Tetra Pak® Cheddaring machine 5

Highlights
- Flexibility for fused and stirred curd cheese types
- Uniform product quality
- Excellent salting performance
- Minimal product losses
- Hygienic design
- Fully CIP cleanable with minimal operator input
- Low maintenance costs
- Heavy duty and maintenance friendly construction

Application
The Tetra Pak® Cheddaring 5 machine is designed for continuous production of fused and stirred Cheddar and pasta filata cheese types. It is a totally enclosed machine, designed to automatically drain, acidify, texture, mill, salt and mellow cheese curd.

Working principle
The curd/whey mixture from the curd making tanks is pumped to the top of the whey drainage screen, where most of the whey is removed. The curd falls down onto the first, perforated, conveyor belt allowing further whey drainage. The second conveyor allows the curd to begin matting and fusing. On transfer to a third conveyor the curd mat is turned upside down and further cheddaring takes place. At the end of the third conveyor the curd is milled to uniformly sized chips.

In the 4200 machine series salt is added on the fourth conveyor with a reciprocating salt lance.

In the 4300 machine series the curd and the salt are mixed thoroughly in a rotating mixing drum. In both machine types, the chips are stirred for further mixing on the fourth belt. The curd is transported for further processing from the outlet trough.

The 2200 machine series are used for making Pasta Filata cheese types and contain only two belts, one for draining and one formatting and fusing. The curd is salted at a later stage.
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Design
Plastic side guides on all belts prevent product losses and cooling of the curd and allow efficient cleaning of the belts.

Pyramid shaped whey collecting trays are located under all conveyors. Half stirrers are placed on the first and fourth conveyor in cheddar production. For stirred curd, stirrers can be provided on all conveyors to prevent fusing of the curd.

All conveyors are enclosed in a stainless steel housing which provides a hygienic environment and stable temperature control. The housing, conveyors, sumps and other components are equipped with CIP devices for efficient cleaning.

A number of manways and removable covers are provided for process monitoring and/or access to the inside of the machine. The conveyor belts and stirrers are all controlled from a central control panel with an intuitive operator interface.

Capacities

2200 series
The two-belt machines are available in seven standard sizes.

4200 and 4300 series
The four-belt machine range contains eight standard sizes. For high capacities we offer the four-belt 4300 XC range. Please see the diagrams for the different capacities.
Standard scope of supply

- Inlet weir and wedge wire whey screen
- Plastic conveyor belts with fish bone support frames
- Belt drive units with flexible couplings
- Plastic side guides, scrapers, belt tensioners and rotation counters on all belts
- Half stirrers on belts 1 and 4
- Rotating chip-mill and curd support plate
- For 4200 series: curd level fork, salt lance and salt dosing unit
- For 4300 series: mixing drum with in- and outfeed belts, curd weighing unit and salt dosing unit
- Outlet trough with open wire auger
- Internal CIP devices and plain-ended CIP headers
- Manways, removable covers and inspection lights throughout the machine
- Control panel with Allen-Bradley CompactLogix PLC and PanelView Plus colour graphic HMI or Siemens S7 PLC with MP377 colour graphic HMI

Options

- Curd wash water pipes
- CIP-split in the machine
- All spray pipes removable for easy maintenance
- Additional salt lance and salt dosing and feeding unit
- Gravimetric salt dosing unit
- Double cut chip-mill
- Stirred curd machine
- Curd distribution tank for even distribution of curd to Tetra Pak® Blockformer
- Rotary valve and blower for curd transport
- ABB SattCon with Exor UniOP colour graphic HMI
- Pre-engineered CIP-header valve cluster
- Dual pump-out control from cheese vats to Tetra Pak® Cheddaring machine 5
- Control of CIP valves on Tetra Pak Cheddaring machine 5
- Fines return
- USDA approved execution

Material

AISI 304 stainless steel and FDA approved plastic and rubber. Mixing drum, stirrers on salting belt, sump on belt 4, outlet trough and outlet auger AISI 316 stainless steel.

Connections and consumptions

The connections and consumptions vary depending on the machine type and size. Please contact your local Tetra Pak representative for more information.
## Tetra Pak® Cheddaring machine 5

### Dimensions

**2200 series**

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**4300 XC series**

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