



Technical Paper

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PART-BAKED PRODUCTS AND FROZEN DOUGH

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PART-BAKED PRODUCTS AND FROZEN DOUGH

The manufacture of bread from scratch in even modest quantities requires significant space, investment in equipment and skilled human resources. In some locations this combination may be difficult to set-up and deliver but the appeal of a 'local' bakery is still considerable to be desirable. Small bakeries have become part of the modern retail environment and are to be found not only in supermarkets (as in-store bakeries) and large retail complexes but also in travel locations, fuel stations and convenience stores. A large proportion of the products offered in such locations are not made 'on-site' but have been manufactured elsewhere and are brought to the site for completion of the baking process.

The two major forms in which these pre-manufactured products are supplied are as frozen dough and part-baked, with the latter form often involving deep freezing. Both manufacturing processes are based on interrupting the normal flow involved with scratch baking and seek to deliver the same qualities as a scratch product when the baking process is completed at a later date. While both forms of pre-manufactured products provide convenient opportunities for small-scale, local baking, both approaches need to be carefully managed from the start to the completion of the operation in order to deliver the required product qualities.

The choice of which technology to use depends on many factors including those related to the retail objectives, available space for storage and bake-off equipment, and the product range which is to be offered to consumers. Both technologies provide the opportunity to offer a wide range of different products, including many specialities, in small, manageable quantities to match consumer demand and so limit wastage.

The principal difference between the two technologies revolves around the management of yeast activity. In the case of frozen dough there is a primary need to not only limit yeast activity before freezing but to preserve it during storage so that it can be revitalised successfully when the dough is defrosted. In the case of part-baked product, the process continues until yeast activity has ceased but does not proceed as far as yielding a product with all of the attributes of a fully baked, scratch product. Inevitably there are significant differences in the technologies employed to deliver the intermediate product and its subsequent treatment at the point of bake-off.

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The Manufacture of Part-Baked Products

Part-baked products present ready-to-use bakery products in a relatively convenient form. They may be stored under ambient conditions, but this tends to limit their practical shelf-life because of mould growth, and so gas-packed or frozen units are more commonly available. A particular advantage of part-baked products is that they can be baked in small batches and so more closely matched to consumer demands in retail environment. Accordingly, commercial bake-off applications are widespread and include in-store bakers, convenience stores, transport and fuel stations, and in catering and leisure contexts. Ready-to-bake products may also be retailed direct to consumers for home bake-off and will commonly be available in a gas flushed pack.



Petit pain for home baking



Petit pain before (right) and after (left) bake-off