

**LEVEL 2 AWARD
IN
CHAINSAW AND RELATED OPERATIONS (QCF)**

**CS35 – Sever multiple windblown trees including
leaning half blown, broken trees and hung up trees**

(Pre requisite: CS30, CS31, CS32, CS34)

This unit covers multiple windblown and broken stems, typically
in a windblown crop situation

ASSESSMENT SCHEDULE

NPTC LEVEL 2 AWARD IN CHAINSAW AND RELATED OPERATIONS (QCF)

CS35 – Sever multiple windblown trees including leaning half blown, broken trees and hung up trees

Introduction

The scheme is administered by NPTC.

NPTC will:

- Publish
 - scheme regulations
 - assessment schedule
 - assessment 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 Certificate of Competence/ID Card

Certificates of Competence/ID Cards 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 to an application for an assessment but potential Candidates are strongly advised to ensure that they are up to the standard that will be expected of them when they are assessed.

NPTC does **not** hold a register of instructors; however instruction will normally be available from recognised training providers and/or centres of further or higher education active in the areas covered by this certificate. Further information on training may be obtained from the local Assessment Centre.

Access to Assessment

Assessment Centres will be responsible for arranging assessment on behalf of a Candidate. Assessment may only be carried out by an Assessor approved by NPTC for that scheme. Under no circumstances can either instructors involved in the preparation of candidates, or the candidates work place supervisors, or anyone else who might have a vested interest in the outcome, carry out the assessment.

The minimum age limit for Candidates taking certificates of competence is 16 years. There is no upper age limit.

Assessment

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

The candidate must be registered through an NPTC approved Assessment Centre for this qualification prior to assessment.

The schedule of assessment contains the criteria relating to:

- Observation of practical performance
- Assessment of knowledge and understanding

When all the criteria within the Units for which assessment has been sought have been completed the result(s) will be recorded on the Candidate Assessment Report Form(s).

Performance Evaluation

The result of each assessment activity is evaluated against the following criteria:

- 4 = Meets or exceeds the assessment criteria by displaying a level of practical performance and/or underpinning knowledge, with no 'minor' or 'critical' faults. (Competent).
- 3 = Meets the requirements of the assessment criteria for both the practical performance and the underpinning knowledge, with some 'minor' faults but no 'critical' faults. (Competent).
- 2 = Does not fully satisfy the requirements of the assessment criteria, being unable to perform the practical task satisfactorily or being deficient in underpinning knowledge leading to the recording of minor faults. (Not yet competent).
- 1 = Does not satisfy the requirements of the assessment criteria, being unable to perform the practical task satisfactorily or safely or being deficient in underpinning knowledge leading to the recording of a critical fault. (Not yet competent).

A list of registered Assessment Centres is available from NPTC. (www.nptc.org.uk)

Verification

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 that NPTC 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 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 NPTC.

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

Safe Practice

At all times during the assessment, the chainsaw and other equipment must be operated in a safe manner in accordance with industry best practice, whatever the task being carried out.

1. Assessors must hold a current 'First Aid at Work' Certificate.
2. It is strongly recommended that Candidates hold at least a recent, recognised 'Emergency First Aid' Training Certificate.
3. All chain saws used in the assessments must comply with Arboriculture and Forestry Advisory Group (AFAG) Safety Guide 301 in terms of safety features, and be a model and size suited to the task(s) required.
4. Recommended guide bar lengths should be observed, although variations may be accepted at the discretion of the Assessor where this is appropriate to the task.
5. Candidates should be familiar with the saw that they are going to use.
6. A spare working chainsaw must be available.
7. Appropriate Personal Protective Equipment (PPE) must be worn at all times. All PPE used must comply with AFAG Safety Guides 301, 401, 801, Health and Safety Executive publications and current legal requirements in terms of specification and use.
8. A First Aid kit meeting current regulations, of the appropriate size for the number of persons on site, must be available.
9. The candidate must be equipped with a personal first aid kit.
10. The Assessor must ensure a Risk Assessment has been carried out, and sufficient control measures implemented. In particular, the location of the site and weather conditions should be assessed, details of access, etc, which may be required by emergency services must be noted, as well as the nearest Accident and Emergency Hospital Unit. The means of contacting the emergency services must be established. Manual handling techniques must comply with current legislation.
11. Any necessary permission must have been granted, and notifications made as appropriate: (e.g. Local Planning Authority, Forestry Commission, Forest Enterprise, Highways Authority, Private owners, Statutory undertakers, Police, etc).
12. All equipment being used for this assessment must comply with relevant requirements of the Provision and Use of Work Equipment Regulations (PUWER) 1998. And where appropriate, Lifting Operations and Lifting Equipment Regulations (LOLER) 1998.
13. Information may be sought from the relevant operator manuals or any other appropriate training or safety publication.
14. The current Regulations for transport, handling and storage of fuel and oils must be complied with.
15. Provision must be made to avoid the risk of environmental pollution.
16. It is the responsibility of the Assessor and the Candidate to ensure that any additional requirements and provisions are met as relevant to this qualification.
17. Candidates must ensure they are complying with the relevant legislative requirements applicable to the work being carried out
18. If required, relevant records must be accurately kept
19. Appropriate steps should be taken to maintain effective teamwork in respect of other persons on site during the assessment. This may include taking steps to ensure effective communication and safety precautions.
20. At all times during the felling operation, candidates must act in a way so as not to endanger themselves, the assessor or any other person or equipment. Work must be carried out to achieve the requirements of the assessment criteria in accordance with all relevant and current legislation and good practice guidance (e.g. INDG317, Chainsaws at Work, AFAG Guides 306 and 310).

If these conditions are not observed this may result in the Candidate not meeting the required standard

Complaints and Appeals

NPTC and its Assessment Centres have a formal Complaints and Appeals procedure. In the event of any dissatisfaction with the arrangements and conditions of assessment, the candidate should first contact the Assessment Centre through whom the assessment was arranged and submit the complaint in writing.

For further information on NPTC's Equal Opportunities Policy and Complaints and Appeals Procedures, please refer to www.nptc.org.uk

Learning Outcomes

The candidate will be able to:

1. Identify the Risk Assessment and Emergency procedures on a work site
2. Select and prepare equipment required for safe and effective removal of windblown trees
3. Plan a systematic approach to the work to ensure that no unstable trees or root plates are overhanging the cutting position
4. Process multiple windblown trees
5. Fell leaning, half blown and hung trees

The assessment contains 1 Unit CS35 (compulsory):

Unit 35 Sever multiple windblown trees fell Leaning half blown, broken stem and half hung trees

The unit covers dealing with multiple interwoven trees that have been uprooted by storm damage ("windblown"),

The uprooted trees will be both over and under guide bar length in diameter.

The trees may need the assistance of a mechanical winch to pull them into a safe area to work on; this can also be achieved by the use of harvesting machinery.

The trees will not be in a position that requires assistance from emergency services or utility companies

Candidates must successfully achieve all Assessment Activities unless otherwise specified.

1. Process multiple windblown trees
2. Fell leaning, half blown and hung trees

Qualifications and Credit Framework (QCF) – credit value

The Award in Sever multiple windblown trees including leaning half blown, broken trees and hung up trees has a credit value of 1 credit on the QCF.

Assessment and site requirements

- Tractor mounted winch available on site or Harvester/Forwarder etc.
- Minimum of 9 interwoven windblown trees 2 with a diameter of over 15" and a minimum of one leaning or half blown tree.
- Rear handled chain saw in good condition [maximum recommended guide bar length: 380mm (15")] appropriate to size of tree
- Sufficient fuel and oil for the assessment, appropriate to saw model
- Appropriate aids (e.g. felling lever)
- An adequate tool kit for field maintenance
- In addition to the relevant requirements of the Provision and Use of Work Equipment Regulations (PUWER) 1998, any ancillary equipment used for this assessment must also comply with relevant requirements of the Lifting Operations and Lifting Equipment Regulations (LOLER) 1998 where applicable.

Part 35 Sever multiple windblown trees including leaning half blown, broken trees and hung up trees

ASSESSMENT ACTIVITIES	ASSESSMENT CRITERIA
1. Check site for hazards	<ul style="list-style-type: none"> - Walk the site and identify hazards - Assess the risks - Confirm that the condition of the site as acceptable for the operation to take place - Report to the appropriate person if the site condition or equipment available is unsuitable
<p>2. Demonstrate knowledge of safety factors to be considered when severing multiple windblown trees</p> <p>Demonstrate knowledge of safety considerations and legal requirements when dealing with multiple windblown trees</p>	<ul style="list-style-type: none"> - Identify hazards and comply with the control procedures of risk assessments when severing multiple windblown trees - Emergency planning and procedures for the site(s) - Signs must be erected warning others of the work carried out - Additional measures taken if public likely to enter the two tree length exclusion e.g banks-man (look-out near paths etc - Working in a pairing system so that regular contact with a partner is maintained - Identify and initiate effective communication with machine operator when severing multiple windblown trees - No authorised person within two tree lengths or the risk zone of any machines working on site - The conditions of the site including terrain, ground conditions, season, weather and tree condition to severing multiple windblown trees must be considered - The principles of safe manual handling techniques are identified - Ensure that all root plates once severed are left in a stable condition - Additional measures are taken if machinery is to be used, including the use of Harvesters, forwarders and tractors - Hand or machine operated winches, if used must be fit for purpose and fully anchored - Ancillary equipment, to be compatible with the winch, etc., will include cables, strops, chokers, shackles, pulley snatch blocks etc - Any extraction equipment (e.g. forwarder) must be fit for purpose & chainsaw operator outside the risk / exclusion zone when tree is moved - All operators of machinery must be trained in the particular use or application
3. Check and prepare chainsaw	<ul style="list-style-type: none"> - Chain tension checked for safe and effective condition - Safety features checked and condition assessed - External nuts and bolts checked for security - Chainsaw contains sufficient fuel and oil for operations - Felling tools are in a serviceable condition
4. Prepare the site	<ul style="list-style-type: none"> - Control measures identified in the Site Specific Risk Assessment are applied. - All other operators on site / personnel informed of work taking place - A plan of operations is agreed where machinery is to be used to extract timber as windblown clearance progresses - An emergency plan for the site is completed or checked - Remove debris from around the base of the tree / root plate and compact vegetation to facilitate severing - Fell / remove any broken or leaning trees in immediate proximity that may be a danger. - Ensure no Overhead Power Lines are within a length of twice the height of the tree to be severed - Ensure no unauthorized person is within 2 tree lengths distance or below the trees to be severed

Part 35 Sever multiple windblown trees including leaning half blown, broken trees and hung up trees

ASSESSMENT ACTIVITIES	ASSESSMENT CRITERIA
<p>5. Sever trees from roots, both under and over guidebar length in diameter</p>	<ul style="list-style-type: none"> - Secure any stems/ root plates with winch that may expose operator to risk - Ensure there is no risk to the operator from the rootplate rolling or falling or the stem springing (including sideways) - Identify tension and compression in stems and select a severing method which is appropriate to the sizes and condition of trees - carry out reducing cuts as required - sever stems using step cuts as appropriate to tension and compression to minimize risk of e.g. saw being thrown - maintain a safe stance when operating the saw to minimise risk of injury - Continually monitor escape routes - Ensure root-plate is in a safe condition - Arrange for extraction or lifting of severed stems as appropriate to enable subsequent operations
<p>Demonstrate knowledge of methods of dealing with a trees with side tension</p>	<ul style="list-style-type: none"> - Use a winch to secure side tension as appropriate - Reduce danger of sudden movement by cutting a product length away from the root plate - Make reducing cuts as appropriate from compression wood side - Make relieving cut into compression wood - Make severing cut into tension wood leaving a step a minimum of 25mm where there is a risk of sudden movement to leave the saw on the part that will move the least - Select appropriate method to remove tree to safe area - Root plate made safe
<p>6. Fell leaning, half blown trees</p>	<ul style="list-style-type: none"> - Ensure adequate escape routes - Select appropriate felling cuts (e.g. Boring / 'Dog tooth' , or 'Double V' where applicable) - Operator to carry out cuts as appropriate to safeguard against release of tension in the stem - Operator to safeguard against becoming trapped or injured by anticipating root plate settling <p>Appropriate take down method selected if tree becomes hung-up:</p> <ul style="list-style-type: none"> - Reduction of hinge (e.g. Letter box) as appropriate - Use of felling lever/ turning hook or strap - Use of winch or heavy machinery for take-down
<p>7. Demonstrate knowledge of safety factors to consider when felling broken trees leaning, half blown trees and hung sections</p>	<ul style="list-style-type: none"> - Sudden movement of root plates - Violent splitting or breaking of trees - Assessment of weight - Checking stability and strength of root plate Difficulty in establishing felling momentum - Broken sections falling out of trees - Lack of directional control with bare poles - Sections bouncing when felled - Risk of structural damage to timber giving unpredictable felling response
<p>8. Demonstrate knowledge of methods of dealing with a broken tree section lodged in or on a standing tree</p>	<ul style="list-style-type: none"> - Use felling lever to remove hung up tips if safe to do so - Attach winch cable to broken section and pull out if possible - Sever broken top at point where it reaches the ground - Fell to side ensuring that hung section is on opposite side from operator (choose felling direction to minimise risk)

Unit 35 Sever multiple windblown trees including leaning half blown, broken trees and hung up trees (continued)

ASSESSMENT ACTIVITIES	ASSESSMENT CRITERIA
<p>9. Demonstrate knowledge of severing multiple windblown stems in the following situations:</p> <p>Working on slopes</p> <p>Working with a variety of different species, hazardous and/or damaged timber</p>	<ul style="list-style-type: none"> - Likely movement of root plates - Likely movement of tree sections - Poor footing - Need for working topside - Leave timber length ('long log') and lift mechanically prior to severing/ felling - Use winch restraint if appropriate - Awareness of sudden splitting or springing - Need for speed of cut to reduce splitting - Variation in characteristics of species being cut - Shatter/ internal damage to timber - Timber under extreme tension may require 'V cuts to sever