

# TASTIER BREAD THE NATURAL WAY



## HOW TO OPTIMIZE DOUGH QUALITY PRIOR TO THE KNEADING PROCESS

Bread production is an art, and its secret is naturalness. Good bread contains no industrial additives. All it consists of is cereals, water, salt, yeast, and above all, pre-doughs that give it a characteristic flavor. Therefore, the challenge of modern baked goods production is the naturalness of the products.

Thanks to pre-dough systems, consumers can consciously enjoy tasty, natural bakery products. This applies worldwide for all sorts of creative combinations to produce unrivaled bakery products. Pre-dough can be used to optimize a wide variety of dough types. From pizza dough to brioche and croissants to gluten-free bread, there are almost no limits to the potential culinary applications.

In addition to variety and taste, pre-dough technologies also enable various forms of further processing as well as packaging. They can also secure a longer shelf life.

## DEFINITION OF PRE-DOUGH

Generally, pre-dough production belongs to the group of food processes named "fermentation."

- Pre-dough is made from milled cereal products.
- Cereal products come from grinding mills and machines, which can be combined with other raw products, such as seeds.
- Pre-dough is made before the main dough.
- It is produced under thermic and/or microbiological conditions for a specific length of time to keep functional.

Many benefits go hand in hand with pre-dough technologies, including:

## CLEAN LABEL

Besides the avoidance of certain ingredients, some of which were declared with E-numbers or sounded like "chemicals," the term "clean label" is often used when the list of ingredients is reduced. Many clean label requirements can be met by pre-dough technologies, for example, in terms of eliminating the need for pre-mixes as well as reducing the use of preservatives.

## COST REDUCTION

In addition to saving space and time, production with pre-dough can significantly reduce the following cost factors: yeast, premixes and improvers. Ready-to-use sourdoughs can be completely replaced as well. Furthermore, pre-dough also allows the re-use of waste dough and of unsaleable bread.

## IMPROVED SHELF LIFE

An optimally matched integration of pre-dough into the production process enables the extension of shelf life, freshness and mold retardation of the baked goods. Additionally, the structure and taste after frozen processes are significantly improved. A beneficial side effect is sustainability: reduction of logistics costs and fewer waste products result by using pre-dough.



Another smart solution within pre-dough technology for longer freshness and great taste is **completely natural grain cooking**. The sophisticated grain cooking process delivers the ideal synergy between mechanical equipment and biotechnology for the best results in food production. It ensures optimal product quality of the baked goods for customers.

Grain cooking involves heating flour and various grains with a large amount of water until you get a gelatinized hot soaker (e.g. "Kochstück"). By adding it to the baking ingredients, the natural freshness of the products extends, and the dough yield gets higher.

By using grain-cooking processes, bakeries get significantly extended natural freshness and frozen storage stability of the baked goods; a reduction or waiver of premixes, bread improvers and preservatives; and, of course, a cost reduction (yeast, flour, logistics).

## IS YOUR PRE-DOUGH PRODUCTION READY FOR TASTIER BREAD?

DIOSNA is the pioneer of pre-doughs and sourdoughs from small to large scale, creating optimum conditions for producing quality goods on the downstream plant. Its pre-dough solutions offer everything from well-engineered artisan systems to individually configurable industrial systems with fully automatic process controls. Besides sophisticated equipment, DIOSNA offers the necessary technical know-how, and with DIOStart starter cultures, it also provides the necessary basis for excellent pre-dough processes.

DIOSNA's core pre-dough technologies include:

- Rye sourdoughs, from single-stage to multistage
- Wheat sourdoughs, from mild to aromatically acidic
- Yeast sponge, from neutral to yeasty
- AromaStück® and Kochstück, from long-lasting freshness to tender bite

VISIT [DIOSNA.COM](https://www.diosna.com) TO UPGRADE YOUR PRE-DOUGH PRODUCTION NOW