

Process felled trees mechanically

Overview

This standard is about processing felled trees mechanically in forests and woodlands. This will include the preparation, driving and manoeuvring of the machine.

This operation can also be carried out integrally with the harvesting of trees using a combined harvesting and processing head.

Firewood processors and similar machines are not included.

This standard covers the efficient de-branching and/or conversion (cross-cutting) of timber for subsequent handling and includes working to a specification to best advantage and to minimise product loss or damage.

Chainsaw limbing and the cutting of large or misshapen trees may be required during processing.

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

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

This standard is only suitable for those who are already competent to operate a base machine with attachments.

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Performance criteria

You must be able to:

1. assess the risks associated with the site and the proposed work
2. select and implement the appropriate working methods, in accordance with the assessed risks
3. select and use the appropriate personal protective equipment (PPE) for the work
4. select, prepare and use the appropriate tools and equipment, safely and effectively
5. confirm all equipment has been checked and is fit for purpose
6. maintain the security of machinery and equipment on site
7. select, prepare and maintain access and egress routes in a serviceable condition
8. ensure that damage to the work site, any remaining standing trees, tracks, roads, drains and the wider environment is kept within specified limits
9. identify the felled trees to be processed and position the processing machine into the product stacking area
10. select a processing method that is relevant to the tree size and condition and to the given specification
11. de-limb trees, ensuring that the quality is within specified limits
12. cross-cut trees safely and effectively, to a specification, avoiding splits
13. stack and segregate timber to facilitate ease of extraction, including the placement of brash clear of the timber zone
14. ensure the site is left in a condition which meets environmental requirements, in accordance with the specification
15. maintain the health and safety of yourself and others at all times, in accordance with relevant legislation

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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. site procedures including communication systems and emergency planning
5. the current guidelines on machinery operation, risk zones, working at height and safety clearances from overhead electricity conductors and what to do in the event of contact with power lines
6. the types of tools and equipment required and how to maintain and use these safely and effectively in line with the manufacturer's recommendations
7. the legal requirements for checking equipment
8. why it is important to maintain the safety and security of equipment and vehicles on site
9. the capabilities and limitations of the machinery used including slope limitations
10. how to recognise and select the tree species and the size to meet required the specification when processing
11. how to de-limb deformed trees
12. the implications of processing shattered, diseased, rotten, dead or other malformed trees
13. how to deal with trees with inaccessible butts
14. the procedures for setting log lengths, tolerances and minimum top diameters, appropriate for the machine
15. how to retrieve information on individual and cumulative products
16. how to make regular checks on the specification of processed timber during the operation and how to recognise malfunctions before and during the operation
17. how to check and sharpen the de-branching knives and why the profile needs setting on the knives
18. how to check and sharpen the cross-cutting mechanism and the procedures to ensure that the operator is safeguarded
19. the potential impact of your work on the environment and how this can be minimised
20. your responsibilities under relevant environmental, health and safety legislation and codes of practice

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- Scope/range related to knowledge and understanding**
- How to use one of the following processors:
- bed processors
 - grapple processors
 - stroke/ reciprocating boom processors

How to prepare ground by creating brash mats to reduce ground damage and aid flotation.

Machinery settings:

- adjustments to meet the job
- on-board measuring systems
- obtain site and production data

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Glossary

Deformed trees: trees that are coarse branched, forked, multi- stemmed and/or bent

Trees with inaccessible butts: windblown trees or where trees are felled in an opposing direction

Individual and cumulative products: the number of pieces and volumes of each specification

Site preparation includes preparing for crossing watercourses and the use of ramps etc.

Links to other NOS

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