LANTw45 - SQA Unit Code H2R8 04 Extract wood products by cable crane



Overview	This standard is about rigging a cable crane, preparing the operating machinery and using the system to extract timber products in a forest or woodland environment. These products may include whole trees, pole lengths, logs and other shortwood. This covers planning your work and the worksite, including assessing and setting up and rigging the system so that you operate the cable crane safely and efficiently and with minimal damage to the environment
	You must be able to operate the cable crane within its operating limits over a variety of ground conditions, in co-operation with other operators such as the choker man
	Your work must conform to all current legislation and codes of practice.
	The standard is intended for those operating machinery as part of an integrated team

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Performance criteria

You must be able to:

- P1 assess the risks associated with the site and the proposed works
- P2 select and implement appropriate working method in accordance with the assessed risks
- P3 select, prepare and use tools and equipment that are appropriate to the work, safely and effectively
- P4 maintain the security of machinery and equipment on site
- P5 prepare and maintain access and egress routes in a serviceable condition
- P6 carry out routine operator maintenance, pre-start checks and setting of the machine for use
- P7 drive and manoeuvre the machine in a safe and effective way within site restraints
- P8 ensure that damage to the worksite, any remaining standing trees, tracks, roads, drains and the wider environment is kept within specified limits
- P9 set up and rig the cable crane in line with manufacturer's and industry guidance
- P10 erect and anchor the tower where appropriate
- P11 rig and anchor tail spar identifying ropes and suitable anchor points
- P12 install carriage
- P13 undertake routine splicing of wire
- P14 maintain effective teamwork and good communication
- P15 keep amount of extracted timber at landing to a volume that can be handled by e.g. forwarder or processor/harvester
- P16 operate the cable crane to extract timber in keeping with site restraints in a safe and effective way
- P17 ensure the stability of the cable crane is maintained
- P18 meet relevant legislative, organisational and environmental requirements relevant to preparing the machine
- P19 maintain the health and safety of yourself and others at all times in accordance with current legislation

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Knowledge and understanding

You need to know and understand:

- K1 how to identify hazards and assess risks
- K2 how to interpret risk assessments
- K3 emergency planning and procedures for the site
- K4 current guidelines on safety clearances from overhead electricity conductors when working with cable cranes
- K5 the implications of working at height in relation to rigging a cable crane
- K6 the need for and benefits of carrying out routine operator checks and basic maintenance in line with manufacturer's recommendations
- K7 how to set up and rig artificial spar
- K8 how to rig an offset cable crane, and when it would be appropriate to use offset winching
- K9 how to rig an intermediate support and when it would be appropriate to do so
- K10 how to set up and rig artificial support
- K11 how to establish ground anchors and their effectiveness
- K12 how to repair main skyline and wire ropes
- K13 the importance of offset working when the landing area is restricted
- K14 the advantages and disadvantages of quick release chokers and chokering aids and equipment
- K15 the types of skyline carriage
- K16 the implications of extracting different products
- K17 the different characteristics and techniques for extracting timber by cable crane with different systems of operation
- K18 the capabilities and limitations of the cable crane system used including weight and length of timber loaded
- K19 the implications of ground conditions, season and weather conditions, on extracting timber by cable crane
- K20 the advantages and disadvantages of uphill and downhill logging
- K21 the potential impacts of your work on the environment and how these can be minimised
- K22 your responsibilities under current environmental, health and safety legislation and codes of practice

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