COLOQUICK

PASTEUR + MAXX4

USER MANUAL

STARTUP

OPERATION

TECHNICAL INFORMATION

Congratulations on your purchase of ColoQuick

For the sake of safety and optimal use of the product, please read this manual thoroughly before using the product for the first time.

The philosophy behind ColoQuick is that through minor procedural changes in how you handle colostrum for feeding to calves, you can ensure that all your calves get as many antibodies as possible. This is essential for rearing a good production animal.

You should focus on:

- **testing and sorting** the colostrum, so you use the best quality
- **feeding the calf as fast as possible** after birth—the sooner the better
- **maintaining a high level of hygiene** while handling the colostrum
  Hoses, tube feeders etc. must be cleaned thoroughly after use

Using ColoQuick, you can give your calves more antibodies and thus better immunity than with any other method. In the long run, ColoQuick will boost both health levels and production in your herd. At the same time, it is easy to use.

We would love to hear from you if you have comments, praise, critique or suggestions for improvement. Our aim is for ColoQuick to be the ultimate product for handling colostrum.

Enjoy your new ColoQuick product.

Yours sincerely

ColoQuick Int.

Brian Pedersen, CEO
info@ColoQuick.com

Note that the illustrations are for information purposes only. They do not necessarily reflect the exact specifications and details of the model in question.

We reserve the right to make changes without prior notice.

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Parts list

1 thawing/pasteurization unit (Pasteur II or MAXX4)

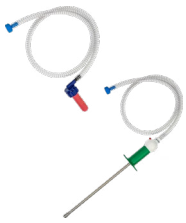
See assembly instructions (separate sheet) for further information.

1 filling station

See assembly instructions (separate sheet) for further information.

Pasteur II	**MAXX4**
10 cartridges	20 cartridges
10 writing plates	20 writing plates
20 clips	40 clips
5 red sliding locks	10 red sliding locks

See assembly instructions (separate sheet) for further information.



1 teat set
1 esophageal tube feeder set

See assembly instructions (separate sheet) for further information.

1 analog optical refractometer

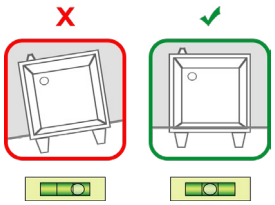
2 carrying straps

35 (Pasteur II) / 70 (MAXX4) colostrum bags

Setting up the ColoQuick unit

Installation

- Pasteur II weighs 50 kg / 110 lbs. and MAXX 4 weighs 90 kg / 200 lbs. The machines must be handled with care.
- Unpack the machine and remove all wrapping before starting.
- Electric and plumbing installation work must be performed by authorized professionals.
- Locking mechanism - activation:
- Pasteur II: Remove the red label reading “Remove”.
- MAXX4: Lock the lock using the black key that is fastened to the machine handle with cable strip.



Placement

- The machine must be situated in a frost-free room.
- The room temperature must not exceed 40 ºC / 104 ºF.
- The machine **must** be placed on a solid, plane surface.

Water hookup

Hook up to cold water, remembering to insert a water filter at the water supply.

Pasteur II:

- Place the large 1” hose on the motor valve’s blue connecting piece, and draw the hose into an outlet.
- Place the flex-hose on the overflow connecting piece (located under the bottom on the right side of the machine to the back) and draw the hose into an outlet.

MAXX4:

- Mount outlet hoses and draw the hose into an outlet.
- Optional: Connect hot water—max. 60 ºC / 140 ºF. Remember to insert a water filter at the water supply. Contact an authorized ColoQuick dealer for assistance.

Electric hookup

(must be performed by an licensed electrician)

- Make sure the electrical data on the type plate correspond to the power supply.
- Always use a correct and legally installed mains connection.
- Check that the machine is grounded.
- Do not use multiplug sockets or extension cords. There is a risk of fire.

ColoQuick Pasteur II comes in three versions:

- EU: 3x400V+N+PE
- EU: 230V+N+PE
- US: 1x208-240V+PE

ColoQuick MAXX4 comes in three versions:

- EU: 3x400V+N+PE
- US: 3x208-240V+PE
- US: 1x208-240V+PE

Starting the ColoQuick unit

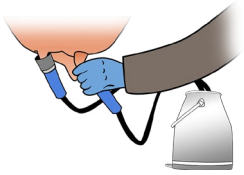
- Check that the electricity is correctly hooked up and that the water supply to the machine is open.
- Check that the locking mechanism is activated.
- Turn on the machine by turning the red handle. This starts the machine, which begins letting water in after a few seconds. When there is enough water in the machine, the water starts heating.

For further information about operating the unit, see the section “Technical Information.”

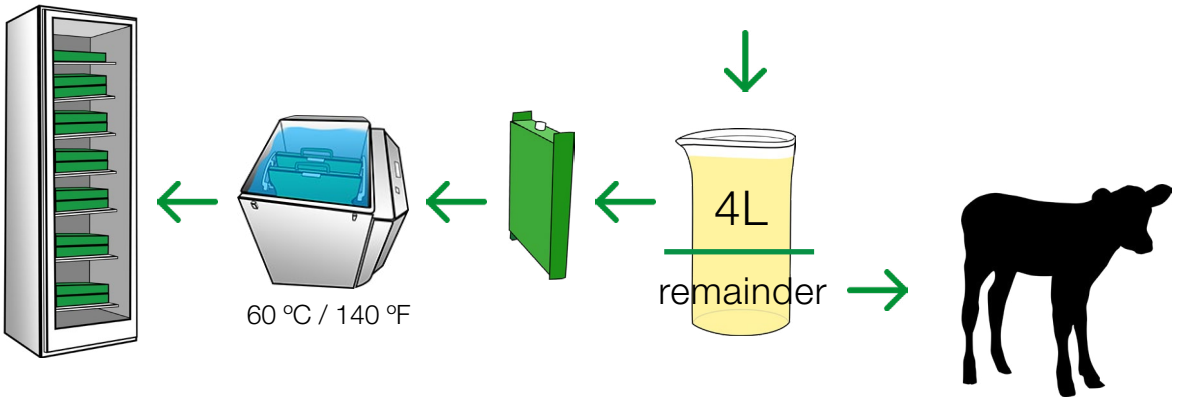
Fill the freezer

Start filling the freezer with colostrum, without any regard to quality.

1. After milking, pour 4 liters of colostum into a cartridge and pasteurize.



2. Give the remainder of the colostrum to the calf.



We recommend storing the colostrum in a freezer, where the cartridges can be neatly arranged and easily taken out.

- We recommend one or more freezers, so the capacity corresponds to the size of the herd.
- We recommend a temperature of -14 °C / 6 °F.
  (lower temperatures result in shorter thawing times).
- The cartridges ***must*** be lying flat during freezing.
- Sort the cartridges according to quality, with the highest quality at the top of the freezer.

Minimum number of cartridges in the freezer:

< 100 cows:	6 cartridges
200 cows:	10 cartridges
500 cows:	15 cartridges
> 1000 cows:	20 cartridges

How to fill the freezer

1. Milking

Milk the cow as soon as possible after calving.

- Hygiene must be optimal.
- Always use disposable gloves.
- The cow has not been milked for several weeks, and udders and teats therefore require thorough cleaning.
- Premilking must be extra thorough.

- Milk pails and the like must be handled with at least the same cleaning and hygiene procedures as when milking dairy milk.
- The newly milked colostrum must not be contaminated with manure.
- The colostrum must either be cooled or pasteurized as soon as possible after milking.

2. Quality measurement

Even though you are saving the colostrum regardless of quality, it is important to note the quality for future reference.

- Use only top-quality hygienic colostrum without visible changes.
- Place a few drops of colostrum on the optical refractometer's glass plate.
- Close the glass plate.

- Read the BRIX value by pointing the refractometer up towards a light source.

See further information about the use of the refractometer, including calibration, in the refractometer's operating manual.

The BRIX value indicates the colostrum's content of antibodies. The higher the BRIX %, the higher the quality.

3. Fill the colostrum in a colostrum bag.

Use the filling station to pour a measured amount of colostrum into a colostrum bag.

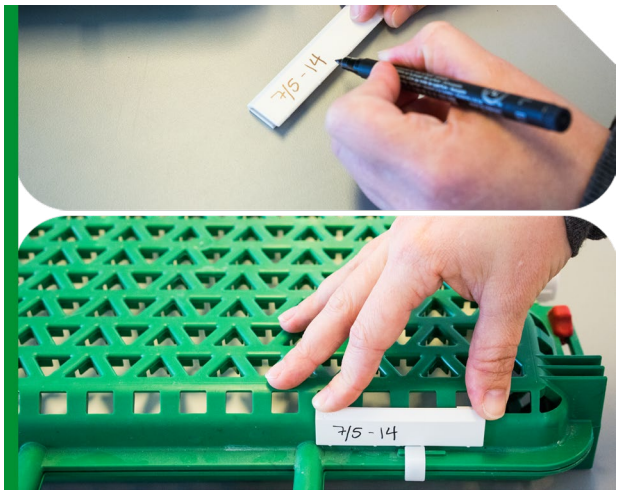
- Open a cartridge.
- Place a bag in the cartridge by pressing the two perforations at the bottom of the bag down over the two “spikes.”
- Secure the collar of the bag in the groove of the cartridge.
- Close the cartridge.

See the cartridge’s instructions for use (separate sheet) for further information regarding how to use the cartridge.

- Place the cartridge with the colostrum bag in the filling station.
- Check that the clamp is on the hose, so the colostrum does not run down into the bag.
- Note the liter markings on the filling station: We recommend giving calves as much colostum as possible. Calves of large races should receive 4 liters.
- Pour the colostrum into the filling station’s funnel.
- Remove the clamp so the colostrum runs down into the bag.

Gently press the cartridge, to remove excess air from the bag before screwing the bag’s lid back on and placing it in the freezer.

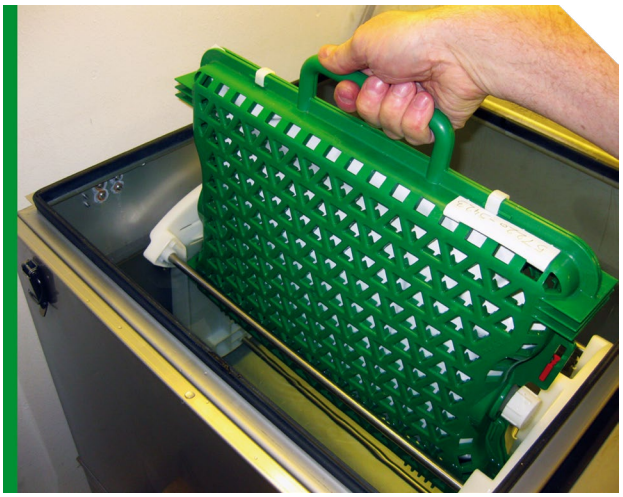
After pouring the colostrum in the colostrum bag and screwing on the bag's lid, take the cartridge out of the filling station.



- Note the cow's number, date and BRIX value on one of the supplied white writing plates.
- Mount the writing plate on the cartridge.
- There is room for mounting multiple writing plates.

4. Pasteurization

Pasteurize the colostrum.



- Place one or more cartridge in the heated ColoQuick Pasteur II/MAXX4 unit.
- Start the pasteurization program:

1. Press START
2. To select a program, press: *until you see the desired program.*
3. Press START

For further information on operating the pasteurization unit, see the section "Technical Information."

When the pasteurization program is done, the machine emits a short buzzing noise and the "COMP" indicator lights up. The display summarizes the pasteurization process.

The pasteurization program consists of the following phases:

1. Heating to 60 ºC / 140 ºF
2. Pasteurization at 60 ºC / 140 ºF for 60 minutes
3. Cooling
4. Maintenance of cooling temperature

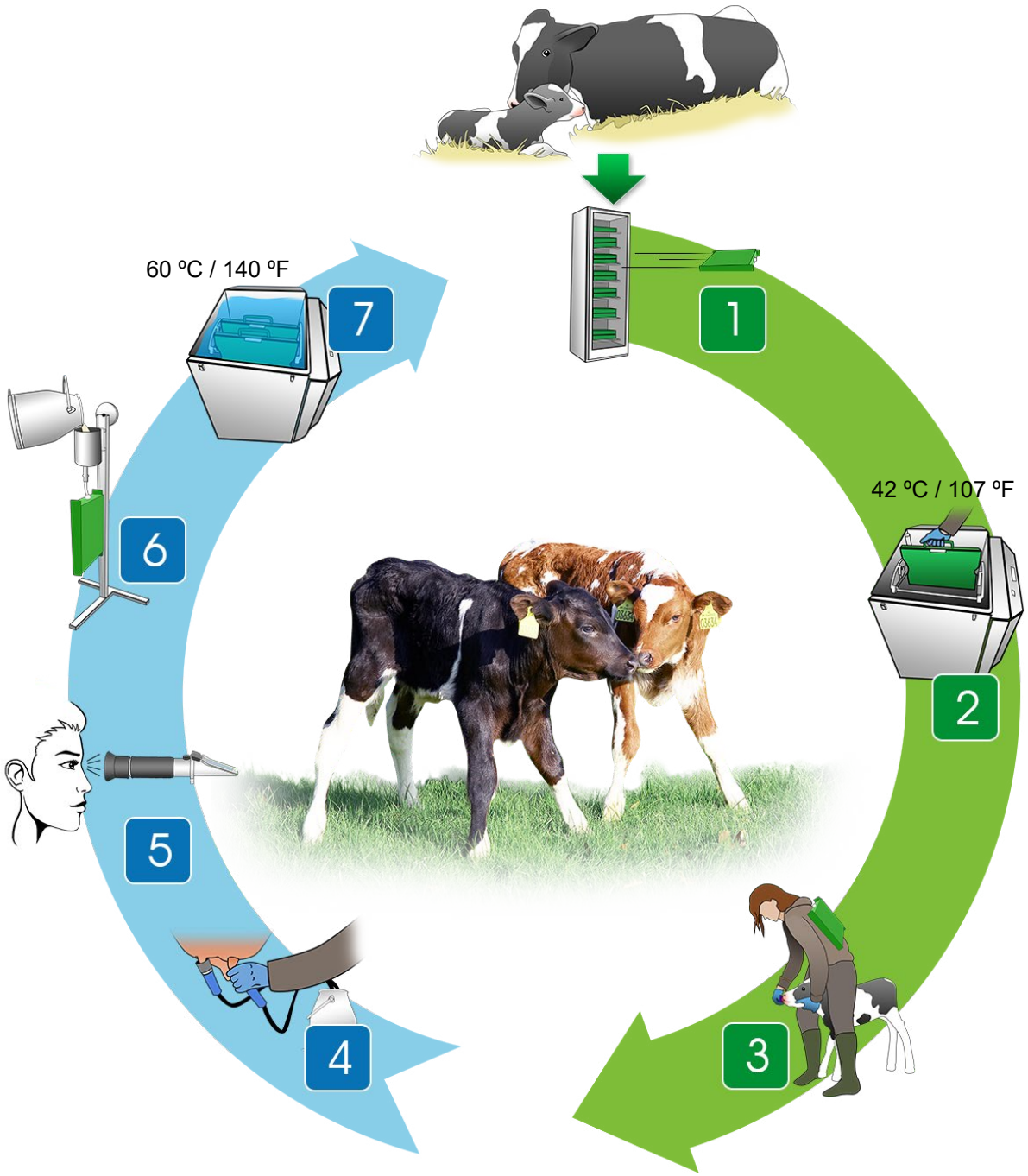
The cartridges must be removed from the water bath immediately after the pasteurization program finishes and placed in the freezer.

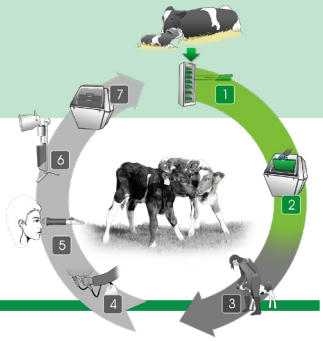
5. Place the cartridge in the freezer

- The cartridge is placed in the freezer.
- The colostrum cartridges **must** be placed lying flat to freeze.
- Sort the colostrum cartridges according to quality, placing the highest quality at the top of the freezer.

- From then on you need to decide how much colostrum you need to store.
- Place the freezer in a practical location that fits into the daily procedures.
- The colostrum can be stored up to one year in the freezer.

The ColoQuick method with pasteurization





A calf is born

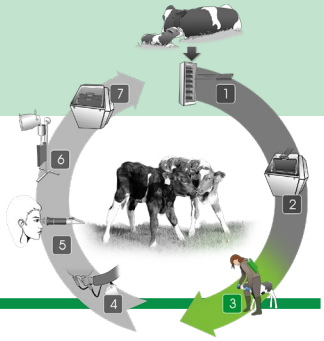
- Make sure the calf's airway is clear.
- Take a portion of colostrum from the freezer.
- For heifers, take colostrum from the top shelf (highest quality).

- Place one or more cartridges in the heated ColoQuick Pasteur II/MAXX4 unit.
- Start the thawing program:

1. Press START
2. Select the desired program - press: *until you see the desired program.*
3. Press START

While the colostrum is heating:

- Take the calf away from the cow as quickly as possible.
- Wipe the calf dry if necessary.
- Disinfect the calf's navel.
- Earmark, if needed.



Feeding

- Rinse hose and teat/tube feeder with clean cold water before use.
- Remove the cartridge from the water bath and stand it on edge with the bag's lid facing up.
- Screw the lid off the bag.
- Check that the colostrum has the desired temperature.
- Screw the milk hose onto the teat or tube feeder.
- Mount the suspender on the cartridge.
- Remember to fill in your colostrum journal after feeding.

Feeding with a teat

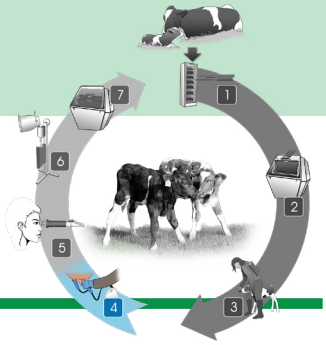
(See assembly instructions (separate sheet) where relevant)

- Avoid interruptions and distractions when the calf has begun sucking.
- Hold the teat so the calf's throat is outstretched.
- Remember to clean the teat, hose, etc., after use - see the section "Cleaning and Hygiene."
- After feeding, the calf can be returned to the cow.

Feeding with a tube feeder

(See assembly instructions (separate sheet) where relevant)

- The calf must be standing.
- Place the tube feeder over the tongue until the sucking reflex is stimulated, and push the tube feeder slowly down into the esophagus.
- You should be able to feel the tip of the tube feeder on the left side of the calf's neck. Do not start the flow of milk until the tube feeder is in place.
- Stop the flow before removing the tube feeder.
- After feeding, the calf can be returned to the cow.

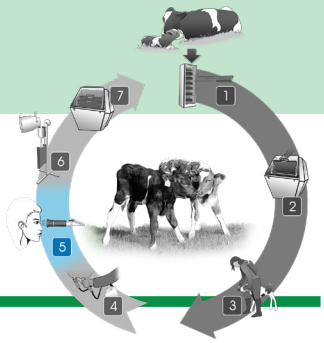


Milking

Milk the cow as soon as possible after calving.

- Hygiene must be optimal.
- Always use disposable gloves.
- The cow has not been milked for several weeks, and udders and teats therefore require thorough cleaning.
- Premilking must be extra thorough.

- Milk pails and the like must be handled with at least the same cleaning and hygiene procedures as when milking dairy milk.
- The newly milked colostrum must not be contaminated with manure.
- Cool the colostrum as quickly as possible.



Quality measurement

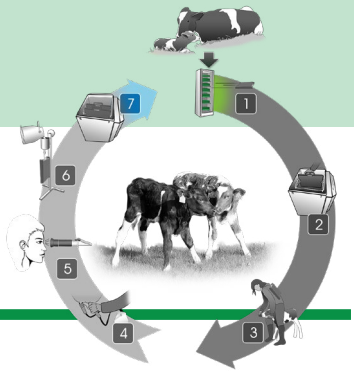
- If you have fewer than the minimum number of cartridges (see table on page 5), save the colostrum after a quality test, regardless of the quality.
- If you have over the minimum number of cartridges (see table on page 7), replace the lowest quality milk with the highest quality, unless you have enough storage capacity to keep both.

- Use only completely hygienic colostrum that is free of visible changes.
- Place a few drops of colostrum on the optical refractometer's glass plate.
- Close the glass plate.

- Read the BRIX value by pointing the refractometer up towards a light source.

See further information about the use of the refractometer, including calibration, in the refractometer's operating manual.

The BRIX value indicates the colosturm's content of antibodies. The higher the BRIX %, the higher the quality.

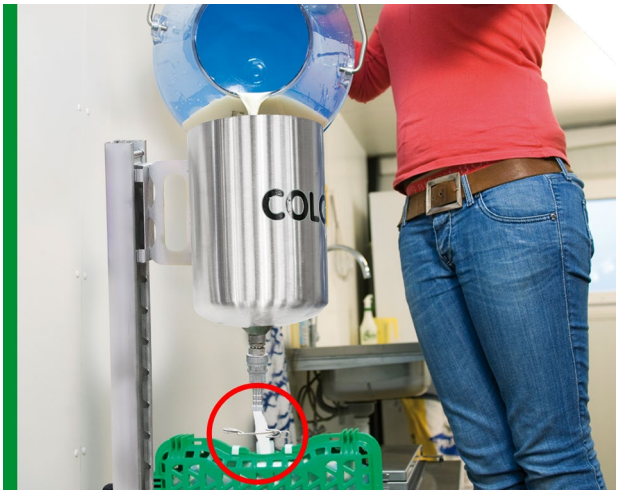


Fill colostrum in a colostrum bag

Use the filling station to pour a measured amount of colostrum into a colostrum bag.

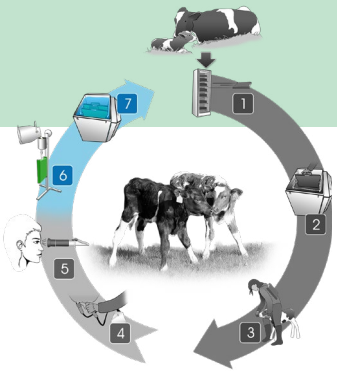
- Open a cartridge.
- Place a bag in the cartridge by pressing the two perforations at the bottom of the bag down over the two “spikes.”
- Secure the collar of the bag in the groove of the cartridge.
- Close the cartridge.

See the cartridge’s instructions for use (separate sheet) for further information regarding how to use the cartridge.

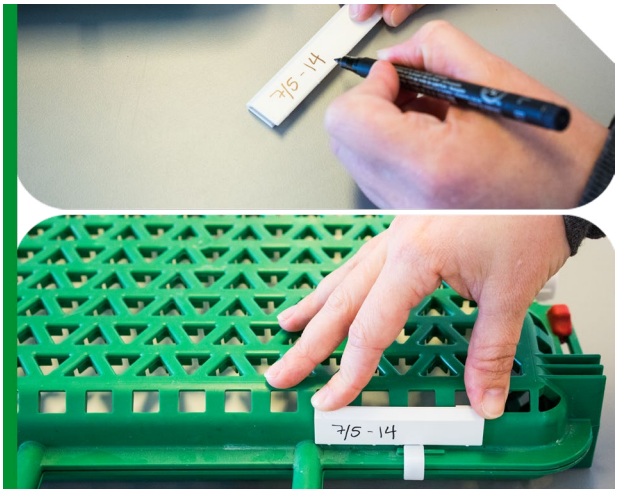


- Place the cartridge with the colostrum bag in the filling station.
- Check that the clamp is on the hose, so the colostrum does not run down into the bag.
- Note the liter markings on the filling station: We recommend giving calves as much colostrum as possible. Calves of large races should receive 4 liters.
- Pour the colostrum into the filling station’s funnel.
- Remove the clamp so the colostrum runs down in to the bag.

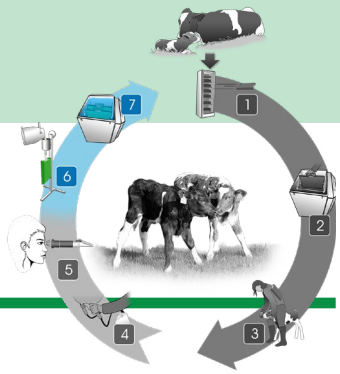
Gently press the cartridge, to remove excess air from the bag before screwing the bag’s lid back on and placing it in the freezer.



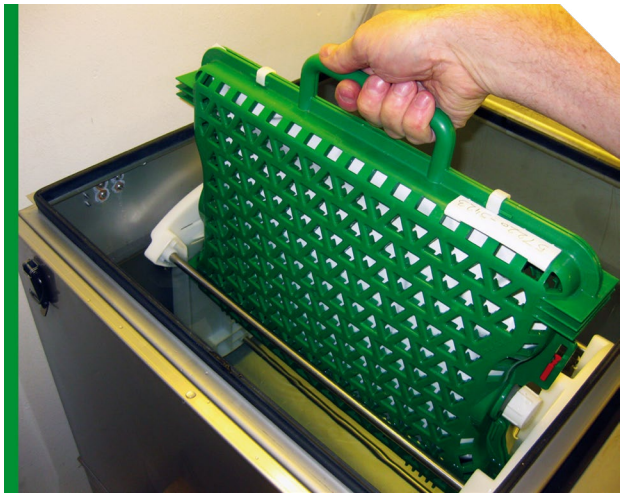
After pouring the colostum in the colostrum bag and screwing on the bag's lid, take the cartridge out of the filling station.



- Note the cow's number, date and BRIX value on one of the supplied white writing plates.
- Mount the writing plate on the cartridge.
- There is room for mounting multiple writing plates.



Pasteurization



- Place one or more cartridges in the heated ColoQuick Pasteur II/MAXX4 unit.
- Start the pasteurization program:

1. Press START
2. To select a program, press: *until you see the desired program.*
3. Press START

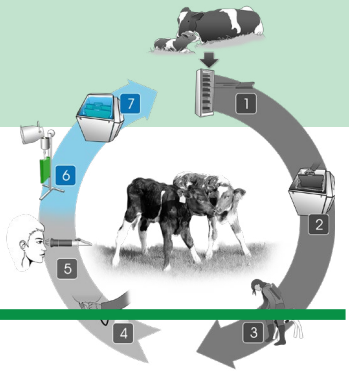
For further information on operating the pasteurization unit, see the section "Technical Information."

When the pasteurization program is done, the machine emits a short buzzing noise and the "COMP" indicator lights up. The display summarizes the pasteurization process.

The pasteurization program consists of the following phases:

1. Heating to 60 ºC / 140 ºF
2. Pasteurization at 60 ºC / 140 ºF for 60 minutes
3. Cooling
4. Maintenance of cooling temperature

The cartridges must be removed from the water bath immediately after the pasteurization program finishes and placed in the freezer.



Place the cartridges in the freezer

- The cartridge is placed in the freezer.
- The colostrum cartridges ***must*** be placed lying <u>flat</u> to freeze.
- Sort the colostum cartridges according to quality, placing the highest quality at the top of the freezer.

Remember to complete your colostrum journal (provided on separate A4 size sheet of paper).

Operation: Indicators

ColoQuick Pasteur II / MAXX4 control panel.

- *The bottom line at the bottom left corner shows the water temperature. Display of Celsius or Fahrenheit can be selected in the service menu (page 32).*
- *The bottom line at the right corner indicates the water level:*
  - *0 is empty*
  - *1 is very low*
  - *2 is low*
  - *3 is normal*
  - *4 is too high*

PWR	Off/on indicator. Blinks in programming mode.
COMP	Lights when a pasteurization or thawing program is done.
LOCK	Lights when the lid is closed and locked. Flashes when the lid is open.
ERR	Flashes in case of error.
RUN	Lights when the cartridges rotate.
IN	Lights when water is let into the machine.
OUT	Lights when water is let out of the machine.
HEAT	Lights when the heating elements are on.

Operation: Buttons

Opens programming mode.

Interrupts current menu function.

Accepts menu functions or interrupts error modes.

Unlocks the safety lock and allows opening of the top lid.
(Not enabled while a program is running)

- The lid can then be opened in the next 15 seconds after rotation has stopped.
- The lid is always locked to prevent personal injury due to hot water.

Used to select pasteurization or thawing program.
(Also used for navigating in menu codes)

Used for navigating in menu codes.

Starts the selected program/action.

Stops the current program/action.

Operation: Pasteurization

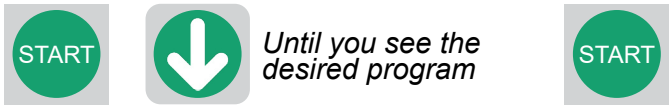
The pasteurization function is used to reduce the number of viable pathogens in the colostrum. The colostrum goes through mild heating and cooling periods during the process.

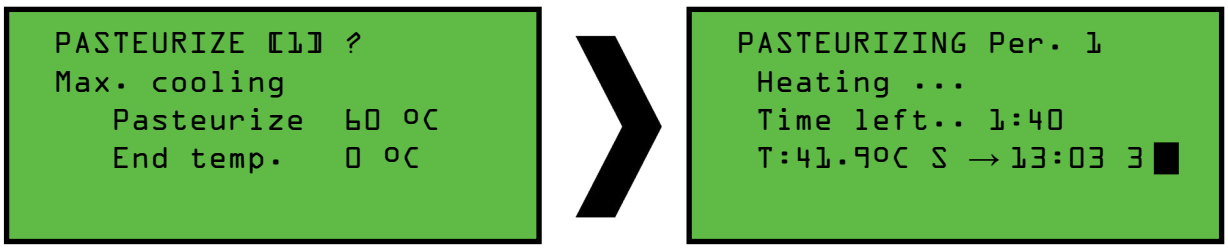
For an optimal pasteurization process, the machine must be on and the ColoQuick unit must have a temperature of 42 ºC / 107 ºF.

The machine has the following pasteurization programs:

Pasteurization program 1

- Standard pasteurization program with maximum cooling after pasteurization has finished.
- To select pasteurization program 1, press the buttons in the following sequence:



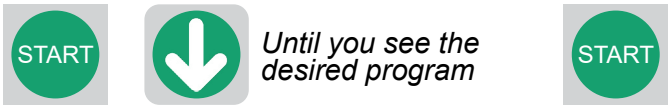


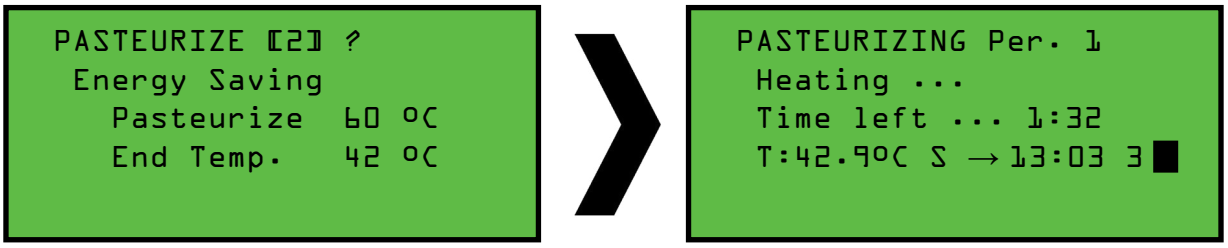
The remaining program time will be shown regularly on the display.

- When the pasteurization program is finished, the **COMP** indicator switches on, the machine emits a noise and a summary appears on the screen.
- The pasteurization program can be stopped at any time by pressing the “**STOP**” button, and then “**OK**“.

Pasteurization program 2

- Pasteurization program with cooling to 42 ºC / 107 ºF after pasteurization is complete.
- To select pasteurization program 2, press the buttons in the following sequence:





The remaining program time will be shown regularly on the display.

- When the pasteurization program is finished, the **COMP** indicator switches on, the machine emits a noise and a summary appears on the screen.
- The pasteurization program can be stopped at any time by pressing the "**STOP**" button, and then "**OK**".

The colostrum goes through 4 phases in a pasteurization program.

- Period 1: Heats to the pasteurization temperature (60 ºC / 140 ºF).
- Period 2: Pasteurizes the colostrum at 60 ºC / 140 ºF for 60 minutes.
- Period 3: Cooling of the colostrum ("Pasteurization program 1" is recommended).
- Period 4: Maintenance of the temperature from period 3.

If you wish to change the length and/or temperature, etc., of the periods, you can activate and set *Pasteurization program 3* in service menu 1112. Contact a ColoQuick dealer for assistance.

The colostrum must be removed from the water bath as soon as possible after pasteurization is complete, to avoid any negative effect on the quality.

Operation: Thawing

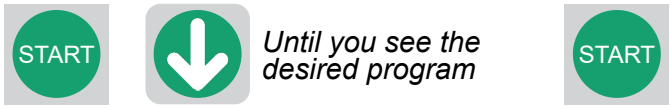
The thawing programs allow fast and effective thawing of colostrum coming directly from the freezer.

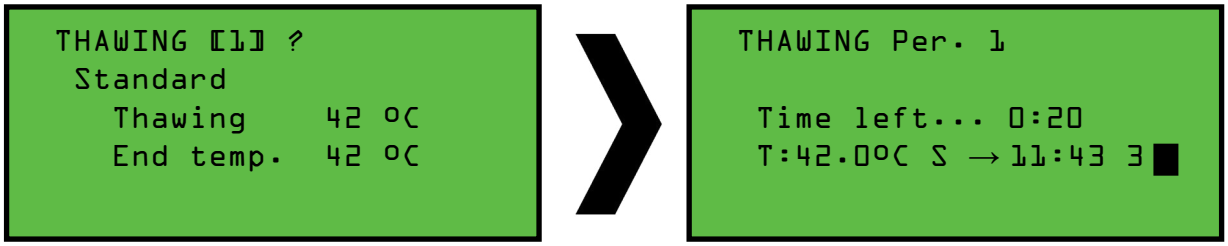
For an optimal thawing process, the machine must be on and the ColoQuick unit must have a temperature of 42 ºC / 107 ºF.

The machine has the following thawing programs:

Thawing program 1

- Standard thawing program. Duration 20 min. at 42 ºC / 107 ºF.
- To select thawing program 1, press the buttons in the following sequence:



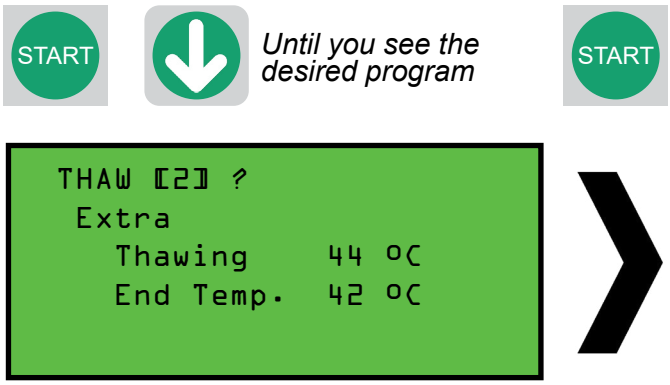


The remaining program time will be shown regularly on the display.

- When the thawing program is finished, the **COMP** indicator switches on, the machine emits a noise and a summary appears on the screen.
- The thawing program can be stopped at any time by pressing the “**STOP**” button, and then “**OK**”.

Thawing program 2

- Thawing program for extra high-quality colostrum. Duration 25 min. at 42 ºC / 107 ºF.
- To select thawing program 2, press the buttons in the following sequence:



The remaining program time will be shown regularly on the display.

- When the thawing program is finished, the **COMP** indicator switches on, the machine emits a noise and a summary appears on the screen.
- The thawing program can be stopped at any time by pressing the "**STOP**" button, and then "**OK**".

The colostrum goes through 4 phases in the thawing programs.

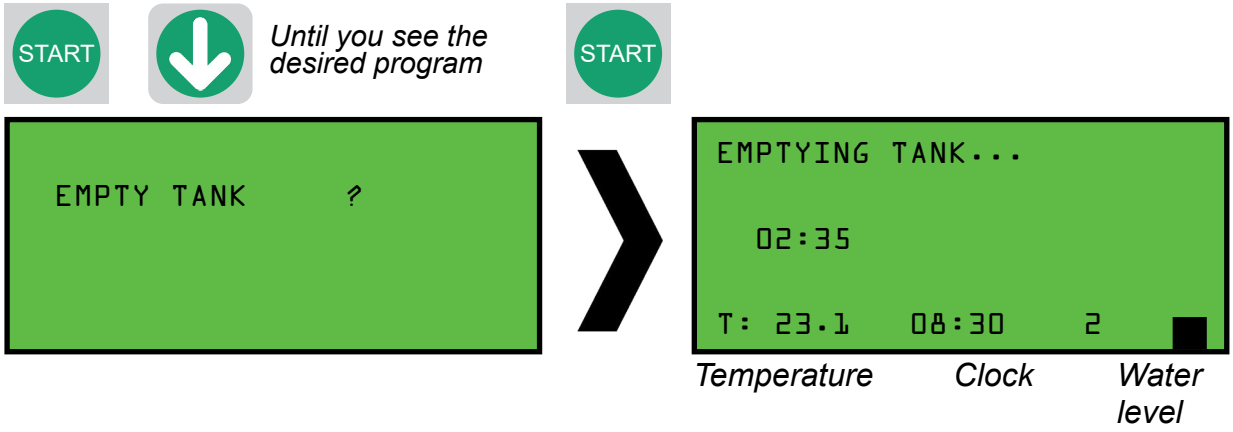
- Period 1: Heats to the thawing temperature (42 ºC / 107 ºF).
- Period 2: Thawing of the colostrum at 42 ºC / 107 ºF for 20 or 25 minutes.
- Period 3: Cooling of the colostrum to end-temperature (42 ºC / 107 ºF).
- Period 4: Maintenance of the temperature from period 3.

If you wish to change the length and/or temperature, etc., of the periods, you can activate and set *Thawing program 3* in service menu 1122. Contact a ColoQuick dealer for assistance.

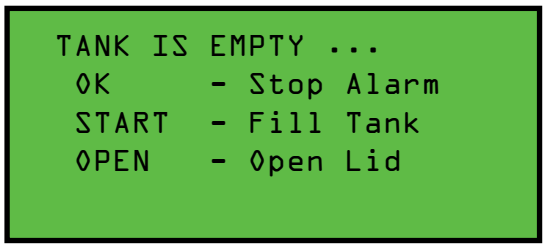
Note: The feeding temperature must be as close to the body temperature of the calf as possible - never higher.

Operation: Unit emptying

To empty water from the unit, press the buttons in the following sequence:



When the tank is empty, the machine emits a buzzing noise for 30 seconds. Press the "**OK**" button to stop the noise:



Press the "**START**" button to refill the unit or "**OPEN**" to open the lid.

Note: Used when cleaning the machine. See the section "Cleaning and Hygiene."

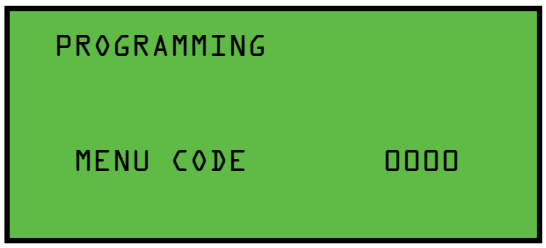
Service menu: Codes

Note: All changes in menus and programs are done at your own risk.

Code	Description
1110	“Pasteurization” setup 1
1111	“Pasteurization” setup 2
1112	“Pasteurization” setup 3
1120	“Thawing” setup 1
1121	“Thawing” setup 2
1122	“Thawing” setup 3
1130	“Temp. maintenance” setup
2222	“User” setup
2223	“Hot water” setup
2240	Calibration
2242	Calibration status
2999	Delete error log
3000	Show log
3001	Show error log
3010	Delete log
7500	Load USB settings
7501	Save USB settings
9990	Test mode
9991	Sensor configuration
9999	Software update

Service menu: Programming

The ColoQuick unit contains several programmable settings that can be accessed by pressing the **PRG** button and then entering a menu code.



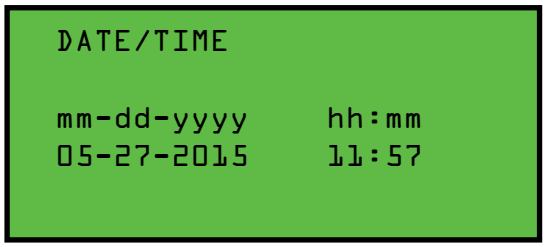
- The menu code is entered using the **UP/DOWN** and **LEFT/RIGHT** buttons.
- Press **OK** after entering the menu code.
- Navigate through the settings using the **UP/DOWN** buttons.
- Select settings by pressing the **OK** button.
- Set using the **UP/DOWN** buttons.
- Confirm the settings by pressing the **OK** button.
- End by pressing the **ESC** button.

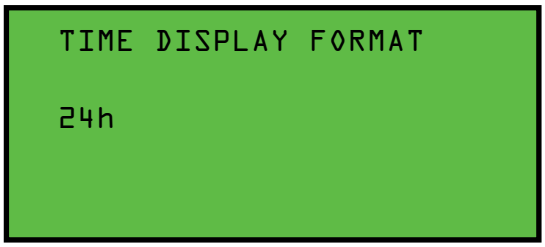
Example: “User” setup

To access the user setup in the service menu, press the **PRG** button and select menu code **2222**.

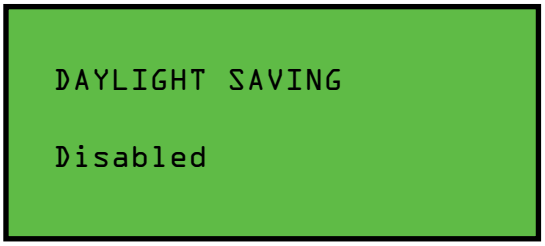
The following settings can be changed in this menu:

Date/time:



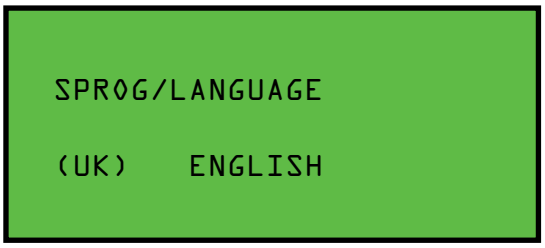


Summer time:

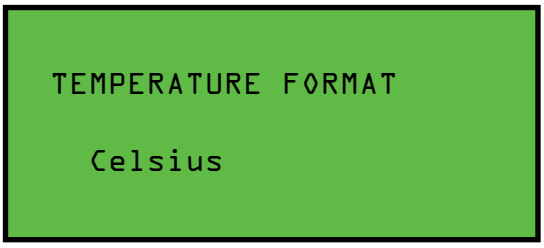


Summer time setting options:	
Disabled	• Automatic adjustment of daylight-saving time is deactivated (default).
EU	• One hour is added on the last Sunday in March at 2 a.m. • One hour is subtracted on the last Sunday in October at 2 a.m.
USA	• One hour is added on the second Sunday in March at 2 a.m. • One hour is subtracted on the first Sunday in November at 2 a.m.

Language selection: UK/DK



Temperature format: Celsius/Fahrenheit



Screen contrast:

Error codes

In case of error, all programs in progress stop, and the machine emits a buzzing noise.

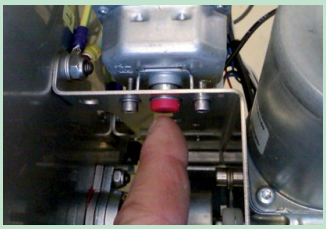
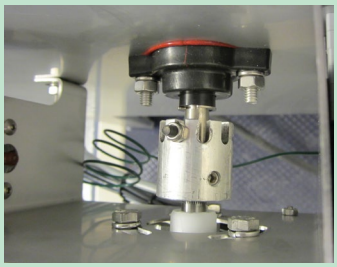
To reset an error, press the OK button or switch off the power. If the problem persists, the unit will immediately return to error mode. Contact a ColoQuick dealer for assistance.

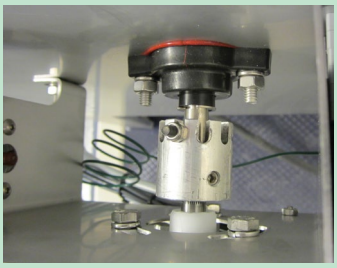
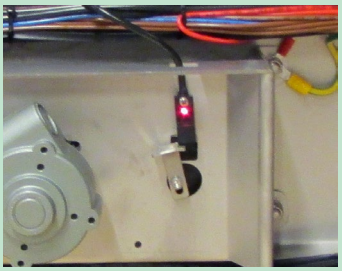
Error code	Description
E01: Motor sensor	**The motor has not given feedback for 20-25 seconds.** • Solution: Check that cartridges can turn freely and that there are no foreign objects in the water bath • PWM 250 is not installed (older models) • Motor uses too much power (continuous consumption over 2.5 A) • Sensor arm is loose on the axle (only Maxx4) • Toothed belt is loose (only Maxx4) • Teeth on belt are worn (only Maxx4) • Inductive sensor not registering sensor arm (only Maxx4)
E02: Water filling stopped	**Problems with water supply** • The water valve has been open for more than 45 minutes without reaching level 3 or 4 (cooling phase) • Filter clogged. (Solution: Clean filter) • Solenoid valve defective. (Solution: Replace solenoid valve) • Cold water not connected • Manual ball valve is open • Motor valve is stuck in open position • Level sensor 3 and/or 4 is defective

Error code	Description
E04: Temp sensor	**Temperature sensor problem** • No communication with the temperature sensor • Plug from temperature sensors is loose in the junction box • Temperature sensors are not configured (menu code 9991)
E05: Heater	**Heating element problem** • The rise in water temperature is less than 0.2 ºC over a 6-minute period with the heating element on • The heating elements are not connected • The heating elements are defective • The thermal cutoff is off • One or more phases in the power supply are missing
E06: Overheating	**Overheating** • The temperature has exceeded 70 ºC or 158 ºF for more than 25 seconds • The relay for the heating elements is stuck • Defective temperature sensors
E07: I2C bus	**Internal system error** • Communication error on the mother board • Defect in controller. Solution: Replace controller
E08: Water level	**Water level error** • An error combination from the water-level sensors has been registered. Ex. if one of the lower placed sensors does not register water, while the higher placed sensor does. The 4 symbols to the far right indicate what sensor is in contact with water • Poor connection to water-level sensors • Soiled water-level sensors due to lack of cleaning • Incorrect placement of water-level sensors

Error code	Description
E09: Low water level	**The water level is too low** • The water level has fallen to under level 2 (the 2nd sensor from the bottom) during the pasteurization or thawing program • Motor valve cannot close • Manual valve is open • Defective level sensors • Check that there is sufficient flow from the water supply
E10: High water level	**The water level is too high** • The water level 4 (top sensor) has been registered for more than 60 seconds. It is normal to reach level 4 for shorter periods • Solenoid valve cannot close • Motor valve cannot open
E11: Over temperature	**The measured water temperature is too high** • The temperature is more than +4 °C over the limit in the selected program • Motor valve cannot open • Solenoid valve cannot open • The relay for the heating elements is stuck
E12: Under temperature	**The measured water temperature is too low** • The temperature has fallen by more than -4 °C in the selected program • Solenoid valve cannot close
E13: Lid open	**The lid/lid switch was not closed/maneuvered correctly during the program** • The lid has been open for more than 15 seconds while a program is running • Hinges are not closed during program (only Pasteur II) • The lid lock is not locked (only Maxx4)

Troubleshooting

Problem	Cause	Solution	Image
The water temperature is not rising	Thermal fuse is off	Press hard on the thermal cutoff button (Pasteur II has one thermal cutoff fuse, MAXX4 has two)	
	Automatic fuse is off	Turn on automatic cutoff fuses	
The water temperature is not rising, and the motor is not turning	Top lid is not closed properly, and the lid switch is therefore unaffected	Close top lid correctly with the hinges	
Motor is running, but cartridges are not rotating	Bolt broken (Pasteur II)	Replace bolt	
	Toothed belt is loose (Maxx4)	Tighten the toothed belt by first loosening the motor's bolts. Tighten the motor's bolts after tightening the toothed belt.	
	Toothed belt is worn (Maxx4)	Replace the toothed belt	

Problem	Cause	Solution	Image
Cartridges stop in wrong position	Bolt mounted incorrectly (Pasteur II)	1. Remove bolt 2. Turn the cartridge holder to the correct position 3. Screw the bolt back on, while the cartridge holder is in the correct position	
	Motor is loose (Pasteur II)	Tighten the motor	
	Sensor arm is loose on the axle (Maxx4)	Tighten the sensor arm securely on the axle in the correct position. (The sensor should light up when the cartridges are in the correct stop position.)	

Contact a ColoQuick dealer for assistance.

Cleaning and hygiene

Filling station

- Clean the filling station immediately after use.
- First rinse with cold water.
- Next wash with warm water (min. 50 ºC / 122 ºF) and cleaning agent.
- Rinse with clean water.
- Replace the silicone hose if needed.

Tube feeder/teat and hose

- Clean the tube feeder/teat and hose immediately after use.
- Rinse the tube feeder/teat and hose thoroughly with cold water.
- Wash the tube feeder/teat and hose with warm water and cleaning agent.
- Rinse the tube feeder/teat and hose thoroughly with warm water--preferably 80º C / 176º F.
- Empty any water from the tube feeder/teat and hose.
- The tube feeder/teat and hose, etc., may be placed in the freezer to avoid bacterial growth.
- Replace the silicone hose in the tube feeder as needed.
- Replace the hose between the bag and tube feeder/teat as needed

The ColoQuick unit

- Clean the unit as needed.
- Select “**EMPTY TANK**” in the menu.
- When emptying is complete, press the “**OPEN**” button. Then open the lid.
- Switch off the machine.
- Wash with warm water (min. 50 ºC / 122 ºF) and cleaning agent that is free of abrasives or bleaching agents. Rinse with clean water.
- Turn on the machine. The machine fills with water automatically.

Service information

Thawing time for a cartridge with colostrum in the ColoQuick water bath is normally about 20 min. This applies to a standard portion of 4 liters of milk with a quality of 50 grams of antibodies/ liter (BRIX ~22%) that has been frozen to -14 ºC / 7 ºF.

The following factors can affect the thawing time:

- The amount of colostrum in the bag.
- Filling - squeeze excess air out of the bag before screwing on the lid.
- Freezing must take place on a horizontal position to achieve an equal distribution of colostrum in the bag.
- Unequal distribution may also make it difficult to place the cartridge in the water bath.
- The lower the freezer temperature, the longer the thawing time.
- The cartridge must be completely submerged in water when standing horizontally in the water bath.
- Thawing two cartridges or more at the same time in the water bath will prolong the thawing time.
- The water should have the desired end temperature when placing the cartridge in the water bath (42ºC / 108 ºF).
- The cartridges should rotate during heating in the water bath.
- The higher the quality of the colostrum, the longer thawing takes.

Pasteurization:

- The colostrum **must** be frozen as soon as possible after pasteurization is complete, to avoid any negative effect on the quality.

General:

- Do not let the cartridges stay in the machine for prolonged periods after thawing, as it could negatively impact the quality of the colostrum.
- The longer the colostrum is stored without being frozen, the greater bacterial growth will be. Rapid cooling and thawing is essential.
- The silicone hose on the filling station and the silicone tube in the tube feeder should be replaced regularly to ensure good hygiene.
- Optimal quality of the colostrum requires that all steps in the handling of the colostrum, from milking to feeding, be executed with maximum regard to hygiene.

About pasteurization

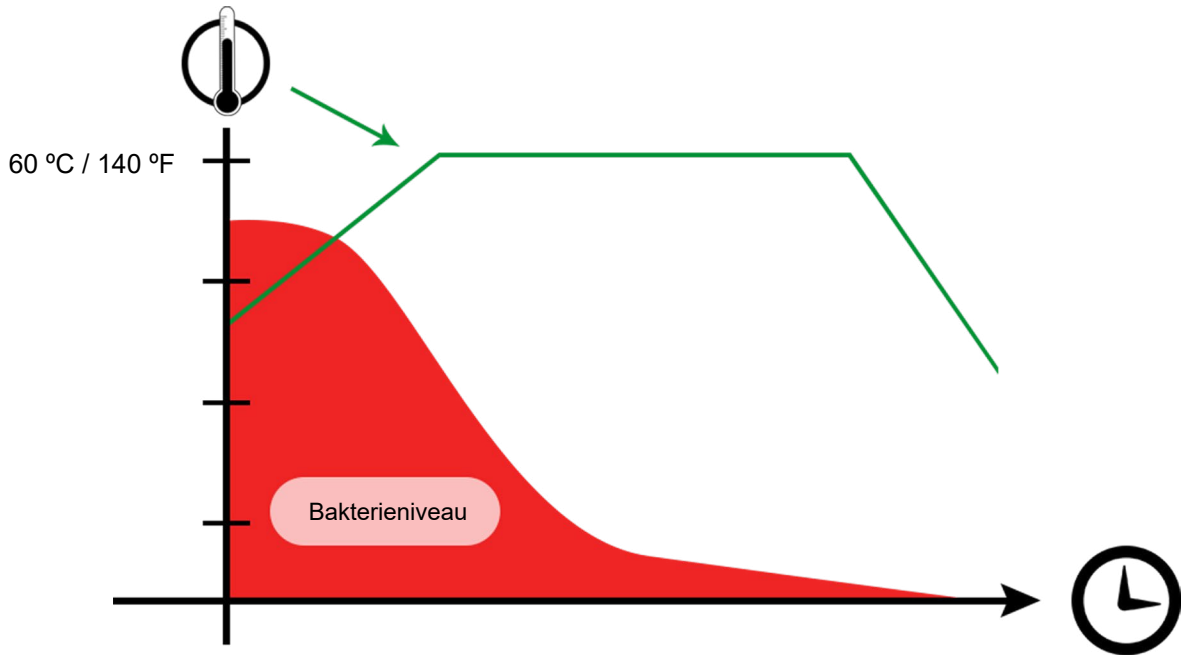
Infectious pathogens are destroyed, and the valuable antibodies are protected.

ColoQuick Pasteur II / MAXX4 are simple and effective tools for colostrum handling that can substantially reduce the risk of transmission of infectious diseases—without harming the antibodies.

The individual portions, where the colostrum is handled in sterile bags all the way from cow to calf, ensure optimal hygiene and traceability.

- Easy to use
- Handles colostrum without denaturing it
- Stores the colostrum in individual portions
- Prevents the spread of pathogens

THE PASTEURIZATION PROCESS:



In the ColoQuick water bath, the colostrum is pasteurized effectively at exactly 60 ºC for 60 minutes.

General information

About safety

Read this user manual thoroughly before installation and use.

- For your sake and that of others around you.
- For correct operation and use of the equipment.

Always keep the user manual together with or near the machine, and keep it with you if you move, or give it to someone else.

The manufacturer may not be held liable if the machine is installed incorrectly and its use causes damage or injury.

Safety for children and vulnerable persons

- People in this category may only use the unit following thorough instruction or under the supervision of a trained individual.
- Do not let children play with the unit.
- Keep all packaging out of the reach of children. There is a risk of suffocation or injury.
- Do not let children or pets near the machine while the lid is open.

General safety

- The machine's specifications may not be changed. This may result in injury or damage to the machine.
- Do not use flammable products or items that have been dampened with flammable products in the machine, near it or on it. There is a risk of explosion or fire.

Maintenance and cleaning

- Turn off the machine and pull the plug from the wall outlet.
- Do not spray water directly on the machine.

Installation

- The machines are heavy (Pasteur II weighs 50 kg / 110 lbs, MAXX4 weighs 90 kg / 200 lbs) and are difficult to handle. Be careful when moving them.
- The machines should be transported on a pallet. Pasteur II fills 1/2 euro pallet. MAXX4 fills 1 euro pallet.
- Never install and hook up a damaged machine.
- Remove all wrapping prior to startup.
- Electrical and plumbing installations may only be installed by a licensed technician.
- Do not place or use the machine in any location where the temperature may fall below 5 ºC or rise to over 40 ºC.
- When installing the machine, it should be on a firm surface. The machine must be placed on a level surface.

Electric hookup

- Never turn on the machine if there is no water in the tank.
- Check that the machine is grounded.
- Make sure that the electrical data on the type plate corresponds to the power supply.
- Always use a correct and legally installed mains connection.
- Do not use multiplug sockets or extension cords. There is a risk of fire.
- Do not replace the electrical cord. Contact the service center.
- Be careful not to damage the mains plug and cable.
- Wait to plug in the unit until installation is complete. Make sure the plug can be accessed after installation.
- Avoid unplugging the machine by pulling on the cord. Always grip the plug when pulling.

Disposing of the machine

1. Pull the plug out of the socket.
2. Cut the cord in two and dispose of it.

Environmental consideration / packaging material

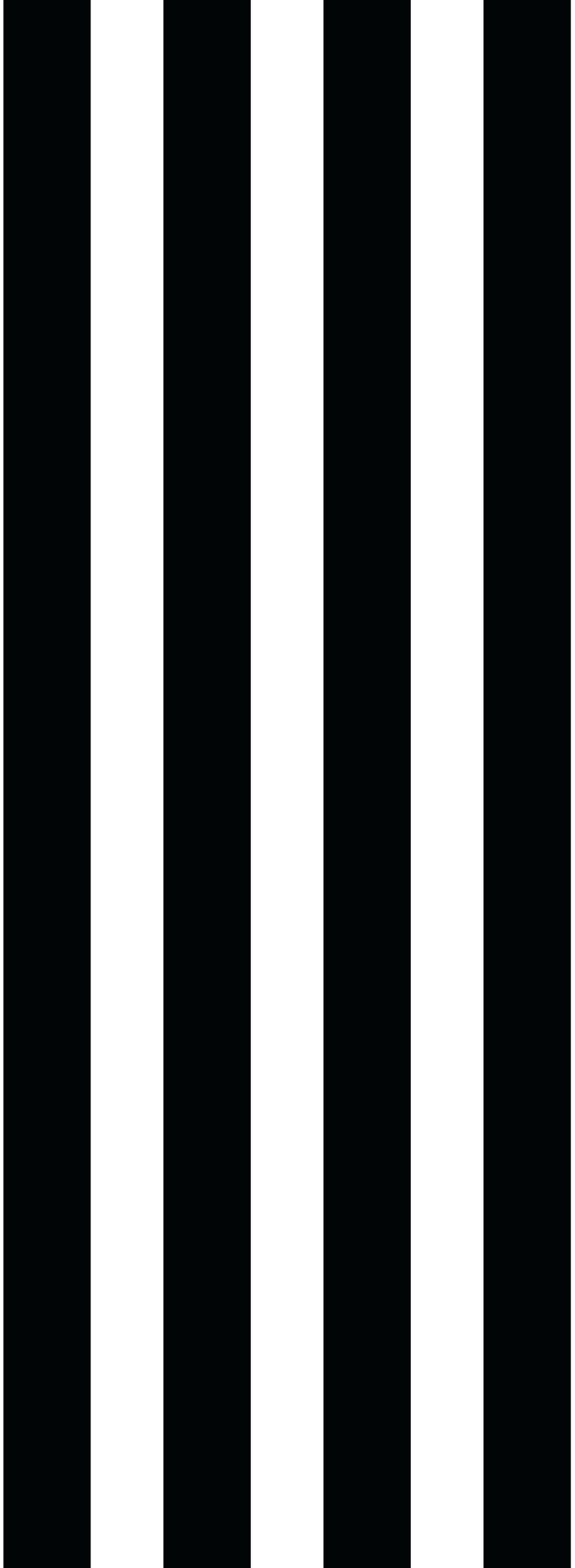
Dispose of packaging material in the appropriate containers for recycling.

All parts can be recycled!

WARNING
This unit may not be used if the lid to the electrical installations is open.

If you have questions, you are welcome to contact us at:

ColoQuick Int.
Phone: +45 97 53 73 33
E-mail: info@ColoQuick.com



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