
Overview

This standard identifies the competences you need to carry out corrective maintenance activities on compressed air systems and equipment used in food and drink operations, in accordance with approved procedures. You will be able to maintain a range of compressed air equipment, which will include compressed air generation, distribution and control systems. This will involve dismantling, removing and replacing faulty or damaged components, including pumps, valves, couplings, receivers, driers, motors, regulators, compressor components, sensors, pipework and hoses, filters, electrical wiring, gaskets and seals.

You will be able to apply a range of dismantling and assembly methods and techniques, including proof marking/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, air, steam 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 specific health and safety food and drink precautions to be applied during the maintenance activity, and their effects on others
4. the requirements of the British Retail Consortium (BRC) guidelines and standards in relationship to the maintenance activities
5. the specific requirements of your customer/client specifications in relationship to the maintenance activities
6. 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
7. the importance of wearing protective clothing and other appropriate safety equipment (PPE) during the maintenance process
8. hazards associated with carrying out maintenance activities on compressed air equipment (including handling oils, greases, stored pressure/force/temperature, misuse of tools, using damaged or badly maintained tools and equipment, not following laid-down maintenance procedures), and how to minimise them to reduce any risks
9. how to obtain and interpret drawings, specifications, manufacturers' manuals and other documents needed in the maintenance process
10. the basic principles of how the equipment functions, its operation sequence, the working purpose of individual units/components and how they interact
11. 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
12. the procedure for obtaining replacement parts, materials and other consumables necessary for the maintenance, including their safe/hygienic storage before use
13. company policy on the repair/replacement of components during the

maintenance process

14. the sequence to be adopted for the dismantling/reassembly of various types of assemblies used on compressed air equipment

15. the methods and techniques used to dismantle/assemble compressed air equipment (including release of pressures/force, proof marking, extraction, pressing, alignment)

16. 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)

17. how to make adjustments to components/assemblies to ensure they function correctly

18. the use of measuring equipment (including micrometers, verniers, and other measuring devices)

19. 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

20. the processes in place to segregate the tools and equipment used into high or low risk areas

21. the checks required to ensure that all tools, materials and components are all accountable before operating the equipment

22. the cleaning requirements/policies in place before returning the equipment into full operational production

23. the generation of maintenance documentation and/or reports following the maintenance activity

24. the equipment operating and control procedures to be applied during the maintenance activity

25. how to use lifting and handling equipment correctly and safely in the maintenance activity

26. the problems associated with the maintenance activity, and how they can be overcome

27. the organisational procedure to be adopted for the safe disposal of waste of all types of materials including any spoilt food or drink products

28. 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 compressed air systems and equipment used in food and drink operations



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