instruction by stating the word 'over'. 		

Activity instructions - Manoeuvring

Sequence	Activity 1 must be undertaken at the start of the test	
	• Activity 9 can be integrated within activity 6	
	• Activities 12 must be undertaken at the end of the test	
	The test must be completed within a given time. The specifications' section gives further information	
	 Assess the given vehicle movement area to ensure suitability of operations 	
Preparing for	2. Identify the vehicle for movement	
vehicle movements	Convey initial movement information at the start of operations and for each activity to the vehicle driver/operator	
	 Guide the vehicle from the parking area into the movement area and into position for the reversing exercise (using the radios) 	
	5. From a start position adjacent to the first marker, guide the vehicle in a reverse direction through pre-positioned markers as per diagram A	
	 Reverse the vehicle into an area (simulating a garage) having restricted width 	
Guiding vehicle	Guide the vehicle from the garage through the markers following the original route back to the start point	
movements	8. Repeat activities 5 and 6	
	9. Reverse the vehicle up to a structure	
	10. Stop all vehicle movements when directed to do so	
	11. Adjust the exclusion zone to accommodate each size of vehicle (if needed)	
Completion of operations	12. On completion of the reversing exercises, guide the vehicle out of the movement area back to the original start point.	
	• For activity 1, the candidate will verbally relay factors relating to the working area to the tester	
	• For activity 3, the candidate must introduce themselves to the driver/operator and:	
	 inform them that they must follows all instructions (verbal and signals) 	
Notes	 inform them that they must stop if they lose sight of the marshaller 	
	 give them the emergency stopping procedure and 	
	 give them the code of signals to be used 	
	 All movements must be undertaken using hand signals except for item 4 where radio communication is to be used 	

Activity instructions – Manoeuvring (*Continued***)**

	• On activity 6, appropriate shunting of the vehicle is allowed depending on the size of manoeuvring area and turning circle
	 Activities 5, 6 and 8 needs to be undertaken sequentially and within one movement as per the plan
Notes (Continued)	• For activity 5, the marshaller must stay on one side of the vehicle and cannot transgress beyond the line of the markers. The opposite side must be used for activity 8 (zones 1 and 2 as per diagram A). The candidate can choose which side they wish to position themselves for the first run
	• For activity 10, the Tester will inform the candidate when all vehicle movements must stop immediately and must be conducted on at least two separate occasions on different activities (one must be an emergency stop)

Activity measurements

Width restrictions (working area entry/exit gate and simulated garage)	Maximum of 300mm clearance
Reversing to a structure	• Within 0.5m of the rearmost part of the vehicle
Distance from markers (during reversing activities)	• Maximum of 0.5 of a metre from the vehicle (the leading wheel must not be more than this distance when passing each marker 1 -5)
Test timings	 Activity Communication = 20 minutes Activity Manoeuvring = 30 minutes The test must be completed within a total accumulated time of 50 minutes

Correctly carried out during the test? Y/N

Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Make and model:	Start time of test:
	Duration:

Mandatorv

Communication	1 Accurate hand signals provided (9 out of 12 to be correct including all those denoted with *)	
(hand signals)	2 Hand signals given clear and concise	
	3 Working area assessed with all factors verbally relayed to tester	
Working area	4 Areas of possible entrapment/crushing identified	
preparation	5 Ensured suitability of access and egress points of the working area	
	6 Emergency marshaller egress routes for each manoeuvre identified	
	7 Signal codes agreed with vehicle operator	
Vehicle	8 Relayed known hazards on travel route and in working area (relative to the vehicle type) to	
nrenaration	vehicle operator	
preparation	9 All other movement information including emergency procedures relayed in a clear manner	
	to vehicle operator	
	10 Exclusion zone maintained when vehicle entering and exiting working area	
	11 Vehicle guided from start position into relevant position for reversing activities	
	12 Vehicle guided as per manoeuvring activities into relevant positions and up to a structure	
	according to given criteria	
Manoeuvring -	13 Restrictions cleared by vehicle	
quiding	14 Stop and emergency stop signals provided to vehicle operator in a suitable time	
guiung	15 Candidate positioning in effective view of operator	
	16 Candidate positioning clear of the moving path of vehicle	
	17 Candidate positioning clear of all entrapment areas	
	18 Vehicle stopped when candidate re-positions themselves	
	19 Clear instructions (radio and hand signals) given to vehicle operator	
Completion of	20 Working zone area segregation established following vehicle's exit	
operations	21 Vehicle parked in given location	
Othor	23 Legislation, manufacturers' and health and safety requirements complied with	
Other	24 Test completed within the given overall time	

All of these items must be awarded

Achieved / Not achieved

Faults	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
	1 Radio and transmission checks		1	
Communication	2 Radio protocol e.g. call signs		2	
activity	3 Clear break between each transmission		1	
(ruuios)	4 Each verbal instruction clear and legible		1	
Vehicle	5 Ensured the vehicle is fit for manoeuvring purposes		2	
preparation	6 Checked that operator wearing appropriate PPE for required activities		1	
	7 Constantly checked for personal trip hazards during manoeuvring activities		1	
	8 Ensued other vehicles and personnel kept out of working area		2	
Manoeuvring -	9 Exclusion zone readjusted to accommodate vehicle movements and/or size		2	
guiaing	10 Candidate remained on designated side during reversing activities		3	
	11 Maximum distance between markers and vehicle not exceeded during reversing activities		3	
	12 Excessive and/or unnecessary shunting/manoeuvring		2	
	Not exceeded eight penalties	Total p	enalties	

Achieved / Not achieved

DIAGRAM A



Resources required

Machine	Purpose built masted piling rig and ancillary equipment to rig the machine for work activities		
	Facilities for rig travel and parking		
Area	Certificated piling platform for piling works to take place		
	 Area clear of hazards e.g. overhead and underground services and with a designated exclusion zone 		
	Piling and ancillary equipment to meet the pile specification		
	 Fully qualified rig operator and additional supporting labour (including reporting line) 		
	Resources and materials to ensure the installation of piles		
Other	• Equipment to remove spoil at the piling location (if required)		
equipment	Pile layout drawing and pile schedule/design		
	Permit to dig		
	Lifting equipment for lifting operations (if required)		
	Applicable lifting accessories for all loads (if required)		
	• Items to create restrictions for manoeuvring (cones, barriers and signage).		
Pile specification	 Minimum of 20 linear metres* 		
	• The machine selected for the test must be in serviceable condition and conform with current legislation		
	• The piling rig operator must be certificated and competent		
	All lifting accessories must be fit for purpose and certificated		
Notes	• The weight of all loads/ancillary equipment must be known		
	• Specification detailing position, sequence, type and depth of completed piles		
	 All certification, permits to dig and lift plans (where required) must be authorised and current 		
	*Linear metres are defined by the length and number of piles e.g. 2 x 10 metre piles or 5 x 4 metre piles etc.		

Activity instructions

Sequence	 Due to the nature of the equipment, piling activities can be undertaken on different rigs, locations and different days if required. CPCS must be informed prior to any tests taking place and be given full details of any divided tests The test must be completed collectively within a given time. The specifications' section gives further information
Preparing for work	 Carry out pre-use checks to all ancillary equipment required for the construction of piles Establish communication methods with the rig operator Ensure, by communication with the operator, that the rig/mast is prepared for travel
Travelling and manoeuvring (refer to activity measurements)	 Guide the rig to the work area by providing directions to the rig operator Guide the rig through a restriction whilst travelling to the work area
Setting up for work	 Prepare the rig/mast and ancillary equipment for defined piling works Ensure resources and materials are correct, available and of sufficient quantity etc.
Working task (refer to activity measurements)	 Locate the rig onto the pile position within specified tolerances Ensure the pile is plumb/at the correct angle throughout the piling activity Ensure the pile is installed to specification Control the working area and maintain the exclusion zone
Completing work	12. On completion of the placing of each pile, confirm the pile has been constructed to specification13. Instruct the rig operator to configure the rig for travel and guide the rig to the next working position
Shutting down	 14. On completion of all activities, instruct the rig operator to configure the rig for travel and guide the rig to a safe parking area on firm level ground 15. Provide specified assistance to the operator for shut-down and securing procedures
Notes	 The test may be carried out during actual work and discrepancies allowed for compared to the stated activities and pile types including time needed to move to a new pile position Checks unable to be carried out may be assessed by the Tester using verbal questions For item 15, instructions for assistance must be defined before shut-down and securing activities begin

Activity measurements

Manoeuvring restrictions	Maximum of the width of the rig plus 800mm
Pile placing	 Within 75mm of the given positions (or specified tolerances if less than 75mm)
Pile measurement	Pile complete within vertical tolerance of the specification
Completed pile(s)	At least 20 linear metres
Test timings	• The test must be completed within a total accumulated time 2 hours and 20 minutes

CP Construction PlantTechnical test - PracticalCS Competence SchemePiling rig attendant - A74

Basic details

Test ref:	Candidate name:
Tester ref:	Candidate ref:
Tester ref:	Date of test:
Make and model:	Start time of test:
	Duration:

Mandatory

Mandatory Correctly carried out during the tes		Y/N
Preparing	1. All pre-use checks to equipment (or responses to relevant questions)	
	2. Assist in setting the rig correctly for travel	
T	3. Guide the rig through restrictions	
Travening	4. Maintain a position of safety during travelling activities	
	5. Encountered hazards identified and cleared	
	6. Exclusion area checked and safe prior to setting up for piling works	
	7. Rig positioned accurately for piling works (reference rods etc.)	
Setting up	8. Ensuring rig was level for piling works	
	9. Confirm pile details are correct with operator	
	10. Communication arrangements confirmed with the rig operator	
	11. Aligned the mast for the required pile angle	
	12. Ensure that the exclusion zone is maintained throughout	
	13. Spoil removed to the agreed area (if applicable)	
Working	14. Form pile to the specification (drawing/schedule)	
working	15. Confirm weight of all loads with rig operator	
	16. Rig stability maintained (checked platform condition)	
	17. Pile constructed in accordance with industry and company standards	
	18. Rig re-configured from piling to travelling duties	
Shutdown	19. Parked securely in appropriate place	
Shutuown	20. All shut down and securing procedures	
Other	21. Legislation, manufacturers' and health and safety requirements complied with	
Other	22. Test completed within given time	

	All of these items must be awarded	Achieve	d / Not ac	hieved
Faults	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
	1. Signal code confirmed with operator		3	
	2 All around observation before rig is moved (no obstructions)		2	
	3 All around observation whilst rig is travelling		2	
Working	4. All around observation made before/during slewing		2	
	5. Ensure all ancillary equipment is checked for travel		3	
	6. Minimal manoeuvring maintained during piling work		1	
	7. Follow planned sequence of operation		2	
	8. Materials organised and ready for use		3	
	9. Remain in a position of safety during piling operation		3	
	10. Maintain communication with rig operator		2	
	Not exceeded eight penalties	Total p	enalties	

Achieved / Not achieved

Resources required

Machine	A conveying pump that meets the following criteria:
	- Pneumatic Pump (Endorsement A)
	- Worm/piston pump without mixer - up to 50mm outlet (Endorsement B)
	- Worm/piston pump with mixer - up to 50mm outlet (Endorsement C)
	Ground, clear of hazards which must include:
Area	- place to receive conveyed material
	- designated wash-out/disposal area
	A set of hoses suitable for pumping relevant to the endorsement
	• Clamps, safety clips, ground lines with couplings, seals, shovel, sponge balls
	Sufficient water supply
	Whip checks
Other equipment /	• A tripod (Endorsement A only)
resources	Primer (if applicable)
	Delivery hose cleaning equipment
	Supply of material suitable for conveying
	Vehicle Marshaller assistance/pour team
	• The machine selected for the test must have all controls clearly marked, be in serviceable condition and conform with current legislation
	• The operator's manual must be with the pump
Notes	• A delivery hose specification must be constructed for the activity, requiring at least 2 x delivery hoses with a combined length of at least 10 metres and tripod (where needed)
	All couplings must be fitted with locking facilities
	• The Tester cannot provide signals or support the tripod
	• Data sheet/Delivery note/COSHH sheet must be available that showing the required mix specification
	 Pre bagged material or site mixed material suitable for pumping must be available

Activity instructions

Sequence	• Due to the nature of the equipment, all activities can be undertaken on different pumps, locations and different days. CPCS must be informed prior to any tests taking place and be given full details of any divided tests		
	The test must be completed collectively within a given time. The specification's section gives further information		
	1. Ensure that the conveyer pump is secure and accessible		
Preparing for work	2. Segregate the working area		
	3. Complete all manufacturer's pre-start and running checks		
	4. Set up the equipment for work following the relevant specification		
	5. Receive raw materials and carry out loading activities		
Setting up for pumping	6. Establish the location where the pumped material to be delivered to		
	7. Establish the communication procedures with the pour team		
	8. Lubricate the delivery hoses with a suitable primer (if applicable)		
Working task	 Convey the material to the delivery location whilst following given signals 		
(refer to activity measurements)	10. Carry out an emergency stop procedure		
	11. Stop and restart the conveyer pump during work		
	12. Clean all pump system components		
Completing and	13. Carry out shut-down and securing procedures		
shutting down	14. Dismantle and store all components and ready the conveying pump for movement		
Notes	• The candidate must provide a running commentary to pre-start checks being carried out in order to provide supporting information to visual checks (e.g. components) and physical checks (e.g. checking travel limits) being made. The tester may prompt the candidate to outline specific information but not ask direct questions that requires a technical answer		
	 For activities 10 and 11, the Tester will instruct the candidate when to stop and re-start pumping operations 		

Activity measurements

Mixing and conveying	• Minimum of 20 minutes (or at least 3 full vessel/pump mixer loads)
Test timings	• The test must be completed within a total accumulated time of 1 hour and 10 minutes

Basic details

Test ref:	Candidate name:
Tester ref:	Candidate ref:
Tester ref:	Date of test:
Endorsement: A B C	Start time of test:
Make and model:	Duration:

Mandatory

Mandato	Y Correctly carried out during the test?	Y/N
	1. Positioned in relevant location	
Preparing	2. All pre-start and running checks	
	3. Function of all safety devices	
	4. Function of the pump checked	
	5. Allocated area checked and clear of hazards prior to conveying	
	6. Pump level and secure prior to conveying	
	7. Stabilisers set for conveying duties (as applicable)	
Setting up	8. Relevant delivery hoses selected and constructed to the given specification	
Setting up	9. Delivery hoses extended to the work area avoiding hazards and checked for condition	
	 Delivery hose couplings and tripod (where applicable) to be compatible, inspected and connected using all appropriate safety devices 	
	11. Delivery Hoses supported and secured (if applicable)	
	12. Pump engaged following required sequence	
	13. Engine set to required speed (Endorsement B & C only if applicable)	
	14. Lubricated the delivery hoses with suitable primer (if applicable)	
Working	15. Mix conforms with given specification	
	16. Mix conveyed to required location at the desired time	
	17. Carried out emergency stop appropriately	
	18. Stop flow of material, depressurised and restarts as instructed by the Tester	
Completing.	19. Waste material disposed of following site instructions, guidelines and regulations	
Completing	20. Components thoroughly cleaned after use	
shutdown	21. All shutdown and securing procedures	
Shataowii	22. All components dismantled and stored correctly	
Othor	23. Legislation, manufacturer's and health and safety requirements complied with	
Other	24. Test completed within the given time	

All of these items must be awarded

Achieved	/	Not	achieved
/ 10/11/2 / 2 / 4	/	1100	acritevea

Faults	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
	1. Full observation before, during, mixing and conveying		3	
	2 Delivered material deposited in suitable position for loading		2	
	3. Communication procedure established		2	
	4. Complied with given signals		1	
	5. Establish location and facilities for wash out		2	
Working	6. Components cleaned after use		2	
	7. Sequence of using controls		2	
	8. Correct use of all controls		2	
	9. Whip checks not fully extended		2	
Not exceeded eight penalties Total penalties				

Not exceeded eight penalties

Achieved / Not achieved

Technical test - Practical Telescopic handler 360 slew - A77

Resources required

	• Telescopic Handler having 360 slew capability and equipped with:
Machine	- standard forks
	- hoist ropes
	- approved lifting hook able to attach a suitable lifting accessory
	- ROPS, FOPS and seatbelt
	- rough terrain capability
	Flat surface for travelling on and for placing/stacking loads
	Rough undulating terrain
Area	 Flat level surface for all travelling and manoeuvring activities with a suspended load
	Incline or inclines
	Clear straight run not less than 20 metres in length
	Truck bed fitted with a headboard
	Suitable lifting accessories for attaching all suspended loads to the hook
	Slinger/signaller assistance
Other equipment	 Structure or below-ground level location for placing a load out-of-sight of the operator
	 Loading-out tower built out of scaffolding, either tube and fitting or system (quick lock), that meets current legislation
	Items to create restrictions for manoeuvring
	 LOAD 1 1 x load at least 50% of the rated capacity* of the telescopic-handler
	 LOAD 2 minimum of 3 x equal-sized loads for stacking purposes**
Loads	 LOAD 3 x load of a weight 30% less than the telescopic-handler's lift capacity at 10 metres extension (horizontal)
	• LOAD 4 A wide load at least 4 metres in length
	• The machine selected for the test must have a minimum operating height of at least 16 metres and be equipped with 4 x stabilisers, be in serviceable condition and conform with current legislation
Notes	• *The rated capacity applies to manufacturers supplied figures for the lifting of all loads applicable to the approved attachments
	 **Capable of lifting by forks (2 loads) and lifting accessories (3 loads). Fork use must be on pallets

Technical test - Practical Telescopic handler 360 slew - A77

Resources required (*Continued***)**

	•	Th acc	e load handling charts for suspended loads, including the use of the cessory, must be available for the machine being used for the test
	•	Th mc	e lifting hook must be detachable from the machine and must be either ounted on the forks or attached directly to the carriage
	•	Th tel	e lifting hook attachment must be approved by the manufacturer of the ehandler being used on the test
	•	Th me	e lifting accessories must be of a length that provides a minimum of 1.2 etres vertical distance between the hook and the load
	•	The loa inc	e telehandler selected must be approved to lift and travel with suspended ads (with a raised boom), and equipped with a suitable load moment dicator or rated capacity indicator
	•	A l by en	ift plan must be devised by a competent person and available for reference the operator. When devising the plan, consideration must be taken to sure that:
		a)	there is sufficient clearance between the load and front of the machine to account for load swing which may require (depending on model) the fitment of a jib
		b)	boom extension is sufficient to ensure clearance between the telehandler chassis and load but no more than needed Note: Manufacturers specific requirements for lift and travel configurations take precedent over this statement.
Notes (Continued)		c)	that the length of the lifting accessories minimises the travel height of the boom whilst not exceeding the included angle of the accessory
		d)	hand lines are specified to allow appropriate external control of the load whilst keeping the slinger/signaller clear of the machine's travel path
		e)	ground conditions are assessed to identify any support pads required
	•	The loa and op a s lev she	e structure or below-ground level location must be suitable for landing the ad, but must be of sufficient height or depth so that the whole of the load d the lower portion of the lifting accessory cannot be seen from the erating position. If a below-ground level landing place is chosen, it must be afe environment for the slinger/signaller to handle the load. If a ground rel structure is chosen, it must be of sufficient strength to resist movement ould the load inadvertently contact the structure
	•	Ea slir po	ch lifting accessory must be a minimum of a two-leg chain or wire rope ng, or a fibre or webbing sling that supports the load from at least two ints
	•	Ead	ch lifting accessory must be fit for purpose and certificated
	•	A h an slir or	hand or tag line must be used to control at least one of the loads on the test d should be used on all loads if appropriate which ensures that the hger/signaler is kept clear of any potential contact with the machine, load structure. The method statement for the hand line must stipulate that:
		-	the rope is at least 16mm in diameter
		-	it is free of knots, kinks, fraying or any form of damage

Resources required (Continued)

	 it is of a suitable length allowing e excessive free length 	easy control of the load but with minimal			
	 it is attached to the load and cannel the parts of the rope secured by a a sprung latch, and not tied in a k 	not unintentionally become free, with a shackle/ karabiner or other device with not			
	 the free end of the rope does not secured end may require an eye t 	have an eye or loop (although the o accommodate the shackle)			
	 The slinger/signaller must hold a CPC A40E and competent in dealing with undertake this role 	S card bearing the category of A40A or pick-and-carry duties. The Tester cannot			
	• The operator's manual must be with	the telehandler			
	• The weight of all loads must be know	n			
	• The loading-out tower must be of a h using at least 75% of telehandler's fu	eight that allows LOAD 1 to be placed Il operating lift height			
Notos	• The truck bed can be simulated but n specifications, including the ground/b	nust conform to road haulage standard bed height			
(Continued)	• The slope must have an incline of 15% area at the top, or a straight ramp wir at the summit	% (1 : 6.6) with sufficient manoeuvring th an up and down route with a flat area			
	• The equipment used to mark out the chicane must have a height of at leas	manoeuvring exercises such as the t 1 metre			
	• Tape measure for the checking of loa	d centres and fork widths etc.			
	• Items for LOAD 2 must be safe for sta	icking			
If a machine having an operating height in excess of 16 metres is being the test, the following concession may be used as an alternative A loading-out tower having a height of 12 metres may be used providin a minimum distance, as shown in the table, from the base of the tower fork tips of the telehandler when the tips of the forks are facing the tow					
					Operating height (metres) Minimum distance (metres)
	17	2			
	18	2			
	19 metres and above	3			

Note: Due to a level of incidents involving telescopic handlers, particularly with the movement of suspended loads, the Strategic Forum for Construction Plant Safety Group have produced a document titled 'Good Practice Guide to the Safe Use of Telehandlers in Construction' and a supplementary 'Good Practice Guide for the Lifting and Travelling with Suspended Loads using Telehandlers.

It is essential that those both planning and conducting testing activities are conversant with the content of each document and that the test procedures and marking reflect all good practices contained therein. Both documents are free to download from <u>www.cpa.uk.net/sfpsg/</u>.

Activity instructions (Pre-use checks)

Sequence	Activities 1 to 3 must be undertaken at the start of the test
	 Using the operator's manual, convey (to the tester) the pre-use or daily checks stipulated by the vehicle manufacturer
Preparing for work	2. Complete all manufacturers' pre-start checks with supporting commentary
	3. Complete full pre-use running checks and prepare the vehicle for travelling activities
Notes (Pre-use checks)	• The candidate must provide a running commentary to pre-start checks being carried out in order to provide supporting information to visual checks (e.g. components) and physical checks (e.g. brakes etc.) being made. The tester may prompt the candidate to outline specific information but not ask direct questions that requires a technical answer
	• The operator's manual must be referenced during activities 2 and 3

Activity instructions (Operational)

	Activities 4 - 24 can be undertaken in any order
Sequence	Activity 26 must be undertaken at the end of the test
	The test must be completed within a given time. The specifications' section gives further information
	4. In an un-laden state and with LOAD 1 :
	- travel up and down the slope
Travelling &	- travel over rough terrain
(forks)	 pass through a chicane executing full right and left-hand turns in a forward and reverse direction
	- stop and restart on the incline whilst loaded
Travelling & manoeuvring (suspended	5. Lift LOAD 1 and pass through a chicane executing full right and left-hand turns in a forward and reverse direction (This activity may be carried out with the hoist rope or suspended from the lifting hook)
loads)	6. Place LOAD 1 at a given point
Setting up for	7. Prepare and set the telescopic-handler for each lift
work	8. Fit the relevant attachment
Working tasks (forks)	 Lift and place LOAD 1 onto the loading out tower. When placed, move the telehandler away from the tower. Retrieve the load, lower to ground level and place at a given point
	 Lift and place 3 x LOAD 2 onto the truck bed. On completion, remove all loads (LOAD 2) from the truck bed
	11. Stack 3 x LOAD 2 vertically on top of one another. On completion de-stack and place alongside each other in a straight line

Telescopic handler 360 slew - A77

Activity instructions (Operational) (Continued)

Working tasks	12. Lift LOAD 3 and place at ground level at an indicated point using 10 metre extension (horizontal) of the telehandler
(forks) Continued	13. Lift LOAD 4 and reverse in a straight line for at least 20 metres, passing through a defined restriction at the end of the run
	14. Carry out undercutting when lifting and placing a load
Working tasks (suspended	15. Lift and place ANY LOAD at a given point which is below ground level or behind a structure. Once landed return to the original start point
loads)	16. Create a stack using each of LOAD 2 at a given location
	17. Lift ANY LOAD from minimum radius to maximum radius in relation to the load
	18. Lift LOAD 4 and reverse in a straight line for at least 10 metres and pass through a defined restriction at the end of the run
	19. Place LOAD 4 onto the vehicle bed
Working tasks (hoist rope)	20. Lift LOAD 4 which must be at maximum radius, and slew through 200 degrees and land the load within 2 metres of the machines minimum radius (using 3 services)
	21. Lift LOAD 1 and simulate a concrete pouring exercise by travelling the load in a straight line for a distance of not less than 6 metres. Land the load at a designated place
	22. Position machine so that stabiliser footprint is 2 metres from base of tower and Lift ANY LOAD from ground level, which should be located at least 75% of maximum radius, slew through 90 degrees and place load on top of the tower (any suitable load, that cannot be detached on landing)
	23. All loads to be placed at ground level following completion of each activity
Completing	24. Configure the telehandler for road travel
work	25. Remove the lifting hook / hoist rope and return the machine ready for fork- use
Shutting down	26. Park the telehandler and carry out shut-down and securing procedures
	• For activity 9, another activity must be undertaken after placing the load at height
	• For activities 4 & 5 (chicane) and 13 & 18, the restrictions must be higher than the height of the load. The forks may not be raised during manoeuvring activities. The boom may not be raised during manoeuvring activities
Notes	• The load stacking area for activity 10 & 11 must be at least 12 metres away from the truck bed
	On activity 10:
	 Should the load or pallet be narrower than fork carriage, the given measurement (maximum of 75mm) applies between the headboard and side of the carriage for the first load

Technical test - Practical

Telescopic handler 360 slew - A77

Activity instructions (Operational) (Continued)

	 On completion of the third load being placed, the machine must be moved away from the truck bed. All loads must be immediately removed again in the correct sequence before commencing another activity
	 The candidate must be instructed at the start of this activity to load the vehicle as though further loads are to be placed on the vehicle bed e.g. following the sequence whereby the vehicle is to be fully loaded
	 On activity 19, LOAD 4 need not be detached after placing on to the vehicle bed
Notes (Continued)	• For item 15, the landing area must have sufficient height or depth so that the load and attaching points between the accessory and the load are out of sight of the candidate when landed
	 All loads must be attached and detached to and from the machine by the slinger
	• To ensure impartiality of the test, the slinger can only control but cannot position each load when stacking or placing e.g. physically exerting effort on a load for positioning, and cannot give instructions relating how the machine should be configured e.g. which component of the machine should be operated
	• For the purposes of the test, all hand signals are to conform with BS 7121 part 1 and the Health and Safety (Safety Signs and Signals) Regulations 1996

Load placing	• 100 mm of a given position
Load placing (vehicle bed)	 Maximum of 75 mm clearance between all loads, and the loads and truck headboard
Load placing (stacking)	 Maximum of 75 mm clearance between each load when placing back at ground level
Load Travelling	Maximum clearance of 300 mm between load and ground
Reversing	Maximum clearance less than 300 mm
Manoeuvring	• Maximum clearance less than 300 mm or 10% of the machine's width (the greater applies) between the telehandler and chicane/restriction sides when undertaking each turn, or passing through the restriction
Manoeuvring LOAD 4	Maximum clearance less than 300 mm
Test timings	The test must be completed within 3 hours

Activity measurements

CP Construction Plant Technical test - Practical CS Competence Scheme Telescopic handler 360 slew - A77

E

Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Make and model:	Start time of test:
	Duration:

Mandato	ory	Correctly carried out during the test?	Y/N
Preparing	1	All pre-start and running checks (or responses to relevant questions)	
	2	Telehandler set for travel	
	3	Seat belt worn	
	4	Full observation before moving and reversing	
	5	Restrictions and hazards cleared	
	6	Full control maintained when ascending and descending slopes	
	7	Travel direction on slopes	
Travelling	8	No contact between load and telehandler and/or other obstructions	
	9	Route assessed and travelled with the suspended load in a controlled manner	
	10	Personnel clear of the machine travel path when travelling with a load	
	11	No opposite movement of intended direction when restarting on slopes	
	12	Limbs and body kept within confines of cab (when travelling)	
	13	Straight line kept during reversing activity	
	14	Loads secure on forks	
	15	Allocated area checked and clear of hazards prior to lifting	
	16	Loads assessed for weight and condition prior to lifting	
	17	Relevant lifting accessory attached to each load	
	18	Forks spaced to match loads	
Setting up	19	Machine isolated (stopped engine) and secure when cab exited	
	20	Communication arrangements confirmed with slinger/signaller	
	21	Stabilisers set (if applicable) and forklift level prior to lifting or placing loads	
	22	Support pads used in accordance with the lift plan (if applicable)	
	23	Removal and replacement of an attachment	
	24	Lift capacity within safe limit	
	25	Machine's stability maintained at all times	
Working	26	Loads/pallets and surrounding area not damaged during operations	
tasks	27	Sequence of loads placed and removed onto and from truck bed	
(forks)	28	Positioned correctly onto the truck bed (heavy loads over the rear axles)	
	29	Parking brake applied and neutral selected before lifting and placing loads	
	30	Undercut loads	
	31	Telehandler positioning prior to lifting the load	
	32	Telehandler level prior to lifting and placing the load	
Working	33	Lifted and lowered load in a controlled manner	
tasks	34	Instructions conformed with	
loads)	35	Stability of the machine maintained at all times	
10003)	36	SWL not exceeded at all times	
	37	Load remains freely suspended (except during lifting and placing)	

CP Construction Plant **CS** Competence Scheme Telescopic handler 360 slew - A77

Working	38 Machine hydraulic controls isolated when load being attached/disconnected*
tasks (suspended	39 Full view of slinger/signaller maintained at all times during lifting, travel and placing activities
loads)	40 Personnel clear of any danger zones when lifting and placing loads
	41 Lift capacity within safe limit
	42 Sequence of loads placed and removed onto and from truck bed
Working tasks (boist ropp)	43 Positioned correctly onto the truck bed (heavy loads over the rear axles)
	44 Lifted and lowered load in a controlled manner
(noise rope)	45 Machine's stability maintained at all times
	46 Parking brake applied and neutral selected before lifting and placing loads
Completing	47 Loads left stable, safe and secure
Shutdown	48 All shut down and securing procedures
Other	49 Legislation, manufacturers' and health and safety requirements complied with
Other	50 Test completed within the given time

	All of these items must be awarded	Achieved / Not acr		chieved
Faults	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
	1 Telehandler mounting and dismounting		1	
	2 Full observation whilst travelling		2	
	3 Gear ratios matched to ground and work speed		2	
	4 Travel speed matched to ground conditions and type		1	
Travelling	5 Boom extension minimised during travel movements – laden only		3	
Havening	6 All loads placed at the given points within the given tolerance		2	
	7 Boom kept fully retracted during travel – unladen only		2	
	8 Loads kept at minimum height during travel		3	
	9 Reversing movements minimised		2	
	10 Forks or loads kept low but clear of the ground during travel		1	
	11 Position and set the forklift when lifting or placing loads		2	
	12 Full observation before slewing the upper structure		2	
	13 All loads vertically lifted e.g. load drag minimised		2	
	14 Lifting accessories kept clear of the ground		1	
	15 Suspended load lifted clear of the surface and checked for integrity		1	
Working	16 Loads entered and exited cleanly		1	
WORKING	17 Load swing minimised during travel and static lifts		3	
	18 Loads heeled whilst travelling		1	
	19 Load placed at given points with the given tolerance		3	
	20 Loads lowered within 1 metre after removing from truck bed		1	
	21 Sequence of using hydraulic/lifting controls		2	
	22 Smooth use of steering, braking, transmission and hydraulic controls		1	
	Not exceeded eight penalties	Total p	enalties	

Achieved / Not achieved

Note:

*Mandatory item 38 – If the candidate does not isolate the operating controls during the load attaching/detaching activity, the Tester must immediately inform the candidate to do so. The candidate has the option to continue the test but will be informed they have not achieved on the test at this time.

The definition of isolated is where no movement of the machine's boom (extension and raising/lowering) or carriage can occur when the operating controls are activated. Depending on the machine, this may be a case of activating an electronic/manual isolation control or requires engine shutdown. Testers should be clear of the method to be used prior to the test commencing

Transitional Assessment Telescopic Handler 360 slew - A77 (A89)

Basic details (All these fields are mandatory)

Tester name:	Candidate name:	Make and model:
Tester number:	Candidate number	Endorsements: N/A
Date of assessment:	Start time:	Duration:
Location of assessment:		

Activity instructions

All activities must be carried out according to Manufacturers' requirements, Legislation, Regulations, Codes of Practice, with additional requirements where indicated. Key Requirements for this category - All activities are to be undertaken.

Mandatory classroom (All required)

Method						Met Y/N		
Question 1	Using the given suspe a) For stabiliser dutie degrees? b) For stabiliser dutie c) For free-on-wheels d) For pick-and-carry e) What is the maxim f) What is the maxim g) A load with dimens distance of 20 metres metres, can the lift be	ended loads lifting cap s, what is the maximu duties, what is the maximu duties, what is the n duties, what is the m um travel speed whe um gradient allowed sions of length - 4 me before being placed e carried out for pick-	pacity diagrams for a um lifting capacity wh um gradient allowed naximum gradient allo aximum available ho en carrying a suspend when travelling down tres, width - 4 metres . Using a set of 4 leg o and-carry duties?	telescopic handler: nen the carriage is at when lifting downhill owed when lifting up ok height? ed load? nhill with a suspende s and height - 2.8 me chains where the dist	the second stage of e on a slope? hill on a slope? d load that is facing u tres, and weighing 4 ance between the to	extension and the bo uphill? tonnes needs to be t op of the load and the	om at angle of 10 ravelled for a e hook is 2.8	
Answer	a)	b)	c)	d)	e)	f)	g)	

Method				Met Y/N
Question 2	Using the lifting capacity diagram a) what is the maximum lifting ca b) what is the lifting capacity with c) what is the farthest distance av	for A77: pacity at maximum height, the boom angle at 30 degrees a railable to place a 2 tonnes load a	t a radius of 13 metres and it a height of 13metres?	
Answer	a)	b)	c)	

Mandatory test site (All required)

Method	Activity	Expected actions or understanding	Met Y/N
D	1. Prepare the machine for work	Full pre-start and running checks completed. Appropriate use of PPE. Correct method of entry/exit of machine.	
N	2. Setting up for work	Explanation to include: Communication methods agreed with all relevant personnel. Loads identified and assessed for weight and characteristics. Lifting area assessed for hazards. Machine isolated and secure when cab exited. Relevant lifting accessory attached. Pick and Carry duties. Lift Plans. Remote Control Units.	
D	3. Changing and using attachments	Procedures, safety precautions, methods of detaching/attaching. Types of attachments for Tele Handlers.	
D	4. Travel to working area	Machine configured for travel. Speeds match ground conditions. Full observation prior to and during travel. Controls and movement of boom used correctly, safely and efficiently. Contact avoided with obstructions.	
D	5. Lift a wide load of at least 4 metres in length which must be at maximum radius, and slew through 200 degrees and land the load within 2 metres of the machines minimum radius (using 3 services)**	Machine positioned and set correctly Inc. stabilisers. Loads placed at required position. Loads entered / exited cleanly. Loads secure after placing. Controls used smoothly and in correct sequence. <i>Ensure that Activity Measurements on page 4 are also met.</i>	
D	 6. Lift a load at least 50% of the rated capacity* of the tele-handler and simulate a concrete pouring exercise by travelling the load (not the machine) in a straight line for a distance of not less than 6 metres. Land the load at a designated place** 	Machine positioned and set correctly Inc. stabilisers. Loads placed at required position. Loads entered / exited cleanly. Loads secure after placing. Controls used smoothly and in correct sequence. <i>Ensure that Activity Measurements on page 4 are also met.</i>	

Transitional Assessment Telescopic Handler 360 slew - A77 (A89)

Basic details (All these fields are mandatory)

Tester na	ame: Tester number:	Candidate name: Candidate number:
Method	Activity	Expected actions or understanding Met Y/N
D	7. Position machine so that stabiliser footprint is 2 metres from base of tower and Lift ANY LOAD from ground level, which should be located at least 75% of maximum radius, slew through 90 degrees and place load on top of the tower (any suitable load, that cannot be detached on landing)**	Machine positioned and set correctly Inc. stabilisers. Loads placed at required position. Loads entered / exited cleanly. Loads secure after placing. Controls used smoothly and in correct sequence. <i>Ensure that Activity Measurements on page 4 are also met.</i>
D	 8. Lift a load at least 50% of the rated capacity* of the tele-handler and pass through a chicane executing full right and left-hand turns in a forward and reverse direction and then place at a given point. (This activity may be carried out with the hoist rope or suspended from the lifting hook) 	Machine configured for travel. Speeds match ground conditions. Full observation prior to and during travel. Correct use of controls and movement of boom. Weight of loads assessed and secured. Machine within rated capacity. Contact avoided with obstructions. Machine positioned and set correctly Inc. stabilisers (if required). Controls used smoothly and in correct sequence. <i>Ensure that Activity</i> <i>Measurements on page 4 are also met.</i>
D	9. Place load in activity 8 at a given point	Machine configured for travel. Speeds match ground conditions. Full observation prior to and during travel. Correct use of controls and movement of boom. Weight of loads assessed and secured. Machine within rated capacity. Contact avoided with obstructions. Machine positioned and set correctly Inc. stabilisers (if required). Load placed at required position. Load secure after placing. Controls used smoothly and in correct sequence. <i>Ensure that Activity Measurements on</i> <i>page 4 are also met.</i>
D	10.Place the machine out-of-service	Shut down and securing procedures completed.

Activity Measurements

Load Placing	100 mm of given position
Load Travelling	Maximum Clearance of 300mm between load and ground
Manoeuvring (Activity 8)	Maximum clearance less than 300 mm or 10% of the machine's width (the greater applies) between the telehandler and chicane/restriction sides when undertaking each turn, (forward and reverse) or passing through the restriction
Assessment Timing	The assessment must be completed within 2 hours (including questions)

Notes

- *The rated capacity applies to manufacturers supplied figures for the lifting of all loads applicable to the approved attachments
- **Activities 5 to 7 must be carried using an attachment with a hoist rope
- **D** = Demonstration **N** = Narrative

Sign off

The Candidate has been successful if ALL applicable items are met.

I confirm that I have carried out the assessment in accordance with CPCS requirements and that the relevant box)	e Tester has: Achieved Not Achieved (Please tick the
Candidate signature:	Date:
Tester signature:	Date:

Basic Details (All these fields are mandatory)

Test Level: Standard Advanced (Place a tick in the relevant box)		
Tester name:	Tester number:	
Candidate name:	Candidate number:	
Tester feedback		

Tester Sign off

I confirm that I, the Tester have carried out the Practical Test is candidate has: Achieved Not Achieved (Ple	n accordance with CPCS Requirements and that the ase tick the relevant box)
Tester Signature:	Date:
Monitor Signature (Advanced Test):	Date:

Candidate feedback (Optional)

Candidate Sign off

I confirm that I, the candidate have undertaken the Transitional Assessment and I, agree / disagree (<i>Please tick the relevant box</i>) with the feedback given by the Tester.
Candidate Signature:Date:
Resources required (Endorsement A to F)

Machine	• Fully equipped vacuum excavator that meets the requirements of the endorsement, equipped with air or water lance delivery capabilities
	Ground clear of hazards and includes:
	- Flat surface for travelling and manoeuvring
	- Clear straight run not less than 20 metres in length
	- Area for spoil discharging
Area	 Area for soil excavation work and arm manipulation exercise as per exercises 1 to 4
	- Area for cleaning and preparation work
	 Specified buried services that meet the required test specification (exercises 3 and 4)
	 Segregated area installed with suitable barriers to prevent unauthorised access, with entry/exit gates for the vehicle/trailer
	Appropriate air or water equipped ground breaking tools
	Equipment to segregate the working area and exposed excavations
Other equipment	Equipment to create restrictions for manoeuvring
equipment	Equipment for marking out the nozzle control exercise (1)
	Replacement nozzle of a different diameter
	• The machine selected for the test must meet the specification for the required endorsement, be in serviceable condition and conform with current legislation
	• The operator's manual for the host vehicle/chassis and excavator unit must be available
	• Trailer mounted units to be manoeuvred by a suitable vehicle. For non-LGV and trailer mounted endorsements, the candidate must have had suitable training for the driving of the machine/vehicle, Inc. trailer connecting and decoupling
Notes	• An excavating specification must be available for the candidate to refer to as per the specification in the resources and activity section of the test documentation
	The remote unit must be guarded to prevent inadvertent movement of controls
	 The area for excavating buried services excavation activity must have (inert) buried services (replicating gas/water piping and low-voltage cabling) that meets the following specification:
	- Service 1: 1 x pipe of a 90mm diameter, buried to a depth of 750mm

Resources required (Continued)

	- Service 2: 1 x pipe of a 125mm diameter running parallel to and directly beneath service 1, buried to a depth of 900mm
	 Service 3: 1 x large diameter cable (min of 200mm) buried to a depth of 300mm at a distance of at least four times the nozzle hose diameter from service 1, (e.g. nozzle diameter 250mm, then distance from service 1 to service 2 = 500mm)
	 Service 4: 1 x electrical cable parallel to service 3 with a length of at least 100mm from service 3 and buried to a depth of 400mm
	 Service 5: 1 x electrical cable at a 90 degree angle to services 1 to 4, buried to a depth of 200mm
	- Service 6: 1 x electrical cable at a 45 degree angle to services 1 to 4, buried to a depth of 250mm
	 The length of each pipe and cable shall be beyond the intended excavating area for the type of machine being used on the test
Notes	• The buried services shall be marked according to industry guidance (except for exercise 4)
	 The area for the excavating tasks should be pre-marked according to the given dimensions and ensured that the ground is sufficiently compacted following previous excavating tests
(Continued)	• An total exclusion zone must be pre-constructed around the excavating area
	• Exercise 1:
	 The equipment for the nozzle control exercise needs to ensure a straight line marked can be followed by the candidate, and that the accuracy of placing the nozzle at each given point can be measured
	• Exercise 3:
	 For endorsements A to D only a cross section of the marked services has to be exposed. The area is identified by the three hashed circles on the plan
	 For endorsements E and F all the marked services has to be exposed within the full dimensions
	• Exercise 4:
	 For endorsement A to D an area of 500mm x 500mm for excavating that contains an unmarked and (to the candidate) unknown buried service situated at between 300mm and 600mm depth
	 For endorsements E & F and area of 1500mm x 1500mm for excavating that contains an unmarked and (to the candidate) unknown buried service situated at between 300mm and 600mm depth

CP Construction PlantTechnical test - PracticalCS Competence SchemeVacuum Excavator - A78

Activity instructions (Pre-use checks) Endorsements A to F

Sequence	•	Activities 1 to 3 must be undertaken at the start of the test
Prenaring for	1.	Using the operator's manual, convey (to the tester) the pre-use or daily checks stipulated by the host vehicle or trailer, and vacuum excavating unit manufacturers
work	2.	Complete all manufacturers' pre-start checks with supporting commentary
	3.	Complete full pre-use running checks and prepare the vehicle/trailer and unit for travelling activities
Notes (Pre-use	•	The candidate must provide a running commentary to pre-start checks being carried out in order to provide supporting information to visual checks (e.g. components) and physical checks (e.g. brakes etc.) being made. The tester may prompt the candidate to outline specific information but not ask direct questions that requires a technical answer
cnecksj	•	The operator's manual must be referenced during activities 2 and 3
	•	For trailer mounted units, the trailer may be pre-coupled to the towing vehicle

Activity instructions (Operational) Endorsements A to F

	Activity 1 must be undertaken at the start of the test
	Activity 15 must be undertaken at the end of the test
Sequence	All activities must be undertaken in the given order
	The test must be completed within a given time. The specifications' section gives further information
	4. Travel/tow the unit to the working area
Travelling and	5. Endorsements C - F; in both a loaded and unloaded state:
manoeuvring (refer to activity	- travel over uneven terrain
measurements)	 pass through a chicane executing full right- and left-hand turns in a forward and reverse direction
	6. Check and prepare the working area in accordance with the site plan
	7. Position and configure the machine for all activities
	8. Maintain an exclusion zone for the working area
	9. Replace a nozzle with a different diameter version
Setting up for work	10. Exercise 1 - From minimum radius, undertake the arm manipulation exercise as per the plan. At each marker, ground the hose at the specified point
	 Exercise 2 - Excavate a straight trench 90 degrees to the machine's centre line
	 Exercise 3 - Excavate an area according to the given site plan and expose marked services (exercise 3)

Activity instructions (Operational) Continued

Working tasks	13. Exercise 4 - Excavate a given marked area
	14. Change the nozzle to a different diameter
	15. On completion of exercises 2 - 4, position the vehicle away from the excavation and segregate the exposed services and excavated areas
Discharging and	16. Discharge the excavated material at a given point
completing	17. Travel/tow the machine to a cleaning area
work	18. Carry out relevant cleaning activities
Shutting down	19. Park the machine and carry out shut-down and securing procedures
	• Exercise 1 must be undertaken in a single sequence from start to finish
Notes	• For exercise 3, both types of ground engaging tools must be used in equal proportion for the activity
	• For activity 9, the tester may provide assistance but limited to basic functions such as steading the nozzle and following the directions of the candidate
	• For activity 14, the nozzle must be changed during exercise 3
	• For activity 16, the discharge point must be at least 30 metres from the excavating area

Activity measurements (Endorsements A to F)

Manoeuvring restriction (activities 5)	• Maximum clearance less than 300 mm or 10% of the machine's width (the greater applies) between the machine and chicane/restriction sides when undertaking each turn, or passing through the restriction
	• Maximum deviation from the route = +/- 100mm
Exercise 1	Maximum tolerance for nozzle placing = 25 mm
	• Maximum ground to nozzle height = 100 mm
	• Trench length = 3 metres +/- 100 mm
Exercise 2	• Trench straightness = 150 mm maximum deviation
	• Trench Depth = 300 mm +/- 100 mm
	• For endorsements A to D a cross section of services exposed as per plan
Exercise 3	For endorsement E & F All services exposed
Exercise 5	 Excavation limit = 100mm outside of outer services and below deepest service
	Service exposed
Exercise 4	 For endorsements A to D - Excavation = 500mm x 500mm + 100mm maximum
	• For endorsements E & F - Excavation = 1 metre x 1 metre + 100mm maximum
	• Maximum depth = 700mm
Test timings	The test must be completed within 3 hours

CP Construction PlantTechnical test - PracticalCS Competence SchemeVacuum Excavator - A78

Resources required (Endorsements G & H)

Machine	• Fully equipped vacuum excavator that meets the requirements of the endorsement, equipped with air or water lance delivery capabilities
Area	 Ground clear of hazards and includes: Area for spoil discharging Area for soil excavation work and arm manipulation exercise as per exercises 1 to 4 Area for cleaning and preparation work Specified buried services that meet the required test specification (exercises 3 and 4)
	 Segregated area installed with suitable barriers to prevent unauthorised access, with entry/exit gates for the vehicle/trailer
Other equipment	 Appropriate air or water equipped ground breaking tools Equipment to segregate the working area and exposed excavations Equipment for marking out the nozzle control exercise (1) Replacement nozzle of a different diameter
Notes	 The host vehicle/chassis and excavator unit selected for Endorsement G must meet the specifications for endorsement E The host vehicle/chassis and excavator unit selected for Endorsement H must meet the specifications for endorsement F The operator's manual for the host vehicle/chassis and excavator unit must be available An excavating specification must be available for the candidate to refer to as per the specification in the resources and activity section of the test documentation The area for excavating buried services excavation activity must have (inert) buried services (replicating gas/water piping and low-voltage cabling) that meets the following specification: Service 1: 1 x pipe of a 90mm diameter, buried to a depth of 750mm Service 2: 1 x pipe of a 125mm diameter running parallel to and directly beneath service 1, buried to a depth of 900mm Service 3: 1 x large diameter cable (min of 200mm) buried to a depth of 300mm at a distance of at least four times the nozzle hose diameter from service 1, (e.g. nozzle diameter 250mm, then distance from service 1 to service 2 = 500mm)

Resources required (Continued)

	- Service 4: 1 x electrical cable parallel to service 3 with a length of at least 100mm from service 3 and buried to a depth of 400mm
	- Service 5: 1 x electrical cable at a 90 degree angle to services 1 to 4, buried to a depth of 200mm
	- Service 6: 1 x electrical cable at a 45 degree angle to services 1 to 4, buried to a depth of 250mm
	• The length of each pipe and cable shall be beyond the intended excavating area for the type of machine being used on the test
	• The buried services shall be marked according to industry guidance (except for exercise 4)
Notes (Continued)	• The area for both excavating tasks should be pre-marked according to the given dimensions and ensured that the ground is sufficiently compacted following previous excavating tests
(,	• An total exclusion zone must be pre-constructed around the excavating area
	• Exercise 1:
	 The equipment for the nozzle control exercise needs to ensure a straight line marked can be followed by the candidate, and that the accuracy of placing the nozzle at each given point can be measured
	• Exercise 3:
	- All the marked services has to be exposed within the full dimensions
	• Exercise 4:
	 Area of 1500mm x 1500mm for excavating that contains an unmarked and (to the candidate) unknown buried service situated at between 300mm and 600mm depth

CP Construction PlantTechnical test - PracticalCS Competence SchemeVacuum Excavator - A78

Activity instructions (Pre-use checks) Endorsements G & H

Sequence	• Activities 20 to 22 must be undertaken at the start of the test
Preparing for work	 20. Using the operator's manual, convey (to the tester) the pre-use or daily checks stipulated by the vacuum excavating unit manufacturers 21. Complete all manufacturers' pre-start checks with supporting commentary 22. Complete full pre-use running checks and prepare the unit for excavating activities
Notes (Pre-use checks)	 The candidate must provide a running commentary to pre-start checks being carried out in order to provide supporting information to visual checks (e.g. components) and physical checks (e.g. hoses etc.) being made. The tester may prompt the candidate to outline specific information but not ask direct questions that requires a technical answer The operator's manual must be referenced during activities 21 and 22

Activity instructions (Operational) Endorsements G & H

	Activity 20 must be undertaken at the start of the test
	• Activity 32 must be undertaken at the end of the test
Sequence	All activities must be undertaken in the given order
	The test must be completed within a given time. The specifications' section gives further information
	23. Check and prepare the working area in accordance with the site plan
	24. Configure the machine for all activities
	25. Maintain an exclusion zone for the working area
	26. Replace a nozzle with a different diameter version
Setting up for work	27. Exercise 1 - From minimum radius, undertake the arm manipulation exercise as per the plan. At each marker, ground the hose at the specified point
	 Exercise 2 - Excavate a straight trench 90 degrees to the machine's centre line
	29. Exercise 3 - Excavate an area according to the given site plan and expose all marked services (exercise 3)
	30. Exercise 4 - Excavate a given marked area
	31. Change the nozzle to a different diameter
Working tasks	32. On completion of exercises 2 - 4, the host vehicle must be positioned away from the excavation to allow the candidate to segregate the exposed services and excavated areas
	33. Carry out relevant cleaning activities

Activity instructions (Operational) (Continued)

	• Exercise 1 must be undertaken in a single sequence from start to finish
	• For exercise 3, both types of ground engaging tools must be used in equal proportion for the activity
	The tester must travel the unit to the working area
	• For activity 26, the tester may provide assistance but limited to basic functions such as steading the nozzle and following the directions of the candidate
Notes	• For activity 31, the nozzle must be changed during exercise 3
	• For activity 32, the tester must position the vehicle away from the excavation to allow the candidate to segregate the exposed services and excavated area
	• The tester must travel the unit to the given discharge point and may also discharge the excavated material
	• For activity 33, the tester must travel the unit to the cleaning area to allow the candidate to carry out relevant cleaning activities

Activity measurements Endorsements G & H

	• Maximum deviation from the route = +/- 100mm
Exercise 1	Maximum tolerance for nozzle placing = 25 mm
	 Maximum ground to nozzle height = 100 mm
	• Trench length = 3 metres +/- 100 mm
Exercise 2	 Trench straightness = 150 mm maximum deviation
	• Trench Depth = 300 mm +/- 100 mm
	All services exposed
Exercise 3	 Excavation limit = 100mm outside of outer services and below deepest service
	Service exposed
Exercise 4	• Excavation = 1 metre x 1 metre + 100mm maximum
	• Maximum depth = 700mm
Test timings	The test must be completed within 3 hours

Nozzle control exercise (exercise 1)



CP Construction PlantTechnical test - PracticalCS Competence SchemeVacuum Excavator - A78

Simulated buried services layout (exercise 3)





Dusic ucturis	Ba	sic	de	etai	ls
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Test ref:
Tester Name:
Tester ref:
Endorsement: A B C D E F G H
Make and model:

Candidate name:
Candidate ref:
Date of test:
Start time of test:

Duration:

Mandat	ory	Correctly carried ou	ıt during	the test?	Y/N	
Ducuculus	1 All pre-start a	nd running checks (or responses to relevant questions)				
Preparing	2 Remote contr	ol unit functional check (where relevant)				
	3 Restrictions c	leared				
Travelling	4 Machine set f	or travel				
	5 Encountered	hazards cleared				
	6 Allocated are	a checked and clear of hazards prior to each activity				
	7 Machine posi	tioned for each activity				
Setting up	8 Exclusion zon	e set correctly for each activity				
	9 Exclusion zon	e maintained for each activity				
	10 Air and water	lance connected and checked				
	11 Nozzle kept v	ertical during arm manipulation exercise		,		
	12 Trenches con	formed to given size and within tolerances (depth, straightness and	clearanc	es)		
	13 Kept clear of	underside of nozzle			-	
	14 Ground engag	Ground engaging tools used enricently with lance armed towards nozzle				
	15 No damage applied to underground services					
Morking	16 Appropriate p	isolated when required				
working	17 Remote units	isolated when required				
	10 Nozzle kept w	hum segregated area				
	20 Maintained s	of situations at all times including operator positioning				
	20 Maintained sa	not exceeding safe limits during operation				
	22 Candidate cle	JZZIE angle not exceeding safe limits during operation				
	23 Stability of th	e machine maintained at all times		11		
	24 Material disch	narged in given area				
	25 Machine clea	achine cleaned in accordance with procedures				
Completing	26 Tools and equ	ipment securely stowed				
	27 Area for clear	ing left tidy and safe				
Shutdown	28 All shutdown	and securing procedures				
Othor	29 Legislation, m	anufacturers' and health and safety requirements complied with				
Other	30 Test complete	ed within the given time				
		All of these items must be awarded	Achie	eved / Not	achieved	
Faulta			- 1.			
Faults		Candidate incorrectly carried out the following:	Fault	IVIARK	Penalty	
	1 Machine mo	unting and dismounting		1		
	2 Full observat	ion before moving		2		
Travelling	3 Full observat	ion whilst travelling		2		
	4 Travel speed	matched to the ground type and conditions		1		
	5 Minimising g	round damage when turning/manoeuvring		1		
	6 Observation	before starting work		2		
	7 Observation	before slewing boom/components		1		
	8 Observation	of surrounding area constantly made during work		2		
	9 Nozzle heigh	within tolerance during exercise 1		1		
	10 Nozzle place	d within given tolerances during exercise 1		2		
	11 Nozzle kept v	vith straight line tolerance during exercise 1		1		
Working	12 Nozzle height	t kept to minimum during all exercises		1		
	13 Sideswiping r	naterial with the hozzle		1		
	14 Euges of exca	ivation crean and crear		2		
	16 Corroct funct	act made with services		2		
	17 Debris/mater	ion of operating controls used		ے 1		
	18 Smooth use	for operating controls		1		
		Not exceeded eight penalties	Total n	enalties	<u> </u>	
e following are	not applicable f	or endorsements G and H:	10tarp			
landatory Itor	nc. 2 A E and 24		Achie	eved / Not	achieved	

Note: Th Mandatory Items: 3, 4, 5 and 24 •

Fault Items: 2, 3, 4, and 5. .

Transitional Assessment Vacuum Excavator - A78 (A93)

s	Test ref:	Candidate name:	Make and model:
letail	Tester name:	Candidate ref:	Duration:
asic c	Tester ref:	Start time of assessment:	
8	Endorsements: E 🛄 F 🛄	Date of assessment:	

Location of assessment:

All activities must be carried out according to: Manufacturers' requirements, Legislation, Regulations, Codes of Practice, with additional requirements where indicated

Activity	Additional standards required including:	Standards √ = Met X = Not met	Comments
1. Prepare the machine for work	Full pre-start and running checks completed. Remote control unit functional check (where relevant) Appropriate use of PPE. Correct method of entry/exit of machine.		
 Travel over various ground conditions (in both a loaded and unloaded state) and manoeuvre in confined spaces executing full right and left-hand turns in a forward and reverse direction 	Appropriate gears engaged and travel speeds matched ground conditions. Transmission engaged smoothly. Brakes and steering used correctly. Full observation prior to and during travel. Contact avoided with obstructions whilst manoeuvring.		
3. Position to excavate	Area approached using appropriate speed. Allocated area checked and clear of hazards. Machine set correctly to excavate inc outriggers deployed. Exclusion zone set correctly and maintained. Stability of machine maintained at all times.		
4. Discharge and complete work	Discharge area approached using appropriate speed. Discharge area assessed for hazards. Material discharged in given area.		
5. Place the machine out-of-service	Machine cleaned in accordance with procedures. Shut down and secure procedures completed.		

The Candidate has been successful if ALL items are met (please tick)

I confirm that I have carried out the assessment in accordance with CPCS requirements and that the Candidate has: Achieved 🗌 Not Achieved 🗌

Should the Candidate be graded 'Not achieved', a period of training or experience is advised prior to the assessment being re-attempted

Sign off

Transitional Assessment - A78 (A93) Sign-off sheet

Basic Details (All these fields are mandatory)

Endorsement: E F	Test Level: Standard
Tester name:	Tester number:
Candidate name:	Candidate number:
Tester feedback	

lester feedback

Tester Sign off

I confirm that I, the Tester have carried out the Practical Test in and that the candidate has: Achieved Not Achieved	accordance with CPCS Requirements (Please tick the relevant box)
Tester Signature:	Date:
Monitor Signature (Advanced Test):Date: .	

Candidate feedback (Optional)

Candidate Sign off

I confirm that I, the candidate have undertaken the Transitional Assessment and I, agree // disa (Please tick the relevant box) with the feedback given by the Tester.	
Candidate Signature:	Date:

Resources required

	• Demolition adapted 360 ^o excavator:
Machine	- Fitted with the relevant attachment
	Ground, clear of hazards which must include:
	- Level area for lifting operations (F)
	- rough terrain
Area	- slope or slopes
	- stockpile of mixed material for sorting purposes
	- structure for demolishing
	- area for attachment changing activity
	Load-carrying vehicle for material.
Other	A replacement attachment.
equipment	Items to create restrictions for manoeuvring.
	Method statement applicable to the demolishing process
	• The machine selected for the test must meet the specifications for the required endorsement, be in serviceable condition, FOPS equipped and conform with current legislation
	 Endorsement B only – A standard 360^o excavator with the appropriate re- handling attachment may be used
	Assistance may be supplied for attachment changing
	• The same attachment may be used but the machine must be repositioned after removal and before re-fitting
Notes	• The Operator's manual (including the attachment) must be with the machine
	• Endorsement A to C only - The slope must have at least an 18% (1:5.5) incline with sufficient manoeuvring room at the top, or a straight ramp with an up and down route with a flat area at the summit
	 Endorsement D & E only – A ramp having a gradient of 10 degrees and least 4 m wider than the track frame width of the machine. (Can be carried out on a smaller machine but must meet the slope requirements of Endorsement A and C)
	• The stockpile (for sorting purposes) must be of sufficient quantity to allow at least 30 minutes of operation

Resources required (Continued)

	• The structure must be of sufficient content to allow at least 30 minutes of operation and be at least 30% of the attachments operated height
	 The nominated area must be safe and supported by an appropriate risk assessment
	• The load-carrying vehicle must have a minimum capacity equivalent to six full bucket loads or six times the handling capacity of the loading attachment of the machine being used for the test
	• The endorsement descriptions are defined as:
Notes (Continued)	- Endorsement A: Material processing – equipped with mechanical or hydraulic attachment (grab / claw) to select and stockpile like materials
	 Endorsement B: Up to 10 tonnes – adapted to undertake demolishing duties using relevant attachments
	 Endorsement C: Demolishing up to 15 metres – height that the demolishing attachment can reach and relates to the attachment to dipper pin height
	 Endorsement D: Demolishing up to 30 metres – known as high reach, height that the demolishing attachment can reach and relates to the attachment to dipper pin height
	 Endorsement E: Demolishing all heights – above 30 metre machines known usually as ultra-high reach

Additional resources required – Endorsement F

Machine	 360 excavator-based machine capable of lifting the requisite slung loads, fitted with check valves*, an RCI/LMI* and have a suitable lifting/accessory attachment point
Loads (Optional)	• LOAD A 1 x load, able to be slung and weighing not less than 60% of the machine's maximum lifting/object handling capacity at full radius.
	• LOAD B 1 x load able to be slung being at least 3 m in length.
	• LOAD C 1 x load able to be placed behind a structure or below ground level
	Multi-legged lifting accessories suitable for each load.
	Measuring tape for measuring the maximum radius of the machine
Other	Slinger and signaller assistance
equipment	• Structure or below-ground level location for placing a load out-of-sight of the operator
	• Items to facilitate the load handling exercise in Activity 12

CP Construction PlantTechnical test - PracticalCS Competence SchemeDemolition Plant - D90

Additional resources required – Endorsement F

	All lifting accessories must be fit for purpose and certificated
	• The weight of all loads must be known
	• The rated load/object handling capacity chart must be available for reference by the candidate
	• The slinger/signaller must be certificated and competent
	• The width of the obstacle for Activity 12 must be minimal allowing the load to be returned to ground level before full radius is reached
Notes (Lifting Operations only)	• The structure or below-ground level location chosen for LOAD C 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 operating position. If a below-ground landing place is chosen, it must be a safe environment for the slinger/signaller to handle the load
	• If a ground level structure is chosen, it must be of sufficient strength to resist movement should the load inadvertently contact the structure
	• Care must be taken if the machine is fitted with a quick-hitch type coupler as the accessory attachment point may extend the working radius of the machine and exceed the manufacturer's maximum rated lift/object handling capacity
	Machines being used for the test must have:
	 a boom lowering control device on the raising (main) boom cylinder(s) and meet the requirements of ISO 8643:1997
	- an RCI* or LMI*
	• * An RCI is deemed as a device that meets the requirements of LOLER 1998 in terms of a device that provides acoustic or visual warnings which indicates to the operator when the object handling capacity or corresponding load moment is reached

Further clarification about Demolition Plant categories and endorsements may be found at www.demolition-nfdc.com or by contacting info@demolition-nfdc.com

Activity instructions

Sequence	Activity 1 must be undertaken at the start of the test
	Activities 4 to 7 can be undertaken in any order during the test
	Activity 9 must be undertaken at the end of the test
Preparing for work	1. Complete all manufacturers' pre-start and running checks and prepare the machine for travel
	2. Travel to the work area and:
Travelling and manoeuvring	- travel up and down the slope (relevant to each endorsement)
(refer to activity measurements)	- pass through a restriction
	- travel over rough terrain
Setting up for	3. Prepare and set the machine for the relevant work
work	4. Change the attachment to a different type
	5. Sort, segregate and form stockpiles of similar materials
Working tasks	6. Load sorted materials into a vehicle.
(refer to activity measurements)	7. Demolish a structure (Endorsement A, C,D and E)
	8. Tidy up and make safe the working area
Shutting down	9. Park the machine and carry out shut-down and securing procedures
Notes	 If the machine is hot, any checks that are unable to be carried out (i.e. coolant) may be assessed by the tester using verbal questions

Activity measurements

Travel restrictions	• 800 mm (400mm for up to 10 tonne machines)
Sorting activity (5 and 8)	• To be carried out for a minimum time of 20 minutes
Demolishing activity (7 and 8)	• To be carried out for a minimum time of 30 minutes
Loading vehicle (6 and 8)	Loaded to capacity
Test timings	• The test must be completed within 2 hours

Activity instructions – Endorsement F

Sequence	• Activities 11 to 15 can be undertaken in any order during the test	
Preparing for work	10. Prepare and set the machine for each lifting operation	
	11. Lift LOAD A from minimum radius, position the load at 75% of full radius and rotate for a minimum of 180 degrees. On completion, land the load at a different radius	
	12. Lift LOAD A and place at minimum radius. Reposition the load to full radius whilst following ground contours. At a point halfway along the load travel route, pass the load over an obstacle whilst following the contours of that obstacle. When at full radius, slew the load for approximately 10 degrees (left or right) and return the load to the start point following ground contours	
Lifting Operations	13. Lift LOAD A and travel for a minimum given distance following a route that includes:	
	- passing through a restriction	
	- travelling over rough terrain	
	 executing right and left hand turns 	
	14. Lift LOAD B and position the dipper arm vertically. Rotate the load for a minimum of 180 degrees and return back to the start point via the same route	
	15. Lift LOAD C and place at a given point which is below ground level or behind a structure. Once landed return to the original start point	
Notes	 Activities 1 and 9 need to be undertaken by existing CPCS cardholders holding Category D90 seeking Endorsement F in addition to Items 10 – 15 	

Activity measurements – Endorsement F

Load movement	• Maximum height of underside of the load = 1 m (except Activity 12)
Load movement	• Maximum height of underside of the load from ground contours = 100 mm
(Activity 12)	 Maximum distance from obstacle = 500 mm
Obstacle height (Activity 12)	• Minimum of 1 m.
Load placing (all activities)	• 100 mm of a given position.
Travelling with load	At least 12 m distance
Test timings	• The test must be completed in a total time of 2 hours and 30 minutes if combining Endorsement F with Endorsements A to E, or
	• The test must be completed within 40 minutes if a stand-alone test for existing cardholders adding Endorsement F only

Note: The lifting operations activities must properly planned by a competent person following the requirements detailed in the Lifting Equipment and Lifting Operations regulations (LOLER) 1998.

CP Construction PlantTechnical test - PracticalCS Competence SchemeDemolition Plant - D90

- F

Basic details

Test ref:	Candidate name:
Tester ref:	Candidate ref:
Tester ref:	Date of test:
Endorsement: A B C D E F	Start time of test:
Make and model:	Duration:

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Mandator	Vandatory Correctly carried out during the test?	
Preparing	1. All pre-start and running checks (or responses to relevant questions)	
	2. Restrictions cleared	
	3. Machine set for travel	
Travelling	4. Encountered hazards cleared	
	5. Boom/dipper arm position when ascending and descending inclines	
	6. Faced direction of travel whilst travelling	
Satting up	7. Allocated area checked and clear of hazards prior to carrying out the activity	
Setting up	8. Positioned and set for the activity	
	9. Machine disabled prior to disconnecting hydraulic hoses	
	10. Hoses removed and fitted following required sequence	
Working tasks	11. Attachment prepared/positioned/supported prior to removal and fitting	
(attachment)	12. Attachment removed and fitted following required sequence	
	13. Checked attachment was secure prior to use	
	14. Functional check carried out prior to use	
	15. Checked exclusion area for size and security	
Working tasks	16. Maintained check on effectiveness of exclusion zone during work	
(demolishing)	17. Structure demolished following method statement and given instructions	
(Endorsements	18. Sequence of hydraulic controls	
B, C, D and E)	19. Smooth use of all controls	
	20. Maintained stability of the machine	
	21. Material sorted and stockpiled into like materials	
Working tasks	22. Complied with environmental requirements	
(sorting)	23. Sequence of hydraulic controls	
	24. Smooth use of all controls	
	25. Materials loaded as per given specification	
Working tasks	26. Sequence of hydraulic controls	
(loading)	27. Smooth use of all controls	
(10001118)	28. Vehicle evenly loaded but not overloaded	
	29. Working areas safe and secure after work	
Shutdown	30. All shutdown and securing procedures	
Other	31. Legislation, manufacturers' and health and safety requirements complied with	
	All of these items must be awarded Achieved / Not ac	hieved
The last		-

Faults	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
	1. Machine mounting and dismounting		1	
	2. Full observation before moving		3	
	3. Full observation whilst travelling		2	
Travelling	4. Observation before slewing upper structure		2	
	5. Drive sprockets kept to the rear when travelling		1	
	6. Travel speed matched to the ground type and conditions		1	
	7. Tight turns avoided when travelling		1	
	8. Material cleanly placed into the loading vehicle		2	
Working	9. Contact with vehicle avoided when loading		3	
	10. Use of track controls		2	
	Not exceeded eight penalties	Total p	enalties	

Achieved / Not achieved

Technical test - Practical Demolition Plant – D90

Basic details – Endorsement F

Test ref:	Candidate name:
Tester ref:	Candidate ref:
Tester ref:	Date of test:
Endorsement: A B C D E F	Start time of test:
Make and model:	Duration:

Mandatory

Mandato	Correctly carried	out during	he test?	Y/N
Preparing	32. All pre-start and running checks (or responses to relevant questions)			
	33. Machine set for travel			
Travelling	34. Encountered hazards cleared			
with load	35. Boom/dipper arm position when ascending and descending inclines			
	36. Faced direction of travel when moving			
	37. Allocated area checked and clear of hazards prior to lifting activity			
Sotting up	38. Communication arrangements confirmed with slinger/signaller			
Setting up	39. Machine positioning prior to lifting loads			
	40. Machine level prior to lifting and placing loads			
	41. No contact between load and machine and/or other obstructions			
	42. Lifted, moved and lowered load in a controlled manner			
	43. Route assessed and travelled with the slung load in a controlled mann	er		
Lifting	44. Instructions conformed with			
Litting	45. Stability of the machine maintained at all times			
operations	46. SWL not exceeded at any time			
	7. Load remains freely suspended (except during lifting and placing)			
	3. Machine controls isolated when loads being attached/disconnected			
	49. Personnel clear of the 'danger' zone when lifting and moving loads			
Shutdown	50. All shutdown and securing procedures			
Other	51. Legislation, manufacturers' and health and safety requirements compl	lied with		
Other	52. Test completed within the given time			
	All of these items must be awarded	Achieve	d / Not ad	chieved
Faults	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
	11. Machine mounting and dismounting		1	

	11. Machine mounting and dismounting		1	
	12. Full observation before moving		2	
	13. Full observation whilst travelling with suspended load		2	
Travelling	14. Observation before slewing upper structure		2	
with load	15. Drive sprockets kept to the rear when travelling		1	
	16. Travel speed matched to the ground type and conditions		1	
	 Minimising ground damage when turning with suspended load (tracked machines only) 		1	
	18. All loads vertically lifted (load not dragged)		2	
Lifting operations	19. Each load lifted clear of surface and checked for integrity		1	
	20. Load swings minimised during travel and static lifts		2	
	21. Keeping load height within given tolerance		1	
	22. All loads placed at given points within the given tolerance		3	
	23. Use of steering/hydraulic controls		1	
	Not exceeded eight penalties	Total pe	enalties	

Mandatory Items 32, 50 and Item 11 in the faults section need not be marked if combining Endorsement F with Endorsements A to E.

- Existing CPCS cardholders holding category D90seeking Endorsement F need to be measured against all marking items in Endorsement F.
- Mandatory Item 48 If the candidate does not isolate the operating controls during the load attaching/detaching activity, the tester must immediately inform the candidate to do so. The candidate has the option to continue the test but be informed they have not achieved on the test at this time.

Achieved / Not achieved

Pedestrian operated

Resources required

Machine	 Pedestrian Operated Demolition Plant fitted with relevant demolishing attachments
	Working area clear of hazards which must include:
	 sufficient floor/ground loading
Aroa	- inclines
Area	 structure or structures for demolishing (suitable for the relevant attachments)
	- area for attachment changing activity
	A replacement attachment (for changing purposes)
	Suitable power supply with sufficient cabling for the relevant activities
	Receptacle for loading purposes
Other equipment	Items to create restrictions for manoeuvring
	Method statement applicable to the demolishing process
	Correct PPE and RPE for the activity
	A pre-set physical exclusion zone with defined access and egress points
	• The machine selected for the test must meet the specification for the category and endorsement, be in serviceable condition and conform with current legislation
	The machine being used for the test must be electrically powered
	• The operator's manual (including the attachments) must be with the machine
	 The restriction for the manoeuvring activities must use materials or equipment that replicates a right-angled corridor, and be higher than the travelling height of the machine
Notes	• The incline must be narrow and not less than 18% gradient, with a defined fulcrum between the horizontal and the angled planes, and no more than 200 mm clearance between the machine and the sides of the incline. This is to replicate stair climbing
	• The structure must be of sufficient content to allow at least 30 minutes of operation for both attachments
	• The structure being demolished must be at least 75% of the operating height of the machine being used for the test
	• Attachments for demolishing must include a hydraulically-operated crusher and a breaker
	• The nominated area must be safe and supported by an appropriate risk assessment that identifies the relevant PPE and RPE needed
	 A demolishing specification must be available and communicated to the candidate

Further clarification about the Pedestrian-operated Demolition Plant category and endorsements can be supplied by contacting <u>info@demolition-nfdc.com</u> or at <u>dsa@drillandsaw.org.uk</u>

Pedestrian operated

Activity instructions

Sequence	Activity 1 and 2 must be undertaken at the start of the test
	Activities 4 and 6 can be undertaken in any order during the test
	Activities 8 and 9 may be taken in any order during the test
	Activities 11 to 13 must be undertaken at the end of the test
	Due to the nature of the test, activities may be taken at different times to take into account availability of suitable structures
	1. Establish the power supply (where relevant)
Preparing for work	 Carry out all manufacturers' pre-use and running checks and prepare the machine for travel
	 Select and use the correct PPE and RPE equipment required for the various activities
	4. Travel to the work area and:
Travelling & manoeuvring	 travel up and down the incline
	 execute 90 degree turns through a restricted area
	5. Prepare and set the machine for the relevant work
Setting up for work	Select and fit the required attachment, removing the previous attachment as required
	 Maintain the exclusion zone during access and egress of the working area
	 Demolish a structure according to the given specification using both demolishing attachments
Working tasks	9. Load the receptacle with suitable materials
	10. Tidy up and make safe the working area
	11. Park the machine and carry out shut-down and securing procedures
Shutting down	12. Isolate power source (and shut down remote units as required)
	13. Store remote units and cabling in specified locations
	 Prior to the start of the test, the machine must be away from the work area and not connected to the power supply, with cabling stored away from the machine
Notes	• The breaker attachment must be used in both a downward position and a horizontal position
Notes	• The crusher attachment must be used at various angles between vertical and horizontal
	• The length of time, within the stated total time, that each attachment is used will be determined by the tester, but be of a time which allows a candidate to fully demonstrate their skills

Technical test - Practical Demolition plant - D91

Pedestrian operated

Activity measurements

Travel restrictions	• 250 mm (at the narrowest point during the turns)
Incline restrictions	• 200 mm clearance between the machine and the sides of the incline.
Demolishing activity	• To be carried out for a total minimum time of 30 minutes
Loading activity	To be loaded during six passes
Test timings	• The test must be completed within a total accumulated time of 1 hour and 45 minutes

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Technical test - Practical Demolition plant - D91

Pedestrian operated

Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Endorsement: A B	Start time of test:
Make and model:	Duration:

Mandatory

Mandato	Y Correctly carried out during the test? Y/	N
	1 All pre-start and running checks (or responses to relevant questions)	
Descus di sec	2 Power source established, sufficient and connected	
Preparing	3 Cabling suitable for machine type and power source, and checked	
	4 Remote units established and checked for function	
	5 Machine set for travel	
	6 Restrictions cleared	
	7 Encountered hazards cleared, including when climbing/descending	
Travelling	8 Boom/dipper arm position when climbing and descending inclines	
	9 Ensure integrity of cabling during travel	
	10 Operator positioning during travel	
	11 Control maintained when negotiating inclines (climbing and descending)	
	12 Allocated area checked and clear of hazards prior to carrying out the activities	
	13 Positioned and set for the activities	
Sotting up	14 Ensure exclusion zone integrity and security	
Setting up	15 Stability aids utilised (where relevant)	
	16 Controls isolated during reconfiguring activities	
	17 PPE selected, worn and effectiveness maintained during work	
	18 Maintained check on effectiveness of exclusion zone during work	
	19 Structure demolished following method statement or given instructions	
Working	20 Followed dust suppression procedures (where relevant)	
tasks	21 Operator in a safe position during work	
(Demolishing)	22 Maintained stability of the machine	
(201101018)	23 Integrity of the structure maintained during demolition activities	
	24 Cabling security and integrity during work	
	25 Working areas safe and secure after work	
Working	26 Materials loaded as per given specification	
tasks	27 Sequence of hydraulic controls	
(Loading)	28 Receptacle evenly loaded and not overloaded	
	29 Working areas safe and secure after work	
	30 Machine disabled prior to disconnecting hydraulic hoses	
Working	31 Hoses removed and fitted following required sequence	
tasks	32 Attachment prepared/positioned/supported prior to removal and fitting	
(attachments)	33 Attachment removed and fitted following required sequence	
	34 Checked attachment was secure prior to use	
	35 Functional check carried out prior to use	
	36 All shutdown and securing procedures	
Shutdown	37 Isolated/shut down power source	
	38 Disconnect and store cabling in given locations	
	39 Stored remote unit in given locations	
Other	40 Legislation, manufacturers' and health and safety requirements complied with	

All of these items must be awarded

Achieved / Not achieved

Technical test - Practical Demolition plant - D91

Pedestrian operated

Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Endorsement: A B	Start time of test:
Make and model:	Duration:

Equilte

Faults	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
Travelling	1 Full observation before moving		3	
	2 Full observation whilst travelling		2	
	3 Observation before and during slewing		2	
	4 Intended direction of travel and steering selected		2	
	5 Travel speed matched to the ground type and conditions		1	
Setting up	6 Selection of control/working mode on console for required activity		2	
	7 Smooth use of all controls		2	
Working tasks	8 Unintentional movement of the chassis during demolishing activities		2	
	9 Attachment angled for the work		2	
	10 Not maintaining the working range		2	
	Not exceeded eight negatives	Total n	enalties	

Not exceeded eight penalties

Achieved / Not achieved

Skid steer tool carrier

Resources required

	Skid steer loader with:
Machine	- a general purpose bucket
	- seat belt
	 an attachment for demolishing (Endorsement B)
	Ground, clear of hazards which must include:
	- rough terrain
	- slope or slopes
Area	 stockpile of material of C & D waste for sorting purposes
	 structure for demolishing (Endorsement B)
	- straight run for reversing
	 clean surface at the working area
	 area for attachment changing activity
	 receptacle for loading purposes or edge for loading over
Other	A replacement attachment (Endorsement B)
equipment	Items to create restrictions for manoeuvring
	• Method statement applicable to the demolishing process (Endorsement B)
	• The machine selected for the test must be in serviceable condition and
	conform with current legislation
	• The Operator's manual (including the attachment) must be with the machine
	• The slope must have at least an 18% (1:5.5) incline with sufficient
	manoeuvring room at the top, or a straight ramp with an up and down route with a flat area at the summit
	 The stocknile (for sorting purposes) must be of sufficient quantity to allow at
	least 15 minutes of operation
	The same attachment can be used for changing purposes
	 The structure must be of sufficient content to allow at least 20 minutes of operation and have internal finishes and components
Notes	 The nominated area must be safe and supported by an appropriate risk assessment
	• The receptacle (if being used) must have a minimum height of 2 metres and
	have a capacity equivalent to 6 full bucket loads of the skid steer being used
	for the test
	 The edge (if being used) must have a minimum drop height of at least 1.5 metres with a load over-height of 950mm
	 There must be sufficient quantity of demolition-type material for all the activities
	• For endorsement B, the demolishing activity must be undertaken on a
	structure that requires the machine's attachment to be working above cab height

Technical test - Practical Demolition plant - D92

Skid steer tool carrier

Activity instructions

	 Activity 1 must be undertaken at the start of the test.
Sequence	• Activity 2 can be undertaken at any time during the test.
	• Activities 4, 5 and 7 can be undertaken in any order during the test.
	• Activity 10 must be undertaken at the end of the test.
	The test must be completed within a given time. The specifications' section gives
Duran dia a fan	1. Complete all manufacturers' are start and running shecks and prepare
Preparing for	1. Complete an manufacturers pre-start and running checks and prepare
work	the skid steer for travel.
	2. In a loaded and unloaded state:
	 travel up and down the slope
Travelling &	 stop and start on the slope in the up direction
manoeuvring	 stop and start on the slope in the down direction
(rejer to specifications)	- travel over rough terrain
<i></i>	- reverse (loaded only) in a straight run for a minimum of 15 m and
	pass through a restriction at the end of the run
Setting up for work	3. Prepare and set the skid steer for the relevant work
Working tasks	4. Form a stockpile of materials from deposited demolition materials
Extracting	5 Load sorted materials into the recentacle or
(refer to	En Denesit materials over the edge
specifications)	Sa. Deposit materials over the edge
A and B	6. Tidy up and make safe the working area
Working tasks	7. Demolish elements of a structure
Demolishing	8. Clean and tidy the work area
(refer to	
Endorsement A	9. Change the attachment
and B	
Shutting down	10. Park the skid steer and carry out shut-down and securing procedures
	• If the machine is hot, any checks that are unable to be carried out (i.e.
Notos	coolant) may be assessed by the tester using verbal questions
Notes	• The same attachment may be used for changing purposes but the machine
	must be repositioned prior to refitting the attachment

Activity measurements

Travel restrictions	• 300 mm
Sorting activity	• To be carried out for a minimum time of 15 minutes
Demolishing activity	• To be carried out for a minimum time of 20 minutes
Ramp incline	• Minimum of 18% (1.5.5)
Loading receptacle	Minimum of six full bucket loads
Test timings	• The test must be completed within 1 hour and 30 minutes

Technical test - Practical Demolition plant - D92

Skid steer tool carrier

Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Endorsement: A B	Start time of test:
Make and model:	Duration:

Mandatory

Mandato	Correctly carried out during the test?	Y/N
Preparing	1. All pre-start and running checks (or responses to relevant questions)	
	2. Seat belt worn	
	3. Skid Steer set for travel	
	4. Restrictions and hazards cleared	
Travelling	5. Full control maintained when ascending and descending slopes	
	6. No opposite movement of intended direction when restarting on slopes	
	7. Travel direction on slopes	
	8. Straight line kept during reversing activity	
	9. Allocated area checked and clear of hazards prior to extracting and demolishing (where	
Setting un	applicable)	
octaing up	10. Positioned and set for the activity	
	11. Ensure appropriate edge protection in place and suitable for tasks (where applicable)	
	12. Attachment prepared/positioned/supported prior to removal and fitting	
Working	13. Hydraulic hoses remove, refitted and checked prior to use (where applicable)	
tasks	14. Attachment removed and fitted following required sequence	
(attachments)	15. Checked attachment was secure prior to use	
	16. Functional check carried out prior to use	
	17. Checked exclusion area for size and security	
	18. Maintained check on effectiveness of exclusion zone during work	
Working	19. Structure demolished following method statement and given instructions	
tasks	20. Sequence of hydraulic controls	
(demolishing)	21. Smooth use of all controls	
	22. Maintained stability of the machine	
	23. Working areas safe and secure after work	
	24. Material stockpiled	
	25. Complied with environmental requirements	
	26. Sequence of hydraulic controls	
Working	27. Smooth use of all controls	
tasks (loading)	28. Materials loaded/over edge as per given specification	
(ioauing)	29. Edge protection maintained during work (where applicable)	
	30. Working area cleaned after loading	
	31. Working area sale and secure after work	
Shutdown	22. All shutdown and socuring procedures	
Shutdown	55. An shutuown and securing procedures	
Other	34. Legislation, manufacturers and nealth and safety requirements complied with	

All of these items must be awarded

Technical test - Practical Demolition plant - D92

Skid steer tool carrier

Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Endorsement: A B	Start time of test:
Make and model:	Duration:

Faults

Faults	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
Travelling	1. Skid steer access and egressing.		1	
	2. Full observation before moving.		2	
	3. Full observation whilst travelling.		2	
	4. Full observation before moving and reversing.		3	
	5. Transmission drive engaged smoothly.		1	
	6. Travel speed matched to the ground type and conditions.		1	
Working	7. Bucket/attachment kept low at all times (except during work).		2	
	8. Wheel spin minimised.		1	
	9. Full bucket loads maintained (except for cleaning work).		2	
	10. Material cleanly placed into the receptacle.		2	
	11. Contact with receptacle avoided when loading.		2	
	12. Use of steering/braking/hydraulic controls.		1	
Not exceeded eight penalties		Total penalties		

Not exceeded eight penalties

Achieved / Not achieved