

## Overview

This standard is about the smoking of fish or shellfish as part of a processing operation. It details the skills and knowledge required to set-up and maintain the smoking process. It is also about working to organisational product specifications and production schedules.

You must be able to prepare to smoke fish or shellfish. You must also be able to complete the smoking process. You must also know how to address problems and adhere to regulatory standards and standard operating procedures and be able to apply your skills and knowledge within food safety and health and safety regulations and any relevant international industry codes. You should also have an understanding of how the green circular economy supports repeated use of resources and products within your organisation.

This standard is for you if you work in the fish and shellfish industry and are involved in the smoking of fish or shellfish.

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## Performance criteria

### *You must be able to:*

1. obtain and interpret smoking specification
2. obtain tools and equipment required to support planned operations, including hygiene and personal protective equipment
3. prepare and maintain the smoking kiln and associated work area throughout the process
4. obtain sawdust and wood chippings and prepare method of smoke generation
5. obtain brined or salted fish or shellfish of specified quality
6. load kiln according to operating instructions
7. establish smoke generation according to kiln operating instructions
8. establish required smoke and temperature conditions within the kiln to achieve required smoking specification
9. monitor and maintain smoking process for smoking period according to operating instructions
10. remove fish or shellfish from kiln following conclusion of smoking process and transfer to the next production stage
11. handle fish or shellfish in a manner which maintains quality and condition
12. dispose of waste material according to organisational procedures and regulatory requirements
13. complete records according to organisational requirements

## Knowledge and understanding

### *You need to know and understand:*

1. what the organisational standards are and what may happen if they are not followed
2. how to obtain and apply the smoking specification
3. how variations in typical smoking specifications can impact on the process requirements of hot and cold smoking
4. what facilities, tools and equipment are required to smoke fish or shellfish
5. the different types of wood used in smoking and the different methods of generating smoke
6. how to assess that fish or shellfish is suitable and ready for smoking
7. how to prepare the facilities, tools and equipment required to smoke fish or shellfish
8. how to obtain sawdust and wood chippings and prepare the smoke generator
9. how to obtain brined or salted raw material that is ready for smoking
10. the role of brining and salting in preparation for smoking, including salt content, types of colour dye and colour coding
11. the importance of monitoring process conditions during smoking
12. how to monitor the smoking process and the impact variations in parameters will have on the process including temperature, humidity, flow rates
13. the operating characteristics of the smoking kiln used to smoke fish or shellfish
14. how smoking kilns operate including how they should be prepared and controlled
15. how to load fish or shellfish into the kiln for smoking
16. how smoked fish or shellfish should be handled, moved and stored during production
17. the methods used to hold fish or shellfish in smoking kiln
18. how to control the smoking process to ensure required quality and yield
19. the impact of handling and storage on the condition and quality of smoked product
20. how the smoking process can impact on yield and product quality
21. the operational requirements of the smoking process and how they are to be met
22. what the expected appearance and other characteristics of the smoked product are

Control the fish or shellfish smoking process

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- 23. what action to take when the process specification is not met
- 24. how to dispose of waste and why it is important to do so according to organisational procedures and regulatory requirements
- 25. how to prepare the facilities, tools and equipment for future use, upon completion of the smoking process
- 26. what recording, reporting and communication is needed and how to carry this out and the reasons why it is important to do so
- 27. the limits of your own authority and competence and why it is important to work within those limits

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Control the fish or shellfish smoking process

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