



ADVANCED MILLING DIPLOMA

in association with

Campden BRI and the Buhler Training Centre

Our aim is:

“To equip a new generation of flour millers with the practical competence and understanding ...

to enable and inspire them ...

to lead the development of a milling industry fit for the 21st century – profitable, sustainable, adaptable.”

Learning Objectives

UNIT 1 – TECHNICAL

“On completion of the Unit: given the requirements of the finished product, the candidate will be able to decide on the ideal wheat and process to be used in its production.”

The candidate will be able to explain:

how wheat’s characteristics (variety, protein quality/quantity, Hagberg etc) can affect functionality and quality of flour;

the impact of wheat preparation on milling performance and flour characteristics;

flour analysis methods – their interpretation in relation to flour application and their suitability for particular baking processes;

the link between milling methods and baked product quality;

the effects of various flour additives and treatments on baked product quality.

and be competent in:

wheat selection for specific end-uses, laboratory mill adjustment, selected flour analyses relevant to finished products and have practical experience in test baking.

UNIT 2 – PRODUCTION/OPERATIONS

“On completion of the Unit: the candidate will be able to present alternative strategies for adapting the milling process in response to particular wheat quality characteristics in order to produce a consistent flour to meet customer specification.”

The candidate will be able to explain:

flowsheet design and the interrelationship between various pieces of equipment and processes, including surface allocation and air to cloth ratio;

the principles of particle size distribution; pneumatics and aspiration; and mill performance;

the effects on mill balance of machine adjustment.

to be competent in the adjustment of:

wheat preparation machinery and in optimisation of the process;

rolls (feed gates, scrapers) and to understand the impact of varying roll dispositions; and

purifiers (feed gates, air valves, flaps) and to understand the impact of adjustment on flour quality and performance.

UNIT 3 – PROJECTS

“On completion of the Unit: the candidate will be able to conduct meaningful in-house studies that improve the performance of their business.”

Through the completion of an agreed research project into an area of technical, operational or technological importance to the milling industry, the candidate will be competent in research skills that facilitate:

the identification of promising areas for investigation within the business;

the effective design of experimental investigations;

the meaningful analysis, interpretation and synthesis of information derived from these investigations and from external sources; and

the communication of research results to relevant stakeholders via written reports and oral presentations.