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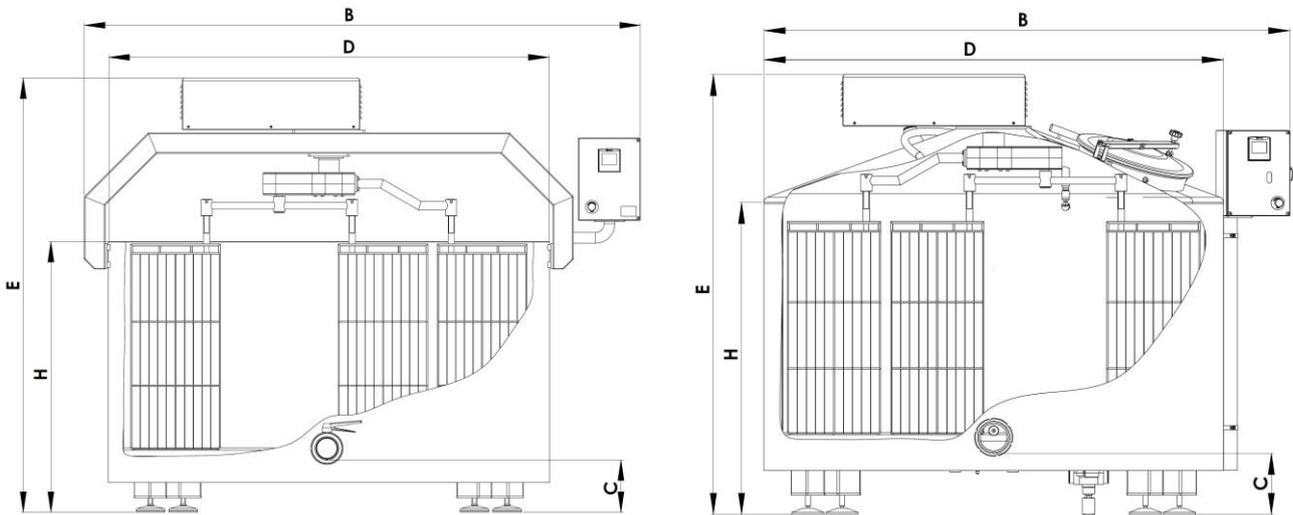
Cheese kettles SKH 1500 - 4000

Cheese cisterns SCH 1000 - 4000



Cheese kettle / cistern type SKH and SCH have the following characteristics:

- The kettle is a three part, insulated, **energy - saving construction** (closed circuit heating system), entirely made of **stainless steel** W.Nr.1.4301
- Thermal energy for heating and cooling is exchanged directly through the water coat and the bottom of the kettle which gives us **very good energy conversion efficiency**
- Because of the **low energetic consumption construction** of the device the volume of the heating or cooling water is very small and represents **only 3-6%** of the kettles useful volume.
- Kettle can be adapted to different kinds of available heating energy: **electricity, hot water from the boiler room, solar energy,...** (steam is optional)
- **Energy consumption is reduced** with the use of a water pump which allows a faster exchange of energy between water and milk.
- Milk is cooled down with the water from the pipe or collector or with **chilled water**. Using chilled water also **reduces water consumption** and cooling time.
- The thermal treatment of milk can be **automated** with the use of a controller on which we can **set, change and save** all the parameters of the processes of heating and cooling.
- We can offer you a wide range of **accessories** that will **facilitate your work** and **expand the usefulness** of the device (different supports, elevating devices, automation of operations, temperature recorders, different type of stirrers,..)



Type	Heating power (kW)* oil/gas boiler	Dimensions (mm)					Weight (kg)
		D outside	H	E	C	B	
SCH 1000	76 – 120	Ø 1550	1050	1700	250	2050	680
SCH 1250	76 – 120	Ø 1550	1200	1800	250	2050	740
SKH / SCH 1500	90 – 120	Ø 1550 (Ø 1720)	1350 (1150)	2050 (1900)	200 (200)	2050 (2200)	790 (860)
SKH / SCH 2000	140 – 180	Ø 1920	1200	2000	200	2450	975
SKH / SCH 2500	180 – 220	Ø 1920	1400	2200	200	2450	1050
SKH / SCH 3000	180 – 250	Ø 2120	1300	2200	200	2700	1150
SKH / SCH 4000	210 – 270	Ø 2120	1600	2500	200	2700	1240

* Recommended power for the preparation of hot water with an oil or gas powered heating boiler. Preparation of hot water is not included.

Cheese kettle

SKH 1500 - 4000

Basic equipment

- three part, **energy saving, insulated coat of the kettle**, made of stainless steel W.Nr.1.4301 (AISI 304) on a stable support
- two part / four part cover
- outflow DN 100 with a butterfly valve (bigger – optional)
- water circulation pump for the circulation of heating or cooling water
- control panel with basic electronic regulation of the heating temperature (up to 85°C)
- **equipment for the mechanical making of cheese** (planet gear, three part cheese harp)
- setting of the speed of the stirrer - cheese harp from 5 up to 20 rpm

Execution:

A – Heating up to 95°C

- connections to an external heating system
- plate heat exchanger for cooling water, safety valve, manometer
- **hand operated** valve for cooling
- control panel with a **basic regulation** of the heating

Label	Heating power (kW)*	Code	Delivery
SKH 1500 A	90 - 120	1.169.01	
SKH 2000 A	140 - 180	1.170.01	
SKH 2500 A	180 - 220	1.171.01	
SKH 3000 A	180 - 250	1.172.01	
SKH 4000 A	210 - 270	1.173.01	

C – Heating up to 95°C

- connections to an external heating system
- plate heat exchanger for cooling water, safety valve, manometer
- electromotor / electro-magnetic valves
- control panel with GPC 145 processor for the **automatic regulation** of heating and cooling

Label	Heating power (kW)*	Code	Delivery
SKH 1500 C	90 - 120	1.169.03	
SKH 2000 C	140 - 180	1.170.03	
SKH 2500 C	180 - 220	1.171.03	
SKH 3000 C	180 - 250	1.172.03	
SKH 4000 C	210 - 270	1.173.03	

O – Heating up to 85°C

- connections for an external heating or cooling water system
- control panel with a **basic regulation** of the heating

Label	Heating power (kW)*	Code	Delivery
SKH 1500 O	90 - 120	1.169.07	
SKH 2000 O	140 - 180	1.170.07	
SKH 2500 O	180 - 220	1.171.07	
SKH 3000 O	180 - 250	1.172.07	
SKH 4000 O	210 - 270	1.173.07	

* Recommended power for the preparation of hot water with an oil or gas powered heating boiler. Preparation of hot water is not included.



Additional equipment:

Kettle	Working platform on one side	Working platform all around the kettle	Elevating device	Central "Z" stirrer	Stirring shovels	Pneumatic inclination of the kettle	Wooden cage
1500 I	1.300.99		/	1.303.25	1.303.40	1.304.97	1.306.81
2000 I	1.301.00		/	/	1.303.42	1.304.98	1.306.82
2500 I	1.301.01		/	/	1.303.43	1.304.99	1.306.83
3000 I	1.301.02		/	/	1.303.44	1.305.00	1.306.84
4000 I	1.301.03		/	/	1.303.45	1.305.01	1.306.85

Equipment	Code
DN 125 outflow	1.304.39
Module for working without the controller	1.305.35
Controller MC 1	1.305.80
Controller Visio 100	1.305.81
Temperature recorder ind. - memory card + SS control panel	1.306.04
Stainless steel control panel	1.306.30
Manhole for curd	1.307.70

Equipment	Code
Module for gentle heating with steam – man. contr. 100kW	1.306.56
Module for gentle heating with steam – man. contr. 150-200kW	1.306.57
Module for gentle heating with steam – man. contr. 300kW	1.306.58
Module for gentle heating with steam – aut. contr. 100kW	1.306.60
Module for gentle heating with steam – aut. contr. 150-200kW	1.306.61
Module for gentle heating with steam – aut. contr. 300kW	1.306.62

Cheese cistern

SCH 1000 - 4000

Basic equipment:

- three part, **energy saving, insulated coat of the kettle**, made of stainless steel W.Nr.1.4301 (AISI 304) on a stable support with a mechanism for the inclination of the kettle to the outflow
- welded basic cover with service manhole and a washing head for CIP
- outflow DN 100 with a butterfly valve (bigger – optional)
- water circulation pump for the circulation of heating or cooling water
- electro-motor with 10 rpm for the cheese harps
- control panel with basic electronic regulation of the heating temperature (up to 85°C)
- **equipment for the mechanical making of cheese** (planet gear, three part cheese harp)
- setting of the speed of the stirrer - cheese harp from 5 up to 20 rpm

Execution:

A – Heating up to 85°C

- connections to an external heating system
- plate heat exchanger for cooling water, safety valve, manometer
- **hand operated** valve for cooling
- control panel with a **basic regulation** of the heating

Label	Heating power (kW)*	Code	Delivery
SCH 1000 A	76 - 120	1.180.01	
SCH 1250 A	76 - 120	1.181.01	
SCH 1500 A	90 - 120	1.182.01	
SCH 2000 A	140 - 180	1.183.01	
SCH 2500 A	180 - 220	1.184.01	
SCH 3000 A	180 - 250	1.185.01	
SCH 4000 A	210 - 270	1.186.01	

C – Heating up to 85°C

- connections to an external heating system
- plate heat exchanger for cooling water, safety valve, manometer
- electromotor / electro-magnetic valves
- control panel with GPC 145 processor for the **automatic regulation** of heating and cooling

Label	Heating power (kW)*	Code	Delivery
SCH 1000 C	76 - 120	1.180.02	
SCH 1250 C	76 - 120	1.181.02	
SCH 1500 C	90 - 120	1.182.02	
SCH 2000 C	140 - 180	1.183.02	
SCH 2500 C	180 - 220	1.184.02	
SCH 3000 C	180 - 250	1.185.02	
SCH 4000 C	210 - 270	1.186.02	

O – Heating up to 85°C

- connections for an external heating or cooling water system
- control panel with a **basic regulation** of the heating

Label	Heating power (kW)*	Code	Delivery
SCH 1000 O	76 - 120	1.180.03	
SCH 1250 O	76 - 120	1.181.03	
SCH 1500 O	90 - 120	1.182.03	
SCH 2000 O	140 - 180	1.183.03	
SCH 2500 O	180 - 220	1.184.03	
SCH 3000 O	180 - 250	1.185.03	
SCH 4000 O	210 - 270	1.186.03	

* Recommended power for the preparation of hot water with an oil or gas powered heating boiler. Preparation of hot water is not included.



Additional equipment:

Kettle	Working platform on one side	Elevating device	Stirring shovels	Pneumatic inclination of the kettle	Wooden cage
1000 I	1.300.97	1.301.46	1.303.38	1.304.95	1.306.78
1250 I	1.300.98	1.301.47	1.303.40	1.304.96	1.306.80
1500 I	1.300.99	/	1.303.41	1.304.97	1.306.81
2000 I	1.301.00	/	1.303.42	1.304.98	1.306.82
2500 I	1.301.01	/	1.303.43	1.304.99	1.306.83
3000 I	1.301.02	/	1.303.44	1.305.00	1.306.84
4000 I	1.301.03	/	1.303.45	1.305.01	1.306.85

Equipment	Code
DN 125 outflow	1.304.39
Module for working without the controller	1.305.35
Controller MC1	1.305.80
Controller Visio 100	1.305.81
Module for lighting the interior DN100	1.305.84
Temperature recorder ind. – memory card + SS control panel	1.306.04
Stainless steel control panel	1.306.30

Equipment	Code
Module for gentle heating with steam – man. contr. 100kW	1.306.56
Module for gentle heating with steam – man. contr. 150-200kW	1.306.57
Module for gentle heating with steam – man. contr. 300kW	1.306.58
Module for gentle heating with steam – aut. contr. 100kW	1.306.60
Module for gentle heating with steam – aut. contr. 150-200kW	1.306.61
Module for gentle heating with steam – aut. contr. 300kW	1.306.62

Cheese kettles and cisterns - gallery

Executions:

		
<p>Equipment for the mechanical making of cheese</p>	<p>Water connections type C - separated dividing plate</p>	<p>Water connections type O - selection of heating/cooling on the bottom and wall</p>

Additional equipment:

			
<p>Working platform</p> <p>Allows the emptying of the kettle directly into the cheese table or prepress. Access to the kettle on one side through a staircase with a safety rail</p>	<p>Elevating device</p> <p>Allows the emptying of the kettle directly into the cheese table or prepress. Access to the kettle from all sides in the lower position makes the work and cleaning easier</p>	<p>Central "Z" stirrer</p> <p>With the central Z stirrer it is possible to stir with the two part cover closed. The central Z stirrer is mandatory if you want to heat the milk over 65°C.</p>	<p>Stirring shovels</p> <p>The stirring shovels are mounted in place of the cheese harps to make a better stirring and prevent curd to stay on the bottom of the kettle.</p>

			
<p>Water (pneumatic) inclination of the kettle</p> <p>Alternative to inclining the kettle with the manual mechanism. We recommend it for bigger volumes. A water cylinder makes it possible to connect it directly to the home water circuit without the need of additional equipment.</p>	<p>DN 125 outflow</p> <p>A bigger outflow makes the pouring of the cheese curd faster.</p>	<p>Manhole for curd</p> <p>The curd can be poured out from this door into the cheese draining table.</p>	<p>Temperature recorder ind. - memory card</p> <p>Independently records the temperatures and times of pasteurization on a CompactFlash card and allows the display and editing of the data on a personal computer</p>

			
<p>Hot water stove with equipment</p>	<p>Module for cooling (Dixell)</p> <p>Enables the use of the kettle as a milk cooling tank. An outside source of iced water is needed.</p>	<p>Stainless steel control panel</p> <p>Makes the cleaning easier and provides for a better look of the machine.</p>	<p>Module for working without the controller</p> <p>In the case of a failure of the main controller it allows a manual operating of the device. We recommend it for dairies in remote places where there is no authorized service in the vicinity.</p>

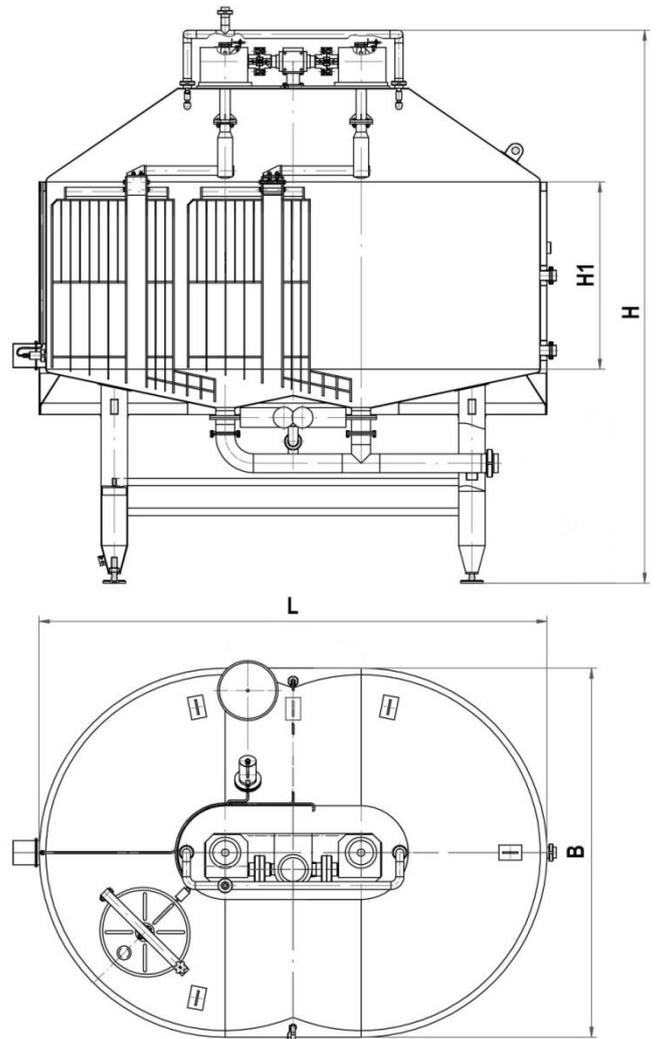
		
<p>Controller MC 1</p> <p>Touch screen display 3.5" with 320×240 resolution. Graphic display of the cheese kettle / pasteurizer, allows saving up to 9 different programs of thermal treatment (pasteurization, cheese making, yoghurt...) and changing the working parameters during the use.</p>	<p>Controller MC 500</p> <p>Color display 5". Graphic display of the cheese kettle / pasteurizer, allows saving up to 9 different programs of thermal treatment (pasteurization, cheese making, yoghurt...) and changing the working parameters during the use.</p>	<p>Controller MC 500R</p> <p>Color display 5". Graphic display of the cheese kettle / pasteurizer, allows saving up to 9 different programs of thermal treatment (pasteurization, cheese making, yoghurt...) and changing the working parameters during the use.</p> <p>Temperature recorder on SD card.</p> <p>Optional: control the opening of the cover and of the outflow valve</p>

Cheese cistern

SCH 3000 - 8000 20

Basic equipment:

- three part, **energy saving, insulated coat of the kettle**, made of stainless steel W.Nr.1.4301 (AISI 304) on a stable support
- welded basic cover with service manhole
- two outflows DN 100 with pneumatic valves on the bottom
- electro-motor with 10 rpm for the cheese harps
- control panel with basic electronic regulation of the heating temperature (up to 85°C)
- **equipment for the mechanical making of cheese** (planet gear, cheese harp)
- setting of the speed of the stirrer - cheese harp from 5 up to 20 rpm



Type	Dimensions (mm)				Code
	B	L	H1	H	
SCH 3000 20	1970	2690	750	2150	1.190.00
SCH 4000 20	1970	2690	1000	2400	1.190.01
SCH 5000 20	2370	3190	1000	2950	1.190.02
SCH 6000 20	2370	3190	1250	3200	1.190.03
SCH 8000 20	2370	3190	1500	3450	1.190.04

Vessel for cottage cheese and quark - Schulenburg SLB 1000 - 3000

It is used for coagulation (option: heating) of milk / for making the curd and extruding of the whey

Basic equipment:

- Double coat, insulated, semi-circular vessel (option: heating walls) made from stainless steel AISI 304S
- Exit door Ø300 mm / outlet for emptying of the curd - quark
- Draining net / perforated plate for extruding / separation of the whey from the cheese mass / curd
- Pneumatic powered lifting / lowering and pressing of the draining net
- Connections for air, pressure reducing valve, pressure gauge, . . .



Industry

Type	Dimensions				Code
	Length	Width	Height of vessel	Total height (on the platform)	
SLB 1000	2000	1300	1000	2000	5.200.01
SLB 2000	2900	1550	1100	2100	5.200.02
SLB 3000	3450	1760	1100	2350	5.200.03

Additional equipment:

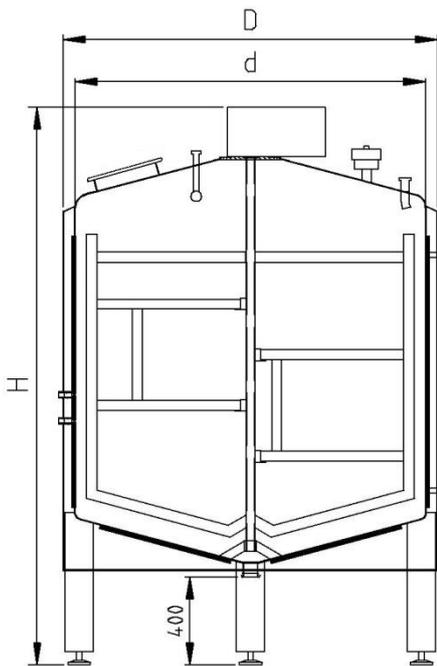
Type	Working platform	Heating coat on the kettle	Pump for whey - manual control	Measuring strip	Module time control of the pressure - 3 levels
SLB 1000	5.200.11	5.200.19	5.200.26	5.200.31	5.200.35
SLB 2000	5.200.12	5.200.20	5.200.27	5.200.32	5.200.35
SLB 3000	5.200.13	5.200.21	5.200.27	5.200.32	5.200.35

Duplicators

D 500 – 6000 – hot water

Basic equipment:

- three part, energy saving, insulated coat of the kettle with conical bottom, made of stainless steel W.Nr.1.4301 / W.Nr.1.404 (AISI 304 / AISI316) on a stable support
- laser welded exchanger allows a maximal heat exchanging area on the wall and bottom
- maximal working pressure in exchanger 3bar
- welded cover with manhole and air valve
- DN 50 (65) inlet
- DN 50 (65) outflow
- connections for heating and cooling water
- connections for CIP and washing head
- PT 100 probe nozzle
- digital temperature display
- motoreducer with anchor stirrer 10 (20) rpm
- maximum hot water intake: 85°C



Type	Dimensions (mm)					Code
	Inside diameter d	Outside diameter D	Height H	Outflow height	Water connections	
D 500	Ø 900	Ø 1020	1720	300	1"	5.000.01
D 750	Ø 900	Ø 1020	2150	400	1"	5.000.02
D 1000	Ø 1185	Ø 1300	1880	400	1"	5.000.03
D 1500	Ø 1300	Ø 1400	2050	400	5/4"	5.000.04
D 2000	Ø 1430	Ø 1540	2250	400	5/4"	5.000.05
D 3000	Ø 1600	Ø 1710	2650	400	6/4"	5.000.06
D 4000	Ø 1800	Ø 1920	2800	400	6/4"	5.000.07
D 5000	Ø 1800	Ø 1920	3250	400	2"	5.000.08
D 6000	Ø 2000	Ø 2150	3300	400	2"	5.000.09

DS 1000 – 3000 - steam

Basic equipment:

- three part insulated coat of the kettle with conical bottom, made of stainless steel W.Nr.1.4301 / W.Nr.1.404 (AISI 304 / AISI316) on a stable support
- double coat with a spiral for steam
- maximal working pressure in exchanger 1 bar
- welded cover with manhole and air valve
- DN 50 (65) inlet
- DN 50 (65) outflow
- connections for steam or cooling water
- connections for CIP and washing head
- PT 100 probe nozzle
- digital temperature display
- motoreducer with anchor stirrer 10 (20) rpm

Type	Dimensions (mm)					Code
	Inside diameter d	Outside diameter D	Height H	Outflow height	Water connections	
DS 1000	Ø 1185	Ø 1300	1880	400	1"	5.000.13
DS 1500	Ø 1185	Ø 1300	2200	350	5/4"	5.000.14
DS 2000	Ø 1300	Ø 1420	2350	350	5/4"	5.000.15
DS 3000	Ø 1600	Ø 1760	2650	400	5/4"	5.000.16

Industry

Additional equipment:

Type	Insulated cover	Stirrer speed regulation - recommended	Scraper stirrer	Dispersion stirrer
D 500	/	1.305.64	5.001.00	5.001.20
D 750	/	1.305.64	5.001.01	5.001.21
D(S) 1000	5.000.75	1.305.64	5.001.02	5.001.22
D(S) 1500	5.000.76	1.305.64	5.001.03	5.001.23
D(S) 2000	5.000.76	1.305.65	5.001.04	5.001.24
D(S) 3000	5.000.77	1.305.65	5.001.05	5.001.25
D 4000	5.000.78	1.305.66	5.001.06	5.001.26
D 5000	5.000.78	1.305.66	5.001.07	5.001.27
D 6000	5.000.79	1.305.66	5.001.08	5.001.28

Equipment	Code
Additional washing head	5.000.91
Washing turbine	5.000.92
Service opening on the side	5.000.93
Ladder	5.000.94
Pt 100 temperature probe 4 - 20 mA	5.000.95
Pt 1000 temperature probe 4 - 20 mA	5.000.96
Control glass with light DN 100	5.000.97
Basic control panel, start - stop	5.000.98



Processing stirring tanks

PST 250 – 3000 EL / HW / EW

Basic equipment:

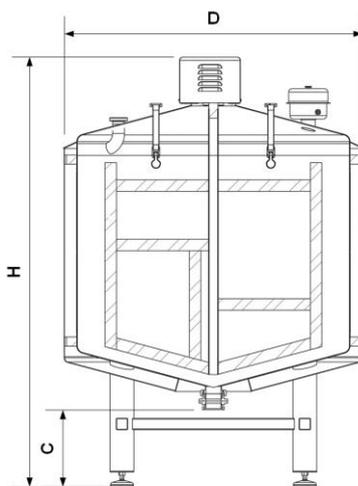
- three part, energy saving, insulated coat of the kettle with conical bottom, made of stainless steel W.Nr.1.4301 / W.Nr.1.404 (AISI 304 / AISI316) on a stable support
- laser welded exchanger allows a maximal heat exchanging area on the wall and bottom
- maximal working pressure in the exchanger 3bar
- maximal temperature in the exchanger: 115°C
- welded cover with manhole and air valve (option: open two part cover)
- electrical (EL), hot water (HW) (boiler, solar, heat pump,...) or combined (EW) heating
- connections for heating and cooling water
- connections for CIP and washing head (only on closed execution)
- maximal temperature in the tank: 100°C

Type	Dimensions (mm)						
	Inside diameter d	Outside diameter D	Height H	Outflow height C	Water connections	Product inlet	Product outlet
PST 250	Ø 750	Ø 860	1420	300	1"	DN 40	DN 50
PST 500	Ø 900	Ø 1020	1720	300	1"	DN 40	DN 50
PST 750	Ø 900	Ø 1020	2150	400	1"	DN 40	DN 50
PST 1000	Ø 1185	Ø 1300	1880	400	5/4"	DN 50	DN 65
PST 1500	Ø 1300	Ø 1400	2050	400	6/4"	DN 50	DN 65
PST 2000	Ø 1430	Ø 1540	2250	400	6/4"	DN 50	DN 65
PST 3000	Ø 1600	Ø 1710	2650	400	2"	DN 50	DN 65

HW - Heating up to 100°C

- connections to an **external heating system**
- manual valves
- control panel with the **basic regulation** of heating

Type	Heating power (kW) ¹	Code
PST 250 HW	35	1.700.00
PST 500 HW	65	1.700.01
PST 750 HW	65	1.700.02
PST 1000 HW	95	1.700.03
PST 1500 HW	95	1.700.04
PST 2000 HW	150	1.700.05
PST 3000 HW	200	1.700.06



EL - Heating up to 100°C

- electrical heaters 20 – 90kW
- expansion vessel, safety valve, manometer
- control panel with the **basic regulation** of heating

Type	Heating power (kW) ²	Code
PST 250 EL	20	1.701.80
PST 500 EL	36	1.701.83
PST 750 EL	40	1.701.84
PST 1000 EL	60	1.701.86
PST 1500 EL	90	1.701.87
PST 2000 EL	120	1.701.88

EW - Heating up to 100°C

- electrical heaters 20 – 60kW
- manual valves
- connections to an **external heating system**
- control panel with the **basic regulation** of heating

Type	Heating power (kW) ²	Code
PST 250 EW	20	1.701.90
PST 500 EW	36	1.701.92
PST 750 EW	40	1.701.94
PST 1000 EW	60	1.701.96
PST 1500 EW	90	1.701.97
PST 2000 EW	120	1.701.98

1) Recommended power for the preparation of hot water with an oil or gas powered heating boiler. Preparation of hot water is not included.

2) Electrical heaters

Type	Anchor stirrer with stirring barrier (100mm from the wall)	Anchor stirrer near the wall (10-15mm from the wall)	Scrape stirrer	High speed propeller stirrer (100rpm)	Turbine stirrer	Dissolver stirrer	Dispersion stirrer
PST 250	1.700.10	1.700.20	1.700.30	1.700.40	1.700.50	1.700.80	1.700.60
PST 500	1.700.11	1.700.21	1.700.31	1.700.41	1.700.51	1.700.81	1.700.61
PST 750	1.700.12	1.700.22	1.700.32	1.700.42	1.700.52	1.700.82	1.700.62
PST 1000	1.700.13	1.700.23	1.700.33	1.700.43	1.700.53	1.700.83	1.700.63
PST 1500	1.700.14	1.700.24	1.700.34	1.700.44	1.700.54	1.700.84	1.700.64
PST 2000	1.700.15	1.700.25	/	1.700.45	1.700.55	1.700.85	1.700.65
PST 3000	1.700.16	1.700.26	/	1.700.46	1.700.56	1.700.86	1.700.66

Type	Two part cover	Automatic temperature regulation	Controller MC1	Module for cooling (PHE)	Module for indirect heating with steam - manual	Module for indirect heating with steam - automatic
PST 250	1.700.70	1.702.00	1.305.80	1.702.10	1.306.55	1.306.59
PST 500	1.700.71	1.702.00	1.305.80	1.702.11	1.306.55	1.306.59
PST 750	1.700.72	1.702.01	1.305.80	1.702.12	1.306.56	1.306.60
PST 1000	1.700.73	1.702.01	1.305.80	1.702.13	1.306.56	1.306.60
PST 1500	1.700.74	1.702.02	1.305.80	1.702.14	1.306.57	1.306.61
PST 2000	1.700.75	1.702.02	1.305.80	1.702.15	1.306.57	1.306.61
PST 3000	1.700.76	1.702.02	1.305.80	1.702.16	1.306.58	1.306.62



Open execution, two part cover



Anchor (gate) stirrer with stirring barrier (100mm from the wall)

Tangential flow, stirring barrier for a better mixing. Used at low speeds. For low viscosity liquids (yogurt, cream, ...)



Anchor (gate) stirrer near the wall (10-15mm from the wall)

Tangential flow, high shearing rate at edges, minimum deposits on the vessel wall. Used at low speeds. The ideal stirrer for medium to high viscosity fluids (chocolate, rice pudding...)



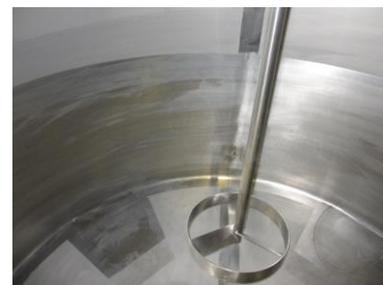
Scrape stirrer

Tangential flow, scraping elements for a minimum deposits on the vessel wall. Used at low speeds. The ideal stirrer for medium to high viscosity fluids that tend to stick on the walls (rice pudding, jam...)



High speed propeller stirrer

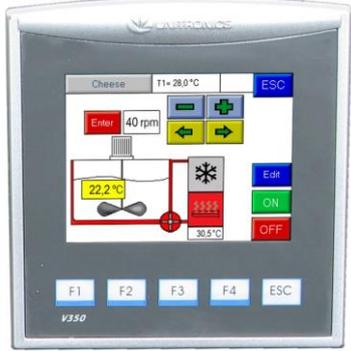
For drawing the material to be mixed from above. Generates axial flow in the vessel.

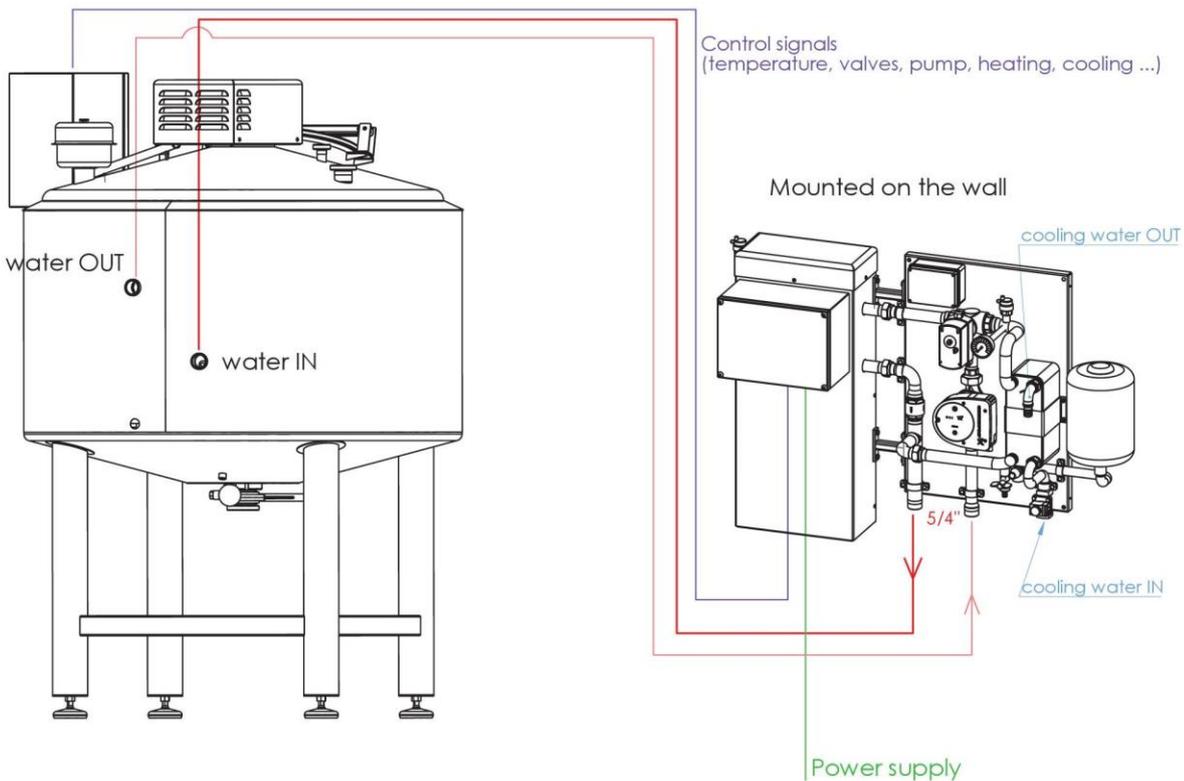


Turbine stirrer

For drawing the material to be mixed from above. Generates axial flow in the vessel. For low viscosity products (milk, juices...)

		
<p>Dispersion stirrer</p>	<p>Dissolver stirrer</p>	<p>Combination of different stirrers</p>
<p>It causes an intensive mixing of the contents of the vessel in the micro and macro range and simultaneously completely disperses the product. For mixing powder into liquid.</p>	<p>Radial flow, for drawing the material to be mixed from the top and the bottom. High turbulence, high shearing forces. For particle reduction.</p>	

		
<p>Module for cooling (plate heat exchanger)</p>	<p>Automatic temperature regulation – processor GPC 145</p>	<p>Color touch screen controller MC1</p>

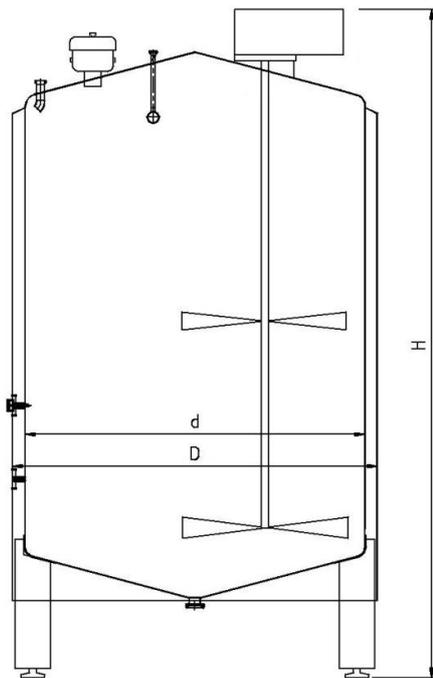


Connection scheme of the electrically heated PST (EL type), with module for cooling and automatic temperature regulation. The module for cooling and the electrical heaters are mounted on a wall near the tank.

Storage tanks type ST 1000 - 20000

Basic equipment:

- energy saving, insulated coat of the kettle with conical bottom, made of stainless steel W.Nr.1.4301 (AISI 304) on a stable support
- welded cover with manhole and air valve
- DN 50 inlet
- DN 50 outflow
- connections for CIP and washing head
- PT 100 probe nozzle
- digital temperature display
- motoreducer with propeller (turbine stirrer) 23 (60) rpm



Industry

Additional equipment:

Type	Dimensions (mm)				Code
	Inside diameter d	Outside diameter D	Height H	Outflow height	
ST 1000	Ø 1015	Ø 1100	2200	300	5.000.30
ST 1500	Ø 1185	Ø 1270	2300	400	5.000.31
ST 2000	Ø 1185	Ø 1270	2750	400	5.000.32
ST 3000	Ø 1430	Ø 1550	2700	400	5.000.33
ST 4000	Ø 1600	Ø 1720	3000	400	5.000.34
ST 5000	Ø 1600	Ø 1720	3600	400	5.000.35
ST 7500	Ø 1800	Ø 1950	3900	400	5.000.36
ST 10000	Ø 2000	Ø 2200	4200	400	5.000.37
ST 15000	Ø 2000	Ø 2200	5700	400	5.000.38
ST 20000	Ø 2200	Ø 2400	6300	400	5.000.39

Type	Insulated cover	Water cooling coat
ST 1000	5.000.75	5.000.60
ST 1500	5.000.76	5.000.61
ST 2000	5.000.76	5.000.62
ST 3000	5.000.77	5.000.63
ST 4000	5.000.78	5.000.64
ST 5000	5.000.78	5.000.64
ST 7500	5.000.79	5.000.65
ST 10000	5.000.80	5.000.66
ST 15000	5.000.80	5.000.67
ST 20000	5.000.80	5.000.67

Equipment	Code
Additional washing head	5.000.91
Washing turbine	5.000.92
Service opening on the side	5.000.93
Ladder	5.000.94
Pt 100 temperature probe 4 - 20 mA	5.000.95
Pt 1000 temperature probe 4 - 20 mA	5.000.96
Control glass with light DN 100	5.000.97
Basic control panel, start - stop	5.000.98

Cheese prepresses

Prepress type PRP-R

The prepress PRP-R is made for accepting cheese curd, draining the whey, prepressing, manual cutting the mass into cheese blocks and (with additional equipment) pressing the cheese moulds. All the processes are manual. The cleaning is manual.

Material: parts that come in contact with the product are made of stainless steel AISI 304

Composition:

- deepened cheese table for accepting the cheese mass with whey
- stable support
- outflow valve for whey
- two draining grids (movable in the front and fixed in the back)
- plates for prepressing (segments)
- deposit grid under the table
- basic version with movable bridges, each with two pressing pneumatic cylinders and a basic regulation of pressure to prepress the cheese mass

Options:

- additional bridges and pressing cylinders to **press the cheese in cheese moulds**
- higher bridges for pressing two cheese moulds under one pressing point
- the table can be used as a vessel for cleaning the equipment (during the use of the table for prepressing/pressing the cleaning solution is stored in a vessel under the table)
- support on wheels
- door on the front side
- selection of 3 levels of pressing force
- time programming of the pressing force
- pumping the whey in an appropriate location
- draining grids on the side



Advantages:

- a very good relationship between price and usefulness
- adaptable for different quantities and sizes of cheese
- movable draining grid to adapt to different quantities of milk
- can be used also as a cheese press (with additional equipment)
- manual execution
- appropriate for small quantities of milk (up to 3000 liters)

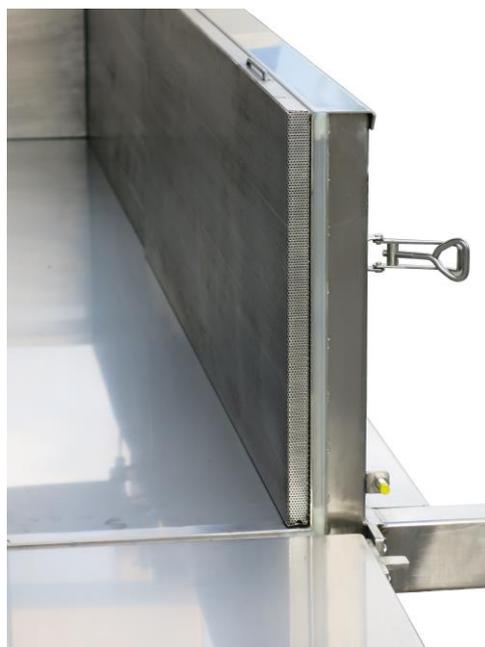


Type	Number of bridges	Processing capacity: (kg)	Vessel dimensions (mm)				Total dimensions (mm)			Expected height of the cheese mass (mm)	Code
			Length	Width	Depth	Height from floor to upper edge	Length	Width	Height		
PRP-R 70	2	cca. 70	1100 (1000)	1000 (900)	350	950	1450	1150	1500	100	1.310.25
PRP-R 120	2	cca. 120	1600 (1500)	1000 (900)	350	950	2000	1150	1500	100	1.310.26
PRP-R 160	2	cca. 160	2100 (2000)	1000 (900)	350	950	2400	1150	1500	100	1.310.27
PRP-R 220	3	cca. 220	2600 (2500)	1100 (1000)	400	1000	3100	1300	1650	100	1.310.28
PRP-R 290	3	cca. 290	3400 (3300)	1100 (1000)	400	1000	3950	1300	1650	100	1.310.29



Option: Higher space under the pressing point

Allows the pressing of two cheese moulds under one pressing point



Option: Draining grids on the side

For a better and faster draining of the whey.



Option: Door on the front

For an easier emptying of the content of the prepress



Option: Automatic (time programmed) selection of the pressing force

Allows the programming of the pressing force

Additional equipment:

Type	Additional bridge	Additional pressing point (cylinder)	Higher space under the pressing point (550mm)	Vessel for the cleaning solution under the table	Draining stainless steel grid on the bottom	Draining PVC grid on the bottom	Draining grids on the side	Support on wheels	Door on the front
PRP-R 70	1.311.15	1.311.17	1.311.27	1.311.18	1.311.05	1.311.10	1.311.25	1.300.42	1.311.25
PRP-R 120	1.311.15	1.311.17	1.311.27	1.311.19	1.311.06	1.311.11	1.311.26	1.300.43	1.311.25
PRP-R 160	1.311.15	1.311.23	1.311.27	1.311.20	1.311.07	1.311.12	1.311.27	1.300.44	1.311.25
PRP-R 220	1.311.16	1.311.24	1.311.27	1.311.21	1.311.08	1.311.13	1.311.28	1.300.46	1.311.26
PRP-R 290	1.311.16	1.311.24	1.311.27	1.311.22	1.311.09	1.311.14	1.311.29	1.300.46	1.311.26

Prepress type PRP-RT

Execution with a draining transport belt on the bottom of the table, cutting knives at the front and movable bridges with pressing cylinders which can be moved by hand along the table. The operator puts perforated plates under the pressing points to press the entire cheese mass simultaneously. After the prepressing the transport belt moves the cheese mass towards the knives.

Manual cleaning.

Material: parts that come in contact with the product are made of stainless steel AISI 304

Composition:

- deepened cheese table for accepting the cheese mass with whey
- draining pressing plates (segments)
- stable support
- collection vessel for whey under the table
- two movable draining grids (fixed in the front and movable in the back)
- manual movable bridges with two pneumatic cylinders
- draining transport belt with drive
- front bridge with knives on a pneumatic drive
- control panel for moving and cutting
- simple regulation of the pressing force



Draining

Draining through the draining transport belt and through the draining grids in the front and in the back of the vessel. The whey is collected in a container under the vessel and is released in a draining canal.

Pressing

Execution with bridges with pressing cylinders which can be moved by hand along the table. The cylinders press the draining pressing plates. The pressure can be set from 1kg up to 3kg per kg of cheese mass.

Cutting

The draining transport belt moves the cheese mass under the knives. The format is given by the movement of the transport belt and the distance between knives. We can adjust the format by changing the height of the cheese mass and the movement of the belt. The distance between the knives is fixed.

Moving

Continuous in manual mode

Operation

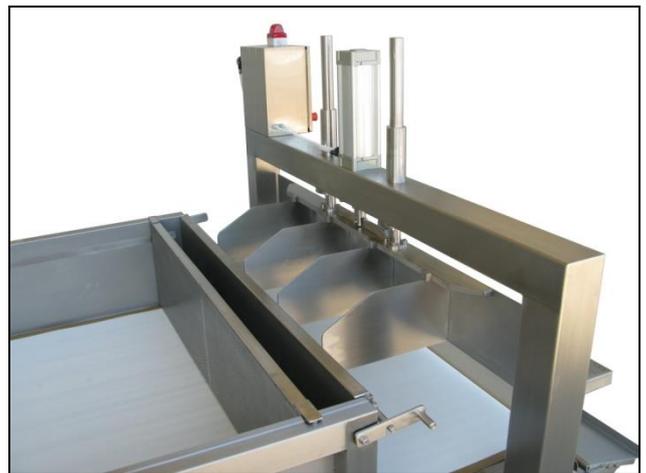
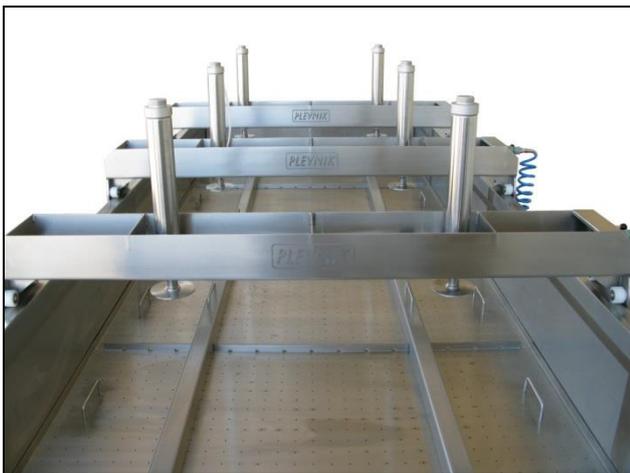
Manual with switches for the belt movement and cutting.

Additional equipment:

- time programming of the pressing force
- adjustable size of the cut cheese
- pumping the whey in an appropriate location
- selection of 3 levels of pressing force

Advantages:

- cheaper execution of a prepress with the draining transport belt
- movable draining grid to adapt to different quantities of milk
- appropriate for bigger quantities of milk (2000 - 10000 liters per batch)



Type	Processing capacity (cheese): (kg)	Vessel dimensions (mm)			Total dimensions (mm)			Expected height of the cheese mass (mm)	Code
		Length	Width	Depth	Length	Width	Height		
PRP-RT 200	200	2200	900	400	3000	1500	1800	100 - 150	1.310.41
PRP-RT 300	300	3100	900	400	3900	1500	1800	100 - 150	1.310.42
PRP-RT 400	400	2800	1250	450	3800	1800	1900	150 - 200	1.310.43
PRP-RT 500	500	3400	1250	500	4400	1800	1900	150 - 200	1.310.44
PRP-RT 800	800	4000	1550	500	5400	2100	1900	150 - 200	1.310.45
PRP-RT 1000	1000	5000	1550	500	6000	2000	1900	150 - 200	1.310.46

Prepress type PRP-AP

Prepress with cutting knives and pressing plate on a movable bridge moving along the vessel. Manual cleaning.

Material: parts that come in contact with the product are made of stainless steel AISI 304

Composition:

- deepened cheese table (400mm depth) for accepting the cheese mass with whey
- front door used as a working surface
- stable support
- outflow valve for whey
- movable bridge with pneumatic drive, knives and a plate for prepressing
- control panel with a processor for the automatic operation

Draining

Draining is done through the draining grid in the front and in the back of the vessel. The movable grid in the back allows the same height of the cheese block with different quantities of milk. The whey is collected in a container under the vessel and is released in a draining canal.

Prepressing

Automatic pressing of the cheese mass in sections. The bridge moves along the table and presses the section of the cheese block under the pressing plate. Then it moves to the next section. The pressure can be set from 1kg up to 4kg per kg of cheese mass. The time of pressing each section can be set from 5 up to 20 seconds.

Cutting

The format is given by the movement of the bridge and the distance between knives. The distance between knives is fixed.

Moving

Automatic cutting of the cheese mass and pushing the cut pieces to the front door.

Operation

Automatic and manual operation with switches for moving and cutting.

Additional equipment:

- time programming of the pressing force
- adjustable size of the cut cheese
- selection of 3 levels of pressing force
- pumping the whey in an appropriate location
- draining grids on the side



Industry

Advantages:

- automated execution (of prepressing, cutting, pushing of cheese blocks)
- movable draining grid to adapt to different quantities of milk
- appropriate for average quantities of milk (1000 - 4000 liters)
- easy maintenance



Type	Processing capacity: (kg)	Inside vessel dimensions (mm)				Total dimensions (mm)			Expected height of the cheese mass (mm)	Code
		Length	Width	Depth	Height from floor to upper edge	Length	Width	Height		
PRP-AP 100	100	1100	900	400	1100	1500	1350	1900	100	1.310.30
PRP-AP 150	150	1700	900	400	1100	2200	1350	1900	100	1.310.31
PRP-AP 200	200	2200	900	400	1100	2700	1350	1900	100	1.310.32
PRP-AP 300	300	2700	1200	400	1100	3200	1650	1900	100	1.310.33
PRP-AP 400	400	3000	1250	450	1100	3700	1750	2600	150	1.310.34

Prepress type PRP-AT

Prepress with a draining transport belt on the bottom of a profiled table, a pressing plate that simultaneously presses the entire cheese mass and cutting knives at the front of the vessel. After the prepressing the transport belt moves the cheese mass towards the knives.

Material: parts that come in contact with the product are made of stainless steel AISI 304

Composition:

- deepened cheese table for accepting the cheese mass with whey
- collection vessel for whey under the table
- stable support
- two movable draining grids (in the front and in the back)
- central bridge with a pressing plate with a pneumatic cylinder
- front bridge with knives on a pneumatic drive
- draining transport belt with drive
- control panel with a processor for the automatic operation
- simple regulation of the pressing force

Draining

Draining through the draining transport belt and through the draining grids in the front and in the back of the vessel.

The whey is collected in a container under the vessel and is released in a draining canal.

Pressing

Pressing the entire cheese mass simultaneously. The pressure can be set from 0.5kg up to 4kg per kg of cheese mass. The time of pressing can be set from 10 seconds up to 24 hours.

Cutting

Automatic cutting of the cheese mass: the transport belt moves the cheese mass towards the knives at the front door. The format is given by the movement of the transport belt and the distance between knives. The distance between knives is fixed.

Moving

Step-by-step in automatic mode or continuous in manual mode.

Operation

Automatic and manual mode with the possibility of programming the movement of the transport belt.

Additional equipment:

- time programming of the pressing force
- adjustable size of the cut cheese
- pumping the whey in an appropriate location
- CIP cleaning
- insulated vessel
- selection of 3 levels of pressing force

Advantages:

- totally automated execution
- draining also through the draining transport belt
- pressing the entire cheese block simultaneously
- appropriate for bigger quantities of milk (2000 - 10000 liters)



Type	Processing capacity (cheese): (kg)	Vessel dimensions (mm)			Total dimensions (mm)			Expected height of the cheese mass (mm)	Code
		Length	Width	Depth	Length	Width	Height		
PRP-AT 200	200	2200	900	400	3000	1500	3000	100 - 150	1.310.35
PRP-AT 300	300	3100	900	400	3900	1500	3000	100 - 150	1.310.36
PRP-AT 400	400	2800	1250	450	3800	1800	3500	150 - 200	1.310.37
PRP-AT 500	500	3400	1250	500	4400	1800	3500	150 - 200	1.310.38
PRP-AT 800	800	4000	1550	500	5000	2000	3500	150 - 200	1.310.39
PRP-AT 1000	1000	5000	1550	500	6000	2000	3500	150 - 200	1.310.40

Pneumatic cheese press - vertical type PPS-A

This type of press with its mobility gives us a good utilization of space.

The press is constituted of a **mobile base** construction with 4 to 20 pneumatic cylinders with the regulation of the pressing force.

The models are put in 2 to 6 levels in height under each pressing point.

Usually is made for pressing only one dimension of cheese and is used in **bigger cheese-making facilities** where they use more than one press.



Type	Number of pressing points	Possibility of pressing up to (kg) of cheese:	Dimensions (mm)				Code	Delivery
			Length	Width	Working height	Height		
PPS-A 4	4	cca. 50	900	700	1400	2200	1.312.08	
PPS-A 6	6	cca. 75	1150	700	1400	2200	1.312.09	
PPS-A 8	8	cca. 100	1450	700	1400	2200	1.312.10	
PPS-A 10	10	cca. 125	1700	700	1400	2200	1.312.11	
PPS-A 12	12	cca. 150	1950	700	1400	2200	1.312.12	
PPS-A 16	16	cca. 200	2500	700	1400	2200	1.312.13	
PPS-A 20	20	cca. 240	3000	700	1400	2200	1.312.14	

Pneumatic cheese press - vertical universal type PPS-AU

Execution with a good space utilization.

The press is constituted of a frame with 2 to 6 pneumatic cylinders , pressure regulation and guided plates between levels.

The moulds are loaded in up to 5 levels.

This press is appropriate for bigger cheese-makers that press more than 100 kg of cheese at a time.



Type	Number of pressing points	Possibility of pressing up to (kg) of cheese:	Dimensions (mm)				Code	Delivery
			Length	Width	Working height	Height		
PPS-AU 2	2	cca. 100	1000	1000	1250	2400	1.312.15	
PPS-AU 3	3	cca. 150	1500	1000	1250	2400	1.312.16	
PPS-AU 4	4	cca. 200	2000	1000	1250	2400	1.312.17	
PPS-AU 5	5	cca. 250	2500	1000	1250	2400	1.312.18	
PPS-AU 6	6	cca. 300	3000	1000	1250	2400	1.312.19	

Cheese equipment - other



CIP 4-part monoblock

- Tunnel presses
- Pumps
- Different types
- Platforms
-

On enquiry

In the process of constant improvements we reserve the right to make technical and aesthetic modifications without prior notice!
Pictures are symbolic



Ice banks

ICE BANKS

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Ice bank with cooling aggregate - generally		Page 28
Ice bank with cooling aggregate SHL 20 - 80		Page 29
Ice bank with cooling aggregate SHL 100 - 1000		Page 30

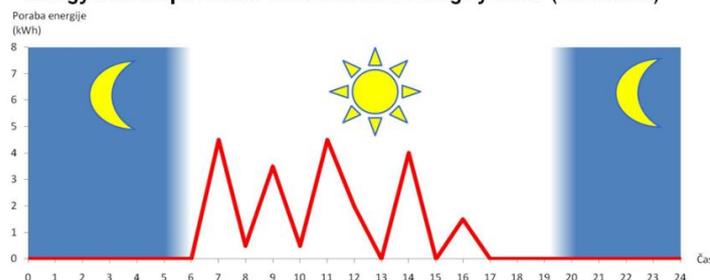
ICE BANKS with cooling aggregates



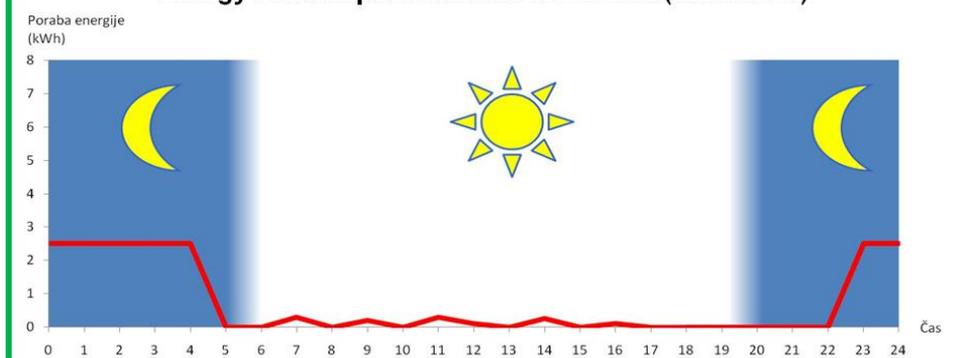
ADVANTAGES of the ice bank with cooling unit:

- It works during the night **when the energy costs are low** and uses the accumulated cooling energy during the day
- It uses a **smaller cooling aggregate** than conventional cooling systems because it operates with constant power over a predefined time range. The **cooling aggregate** has a **much smaller cooling power** than the peaks of cooling energy used during the process
- By cooling by night we achieve a **smaller load of the electric network** in the daytime (cheaper energy)
- Possibility of storing cooling energy from 20% to 100% of the capacity of the tank
- The water cools down to 0,5°C (optional -10°C)
- Thanks to the uniform ice surface the temperature of the water remains the same until the end of the melting

Energy consumption with conventional cooling systems (simulation)



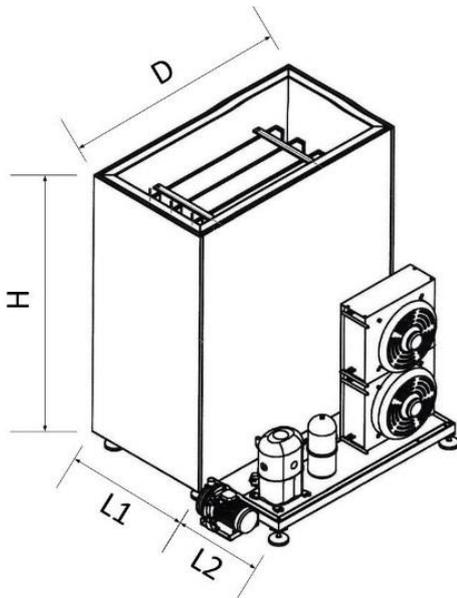
Energy consumption with the ICE BANK (simulation)



Ice bank with cooling aggregate type SHL 20 - 80

Assembly of the ice bank:

- Inside of the tank made from stainless steel W.Nr.1.4301
- Outside and cover of the tank made from stainless steel W.Nr.1.4301 (optional - outside of the tank made from zinc steel or lacquered)
- Thickness of insulation 60/75mm
- Framework and evaporator plates made from stainless steel W.Nr.1.4301
- Cooling aggregate with air condensing unit working with an **ecological coolant** (R404A)
- Control panel with an electronic thermostat for **setting and monitoring** the working parameters of the device
- Power supply: MF 230V 50Hz or TF 400V 3N 50Hz



Type SHL	Volume (l)	Capacity (kWh)	Amount of ice* (kg)	Melting capacity (0°C - 6°C) (kWh)	Type of cooling unit**	Cooling power*** (kW)	Supply power (V / kW)	Dimensions (mm)		
								D	H	L1 + L2
20	500	20	225	1,58	HGZ 22	2,3	MF/TF / 1,6	1100	1150	790 + 500
30	710	30	375	2,63	HGZ 28	3,3	TF / 2,0	1350	1680	600 + 500
40	1030	40	500	3,5	HGZ 36	4,5	TF / 2,7	1350	1680	810 + 500
50	1280	50	625	4,38	HGZ 50	6,5	TF / 3,7	1350	1680	960 + 600
60	1530	60	750	5,25	HGZ 50	6,5	TF / 3,7	1350	1680	1120 + 600
80	2030	80	1000	7	HGZ 64	8,2	TF / 4,8	1350	1680	1400 + 600

* When ice thickness is 50mm

** Labels and dimensions of the cooling units are only informative

***Making the full capacity of ice in 8-10h

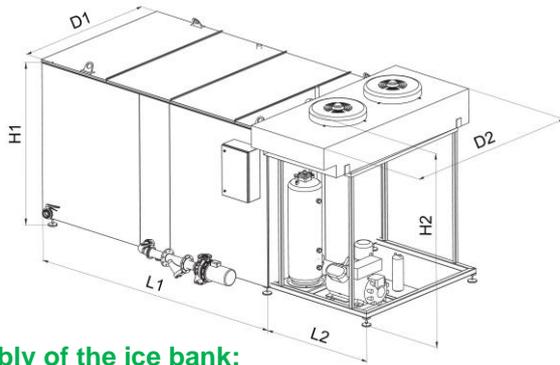
Type SHL	Code for inbuilt cooling unit	Code for separate cooling unit	Options		
			Waste heat recovery*	Scroll compressor	Ice water pump
20	3.000.04	3.000.33	3.001.00	/	3.000.73
30	3.000.07	3.000.36	3.001.01	3.001.40	3.000.74
40	3.000.08	3.000.37	3.001.01	3.001.41	3.000.75
50	3.000.09	3.000.38	3.001.01	3.001.42	3.000.76
60	3.000.10	3.000.39	3.001.02	3.001.42	3.000.77
80	3.000.11	3.000.40	3.001.02	3.001.43	3.000.78

* Without hot water tank

Additional equipment:

Equipment	Code
Water tank 100 L	3.001.10
Water tank 200 L	3.001.11
Water tank 300 L	3.001.12
Water tank 500 L	3.001.13
Electric heater 2kW for Water tank	3.001.30
Electric heater 3kW for Water tank	3.001.31
Air blower – for a more uniform ice consumption	3.001.04

Ice bank with cooling aggregate type SHL 100 - 1000



Assembly of the ice bank:

- Inside of the tank made from stainless steel W.Nr.1.4301
- Outside and cover of the tank made from stainless steel W.Nr.1.4301 (optional - outside of the tank made from zinc steel or lacquered)
- Thickness of insulation 50/75mm
- Framework end evaporator plates made from stainless steel W.Nr.1.4301
- Iced water pump 1x
- Cooling aggregate with air condensing unit working with an **ecological coolant** (R404A)
- Control panel with an electronic thermostat for **setting and monitoring** the working parameters of the device
- Power supply: 400V 3N 50Hz

Type SHL	Volume (l)	Capacity (kWh)	Amount of ice* (kg)	Melting capacity (0°C - 6°C) (kWh)	Length L1 (mm)	Width D1 (mm)	Height H1 (mm)	Volume of cooling plates (l)	Code	Recommended cooling unit**
100	2300	100	1035	7,2	920	1900	2000	30	3.002.02	CA10
120	2750	120	1242	8,7	1100	1900	2000	36	3.002.03	CA12
160	3680	160	1712	11,6	1380	1900	2000	48	3.002.04	CA16
200	4600	200	2140	14,5	1750	1900	2000	60	3.002.05	CA20
280	6450	280	2996	21,8	2400	1900	2000	84	3.002.06	CA28
400	9200	400	4230	29	3320	1900	2000	120	3.002.07	CA40
500	12400	500	5382	37,8	4200	1900	2000	150	3.002.08	CA50
600	15180	600	6420	46,5	4950	1950	2050	180	3.002.09	2x CA28
800	17950	800	8560	55,2	6600	1950	2050	240	3.002.10	2x CA40
1000	24000	1000	10764	75,5	7850	1950	2050	288	3.002.11	2x CA50

*When ice thickness is 50mm

**Calculated for making the ice in 9-11 hour

Cooling unit***	Cooling power (kW)	Supply power (kW)	Length L2 (mm)	Width D2 (mm)	Height H2 (mm)	Code for inbuilt cooling unit	Option	
							Scroll compressor	Waste heat recovery****
CA10	8,9	3,5	800	1300	2000	3.002.35	3.002.95	3.003.95
CA12	11,4	4,4	1200 (800)	1500	2000	3.002.36	3.002.96	3.003.96
CA16	17,8	7	1300 (800)	1900	2100	3.002.38	3.002.98	3.003.98
CA20	22,8	8,8	1000	2300	2400	3.002.39	3.002.99	3.003.99
CA28	27,4	10,8	1250	2400	2400	3.002.40	3.003.00	3.004.00
CA40	45,6	17,6	1400	2420	2450	3.002.42	3.003.02	3.004.02
CA50	54,8	21,6	1400	3500	3600	3.002.43	3.003.03	3.004.03
2x CA28	54,8	21,6	1400	3500	3600	3.002.44	3.003.04	3.004.04
2x CA40	93	35,2	1400	4000	3800	3.002.46	3.003.06	3.004.06
2x CA50	110	44,7	1400	4800	3800	3.002.47	3.003.07	3.004.07

** Labels and dimensions of the cooling units are only informative

*** Without hot water tank

Equipment	Code
Air blower – for a more uniform ice consumption	3.001.05
Centrifugal pump for iced water, 10m ³ /h	3.003.60
Centrifugal pump for iced water, 20m ³ /h	3.003.61
Centrifugal pump for iced water, 30m ³ /h	3.003.62
Centrifugal pump for iced water, 40m ³ /h	3.003.63
Centrifugal pump for iced water, 50m ³ /h	3.003.64
Centrifugal pump for iced water, 60m ³ /h	3.003.65
Centrifugal pump for iced water, 70m ³ /h	3.003.66
Centrifugal pump for iced water, 80m ³ /h	3.003.67
Centrifugal pump for iced water, 90m ³ /h	3.003.68
Centrifugal pump for iced water, 100m ³ /h	3.003.69

In the process of constant improvements we reserve the right to make technical and aesthetic modifications without prior notice!