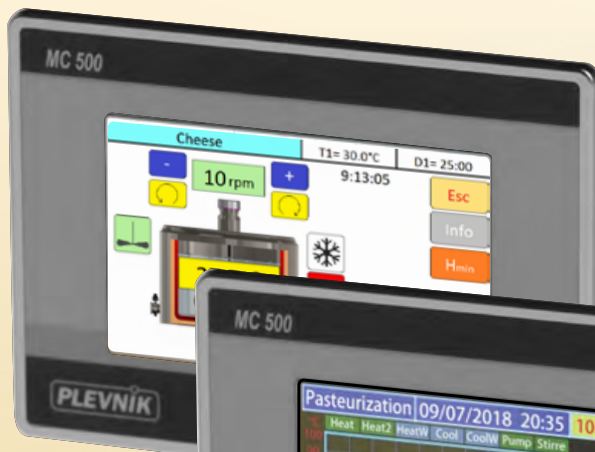


For modern
and automated
milk processing



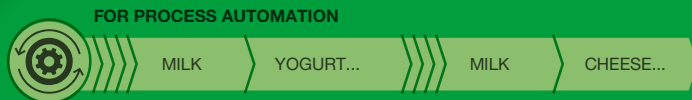
MC500



MC500R



MC700i



CONTROLLERS

MC500 | MC500R | MC700i



Add value to milk.

Milk processing using Plevnik equipment enables automation.



In the future I want to: have more time, be a better cheese-maker and make more money.

BENEFITS

of MC controllers:

- **save time** – time efficiency
- **generate repeatable quality** from batch to batch
- comprehensive **process control** (with documentation)
- **operator does not always have to be present** – process autonomy
- **little physical work**
- **generate more profit in an easy way**

Plevnik automation is especially possible with pasteurizers, cheese kettles and process stirring tanks.

CONTROLLERS MADE FOR THE FUTURE...



TOUCH

The human finger. The most precise tool that is always available.



SMART

Flexible process monitoring according to set parameters.



SAVES TIME

Controller automatically performs the steps. Saves time.



ACCURACY

Processing. Process recording and documenting. Reliability. Repeatability.



PAST EXPERIENCE...

Manual milk processing can require constant human presence (reaching a constant temperature, stirring). We are constantly developing solutions to ensure the best and most efficient processing. MC controllers are the 'brain' of Plevnik devices and they help you work smarter with less effort.



MC500

MC500R

MC700i



Page 4-6

Page 7

Page 8-13

SOLUTIONS FOR AUTOMATION

PLEVNIK

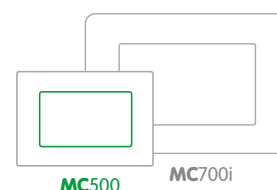
MC500

Easy, modern
and independent operation

80% of actual size

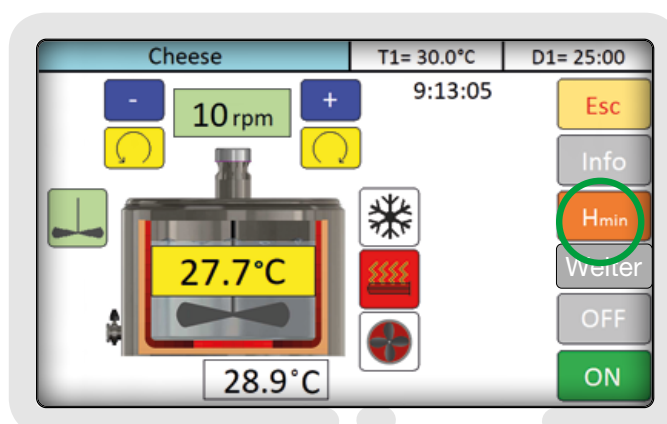


MC500 and **MC500R** controllers with touchscreen enable easy and adaptable operation of up to 12 thermal programs. **Easy and user-friendly operation.**



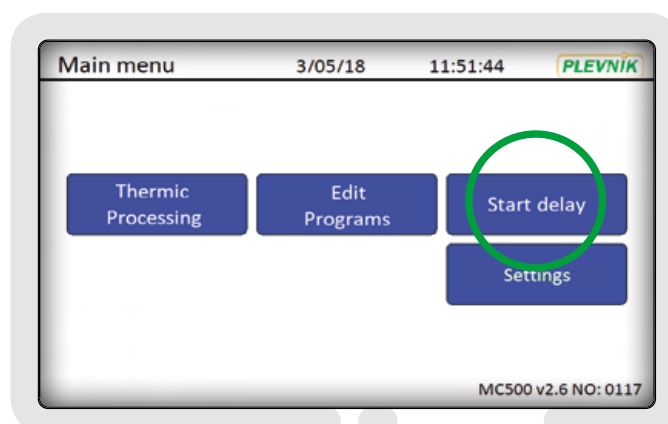
Simple and user-friendly.

A large 5-inch colour touchscreen with an excellent overview offers an exceptional user experience.



Heating setting module.

Enables energy consumption selection, which is especially useful for the processing of different quantities.



Enables additional energy/time efficiency.

A start delay function enables overnight processing (when electricity is cheaper) and thus saves energy costs. The thermal treatment process can start automatically (delayed) early in the morning and saves the operator's time (and sleep).

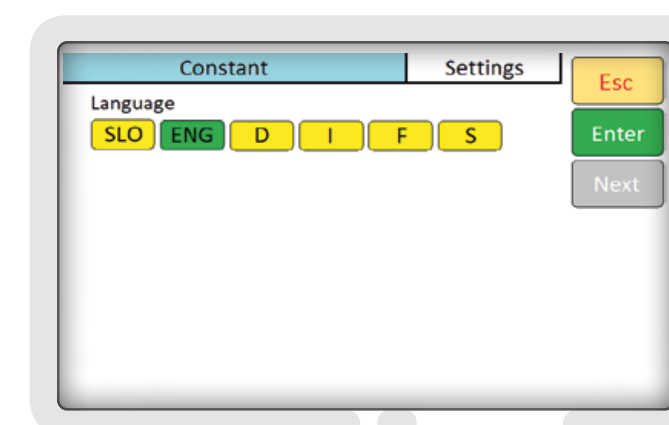
Add value to milk.

PLEVNIK



Outstanding flexibility and clear overview.

It is possible to choose from 12 programs, which can be adjusted to suit your technological procedures.



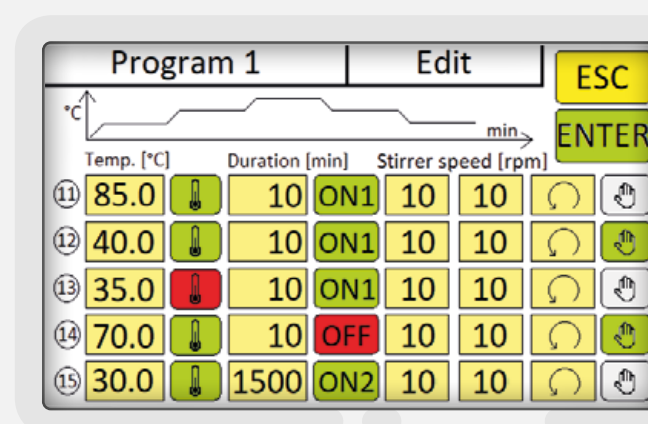
Speaks your language.

Supports 6 languages, including English.

Programs for excellent processes

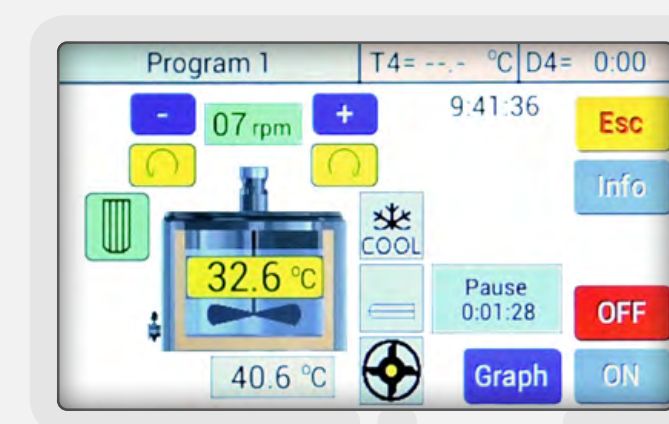
Adapt to
your favourite
recipe

Now there are six programs available, **which are even more customizable**. They provide up to 15 steps, which support not only the basic temperature, time, speed and stirring direction settings, but also the possibility to turn the temperature regulation off and to turn the "gentle" duration mode (controlled maintenance of temperature during milk fermentation) on. It is possible to set audible alerts before the following phases, before the next step is automatically executed. All 6 programs are **repeatable** and **automated**.



Control the entire thermal treatment process.

Parameters can be modified and set during operation. The six (6) programs have additional options, which accept even the most demanding recipes.



Adjust to your needs.

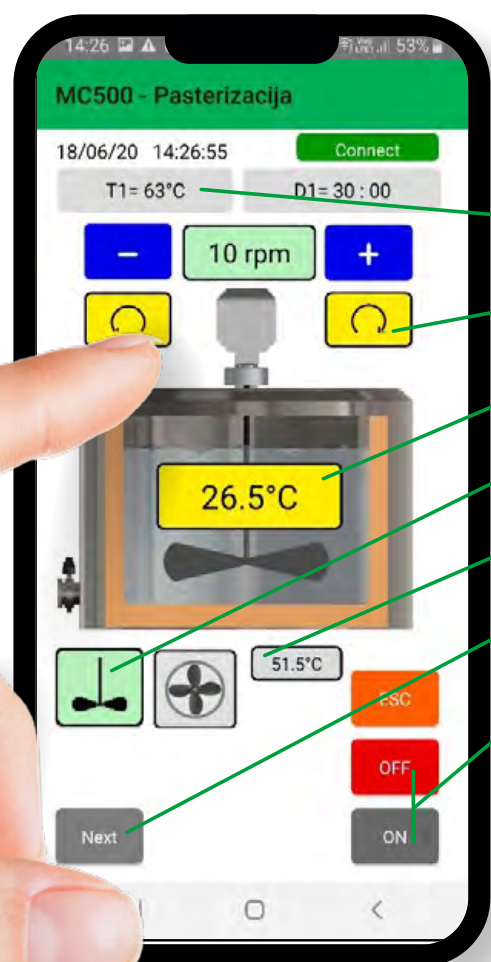
There are 6 programs available for setting up (stop points require confirmation) - displayed on the controller screen before you can continue with the next step. In the meantime, ingredients can be safely added, pH can be measured, stirrers can be replaced ... This makes it possible to completely adapt the process to your needs.



Remote access (WiFi) and additional program settings

Via remote access using a mobile phone, tablet or laptop, cheese-makers can manage and control milk processing even when they are not present in the dairy.

Using a smart phone, desktop or laptop, you can set the following: turning on/off, delayed start, record transfer, moving to the next process step, temperature changes and certain other parameters, such as speed and stirring direction.



EXAMPLE OF A REMOTE SCREEN ON A SMARTPHONE

[TARGET TEMPERATURE] during pasteurization, etc.

[STIRRING/SPINNING DIRECTION] stirring direction control

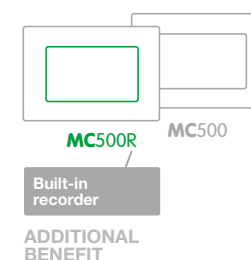
[CURRENT PRODUCT TEMPERATURE] product temperature

[STIRRER OPTIONS] stirring shovel, harps, scrape stirrer, etc.

[TEMPERATURE OF WATER IN THE COAT] temperature display

[NEXT] go to next process step

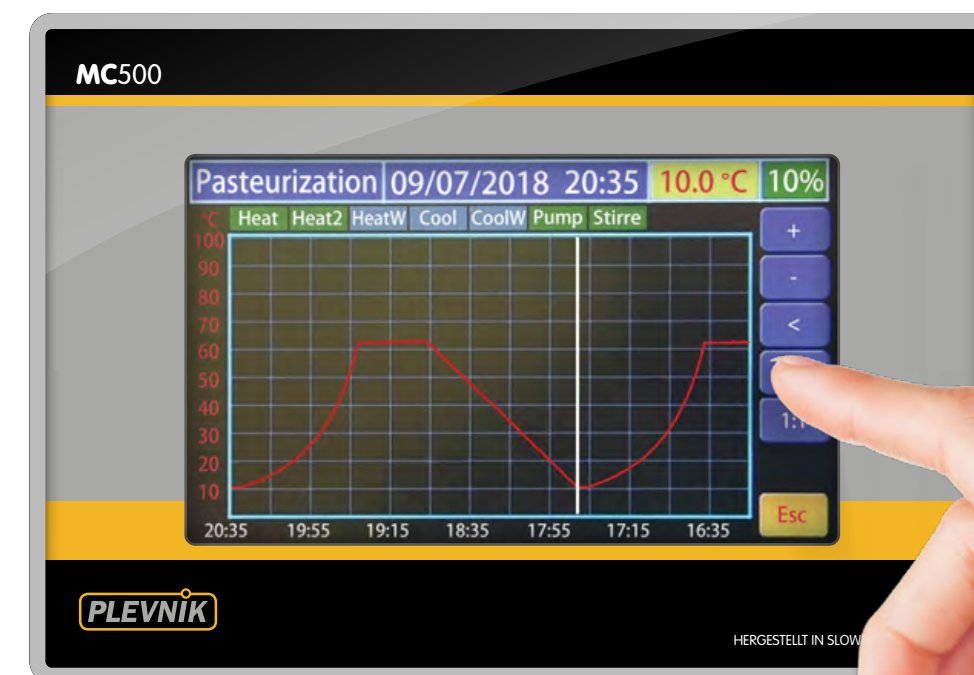
[ON/OFF] turn the process on/off



The **MC500R** controller has a built-in recorder, which automatically documents all active processes, in turn making it easier to control them as well as offering an overview of completed processes. The currently active process and the log of complete processes are displayed on the controller screen.

MC500R

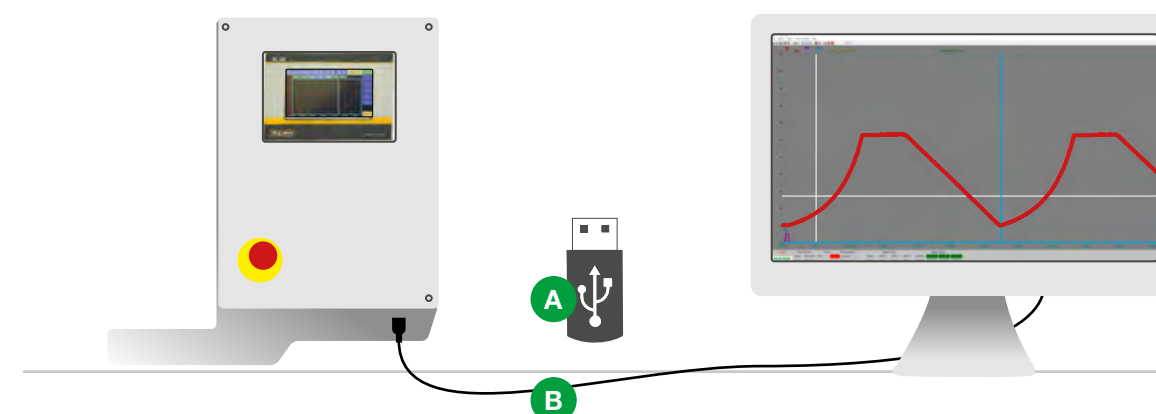
Integrated recorder – a modern approach to process control



Fully recorded processes – documents temperature and processes. (MC500R)

In addition, full control over milk temperature as well as the valve and cover condition, etc. is possible.

Records can be easily transferred via USB (A flash drive or B cable) to the computer, where you can view and save them with the dedicated software.



MC700i

Professional, smart, intelligent, adaptable, easy to use, ready for remote access



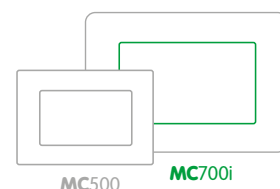
93% of actual size



Control additional functionalities

MC700i is a completely new controller, specially designed for advanced professional user. The controller is a powerful high-tech product. It combines powerful hardware with 30 years of experience and knowledge of milk processing. The integrated recorder supports the recording of all active processes and simplifies overview and saving of processes for further processing using a controller or a PC.

We expect a need for more automation in the future. Additional sensors for more control and more automation. (More on page 11.)



Simple menus. Simple to use
Five virtual buttons to access all processes.

All controls are at your disposal
The main commands are always displayed on the screen, making access quick and easy.

Program adaptability and adjustability
There are 20 steps available. Each step can be augmented with various additional functionalities (dosing, speed regulation and others).

STEP – basic automation element
Having complete control that enables you to precisely determine the automation measures is important in regard to quality and time, as well as energy efficiency, during processing.



Add value to milk.

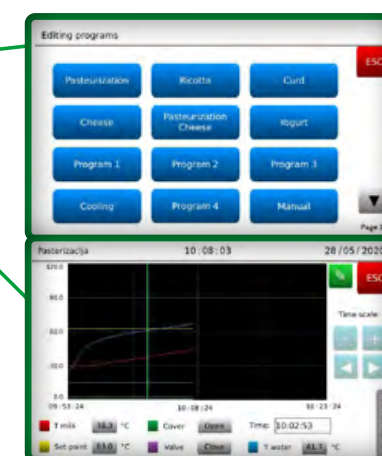
PLEVNIK

24 programs.
Pre-set programs, which help make the final milk product.



Set process delay

Set process start time – useful when the process does not require constant human presence.

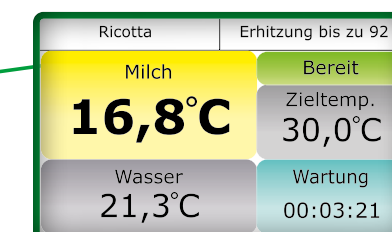


Recording process

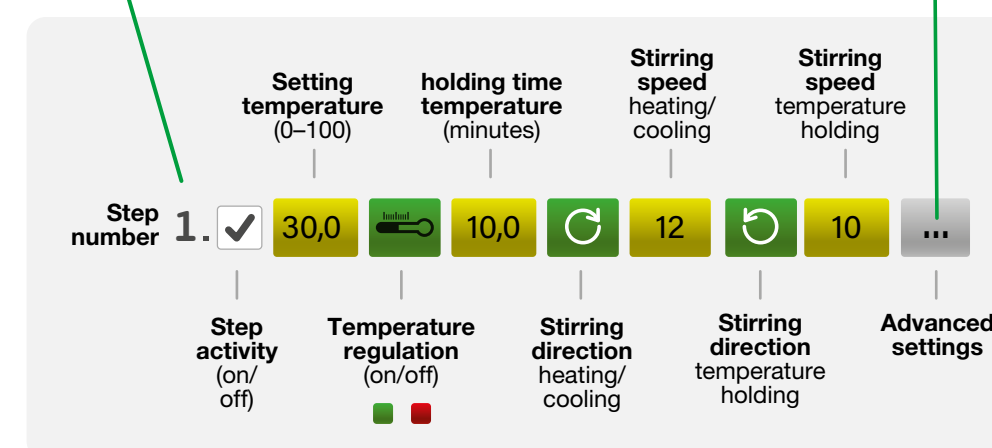
You can access past process data at any time.



Enlarged, simplified screen highlights. The process and parameter preview is displayed in a larger font.



Easy access to more advanced step settings.
Each step can be set up in greater detail.



Using the controller

Professional level of process step control while producing various final products:



CHEESE MAKING

An expert in the processing of milk into dairy products, Plevnik guarantees that by using the MC700i smart controller, you can execute any of your processes with maximum automation.

SKH / SCH / 20
CHEESE KETTLES/VESSELS



FERMENTED PRODUCTS

Pasteurization and fermentation are the most important processes enabling long-lasting final products. The MC700i makes quality control of processes simple and you can easily upgrade it with your imagination, even with multiple batches per day.

P / PH
PASTEURIZERS



FOOD PROCESSING

Unlimited stirring possibilities in the Plevnik PST stirring tank (process stirring tank) - any type of food can be processed at the most professional level with complete control over the processes, produce high-quality products always in the same way.

PST
PROCESS
STIRRING
TANK



MC700i ENABLES AUTOMATED PROCESSES

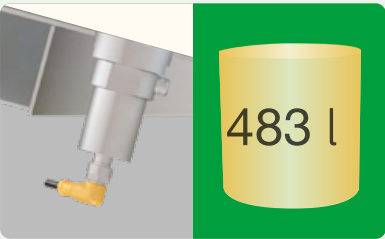
Process recording

Follow your process with the recording function and built-in recorder.



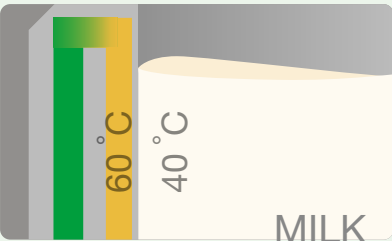
Quantity sensor*

The pressure sensor measures the volume in the vessel and provides information for control.



Precise heating regulation*

The water heating speed is regulated by the controller, so that the thermal treatment is gentle all the way to the final product – the MC700i regulates the temperature difference between the milk and the heating water in the vessel's coat (for example 20 °C).



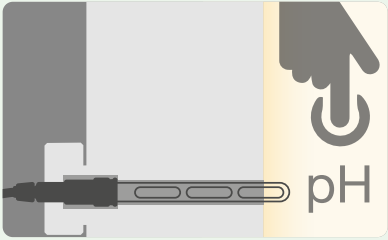
WiFi assistance*

Automatic updates during idle times, remote assistance and support, etc.



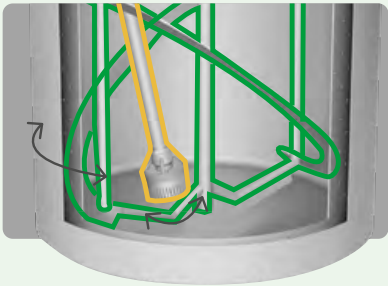
pH sensor*

The pH meter is a universal sensor for detecting the pH value of the processed product. More cheese mass, same product quality – repeatability (start by cutting the cheese coagulum into cheese grains).



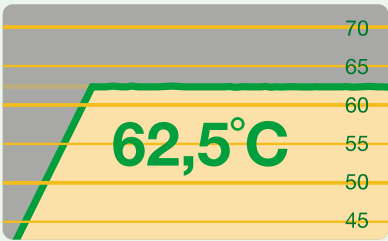
Stirring control*

Up to 2 stirrers to control the speed of rotation, direction and even pulsation.



Holding and maintaining temperature

Automatically maintain the target temperature for a certain time required by the process step.



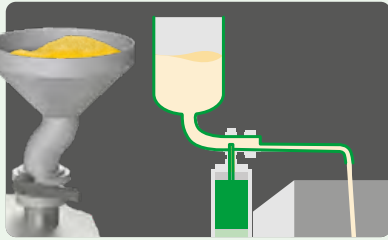
The MC700i can be incorporated into main control centres

Our devices are ready to be connected with certain other system controllers.



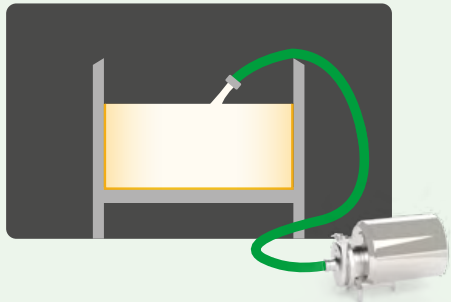
Automatic dosage option*

Calculating the dose and applying the dose at a certain time is yet another automation function ensuring reliable and repeatable processes and products.



Managing vessel content inlets and outlets

Smart calculation according to recipe settings. Connecting the volume sensor and other sensors for achieving identical results.



Remote access*

Remote access enables you to optimize the operator's presence during the process.



* Additional equipment

Processing of 200–500 l of milk using automation (MC700i)

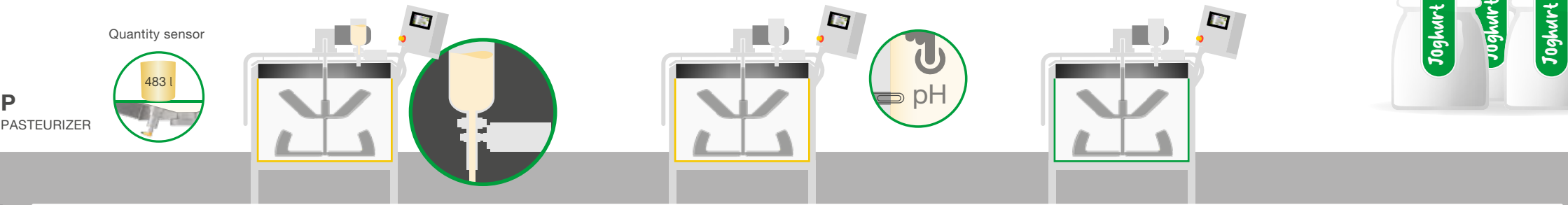


Example of automated yogurt production. The diagram shows the entire process with the following main parameters: **temperature** - thermal treatment, **stirring**, **dosing** of cultures, **fermentation** and display of automation **steps** determined at the start.

Fermentation - takes place in a controlled manner at 42 °C for 6–8 hours.

Control of the PH values.

YOGURT



AUTOMATED PROCESS MILK > YOGURT

1

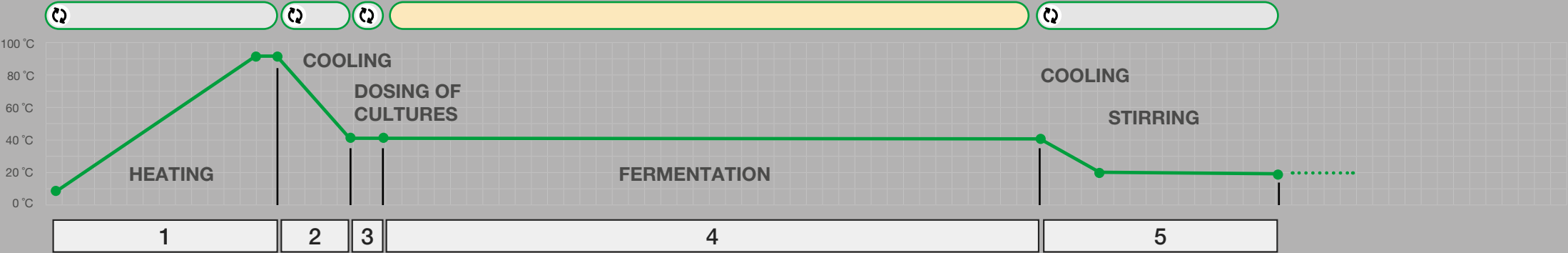
STEP (AUTOMATION UNIT)

TEMPERATURE PROGRESS OF PROCESSES

STIRRING

BIOLOGICAL PROCESSES: COAGULATION, FERMENTATION, ETC.

1	11
2	12
3	13
4	14
5	15
6	16
7	17
8	18
9	19
10	20



Example of an automated process of making cheese mass - the basis of cheese making. The diagram shows the entire process with the following main parameters: **temperature** - thermal treatment, **stirring** - harps are spinning in one direction, **cutting the cheese mass** - harps spinning in the other direction, **dosing** of cultures and rennet, **coagulation** and display of automation **steps** determined at the start.

Example of automated dosing
The MC700i intelligently manages the dispenser.

The PH meter detects when time to dose rennet.

CHEESE MASS



MILK > CHEESE MASS

1

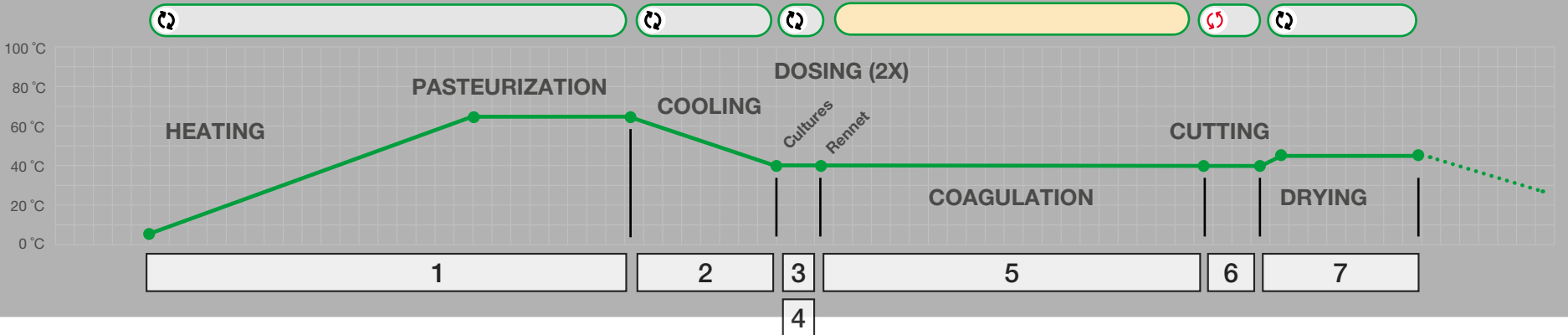
STEP (AUTOMATION UNIT)


FLOW OF THERMAL PROCESSES

STIRRING, CUTTING

BIOLOGICAL PROCESSES: COAGULATION, FERMENTATION, ETC.

1	11
2	12
3	13
4	14
5	15
6	16
7	17
8	18
9	19
10	20





My ideas for milk ... food ... processing



Compete dairy solutions.

Plevnik products in the service of the user.

All Plevnik devices are user- and environmentally friendly, as well as energy-efficient. They are designed and manufactured for long-term use.



MC EN 26 03 2021

More information



Consulting



Visit



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.



Add value to milk.

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*The milk processing equipment specialists.
Together we have created more than 3,500
successful cheese-making stories.*

*Creating joyful
countryside
stories*