

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 2018

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.
1:01	Safety boots
1:02	Eye (& ear) protection as appropriate
1:03	Personal /Squad First Aid Kit - on <u>every</u> work site
1:04	Gloves appropriate to task
ECS1-2	Routine / daily CHAINSAW MAINTENANCE - Chainsaw operator must be able to check function of safety features: (chainsaw off)
2A:1	Chain brake
2A:2	Anti-vibration mounts
2A:3	Safety chain
2A:4	Throttle lock
2A:5	Exhaust away from the operator
2A:6	Chain catcher
2A:7	Legal symbols: Head/eye/ear defender
2A:8	Right hand guard
2A:9	Left hand guard
2A:10	Chain/Bar cover
2A:11	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 inspected
2D:2	Chain brake cleaned & inspected
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
3:01	Chainsaw safety trousers
3:02	Chainsaw safety boots
3:03	Safety helmet if necessary
3:04	Eye & ear protection
3:05	Gloves appropriate to task
3:06	Non-snag outer clothing
3:07	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:
	RISK ASSESSMENT - walk site, METHOD STATEMENT – verbal, EMERGENCY PLANNING - check information
ECS1-4	OPERATIONAL SAFETY CHECKS - Chainsaw operator must be able to check chainsaw for condition/sharpness etc and pre-use safety:
4:01	Cold/Warm start method (ground/'leg lock')
4:02	Safe start distance from fuel (min.1m or greater according to national guidance, no spillage, gases released)
4:03	Function of chain brake tested, left hand guard and throttle lock
4:04	Saw checked for oiling (e.g. oil throw test or oil present on drive links)
4:05	Chain not moving when throttle released (no chain creep)

4:06	On/off switch is working (pull choke to stop if not, then label not to be used)
4:07	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:
5:01	Protection of fauna, flora, wildlife, waterways, site specifications etc, regards pollution/damage, selection of fuel storage:
5:02	Use bio-oils whenever possible
5:03	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
6:01	Walk site, check timber
6:02	Safe stance, well balanced
6:03	Bar aligned to maintain accuracy
6:04	Head/neck are not allowed across of line of chain (unless checking the line of the cuts with bar tip in full view)
6:05	Use of throttle to cut safely and efficiently
6:06	Left thumb around top handle
6:07	Use of boring to initiate cuts where access is limited
6:08	Sequence of cuts is made to avoid saw becoming trapped or uncontrolled timber movement i.e. splitting
6:09	Tension and compression cuts should meet
6:10	Chain brake used appropriately: 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
6:11	Safe withdrawal of saw from the cut
6:12	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:
7:01	Correct stance during lifting
7:02	Avoiding excessive lifting by levering, sliding, rolling etc
7:03	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
4:01	Demonstrate knowledge of information required to select a replacement chain for a given saw
4:02	Demonstrate knowledge of reasons for chain maintenance

4:03	Demonstrate knowledge of reasons for maintaining guide bar
4:04	Demonstrate knowledge on sprocket replacement
4:05	Demonstrate knowledge on clutch components
4:06	Demonstrate knowledge on power unit and covers and inspect for damage
4:07	Demonstrate knowledge on condition of spark plug
4:08	Demonstrate knowledge on chain tension
4:09	Demonstrate knowledge on air filter and compartment and explain the purpose of cleaning
4:10	Demonstrate knowledge on cord condition and recoil starter mechanism
4:11	Demonstrate knowledge on fuel filter maintenance
4:12	Demonstrate knowledge on condition and pre-use operational safety checks on the chainsaw
4:13	Demonstrate knowledge on chain oiling system and on their function
4:14	Demonstrate knowledge of symptoms associated with poor cutting performance
5	Demonstrate knowledge of maintaining the safety and security of chainsaw(s) and other equipment
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:

Theoretical test:

- Written or oral

Practical Test:

- Recommended guide bar size 30-38cm & maximum time allowed 60min
- Candidate has to sign RA, shows ID and wears 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: A minimum of 10 cross cuts need to be demonstrated to standard using both upper & lower side of the guide bar, including a minimum of 2 vertical boring cuts.
- Candidate has to demonstrate an ergonomic use of appropriate aids to handle / move timber

**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 critical 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 |
| none | - the candidate checks function of chainbrake, left hand guard and throttle lock |
| none | - sequence of cuts is made to avoid saw becoming trapped or uncontrolled timber movement i.e. splitting |

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 a personal /Squad First Aid Kit – on <u>every</u> work site |
| | - the candidate checks the chain catcher, etc |
| | - 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 identifies uneven/damaged/blued/cracked rails |
| | - 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 uses the chain brake appropriately: 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 around top handle |