LEVEL 3 NPTC CERTIFICATE OF COMPETENCE IN THE THOROUGH EXAMINATION OF ARBORICULTURAL EQUIPMENT



2016 Version

QUALIFICATION GUIDANCE

Independently Assessed

Essential Qualification Information

Not to be used by the Candidate during Assessment

Qualification Programme No	X A R B - 0 3	Level 3 NPTC Certificate of Competence in the Thorough Examination of Arboricultural Equipment
Unit(s)	0 1	Principles Of "Thorough Examination" Of Arboricultural Equipment "Thorough Examination" Of Arboricultural Equipment
Recommended		2.5 hours par Condidate

Assessment Duration* 3.5 hours per Candidate

Level 3 NPTC Certificate of Competence in the Thorough Examination of Arboricultural Equipment Qualification Guidance

Introduction

The scheme will be administered by City & Guilds which will;

Publish - Scheme regulations - Qualification guidance - Training material - Trainers support material Approve centres to co-ordinate and administer the scheme Set standards for the training of verifiers and assessors Recruit, train and deploy verifiers Manage verification Issue certificates to successful Candidates

The Qualification

The qualification will be awarded to candidates who achieve the required level of competence in the units to which their certificate relates.

Instruction

Attendance at a course of instruction is not a pre-requisite for an application for an assessment but potential Candidates are strongly advised to ensure that they are up to the standards that will be expected of them when they are assessed.

Access to Assessment

Assessment centres will be responsible for arranging assessment on behalf of the Candidate.

The minimum age limit for Candidates taking Certificates of Competence is 16 years. There is no upper age limit.

The assessment consists of two compulsory units:

Unit 01

Outcome 1. Outcome 2.	Understand the legislation and other official guidance relating to the examination of arboricultural equipment Understand the definition and status of a "competent person" under LOLER
Outcome 3.	Identify the range of lifting and lowering equipment appropriate to working at height in arboricultural operations
Outcome 4.	Understand the requirements for operator pre-use checks, inspection and record keeping
Outcome 5.	Identify different categories of equipment and their appropriate examination intervals
Outcome 6.	Recognise appropriate marking of equipment to identify individual items
Outcome 7.	Correctly identify levels of wear and damage in a range of arboricultural equipment
Outcome 8.	Understand the forces within rigging systems and components

Unit 02

Outcome 9	Record the findings of the "thorough examination" using the appropriate forms
Outcome 10.	Make recommendations for future use and inspection or retirement of equipment, according to findings

Unit 01 - Principles Of "Thorough Examination" Of Arboricultural Equipment (This unit takes the form of a 1.5 hour written examination paper)

Unit 02 - "Thorough Examination" Of Arboricultural Equipment (This unit takes the form of a 2 hour practical test, thoroughly examining ten items of arboricultural lifting and lowering equipment)

Candidates must successfully achieve all assessment activities in the above units.

There are no endorsements for this Award.

Quality Assurance

Verification is a process of monitoring assessment; it is an essential check to confirm that the assessment procedures are being carried out in the way City & Guilds has laid down. The overall aim of verification is to establish a system of quality assurance that is acceptable in terms of both credibility and cost effectiveness.

Approved Assessors will be subject to a regular visit by the verifier at a time when assessments are being undertaken.

A selection of assessment reports completed by the Assessor will be evaluated by a City & Guilds approved verifier.

Compliance with the verification requirements is a pre-requisite for Assessors remaining on the list of approved Assessors.

Performance Evaluation

Unit one (written paper) of the assessment is divided into four sections. Within each section a percentage equal to or greater than 70% must be achieved to demonstrate the assessment criteria has been met.

Part two (practical) the assessor will evaluate each activity against the following criteria:

- a. Safety critical faults These are faults which could be safety critical to a user such as unsafe items being passed as safe or safe working load given as higher than is safe. One 'safety critical fault' will result in an overall performance evaluation of not met.
- b. Other significant faults These are serious faults which are not safety critical such as safe items being failed or a safe working load given lower than is expected. Two 'other significant faults' will result in an overall performance evaluation of not met.
- c. Minor faults These are non-serious faults such as incorrect minimum breaking strength or poor reporting. A number of 'minor faults' could result in an overall performance evaluation of not met.

Appeals and Equal Opportunities

Centres must have their own auditable, appeals procedures. If a Candidate is not satisfied with the examination conditions or a Candidate feels the opportunity for examination is being denied, the Centre Manager should, in the first instance, address the problem. If, however the problem cannot be resolved, City & Guilds will arbitrate and an external verifier may be approached to offer independent advice. All appeals must be clearly documented by the Centre Manager and made available to the external verifier or City & Guilds if advice is required.

Should occasions arise when centres are not satisfied with any aspect of the external verification process, they should contact Verification Services at City & Guilds.

Access to the qualification is open to all, irrespective of gender, race, creed, age or special needs. The Centre Manager should ensure that no learner is subjected to unfair discrimination on any grounds in relation to access to assessment and to the fairness of the assessment. QCA requires City & Guilds to monitor centres to check whether equal opportunities policies are being adhered to.

Additional Information

The assessor will supply ten items of arboricultural equipment (PPE and rigging) that require thorough examination for the candidate to inspect and comment upon. It is expected that the equipment will consist of a range of conditions that may require remedial action, taking out of service or deemed safe for use.

With each item a briefing card will be issued that describes where known the following data:

- a. Date of purchase
- b. Date of first use
- c. Supplier name
- d. Application (PPE or Rigging)

Each briefing card will also include where relevant end user comments relating to the use of the item.

Only user instructions/manufacturers data supplied by the assessor can be used during assessment.

Assessment Guidance for the Assessor

This qualification can only be assessed by an Assessor who is suitably qualified and meets the requirements of the awarding body. The Assessor must be independent **and cannot have been involved with the training of the Candidate**. Please see City & Guilds Centre Manual for guidance.

The Candidate is to be notified when formal assessment commences and ceases.

Assessors are reminded that assessment is a formal process and that assessment must be carried out using this Qualification Guidance. All relevant assessment criteria must be assessed against the criterion as specified in the Qualification Guidance. After assessment has been completed the Qualification Guidance document is to be retained by the assessor and provided if required by a Quality Systems consultant (QSC).

Assessment Guidance for Candidate

A list of registered assessment centres is available form City & Guilds Land Based Services www.nptc.org.uk

Assessment is a process by which it is confirmed that the candidate is competent in the unit(s) within the award to which the assessment relates. It is the process of collecting evidence about his/her capabilities and judging whether that evidence is sufficient to attribute competence.

The Candidate must be registered through the City & Guilds approved assessment centre for this qualification prior to the assessment.

The results of the assessment will be recorded on a Candidate Assessment Result Form (CARF).

Assessment Requirements

- a. Well lit, warm and comfortable classroom or workshop based environment to conduct written examination papers
- b. Adequate worktop space for items of arboricultural equipment to be presented, allowing space for movement of candidates
- c. Wipeboard, flipchart or similar for the recording of assessment information
- d. A clock visible to all candidates
- e. Suitable welfare arrangements including toilet and hand washing facilities

Safe Practice

- 1. Assessors must hold a current 'First Aid at Work' Certificate
- Appropriate Personal Protective Equipment (PPE) must be used when applicable by both the candidate and the assessor. All PPE used must comply with relevant industry good practice, Health and Safety Executive publications and current legal requirements in terms of specification and use
- 3. A First Aid kit meeting current regulations, of the appropriate size for the number of persons on site, must be available
- 4. The assessor must ensure a site specific risk assessment has been carried out, sufficient control measures implemented and appropriate emergency procedures recorded. All recorded risk assessment information should be clearly legible and accessible to candidates and completed for all locations where assessment activities are scheduled to take place
- 5. A breach of Health and Safety that puts any person at risk during the assessment process will result in the assessment being terminated and the Candidate not meeting the required standard.

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City & Guilds is a registered charity established to promote education and training

Candidate A	Name:	Date:	Start Time:	Duration:
Candidate B	Name:	Date:	Start Time:	Duration:
Candidate C	Name:	Date:	Start Time:	Duration:
Candidate D	Name:	Date:	Start Time:	Duration:

Unit 1: Principles of "Thorough Examination" of Arboricultural Equipment

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT	C	AND		ΓE
NUMBER	CRITERIA	GUIDANCE	ACTIVITIES	Α	В	С	D
LO1	Demonstrate knowledge of legislation and other official guidance relating to arboricultural equipment	Management of Health and Safety at Work Regulations (MHSWR)	 To include: MHSWR MHSWR require a risk assessment to be carried out to identify the nature and level of the risks associated with a lifting operation 				
		Provision and Use of Work Equipment Regulations (PUWER)	 PUWER PUWER applies to all work equipment including lifting equipment. Under the PUWER duty holders are required to select suitable work equipment 				
		Machinery Directive	 Machinery Directive All new machinery within the scope of the Directive has to be designed and constructed to meet common minimum European requirements for safety 				
		Lifting Operations and Lifting Equipment Regulations (LOLER)	 LOLER LOLER is aimed at ensuring all lifting operations are properly planned, lifting equipment is used in a safe manner and lifting equipment is thoroughly examined at suitable intervals by a competent person 				
			 the regulations aim to ensure: All lifting operations are properly managed Lifting systems are properly designed 				
			 Lifting systems are properly designed Lifting equipment is inspected and maintained to ensure that it is safe to use 				
			 Lifting equipment is fit for purpose Equipment is regularly inspected to ensure it remains fit for purpose 				
			• Equipment is marked and any other information is provided to inform the user of the parameters of the use for that piece of equipment				
			 Equipment is uniquely identifiable and there is a differentiation between 'equipment used for lifting people' and 'rigging' equipment 				
		Personal Protective Equipment at Work Regulations (PPE)	 PPE PPE at Work Regulations require that personal protective equipment is to be supplied and used at work wherever there are risks to health and safety that cannot be adequately controlled in other ways 				
Continued		Work at Height Regulations (W@H)	 W@H WAHR apply to all work at height where there is a risk of a fall which is likely to cause personal injury. Employers and those in control of any work at height activity must make sure work is properly planned, supervised and carried out by competent people. This includes using the right type of equipment for working at height 				

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	C A	AND B	IDAT C	TE D
Cont		Industry Good Practice	• guidance issued which is not compulsory to follow and individuals are free to take other action, following the guidance will normally mean you are doing enough to comply with the law, many refer to this guidance as illustrating good practice				
		Industry Code of Practice	 a document providing recommendations and guidance pertaining to the planning, management and undertaking of tasks and operations within a specific industry 				
			Met√ Not Met X				
LO1	Demonstrate knowledge of the following terms in relation to arboricultural lifting equipment	Minimum Breaking Strength (MBS)	 To include: MBS – Minimum Breaking Strength: the load above which an item of equipment might fail when it is new, as determined by the manufacturer 				
		Working Load Limit (WLL)	WLL – Working Load Limit: the load that an item of equipment – when new – can safely lift, lower, raise or suspend as specified by a manufacturer. This does not account for particular service conditions				
		Safety factor or Design Factor (SF)	• SF – Safety Factor: the relationship between the MBS and the SWL, often expressed as ratio				
		Safe Working Load (SWL)	• SWL – Safe Working Load: the load that an item of equipment can safely lift, lower, raise or suspend based on particular working conditions as specified by a competent person. The safe working load may be lower than working load limit				
		European Norm (EN)	• EN – European Norm. sets out performance and testing criteria for a defined product type				
		Evidence of Conformity (CE)	• Evidence of conformity - verifiable link between the product and a stated EN standard or directive				
			Met ✓ Not Met X			\square	
LO2	Demonstrate knowledge of what deems an individual "Competent" for the purposes of Thorough Examination of		 To include: practical and theoretical knowledge of arboricultural lifting equipment experience of the arboricultural lifting equipment 				
	Arboricultural Equipment		 an ability to detect defects or weaknesses and assess their importance an ability to certify, with confidence, whether an 				
			 item is free from patent defect and suitable for the duty for which the material is required an ability to act without fear or favour 				
			Met ✓ Not Met X				
	Demonstrate knowledge of		To include:				
LO4	the different types of checks, inspection or examination of		 pre-use check interim recorded inspection for items subject to rapid deterioration 				
	arboricultural equipment		thorough examinationexceptional circumstances				
			Met ✓ Not Met X				
	Demonstrate knowledge of thorough examination		 The thorough examination should take place: at least every 6 months for equipment used for 				
LO5	intervals		 lifting people at least every 12 months for other lifting equipment 				
			 at least every 12 months for other inting equipment in accordance with an examination scheme 				
			 following the occurrence of exceptional circumstances 				
			Met ✓ Not Met X				

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	-			
NOWBER	Demonstrate knowledge of	GOIDANCE	Exceptional circumstances following which a thorough	Α	В	С	D
LO4	exceptional circumstances following which a thorough		examination may be required may include:				
LU4	examination may be		 exceeding of stated SWL change in context of use 				
	required		 contamination 				
			alteration or modification				
			Met ✓ Not Met X				
	Demonstrate knowledge of		To include:				
	different personal fall		Work restraint:				
LO3	protection systems		 a technique where a person working at height is prevented by personal fall protection equipment 				
			from reaching areas where there is a risk of a fall				
			Work Positioning:				
			 a technique allowing a person working at height to be supported in tension or suspension, by PPE 				
			configured to prevent or reduce falls				
			Fall Arrest:				
			 a system used to prevent a falling person from 				
			hitting the ground or other obstructions and				
			designed to reduce the impact forces of the arrested fall				
	Fundaia harranakia ar		Met ✓ Not Met X				
	Explain how carabiner shape affects its		 To include: Oval – allows central positioning of 				
LO3	application and		devices/alignment of systems and components				
203	configuration		D Shape – asymmetric shape, transfers the				
			majority of their load close and parallel to the				
			 spine, the strongest axis Off-set D – variant of a D shaped carabiner with 				
			greater asymmetry allowing for a wider gate				
			opening and alignment of load along the spine				
			 Pear/HMS – oversized offset D shaped carabiner providing increased internal volume and gate 				
			clearance				
			Met ✓ Not Met X				
	Demonstrate knowledge of		Likely forces to be encountered a rigging system:				
	forces within a rigging		 Forces at pulley = the combined forces acting on 				
LO8	system		the lead and fall of the rope required to resist			_	
			gravity acting on the mass				
			 Force at lowering device = the force required to resist gravity acting on the mass 				
			Met ✓ Not Met X				
	Demonstrate knowledge of		Strength ratings of specific sling types (polyester				
	strength ratings in different		webbing and round slings EN1492), to include:				
LO8	sling configurations		• basket hitch (angle between the legs 0°) increase			_	
			 lift capacity WLL x 2 basket hitch (angle between the legs 90°) increase 				
			lift capacity WLL x 1.4				
			choker reduces lift capacity WLL x 0.8				
			Met ✓ Not Met X				
	Identify a range of		Thorough examination covers the different types of:				
	arboricultural equipment		 harnesses 				
LO3	that requires "thorough examination"		• ropes				
			connectors				
			• pulleys				
			• slings				
			lowering devices				
			 ascender/descender or guided fall arresters lanyards 				
			 lanyards friction savers 				
			 friction cord 				
			Met ✓ Not Met X				
			Wet Y NOT WET X				

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	C.	AND B	IDA C	TE D
NONDEN	Demonstrate knowledge of	GOIDANCE	To include:	A	Б	C	
LO4	the requirements for "traceability" of equipment		provides proof of ownershiphelps determine where and when an item was				
			 purchased provides a link between product and manufacturer 				
			Met ✓ Not Met X				
1.04	Demonstrate knowledge of information that may obtained, stored or		Traceability of equipment may require the obtaining, storing or recording of the following:				
LO4	recorded for arboricultural equipment		manufacturer's instructionsdate of purchase and supplier				
			evidence of conformitydates of entry to service				
			 written documentation of interim inspections thorough examination records 				
			Met ✓ Not Met X				
	Demonstrate knowledge of the different types of		To include: • corrosion				
LO7	damage and defects that can affect metal items of		abrasion				
	equipment		cracksdeformation				
			chemicalsage				
			Met ✔ Not Met X				
	Demonstrate knowledge of the different types of		To include: • cuts				
LO7	damage and defects that can affect textile items of equipment		abrasionburns/melting				
	equipment		 age chemicals 				
			deformation				
			UV degradation Met ✓ Not Met X				
	Demonstrate knowledge of records that should be		To include:				
LO4	retained within a controlled system		purchase information including date and suppliermanufacturer's instructions				
			evidence of conformityinterim inspection records				
			record of thorough examination				
	Demonstrate knowledge of		Met ✓ Not Met X To include:				
LO2	information relating to the competent person to be		• their name				
LUZ	contained within a thorough examination		 their address their qualification				
	report		 statement of whether they are self-employed, or; if employed, the name and address of employer 				
			Met ✓ Not Met X				
	Demonstrate knowledge of dates to be contained		To include: • the date of the last thorough examination				
LO4	within a thorough examination report		 the latest date by which the next thorough examination must be carried out 				
			• the date of thorough examination				
			the date of the reportthe date (where known) of equipment manufacture				
						1	1

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT		AND	IDA ⁻	ΓЕ
NUMBER	CRITERIA	GUIDANCE	ACTIVITIES		В	С	D
	Describe the appropriate methods for marking		If approved by the manufacturer appropriate methods for marking of equipment may include:				
LO6	LO6 equipment to include: • Carabiner – Lightly engraved preferably on a non- load bearing part (e.g. base of the gate on the carabiner)						
	 Harness 		 Rope – Production of a label secured to the end of the rope using a shrinkable clear sleeve. Other methods may include colour coding 				
			 Harness - Mark item on a non-load bearing part i.e. the padding or back support, using an indelible marker pen 				
			Met ✓ Not Met X				
	State the industry good practice requirements for		industry good practice requirements for minimum diameters are:				
LO1	minimum diameter of:Climbing rope		 minimum acceptable diameter of climbing rope = 10mm 				
	 Friction cord 		 minimum acceptable diameter of friction cord = 8mm 				
			Met ✓ Not Met X				

Unit 2: Thorough Examination of Arboricultural Equipment

	Conduct a "thorough	To include:		
	examination" of a range of	 identify the item to be inspected and inspection 		
LO9	arboricultural equipment	method suitable to type		
	provided by the assessor	 inspect item thoroughly for any indication of 		
		damage and/or wear		
		try to expose hidden areas where appropriate		
		 pay particular attention to attachment points 		
		 check moving parts for function and freedom of 		
		movement		
		 look for distortion, stiffness or residues 		
		check for smell or discoloration that may indicate		
		contamination		
		 evaluate whether damage identified is within 		
		acceptable limits		
		 where available make reference to manufactures instructions or technical data 		
		 decision made as to whether item is safe or not 		
		safe for use		
		Met 🗸 Net Met X		
		Met ✓ Not Met X		
	Record the results of the "thorough examination"	Make a written and signed report of the "Thorough		
LO10	Record the results of the "thorough examination"	Make a written and signed report of the "Thorough Examination" containing:		
LO10		Make a written and signed report of the "Thorough Examination" containing: description of equipment;		
LO10		Make a written and signed report of the "Thorough Examination" containing: description of equipment; application of equipment – PPE or rigging		
LO10		Make a written and signed report of the "Thorough Examination" containing: description of equipment; application of equipment – PPE or rigging identification number or code		
LO10		Make a written and signed report of the "Thorough Examination" containing: description of equipment; application of equipment – PPE or rigging identification number or code minimum breaking strength		
LO10		Make a written and signed report of the "Thorough Examination" containing: description of equipment; application of equipment – PPE or rigging identification number or code minimum breaking strength safe working load		
LO10		Make a written and signed report of the "Thorough Examination" containing: description of equipment; application of equipment – PPE or rigging identification number or code minimum breaking strength safe working load record details of all parts that have or may result in		
LO10		Make a written and signed report of the "Thorough Examination" containing: description of equipment; application of equipment – PPE or rigging identification number or code minimum breaking strength safe working load		
LO10		Make a written and signed report of the "Thorough Examination" containing: description of equipment; application of equipment – PPE or rigging identification number or code minimum breaking strength safe working load record details of all parts that have or may result in a defect or details of remedial action required		
LO10		Make a written and signed report of the "Thorough Examination" containing: description of equipment; application of equipment – PPE or rigging identification number or code minimum breaking strength safe working load record details of all parts that have or may result in a defect or details of remedial action required provide information relating to justification of a		
LO10		Make a written and signed report of the "Thorough Examination" containing: description of equipment; application of equipment – PPE or rigging identification number or code minimum breaking strength safe working load record details of all parts that have or may result in a defect or details of remedial action required provide information relating to justification of a decision made		
LO10		Make a written and signed report of the "Thorough Examination" containing: description of equipment; application of equipment – PPE or rigging identification number or code minimum breaking strength safe working load record details of all parts that have or may result in a defect or details of remedial action required provide information relating to justification of a decision made calculations that have used		
LO10		Make a written and signed report of the "Thorough Examination" containing: description of equipment; application of equipment – PPE or rigging identification number or code minimum breaking strength safe working load record details of all parts that have or may result in a defect or details of remedial action required provide information relating to justification of a decision made calculations that have used a statement of whether the item is safe for use or		

Candidate A	Candidate has met all of the assessment criteria	Tick ✓	The Candidate has not met all of the assessment criteria; (state reason(s))	Tick ✓			
	Signed: C)ate:					
Candidate B	Candidate has met all of the assessment criteria	Tick ✓	The Candidate has not met all of the assessment criteria; (state reason(s))	Tick ✓			
	Signed: Date:						
Candidate C	Candidate has met all of the assessment criteria	Tick ✓	The Candidate has not met all of the assessment criteria; (state reason(s))	Tick ✓			

Signed:		

Date:

Candidate D	Candidate has met all of the assessment criteria	Tick ✓	The Candidate has not met all of the assessment criteria; (state reason(s))	Tick ✓
	Signed:	Date:		

For use by Internal Verifier ONLY if the assessment process was internally verified (Internal Verifier to complete ONE of the boxes below)

I observed an assessment process taking place and I am satisfied that the assessment was conducted in line with the qualification requirements and that the judgement of the Assessor was appropriate.	Tick ✓
I observed an assessment process taking place. The following were noted as areas of concern.	Tick ✓
Signed: Date:	