

Carry out assisted tree felling operations

Overview

This standard is about carrying out assisted tree felling operations. It covers using non-return pull lines, hand winches or mechanical winches - as appropriate to the tree's size and weight.

This covers both coniferous and broadleaved trees; trees that are upright; trees that are weighted towards and trees that are weighted against a given felling direction.

Ancillary equipment compatible with assisted fell systems used includes pull ropes, friction devices, cables, strops, chokers, shackles/connectors, pulley snatch blocks and other devices such as cable extension clamps.

It is important to be aware of the need for clear communication between the chainsaw operator and the pull system operator when lines of sight cannot be maintained, in accordance with the specific risk assessment.

When working with machinery you need to be appropriately trained, and hold current certification where required, in line with relevant legislation.

Your work must conform to all relevant legislation and codes of practice when carrying out this work.

Carry out assisted tree felling operations

Performance criteria

You must be able to:

1. assess the risks associated with the site and the proposed work
2. select and implement appropriate working methods in accordance with the assessed risks
3. select and use the appropriate personal protective equipment (PPE) for the work
4. estimate load and select appropriate work equipment for the load
5. select, prepare and use the tools and equipment that are appropriate for carrying out assisted fell operations and that are suitable for the condition of the site
6. select a felling direction appropriate to the tree form and the site conditions
7. position the pulling equipment in accordance with the specific risk assessment to ensure the safety of all operators involved with the operation
8. select and use suitable anchor points, which are adequate for the anticipated load, as necessary
9. select and install adequate attachment point(s) within the tree to be felled to give sufficient security and adequate leverage for the pulling system
10. establish a clear communication system between the chainsaw operator and the pull system operator
11. set up a safe pull system in accordance with industry good practice
12. pre-tension the pull system to ensure all parts are functional
13. make felling cuts as appropriate to the tree and the guide bar, using aid tools (wedges), as appropriate
14. ensure trees are in a safe and appropriate position and condition to enable subsequent operations
15. follow environmental good practice as set by your organisation and the industry, and minimise environmental damage
16. maintain the health and safety of yourself and others at all times, in accordance with relevant legislation

Carry out assisted tree felling operations

Knowledge and understanding

You need to know and understand:

1. how to identify hazards and assess risks
2. how to interpret risk assessments
3. the selection, use and care of personal protective equipment (PPE)
4. how to estimate the load
5. how to determine the appropriate pulling equipment for the assisted fell of a range of tree types/weights
6. the application and limitations of different types of pulling equipment
7. how to inspect and operate equipment and recognise defects in any of the pull system components
8. the importance of clear communication when carrying out assisted felling operations and the alternative communication methods available when a clear line of sight cannot be maintained
9. the techniques used to safely set-up an assisted fell pulling system which is adequate for the anticipated load of the tree in question
10. the necessity for offset pulling when operating in confined sites or on sites with steep slopes
11. the need for the accurate selection of the felling direction and the importance of employing appropriate felling techniques/cuts
12. the benefit of incorporating a 'back-hold' into the felling cut for assisted fell operations
13. the consequences of not carrying out an assisted fell operation in an organised and appropriate manner
14. how to assess the hinge-holding requirements of different tree species
15. how to perform cuts to produce hinge dimensions to meet the requirements of different tree species, condition and cut
16. the use of felling aids
17. the potential impact of your work on the environment and how this can be minimised
18. your responsibilities under relevant environmental and health and safety legislation

Carry out assisted tree felling operations

Scope/range

Clear communication system between chainsaw operator and pull system operator – the use of supplementary measures where clear visual communication cannot be maintained, in accordance with the specific risk assessment



Carry out assisted tree felling operations

Carry out assisted tree felling operations

Developed by	Lantra
Version Number	2
Date Approved	February 2017
Indicative Review Date	February 2021
Validity	Current
Status	Original
Originating Organisation	Lantra
Original URN	LANTw25
Relevant Occupations	Arboriculture and forestry; Chainsaw and forest machine operators
Suite	Treework
Keywords	assisted fell; pulling equipment; weight; load