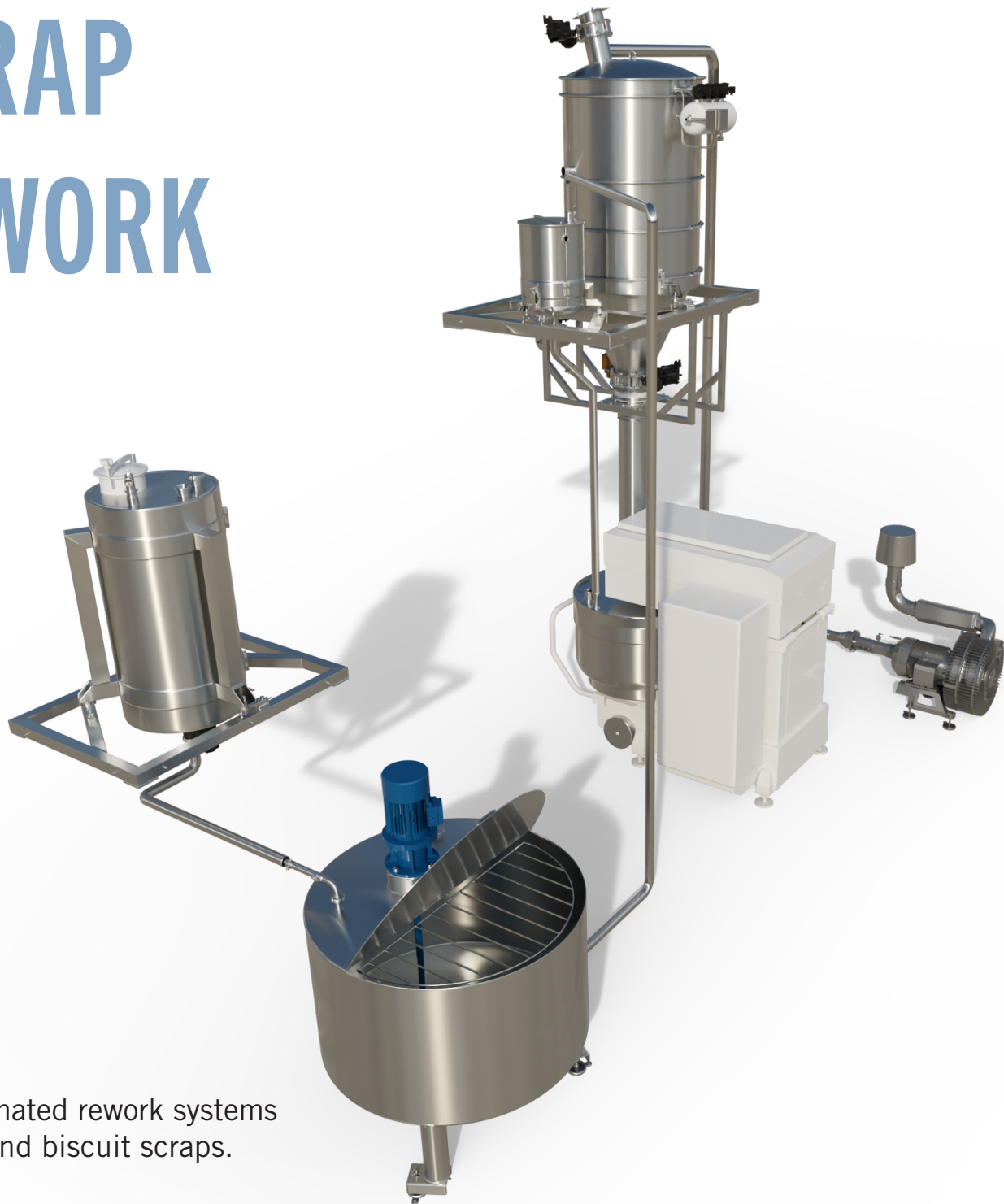


# SCRAP REWORK



Fully automated rework systems  
for bread and biscuit scraps.

**Dry and liquid rework**

**Reduces material consumptions and waste**

**Fully automated**

**No loss of food properties**

Fully automated dry rework systems for bread and similar products such as toasts, loaves and sandwiches. The final product can be fed back into production in place of flour, sold, used for animal feed, or worked again to produce croutons or bread crumbs.

Dry biscuit rework systems are also completely automated and re-use the powders on the production line. Product can be put directly on the conveying line.

Liquid biscuit rework system for the recovery of sandwich biscuit scraps. Scraps are broken and mixed with liquid inside a stainless steel tank with agitator, creating an emulsion that can be dosed directly on mixer to produce more biscuits.

With less material consumptions and reduction of waste, reworking scraps is good for the planet. It leads to excellent return on moderate investments within a short time period. The process eliminates the need to store scraps and guarantees a high quality end product with no loss of food properties.

## INDUSTRIES



BAKERY



CONFECTIONERY



PET FOOD

## AUTOMATION



OPERATOR  
PANEL

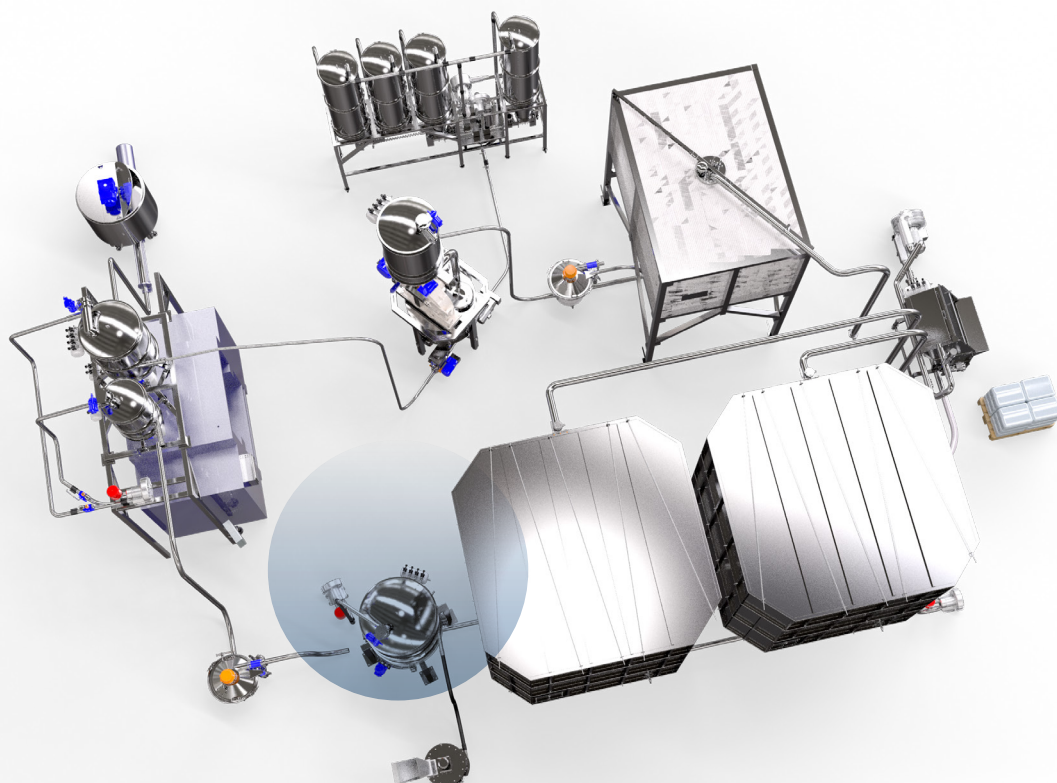


PROCESS  
CONTROL



TRACEABILITY

Biscuit rework system  
feeding powdered scrap  
into the mixer or into the storing silo for  
reuse in the production line



Fully automated

For bread and similar products such as toasts, loaves and sandwiches

Final product can be fed back into production in place of flour, sold, used for animal feed, or worked again to produce croutons or bread crumbs

Loading, drying, cooling, grinding and storing with temperature control

Pneumatic conveyance

No more scrap storing

No loss of food properties

Weight control in real time, integrated automation and full traceability

1 Cutting mill

2 Magnet

3 Drier with fluidized bed

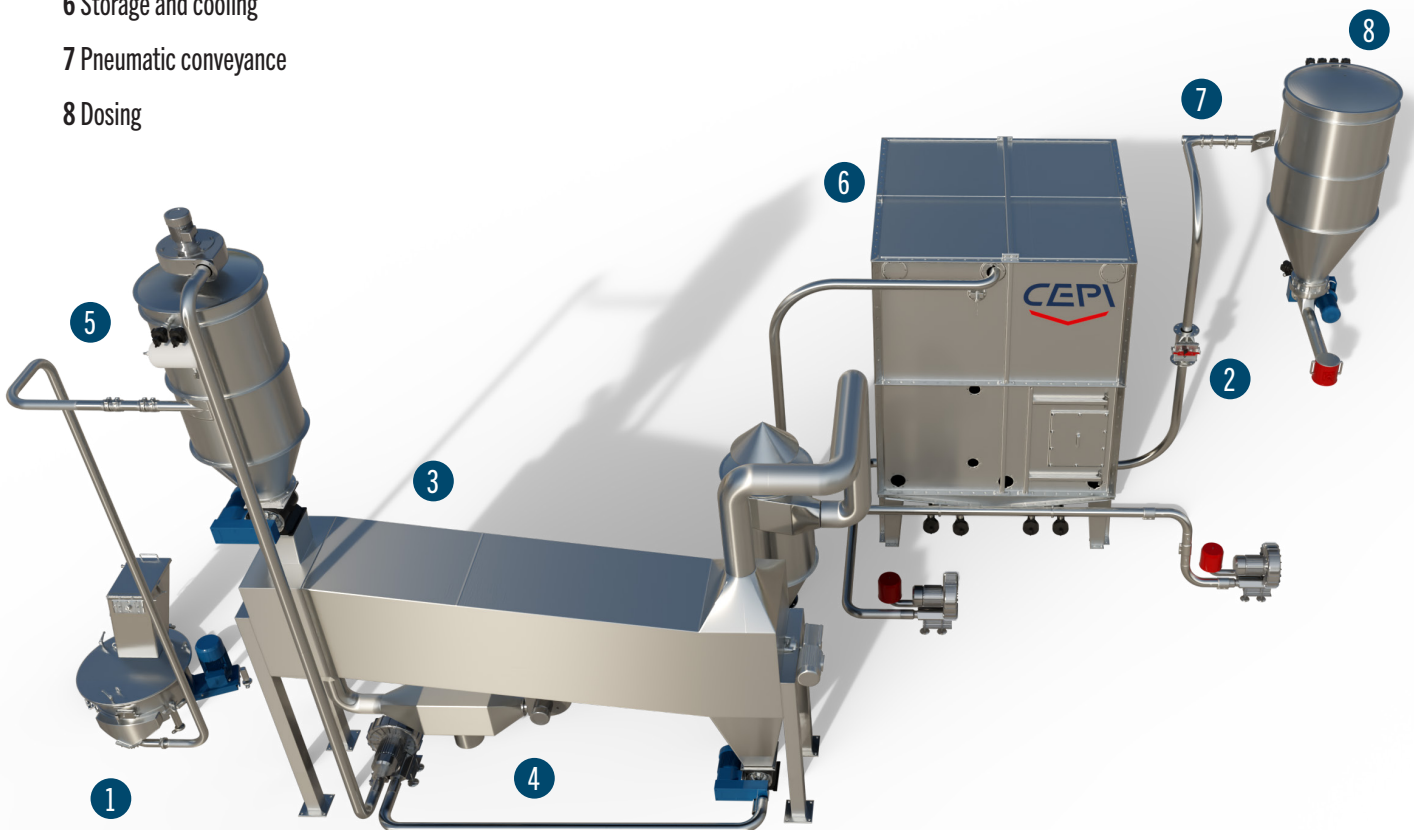
4 Hot air

5 Filter

6 Storage and cooling

7 Pneumatic conveyance

8 Dosing



The scraps are first ground in a cutting mill placed at ground level to facilitate loading. Loading can be done both manually from the sacks, or directly from the line, and also from different locations through the conveyor belts.

The product is then transferred by vacuum to a hot-air dryer with fluidised bed and filter. During this phase the product acquires all necessary features for the various applications it is being recovered for.

After this the product is sent through pneumatical transport in a silo for storage with controlled temperature. The silo has a capacity of about 8 tons, is made of panels in stainless steel with fluidized bed.

The resultant re-work can be fed back into production, sold for animal feeding, or further worked to produce to bread crumbs (by adding a hammer mill in the installation) or crouton (by using an extruder.)



Use your production scrap to make croutons and bread crumbs



Fully automated

Loading, grinding and storing with temperature control

Pneumatic conveyance

No more scrap storing

No loss of food properties

Weight control in real time, integrated automation and full traceability

1 Cutting mill

2 Magnet

3 Filter

4 Storage with temperature control

5 Pneumatic conveyance





Biscuit rework system and cutting mill detail



Biscuits



Fully automated

Liquid recovery by addition of oil or water

Loading, breaking and mixing with liquid, conveyance of the resulting emulsion to the mixer

Breaking and mixing in stainless steel tank (which can be heated or double-jacketed)

No more scrap storing

No loss of food properties

Fully customized and suitable to variable production volumes

Weight control in real time, integrated automation and full traceability

1 Liquid loading hopper

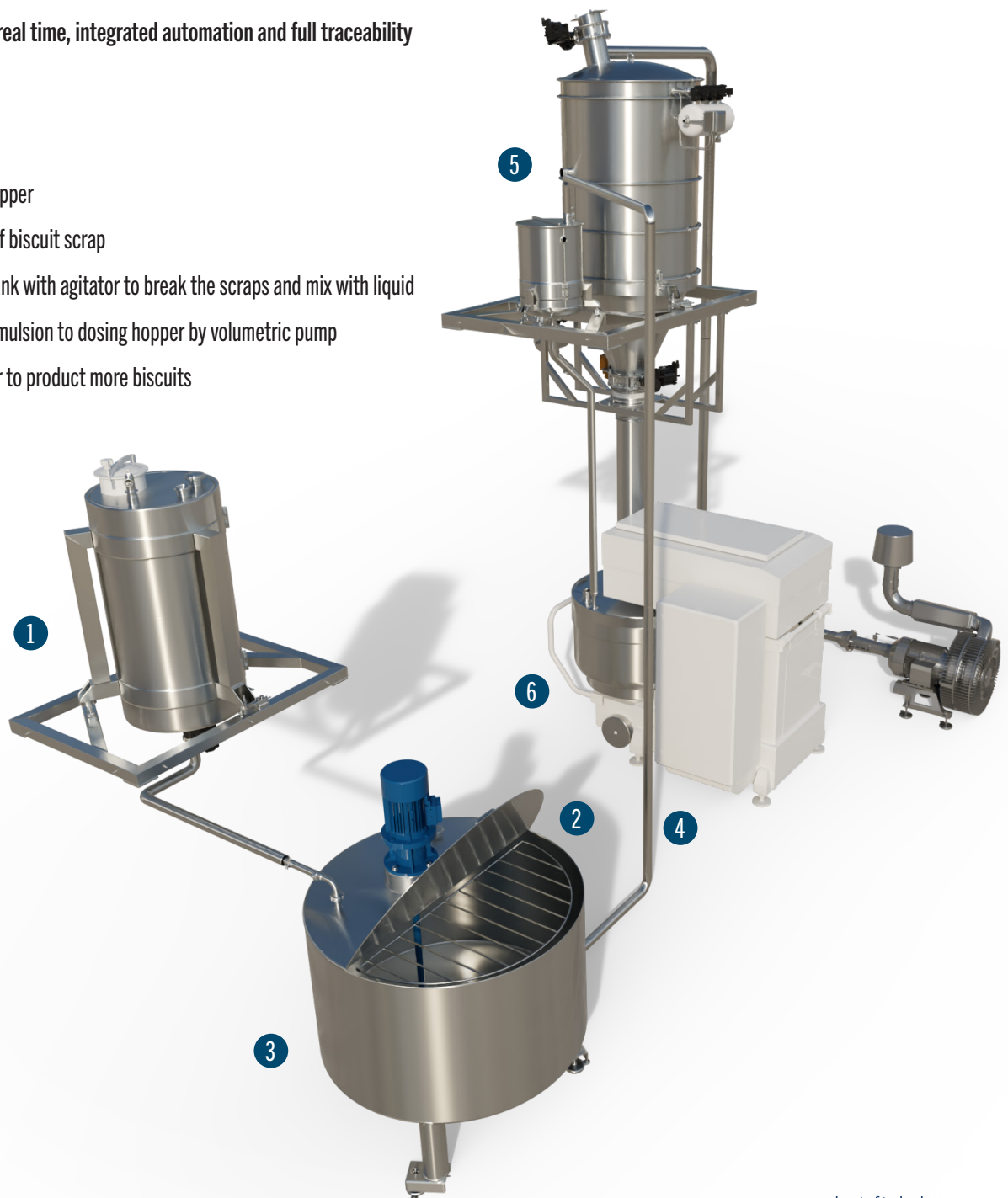
2 Manual loading of biscuit scrap

3 Stainless steel tank with agitator to break the scraps and mix with liquid

4 Conveyance of emulsion to dosing hopper by volumetric pump

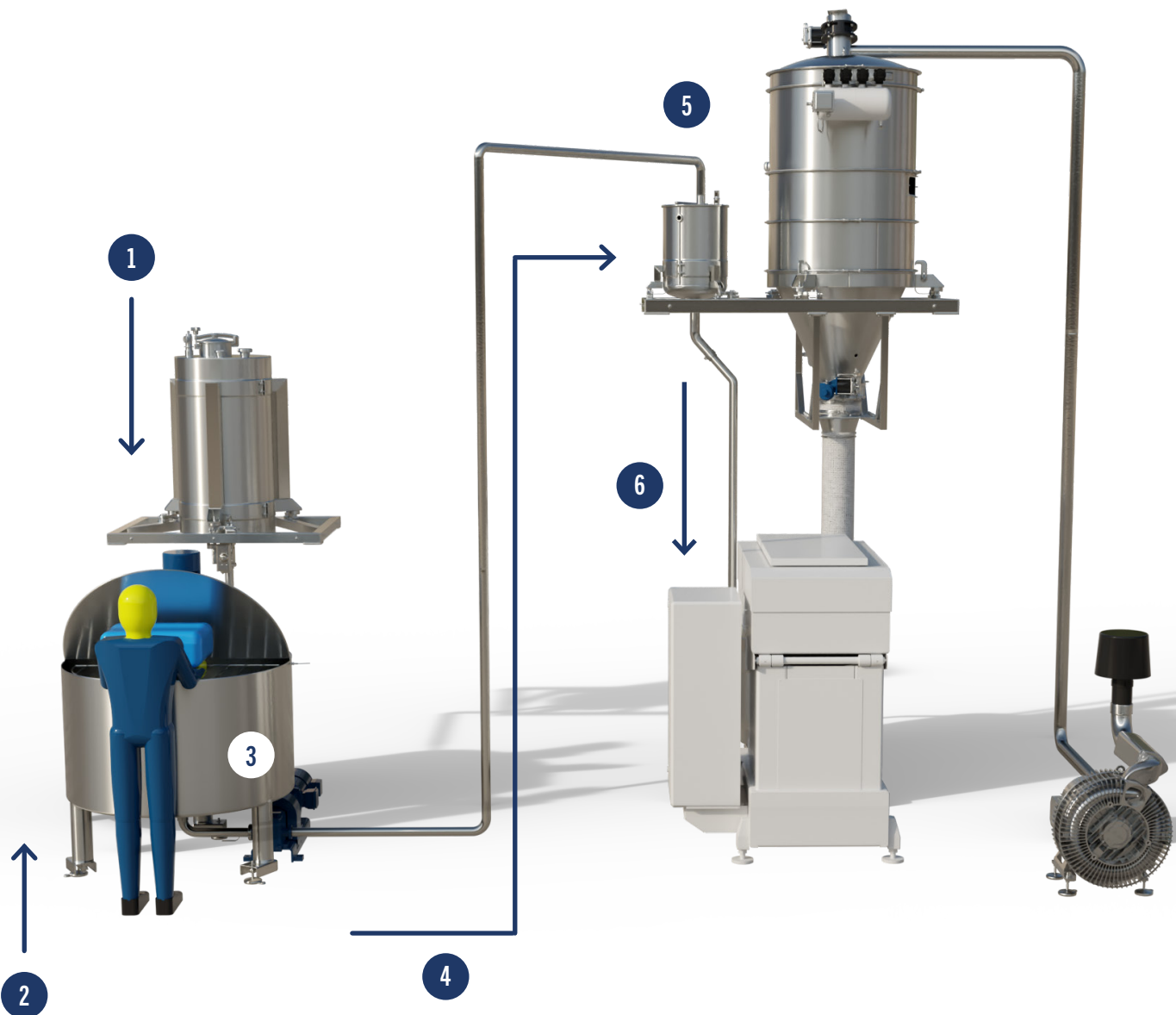
5 Dosing into mixer to product more biscuits

6 Mixer





- 1 Scraps are loaded manually into a stainless steel tank with agitator.
- 2 Liquid (oil or water) is loaded by weighing liquid hopper.
- 3 The biscuits are broken and mixed with the liquid inside the tank, creating an emulsion.
- 4 The emulsion is conveyed on a dosing hopper
- 5 The conveyance happens through volumetric pump
- 6 The emulsion is dosed on mixer







Sandwich biscuit

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**

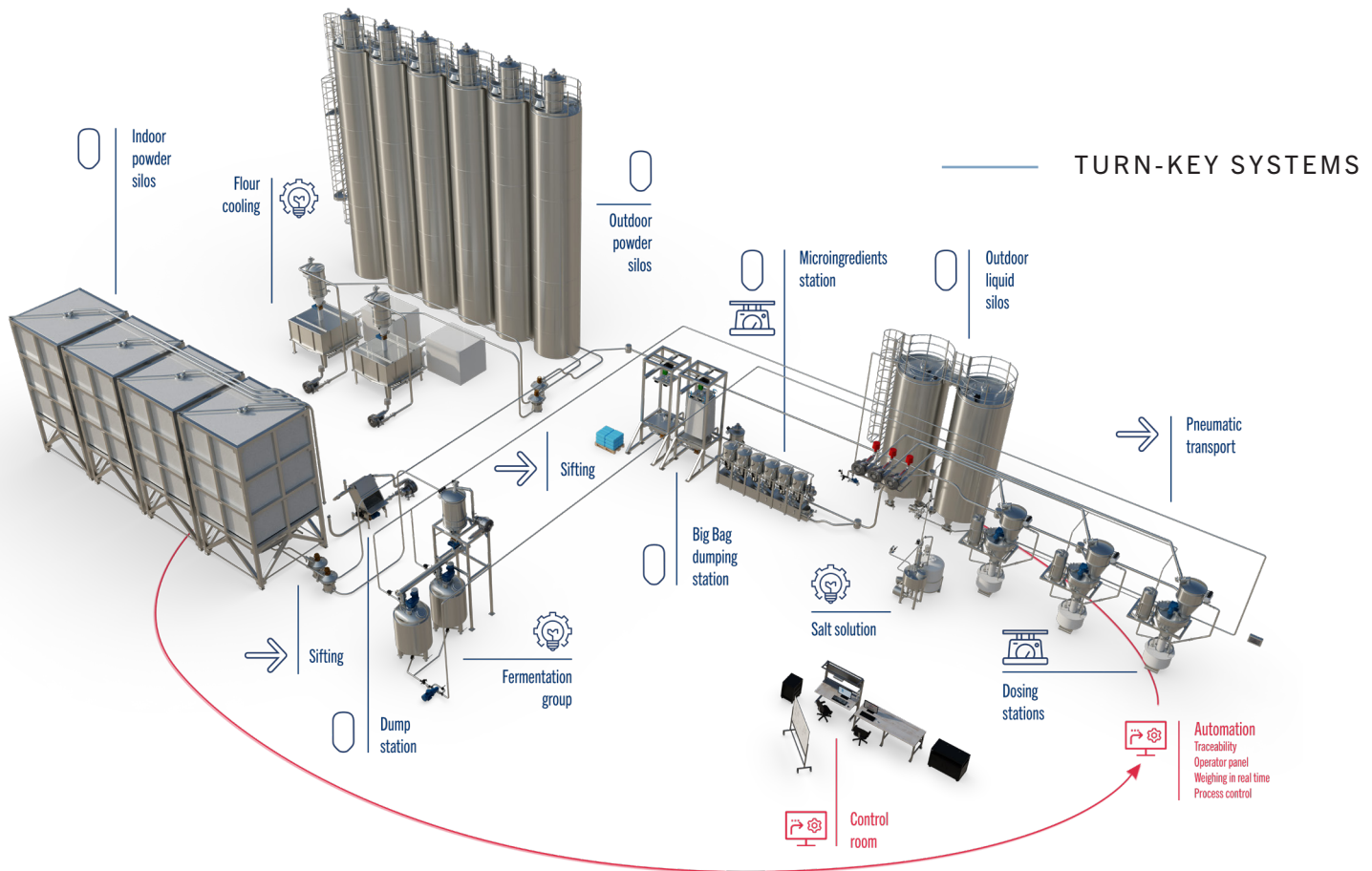
**Production, storage and dosing of invert sugar**

**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