

## 3220 Principles of mixing dough and process control

**SQA Unit Code**

**H3HG 04**

**Level 3**

**SCQF Level 6**

**SCQF Credit value 6**

### Unit Summary

This unit is about understanding dough mixing and the control of dough processing during mixing, in both non-automated and automated bakery production environments.

Fermented dough typically include bread, roll and stick dough, plain and fruited bun dough, doughnuts, base dough for Danish and Croissant.

You need to understand the purpose and importance of the mixing process for dough. You need to know how blending takes place during the mixing process, how a dough structure begins its development and how this is different depending upon the type of dough required. You also need to know what factors effect mixing and how critical the mixing process is to the shape and quality of the eventual product.

In order to be assessed as competent you must demonstrate to your assessor that you can consistently perform to the requirements set out below. Your performance evidence must include at least one observation by your assessor.

Evidence of knowledge and understanding should be collected during observation of performance in the workplace. Where it cannot be collected by observing performance, other assessment methods should be used.

You need to know and understand:

1. the purpose of the dough mixing process for dough
2. the importance of mixing to the required specifications for mixing equipment, recipe, ingredients, and process control
3. the importance of loading ingredients at the correct temperatures, in the correct weights/volumes and the correct order
4. what problems result from overloading the mixer, using an inappropriate mixer or selecting the incorrect mixer attachments
5. blending of ingredients that occurs during dough mixing that assist in developing a smooth homogenous mass and contributes to developing dough structure
6. the development of dough structure and gluten formation for long process dough processing methods; bulk fermentation process (BFP), sponge and dough process
7. 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
8. the function of key ingredients in dough making; flour improvers, oxidants, emulsifiers, salt, and their role in developing dough structure and quality
9. how to recognise a dough which does not conforming to specification

10. what corrective actions are appropriate to dealing with dough which does not conform to specification

Evidence of performance may employ examples of the following assessment:

- observation
- written and oral questioning;
- evidence from company systems (e.g. Food Safety Management System)
- reviewing the outcomes of work
- checking any records of documents completed
- checking accounts of work that the candidate or others have written