

Overhauling marine pantry and galley equipment

Overview

This standard identifies the competences you need to carry out a complete overhaul of marine pantry and galley equipment, in accordance with approved procedures. The equipment to be overhauled will have been removed from the vessel or craft and the overhauling activities may take place in a shipyard or manufacturer's workshop. The marine pantry and galley equipment covered by this standard includes items such as dishwashers, potato peelers, roll and bun dividers, proving ovens, steam ovens, electric ovens, deep fat fryers, mixing machines, slicers, tenderisers, servery counters, salad bars, ready-use refrigeration, ice-cream makers, salt and fresh water supplies and other associated equipment.

The overhauling activities will involve stripping the equipment down to component level, cleaning and inspecting the components for wear, replacing all defective and 'lived' components and rebuilding the equipment in line with the overhauling specification. These activities will include making all necessary checks and adjustments to ensure that components are correctly replaced, positioned, aligned, adjusted, torque loaded, locked and fastened and that the correct sealants are used.

Your responsibilities will require you to comply with organisational policy and procedures for the overhauling 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 must ensure that all tools, equipment and materials used in the overhauling activities are removed from the work area on completion of the activities and that all necessary job/task documentation is completed accurately and legibly. You will be expected to work with a minimum of supervision, taking personal responsibility for your own actions and for the quality and accuracy of the work that you carry out.

Your underpinning knowledge will provide a good understanding of your work and will provide an informed approach to applying overhauling procedures to marine pantry and galley equipment. You will understand the dismantling/reassembly methods and 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 overhauling activities, correcting faults and ensuring that the repaired equipment functions to the required specification. In addition, you will have sufficient in-depth knowledge of these components to ensure that they are fit for purpose and meet the specifications, thus providing a sound basis for carrying out reassembly.

You will understand the safety precautions required when carrying out the overhauling activities associated with marine pantry and galley equipment, especially those for lifting and handling the equipment. 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, both ashore and afloat.

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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 documentation in line with organisational procedures*, *and pass them on to the appropriate person
7. dispose of waste materials in accordance with safe working practices and approved procedures

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Knowledge and understanding

You need to know and understand:

1. the health, safety and hygiene requirements of the area in which the overhauling activity is to take place and the responsibility they place on you
2. the isolation and lock-off procedures or permit-to-work procedure that applies
3. the specific health and safety precautions to be applied during the overhauling procedure and their effects on others
4. hazards associated with carrying out overhauling activities on marine pantry and galley equipment (such as handling oils and greases, release of stored pressure/force, misuse of tools, using damaged or badly maintained tools and equipment, not following laid-down overhauling procedures)
5. the importance of wearing protective clothing and other appropriate safety equipment (PPE) during overhaul
6. how to obtain and interpret drawings, specifications, manufacturers' manuals and other documents needed in the overhauling process
7. how to carry out currency/issue checks of the specifications you are working with
8. the procedure for obtaining replacement parts, materials and other consumables necessary for the overhaul
9. company policy on the repair/replacement of components during the overhauling process
10. the sequence to be adopted for the dismantling/reassembling of various types of assemblies
11. the methods and techniques used to dismantle/reassemble marine pantry and galley equipment (such as release of pressures/force, proof-marking, extraction, pressing, alignment)
12. methods of checking that components are fit for purpose, how to identify defects and wear characteristics and the need to replace 'lived' items (such as seals, belts and gaskets)
13. how to make adjustments to components/assemblies to ensure that they function correctly (such as setting working clearance, setting travel)
14. the basic principles of how the equipment functions, its operating sequence, the working purpose of individual units/components and how they interact
15. the identification, application, fitting and removal of different types of bearings (such as roller, ball, thrust, shell)
16. methods and techniques of fitting keys and splines
17. how to set the tension of belts correctly
18. the identification and application of different types of locking devices
19. the uses of measuring equipment (such as micrometers, verniers,

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- and other measuring devices)
- 20. the importance of making 'off-load' checks before running the equipment under power
- 21. how to check that tools and equipment are free from damage or defect, are in a safe and usable condition and are configured correctly for the intended purpose
- 22. the generation of documentation and/or reports following overhauling activity
- 23. the equipment operating and control procedures to be applied during the overhauling activity
- 24. how to use lifting and handling equipment in the overhauling activity
- 25. the problems associated with the marine overhauling activity and how they can be overcome
- 26. the organisational procedure to be adopted for the safe disposal of waste of all types of materials
- 27. the extent of your own authority and whom you should report to if you have a problem that you cannot resolve

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Scope/range related to performance criteria

1. Carry out all of the following during the overhaul of the marine pantry and galley equipment:
 1. use the correct issue of company and/or manufacturers' drawings and overhauling documentation
 2. adhere to risk assessment, COSHH and other relevant safety standards
 3. ensure the safe isolation of equipment (such as mechanical, electricity, gas, air or fluids, steam)
 4. provide safe access and working arrangements for the overhauling area
 5. use lifting and handling equipment, in accordance with health and safety guidelines and procedures
 6. carry out the overhauling activities using appropriate techniques and procedures
 7. comply with organisational requirements with regard to renewal or replacement of existing components
 8. ensure that the overhauled components meet the required specification
 9. ensure that there are no foreign objects left in the completed equipment

2. Carry out overhauling activities on one of the following types of marine pantry and galley:
 1. passenger
 2. crew
 3. captain's
 4. officers'
 5. wardroom

3. Carry out overhauling activities on six of the following items of marine pantry and galley equipment:
 1. dishwashers
 2. steam ovens
 3. servery counters
 4. potato peelers
 5. deep fat fryers
 6. salad bars
 7. roll and bun dividers
 8. mixing machines
 9. ready-use refrigeration
 10. proving ovens

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11. slicers
 12. ice-cream makers
 13. salt water supply
 14. tenderisers
 15. fresh water supplies
 16. garbage disposal system
 17. plumbing
 18. boiling coppers
 19. electric oven
 20. sinks
4. Carry out eighteen of the following activities, as applicable to the equipment being overhauled:
1. draining/emptying fluid reservoirs
 2. setting and adjusting components
 3. dismantling equipment to unit/sub-assembly level
 4. tightening fastenings to the required torque
 5. dismantling units to component level
 6. applying gaskets and sealant/adhesives
 7. proof-marking/labelling of components
 8. electrical bonding of components
 9. checking components for serviceability
 10. making 'off-load' checks before starting up
 11. replacing all 'lived' items (such as seals, bearings, gaskets)
 12. replenishing oils and greases
 13. replacing all damaged or defective components
 14. re-assembling components to sub-assembly level
 15. re-assembling sub-assemblies to unit level
 16. securing components using mechanical fasteners and threaded devices
 17. applying bolt locking methods (such as split pins, wire locking, lock nuts, stiff nuts, swage nuts)
 18. functionally testing the completed system
 19. other specific overhauling activity
5. Replace a range of marine pantry and galley equipment components, to include sixteen of the following:
1. shafts
 2. bearing housings
 3. liquid receiver
 4. couplings
 5. keys
 6. slides
 7. gears
 8. springs
 9. rollers
 10. valves (supply and drain)

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11. diaphragms
 12. static and dynamic seals and joints
 13. seats
 14. pulleys and belts
 15. housings
 16. roller or ball bearings
 17. levers and linkages
 18. structural components
 19. pipes and unions
 20. shims and packing
 21. guards
 22. resilient mount
 23. temperature controller
 24. wire thread inserts
 25. strainers and filters
 26. site glass
 27. door seals
 28. vent flaps
 29. dryer
 30. locking and retaining devices (such as circlips, pins)
 31. other specific components
6. Overhaul marine pantry and galley equipment, in compliance with one of the following standards:
1. BS or ISO standards and procedures
 2. customer (contractual) standards and requirements
 3. company standards and procedures
 4. specific system requirements
 5. recognised compliance agency/body's standards
 6. other accepted international standards
7. Complete the relevant documentation in line with organisational procedures, to include one of the following and pass it to the appropriate people:
1. job cards
 2. permit to work/formal risk assessment
 3. maintenance log or report
 4. chart of dimensional inspection
 5. other specific reporting method

Behaviours

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

