

# 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

as low as 10-12 °C

Progressive cooling system

Constant temperature through the whole year

Direct exchange of air in fluidized bed

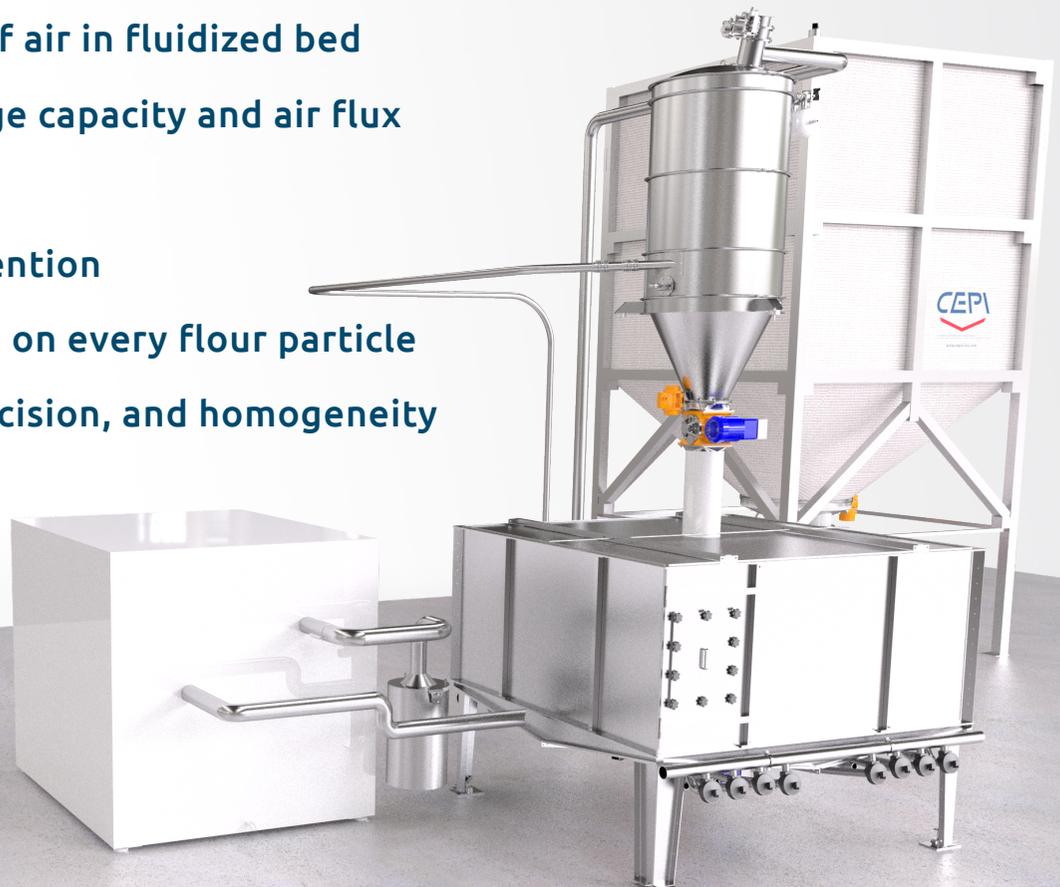
Increased exchange capacity and air flux

No cooling agents

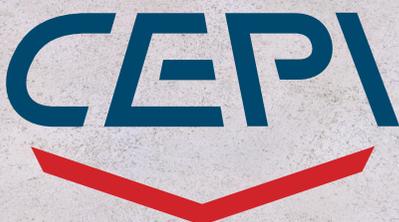
No manual intervention

Thermal exchange on every flour particle

High stability, precision, and homogeneity in the dough



heart of technology



Bulk-handling systems  
for the food industry since 1985

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Via G Ansaldo 15 47122 Forlì FC Italy \_ T +390543940514 \_ [cepi@cepisilos.com](mailto:cepi@cepisilos.com)



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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.



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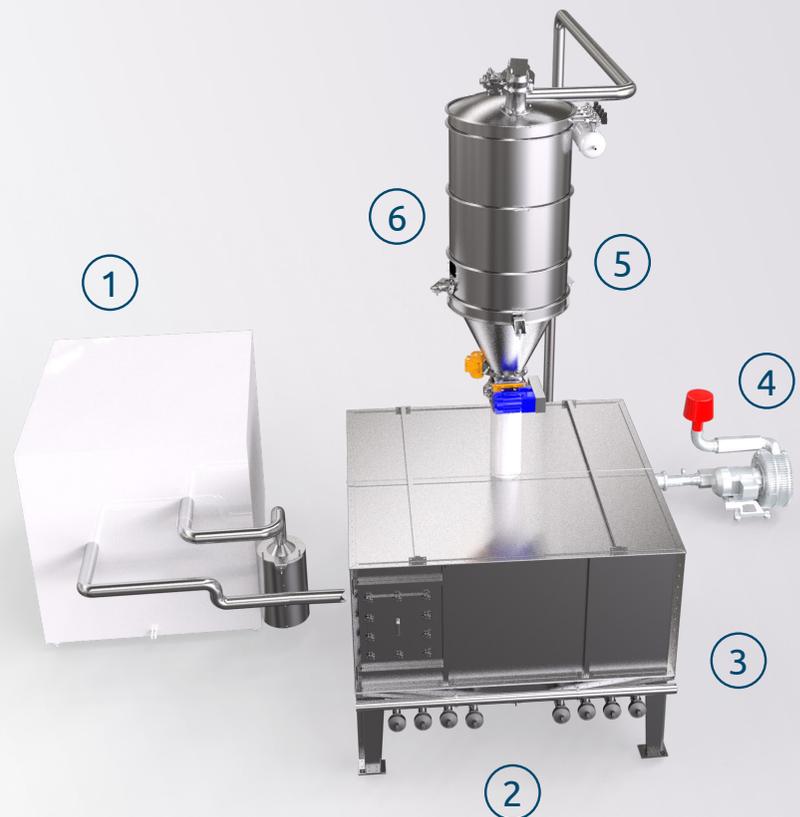
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## Features & Technologies

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 in real time

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

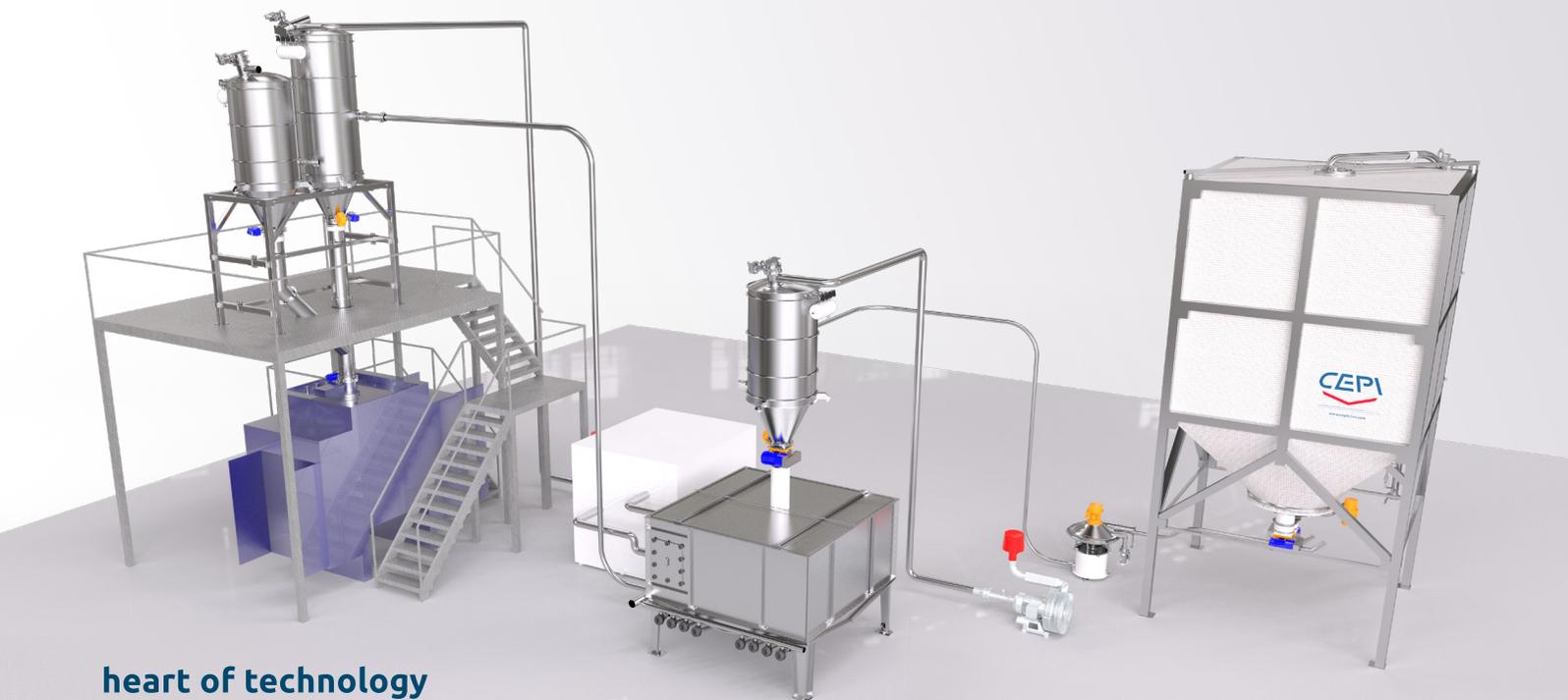


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Example of flour cooling installation with flour stored in Trevira fabric indoor silo, cooled in CEPI system and later conveyed to metering station



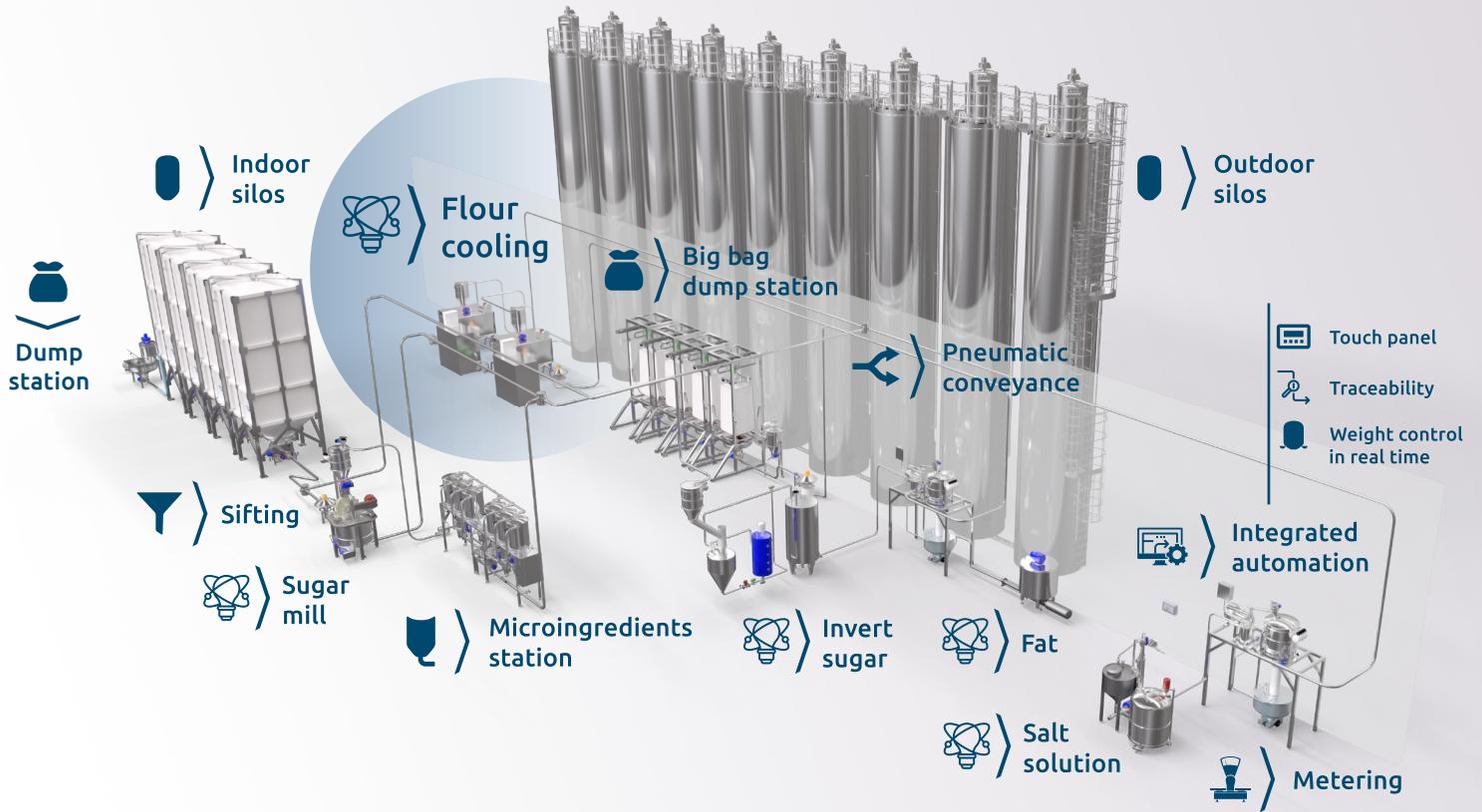
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Via G Ansaldo 15 47122 Forlì FC Italy \_ T +390543940514 \_ [cepi@cepilos.com](mailto:cepi@cepilos.com)



**CEPI Spa**  
 Via G Ansaldo 15  
 47122 Forlì FC Italy  
 T +390543940514  
 F +390543940534  
 cepi@cepisilos.com  
 www.cepisilos.com  
 f in .. cepisilos

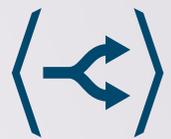


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