

## Control temperature reduction in food and drink operations

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### Overview

This standard is about the skills and knowledge needed for you to control temperature in food and drink operations and the associated supply chain.

This standard is about removing heat to achieve the required change in the condition of the product or to preserve the product state and/or quality. It details the skills required to start up, run and shut down equipment, as well as being able to take the appropriate 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 work in food and drink manufacture and/or supply operations and are involved in controlling temperature.

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**Performance criteria**

You must be able to:

**Prepare for temperature reduction**

1. operate to the legal or regulatory requirements, the organisational health and safety, hygiene and environmental standards and instructions when preparing for temperature reduction
2. check product specifications at the right time
3. set up equipment according to specification
4. check that material for temperature reduction 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 effective action in response to operating problems
8. maintain effective communication

**Carry out temperature reduction**

9. meet the legal or regulatory requirements, the organisational health and safety, hygiene and environmental standards and instructions when carrying out temperature reduction
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 effective action in response to operating problems within the limits of your responsibility
14. maintain effective communication

**Finish temperature reduction**

15. meet the legal or regulatory requirements, the organisational health and safety, hygiene and environmental standards and instructions when finishing temperature reduction
16. check the specifications to time shut down accurately
17. follow procedures to shut down equipment
18. deal with items that can be re-cycled or reworked
19. dispose of waste
20. make equipment ready for future use after completion of the process
21. maintain effective communication
22. complete all necessary documentation

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### 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 purpose and importance of temperature reduction
3. what equipment and tools to use and their correct condition
4. what materials to use and in what quantity
5. how to obtain and interpret the relevant process or ingredient specification
6. what recording, reporting and communication is needed and how to carry this out and the reasons why it is important to do so
7. what action to take when the process specification is not met
8. how to carry out the necessary pre start checks and why it is important to do so
9. how to follow the start up procedures for temperature reduction and why it is important to do so
10. how to obtain the necessary resources for temperature reduction
11. how to follow work instructions and why it is important to do so
12. common sources of contamination during processing, how to avoid these and what might happen if this is not done
13. how to operate, regulate and shut down the relevant equipment
14. when it is necessary to seek assistance and how to seek it
15. how to follow the relevant process control procedures and why it is important to do so
16. different ways to carry out temperature reduction
17. how to carry out temperature reduction in an efficient manner and why it is important to do so
18. what the limits of your own authority and competence are and why it is important to work within them
19. how to deal with items that can be re-cycled or re-worked
20. how to dispose of waste
21. how to make equipment ready for future use

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