

Prepare and mix dough in bakery operations

Overview

This standard covers the skills and knowledge needed to prepare and mix dough, in craft, artisan or in-store bakery operations. Fermented dough typically includes that for bread and rolls, enriched, sour and laminated dough and dough for free-from products. Non-fermented dough typically includes that for sweet and savoury pastes, puff pastry, scones and biscuits.

You need to show and understand how you check and adjust the condition of ingredients required by a product specification or recipe and prepare for mixing. You will need to show and know how to mix ingredients using different types of mixers, adjust mixtures to meet final specifications and store dough ready for further processing. You need to know how to recognise and prevent contamination during mixing, know how to check and adjust dough consistencies where this is permitted, and recognise when dough are at the required specification. You need to understand the purpose of mixing, how blending takes place and how a dough structure is developed. You also need to know what factors effect mixing and how critical the mixing process is to product quality. Complying with and understanding health and safety, food safety, allergen and organisational requirements are essential features of this standard.

This standard is for you if you work in bakery operations, and can be applied in the context of fermented dough and non-fermented dough production.

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Performance criteria

You must be able to:

Prepare work area for mixing dough

1. obtain the correct instructions and specifications for mixing
2. check that weighed and measured ingredients are in the correct condition for use and make adjustments where this is necessary
3. isolate and report any substandard ingredients, obtain authority to source replacement supplies where this is necessary
4. check and report the safe availability of the mixing area and mixing equipment in accordance with procedures
5. comply with health, safety and food safety requirements

Mix dough ingredients

6. select the correct mixing equipment to meet mixing needs
7. mix ingredients in accordance with procedures
8. check the quality of dough against specification and report any inconsistency to the relevant personnel
9. use additional ingredients, and having sought advice, adjust the consistency of dough to specification where this is permitted
10. place dough in the correct condition and location, and label where required, ready for further processing
11. comply with health, safety, food safety, allergen and organisational requirements
12. carry out cleaning, lubrication and detection activities in accordance with procedures
13. operate within the limits of your own authority and capabilities

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Knowledge and understanding

You need to know and understand:

1. the standards of health and safety and food safety you are required to comply with, why it is important that you do so, and what might happen if standards are not met
2. why it is important to follow work instructions and product specifications or recipes throughout dough mixing
3. how to recognise and report dough that do not meet specification
4. how to seek advice and make mixing adjustments to dough, to take into account minor changes in ingredient performance, production timing and environmental conditions, necessary to keep a dough within specification
5. how to prevent dough contamination and cross contamination during mixing and what might happen if this is not done
6. what the lines and methods of effective communication are and why it is important to use them correctly
7. what the documentation requirements are and why it is important to meet them
8. personal protective clothing/equipment and working practices which are useful in combating the potentially harmful effects of dust and allergies resulting from breathing or skin contact with ingredients or dough
9. the purpose of the dough mixing process
10. the importance of loading ingredients at the correct temperatures, in the correct weights/volumes and in the correct order
11. what problems result from overloading the mixer, using an inappropriate mixer or selecting the incorrect mixer attachments
12. blending of ingredients that occurs during dough mixing that assist in developing a smooth homogenous mass and contributes to developing dough structure
13. the development of dough structure and gluten formation for long process dough processing methods; bulk fermentation process (BFP), sponge and dough process
14. the development of dough structure and gluten formation for short process dough processing methods; mechanical dough development in the Chorleywood Bread Process (CBP), activated dough development (ADD), no-time dough process
15. the function of key ingredients in dough making; flour improvers, oxidants, emulsifiers, salt, and their role in developing dough structure and quality
16. what corrective actions are appropriate to dealing with dough which does not conform to specification

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