

EUROPEAN CHAINSAW STANDARDS: 2014

ECS 1: Chainsaw Maintenance and Crosscutting Techniques

What the chainsaw operator must be able to do: (Practical Test: Recommended guide bar size 30-38cm & maximum time allowed 60min)
Pre-requisite: none

		Diagnostic tools				
		Written	Practical	Oral	Other	Critical
ECS1-1	Take care of yourself (PPE) and others around you at work - Candidate to wear appropriate <u>PPE for maintenance</u> , sign RA & show ID:	√	√			1
1:1	Safety boots		√			1:1
1:2	Eye (& ear) protection as appropriate		√			1:2
1:3	Personal /Squad First Aid Kit - on <u>every</u> work site		√			1:3
1:4	Gloves appropriate to task		√			1:4
ECS1-2	Routine / daily CHAINSAW MAINTENANCE - Candidate to check <u>function</u> of safety features: (chainsaw off)	√	√			2
2A:1	Chain brake		√			2A:1
2A:2	Anti-vibration mounts		√			2A:2
2A:3	Safety chain		√			2A:3
2A:4	Throttle lock		√			2A:4
2A:5	Exhaust away from the operator		√			2A:5
2A:6	Chain catcher		√			2A:6
2A:7	Legal symbols: Head/eye/ear defender		√			2A:7
2A:8	Right hand guard		√			2A:8
2A:9	Left hand guard		√			2A:9
2A:10	Chain/Bar cover		√			2A:10
2A:11	Functional clearly marked on/off switch		√			2A:11
	Candidate to sharpen <u>whole</u> saw chain:					
2B:1	Chain checked for damage and compatibility with bar and sprockets		√			2B:1
2B:2	Cutters sharpened using file of correct size with handle fitted & correct top/side plate angles		√			2B:2
2B:3	Equal length of cutters maintained		√			2B:3
2B:4	Filing burrs removed if needed		√			2B:4
2B:5	Height and profile of depth gauges checked / set		√			2B:5
	Candidate to maintain guide bar:					
2C:1	Straightness of bar checked		√			2C:1
2C:2	Identify uneven/damaged/blued/cracked rails		√			2C:2
2C:3	Burrs removed and edges chamfered/curved		√			2C:3
2C:4	Groove (depth checked) and oil holes cleared		√			2C:4
2C:5	Sprocket nose greased if applicable		√			2C:5

2C:6	Bar turned to reduce wear		√				2C:6
	Candidate to undertake other maintenance tasks:						
2D:1	Drive sprocket inspected		√				2D:1
2D:2	Chain brake cleaned & inspected		√		√		2D:2
2D:3	Candidate to correctly re-assemble chain, bar and side plate		√				2D:3
	Candidate to inspect & clean air filter :						
2E:1	Remove debris from around filter		√				2E:1
2E:2	Remove and clean filter protecting carburetor intake		√				2E:2
	Candidate to inspect spark plug:						
2F:1	Color, tightness, 'drop test', gap size		√				2F:1
	Candidate to clean, inspect & re-tension starter recoil mechanism:						
2F:1	Remove starter cover, clear air ways, check cord wear	√	√				2G:1
2F:2	Release and re-tension cord and coil spring		√				2G:2
2F:3	Check handle/pull toggle for security		√				2G:3
	Candidate to inspect fuel filter:						
2H:1	Remove cap, hook filter with tool, comment		√				2H:1
ECS1-3	Take care of yourself (PPE) and others around you at work - Candidate to wear appropriate PPE for crosscutting	√	√				
3:1	Chainsaw safety trousers		√		√		3:1
3:2	Chainsaw safety boots		√		√		3:2
3:3	Safety helmet if necessary		√		√		3:3
3:4	Eye & ear protection		√		√		3:4
3:5	Gloves appropriate to task		√				3:5
3:6	Non-s snag outer clothing		√				3:6
3:7	Whistle/Mobile/Radio		√				3:7
	Planning the work including what to do if there is an emergency - Candidate 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 - Candidate to check chainsaw for condition/sharpness etc and pre-use safety:	√	√				LO-4
4:1	Cold/Warm start method (ground/'leg lock')		√				4:1
4:2	Safe start distance from fuel (min.1m or greater according to national guidance, no spillage, gases released)		√				4:2
4:3	Chain brake tested with saw running		√		√		4:3
4:4	Saw checked for oiling (e.g. oil throw test or oil present on drive links)		√				4:4
4:5	Chain not moving when throttle released (no chain creep)		√				4:5
4:6	On/off switch is working (pull choke to stop if not, then label not to be used)		√				4:6
4:7	Chain tension 'warm' re-checked		√				4:7
ECS1-	MEET LEGAL & SITE ENVIRONMENTAL REQUIREMENTS IN ACCORDANCE WITH NATIONAL STANDARDS - Candidate to check specifications:	√	√				LO-5

5						
5.1	Protection of fauna, flora, wildlife, waterways, site specifications etc, regards pollution/damage, selection of fuel storage:				√	5.1
ECS1-6	INSPECT TIMBER & USE SAFE CROSSCUT METHODS	√	√			LO-6
Candidate 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 nose of the guide bar, including a minimum of 2 vertical boring cuts.						
6:1	Walk site, check timber		√			6:1
6:2	Safe stance, well balanced		√			6:2
6:3	Bar aligned to maintain accuracy		√			6:3
6:4	Head/neck are not allowed across of line of chain		√		√	6:4
6:5	Use of throttle to cut safely and efficiently		√			6:5
6:6	Left thumb around top handle		√			6:6
6:7	Use of boring to initiate cuts where access is limited		√			6:7
6:8	Sequence of cuts to prevent saw becoming trapped or uncontrolled timber movement i.e. splitting		√			6:8
6:9	Tension and compression cuts should meet		√			6:9
6:10	Chain brake used appropriately: when walking with the engine running, if the saw has to be put down whilst moving cut material or before taking a hand off the saw		√			6:10
6:11	Safe withdrawal of saw from the cut		√			6:11
6:12	Ergonomics: straight back, use of legs to control saw, bending at knees		√			6:12
ECS1-7	SELECT & USE APPROPRIATE AID TOOLS-Candidate to demonstrate use of appropriate aids to handle / move products:	√	√			LO-7
7:1	Correct stance during lifting		√			7:1
7:2	Avoiding excessive lifting by levering, sliding, rolling etc		√			7:2
7:3	Site left tidy & safe		√			7:3
What the chainsaw operator must know and understand: (Theory Test) ECS1						
1	Demonstrate knowledge of how to identify hazards and comply with the control measures of risk assessments	√	√	√		1
2	Demonstrate knowledge of emergency planning and procedures	√	√	√	√	2
3	Demonstrate knowledge on why the PPE is required and what kind of PPE that is required	√			√	3
4	Demonstrate knowledge of carrying out daily and weekly maintenance, settings and pre-start checks as per manufacturers' recommendations	√				4
4:1	Demonstrate knowledge of information required to select a replacement chain for a given saw	√				4:1
4:2	Demonstrate knowledge of reasons for chain maintenance	√				4:2
4:3	Demonstrate knowledge of reasons for maintaining guide bar	√				4:3
4:4	Demonstrate knowledge on sprocket replacement	√				4:4
4:5	Demonstrate knowledge on clutch components	√				4:5
4:6	Demonstrate knowledge on power unit and covers and inspect for damage	√				4:6
4:7	Demonstrate knowledge on condition of spark plug	√				4:7
4:8	Demonstrate knowledge on chain tension	√				4:8
4:9	Demonstrate knowledge on air filter and compartment and explain the purpose of cleaning	√				4:9

4:10	Demonstrate knowledge on cord condition and recoil starter mechanism	√					4:10
4:11	Demonstrate knowledge on fuel filter maintenance	√					4:11
4:12	Demonstrate knowledge on condition and pre-use operational safety checks on the chainsaw	√					4:12
4:13	Demonstrate knowledge on chain oiling system and on their function	√					4:13
4:14	Demonstrate knowledge of symptoms associated with poor cutting performance	√					4:14
5	Demonstrate knowledge of maintaining the safety and security of chainsaw(s) and other equipment	√					5
6	Demonstrate knowledge of the safety considerations required during crosscutting.	√	√				6
7	Demonstrate knowledge of maintaining effective teamwork when working with others	√					7
8	Demonstrate knowledge of how to remove a trapped saw	√					8
9	Demonstrate knowledge of the alternative methods of carrying out a boring cut and the safeguards required	√					9
10	Demonstrate knowledge of the risks associated with using long chainsaw bars to cut small diameter timber	√					10
11	Demonstrate knowledge of methods required for cross cutting timber of greater diameter than the chainsaw bar	√					11
12	Demonstrate knowledge of the implications of terrain, ground conditions, season, weather and species	√					12
13	Demonstrate knowledge of causes of, and how to prevent, potential pollution, environmental damage	√		√		√	13
14	Demonstrate knowledge of how to identify your own capabilities and limitations as operator	√	√	√			14
15	Demonstrate knowledge of the principles of a safe effective stance whilst crosscutting under guidebar length in diameter	√	√	√			15
16	Demonstrate knowledge of how to apply ergonomic working methods and the implications of manual handling regulations	√	√	√			16
17	Demonstrate knowledge of how to move or roll timber by hand and with mechanical assistance	√	√	√			17
18	Demonstrate knowledge regarding first aid and chainsaw use	√				√	18
19	Demonstrate knowledge of how to identify tension and compression in timber	√	√	√		√	19
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	√	√	√		√	20
21	Demonstrate knowledge of precautions to take to avoid the danger of logs rolling	√		√			21
		Written	Practical	Oral	Other	Critical	