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## Overview

This standard identifies the competences you need to carry out preventative planned maintenance activities on services systems and equipment used in food and drink operations, including water distribution, waste water, environmental control, refrigeration, heating and ventilation, air conditioning and ventilation, gas/steam distribution, compressed air, process control, and instrumentation and control and sterilisation/decontamination equipment.

You will need to organise and carry out the maintenance activities to minimise down time, and to ensure that the maintained system performs at optimal level and functions to the required specification. Food and drink operations is a term used in this standard to cover the following sub sectors of Meat, Drinks, Confectionery, Fresh Produce, Bakery, Seafood and Dairy.

You will be able to work with minimal supervision, taking personal responsibility for your own actions, and for the quality and accuracy of the work that you carry out.

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## Performance criteria

*You must be able to:*

1. work safely at all times, complying with health and safety, environmental and other food and drink relevant regulations, directives and guidelines
2. obtain and use the correct issue of company and/or manufacturers drawings and maintenance documentation
3. plan and communicate the maintenance activities to cause minimal disruption to normal working
4. follow the relevant maintenance schedules to carry out the required work
5. carry out the maintenance activities in accordance with organisational procedures within the limits of your personal authority
6. isolate equipment (including mechanical, electricity, gas, steam, air or fluids) in accordance with organisational procedures
7. provide and maintain safe access and working arrangements for the maintenance area in accordance with organisational procedures
8. re-connect and return the system to service on completion of the maintenance activities
9. report any instances where the maintenance activities cannot be fully met or where there are identified defects outside the planned schedule
10. complete maintenance records and documentation in accordance with organisational requirements
11. 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 and environmental requirements of the area in which the maintenance activity is to take place, and the responsibility these requirements place on you not to compromise food safety
2. the isolation and lock-off procedure or permit-to-work procedure that applies to the system, including the critical control points
3. the tools to use for isolating equipment
4. the specific health and safety food and drink precautions to be applied during the maintenance activity, and their effects on others
5. the requirements of the British Retail Consortium (BRC) guidelines and standards in relationship to the maintenance activities
6. the specific requirements of your customer/client specifications in relationship to the maintenance activities
7. your responsibilities in relationship to Hazard Analysis and Critical Control Points (HACCP), Threat Assessment and Critical Control Points (TACCP), Vulnerability Assessment and Critical Control Points (VACCP) during the maintenance activities
8. what constitutes a hazardous voltage and how to recognise victims of electric shock
9. how to reduce the risks of a phase to earth shock (including insulated tools, rubber mating and isolating transformers)
10. the importance of wearing protective clothing and other appropriate safety equipment (PPE) during the maintenance activities, and where it may be obtained
11. hazards associated with carrying out maintenance activities on service systems (including handling fluids, stored pressure/force, electrical supplies, process controller interface, using damaged or badly maintained tools and equipment, not following laid-down maintenance procedures), and how to minimise these and reduce any risks
12. how to obtain and interpret drawings, charts, specifications, manufacturers' manuals, history/maintenance reports and other documents needed in the maintenance process
13. a basic understanding of the various planned maintenance schedules that are

generally used (including condition based maintenance, scheduled maintenance, and total preventative maintenance (TPM))

14. the basic principles of how the system functions, its operating sequence, the working purpose of individual units/components and how they interact
15. the principles of the equipment's design features for safe operation in a food or drink environment including minimising the chance of contaminants or foreign bodies in the final product
16. the equipment operating and control procedures, and how to apply them along with the planned maintenance procedures
17. the testing methods and procedures to be used to check that the system conforms within acceptable limits
18. how to make sensory checks (by sight, sound, smell, touch)
19. the procedure for obtaining replacement parts, materials and other consumables necessary for the maintenance, including their safe/hygienic storage before use
20. company policy on the repair/replacement of components during the maintenance process
21. methods for checking that components are fit for purpose, and the need to replace 'lived' or consumable items (including filters, seals, gaskets, belts, chains and bearings)
22. the processes in place to segregate the tools and equipment used into high or low risk areas
23. the checks required to ensure that all tools, materials and components are all accountable before operating the equipment
24. how to make adjustments to components and assemblies to ensure that they function correctly
25. the cleaning requirements/policies in place before returning the equipment into full operational production
26. the generation of maintenance documentation and/or reports following the maintenance activity
27. the problems that can occur during the planned maintenance activity, and how they can be overcome
28. the organisational procedure to be adopted for the safe disposal of waste of all types of materials including any spoilt food or drink products
29. the extent of your own authority and to whom you should report if you have

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problems that you cannot resolve

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