

Overview

This standard covers the manufacture of gums, jellies and pastilles. This includes measuring and mixing, cooking, depositing, stoving and demoulding as well as the packing and finishing process. It also covers the importance of checking the quality of the product.

This standard covers use of gelling agents in the manufacture of jellies, gums and pastilles. The gelling agent is a key ingredient and different agents are used in the production of different types of sweet confectionery.

It also covers the ingredients which are used in producing gums, jellies and pastilles. It covers why these ingredients are used and what happens to them during the cooking process. Also, why it is important to get the right balance of ingredients at the start of the process, and what the effect can be if this does not happen.

Performance criteria

You must be able to:

Prepare for producing gums, jellies and pastilles

1. prepare to produce gums, jellies and pastilles in accordance with the legal or regulatory requirements, the organisational health and safety, hygiene and environmental standards and instructions
2. check product specifications at the right time
3. set up equipment according to specification
4. check that material for producing gums, jellies and pastilles is available and fit for use
5. check that services meet requirements
6. start up the plant and check that it is running to specification
7. take action in response to operating problems
8. maintain communication in accordance with organisational requirements

Carry out production of gums, jellies and pastilles

9. carry out the production of gums, jellies and pastilles according to the legal or regulatory requirements, the organisational health and safety, hygiene and environmental standards and instructions
10. use equipment and check that it is supplied with materials and services
11. measure and mix product in accordance with specifications
12. cook the product using open-pan or continuous cooking method
13. check the quality of product during cooking in line with organisational requirements
14. deposit the product following cooking
15. undertake stoving in accordance with specifications
16. mould products according to organisational requirements
17. check the product is transferred to the next stage in the manufacturing operation
18. take action in response to operating problems within the limits of your responsibility
19. maintain communication in accordance with organisational requirements

Finish production of gums, jellies and pastilles

20. finish production of gums, jellies and pastilles in accordance with

- the legal or regulatory requirements, the organisational health and safety, hygiene and environmental standards and instructions
21. shut down equipment in accordance with organisational procedures
 22. deal with items that can be re-cycled or reworked
 23. dispose of waste in accordance with organisational requirements
 24. make equipment ready for future use after completion of the process
 25. maintain communication in accordance with organisational requirements
 26. complete all necessary documentation in accordance with organisational procedures

Knowledge and understanding

You need to know and understand:

1. the potential food safety risks, allergens and control procedures associated with manufacturing gum, jelly and pastille confectionery
2. what the process and main manufacturing stages are for producing jellies, gums and pastilles
3. what the different types of measuring and mixing processes are
4. what the critical quality checkpoints are in the measuring and mixing process
5. what the differences are between open-pan and continuous cooking
6. what the different types of cooker used are and the principles on which they work
7. what the critical quality checkpoints are during cooking
8. what the depositing, stoving and demoulding cycle is
9. what the critical quality checkpoints are during depositing, stoving and demoulding cycle
10. why starch is used for moulding and when starchless moulding might be used
11. what the different finishing processes are
12. what the causes of rework are
13. how rework can be incorporated back into the cooking process
14. how rework could be avoided
15. what the definition of a gelling agent is in the context of sweet confectionery manufacture
16. how molecules of a gelling agent rearrange when gelation occurs
17. what the five main gelling agents used in confectionery are and their sources
18. which gelling agents are used in which products, their different properties and the benefits of each
19. how gelling agents behave in these manufacturing stages
20. how and when gelling agents are quality checked
21. the consequences of using agents that do not comply with company specifications
22. the main ingredients in a gum, jelly and pastille and what function they have in the confectionery product
23. the basic recipes for gum, jelly and pastille making
24. the key differences in ingredients and eating experience between

gums, jellies and pastilles

25. how different cooking methods will affect recipes
26. why it is important that ingredients are carefully measured, and what the effect would be if this does not happen
27. what recording, reporting and communication is needed and how to carry this out and the reasons why it is important to do so
28. what action to take when the process specification is not met
29. how to carry out the necessary pre start checks and why it is important to do so
30. how to follow the start up procedures for conditioning and why it is important to do so
31. how to obtain the necessary resources for producing gum, jelly and pastille confectionery
32. how to follow work instructions and why it is important to do so
33. common sources of contamination during processing, how to avoid these and what might happen if this is not done
34. how to operate, regulate and shut down the relevant equipment
35. when it is necessary to seek assistance and how to seek it
36. how to follow the relevant process control procedures and why it is important to do so
37. what the limits of your own authority and competence are and why it is important to work within them
38. how to deal with items that can be re-cycled or re-worked
39. how to dispose of waste
40. how to make equipment ready for future use

Manufacture gum, jelly and pastille confectionery

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