



Tetra Tebel OST®

Horizontal tank for curd making



Highlights:

- Even curd size distribution
- Low fat and fines losses
- Very strong reliable and quietly operating drive unit
- High standard of hygiene
- Quickly and good emptying
- Improved process control by advanced automation

Application

The Tetra Tebel OST is a horizontal tank for the production of curd, for most types of cheese.

It 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).

Working principle

The milk (and in line added starter) is fed into the tank 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 tubular whey strainer with pivoted pipe connection is suspended from the tank top. The strainer is immersed just under the liquid level for efficient whey drainage. (Not valid for the CH type).

Hot process water can be fed directly into the tank. Alternatively the curd/whey mixture can be indirectly heated by adding hot water or steam to the tank jacket. The tank is emptied through the the bottom valve.

The curd making process is controlled from the control panel placed adjacent to the manway on top of the tank.

The tank 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 is available in the following sizes (nominal filling volume):

3.000 - 8.000 litres (in steps of 1.250 litres)

10.000 - 30.000 litres (in steps of 2.500 litres)

Standard scope of supply

- Horizontal cylindrical body with slightly conical ends
- Heating jacket on lower half of the cylindrical section
- Whey strainer with motor and gearbox (not in the Tetra Tebel OST-CH version)
- Motor with frequency converter for cutting/stirring tool
- Internal lighting
- Manway with sliding door on top position
- Solenoid valve box
- One level electrode (max. or min.)
- Temperature electrode
- Air vent
- CIP connection and devices
- 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 jacket for faster heating
- Spray pipe for indirect heating/cooling with water
- Rennet nozzles
- Rennet distribution with pressurized hopper
- Rennet distributors
- Rennet distribution unit with hopper
- Insulation around double jacket

Options (standard 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	3-8 kL	10-20 kL	22.5-25 kL	27.5-30 kL
CIP supply	30 m ³	40 m ³	80 m ³	80 m ³
Electricity	4 kW	5 kW	6,5 kW	8,5 kW
Compressed air	2 NL/h	2 NL/h	2 NL/h	2 NL/h
Process water*	30 m ³	40 m ³	50 m ³	60 m ³
Steam**	300 kg/h	1.000 kg/h	1.500 kg/h	1.800 kg/h

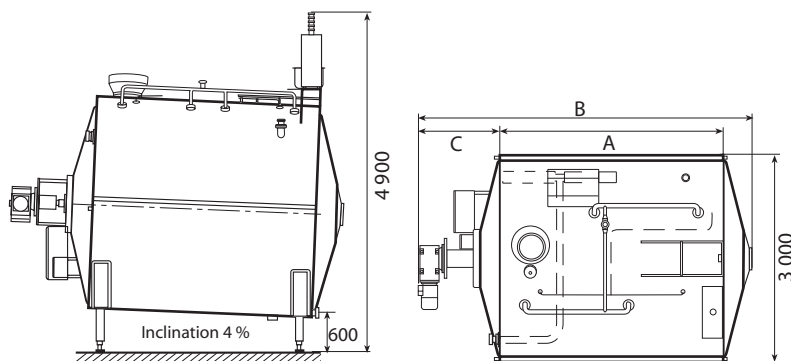
* Only applicable when washing water is used.


** Based on 1bar for 0,35°C/min.

Values are average and subject to process parameters.

Dimensions and Shipping Data

Size Litres	A mm	B mm	C mm	Load pro leg, kg	Weight net, kg	Weight gross, kg	L x W x H unpacked approx. (m)	L x W x H seaworthy case (m)
3.000	1.000	2.385	1.085	1.040	1.150	2.200	2.4 x 2.2 x 2.5	2.7 x 2.5 x 2.8
8.000	3.000	4.385	1.085	2.450	1.800	3.000	4.4 x 2.2 x 2.5	4.7 x 2.5 x 2.8
10.000	1.750	3.350	1.190	3.200	2.800	4.000	3.4 x 3.0 x 3.4	3.7 x 2.8 x 3.7
15.000	2.750	4.350	1.190	4.550	3.200	4.600	4.4 x 3.0 x 3.4	3.7 x 2.8 x 3.7
20.000	3.750	5.350	1.190	5.925	3.700	5.200	5.4 x 3.0 x 3.4	3.7 x 2.8 x 3.7
30.000	5.750	7.610	1.305	6.000	6.000	7.500	7.7 x 3.0 x 3.4	3.7 x 2.8 x 3.7



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