

Tetra Pak® Rack Brining system

Rack brining



Highlights

- Consistent accurate salt uptake thanks to carefully controlled brining process
- The system can be easily customized to suit a variety of plant layouts and production needs
- Hygienic design

Application

The Tetra Pak® Rack Brining System is an advanced system used for brining of semi-hard cheeses. Brining racks are loaded with cheeses and placed in a brine basin. All operations – loading the racks, placing them in a brine basin and in the unloading station – are fully automated. The system includes a rack rinsing unit integrated with a dedicated CIP station, girder crane and brine microfiltration. The racks can be loaded with cheese in a dry or wet environment. depending of the shape and type of cheese.

Working principle

The Tetra Pak® Rack Brining system is designed to brine cheeses in a hygienic and controlled way. Cheese is removed from the moulds and transported to the brining room by a conveyor or brine gutter where it is loaded into the brining racks.

The shelves of the racks are loaded from the bottom to the top and when one shelf has been loaded with cheeses it is emerged in the brine solution.

The system ensures that all cheeses are kept in the brine with a minimum variance in brining time. When the rack is loaded, a crane either automatic or manual transfers it to the brine basin, where it will stay until the required brining time is reached. The rack is then taken out and transferred to the unloading station where the rack is unloaded, starting with the top shelf. Empty racks are cleaned by the rack rinsing machine before they are reloaded with cheese

The brine is continuously circulated inside the brining basin(s), keeping conditions stable and ensuring a consistent end product quality. To maintain the overall quality of the brine, brine is led into a treatment section where it is filtered, cooled and salt and or other additives are added.

Scope of supply

- Feeding conveyor or gutter
- Rack loading unit/s dry or wet
- Brining basin(s)
- Brining racks
- · Racks unloading unit/s with a conveyor
- Salt dissolving unit manual or automatic
- Crane system semi or fully automatic
- Brine cooling / filtering and circulation

Options

- Girder crane system
- Cheese surface drying unit
- Cheese disinfection unit
- Unloading conveyor (to packing)
- Brine microfiltration
- Automatic acid and/or CaCl dosing

Control panel

The Tetra Pak® Rack Brining system is controlled by a Siemens or Allen Bradley control system.

A motor control cabinet is normally situated in a separate room

The Tetra Pak® Rack Brining System is prepared to communicate with Tetra Pak PlantMaster or other supervisory systems.

Capacity

• 10 – 200 tons of cheese per day

Utilities needs

The Tetra Pak® Rack Brining system is highly customised and designed according to customer specific requirements such as capacity, building, line set up etcetera hence no generic consumption figures can be stated.

Layout

