

Created
for making
extraordinary
dairy products



CHEESE KETTLES

SKH50-1500

PLEVNIK

Add value to milk.

Cheese kettles

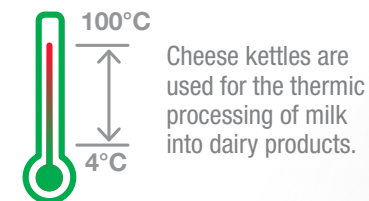
SKH50-1500

State-of-the-art cheese kettles.

PLEVNIK
Add value to milk.



Plevnik devices for modern cheese-making and successful cheese-making stories.



Cheese kettles are used for the thermic processing of milk into dairy products.

Easy production of dairy products:
CHEESE, CURD, RICOTTA, YOGURT, PASTEURIZED MILK ETC.

BENEFITS

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

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.

Benefits for cheese-makers

Add value to milk.

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1 ENERGY EFFICIENCY

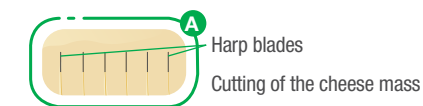
Between 10% and 30% lesser energy consumption thanks to an efficient energy exchange, which is made possible by **I** a well-insulated vessel (with three coats), **II** **III** laser-welded exchange surfaces and carefully chosen materials. • **P** The water pump facilitates a better heat exchange, which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



2 GOOD AND EFFICIENT PROCESSING OF CHEESE MASS

The Plevnik harps are specially designed, sharpened and polished to facilitate smooth cutting. Substituting harps for other stirrers is simple – in a single move.

A Cutting: Automated harps with sharp and thin blades ensure a precise cut, which improves the quality and quantity of the final product (less cheese dust and more cheese). **Stirring B** (other direction of harp spinning): Stirring shovels are automatically activated when the stirring direction changes, and build the required stirring speed for **more efficient stirring** and drying of the cheese grains.



Cheese mass

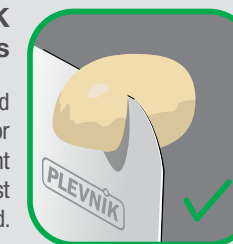


Quality cutting – more cheese mass

The desired goal of cheese making is more cheese mass and less cheese dust. Precise and gentle cutting results in more cheese mass at the end of the process.

PLEVNIK cheese harps

Sharp and polished harps are designed for a precise and efficient cut, and for the highest cheese mass yield.



Cheese harps

Wire harps – cutting with a wire as shown: The round blade form causes tearing and more cheese dust – more small cheese mass particles which are lost with whey.



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, thermally treated milk is ready for cheese-making. • Possibility to record and document all active process parameters (temperature, stirring, etc.).



TIME-MONEY SAVING

More about the state-of-the-art controllers on page 7.

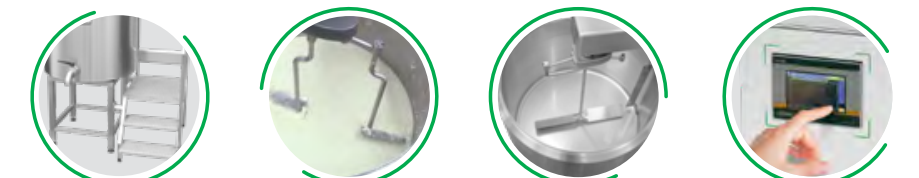
4 EASY CONTROL AND CLEANING

Easily and quickly control the Plevnik cheese kettle. Due to a well-conceived 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 (cutting, stirring, thermal treatment etc.) simply by pressing a button. **C** **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

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



More about upgrade possibilities on page 6.

Versions

BASIC
SKH50-650l

≤ 85°C

Energy efficiency
Automation



A cheese kettle with a simple three-coat construction (water bath), electric heating (EL), connections for cooling with water from the distribution network and a propeller stirrer.

Simple regulation of the set temperature.

BASIC+
SKH50-650l

≤ 90°C

Energy efficiency
Automation



Automatic temperature regulation according to the pre-set program.

ADVANCED
SKH100-1500l

≤ 100°C

Energy efficiency
Automation



Advanced, extremely energy efficient (circular pump) cheese kettle with a simple, energy efficient three-coat construction which automatically cuts the cheese mass (automated harps). Position on a stable support with a tilting mechanism. Inox cover for motor protection.

Easy regulation of the pre-set temperature. Designs with different heating (HW, EL, EW) and cooling options.

ADVANCED+
SKH100-1500l

Recommended!

≤ 90°C

Energy efficiency
Automation



Automated cutting, heating (EL) and cooling processes.

PROFESSIONAL
SKH100-1500l

Recommended!

≤ 100°C

Energy efficiency
Automation



A professional, autonomous and efficient cheese kettle for advanced users. Enables faster heating – has a closed pressure system (higher temperatures) and indirect cooling. Automatically cuts the cheese mass (automated harps). Position on a stable support with a tilting mechanism. Inox cover for motor protection.

Advanced automatic regulation MC 500 and monitoring of the set temperature.

PREMIUM
SKH100-1500l

≤ 100°C

Energy efficiency
Automation



Advanced automatic regulation with monitoring and recording of the temperature with the MC 500 R. 2R polished interior. Electric heater power selection module. Central Z-mixer, stirring shovels and curd strip. Inox power cabinet and inox protection of the kettle bottom.

Equipment overview

Add value to milk.

PLEVNIK

SKH cheese kettles	BASIC	BASIC+	ADVANCED	ADVANCED+	PROFESSIONAL	PREMIUM
POWER SOURCE:	EL	EL	EL / HW / EW	EL	EL / HW / EW	EL / HW / EW
HEATING UP TO:	85°C	90°C	85 / 100 / 100°C	90°C	100°C	100°C
VESSEL						
Durable and reliable material - stainless steel	AISI 304	AISI 304	AISI 304/316	AISI 304/316	AISI 304/316	AISI 304/316
Energy saving construction - laser welded	/	/	●	●	●	●
Faster, easier discharge - bigger outlet	○	○	○	○	○	○
More efficient heat exchange - indirect cooling (plate heat exchanger)	/	/	/EL ● HW ● EW	/	●	●
Lower energy consumption - water pump	/	/	●	●	●	●
Energy efficient cooling - Double-cooling	/	/	/	○	○	○
Less cleaning, time saving - 2R polished vessel interior	/	/	○	○	○	●
STIRRERS						
Propeller stirrer – 23 rpm, two-part cover	●	●	/	/	/	/
Automated cutting of the cheese mass - a three-part automated harp, two-part cover	○	○	●	●	●	●
For mixing above 60 °C - a central Z-stirrer	○	○	○	○	○	●
For drying cheese grains - stirring shovels	○	○	○	○	○	●
CONTROLLING						
Simple temperature regulation Eliwell	●	/	●	/	/	/
Simple automatic temperature regulation GPC 145	/	●	/	●	/	/
Advanced automatic temperature regulation MC 500	/	/	/	○	●	● MC 500 R
Advanced automatic temperature regulation with a recorder - MC 500 R	/	/	/	○	○	●
Process recording - temperature recorder (different options)	○	○	○	○	○	○
Stirrer/harp speed and stirring direction regulation	○	○	●	●	●	●
Energy saving with small batches - electric heater power selection module	○	○	○	○	○	●
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 *	○	○	●	●	●	●
For easier moving - a support on wheels	○	○	○	○	○	○
For easier access and ergonomic work - a working platform	○	○	○	○	○	○
For easier access and ergonomic work - an elevating device	/	/	○	○	○	○
Protection for the water system underneath the vessel ≤ 300 l	/	/	○	○	○	●
Stirrer motor protection – a stainless steel cover	/	/	●	●	●	●
Greater durability - a stainless steel control panel (always with the MC 500)	○	○	○	○	●	●
Greater durability - a stainless steel power cabinet	○	○	○	○	○	●
A solution for facilities with the narrow door - adaptation for door	○	○	○	○	○	○
Local requirements - a rounded two-part cover	○	○	○	○	○	○
Draining the curd - curd strip	○	○	○	○	○	●**
Local requirements - a cover and valve position sensor	○	○	○	○	○	○
Additional safety - sensor protection against the harps	○	○	○	○	○	○
Additional safety - a protective net against the harps	○	○	○	○	○	○
...						

* mechanical, from 500 litres the tilting is pneumatic ** up to 650 litres

● 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 l

ΔT – temperature change	ΔT=30°C	ΔT=60°C	ΔT=90°C
Required energy	3,7 kWh	7 kWh	10,5 kWh

Additional equipment

PLEVNIK SKH50-1500



Stirring shovels

For the steady and efficient stirring of the cheese mass during drying. The stirring shovels ensure the homogeneity of cheese grain and whey.



Z-stirrer

Enables the thermal treatment of milk above 65 °C. Together with the two-part cover, it enables the production of yogurt, ricotta etc.



Double-cooling

Save ice water (energy), because water from the water supply network is used for cooling from higher temperatures (100–40 °C). Ice water is used for cooling down (40–4 °C).



Protective net in front of harps

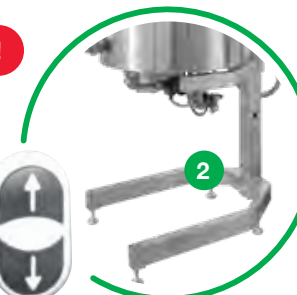
Physically prevents unauthorized reaching into the vessel during operation – for better safety at work.



Recommended!

Working platform

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



Elevating device

Enables setting the ergonomic working height and therefore makes work easier. Ideal solution for facilities with a low ceiling.



Water system protection

Protects the lower parts of the kettle against filth and makes cleaning the entire kettle easier.



Stainless steel control panel

The INOX control panel is very durable and makes cleaning easier (the picture is symbolic).

ERGONOMY AT WORK

HEALTH FIRST

Using the Plevnik **working platform** or **elevating device**, you can adapt the working height to **your best working zone**.

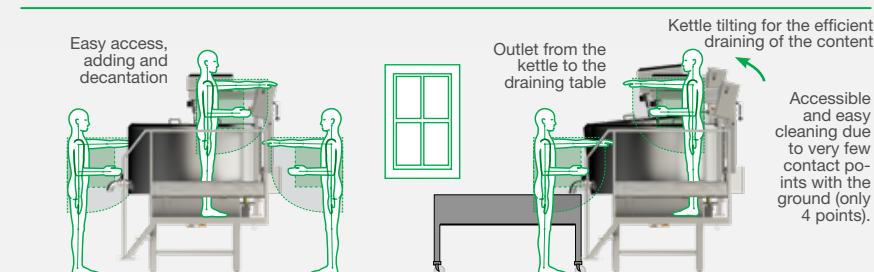
Long-term working in an unsuitable working environment can result in poor posture, which in turn results in numerous health issues, such as back pain, neck pain, headaches and others. Each person's body dimensions are unique.

ECONOMICAL ERGONOMY

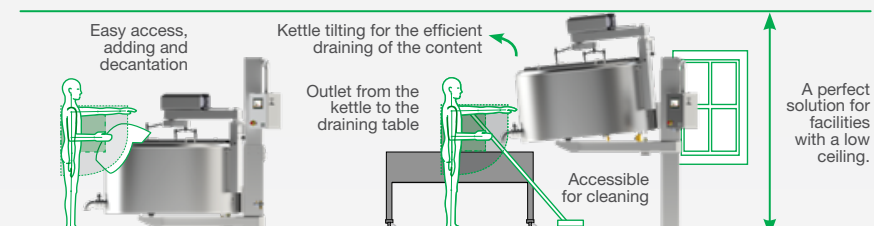
The listed solutions enable you to work faster and easier. Create good working conditions to ensure your employees remain healthy and satisfied.

PLEVNIK SOLUTIONS:

1 Working platform a static solution with a fixed height



2 Elevating device for adjusting the height



Controllers

Add value to milk.

PLEVNIK

Modern and easy control of cheese and dairy processes

MC 500



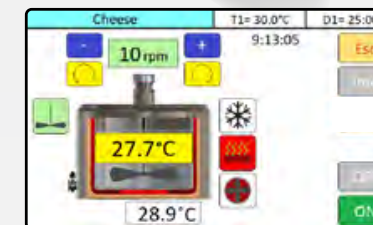
A state-of-the-art controller for **process automation**. Set your unique processes and ensure the **stable quality** of your products.

MC 500 R

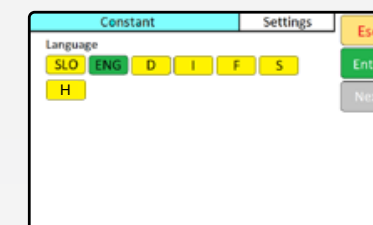


Recommended!

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



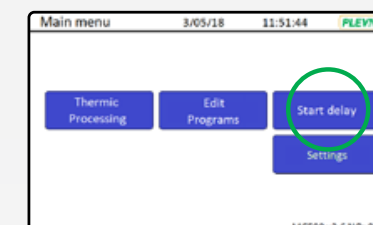
Easy, user-friendly operation.
A large 5" colour touchscreen with an excellent overview offers an excellent user experience.



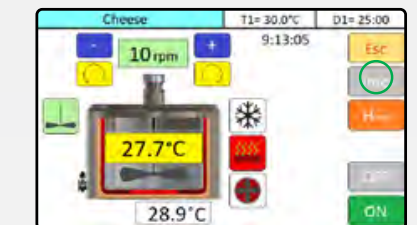
Speaks your language.
Supports 7 languages, including English.



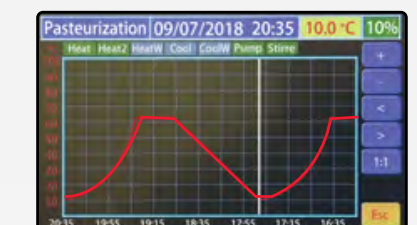
Outstanding flexibility and clear overview.
It is possible to choose from **10 programs**, which can be adjusted to suit your technological procedures.



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.



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

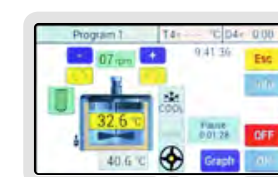
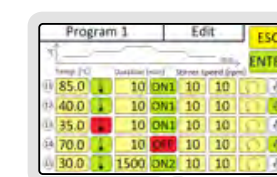


Fully recorded processes – documents temperature and processes. (MC 500 R)

ADVANCED PROGRAMS FOR ADVANCED/ PROFESSIONAL USERS

Adaptable to your unique recipes

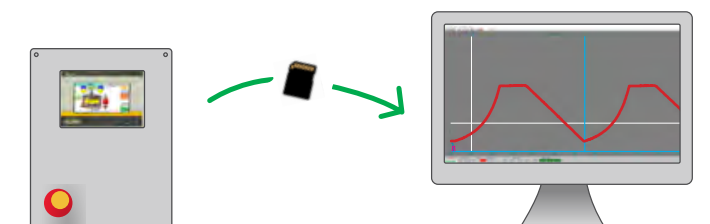
Adaptable programs **support up to 15 steps**, including the basic settings, such as temperature, time, stirring speed and direction, as well as turning on the "gentle" temperature retention mode (stage-controlled temperature retention during fermentation, cheese making etc.) and turning off the temperature regulation.



MC 500 R - 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.



Special versions

Cheese kettle with cooling/heating unit
SKH-H200-650

BENEFITS

1 The SKH-H is an SKH cheese kettle 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 Versions: air-air, air-water, water-water; 7 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.

Cheese kettle with a copper inside
SKHCu300-1500

Make traditional cheese products using advanced copper cheese kettles

BENEFITS

1 Hygiene: Copper surface (traditional cheese-making material) helps suppress pathogenic organisms, which may lead to products being infected during raw milk processing.



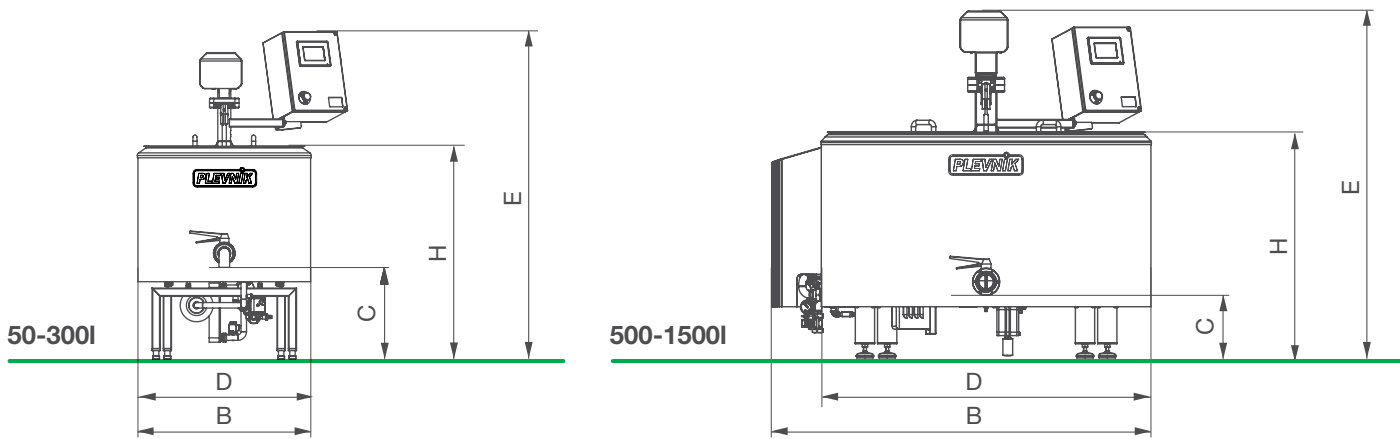
2 Products get a special flavour and gain a certain amount of copper, which is a vital element for the health and nutrition of people. Examples of traditional cheeses from copper kettles: Parmigiano Reggiano, Trentingrana and Grana Padano etc.

The World Health Organization estimates that at least 20% of world population suffers from medical disorders related to copper deficiency in food. Source: European Copper Institute

<https://copperalliance.eu/benefits-of-copper/health/>

Technical information

Add value to milk. PLEVNIK

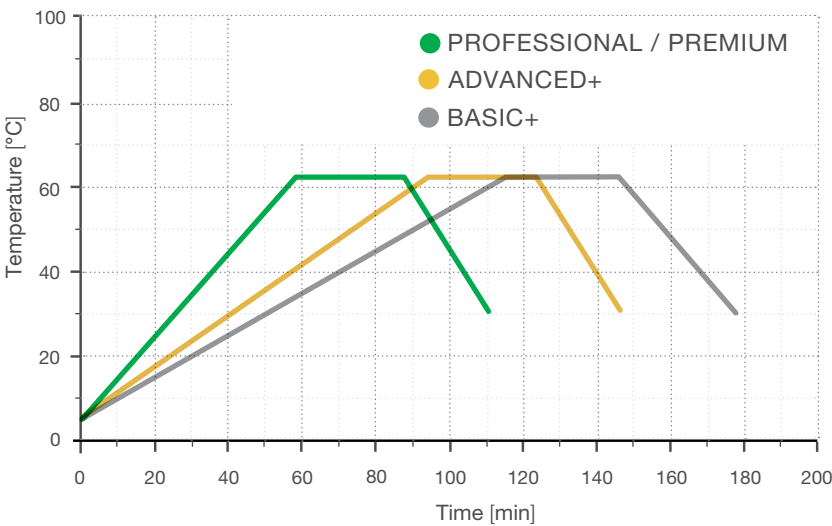


Type	Heating power (kW)					Dimensions (mm)					Cooling water connections	Hot water connections	Weight (kg)	Outlet (DN)
	Basic Basic+	Advanced	Advanced+	Professional / Premium										
	Electric heaters* for: EL	Electric heaters* for: EL / EW	Electric heaters* for: EL	Electric heaters* for: EL / EW	Electric heaters* for: HW / EW	D	H	C	B	E				
SKH 50	4/4	-/-	-	-/-	-	Ø550	930	575	850	1450	1/2"	3/4"	90	DN50
SKH 100	6/6	6/6	6	9/6	35	Ø740	930	575	1030	1480	1/2"	3/4"	125	DN50
SKH 200	10/12	10/10	12	18/12	35	Ø850	1020	475	1030	1600	1/2"	1"	170	DN50
SKH 300	12/15	12/12	15	20(24)/15	35	Ø1000	1020	475	1100	1600	3/4"	1"	230	DN65
SKH 500	12/20	18/18	20	30(36)/24	35 / 65	Ø1120	1030	330	1400	1550	3/4"	5/4"	310	DN65
SKH 650	15/24	20/20	24	36(45)/30	65	Ø1280	1030	330	1520	1600	1"	5/4"	360	DN65
SKH 800	-/-	24/20	30	45/30	65 / 95	Ø1400	1030	330	1640	1600	1"	5/4"	395	DN65
SKH 1000	-/-	24/20	30	45(60)/45	65 / 95	Ø1540	1030	330	1800	1600	1"	5/4"	465	DN80
SKH 1250	-/-	24/20	30	45(60)/45	65 / 95	Ø1540	1200	330	1800	1800	1"	6/4"	525	DN80
SKH 1500	-/-	30/30	30	60/45	95	Ø1540	1390	330	1800	1950	1"	6/4"	670	DN80

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 SKH 300 EL kettle
design comparison (heating with electric heaters)

- PROFESSIONAL / PREMIUM
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 CHEESE KETTLES

Includes components of recognized European manufacturers to ensure **long-lasting, stable and reliable quality.**

SIEMENS
Reliable electric motors, Germany

SCHRACK TECHNIK
Electric components for electric installations, Austria

Castel
Italian technology
Reliable valves for a long equipment lifespan, Italy

GRUNDFOS
A state-of-the-art pump for better efficiency, Germany (≥ 300 l)

SVEP
An efficient heat exchanger, Sweden

operam outokumpu
Inox steel sheets, Sweden, Finland

made in EU

RELIABLE QUALITY



SKH100



SKH800



SKH300



SKH500



SKH500

SKH1000

PRP-R120



SKH1000

PRP-AP150



Cheese making in the past.

Superior heating, cooling and milk processing performance in all process phases is what I can say about the Plevnik cheese kettles. The best cheese, yoghurt and curd are the logical result.

Ecological Farm Kukenberger, Toni Kukenberger Innovative Young Farmer 2016

TRUSTED BY THE BEST.



SKH500



2xSKH1000

SKH1000



Complete dairy solutions



SKH EN 06 01 2020

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.



Consulting



Visit



Planning



Production



Assembly and start up

More information

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



The milk processing equipment specialists.
Together we have created more than 3,000 successful cheese-making stories.

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