
Overview

This standard covers the maintenance and repair of equipment and machines. Maintenance may be daily, periodic or seasonal. Maintenance may also be required due to equipment malfunction. You are required to be competent in relation to routine maintenance of equipment, and in relation to fault identification and rectification.

If you are working with chemicals or machinery you need to be appropriately trained or certificated in line with current legislation.

You must carry out your work in a way which will minimise any impact on the natural environment.

Performance criteria

You must be able to:

- P1 obtain the relevant information and authorisation for the maintenance procedure
- P2 identify the equipment and machines requiring maintenance
- P3 make sure the equipment and machines for maintenance are safe and completely isolated from the power source
- P4 keep the work area safe and in a condition suitable for the maintenance procedure
- P5 select and prepare tools and materials appropriate for the maintenance safely and effectively
- P6 complete the preparation of equipment and machines for maintenance in accordance with manufacturers' instructions
- P7 assess the maintenance requirements based on the condition and use of the equipment and machines
- P8 identify the relevant components for disassembly and re-assembly purposes
- P9 identify, remove and replace worn and damaged components in accordance with manufacturers' instructions
- P10 where replacement components are unavailable, safely store the equipment and machinery, and take the appropriate action to obtain the suitable replacements
- P11 prevent dangers from contamination and the escape of substances
- P12 carry out the maintenance in accordance with manufacturers' instructions, standard procedures and legislation
- P13 identify the need for expert advice and assistance and promptly refer to the appropriate person
- P14 carry out the correct tests on completion of the maintenance procedure to confirm the machinery or equipment is returned to good working order
- P15 deal with waste safely and correctly in accordance with legislation
- P16 ensure that stored equipment and machines are safe, secure and appropriately protected from any adverse conditions
- P17 clean, service and store maintenance tools safely and effectively

Knowledge and understanding

You need to know and understand:

- K1 circumstances in which authorisation must be obtained prior to maintenance
- K2 information required for the maintenance procedure and how it should be obtained
- K3 methods for preparing equipment and machines for maintenance
- K4 the dangers created by stored energy and how these should be responded to during the preparation stage
- K5 hazardous chemicals and substances which may be present and ways in which they should be dealt with
- K6 the type of tools, equipment and materials required for the maintenance procedure
- K7 the ways, and reasons, for making equipment and machinery for disassembly and re-assembly purposes
- K8 types of personal protective equipment and the reasons why it must be worn
- K9 the location of stored equipment and any associated components
- K10 methods for the diagnosis of faults and the identification of the root cause
- K11 routine maintenance requirements and why these must be adhered to
- K12 factors which impact on the value of continuing with the procedure such as the cost of repair, estimated working life, immediate needs for the equipment/machinery use
- K13 the reasons and methods for maintaining equipment and machines and the possible consequences of not maintaining equipment and machines
- K14 components that require periodic replacement and the reasons for this
- K15 procedures for obtaining replacement components
- K16 legislative requirements relating to the maintenance of equipment and machinery and the work area
- K17 deal with waste safely and correctly in accordance with legislation
- K18 safe and appropriate methods of storing equipment and machinery
- K19 how and where to obtain expert advice in relation to maintenance

Glossary

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines, customer requirements.

Instructions: verbal or written.

Stored energy: springs, belt tension, hydraulic pressure or electrical discharge.

Waste materials may include hazardous and non-hazardous materials.

Equipment and machines: manual and mechanical.

Developed by	Lantra
Version number	3.2
Date approved	March 2012
Indicative review date	March 2017
Validity	Current
Status	Original
Originating organisation	Lantra
Original URN	LANCU28
Relevant occupations	Agriculture; Horticulture; Animal Care; Farmer; Farm Worker
Suite	Agricultural Crop Production; Horticulture; Livestock Production
Key words	equipment; tools; machinery; repair