



Primodan - When flexibility is your priority

CurdMaster



Application:

The CurdMaster is designed for the production of cheese curd from cheese milk.

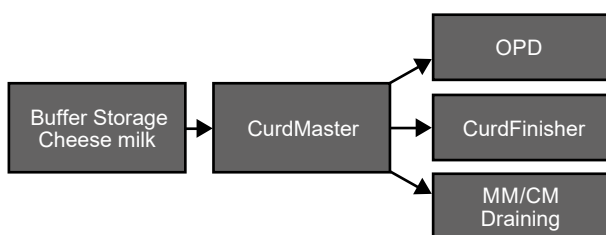
The CurdMaster can be used for a wide range of cheeses with a moisture content ranging from 35% to 60% - from low fat types based on skimmed milk to high fat types with 60% fat in total solids.

Cheese production range:

- Very hard cheeses
- Hard cheeses
- Semi-hard cheeses
- Soft cheeses

Recipe variation

Parmesan - Grana - Gruyère - Emmental, Swiss - Gouda - Edam - Tilsit - Cheddar - Havarti - Port Salut / St. Paulin - Provolone - Kashkaval - Pizza cheese - Italian Mozzarella - Cheshire, stirred curd - English Territorial's - White cheese / Feta, Cremoso, Caciota, and many more.



Working principle

The cheese milk (optionally pre-acidified) is pumped into the CurdMaster through the bottom inlet (option the top inlet) and gently stirred with the two specially designed agitators. The rennet is added and the cheese milk will start to

create a firm coagulum. The coagulum is then cut with the sharp knives, which are an integrated part of the agitator. The cutting is done by rotating the agitators anti clockwise. (Speed regulation from 2 to 10 rpm).

When the curd has been cut to the desired grain size, the agitator rotation is reversed in order to agitate until the first whey is drained. Heat is then applied. Second whey draining and final stirring then take place before the curd is emptied through the two bottom outlets. The CurdMaster is then emptied completely by means of the two bottom flush pipes and cleaned through the spray nozzles.

CurdMaster Standard design

The double jacket tank is made of stainless steel AISI 304 throughout. The design is based on the double circuit principle, ensuring optimum, efficient and yet careful treatment of the curd.

The tank features a flat bottom with a fixed inclination towards the two side outlets, which are located below bottom level and 500 mm above floor level to avoid the entry of air being mixed into the curd/whey mix.

An effective steam distribution system between the internal and external bottom allows for indirect heating by means of steam without any risk of product sticking to the bottom.

CurdMaster Finish

The inside surface is in cold-rolled 2B/oil-brushed finish with smoothly ground welds - grain 200, max. 1.0 µm. The outside surface is in cold-rolled 2B finish, with welds ground smooth - max. 1.6 µm.

Instrumentation

- Two level switches for low level and empty tank
- One Pt 100 temperature transmitter built into the tank wall
- Two proximity switches for safety on manhole (cover and grid)

Technical data

Tank size:

R 900	3,000 L
R1100	6,000 L
R1300	8-10,000 L
R1500	12-15-18,000 L
R1700	20-22-25-30,000 L

Connections

Milk inlet/curd outlet	2 x 4"
Bottom flush	2 x 1"
Steam inlet	1½" / 2½" BST
Condensate discharge	2½"
CIP-Connection	2½"

Options connections

Lowering whey strainer	4"
Continues whey strainer	2½"
Whey discharge (50%-75%)	4"
Jacket water	2"
Foam less inlet	3"

Consumption

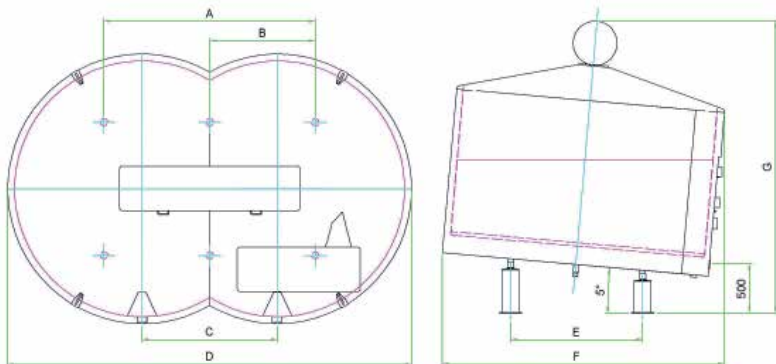
Steam:	2 kg/°C/1000 l/min
Power:	3x400V, 50Hz + Earth + 0
Control voltage:	24 V DC
25,000 l/h at 2 bar	
Flushing water:	25,000 l/h at 2 bar

Standard equipment

- Double-O vertical body with heating jacket on bottom and partly on sides
- Agitator/cutting device with knives
- Drive station with gearbox
- Frame agitators and frequency converter (speeds of min. 2 rpm and max. 10 rpm)
- Manhole cover
- Air vent
- Halogen light fitting
- Cleaning turbines (4 pcs.)
- Bottom flush
- Steam inlet
- Condensate outlet
- Jacket air vent
- Adjustable legs with base plates
- Capacity indication scale on shaft
- 15" touch screen control panel with PLC and software for recipe management system
- MCC-Panel

Options

- Extra level pressure transmitter
- Foamless top inlet
- Extra Whey outlet
 - Set of automatic valves for tank without extra whey outlets
 - Set of automatic valves for tank with extra whey outlets
 - Set of automatic valves for tank with whey strainer
 - Set of automatic valves for tank with continued whey suction unit
- Water distributing ring for jacket including raised jacket
- Frame flush for agitators
- Automatic system for dosing of additives
- Whey strainer
- Continuously operating whey suction unit
- APV curd pump,
- Sketch of platform for the CurdMaster
- Set of spare parts
- Non standard length of legs



Capacity	A	B	C	D	E	F	G	Weight	Motor
Litres	mm	mm	mm	mm	mm	mm	mm	kg	kW
3000	x	0	x	x	x	x	x	x	1.1
6000	x	0	x	x	x	x	x	x	1.5
8000	2150	0	1375	4105	1350	x	x	x	1.5
10000	2150	0	1375	4105	1350	2871	2962	2600	2.2
12000	2600	1300	1575	4709	1500	3262	2943	3050	2.2
15000	2600	1300	1575	4709	1500	3285	3203	3800	2.2
18000	2600	1300	1575	4709	1500	3307	3467	4000	2.2
20000	2900	1450	1775	5311	1700	x	x	x	4
22000	2900	1450	1775	5311	1700	x	x	x	4
25000	2900	1450	1775	5311	1700	3720	3830	4820	5.5
30000	2900	1450	1775	5311	1700	x	x	x	5.5

Primodan reserves the right to incorporate our latest design and material changes without notice or obligation. Design features, materials of construction and dimensional data, as described in this bulletin, are provided for your information only and should not be relied upon unless confirmed in writing. Please contact our sales representative for product availability in your region. For more information visit www.primodan.dk
Version: 01/2020