



Tetra Tebel OST[®] 6 CH

Horizontal curd making vat with dimple jacket



Highlights

- Even curd size distribution
- Low fat and fines losses
- Very strong and reliable
- Optimal heat transfer
- High standard of hygiene
- Quick and efficient emptying

Application

Tetra Tebel OST 6 CH is a horizontal vat for the production of curd especially for Cheddar, Pasta Filata and similar types of cheese.

The vat has all required functions for a controlled and predictable process, including filling of cheese milk, mixing of ingredients, coagulation of milk, cutting of coagulum, blending, whey discharge, water addition, indirect heating and cooling, emptying and CIP (Cleaning in Place).

Using warm water in a dimple jacket to heat the product allows the operator to have more control on 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 can 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. When the curd is cut to the required grain size the rotation of the tools is reversed. By rotating the opposite way the blunt sides of the knives stir the curd and whey mixture to avoid sedimentation. A vat with a tubular whey strainer is also available, Tetra Tebel OST 6 SH.

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 means of rotating spray nozzles and a connection to the shaft seal housing.

Capacity / Range

The Tetra Tebel OST 6 CH vat is available in the following sizes (nominal filling volume): 15.000 – 30.000 litres (in steps of 2.500 litres).

Standard scope of supply

- Horizontal cylindrical body with slightly conical ends
- Dimple jacket on lower half of the cylindrical section
- External bearing with hygienic seal design
- Main shaft with the cutting and stirring tools
- Frequency controlled E-motor for cutting/stirring tool
- Internal lighting
- Manway with sliding door on top position
- Air vent
- Solenoid valve box located in control panel
- CIP nozzles with interconnecting pipe work
- Temperature electrode
- Content measurement
- Siemens based control system
- MCC panel

Options

- Top milk inlet
- Remote controlled bottom valve
- Spray lance
- Permanent located whey drainage outlet
- Non standard length of the legs

- Stairs for platform
- Platform
- Manway with sliding door in front position
- Non-standard voltage and frequency
- Raised dimple jacket for heating
- Rennet nozzles
- Rennet distribution with pressurised hopper
- Rennet distributors
- Rennet distribution unit with hopper
- Insulation around dimple jacket
- Semi-hard cheese version with whey sieve

Options automation

- Central control
- Communication by means of interface relays
- Non standard control system and operator panel
- Recipe editing on external PC via Ethernet
- Operator panel in non EU language

Consumption data

Version	15-20 kL	22,5-25 kL	27,5-30 kL
CIP supply	40 m ³	80 m ³	80 m ³
Electricity	5 kW	6,5 kW	8,5 kW
Compressed air	2 NL/h	2 NL/h	2 NL/h
Process water*	40 m ³	50 m ³	60 m ³
Heating water**	20-40 m ³ /h	40-50 m ³ /h	50-70 m ³ /h

* Only applicable when washing water is used. ** Depending on required heating rate and ΔT . ** Heating water is circulating in closed system. Values are average and subject to process parameters.

Dimensions and Shipping Data

Size	A	B	C	Load	Weight	Weight	L x W x H	L x W x H
Litres	mm	mm	mm	pro leg	net kg	gross kg	unpacked approx (m)	seaworthy case (m)
15.000	2.750	4.510	1.195	5.000	3.200	4.200	4,6 x 3,2 x 3,5	4,9 x 3,5 x 3,8
17.500	3.250	5.010	1.195	5.700	3.400	4.400	5,1 x 3,2 x 3,5	5,4 x 3,5 x 3,8
20.000	3.750	5.510	1.195	6.400	3.600	4.700	5,6 x 3,2 x 3,5	5,9 x 3,5 x 3,8
22.500	4.250	6.120	1.305	7.600	5.400	6.600	6,2 x 3,2 x 3,5	6,5 x 3,5 x 3,8
25.000	4.750	6.620	1.305	8.300	5.600	6.900	6,7 x 3,2 x 3,5	7,0 x 3,5 x 3,8
27.500	5.250	7.120	1.305	9.100	5.800	7.200	7,2 x 3,2 x 3,5	7,5 x 3,5 x 3,8
30.000	5.750	7.620	1.305	9.800	6.000	7.500	7,7 x 3,2 x 3,5	8,0 x 3,5 x 3,8