
Overview

This standard identifies the competences you need to carry out corrective maintenance activities on gas distribution systems and equipment used in food and drink operations, in accordance with approved procedures. You will be able to maintain a range of gas distribution systems, which will include mains, cylinder and tanked gases. This will involve dismantling, removing and replacing faulty or damaged components, including valves, couplings, motors, regulators, boosters, manifolds, storage devices, sensors, gaskets and seals, filters, gauges and indicators, electrical wiring, safety devices, pipework and hoses.

You will be able to apply a range of dismantling and assembly methods and techniques, including labelling of components to aid the assembly, dismantling components requiring pressure techniques, torque loading, and setting, aligning and adjusting components. 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.

Performance criteria

You must be able to:

1. work safely at all times, complying with health and safety, environmental and other relevant food and drink 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) 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. functionally test and adjust equipment to specification
10. report any instances where the maintenance activities cannot be fully met or where there are identified defects outside the planned schedule
11. complete maintenance records and documentation in accordance with organisational requirements
12. 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. the importance of wearing protective clothing and other appropriate safety equipment (PPE) during the maintenance process
9. hazards associated with carrying out maintenance activities on gas systems (including fire, explosion, respiratory problems, stored pressure, misuse of tools, using damaged or badly maintained tools and equipment, not following laid-down maintenance procedures), and how to minimise them and reduce any risks
10. how to obtain and interpret drawings, specifications, manufacturers' manuals and other documents needed in the maintenance process
11. the procedure for updating drawings and other documentation on gas distribution systems
12. the basic principles of how the equipment functions, its operation sequence, the working purpose of individual units/components and how they interact
13. 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
14. the procedure for obtaining replacement parts, materials and other consumables necessary for the maintenance, including their safe/hygienic storage

before use

15. the importance of following the correct procedures for purging and decommissioning components
16. company policy on the repair/replacement of components during the maintenance process
17. the sequence to be adopted for the dismantling/reassembly of various types of gas assemblies
18. methods of checking components are fit for purpose, how to identify defects and wear characteristics, and the need to replace 'lived' or consumable items (including filters, seals and gaskets)
19. how to make adjustments to components/assemblies to ensure they function correctly
20. the methods used to label and identify different pipework systems (including colour coding and warning signs)
21. the different types and applications of measuring and monitoring equipment used
22. how to check tools and equipment are free from damage or defects, are in a safe and usable condition, and are configured correctly for their intended purpose
23. the processes in place to segregate the tools and equipment used into high or low risk areas
24. the checks required to ensure that all tools, materials and components are all accountable before operating the equipment
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 equipment operating and control procedures to be applied during the maintenance activity
28. how to use lifting and handling equipment correctly and safely in the maintenance activity
29. the problems associated with the maintenance activity, and how they can be overcome
30. the organisational procedure to be adopted for the safe disposal of waste of all types of materials including any spoilt food or drink products
31. the extent of your own authority and to whom you should report if you have problems that you cannot resolve

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Maintain gas distribution systems and equipment used in food and drink operations



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