

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 BRUSH CUTTER STANDARDS version 2021

(Includes Trimmer and brush cutter)

EBS 1: Maintenance and Operational Techniques

What the operator must be able to do:

Carry out maintenance and cutting vegetation with both a Brush cutter (steel blade) and Trimmer (plastic line)

The Certificate awarded to successful candidates will be endorsed with both machines

EBS1-1	Take care of yourself (PPE) and others around you at work - Brush cutter/ Trimmer operator to wear appropriate PPE for MAINTANCE.	R fault	C fault
1:01	Safety boots		
1:02	Face & eye protection as appropriate		
1:03	Squad First Aid Kit - on <u>every</u> work site (personal kit must be worn by the operator)		
1:04	Gloves appropriate to task		
EBS1-2	Routine / daily BRUSH CUTTER MAINTENANCE - Brush cutter/Trimmer operator must be able to check function of parts, including safety features: (Machine switched off):		
2:01	Check for any damage to the machine		
2:02	Air filter (machines with combustion engine) or battery compartment (battery machines) clean and intact		
2:03	Anti-vibration system intact		
2:04	Fully compatible Blade/trimmer deflector guard fitted correctly		
2:05	Throttle lock functioning correctly		
2:06	Exhaust and protective guard intact		
2:07	Spark plug (machines with combustion engine)		
2:08	Legal symbols present: Head/eye/ear defender/ Safety distances		
2:09	Recoil starter mechanism functions correctly (machines with combustion engine)		
2:10	Control handle intact and secure		
2:11	Gearbox greased (if applicable)		
2:12	Functional clearly marked on/off switch		
2:13	Harness: double shoulder, belt, and hook intact and properly fastened		
2:14	Fuel tank and filter clean (machines with combustion engine) or battery secure & intact (battery machines)		

	Specific Routine / daily. Brush cutter operator must be able to:		
2A:1	Check for damage to the cutting blade / head, and deflector guard	Yellow	
2A:2	Sharpen Brush Cutter blade using file with handle fitted or soft grinding disc	Yellow	
2A:3	Maintain correct angles and equal lengths of cutters		
2A:4	Remove Filing burrs if needed		
	Specific Routine / daily Trimmer operator must be able to:		
2B:1	Check for damage to and function of the trimmer head, bearing and deflector guard	Yellow	
2B:2	Ensure trimmer lines are equal and set to manufacturer's recommended length	Yellow	
EBS1-3	Safe at work – PPE; Brush cutter / trimmer operator to wear appropriate PPE		
3:01	Safety boots		Red
3:02	Face & eye protection according to risk assessment		Red
3:03	Ear's defenders or ear's protection		Red
3:04	Safety helmet if necessary		
3:05	Non snag clothes		
3:06	Squad First Aid Kit - on every work site (personal kit must be worn by the operator)		Red
3:07	Gloves appropriate to task	Yellow	
3:08	Whistle/Mobile/Radio	Yellow	
3:09	Protective trousers, chaps or similar for protecting legs from thorns, debris etc. appropriate to risk assessment	Yellow	
3:10	Other PPE as highlighted by the risk assessment (e.g. shin guards, aprons, face protection visor, high visibility clothes)		Red
EBS1-4	Planning the work including what to do if there is an emergency. Brush cutter/Trimmer operator must be able to identify hazards relevant to the site and plants or material to be brush cut /trimmed.		
	RISK ASSESSMENT: Walk site; METHOD STATEMENT – verbal; EMERGENCY PLANNING – check information	Yellow	
EBS1-5	MEET LEGAL & SITE ENVIRONMENTAL REQUIREMENTS IN ACCORDANCE WITH NATIONAL STANDARTS. Brush cutter/Trimmer operator must be able to check specifications:		
5:01	Protection of fauna, flora, wildlife, waterways, site specifications etc., regard given to pollution/damage, selection of fuel storage	Yellow	
5:02	Use of biofuel whenever possible (machines with combustion engine) or battery storage, charging & transport meets current guidelines (battery machines)		
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		
5:04	Position warnings of Brush cutter/Trimmer work		Red
EBS1-6	OPERATIONAL SAFETY CHECKS - Operator must be able to check Brush cutter / trimmer for pre-use safety:		
6:01	Adjust harness, straps, and hook to appropriate working position (length, position, and balance)	Yellow	
6:02	Safe Start method (ground)	Yellow	
6:03	Safe start distance from fuel and other persons (min. 5 m or greater according to national guidance, no spillage, gases released)	Yellow	

6:04	Check maximum speed of the cutting attachment and compatibility with stated maximum blade speed		
6:05	On/off switch is working (pull choke to stop if not, then label not to be used) or remove battery for battery driven machines		
EBS1-7	INSPECT WORK AREA & VEGETATION: herbaceous, bushes and small vegetation		
7:01	Inspect the work area: stones, pieces of metal or other solid objects. Check vegetation for other hazards e.g., toxic plant or sap, thorny vegetation and other bio-hazards		
7:02	Determine safety distances and exclusion zones from other people		
EBS1-8	OPERATE IN A SAFE AND ERGONOMIC WAY & USE SAFE WORK METHODS. Brush cutter /trimmer operator must be able to:		
8:01	Change different cutting heads, cutting line, blade and deflector(s)'s attachments		
8:02	Working procedure (direction of cutting) is appropriate to deflection of material and proximity to obstacles according to working plan		
8:03	Always walk forwards while working		
8:04	Operator must avoid contact with stones, rocks, pieces of metal, other solid foreign objects, and biohazards		
8:05	Use the throttle to cut safely and efficiently		
8:06	Cut/shred wild growth and scrub, lower the brush knife down onto the growth to achieve a shredding effect – always keep the cutting attachment below hip level during this process.		
8:07	Use of cutting attachments appropriate diameter / density of plant material		
8:08	Operator must not damage bark of trees with the cutting attachment		
8:09	When brush cutting / trimming maintain a safe of at least 15 meters, or further if manufacturer recommends		
8:10	Maintain an ergonomic stance: Straight back, use of legs to control balance, bending at knees		
8:11	Leave site tidy & safe		
What the Brush cutter / Trimmer operator must know and understand: EBS1			
1	Demonstrate knowledge of emergency planning and procedures		
2	Demonstrate knowledge on why the PPE is required and what kind of PPE is appropriated for each task		
3	Demonstrate knowledge regarding first aid and Brush cutter / trimmer use		
4	Demonstrate knowledge of adjusting harness to ergonomic work		
5	Demonstrate knowledge of carrying out daily and weekly maintenance, settings and pre-start checks as per manufacturers' recommendations		
5-1	Demonstrate knowledge of information required to select a replacement brushing/cutting saw/trimmer head for a given brush cutter/trimmer		
5-2	Demonstrate knowledge of anti-vibration system		
5-3	Demonstrate knowledge of clutch components and function		
5-4	Demonstrate knowledge of cutting head/unit and transport / storage safety cover and inspect for damage		
5-5	Demonstrate knowledge of condition of spark plug (machines with combustion engine) or battery (battery machines)		
5-6	Demonstrate knowledge of cutting attachment and corresponding deflector		
5-7	Demonstrate knowledge of air filter and compartment (machines with combustion engine) or battery compartment (battery machines) and explain the purpose of cleaning		
5-8	Demonstrate knowledge of cord condition and recoil starter mechanism (machines with combustion engine) or function of switches (battery machines)		

5-9	Demonstrate knowledge of fuel filter maintenance (machines with combustion engine) or battery checks including storage, charging and transport (battery machines)
5-10	Demonstrate knowledge of condition and pre-use operational safety checks on the Brush knife/cutting saw/trimmer
5-11	Demonstrate knowledge of symptoms associated with poor brush cutting /trimming / clearing performance
6	Demonstrate knowledge of maintaining the safety and security of brush cutter / trimmer and other equipment
7	Demonstrate knowledge of efficient throttle use and maximum blade / head speed
8	Demonstrate knowledge of the safety considerations required during brush cutting /trimming –including-safe working distances for brush cutter / trimmer
9	Demonstrate knowledge of maintaining effective teamwork when working with others
10	Demonstrate knowledge of kickout risk of the blade when working.
11	Demonstrate knowledge of the implications of terrain, ground conditions, season, weather, and species
12	Demonstrate knowledge of causes of, and how to prevent, potential pollution, environmental damage
13	Demonstrate how to brush cutting / trimming without damaging bark of trees with the cutting attachment
14	Demonstrate knowledge of how to identify your own capabilities and limitations as operator
15	Demonstrate knowledge of the principles of a safe effective use of the brush cutter / trimmer like a scythe ('sweep' method)
16	Demonstrate knowledge of the principles of a safe effective use of the brush cutter / trimmer as a shredder ('swatting' method)
17	Demonstrate knowledge of how to apply ergonomic working methods and the implications of manual handling regulations
18	Demonstrate knowledge of the methods and safeguards required when cutting and shredding tough, matted grass and scrub (e.g. hardwood or similar - scrub)
19	Demonstrate knowledge of reinspecting machine after use and procedure if defects found
20	Demonstrate knowledge of cleaning machine after use to prevent corrosion after the work

EBC1 assessment: EFESC prescriptions of tasks and criteria

To obtain a European Brush cutter Certificate, 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 Brush cutter Standards.

If national standards or assessment procedures are more stringent and EBS is covered, an EBC1 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 to the standards by a certified assessor.

Training and assessing must be separated: the assessor may not be familiar with the candidate.

Pre-requisite to EBC1 assessment: none

EBC1 assessment tasks:

Theoretical test:
- Written or oral
Practical Test:
- Recommended brush cutter/trimmer/cutting saw, maximum time allowed 60min
- Candidate must <u>sign RA, shows ID</u> and wears appropriate PPE for maintenance and brush cutting
- Candidate must check function of safety features (Brush cutter off)
- Candidate must state guarding requirements for the machine use
- Candidate must undertake required maintenance tasks
- Candidate must inspect & clean air filter or check condition & security of battery
- Candidate must clean, inspect & re-tension starter recoil mechanism (machines with combustion engine) or function of switches (battery machines)
- Candidate must sharpen a brush knife
- Candidate must identify hazards relevant to the vegetation, site terrain, ground conditions, season, weather and species to be cut / shred
- Candidate must check the legal & site environmental requirements in accordance with national standards.
- Candidate must perform site Inspection, Risk Assessment (RA), work planning and emergency planning
- Candidate must check Brush cutter trimmer for condition/sharpness etc. and pre-use safety
- Candidate must change cutting attachment and deflector to perform brush cutter / trimmer practice
- Candidate must brush cut / trim / clear shrub/grass and/or cut shrubs
<u>A minimum of 50 square meters brush and trimming needs to be demonstrated to a given standard using brush cutting blade and trimmer head with line</u>
Both scything ('sweep') method and a shredding-effect ('swatting') method are to be used,-always keeping the cutting attachment below hip level during this process).
- Candidate has to change the cutting attachment and deflector if needed to perform brush cutter, trimmer or cutting saw practice
- Candidate has to leave brush cutter/trimmer or cutting saw in good condition without debris on the deflector or damage to the machine
- Candidate has to check for damages to the cutting blade, trimmer head, or cutting head protective cover

**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.**

EBC1 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 EBC:

None

- the candidate wears appropriate PPE for maintenance and brush cutting/trimming o cutting saw

- Safety boots
- Face & eye protection as appropriate
- Squad First Aid Kit - on every work site (personal kit must be worn by the operator)
- Other PPE as highlighted by the risk assessment (e.g. shin guards, aprons, face protection visor, high visibility clothes)

- the candidate checks function of parts, including safety features

- Fully compatible Blade/trimmer deflector guard fitted correctly
- Throttle lock functioning correctly
- Exhaust and protective guard intact
- Legal symbols present: Head/eye/ear defender/ Safety distances

- the candidate positions warnings of Brush cutter/Trimmer work

- the candidate inspects the work area: stones, pieces of metal or other solid objects. Check vegetation for other hazards e.g., toxic plant or sap, thorny vegetation and other bio-hazards

- the candidate works backwards while brush cutting/trimming

- the candidate cuts/shreds wild growth and scrub, lower the brush knife down onto the growth to achieve a shredding effect – always keeps the cutting attachment below hip level during this process.

**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 EBC level 1:**

3 Max. number of errors allowed	- the candidate checks function of safety features (Brush cutter off) <ul style="list-style-type: none"> • Check for any damage to the machine • Air filter (machines with combustion engine) or battery compartment (battery machines) clean and intact • Anti-vibration system intact • Control (bike) handle intact and secure • Functional clearly marked on/off switch • Harness: double shoulder, belt, and hook intact
	SPECIFIC ROUTINES Brush cutter/Trimmer - The candidate checks for damage to and function of cutting blade/trimmer head, bearing and deflector guard <ul style="list-style-type: none"> • the candidate sharpens Brush Cutter blade using file with handle fitted or soft grinding disc • the candidate ensures trimmer lines are equal and set to manufacturer's recommended length
	- the candidate performs a risk assessment (RA) work planning and emergency planning
	- the candidate checks specifications: <ul style="list-style-type: none"> • Protection of fauna, flora, wildlife, waterways, site specifications etc., regard given to pollution/damage, selection of fuel storage
	- the candidate checks pre-use safety features: <ul style="list-style-type: none"> • Adjust harness, straps, and hook to appropriate working position (length, position, and balance) • Safe Start method (ground) • Safe start distance from fuel and other persons (min. 5 m or greater according to national guidance, no spillage, gases released)
	- the candidate determines safety distances and exclusion zones from other people
	- the candidate operates in a safe and ergonomic way & uses safe work methods <ul style="list-style-type: none"> • changes different cutting heads, nylon mowing line, deflectors and attachments • has a working procedure (direction of cutting) appropriate to deflection of material and proximity to obstacles according to working plan • avoids contact with stones, rocks, pieces of metal, other solid foreign objects and biohazards • does not damage bark of trees with the cutting attachment. • maintains a safe distance at least 15 metres, or further if manufacturer recommends when brush cutting or trimming • maintains an ergonomic stance: Straight back, use of legs to control balance, bending at knees