

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

ECS 1: Chainsaw Maintenance and Crosscutting Techniques

What the chainsaw operator must be able to do:

chainsaw maintenance and crosscutting with a chainsaw with recommended guide bar size 30-38cm

ECS1-1	Take care of yourself (PPE) and others around you at work - Chainsaw operator to wear appropriate PPE for maintenance.
01:01	Safety boots
01:02	Eye protection as required if using compressed air or machine sharpening
01:03	Personal /Squad First Aid Kit - on <u>every</u> work site
01:04	Gloves appropriate to task
ECS1-2	Routine / daily CHAINSAW MAINTENANCE - Chainsaw operator must be able <u>to check function</u> of safety features: (chainsaw off)
2A:1	Chain brake
2A:2	Anti-vibration mounts
2A:3	Safety chain
2A:4	Throttle lock
2A:5	Chain catcher
2A:6	Right hand guard
2A:7	Left hand guard
2A:8	Chain/Bar cover
2A:9	Functional clearly marked on/off switch
	Chainsaw operator must be able to sharpen whole saw chain:
2B:1	Chain checked for damage and compatibility with bar and sprockets
2B:2	Cutters sharpened using file of correct size with handle fitted & correct top/side plate angles maintained
2B:3	Equal length of cutters maintained
2B:4	Filing burrs removed if needed
2B:5	Height and profile of depth gauges checked / set
	Chainsaw operator must be able to maintain guide bar:
2C:1	Straightness of bar checked
2C:2	Identify uneven/damaged/blued/cracked rails
2C:3	Burrs removed and edges chamfered/curved
2C:4	Groove (depth checked) and oil holes cleared

2C:5	Sprocket sidegreased if applicable
2C:6	Bar turned to reduce wear
	Chainsaw operator must be able to undertake other maintenance tasks:
2D:1	Drive sprocket and drive link inspected (for damage / limits of sprocket wear)
2D:2	Inspect and clean (as possible) and check the function of the chain brake (what procedure should be undertaken if damaged?)
2D:3	Chainsaw operator to correctly re-assemble chain, bar and side plate
	Chainsaw operator must be able to inspect & clean air filter:
2E:1	Remove debris from around filter
2E:2	Remove and clean filter protecting carburetor intake
	Chainsaw operator must be able to clean, inspect & re-tension starter recoil mechanism:
2F:1	Remove starter cover, clear air ways, check cord wear
2F:2	Release and re-tension cord and coil spring
2F:3	Check handle/pull toggle for security
ECS1-3	Take care of yourself (PPE) and others around you at work - Chainsaw operator to wear appropriate PPE for crosscutting
03:01	Chainsaw safety trousers
03:02	Chainsaw safety boots
03:03	Safety helmet according LMRA
03:04	Eye & ear protection
03:05	Gloves appropriate to task
03:06	Non-snag outer clothing
03:07	Whistle/Mobile/Radio
	Planning the work including what to do if there is an emergency - Chainsaw operator must be able to identify hazards relevant to the site and timber to be cut:
03:08	EMERGENCY PLANNING - check information, METHOD STATEMENT – verbal, RISK ASSESSMENT - walk site
ECS1-4	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)
04:01	Cold/Warm start method (ground/'leg lock')
04:02	Safe start distance from fuel (min.1m or greater according to national guidance, no spillage, gases released)
04:03	Function of chain brake tested, left hand guard and throttle lock
04:04	Saw checked for oiling (e.g. oil throw test or oil present on drive links)
04:05	Chain not moving when throttle released (no chain creep)
04:06	On/off switch is working (pull choke to stop if not, then label not to be used)
04:07	Chain tension 'warm' re-checked

ECS1-5	MEET LEGAL & SITE ENVIRONMENTAL REQUIREMENTS IN ACCORDANCE WITH NATIONAL STANDARDS - Chainsaw operator must be able to check specifications:
05:01	Protection of fauna, flora, wildlife, waterways, site specifications etc, regards pollution/damage, selection of fuel storage:
05:02	Use bio-oils and alkylate fuel whenever possible
05:03	Prevent waste or dispose of it without causing further damage, in accordance with the regulations, especially according to the standard for recyclable waste
ECS1-6	INSPECT TIMBER & USE SAFE CROSSCUT METHODS
06:01	Walk site, check timber
06:02	Safe stance and well balanced (e.g. situation with side tension)
06:03	Right hand always on the rear handle when sawing
06:04	Bar aligned to maintain accuracy (cut at a right angle)
06:05	Head/neck are not allowed across of line of chain (unless checking the line of the cuts with bar tip in full view)
06:06	Use of throttle to cut safely and efficiently
06:07	Left thumb always around top handle when sawing
06:08	Use of boring to initiate cuts where access is limited
06:09	Sequence of cuts is made to avoid saw becoming trapped or uncontrolled timber movement i.e. splitting
06:10	Tension and compression cuts should meet
06:11	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
06:12	Safe withdrawal of saw from the cut
06:13	Ergonomics: straight back, use of legs to control saw, bending at knees
ECS1-7	SELECT & USE APPROPRIATE AID TOOLS - Chainsaw operator must be able to use appropriate aids to handle / move products:
07:01	Correct stance during lifting
07:02	Avoiding excessive lifting by levering, sliding, rolling etc
07:03	Site left tidy & safe
What the chainsaw operator must know and understand: ECS1	
1	Demonstrate knowledge of how to identify hazards and comply with the control measures of risk assessments
2	Demonstrate knowledge of emergency planning and procedures
3	Demonstrate knowledge on why the PPE is required and what kind of PPE that is required
4	Demonstrate knowledge of carrying out daily and weekly maintenance, settings and pre-start checks as per manufacturers' recommendations
04:01	Demonstrate knowledge of information required to select a replacement chain for a given saw
04:02	Demonstrate knowledge of reasons for chain maintenance
04:03	Demonstrate knowledge of reasons for maintaining guide bar

04:04	Demonstrate knowledge on sprocket replacement
04:05	Demonstrate knowledge on clutch components
04:06	Demonstrate knowledge on power unit and covers and inspect for damage
04:07	Demonstrate knowledge on condition of spark plug
04:08	Demonstrate knowledge on chain tension
04:09	Demonstrate knowledge on air filter and compartment and explain the purpose of cleaning
04:10	Demonstrate knowledge on cord condition and recoil starter mechanism
04:11	Demonstrate knowledge on fuel filter maintenance
04:12	Demonstrate knowledge on condition and pre-use operational safety checks on the chainsaw
04:13	Demonstrate knowledge on chain oiling system and on their function
04:14	Demonstrate knowledge of symptoms associated with poor cutting performance
5	Demonstrate knowledge of maintaining the safety and security of chainsaw(s) and other equipment
05:01	Demonstrate knowledge of risks of improper handling of batteries (transport, storage and charging)
05:02	Demonstrate knowledge of factors leading to battery damage
05:03	Demonstrate knowledge of how to identify battery damage
05:04	Demonstrate knowledge of proper transportation, storage and charging of batteries,
6	Demonstrate knowledge of the safety considerations required during crosscutting.
7	Demonstrate knowledge of maintaining effective teamwork when working with others
8	Demonstrate knowledge of how to remove a trapped saw
9	Demonstrate knowledge of the alternative methods of carrying out a boring cut and the safeguards required
10	Demonstrate knowledge of the risks associated with using long chainsaw bars to cut small diameter timber
11	Demonstrate knowledge of methods required for cross cutting timber of greater diameter than the chainsaw bar
12	Demonstrate knowledge of the implications of terrain, ground conditions, season, weather and species
13	Demonstrate knowledge of causes of, and how to prevent, potential pollution, environmental damage
14	Demonstrate knowledge of how to identify your own capabilities and limitations as operator
15	Demonstrate knowledge of the principles of a safe effective stance while crosscutting under guidebar length in diameter
16	Demonstrate knowledge of how to apply ergonomic working methods and the implications of manual handling regulations
17	Demonstrate knowledge of how to move or roll timber by hand and with mechanical assistance
18	Demonstrate knowledge regarding first aid and chainsaw use
19	Demonstrate knowledge of how to identify tension and compression in timber
20	Demonstrate knowledge of the methods and safeguards required when dismantling timber (e.g. hardwood or similar tops) with vertically aligned stems, branches or sections
21	Demonstrate knowledge of precautions to take to avoid the danger of logs rolling

ECC1 assessment: EFESC prescriptions of tasks and criteria

To obtain a European Chainsaw Certificate level 1, 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 level 1.

If national standards or assessment procedures are more stringent and ECS1 is covered, an ECC1 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 assessment: none

ECC1 assessment tasks:

Using a battery chainsaw is permitted. Apart from sharpening, which can be conducted on battery chainsaw, all other maintenance must be conducted on two-stroke chainsaw.

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

Theoretical test:

- Written or oral

Practical Test: (only sharpening and cross-cutting can be undertaken with battery chainsaw)

- Recommended guide bar size 30-38cm & maximum time allowed 60min
- Candidate has to sign RA, show ID and wear appropriate PPE for maintenance and crosscutting
- Candidate has to check function of safety features (chainsaw off)
- Candidate has to maintain guide bar
- Candidate has to undertake other maintenance tasks
- Candidate has to inspect & clean air filter
- Candidate has to clean, inspect & re-tension starter recoil mechanism
- Candidate has to sharpen whole saw chain
- Candidate has to identify hazards relevant to the site and timber to be cut
- Candidate has to check the legal & site environmental requirements in accordance with national standards.
- Candidate has to perform timber Inspection, Risk Assessment (RA), work planning and emergency planning
- Candidate has to check chainsaw for condition/sharpness etc and pre-use safety

	- Candidate has to crosscut timber under guide bar length, according to the measurements given with some moderate tension & compression present: <u>A minimum of 10 cross cuts</u> need to be demonstrated to standard using both upper & lower side of the guide bar, including <u>a minimum of 2 vertical boring cuts</u> .
	- Candidate has to demonstrate an ergonomic use of appropriate aids to handle / move timber
	- Candidate using battery chainsaw has to demonstrate basic skills in handling a two-stroke chainsaw (maintenance, fuelling, starting and operational safety checks)

**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 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 ECC level 1:

none

- the candidate wears appropriate PPE for maintenance and crosscutting
- the candidate has the right hand on the rear handle when sawing
- the candidate checks function of chainbrake, chain catcher, left hand guard and throttle lock during maintenance (what should be undertaken if damaged?)

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 ECC level 1:

**3
Max.
number
of errors
allowed**

- the candidate has eye protection as required if using compressed air or machine sharpening. Gloves appropriate to task and a personal /Squad First Aid Kit – on every work site
- the candidate sharpens the cutters using file of correct size with handle fitted & correct top/side plate angles
- the candidate checks / set the height and profile of depth gauges
- the candidate cleans and inspects the chain brake, identifies uneven/damaged/blued/cracked rails and re-assembles chain, bar and side plate properly
- the candidate checks protection of fauna, flora, wildlife, waterways, site specifications etc, regards pollution/damage
- the candidate performs timber Inspection, Risk Assessment (RA), work planning and emergency planning
- the candidate checks function of chainbrake, chain catcher, left hand guard and throttle lock during operational safety checks
- the candidate uses 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
- Head/neck are not allowed across of line of chain (unless checking the line of the cuts with bar tip in full view), left thumb always around top handle
- Safe stance and well balanced (e.g. situation with side tension)
- Sequence of cuts is made to avoid saw becoming trapped or uncontrolled timber movement i.e. splitting