

COLOQUICK

USER MANUAL



STARTUP

OPERATION

TECHNICAL INFORMATION

US

GN-M0003US

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** when handling the colostrum; hoses, probes, 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.

A handwritten signature in blue ink, appearing to read 'Brian Pedersen', written in a cursive style.

Brian Pedersen, CEO
info@coloquick.com

STARTUP

| | |
|--|----|
| Parts List | 4 |
| Filling the Freezer..... | 5 |
| 1. Milking..... | 6 |
| 2. Quality Measurement | 7 |
| 3. Fill Colostrum in a Colostrum Bag..... | 8 |
| 4. Place the Cartridge in the Freezer..... | 9 |
| Setting up the coloQuick Thaw Unit | 10 |

OPERATION

| | |
|---|----|
| A calf is born | 13 |
| Feeding | 14 |
| Milking | 15 |
| Quality Measurement | 16 |
| Place the Cartridge in the Freezer..... | 17 |

TECHNICAL INFORMATION

| | |
|----------------------------|----|
| Cleaning and Hygiene | 19 |
| Service Information | 20 |
| Troubleshooting | 21 |
| General Information..... | 22 |

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.

Parts List



1 thawing unit

See assembly instructions (separate sheet) for further information.



1 filling station

See assembly instructions (separate sheet) for further information.



10 cartridges
10 writing plates
20 clips
5 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 colostrum bags

Filling the Freezer



Start by filling the freezer with colostrum without consideration to quality.

Use the thawing unit only when you have built up a sufficient supply of colostrum in the freezer.

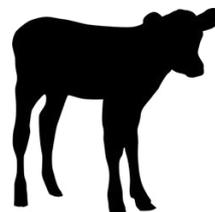
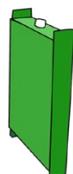
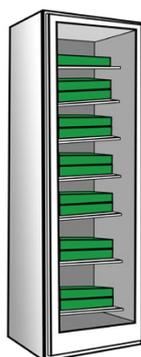
1.

After milking, pour 4 liters of colostrum into a cartridge.



2.

Give the remaining colostrum to the calf.



We recommend storing the colostrum in a freezer where the cartridges can be placed in an orderly and clear manner and can be easily taken out.

- We recommend using one or more freezers, so the capacity corresponds to the size of the herd.
- We recommend a temperature of $-14\text{ }^{\circ}\text{C}$ / $6\text{ }^{\circ}\text{F}$ (lower temperatures require longer thawing times).
- The cartridges **must** be lying flat during freezing.
- Sort the cartridges according to quality, with the best quality placed highest up in 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.



- The hygiene must be optimal.
- Always use disposable gloves.
- The cow has not been milked for several weeks; therefore, udders and teats must be cleaned thoroughly.
- Premilking must be extra thorough.



- The milk bucket and the like must be handled with at least the same cleaning and hygiene procedures as for dairy milk.
- The newly milked colostrum must not be exposed to fertilizer contamination.
- Cool the colostrum after milking as quickly as possible.

2. Quality measurement

Although you are to save the colostrum regardless of the quality, it is important to note the quality for future reference.



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



- Take the BRIX reading by pointing the refractometer towards a source of light.

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



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

3. Fill the colostrum in a colostrum bag

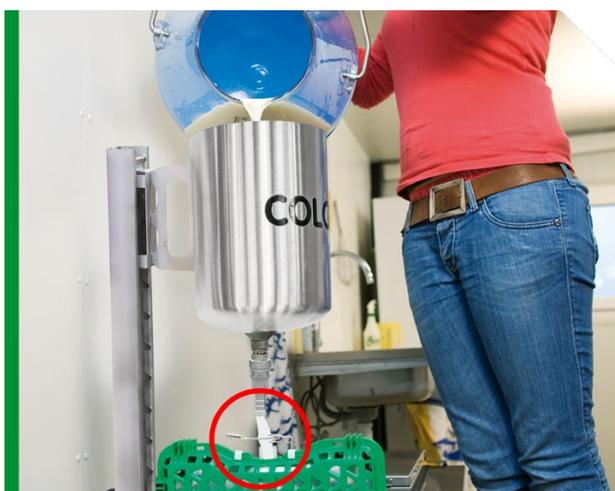
Use the filling station to pour a measured amount of colostrum into a colostrum bag.

STARTUP



- 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."
- Fix the bag's collar firmly in the groove in 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 marking on the filling station: We recommend giving the calves as much colostrum as possible. Calves of large races should be given 4 liters.
- Pour the colostrum in the filling station's funnel.
- Remove the clamp so the colostrum runs down in to the bag.



Gently press the cartridge together to remove any excess air from the bag before putting the bag's lid back on and placing it in the freezer.

Preparation - Filling the Freezer

How to Fill the Freezer (continued)

4. Place the cartridge in the freezer.

After pouring the colostrum into the colostrum bag and screwing the bag's lid back onto the bag, take the cartridge out of the filling station.



- Note the cow's number, date and BRIX value on one of the accompanying white writing plates.
- Place the writing plate on the cartridge.
- There is room for several writing plates.



- Place the cartridge in the freezer.
- The colostrum cartridges **must** be lying flat during freezing.
- Sort the colostrum cartridges according to quality, with the best quality placed highest up in the freezer.

-
- Place the freezer in a practical location with respect to the daily procedures.
 - The colostrum may be stored for up to one year in the freezer.
-

Setting up the coloQuick Thaw Unit

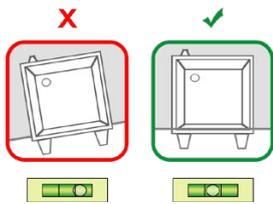
STARTUP



Installation

- The machine weighs 35 kg / 77 lbs and must be handled with care.
- Unpack the machine and remove all wrapping prior to startup.
- Electrical and plumbing installations may only be installed by an authorized technician.

Placement



- The machine must be placed in a frost-free room
- The room temperature must not exceed 40 °C / 104 °F.
- The machine **must** be placed on a firm, level surface.



Connection, water

- Fill water with a maximum temperature of 40 °C / 104 °F up to the overflow level.



Connection, electricity

(May only be performed by an authorized electrician.)

- Make sure that the electrical data on the type plate corresponds to the power supply.
- Always use a correct and legally installed mains connection.
- Check that the machine is grounded.
- Do not use power strips or extension cords. There is a risk of fire.
- The coloQuick water bath comes in 4 versions:
 - 3 x 400 VAC + N + PE, 6100W
 - 220-240 VAC + N + PE, 6100W
 - 1 x 208-240 VAC + PE, 6100W
 - 3 x 230 VAC + PE, 6100W

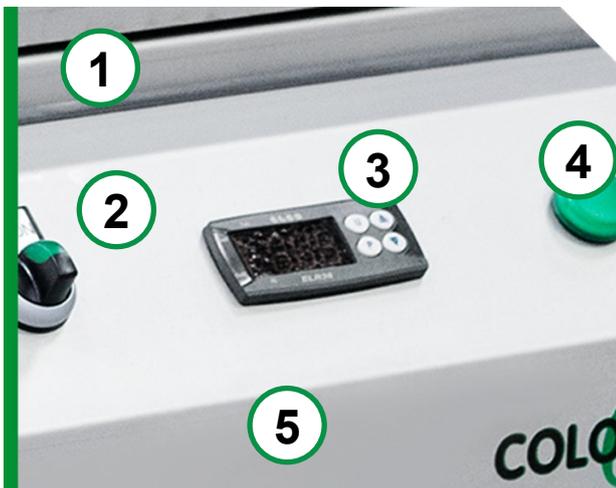
Setting up the coloQuick Thaw Unit



Starting up the coloQuick Thaw unit

- Check that the electrical connection is correct and that water has been poured into the machine to the overflow level (max. 40 °C / 104 °F).
- Turn on the coloQuick Thaw unit by turning the red main power switch on the front from OFF to ON. The machine should always be on.
- The machine will now heat up the water. The heating time depends on the starting temperature of the water.

Note: Never turn on the machine if there is no water in the tank!



Illustration

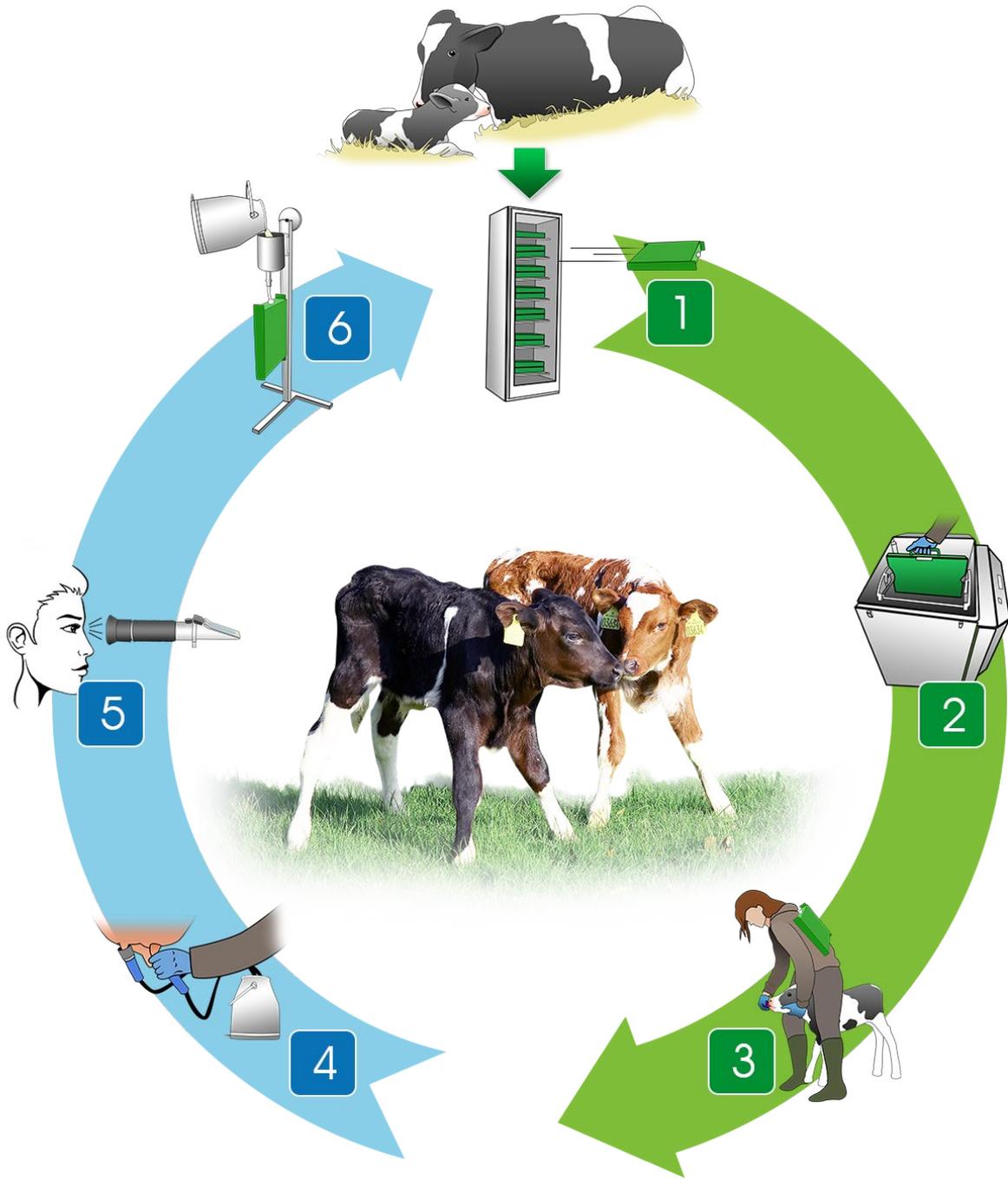
1. Lid contact.
2. Dial for start/stop of rotation. Do not open the lid until the light in the button is off.
3. Display showing the current water temperature. Change of temperature if necessary:
 - Press ▼ briefly. Then set the desired temperature using the ▼ and ▲ buttons. After 20 seconds, the changes are saved automatically.
4. Indication of activated/deactivated heating elements.
5. Main switch.

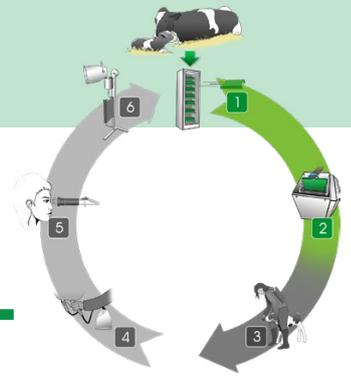


Note: The feed temperature must be as close to the body temperature of the calf as possible – never over.

The coloQuick Method

OPERATION





A Calf is Born



- Make sure the calf's airways are free.
- Take a portion of colostrum from the freezer.
- For heifers, take colostrum from the upper shelf (highest quality).

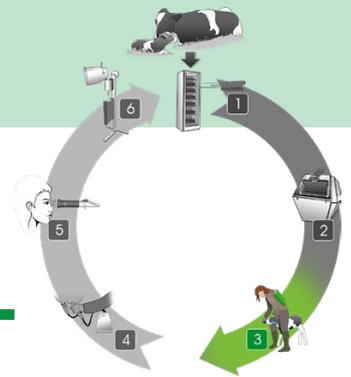


- Place the cartridge with the colostrum bag in the warm water bath.
See the cartridge's instructions for use (separate sheet).
- The water should cover the colostrum bag when the cartridge is in a horizontal position.
- Turn on rotation and wait approx. 20 minutes (see page 20).



While the colostrum is heating:

- Take the calf away from the cow as quickly as possible.
- Dry the calf if necessary.
- Disinfect the calf's naval.
- Ear-tag if necessary.



Feeding

OPERATION



- Before use, rinse the milk hose and teat/tube feeder using cold water
- Remove the cartridge from the thawing unit and place it upright with the bag's lid facing up.
- Unscrew and remove the lid from the bag.
- Check that the colostrum has the desired temperature.
- Screw on the milk hose—for teat or tube feeder.
- Place a suspender on the cartridge.
- Remember to complete your colostrum journal after feeding.



Feeding with a teat

(See assembly instructions (separate sheet) where relevant)

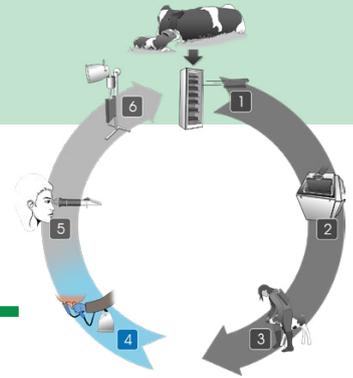
- Avoid interruptions and distractions when the calf has begun sucking.
- Hold the teat so the calf's throat is outstretched.
- Remember to clean the teat, hose, etc., after use (see the section "Cleaning and Hygiene").
- After feeding, the calf can be returned to the cow.



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.
- Block the flow before removing the tube feeder.
- After feeding, the calf can be returned to the cow.



Milking

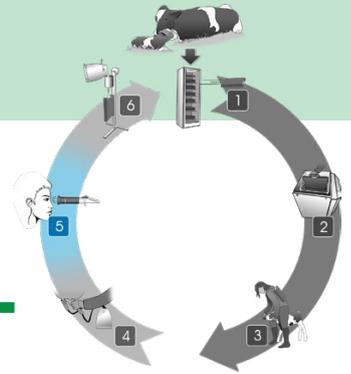
Milk the cow as soon as possible after calving.



- The hygiene must be optimal.
- Always use disposable gloves.
- The cow has not been milked for several weeks; therefore, udders and teats must be cleaned thoroughly.
- Premilking must be extra thorough.



- The milk bucket and the like must be handled with at least the same cleaning and hygiene procedures as for dairy milk.
- The newly milked colostrum must not be exposed to fertilizer contamination.
- Cool the colostrum as quickly as possible.



Quality Measurement

OPERATION

- 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 5), replace the lowest quality colostrum with the highest quality, unless you have enough storage capacity to keep both.



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

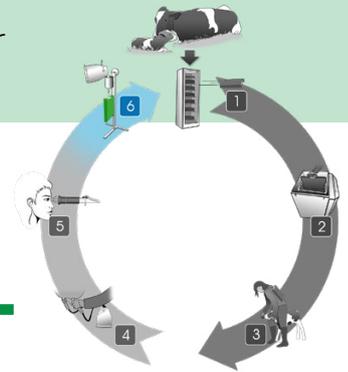


- Take the BRIX reading by pointing the refractometer towards a source of light.

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



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



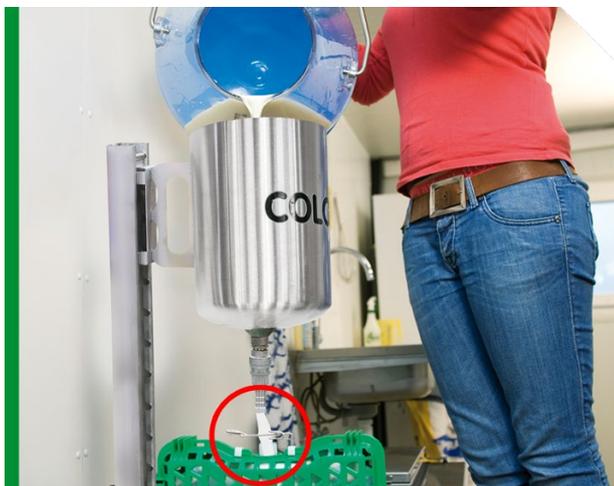
Place the Cartridge in the Freezer

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



Gently press the cartridge together to remove any excess air from the bag before putting the bag's lid back on and placing it in the freezer.

OPERATION - Place the Cartridge in the Freezer

Place the Cartridge in the Freezer (continued)

After pouring the colostrum into the colostrum bag and screwing the bag's lid back onto the bag, take the cartridge out of the filling station.



- Note the cow's number, date and BRIX value on one of the accompanying white writing plates.
- Place the writing plate on the cartridge.
- There is room for several writing plates.



- Place the cartridge in the freezer.
- The colostrum cartridges **must** be lying flat during freezing.
- Sort the colostrum cartridges according to quality, with the best quality placed highest up in the freezer.



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

Cleaning and Hygiene



Filling station

- Clean the filling station after use.
- First rinse with cold water.
- Next wash with warm water (min. 50 °C / 122 °F) 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 80° C / 176° 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 tube in the tube feeder as needed.
- Replace the hose between the bag and tube feeder/teat as needed



Thawing unit

- Clean the unit as needed.
- Switch off the machine by switching the main power switch to OFF, and unplug the unit.
- Empty all water from the water tank and rinse.
- Wash with warm water (min. 50 °C / 122 °F) and cleaning agent that is free of abrasives or bleaching agents. Flush out the cleaning water.
- Fill with clean water (max. 40 °C / 104 °F) up to overflow level.



Service Information

Thawing time for a cartridge with colostrum in the coloQuick thawing unit is normally about 20 min. This applies to a standard portion of 4 liters of colostrum with a quality of 50 grams of antibodies/liter (BRIX ~22%) that has been frozen to -14 °C / 7 °F.

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 in 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 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 (40-42°C / 104-108 °F).
- The cartridge should rotate during heating in the water bath.
- The higher the quality of the colostrum, the longer thawing takes.

Generally:

- Do not let the cartridges stay in the machine for prolonged periods, 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.

| Problem | Cause | Solution | Comment |
|--|--|--|--|
| The water bath is not heating / cannot maintain the temperature. | Thermal cutout is off. | Activate the red/brown button on the thermal cutout. This is located behind the service door on the left side of the motor suspension. | Always turn off the machine and pull out the plug before opening the service door. |
| | Top lid not closed. | Close the top lid properly. Use both hinges to secure the top lid. | |
| | Error in supply voltage | Contact trained, authorized staff. | |
| Cartridges are not rotating. | Top lid not closed. | Close the top lid properly. Use both hinges to secure the top lid. | Always turn off the machine and pull out the plug before opening the service door. |
| | Bolt between the motor and coupling is broken. | Replace the bolt. Remember to hold the cartridge holder horizontally when mounting the new bolt. | |
| Heats only periodically and/or motor runs only periodically. | Top lid not closed. | Close the top lid properly. Use both hinges to secure the top lid. | Always turn off the machine and pull out the plug before opening the service door. |

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 machine is heavy (35 kg / 77 lb) and difficult to handle. Be careful when moving it.
- The machine should be transported on a pallet. The machine's size corresponds to a ½ 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 an authorized technician.
- Do not place or use the machine in any location where the temperature may fall below 5 °C or rise to over 40 °C.
- When installing the machine, it should be on a firm surface. The machine **must** be placed on a level surface.

Connection, electricity

- 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 power strips 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 until installation is complete to plug in the unit. 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.

Tel: +45 9753 7333

Email: info@coloquick.com



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