

PASTEURIZERS

P50-12501



Pasteurizers P50-1250

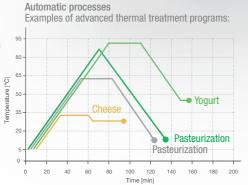
PLEVNIK Add value to milk.

State-of-the-art pasteurizers.



Pasteurizers are used for thermic processing of milk into dairy products at temperatures between 4 °C and 100 °C:

PASTEURIZED MILK, YOGURT, CHEESE, RICOTTA, **CURD, ETC.**



BENEFITS

- 1 Energy efficiency
- 2 Diverse and efficient stirring
- 3 Automated processing
- 4 Easy control and cleaning
- 5 Extending the functionality of the device

Plevnik products in the service of the user









All our devices are user and environment friendly as well as energy-saving. They are designed and manufactured for long-term use.

Benefits for you

1 ENERGY EFFICIENCY

Between 10% and 30% lower energy consumption thanks to an efficient energy exchange, which is made possible 1 by a well-insulated vessel (with three coats), III IIII laser-welded exchange surfaces and carefully chosen materials. • P The water pump facilitates a better heat exchange, which speeds up the heating and cooling processes and thus saves energy and money.



2 DIVERSE AND EFFICIENT STIRRING

Pasteurizers can be equipped with various stirrers, with which you can make various products. A The most basic stirring can be done with the basic propeller stirrer.

B The larger 75 % propeller stirrer (75 % of vessel diameter) is more efficient.

The shape of the new professional stirrer for yogurt, cheese and milk enables efficient, yet gentle stirring for a homogenous product. The stirrer is made of stirring shovels at one or two (removable) levels. Stirring rake: Widen the stirrer functionality with an optional detachable part on the upper level. The rake stirs quickly yet gently, not affecting the product structure.

 We have developed a special yogurt **stirrer** for yogurt production **(3)** At higher temperatures and higher viscosity, there is a need for a stirrer that can scrape the walls and the bottom - scrape stirrer, preventing the product from sticking to the pasteurizer walls (rice pudding, pudding, jam, chocolate, etc.).

Basic propeller stirrer



Larger 75% propeller stirrer



Professional stirrer for yogurt, cheese and milk

Add value to milk.



Professional stirrer for yogurt, cheese and milk - stirring rake



Yogurt stirrer

PLEVNIK





Scrape stirrer



3 AUTOMATED PROCESSING PROCEDURES

Convenient and easy management using smart controllers that control processes and make the working day more efficient and organized • Save time and money with start and shutdown delay of processes. Set them in such a way that in the morning, milk is thermally ready for cheesemaking • Possibility to record and document all active process parameters (temperature, stirring, etc.).





Learn more about the state-of-the-art controllers on

EASY CONTROL AND CLEANING

Easily and quickly control the Plevnik pasteurizer. Due to the wellconceived design of Plevnik devices, including controllers and stirrers, their handling is easy, and the work becomes faster and more efficient. You can start all processes (stirring, thermal treatment, etc.) simply by pressing a button. **©** Cleaning is faster and easier due to the special surface treatment – 2R polish (prevents sticking to the vessel walls).



5 EXTEND THE FUNCTIONALITY OF THE DEVICE

The possibility to extend the functionality of the device: For a wider range of final milk products (cheese, curd, ricotta, pudding, etc.), and the most modern, easiest, most efficient and more ergonomic work, etc.









Learn more about upgrade possibilities on page 6.

The entry-level pasteurizer with a simple three-coat construction (water bath), electric heating (EL), connections for cooling with water from the distribution network and a propeller stirrer.

> Automatic temperature regulation according to the pre-set program.







Advanced, extremely energy efficient (water pump) pasteurizer with a simple, energy efficient three-coat construction which automatically and efficiently stirs the content with a propeller stirrer. Positioned on a stable support with a tilting mechanism.

> Simple temperature regulation. Manual valves (HW, EL, EW)

Simple automatic temperature regulation GPC 145.





A professional, autonomous and efficient pasteurizer for the most demanding users. Enables faster heating – has a closed pressure system (higher temperatures) and indirect cooling. Automatic and efficient stirring of the content with a propeller stirrer. Positioned on a stable support with a tilting mechanism. Stainless steel cover for protection of the motor.

Advanced automatic regulation MC 500 *

An advanced MC 500 R automatic controller with a recorder. When used together with the professional stirrer, speed regulation and power selection, it provides a higher degree of flexibility and a wide range of final products, enabling easier adaptation to the needs of the market. The protection of vital electrical parts ensures a long lifespan and makes cleaning easier.

Equipment overview		Add value to mi		PLEVNÍK			
P Pasteurizers	BASIC+	LIGHT	ADVANCED+	PROFESSIONAL	PREMIUM		
POWER SOURCE:	EL	EL / HW / EW	EL	EL / HW / EW	EL / HW / EW		
HEATING UP TO:	90°C	85 / 100 / 100°C	90°C	100°C	100°C		
VESSEL							
Durable and reliable material - stainless steel	AISI 304	AISI 304/316	AISI 304/316	AISI 304/316	AISI 304/316		
Energy saving construction – laser welded	/	•	•	•	•		
Faster, easier discharge – bigger outlet	0	0	0	0	0		
More efficient heat exchange – indirect cooling (plate heat exchanger)	/	/EL ●HW ●EW	/	•	•		
Lower energy consumption – water pump	/	•	•	• •			
Energy efficient cooling – two-step cooling	/	/	0	0 0			
Less cleaning, time saving – 2R polished vessel interior	/	0	0	0	•		
STIRRERS							
Basic propeller stirrer	•	•	•	•	•		
Larger 75% propeller stirrer	0	0	0	0	> 500		
Professional stirrer for yogurt, cheese and milk	0	0	0	0	● ≤ 500		
Professional stirrer for yogurt, cheese and milk – stirring rake	0	0	0	0	0		
Yogurt stirrer	0	0	0	0	0		
Scrape stirrer	0	0	0	0	0		
A console for the stirrer and two-part cover	0	0	0	0	0		
CONTROLLING							
Simple temperature regulation Eliwell	/	•	/	/	/		
Simple automatic temperature regulation GPC 145	•	/	•	● ≤ 200 l	/		
Advanced automatic temperature regulation MC 500	/	/	0	● ≥ 300 I	•		
Advanced automatic temperature regulation with a recorder - MC 500 R	/	/	0	0	•		
Process recording - temperature recorder (different options)	0	0	0	0	0		
Stirring speed and direction regulation	0	0	0	•	•		
Energy saving with small batches: electric heater power selection module (full or partial heating power)	0	0	0	0	•		
In case of overvoltage (lightning strike) — a module for operation without a controller	•	/	•	•	•		
OTHER EQUIPMENT							
For easier handling and discharging - a stable support with a tilting mechanism *	0	•	•	•	•		
For easier moving – a support on wheels	0	0	0	0	0		
For easier access and ergonomic work – a working platform	0	0	0	0	0		
For easier access and ergonomic work – an elevating device	/	0	0	0	0		
Protection for the water system underneath the vessel ≤ 300 l	/	0	0	0	•		
Greater durability – a stainless steel control panel (standard with the MC 500 and the MC 500 R)	0	0	0	● ≥ 300 I	•		
Stirrer motor protection – a stainless steel cover	/	0	0	0	•		
Greater durability – a stainless steel power cabinet	0	0	0	•	•		
Smaller dimensions for entering facilities with narrower doors – door adaptation	0	•	0				

Local requirements – a cover and valve position sensor

Smaller dimensions for entering facilities with narrower doors – door adaptation

• included • option / unavailable

Heating options:

EL ... heating using electrical heaters

HW ... heating using hot water from a boiler using solar energy, heat pump, etc ...

EW ... combined heating (hot water and electrical heaters)

ST ... heating with an indirect steam on request

Required heating power for heating 100 I								
∆T – Temperature change	ΔT=30°C	ΔT=60°C	ΔT=90°C					
Required energy	3,7 kWh	7 kWh	10,5 kWh					

*MC 500 is standard and monitoring of the set temperature.

^{*} mechanical, from 500 I, the tilting mechanism is pneumatic

75% propeller

The larger stirrer ensures a more efficient stirring (circular rising of the content).



Professional stirrer for yogurt, cheese and milk

A universal helical stirrer for efficient and gentle stirring.



Professional stirrer for yogurt, cheese and milk - stirring rake

A detachable grid module, which transforms the yogurt ferment into a liquid one (liquid yogurt).



Yogurt stirrer

Specialized stirrer for making yogurt (gently breaks up the ferment - yogurt, liquid yogurt).



Scrape stirrer

The sliding scrape stirrer ensures a constant and gentle scraping of the pasteurizer walls. For making: pudding, jam, chocolate and other highly viscous products.



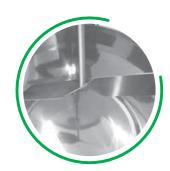
A console for the stirrer and two-part cover

For accessing the vessel during processing. The vessel is closed with a two-part cover.



Manual harp

Manual harp with six sharp blades. Cut the cheese mass for different products with only



2R polished interior

Due to its very smooth surface, the contents do not stick to the walls during processing. This enables quick and easy cleaning.



Working platform

Easier access, higher outlet and easy decantation of the cheese mass to the draining table. Safe, efficient and ergonomic process control.



Two-step cooling

Save ice water (energy), because water from the water supply network is used for cooling at higher temperatures (100-40 °C) and ice water for cooling between 40 °C and 4 °C.



Elevating device

Enables setting of the ergonomic working height and therefore makes work (discharging, cleaning) easier. Ideal solution for facilities with a low ceiling.



Protection for the stirrer motor

Protection for the stirrer motor (stainless steel) during operation and cleaning. For protection of the motor and a long lifespan.



Protection around the support

Protects the kettle pipes against filth and makes cleaning the entire kettle easier. Ensures a long lifespan due to water-system protection.

Controllers

Modern and easy control of cheese and dairy processes

MC 500



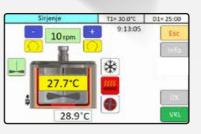
A state-of-theart controller for process automation

Set your unique processes and ensure the stable quality of your products.

MC 500 R



The MC 500 R with an integrated recorder enables the digital recording of all parameters of active processes (temperature, stirring, etc.).



Easy, user-friendly operation.

A large 5" colour touchscreen with an excellent overview offers an excellent user experience.



Speaks your language. Supports 7 languages, including English.

Izberi program					
Sirjenje	Pasterizacija Sirjenje				
Skuta	Rikota				
Program 1	Program 2				
	Rocno				
	Sirjenje Skuta				

Outstanding flexibility and clear overview. It is possible to choose from 10 programs, which can be adjusted to suit your technological

procedures.



Energy efficient, lowers costs, saves time.

A start delay function allows the milk to cool overnight (when power is cheaper), and the thermal treatment process can be scheduled to start automatically at the desired time.

T1= 30.0°C	D1= 25:00
9:13:05	Esc
*	Hadi
5555	
	1000

Module for choosing the power of heating. It provides a choice of power settings, which is especially important when processing different quantities. (Additional equipment).



Fully recorded processes – documents temperature and processes. (MC 500 R)

ADVANCED PROGRAMS FOR ADVANCED/ PROFESSIONAL USERS

Adaptable to your unique recipes

Adaptable programs support up to 15 steps. Support the basic settings, such as temperature, time, stirring speed and direction, as well as turning on the "gentle", stage-controlled, temperature retention mode.





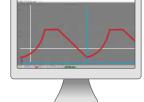
THE MC 500 RO - A MODERN APPROACH TO PROCESS CONTROL WITH AN INTEGRATED RECORDER

Process recording

The MC 500 R controller has a built-in recorder, which automatically records all active processes, in turn making it easier to control them as well as offering an overview of completed processes. Records can be easily transferred via an SD card to the computer, where you can view and save them with the dedicated software.







Pasteurizer (monoblock) - All in one

PH100
Cooling/heating
processes in one
device









- Universal, flexible, mobile, compact device PH can be used as: pasteurizer, cheese kettle, cooling tank and fermenter, all within one square metre.
- 2 The products can be thermally treated (heated or cooled) in a temperature range between 4 °C and 100 °C. The heating system consists of electric heaters and an energy efficient heat pump.
- 3 Multiple stirrers enable the making of various end products, such as: yogurt, pasteurized milk, cheese, curd, cream, mozzarella, jam, sauces, etc.
- 4 The user-friendly touch-screen controller can save up to 10 different programs.

All in one device.

Pasteurizer/cheese kettle/cooling tank/fermentation vessel.

Yogurt, cheese, curd, jam, pudding, chocolate, juice, etc.



Pasteurizer with cooling/heating unit

PH200-650



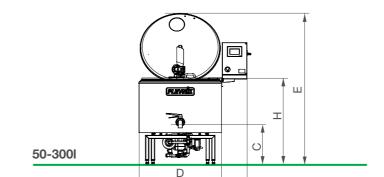
- 1 The PH is a pasteurizer with a standalone 2 cooling/heating unit.
- 3 Possibility of heating with a **heat pump** (up to 45 °C, where energy consumption is reduced by 70%).
- 4 Extremely efficient air cooling up to 40 °C (COP 35).
- **5** Cooling down to 4 °C when needed. The only thing required is a power outlet.
- **6** Cooling versions: air-air, air-water, waterwater;
- On request: Cooling/heating unit with an upgrade for connecting up to 3 consumers* (devices).



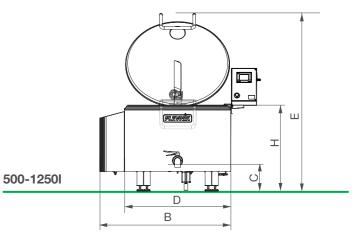


Low energy consumption, no waste water, precise temperature regulation

*The three devices don't work simultaneously, they work individually.



В



	Heating power (kW)			Dimensions (mm)									
	Light	Basic+ Advanced+	Professiona	Difficusions (IIIIII)				Cooling	Hot water	Weight			
Туре	Electric heaters for: EL / EW	Electric heaters for: EL	Electric heaters for: EL / EW	Hot water container / Electric heaters for: HW / EW	D	н	С	В	Е	water connections	connections	(kg)	Outlet
P 50	4/-	4/4	6/-	-	Ø520	930	575	660	1470	1/2"	3/4"	90	DN50
P 100	6/6	6/6	9/6	35	Ø720	930	575	660	1470	1/2"	3/4"	125	DN50
P 200	10 / 10	12 / 12	18 / 12	35	Ø820	1010	475	980	1700	1/2"	1"	170	DN50
P 300	12 / 12	15 / 15	20 (24) / 15	35	Ø1000	1010	475	1150	1820	3/4"	1"	230	DN50
P 500	18 / 18	20 / 24	30 (36) / 20	35 / 65	Ø1120	1030	330	1270	2030	3/4"	5/4"	310	DN65
P 650	20 / 20	24 / 24	36 (45) / 24	65	Ø 1280	1010	330	1430	2150	1"	5/4"	360	DN65
P 800	24 / 20	-/30	45 (60) / 30	65 / 95	Ø1400	1010	330	1550	2230	1"	5/4"	395	DN65
P 1000	24 / 20	-/30	45 (60) / 45	65 / 95	Ø 1540	1030	330	1750	2410	1"	5/4"	465	DN65
P 1250	24 / 20	-/30	45 (60) / 45	65 / 95	Ø1550	1160	330	1750	2580	1"	6/4"	525	DN80

^{*} Applies for all except Basic+

Connection power
400V 3N 50Hz / EL: 4-60 kW and HW 230V 1N 50Hz
It is possible to adapt to other power parameters (60 Hz, etc.) - on request

Pasteurization speed in the P 300 EL kettle

heating execution comparison (heating with electric heaters)

■ PROFESSIONAL / PREMIUM

Energy saving construction – lower energy consumption

- Faster heating more powerful electrical heaters
- Closed (pressure) heating system (heating up to 100 °C)
- Indirect cooling via a heat exchanger (longer heater lifespan)

ADVANCED+

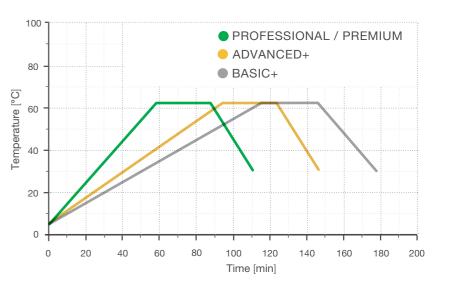
Energy saving construction – lower energy consumption

• Faster energy decantation (water pump) • Automatic temperature regulation

■ BASIC+

Simple construction

Automatic temperature regulation



PLEVNIK

made in **EU**

obelow

Sweden, Finland

outokumpu (

SWER

An efficient heat

exchanger, Sweden

PASTEURIZERS

Built-in components

long-lasting, stable

and reliable quality.

of recognized European manufacturers to ensure RELIABLE QUALITY

SCHRACK

Electric components

SCastel

Reliable valves for a long equipment lifespan, Italy

for electric installations, Austria









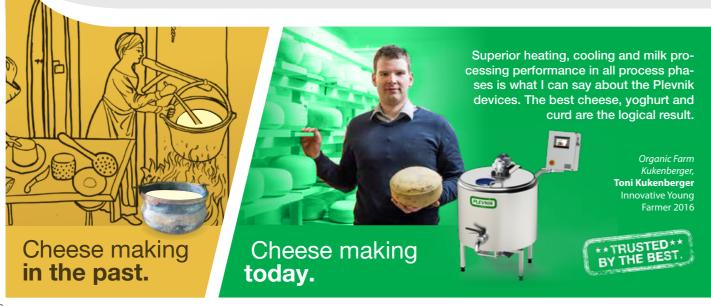


processing. This saves me time to



Gold medals at AGRA fair for the pasteurizer (P 200 EL PRO with the professional stirrer for yogurt, cheese and milk, the MC 500 R controller and the elevating device) and the pneumatic draining press (POS 50).





SIEMENS

Reliable electric motors, Germany

GRUNDFOS A state-of-the-art pump

for better efficiency,

Germany (≥ 300 l)







Complete dairy solutions

Plevnik products – in the service of the user

All Plevnik devices are user and environment friendly as well as energy-saving. They are designed and manufactured for long-term use.





More information

P50-1250 EN 04 10 2019



Consulting





Planning



Production



Assembly and start up

In the process of constant improvements, we reserve the right to make technical and design modifications without prior notice.



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The milk processing specialists. Together we have created more than

3,000 successful cheese-making stories.



www.plevnik.eu

Representative: