# Liquid management

Storing, transport and dosing of liquids of variable viscosity with temperature and modified atmosphere management

Temperature and modified atmosphere management Stainless steel storing tanks and bin management CIP or PIG washing system Jacketed piping in stainless steel and centrifugal or volumetric pumps Volumetric and weighed dosage by flowmeter or stainless steel hopper Integrated automation and traceability

Storing, transport and dosing **Liquids** 





CEPI's technology handles the storing, transport and dosing of all liquids, including oils, fats, egg, milk, liquid sugar, liquid yeast, liquid sourdough, liquid acid mixtures, colorings, flavors, honey, glucose, syrup, cream, paste like cocoa paste, as well as salt solution and invert sugar, which our technology also prepares.

Liquids are stored in tanks of variable capacity in appropriate steel material and suitable for the viscosity of the stored liquid. Tanks come with temperature management and modified atmosphere management and can be provided with recirculation system, double jacketed and/or cooled depending on the needs of the material and process.

Bin storing management with management of transport and dosing is also available.

Customized transport system with stainless steel, double jacketed piping, with modified atmosphere management and and temperature management with cooling or heating. Centrifugal or volumetric pumps that are suitable to the viscosity of the handled liquid.

Management of multiple liquids and feeding of multiple tanks. Hygienic and safe design. All components (such as valves) are easily accessible and maintainable. The transport system is designed to minimize energy consumptio with individual analysis of energetic impact.

Dosing in heated and double jacketed hoppers in suitable stainless steel. Hoppers are hermetic and pressurizable. Multiple flowmeter options are also available, including mass and weighted flowmeter, as well as mixed hopper/flowmeter solutions. The dosing system is designed to match the needs of materials, logistics and production volumes.

Fully or semi-automatic washing with PIG or CIP system.

Integrated automation and full traceability.



Storing, transport and dosing **Liquids** 



#### **Features & Technologies: Liquid Storing**

Tanks of variable capacity in appropriate steel material, suitable for the viscosity and other properties of the stored liquid

Temperature and modified atmosphere management

Double jacketed recirculation system with temperature management

Bin management

Weight control in real time, integrated automation and full traceability





Storing, transport and dosing **Liquids** 



#### Storing in big and medium sized stainless steel tanks



Double jacketed tank group with maintenance platform

Manually loaded tank with EU standard ladder

Automatic loading with heated pipeline

Storing, transport and dosing **Liquids** 



#### Features & Technologies: Liquid transport

Stainless steel, double jacketed piping

Modified atmosphere management

Temperature management with cooling or heating

Centrifugal or volumetric pumps that are suitable to the viscosity of the liquid

Management of multiple liquids and feeding of multiple tanks

Hygienic and safe design

Designed to minimize energy consumptio with individual analysis of energetic impact Integrated automation and full traceability



Feeding multiple dosing tanks

Multiple pump options: gear pumps, lobe pumps, screw pumps, peristaltic pumps...



Storing, transport and dosing **Liquids** 





Flow of heated pipes without intertwining, ordered paths feeding a large number of different tanks in several points. Hygienic and safe design with leveled vertical pipes descending from the top.



Three-way ball valves, easily accessible for maintenance



Screw pump

Storing, transport and dosing **Liquids** 



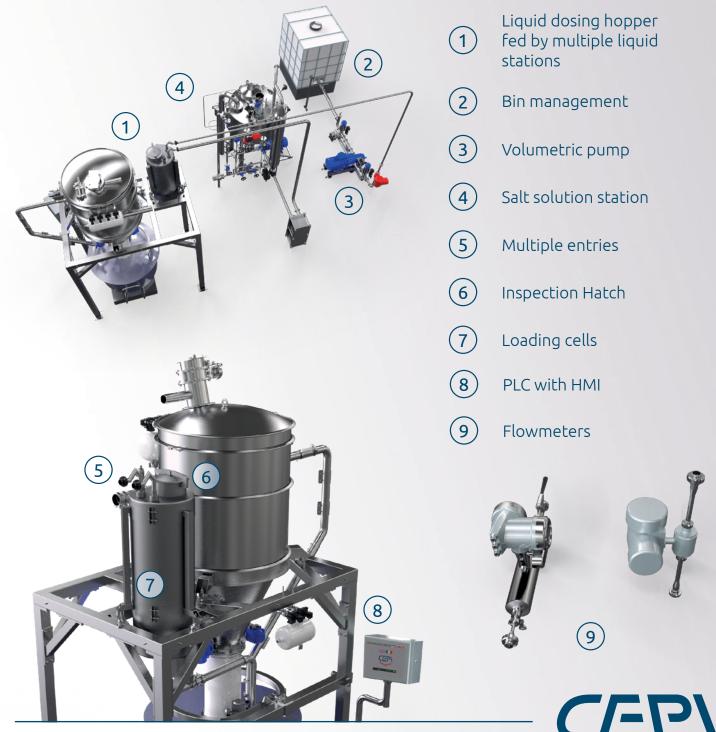
## **Features & Technologies: Liquid Dosing**

Heated and double jacketed hoppers in stainless steel suitable to the dosed liquid Hermetic and pressurizable

Multiple flowmeter options including mass and weighted flowmeter

Mixed hopper/flowmeters solutions

Integrated automation with HMI and full traceability



Storing, transport and dosing **Liquids** 



Liquid preparation and dosing tanks with HMI



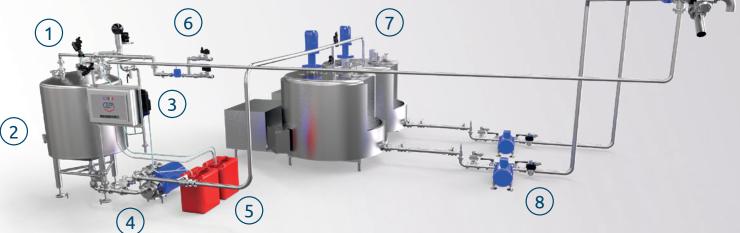
Liquid tank in dosing station

Storing, transport and dosing **Liquids** 



### Features & Technologies: CIP washing system

Double pneumatic seat valves (1)for the simultaneous management 6 Water flowmeter and of multiple lines mixer Process tanks 7 2 Washing tank (water, detergent/sanitizer) (8) Dosing pumps 3 Control panel (9) Double pneumatic 4 Recirculation pump seat valves (5) Detergent/sanitizer 9





- Peristaltic pump to dose detergent/sanitizer
- Washing ball



Storing, transport and dosing **Liquids** 





Installation and commissioning

Monitoring and service

Dairy Premix

Pharmaceutical