



Tetra Pak® Cheese Vat OST CH6

Horizontal vat for curd making



Highlights

- Even curd size distribution
- Low fat and fines losses
- Very strong and reliable
- Controlled heating
- Advanced process control

Application

The Tetra Pak® Cheese Vat OST CH6 is a horizontal vat for the curd production of cheddar/mozzarella cheese types.

The vat has all required functions for a controlled and predictable process: filling of cheese milk, ingredient mixing, milk coagulation, cutting of coagulum, blending, indirect heating, emptying and CIP (Cleaning in Place).

The Tetra Pak Cheese Vat OST CH6 is designed to satisfy the cleaning requirements after each batch especially for cheddar, mozzarella and similar cheese types.

Using warm water in a dimple jacket to heat the product allows the operator to control the heating speed and temperature difference. In the recipe the maximum temperature difference between heating medium and product can be set, so the optimal heating rate will be achieved.

Working principle

The milk (and in-line added starter) is fed into the vat through the bottom (or optional top) inlet and gently stirred by the combined stirring and cutting tools.

After rennet addition, the milk rests to create a firm coagulum to be cut by the sharp knives of the cutting tool. The speed of the tools is controlled between 2 and 10 rpm. Once the curd is cut to the required grain size the rotation of the tools is reversed. By rotating the tools the blunt sides of the knives stir the curd and whey mixture to avoid sedimentation.

The curd/whey mixture can be indirectly heated by circulating hot water through the dimple jacket. The vat is emptied through the outlet at the bottom. The curd making process is controlled from the control panel placed adjacent to the manway on top of the vat. The vat can be cleaned in place by rotating spray nozzles and a connection to the shaft seal housing.

Tetra Pak® Cheese Vat OST CH6

Scope of supply

- Horizontal cylindrical body with slightly conical ends
- Slope of the vat of 3°
- Heating jacket on nominal filling level of the cylindrical section (heating rate ~0,3°C/min.)
- Main shaft with welded-on knife frames and side stirring blades
- Frequency controlled E-motor for cutting/stirring tool
- Internal LED lighting
- Manhole with non-transparent sliding door on top position
- Air vent
- CIP nozzles with interconnecting pipe work
- Temperature electrode
- One level electrode
- Curd-whey outlet/milk inlet
- Adjustable legs
- Sanitary couplings
- Siemens based control system
- Operator panel
- Control panel
- MCC panel

Options, mechanical

- 01 Top milk inlet
- 02 Remote controlled bottom valve, type LKB-F
- 06 Extra level electrode
- 07 Content measurement
- 08 Non-standard length of the legs
- 13 Non-standard voltage and frequency
- 18 Rennet distribution system with hopper
- 21 Coagulation sensor

Options, automation

- 32 I/O Communication (hardwired communication)
- 33 Rockwell (Allen Bradley) control system and operator panel
- 35 Operator panel in non-EU language

Capacity/Range

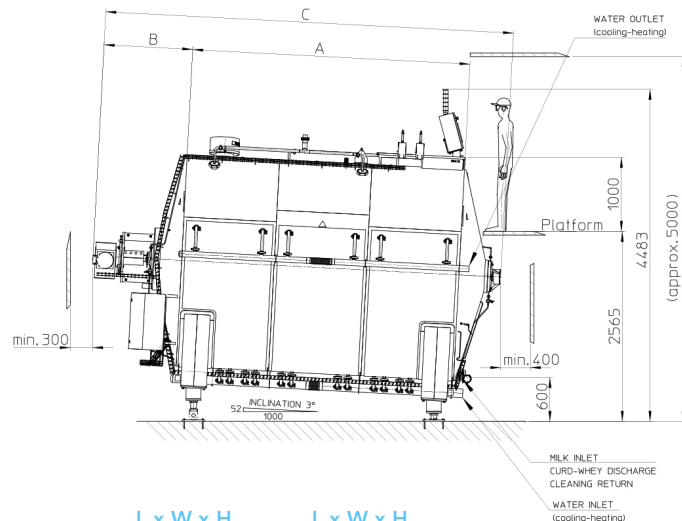
The Tetra Pak® Cheese Vat OST CH6 is available in the following sizes (nominal filling volume):

- 15 000 – 30 000 litres (in steps of 2 500 litres)

Consumption data

| Capacity, litres | 15 000 – 20 000 | 22 500 – 25 000 | 27 500 – 30 000 |
|------------------|-----------------|-----------------|-----------------|
| CIP supply | 40 m³/h | 80 m³/h | 80 m³/h |
| Electricity | 4kW | 5,5kW | 7,5kW |
| Compressed air | 2NL/h | 2NL/h | 2NL/h |
| Heating water* | 40 m³/h | 50 m³/h | 60 m³/h |

* Dependent on required heating rate and ΔT. Heating water circulates in closed system
Values are average and subject to process parameters.



Dimensions and shipping data

| Size Litres | A mm | B mm | C mm | Load pro leg | Weight net kg | Weight gross kg | L x W x H unpacked approx (m) | L x W x H seaworthy case (m) |
|-------------|-------|-------|-------|--------------|---------------|-----------------|-------------------------------|------------------------------|
| 15 000 | 2 750 | 1 200 | 4 515 | 4 550 | 3 200 | 4 200 | 4.7 x 3.3 x 3.5 | 5.0 x 3.6 x 3.8 |
| 17 500 | 3 250 | 1 200 | 5 015 | 5 225 | 3 400 | 4 400 | 5.2 x 3.3 x 3.5 | 5.5 x 3.6 x 3.8 |
| 20 000 | 3 750 | 1 200 | 5 515 | 5 900 | 3 600 | 4 700 | 5.7 x 3.3 x 3.5 | 6.0 x 3.6 x 3.8 |
| 22 500 | 4 250 | 1 200 | 6 092 | 6 975 | 5 400 | 6 600 | 6.3 x 3.3 x 3.5 | 6.6 x 3.6 x 3.8 |
| 25 000 | 4 750 | 1 277 | 6 592 | 7 650 | 5 600 | 6 900 | 6.8 x 3.3 x 3.5 | 7.1 x 3.6 x 3.8 |
| 27 500 | 5 250 | 1 277 | 7 092 | 8 325 | 5 800 | 7 200 | 7.3 x 3.3 x 3.5 | 7.6 x 3.6 x 3.8 |
| 30 000 | 5 750 | 1 277 | 7 592 | 9 000 | 6 000 | 7 500 | 7.8 x 3.3 x 3.5 | 8.1 x 3.6 x 3.8 |

We reserve the rights to introduce design modifications without prior notice. Tetra Pak, and PROTECTS WHAT'S GOOD are trademarks belonging to the Tetra Pak Group.

www.tetrapak.com

Tetra Pak®