

DymoMix®

It's all about hydration:

# THE TECHNOLOGY FOR THE BEST DOUGH

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# DymoMix® – YOUR GUARANTEE FOR PREMIUM DOUGH



The DymoMix® works extremely quickly and dust-free, producing doughs with a homogeneous consistency. Flour or other dry materials are hydrated with liquids in seconds, exposed to air, and mixed before being introduced into the actual dough-making process. This produces doughs that can be used immediately or fed to the batch kneader or continuous kneader.

The main focus of the DymoMix® is on pasta doughs, waffle doughs and starters. It is suitable for both medium and large industrial plants.

## EFFECTIVE AND INEXPENSIVE

The DymoMix® produces a dough that can be kneaded immediately, thus eliminating the mixing process in batch operation. The result: Much more dough can be processed than before. This innovative process means significant energy and cost savings can be achieved throughout the manufacturing process.

## VERSATILE DESIGN

The DymoMix® can handle all common types of dough with varying hydration content (from TA 110 to 250). In addition to flour, other dry materials such as premixes can also be used. Water as well as other flowable solutions can be used for hydration. The hydration quantity can be easily changed during operation.

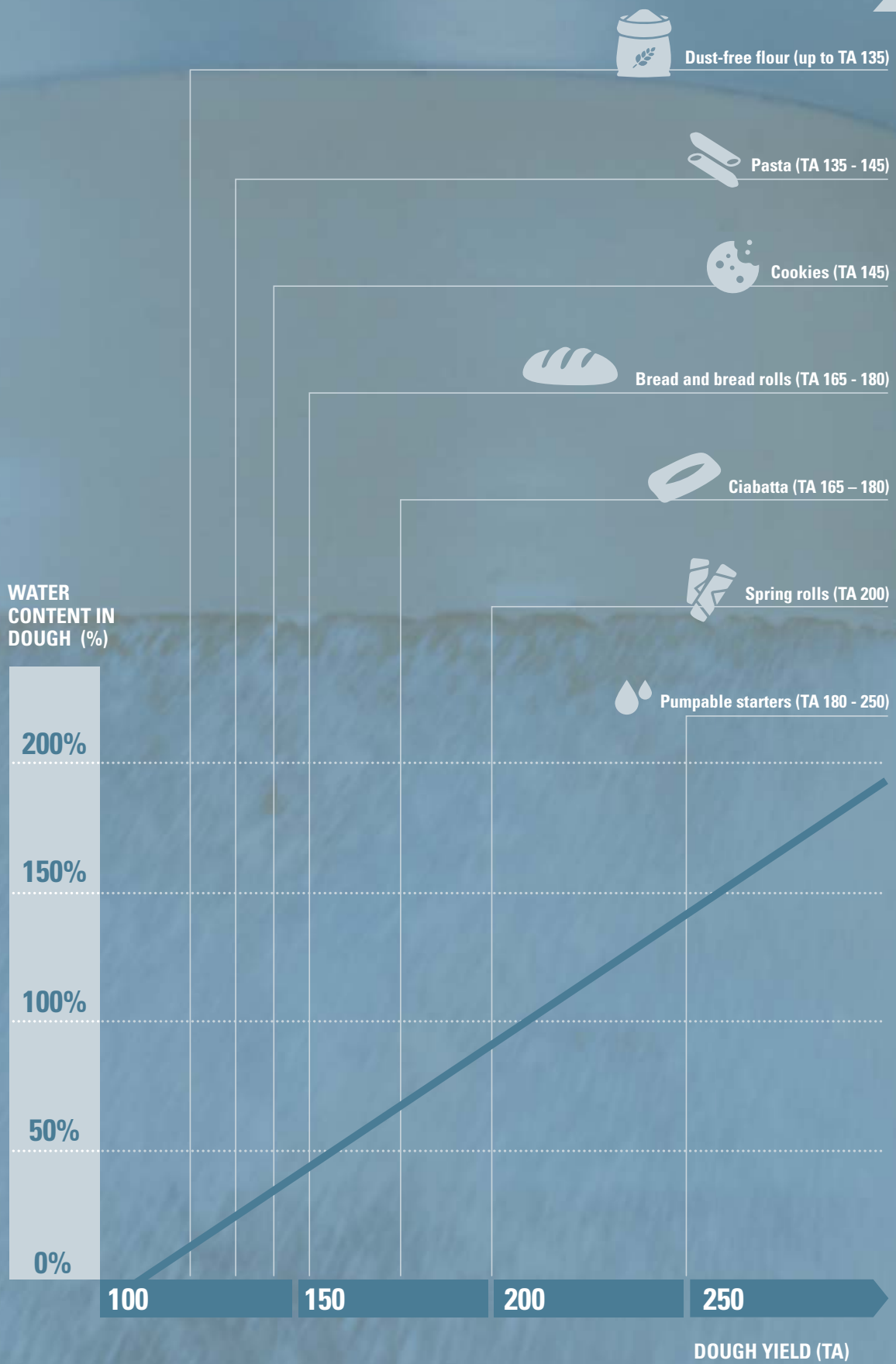
## PRODUCT-FRIENDLY HYDRATION

With the DymoMix®, hydration does not take place via high pressure, but via centrifugal force. This makes it possible to produce an excellent product, such as a high-quality dry pasta dough (TA 136), which can be processed immediately, even with minimal hydration input.

## RUNS LONGER - LESS STANDSTILL

The DymoMix® is a marathon runner. It has a very robust gearbox and can therefore deliver full power around the clock - for perfect doughs. At the same time, the system can be cleaned very easily and quickly (WIP). This means even less downtime and thus even greater effectiveness.







## INNOVATION CREATES QUALITY

### Perfect solution for premixed doughs

The DymoMix® hydration system works as a premixer and is used as a supplementary production step between the dosing and kneading of doughs or other further processing steps. Since it can handle high amounts of liquid, it is the ideal solution for the production of premixed doughs. The DymoMix® is very small and space-saving and can be easily retrofitted to existing CODOS® systems.

### The nozzle for ideal hydration

Hydration takes place through a specially developed nozzle in the rotating shaft of the unit. It creates a liquid film through which the powdered particles must pass and are thus hydrated. Thanks to hydration by centrifugal force, a high-quality product can be produced even at low added moisture, which can be processed immediately without intermediate steps.





## Highly flexible

In addition to batching, the DymoMix® can also be used for agglomeration in the fine bakery sector - if it is equipped with the optional double jacket heating. Even hard fats can be processed this way. This allows solids and liquids, such as powdered sugar and melted butter, to be continuously mixed homogeneously and processed quickly, cleanly, and dust-free.

## State-of-the-art efficiency due to reduced kneading time

After premixing, the doughs are transferred to batch or continuous kneading systems, whose kneading time can be reduced by approx. 40%. Alternatively, continuous dough systems can be fed, where mixing time no longer has to be taken into account. Between 400 and 6,000 kg per hour can be processed in this way – an output that is currently unmatched on the market! Existing kneading systems operating in batches can thus be utilized almost to double their capacity.

## DymoMix® replaces continuous mixer

With the DymoMix®, continuously operating kneading systems can be optimized in performance and made more cost-effective overall. Under certain conditions, it is even possible to replace the first stage (mixer) in the CODOS® system, which contains both a mixer and a kneader - as has already been done with great success in projects for the production of yeast dough and cookie dough.

## DymoMix®: Dough-making at its best

The premixer is suitable for a wide range of products in the food sector:

### **BAKED GOODS**

- Fresh bakery products (bread, rolls, frozen goods, etc.)
- Extended shelf-life bakery products (cookies, pastries, etc.)

### **PASTA**

- Pasta
- Filled pastries

### **CONFECTIONARY**

- Chocolate cream
- Granola bars
- Icing and fillings
- Ice cream

### **STARCH**

- Proteins
- Meat substitutes
- Milk substitutes
- Egg substitutes

### **PET FOOD**





## CONTINUOUS PRODUCTION OF HIGH-QUALITY DOUGHS: **THE NEW MODULAR CODOS® KNEADING SYSTEM**

**Integrated into the CODOS® system, the DymoMix® completes an exceptionally effective kneading system. In addition to the DymoMix® premixer, the complete system consists of a CODOS® tower and a CODOS® NT kneader.**

### The CODOS® Tower: Doses liquids and solids

The CODOS® tower consists of a reservoir, a differential weigh feeder located below it, and a liquid feeder. The first two components ensure that the powdered raw materials are continuously and consistently metered. In the bakery, this involves flour; in the starch industry, it involves starch, proteins, dextrans, etc. Together with the powdered raw materials, the liquids are also continuously metered. This is ensured by the third component of the tower - liquid dosing for tempered water, yeast suspension,

salt solution or similar. The aggregates and instruments are summarized on the liquid panels on the CODOS® tower. The panels are also modular and can be easily replaced thanks to their easy accessibility on the tower.

### CODOS® NT: Gentle kneading for optimum dough quality

The dough is formed in the horizontally operating, continuous CODOS® NT kneader. The energy input required for kneading is provided by helical, intermeshing twin shafts. Kneading forms the gluten structure of the wheat dough. Bow-shaped kneading attachments on the twin shafts ensure gentle kneading without cutting the dough. The energy input required in each case and the dwell time of the dough can be controlled via the speed of the kneading shafts. The double-walled trough construction can be heated as well as cooled and thus always maintains the desired, pre-set dough temperature.

## CODOS® SYSTEM

### DYMO MIX®



### The DymoMix®: A perfect dough thanks to special hydration

The DymoMix® is a hydration system. In the CODOS® system, it is used as a premixer and as a supplementary production step between dosing and kneading of doughs or other further processing steps. Powdered components are hydrated with water or oil, so that a homogeneous mixture is immediately formed. This creates doughs of perfect quality. The special oil/water hydration takes place through a nozzle in the rotating shaft of the unit. A liquid film is formed, which the powdered particles must pass through - and thus become hydrated. Unlike conventional systems, this does not involve the use of a high-pressure water jet. Even with low hydration input, this allows a high-quality product to be produced that can be processed immediately without any intermediate steps.

### CODOS® System: Your customized plant

To ensure that your investment pays off quickly, we support you with our engineering expertise right from the start. Benefit from our simulation software or test the design of your plant in our technical center or at your site. In this way, you can individually adapt the system to your requirements.



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