

## Overview

This standard is about the conching process in chocolate manufacture. It covers the different processes used in the manufacturing of different types of chocolate as well as the different machinery used in the process.

This standard is about physically changing the properties of a product through organic or physical processes. It details the skills required to start up, run and shut down equipment, as well as being able to take action should operating problems occur. It is also about working to product specifications and production schedules. Complying with and understanding health and safety, food safety and organisational requirements are essential features of this standard.

This standard is for you if you require a basic knowledge of the conching process used to convert mixed and refined chocolate into a product ready for chocolate manufacture.

## Performance criteria

*You must be able to:*

### **Prepare for conching**

1. prepare for conching 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 conching 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 conching**

9. carry out conching in accordance with 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. achieve the required output to the correct specification
12. check the product is transferred to the next stage in the manufacturing operation
13. take action in response to operating problems within the limits of your responsibility
14. maintain communication in accordance with organisational requirements

### **Finish conching**

15. finish conching in accordance with the legal or regulatory requirements, the organisational health and safety, hygiene and environmental standards and instructions
16. check the specifications to time shut down
17. shut down equipment in accordance with organisational procedures
18. deal with items that can be re-cycled or reworked in accordance with organisational procedures

19. dispose of waste in line with organisational requirements
20. make equipment ready for future use after completion of the process
21. maintain communication in accordance with organisational requirements
22. complete all necessary documentation in line with organisational requirements

## Knowledge and understanding

*You need to know and understand:*

1. what the legal or regulatory requirements, the organisational health and safety, hygiene and environmental standards and instructions are and what may happen if they are not followed
2. the potential food safety risks and control procedures associated with chocolate conching processes
3. the purpose and importance of the conching process in chocolate manufacture
4. how to obtain and interpret the relevant process or specification
5. what the different types of conching machinery in common use are and how they operate
6. what materials to use and in what quantity
7. why the conching process is used in chocolate manufacture and its affects on the final product
8. the different conching processes applied and to which types of chocolate
9. what cold conching and hot conching are and the comparative effectiveness of these two processes on the finished product
10. why different temperatures and times are needed for conching different grades of chocolate
11. how the conching process is controlled
12. what recording, reporting and communication is needed and how to carry this out and the reasons why it is important to do so
13. what action to take when the process specification is not met
14. how to carry out the necessary pre start checks and why it is important to do so
15. how to follow the start up procedures for conching and why it is important to do so
16. how to follow work instructions and why it is important to do so
17. common sources of contamination during processing, how to avoid these and what might happen if this is not done
18. how to operate, regulate and shut down the relevant equipment
19. when it is necessary to seek assistance and how to seek it
20. how to follow the relevant process control procedures and why it is important to do so
21. what the limits of your own authority and competence are and why it is important to work within them
22. how to deal with items that can be re-cycled or re-worked

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- 23. how to dispose of waste
  - 24. how to make equipment ready for future use

## Conch chocolate

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