

## Overview

This standard identifies the competences you need to carry out planned maintenance activities on rigging and lifting equipment, in accordance with approved procedures, health and safety requirements and Lifting Operations and Lifting Equipment Regulations (LOLER). You will be required to maintain a range of rigging/lifting equipment such as cranes, winches, powered lifting gear, lifting appliances, fibre and wire ropes, pulling equipment and rigging equipment, including blocks, shackles, and bottle screws. This will involve cleaning and where appropriate, lubricating and checking the equipment for faults or defects and removing and replacing faulty equipment. You will also be expected to carry out a range of checks and tests to confirm that the equipment is fit for service.

Your responsibilities will require you to comply with organisational policy and procedures for the maintenance activities undertaken and to report any problems with these activities or with the tools and equipment used that you cannot personally resolve, or are outside your permitted authority, to the relevant people. You will need to ensure that all the required maintenance documentation and rigging/lifting equipment registers are completed accurately and legibly. You will be expected to work to instructions, alone or in conjunction with others, taking personal responsibility for your own actions and for the quality and accuracy of the work that you carry out.

Your underpinning knowledge will be sufficient to provide a sound basis for your work and will provide an informed approach to applying maintenance procedures to rigging and lifting equipment. You will have an understanding of the rigging and lifting equipment, the inspection and maintenance procedures used and their application. You will know how the equipment functions, the purpose of the individual components and associated defects, in adequate depth to provide a sound basis for carrying out the maintenance activities and ensuring that the maintained equipment functions to the required standards.

You will understand the safety precautions required when carrying out the maintenance activities. You will be required to demonstrate safe working practices throughout and will understand your responsibility for taking the necessary safeguards to protect yourself and others in the workplace.

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## Performance criteria

### *You must be able to:*

1. work safely at all times, complying with health and safety and other relevant regulations, directives and guidelines
2. follow the relevant maintenance schedules to carry out the required work
3. carry out the maintenance activities within the limits of your personal authority
4. carry out the maintenance activities in the specified sequence and in an agreed time scale
5. report any instances where the maintenance activities cannot be fully met or where there are identified defects outside the planned schedule
6. complete relevant maintenance records accurately and pass them on to the appropriate person
7. dispose of waste materials in accordance with safe working practices and approved procedures

## Knowledge and understanding

### *You need to know and understand:*

1. the health and safety requirements of the area in which the maintenance activity is to take place, and the responsibility it places on you
2. an understanding of the Approved Code of Practice (ACOP) for safe use of lifting equipment, and Lifting Operations and Lifting Equipment Regulations (LOLER)
3. maintenance authorisation procedures that apply to the rigging and lifting equipment being maintained (such as permit to work, isolation permits, T cards, area closures, safety tags and other safe working practices)
4. the specific health and safety precautions to be applied during the maintenance activities and their effects on others
5. hazards associated with carrying out maintenance activities on rigging and lifting equipment (such as handling oils, greases, stored pressure/force, misuse of tools, using damaged or badly maintained tools and equipment, not following laid-down maintenance procedures) and how they can be minimised
6. the importance of wearing personal protective equipment (PPE) during the maintenance process
7. how to obtain and interpret specifications, manufacturers' manuals and other documents needed in the maintenance process
8. the procedure for obtaining replacement parts, materials and other consumables necessary for the maintenance
9. company policy on the repair/replacement of components during maintenance process
10. the specific requirements for the maintenance of rigging and lifting equipment, and the maintenance methods used
11. the range and aspects of lifting equipment to be maintained (such as cranes, winches, derricks)
12. the rigging/lifting equipment/accessories to be inspected and maintained (such as slings, chains, wires, swivels, blocks, shackles)
13. methods of checking that components are fit for purpose and how to identify defects and wear characteristics
14. the basic principles of how the equipment functions, the working purpose of individual units/components and how they interact
15. the maintenance procedures and preventive measures which are undertaken to minimise equipment failure and reduce the risk of accidents

16. how to record the maintenance of rigging and lifting equipment and how to complete the documentation

17.

how to handle and store rigging and lifting equipment correctly and how to carry out care and control maintenance during storage

18.

why tool/equipment control is critical and what to do if a tool or piece of equipment is unaccounted for on completion of the activities

19. the problems associated with the maintenance of the rigging and lifting equipment and how they can be overcome

20. the organisational procedure to be adopted for the safe disposal of waste of all types of materials

21. the extent of your own responsibility and whom you should report to if you have problems that you cannot resolve

## Scope/range related to performance criteria

1.

Carry out all of the following during the maintenance of the rigging and lifting equipment:

- 1.1 undertake the maintenance activities to cause minimal disruption to normal working
- 1.2 adhere to risk assessment, COSHH and other relevant safety standards
- 1.3 ensure that safe access and working arrangements for the maintenance area have been provided
- 1.4 check that the equipment is certified and compliant with current legislation (LOLER)
- 1.5 check that all equipment registers are up to date
- 1.6 ensure that all slings/wires are inspected before use
- 1.7 ensure that all lifting equipment is marked with the SWL (safe working load) or WLL (working load limit) application
- 1.8 ensure that company procedures are followed with regard to colour coding equipment

2.

Carry out checks, including securing points, lubricate as necessary and renew as required, fibre and/or wire rope running gear on three of the following:

- 2.1 cranes
- 2.2 derrick runners
- 2.3 accommodation ladders
- 2.4 winches
- 2.5 derrick topping lifts
- 2.6 derrick guys
- 2.7 lifeboat falls
- 2.8 other specific equipment

3.

Carry out all of the following checks and maintenance activities:

- 3.1 dismantle, by removing pin and sheaves and check if necessary
- 3.2 inspect the centre pin and sheaves for wear
- 3.3 renew the pin and sheaves, if required
- 3.4 lubricate, as required
- 3.5 re-assemble, ensuring that a locking nut and pin are fitted
- 3.6 check for free rotation of the swivel eye and lubricate as necessary
- 3.7 re-stamp the identity number and colour code on two of the following:
- 3.8 single sheave blocks
- 3.9 multi-sheave blocks
- 3.10 snatch blocks

4.

Check, clean, adjust and lubricate, as appropriate and renew as required, four of

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the following:

- 4.1 lifting hooks
- 4.2 bottle screws
- 4.3 skates and trolleys
- 4.4 shackles
- 4.5 chain blocks
- 4.6 fairlead rollers
- 4.7 blocks
- 4.8 hydraulic jacks
- 4.9 clamps

5.

Check, and renew as necessary, two of the following items of lifting equipment:

- 5.1 wire rope slings
- 5.2 single and multi-legged chain slings
- 5.3 wire rope grommets and strops
- 5.4 fibre rope and fibre slings

6.

Carry out all of the following maintenance activities on rigging and lifting equipment:

- 6.1 clean and grease the equipment
- 6.2 replace all 'lived' items (such as ropes, wires or chains)
- 6.3 set and adjust replaced components
- 6.4 remove any defective or damaged components
- 6.5 proof load testing
- 6.6 replace defective or damaged components

7.

Maintain lifting equipment, in compliance with all of the following standards:

- 7.1 organisational guidelines and codes of practice
- 7.2 equipment manufacturer's operation range
- 7.3 health and safety regulations (LOLER)

8.

Complete the relevant documentation for the maintenance activity, to include one of the following:

- 8.1 maintenance/renewal reports
- 8.2 defect reports
- 8.3 register of rigging/lifting equipment
- 8.4 repair documentation
- 8.5 test certificates
- 8.6 record of colour coding

## Behaviours

You will be able to apply the appropriate behaviours required in the workplace to meet the job profile and overall company objectives, such as:

- strong work ethic
- positive attitude
- team player
- dependability
- responsibility
- honesty
- integrity
- motivation
- commitment

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