

# FLOUR COOLING SYSTEM



Centralized system for the gradual and automatic reaching of set temperature, based on the direct exchange of pre-cooled air through a fluidized bed.

**Takes the flour as low as 10-12 °C**

**Progressive cooling system**

**Constant temperature through the whole year**

**Direct exchange of air in fluidized bed**

**No cooling agents**

**No manual intervention**

**Thermal exchange on every flour particle**

**High stability, precision, and homogeneity in the dough**

Correct and linear management of the dough temperature is essential in bread-making and similar processes. Seasonal changes cause considerable variations to the temperatures of work areas and raw materials, impacting leavening times and creating unevenness in the finished product. CEPI offers a centralized cooling system for a gradual and automatic reaching of set temperature, based on the direct exchange of pre-cooled air through a fluidized bed. With constant temperature of flour in the mix the final product is constant all year round.

With an increased exchange capacity and a bigger air flux, our system has been recently perfected to automatically and independently take the flour to the temperature required for further processing. Flour can go as low as 10-12 °C with a difference between entry and exit temperature up to 20 °C, making it a highly rational and accurate system that removes the need for cooling agents such as cooled water or ice, and the constant manual intervention they require.

Cooling agents not only add unnecessary costs to your process but lead to instant decreases and unstable temperatures through time. The progressive cooling of the CEPI system guarantees higher stability and precision, and homogeneity in the dough with thermal exchange acting directly on every flour particle. CEPI cooling system leads to standardization of production and finished product with diminished costs and reduction of human error.

Like all our technologies, it is highly versatile with various options for dimension and thermal capacity. It is a modular system based on the specific cooling needs and consumption rates of each installation, and is designed to ensure full hygiene and safety and in compliance with all relevant international standards including ATEX legislation. There is no exchanger on the conveying lines and therefore no clogging in the pipes and no loss of time and resources to pure and restore the lines. CEPI cooling system is fully integrated with the storing, conveying and metering installation and provided with weighing in real time, integrated automation and full traceability.

## INDUSTRIES



BAKERY



CONFECTIONERY



PASTA & CEREALS



BABY FOOD



FUNCTIONAL FOOD

## AUTOMATION



OPERATOR  
PANEL



PROCESS  
CONTROL



TRACEABILITY

Flour can go as low as 10-12 °C

Gradual and automatic reaching of set temperature

Centralized system and feeding silo from the line

Flexible and modular with variable dimension: 2000x2000 & 2500x2500 mm

Fluidized bed with variable thermal capacity

No cooling agents such as water or ice

No constant manual intervention required

Air heat-exchanger

Air depuration filter

Higher stability, precision and homogeneity in the dough

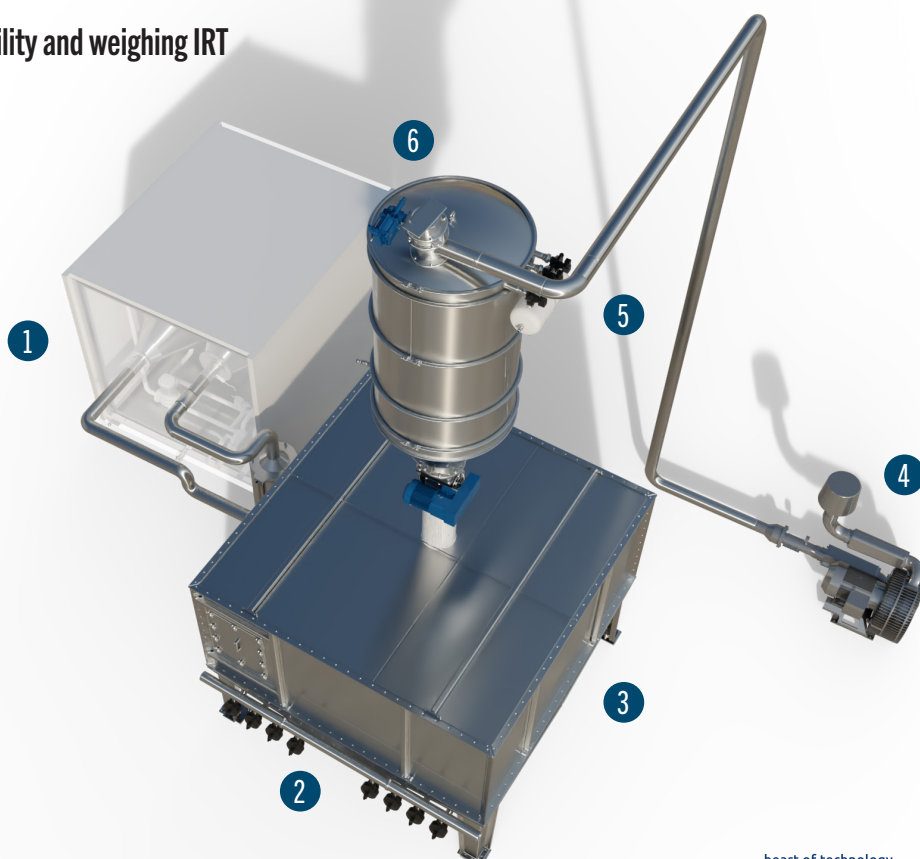
Standardization of production and finished product

Diminished costs

Reduction of human error

Integrated automation, full traceability and weighing IRT

- 1 Air exchanger
- 2 Fluidized bed
- 3 Modular storage silo
- 4 Blower
- 5 Feeding hopper
- 6 Air depuration filter



Special applications are the ingredient management technologies that CEPI developed to complete storage, transport and dosing operations. Our goal is to offer a turnkey solution that covers the entire process from the input of the ingredients to their dosing in an organic way. *Our motto is: if your process needs it, we can do it. If we cannot do it yet, we will develop it, just for you.* Our solutions evolve to match each individual demand from the manufacturer side, leading to unparalleled technological range:

**Fermentation technology**

**Flour cooling**

**Sugar mill**

**Bread and biscuit rework**

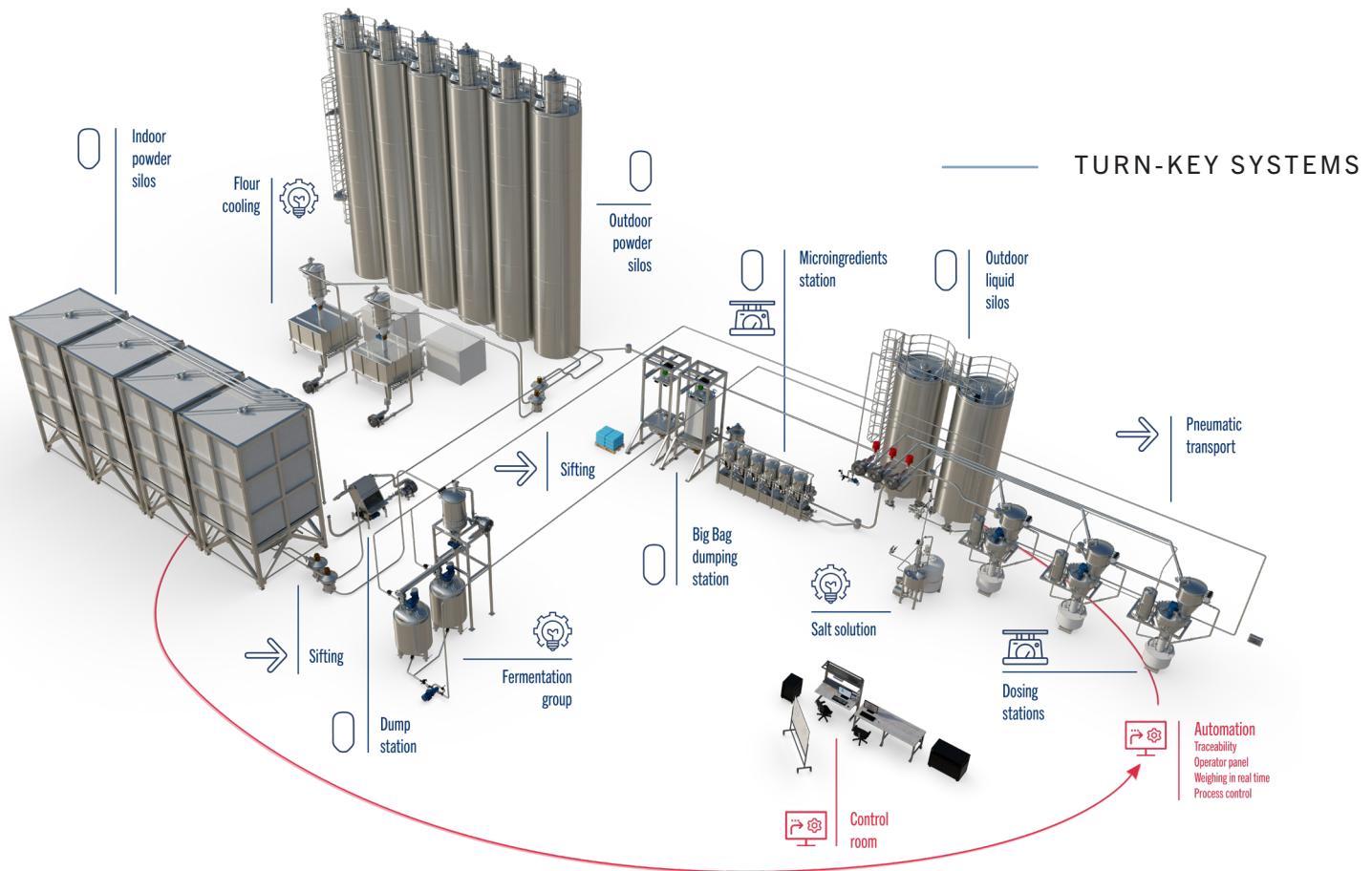
**Production, storage and dosing of invert sugar**

**Production, storage and dosing of salt solution**

**Fat tanks**

**Cold fat dosing in paste form**

**Heat treatment**



CEPI designs, manufactures and commissions bulk-handling systems for the storage, transport and dosing of raw materials, as well as fully integrated automation and technologies to complete all food production processes. Since 1985, we have worked with the most important companies from all sectors of food manufacturing.



STORAGE



TRANSPORT



DOSING



SPECIAL



AUTOMATION