

To include in all translations:

This is a translation of the original English version of the EFESC handbook and its appendices.
This translated version is subordinate to the original English version.

EUROPEAN CHAINSAW STANDARDS version 2026

ECS1-Tension: CROSS-CUTTING TIMBER ON TENSIONED TIMBER SECTIONS by a SIMULATOR

This Standard is developed for workers who are not required to fell trees but need to crosscut timber that is under particular heavy tension as a result of natural or man-made incidents. It can be an extra qualification e.g. for those who have to clear roads, prepare branches for a chipper, sawmill workers, fire brigade...

What the chainsaw operator must able to do: safe severing timber under heavy tension by a simulator

ECS1 (T)-1	TAKE CARE OF YOURSELF (PPE) AND OTHERS AROUND YOU AT WORK - Chainsaw operator to wear appropriate PPE
1:01	Chainsaw safety trousers
1:02	Chainsaw safety boots
1:03	Safety helmet according to LMRA (last minute risk assessment)
1:04	Eye & ear protection
1:05	Gloves appropriate to task
1:06	Non-snag outer clothing
1:07	Personal /Squad First Aid Kit - on work site
1:08	Whistle/Mobile/Radio
ECS1 (T)-2	PLANNING THE WORK INCLUDING WHAT TO DO IF THERE IS AN EMERGENCY - Chainsaw operator must be able to identify hazards relevant to the site & timber:
2:01	Emergency planning
2:02	Method statement - verbal
2:03	Risk Assessment – walk site, look and discuss
ECS1 (T)-3	OPERATIONAL SAFETY CHECKS (chainsaw ON) - Chainsaw operator must be able to check a chainsaw for condition/sharpness etc and pre-use safety: (Still applicable if battery chainsaw is used for cross-cutting)
3:01	Cold/Warm start method (ground/'leg lock')
3:02	Safe start distance from fuel (min.1m or greater according to national guidance)
3:03	Function of chain brake tested, left hand guard and throttle lock
3:04	Saw checked for oiling (e.g. oil throw test or oil present on drive links)
3:05	Chain not moving when throttle released (no chain creep)
3:06	On/off switch is working (pull choke to stop if not, then label not to be used)
3:07	Chain tension 'warm' re-checked

ECS1 (T)-4	MEET LEGAL & SITE ENVIRONMENTAL REQUIREMENTS IN ACCORDANCE WITH NATIONAL STANDARDS - Chainsaw operator must be able to check specifications:
4:01	Protection of fauna, flora, wildlife, waterways, site specifications etc, regards pollution/damage, selection of fuel storage:
4:02	Use bio-oils and alkylate fuel whenever possible
4:03	Prevent waste or dispose of it without causing further damage, in accordance with the regulations, especially according to the standard for recyclable waste
ECS1 (T)-5	CROSSCUTTING TIMBER USING APPROPRIATE CUTS ON TENSIONED TIMBER SECTIONS UNDER EFFECTIVE GUIDE BAR DIAMETER BY A SIMULATOR - Chainsaw operator must be able to crosscut timber with any side tension safely
5:01	Check risk to the operator from the tensioned timber sections springing (including sideways)
5:02	Identify tension and compression in timber sections and select severing methods
5:03	Right hand on the rear handle when sawing
5:04	Head/neck are not allowed across of line of chain (unless checking the line of the cuts with bar tip in full view)
5:05	Left thumb always around top handle
5:06	Chain brake used appropriately: according to national regulations e.g. when walking with the engine running, if the saw has to be put down while moving cut material or before taking a hand off the saw
5:07	Safe stance and position to avoid working in danger areas
5:08	Sever timber section with simulated tension safely using a technique involving 'V'-style cuts
5:09	Sever timber section with simulated tension safely using a technique involving stepped cuts
5:10	Sever timber section with simulated tension safely using a technique involving boring cuts if appropriate
5:11	Site left safe & tidy
What the chainsaw operator must know and understand: ECS 1 Tension	
1	Demonstrate knowledge of safety considerations and legal requirements when dealing with timber under heavy tension
2	Demonstrate knowledge of safety regarding overhead and underground services when dealing with timber under heavy tension
3	Describe the features of tension and compression in the timber to be considered when dealing with timber under heavy tension
4	Demonstrate knowledge of when it is appropriate to use aid tools when dealing with timber under heavy tension
5	Demonstrate knowledge of where winches may be used when dealing with timber under heavy tension
6	Demonstrate knowledge of additional safety considerations that may be needed when dealing with timber under heavy tension
7	Demonstrate knowledge of other types of uprooted or damaged trees that will require specialist methods
8	Demonstrate knowledge of alternative methods of restraining timber under heavy tension
9	Demonstrate knowledge of methods of dealing with timber that has side tension
10	Demonstrate knowledge of severing timber under heavy tension, working on slopes
11	Demonstrate knowledge of severing timber under heavy tension, working with a range of timber types, hazardous and/or damaged timber
12	Demonstrate knowledge of identifying safety points when planning work, cutting timber under heavy tension (e.g. the order of operation)
13	Demonstrate knowledge of safety requirements where machinery is to be used

ECC1-Tension assessment: EFESC prescriptions of tasks and criteria

To obtain a European chainsaw certificate 1 Tension, you must pass an assessment in which your skills and knowledge, both theoretical and practical, are tested. With this certificate you can prove your competence to work according to the European minimum Chainsaw Standards Tension.

If national standards or assessment procedures are more stringent and ECS1-Tension is covered, an ECC1-Tension label can be added to the current certificate by a certified assessment center.

During the assessment, the following minimum tasks and criteria must be checked objectively according the standards by a certified assessor.
Training and assessing must be separated: the assessor may not be familiar with the candidate.

Pre-requisite to ECC1-Tension assessment: ECC1

ECC1-Tension assessment tasks:

Using a battery chainsaw is permitted.

Candidates need to demonstrate knowledge and basic practical skills of operating two-stroke chainsaws.

Theoretical test:

- Written or oral

Practical Test:

- Recommended guide bar size 30-38cm & maximum time allowed 60min
- Candidate has to sign RA, show ID and wear appropriate PPE for crosscutting
- Candidate has to perform timber Inspection, Risk Assessment (RA), work planning and emergency planning
- Candidate has to identify hazards relevant to the site and timber to be cut
- Candidate has to check chainsaw for condition/sharpness etc and pre-use safety
- Candidate has to check legal and environmental specifications
- Candidate has to demonstrate **2 different cuts** to crosscut **a minimum of 3** tensioned timber sections using appropriate cuts from:
 1. Boring technique; 2. V-cut 3. Stepped cuts.
- **3 different tension/compression situations** need to be simulated:
 1. Tension above 2. Tension below; 3. Side tension

**Critical faults or a combination of relevant faults against the good practice of these standards will lead to not passing the assessment.
The assessor has the right and duty to stop the assessment if direct safety is compromised.**

ECC1-Tension assessment criteria:

Theoretical test:

- If multiple choice: recommended minimum score to succeed: 70% (depending on the national scoring system)

Practical Test:

CRITICAL (C): IF ONE OF THE FOLLOWING critical POINTS IS NOT FULFILLED, THE CANDIDATE CAN NOT PASS ECC1-Tension:

none

- the candidate wears appropriate PPE for crosscutting timber
- the candidate has the right hand on the rear handle when sawing
- the candidate checks the risks from the tensioned timber sections springing (including sideways)
- the candidate takes a safe stance and position to avoid working in danger areas

RELEVANT (R): IF, AFTER ONE WARNING, MORE THAN THE MAXIMUM NUMBER OF RELEVANT ERRORS ON THE TOPICS BELOW ARE MADE, THEN THE CANDIDATE CAN NOT PASS ECC1-Tension:

**2
Max.
number
of errors
allowed**

- the candidate has to check protection of fauna, flora, wildlife, waterways, site specifications etc, regards pollution/damage
- the candidate performs timber Inspection (tension and compression), Risk Assessment (RA), work - and emergency planning
- the candidate wears gloves appropriate to the task and has a personal /Squad First Aid Kit – on work site
- the candidate checks function of chainbrake, left hand guard and throttle lock
- Head/neck are not allowed across of line of chain (unless checking the line of the cuts with bar tip in full view)
- the candidate has his left thumb always around top handle
- the candidate has to use the chain brake appropriately: according to national regulations e.g. when walking with the engine running, if the saw has to be put down while moving cut material or before taking a hand off the saw