

## We are so pleased that you bought our product

If the product is to do you good we advise you to read this manual, and, most of all, that you let all the persons who are to use the product, read it.

We hope you will keep the manual and use it as an inspiration to get hold of your colostrum protocols.

#### How to get a quick start

Find a suitable freezer – preferably an upright model, in order to have a proper overview of all your colostrum portions.

Start by filling the freezer with colostrum, without regard for the quality.

You are not supposed to use the coloQuick water bath, until the colostrum bank has been totally loaded. Only when you have 6-8 portions in your freezer you are ready to start with the coloQuick system. From now on you will estimate how much colostrum you need to have in stock in order not to run out.

Before long your freezer will be filled up - exclusively with colostrum of the best quality- and in this way you are able to secure the most flying and optimal start for all your calves.

No matter how your colostrum procedures were until now we are sure that the coloQuick system will give your calves a big boost.

Once more – good luck with your calves in future.

Best regards

Coloquick International



Congratulations	on your new coloQuick	20
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Please note that pictorial materials are only instructive. It will not necessarily reflect the precise specifications and details of the model in question.



When contacting Calvex please have the following data available. You will find the information on the data plate of the machine.		
Туре:		
Year o	f production:	
Machi	ne serial number:	
Calvex A	VS, Holstebrovej 104, 7800 Skive, Danmark · phone +45 9753 7333	
In this r	nanual the following symbols were used:	
	Caution – Important security instructions.	
[1]	General information and advice.	
	Environmental information.	



We reserve the right to amendments without further notice.



## On supply

Supply, everything is in one box. Unwrap the box.

Avoid damaging the materials when unwrapping. Avoid to cut open the cardboard wrapping with a knife or the like.

On supply there is equipment inside the water bath. Exercise necessary caution so the equipment and the water bath will not be damaged.

Check that you received all the parts for the coloQuick-concept (see the below parts list).



## Parts list Thawing unit

- 1 Thawing unit
- 1 Filling station
- 10 Cartridges
- 35 Colostrum bags
- 1 Colostrometer
- 1 Set of teats
- 1 Esophageal tube feeder
- 2 Belts Hoses, fittings, etc.



#### Parts list Pasteur

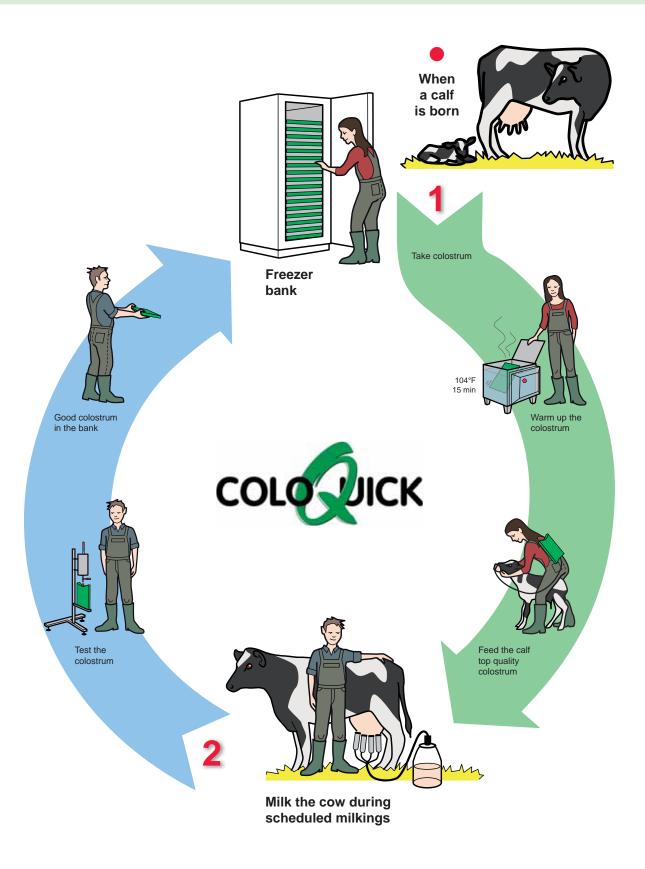
- 1 Pasteur
- 1 Filling station
- 10 Cartridges
- 35 Colostrum bags
- 1 Colostrometer
- 1 Set of teats
- 1 Esophageal tube feeder
- 2 Belts Hoses, fittings, etc.



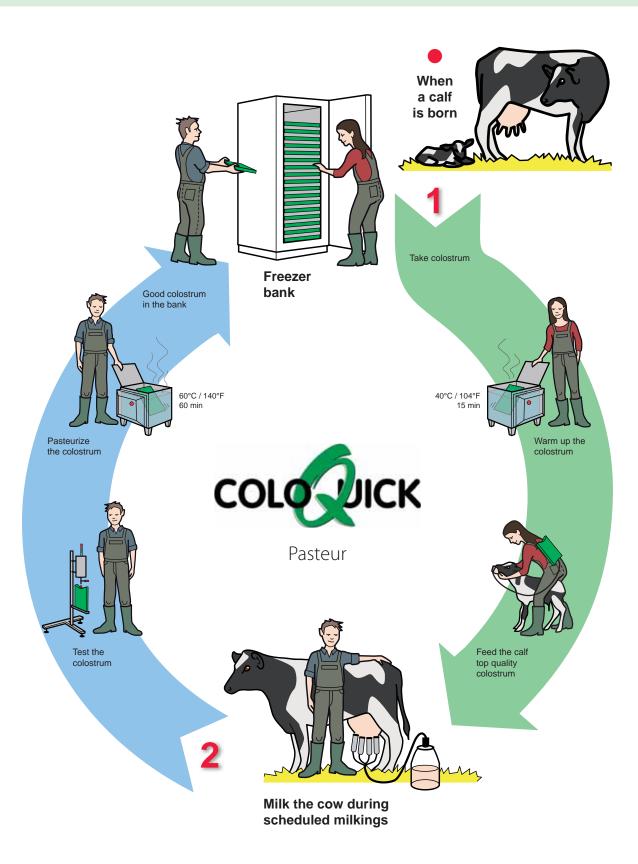
## Firstly the calf – secondly the cow

It is much more important to feed the calf with colostrum quickly after calving than it is to milk the cow. Therefore, feeding of the calf has to be separated from milking of the cow. Only in that way you can secure a perfect start for all calves.

## coloQuick thawing unit



## **Pasteur**



#### Precautions

Please read this manual carefully before installation and putting into operation:

- for the safety of you and your surroundings
- for the correct operation and use of the machine.

Always keep the manual together with or nearby the machine and let it come with, if you move or give it to another person.

The producer is not responsible, if the machine is installed incorrectly, and the use leads to damage.

#### Precautions for kids and exposed persons

- Please be aware not to let any persons, including children, with impaired physical senses, impaired mental abilities or lack of experience and knowledge operate the machine. They must be supervised by a person, who is responsible for their security, or they must be instructed how to use the machine.
- Don't let children play with the machine.
- Please store all packaging materials unreachable to children. There is danger of suffocation or personal injury.
- Please don't let children and pets come near the machine, while the lid is open.

#### Precautions in general

- The specifications of the machine must not be changed. This could cause risk of personal injury and damage of the machine.
- Please don't use inflammable products or components wetted with inflammable products in the machine or close to or on it. There is danger of explosion or fire.

#### Maintenance and cleaning

- Switch off the machine, pull out the plug.
- Don't use the machine without the appurtenant filters.
   Make sure they are mounted correctly. If not it may cause water leaks.
- Don't splash water directly on the machine.



#### **CAUTION**

Please do not use this machine, if the lid to the electrical installations is open.

#### Installation

- The machine is heavy and difficult to handle. Please be careful when moving it.
- The best way of transportation is on a pallet. The size of it fits on one half euro pallet.
- Don't install and connect a damaged machine.
- Make sure to remove all the packaging before start-up.
- Make sure the plug is not connected during installation.
- Electrical and plumber works and installation must be done only by skilled persons. Then personal or materials damage will be reduced.
- Don't place or use the machine in a place where the temperature falls below 0°C or rises above 30°C.
- Install the machine on a firm surface place it horizontally.

#### Connection, water

- Please don't connect the machine with old hoses, which have already been used. Use only new hoses.
- Be careful not to damage the hoses.
- Don't connect the machine to new pipes or pipes that have not been used for a long time. Let the water run for some minutes and then connect the inlet hose.
- Make sure the hoses and the couplings are tight before the machine is put into operation.

#### Connection, power

- Please check that the machine has an earth connection.
- Make sure the electrical data on the data plate correspond to the power supply.
- Always use a correct and legally installed electricity network.
- Don't use connectors and extension cords. There is a risk of fire.
- Don't replace the electrical cable. Contact the service centre.
- Be careful not to damage the mains plugs and the cable.
- Don't put the mains plug in the socket until the installation has been completed. Make sure there is an access to the plug after the installation.
- Don't switch off the machine by pulling the cable. Always take hold on the mains plug itself.





#### Right to exchange – damaged bags

Please note: to be sure of a quick solution you must save damaged bags for inspection.

Have you any questions as to the return, please contact Calvex on phone No. +45 97537333 or mail to: info@ coloquick.com.

#### Disposal of the machine

- 1. Pull out the plug
- 2. Snip off the power cable and discard it
- 3. Remove the lid lock and discard it. This will prevent children and animals from locking themselves up in the machine.



## Danish environmental considerations / packaging materials

Place the packaging material in suitable containers for recycling.

#### All parts may be recycled!



	CONSTRUCTION	COLOCICK
Model:	coloQuick thawing unit	Pasteur
Version:	IV	III
Туре:	Colostrum heater	Pasteuriser and colostrum heater
Connection:	230V/400V 3-phase (EU) 208V/240V 3-phase (US)	230V/400V 3-phase (EU) 208V/240V 3-phase (US)
Power:	6100W	6200W
Water contents (litres):	85	85
Consumption (kWh):	- 1.8 (thawing)	4.8 (pasteurisation) 1.8 (thawing)
Dimensions, LxWxH:	686 x 515 x 732 mm	708 x 525 x 735 mm
Green cartridge Dimensions, LxWxH:	417 x 378 x 62 mm	417 x 378 x 62 mm
Weight water bath (kos):	60	68
Weight filling station (kos):	8,9	8,9

## coloQuick thawing unit

Problem	What is happening	Solution	Comments
Motor runs, but the cartridge in the water tank is not rotating.	Split-pin has broken.	Mount a new bolt. Check that the motor and the tank shafts are end to end.	*
Motor runs, but temperature is not rising.	INo voltage to heating element.	Affect the button of the thermal fuse.	
	Level sensor does not function correctly or is defective. (NB: Level sensor has not been mounted in all models).	Affect the movable part of the sensor. Replace the sensor, if necessary.	
	Voltage to heating element.	Heating element defective – must be replaced.	
Motor is not running.	Lid switch not activated.	Check plate of the lid switch. Maybe it is skew. Lid switch defective – must be replaced.	
	Fuse defective.	Replace fuse (max. 3A inert).	A CONTRACTOR OF THE PARTY OF TH
Motor makes noise or vibrates slightly.	If the motor is worn it will make more noise and maybe vibrate slightly.	Replace motor.	
Thermostat reads incorrectly.	Very large temperature fluctuations.	Thermostat must be replaced. (NB: Thermostat has not been mounted in all models).	
Temperature does not rise, or heating takes too long.	Split-pin has broken.	Replace split-pin.	* Same picture as on top.



## Pasteur

Problem	What is happening	Solution	Comments
Display shows error code E01:  Motor error	No feedback from motor for 20 seconds.	Check connections to motor. Cables have fallen off. Motor lacks voltage from power supply.	
Display shows error code E02: Water inlet – error	Appears if the water inlet valve has been open for more than 20 minutes.	Open the water inlet. Inlet choked.	
Display shows error code E05: Heat element error	Appears if the temperature for a period of more than 5 minutes will not rise by more than 0.2 degrees.	Heat element was not connected. Thermal fuse switched off.	
Display shows error code E08: Water level sensor error	Appears if there is an "illegal" feedback from the water level sensors. For instance if L1 (lower sensor) does not warn that it is covered - contemporary with the second sensor from the bottom breaking off. From the error parameter it appears which sensors were active when the error occurred, and the sensor sensitivity.	Dirt must be removed from the sensors. Check connection to sensors.	
Display shows error code E09:	Appears if the water level stands below L2 (second from the bottom) when running a program.	Dirt must be removed from discharge and discharge valve.	

## Pasteur

Comments	What is happening	Solution	Comments
Motor runs, but cartridges in the water tank do not rotate. They are not rotating, if you cannot hear the water sloshing around.	Bolt has broken.	Mount a new bolt. Check that the motor and the tank shafts are end to end.	
Motor runs, but temperature is not rising.	No voltage to heating element.	Affect the button of the thermal fuse.	
Motor is not running.	Lid switch not activated. Lock light flashes.	Check plate of the lid switch. Maybe it is skew.	
	Lid switch has been activated. Lock light flashes.	Lid switch defective. Replace it.	
	Fuse defective.	Replace fuse (max. 3A inert).	A COURT
Motor makes noise or vibrates slightly.	If the motor is worn it will make more noise and maybe vibrate slightly.	Replace motor.	



## Installation of thawing unit



Place the thawing unit on a firm, plane surface and in a place that fits into the work routines.

Attach handles to the lid of the thawing unit.

Fill water into the water bath up to the mark.

Be sure there are no foreign bodies in the water tank.

Check that the cartridges are properly fixed into the cartridge holder.



Get an authorised electrician to install the power supply to the water bath correctly as prescribed.

Never turn on the power with no water in the water bath!

Please note that the guarantee will not cover incorrect installation of power!

In case of 3-phase alternating current the phase sequence must be correct (L1-L2-L3).





The water tank must  $\emph{always}$  be switched on – and have the same temperature all the time.

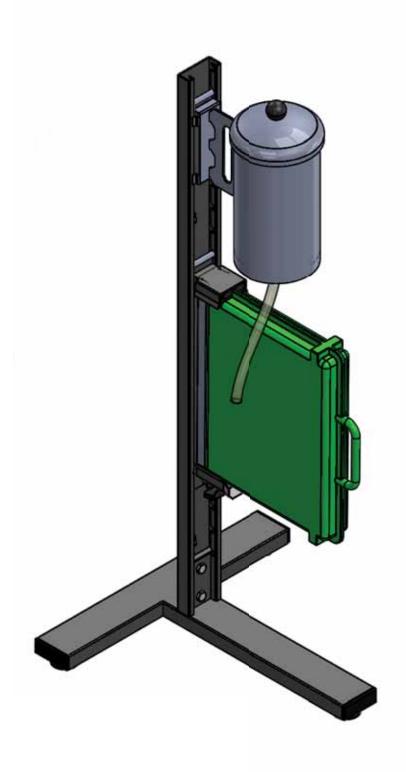
Change of temperature, if necessary:

Shortly press  $\nabla$ . Then set the wanted temperature by means of the  $\nabla$  and  $\Delta$  buttons. After 20 seconds the changes are automatically stored. Do not use the U- and P-keys.



When using the system for the first time it is important to manually check by at thermometer how much the colostrum temperature falls, from it is taken up from the water bath – and until it is fed. This must be repeated if the feeding procedure is changed. Please note that the large surface of the bag also means that the milk will be cooled quickly!







#### Remember the 3 Os

It is all important for the newborn calf's success as a calf, heifer / fat calf and milk cow that it gets sufficient colostrum of good quality quickly after it was born.

We are talking about the 3 Qs – Quick, Quantity and Quality:

**Quick** – is for colostrum quickly after birth. The coloQuick concept prescribes that the calf must have colostrum within 1 hour after birth. With the coloQuick this has now been feasible.

Time is the most important factor, because that is the one you can directly influence the most when using coloQuick.

**Quantity** – the quantity of colostrum. A normal calf of 40 kos must have 4 litres of colostrum (10 % of the calf's weight).

If you feed colostrum by teat the calf can normally not drink 4 litres, and then it is even more important that the calf has colostrum of first quality very quickly after birth.

**Quality** – Good quality means at least 50 grams of antibodies per litre of colostrum. But there are also many other valuable substances in the colostrum.

Quality also means top hygienic colostrum. Colostrum from mastitis cows and colostrum with visible changes must be discarded.

On the whole think in that way that the calf should not drink any milk you would not drink yourself.

#### Good "immunization" of the calf

It is most important that the newborn calf has as many antibodies transferred to its blood as altogether possible.

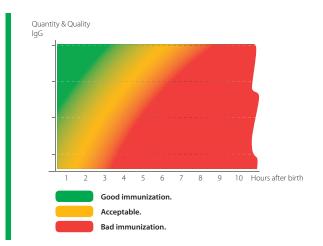
If there is at least 15 grams of antibodies per litre of blood on the calf's 2nd day of life then we can talk about a "good immunization". The Americans talks about "Failure of Passive Transfer" as an expression of a bad immunization.

This figure can be measured or calculated. Please see the below table.

With the coloQuick concept you make sure that the calf reached a "good immunization" with more than 22 grams of antibodies per litre of blood.

By comparison a calf will obtain 3 grams of antibodies per litre of blood, if it has only 2 litres of colostrum with 40 grams of antibodies per litre 6 hours after birth. This calf will have a catastrophic start of life.





## Quality – colostrometer

The contents of antibodies in the colostrum may vary a lot – from less than 10 to more than 200 grams of antibodies per litre. The average is typically approx. 40-50 grams of antibodies per litre. We define a good quality as more than 50 grams per litre.

Unfortunately, it is a widespread misunderstanding that you can estimate the contents of antibodies in the colostrum without measuring it. That is not possible!

A colostrometer will measure the contents of antibodies in the colostrum. The colostrometer is a hydrometer which is lowered into the colostrum.

If it floats at a high level so the surface of the colostrum intersects the colostrometer in the dark green area, the quality is good. If the colostrometer sinks deep down so the surface of the colostrum intersects in the read area, the quality is poor. The light green area is in the middle between them.

The colostrometer shows the quality on a colour scale and states a density – as an example a density of 1.045 corresponds to 50 grams of antibodies per litre of colostrum.

The colostrometer is estimated for a colostrum temperature of 20° C. If the temperature is higher the colostrometer will underestimate the quality – and the opposite at lower temperatures.

If the colostrum foams there is also an indication error.



## Quality - diseases

Make sure to minimize the risk of using colostrum with paratuberculosis and salmonella bacteria.

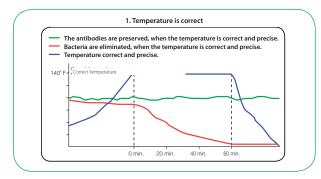
Never use colostrum from risk cows.



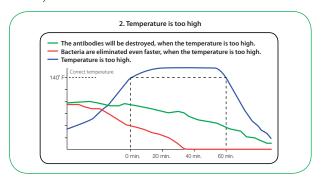
#### Pasteurisation of colostrum

In the old days people believed you could not pasteurise the colostrum without destroying the antibodies. But modern research confirms that you really can.

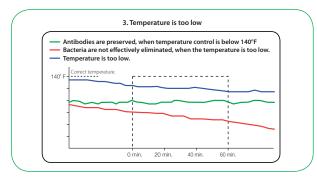
The formula is heating of the colostrum to 60°C for 60 minutes. The secret is a very precise control of the temperature.



If the temperature is too high the wanted killing of bacteria will still go on, but the antibodies will also be destroyed.



If the temperature is not high enough, the antibodies are preserved, but the wanted killing of bacteria will not take place.



#### Colostrum bank

**Freezer** – the coloQuick concept prefers a freezer rather than a fridge for the colostrum bank.

- It clearly gives the simplest "flow" through the colostrum bank
- The colostrum keeps in the freezer for one year
- It only takes a few minutes to heat the colostrum from frozen condition to drinking temperature
- Keeping the colostrum in the freezer ensures the quickest possible cooling.
- It is easier to have an overview of the colostrum cartridges in an upright freezer than it is in a chest freezer

**Fridge** – if you still prefer to keep your colostrum bank in a fridge, then please be aware:

- that the temperature must be max. 4-5°C
- that the storage time is max. 48 hours
- that "the flow" will not end in a mess
- that fresh colostrum which is placed in the fridge will cool down slowly, and bacteria will grow quickly, as long as the temperature is more than 10-15°C. Even down to 4-5°C there will still be a certain growth of bacteria.



### The colostrum temperature

The right temperature for milk for feeding is the body temperature of the calf, which means that the temperature of the colostrum must be approx. 39°C.

The colostrum temperature falls relatively quickly, when it is taken up from the water bath. This is due to the large surface of the colostrum bag.

If you feed the colostrum by teat then please be aware of this temperature drop.

When feeding by esophageal tube feeder it is important that the colostrum is not too hot. It is unpleasant to the calf, and it might be highly responsive to it.





## Feeding by esophageal tube feeder

Also see page 130.

Treat the calf gently and calmly and learn to feed by esophageal tube feeder with good skills. Remember, the calf is a newborn baby! If you feel uneasy then ask your general vet to instruct you in the feeding by esophageal tube feeder.

- Hygiene is most important in connection will all handling of the colostrum. Always wear disposable gloves when feeding the calf, or wash your hands carefully.
- Make sure the esophageal tube feeder has a proper and pleasant temperature. This is especially important, if the esophageal tube feeder is kept in the freezer while not used.
- Make sure the colostrum is not too hot. It is unpleasant to the calf, and it might be highly responsive to it.
- Place the colostrum cartridge at a convenient height

   on your back, over your shoulders or in a cartridge
   holder on intermediate bars or the like. The higher it is
   placed the faster the colostrum bag will be emptied.
- "Grease" the tip of the esophageal tube feeder before use – for instance by dipping it in colostrum, water or something like that.
- Place the calf in a corner of the box or the like so you don't have to put efforts into holding the calf.
   Avoid "fighting". If the calf will not stand up then, if possible, make sure it lies "upright" on its chest.
- Stand astride with the head of the calf between your legs.
- Press your thumb into the corner of the calf's mouth behind its teeth. Now you have a good grip on the head, and it is easy to insert the esophageal tube feeder.
- Move the tip of the esophageal tube feeder to the back of the tongue of the calf, until the sucking reflex is stimulated. Then gently and with feeling push the esophageal tube feeder down into the gullet of the calf. It is important to follow the calf's signals and not to rush.
- Feel on the throat of the calf when the probe is led down through the gullet – especially the drop-shaped tip is clearly felt. If the probe is in the windpipe you cannot feel it on the calf's throat.
- Once the esophageal tube feeder is down and in place, you open for the colostrum not until then!
- Adapt the pace to the signals of the calf. Turn off the milk supply, if the calf is choking on the milk – that is, if some colostrum comes up again through the gutter and could end in the windpipe.
- When the calf got its colostrum then turn off the probe, and easily remove it.







#### Råmælksbank

Opbyg en råmælksbank af god og kvalitetssikret råmælk.

Vi anbefaler at råmælken opbevares i et fryseskab, hvor de grønne kassetter kan placeres overskueligt og let kan tages ud.

Start med at fylde fryseren med råmælk, uden hensyntagen til kvaliteten.

### Colostrum bank

Build up a colostrum bank of good and quality controlled colostrum.

We recommend that the colostrum is kept in an upright freezer, where the green cartridges can be placed, easy to survey and easy to take out.

Start by filling the freezer with colostrum, without regard for the quality.



#### Før ibrugtagning:

Du skal ikke bruge coloQuick vandbadet, før du har 6-8 portioner i råmælksbanken.

- Malk koen
- Giv kalven sin råmælk
- Test overskydende råmælk med kolostrumeter
- Al råmælk fyldes på poser uanset kvalitet
- Noter kvaliteten på skrivepladerne på kassetten
- Placer kassetten i fryseren.

## Before putting into operation:

You are not supposed to use the coloQuick water bath until you have 6-8 portions in your colostrum bank.

- · Milk the cow
- Give the calf its colostrum
- Check the quality of the excess colostrum with a colostrometer
- All colostrum is filled into bags
   without regard for the quality
- Make a note of the quality on the writing boards on the cartridges
- Place the cartridge in the freezer.



Først når du har 6-8 portioner i fryseren, er du klar til at starte med coloQuick.

Fremover vurderer du, hvor meget råmælk du skal have på lager for ikke at løbe tør.

Placér råmælksbanken et praktisk sted, der passer ind i de daglige arbejdsprocedurer.

Råmælken kan opbevares op til et år i fryseren.

#### **Putting into operation**

Only when you have 6-8 portions in your freezer you are ready to start with the coloQuick system.

In future you will estimate how much colostrum you need to have in stock in order not to run out.

Place the colostrum bank in a suitable place that fits into the everyday work routines.

The colostrum may be kept in the freezer for up to 1 year.









## Malke koen

Koen malkes, når det passer ind i bedriftens rutiner.

## Milking the cow

The cow is milked when it fits into the other routines of the farm



Hygiejnen skal være i top. Koen har ikke været malket i flere uger, så derfor skal yver og patter gøres ekstraordinært grundigt rene.

Formalkningen skal være ekstra grundig.

The hygiene must be first-class. The cow has not been milked for several weeks, and therefore udder and teats must be most carefully cleaned.

The premilking must be extra careful.



Malkesæt m.m. skal håndteres med mindst samme rengørings- og hygiejneprocedurer, som når der malkes mejerimælk.

Den nymalkede råmælk må ikke udsættes for gødningsforurening.

Råmælken skal nedkøles så hurtigt som muligt.

i

Brug altid engangshandsker.

Milking equipment, etc. must be handled with at least the same cleaning and hygiene procedures as apply to the milking of dairy milk.

The freshly milked colostrum must not be exposed to manure pollution.

The colostrum must be cooled as soon as possible.



Always remember to use disposable gloves.









## Kvalitetsteste råmælken

Køl råmælken ned til 20°C.

Hæld råmælken i fyldestationens tragt.

Bemærk literskala.

Brug kun tophygiejnisk mælk uden blod og andre synlige forandringer.

Kassèr mastitismælk.

Tjek råmælkens kvalitet med et kolostrumeter.

Sænk forsigtigt kolostrumeteret ned i råmælken i fyldestationens tragt.

Skalaen aflæses ved mælkens overflade. Jo dybere kolostrumeteret synker - jo dårligere kvalitet.

God kvalitet lukkes i råmælksposen.

Klem kassetten sammen for at få luften ud af posen inden låget skrues på.

Dårlig kvalitet kasseres, eller bruges til 2. gangs fodring.

i

Vigtigt - al råmælk skal testes med et kolostrumeter. Man kan ikke se eller mærke om kvaliteten er god nok.

## Checking the quality of the colostrum

Cool the colostrum to 20°C.

Pour the colostrum in the hopper of the filling station.

Please note the litre scale.

Use only top hygienic milk without blood and other visible contamination.

Discard mastitis milk.

Check the quality of the colostrum with a colostrometer.

Gently lower the colostrometer into the colostrum in the hopper of the filling station.

The scale to be read at the surface of the milk. The deeper the colostrometer falls - the poorer quality.

Good quality is poured into the colostrum bag.

Squeeze the cartridge to get the air out of the bag, before the lid is screwed on.

Poor quality is discarded, or it is used for second-time feeding.



Important – all colostrum must be checked by a colostrometer. You cannot see or feel, whether the quality is okay.







## Sætte pose i kassette

Åbn en kassette halvt (90°).

Placer den med de to "pigge" til venstre.

# Placing the bag in the cartridge

The cartridge must be half-open (90°).

Place it with the two "spikes" to the left.



Pres de to perforeringer i posens bund ned over de to "pigge".

Med højre hånd sættes posens studs fast i rillen i kassetten. Press the two perforations at the bottom of the bag down onto the two "spikes".

With your right hand fix the connecting pipe of the bag onto the groove of the cartridge.





Hold studsen på plads med højre hånd og luk kassetten.

Lås kassetten med de røde "låseknapper".

Kontrollér at posen er tæt.

Hold the connecting pipe in place with your right hand and close the cartridge.

Lock the cartridge with the red "locking buttons".

Check that the bag is tight.



Hav altid et antal kassetter med råmælksposer klar til brug.



Be sure always to have a number of cartridges with colostrum bags ready for use.







## Notater på kassetter

Skriv notater på skrivepladen

- fx dato, kvalitet, konummer m.v.
- med whiteboard-pen
- eller med blyant, som kan slettes med viskelæder.

## Making notes on the cartridges

Write your notes on the writing board

- e.g. date, quality, cow number, etc
- with a white board pen
- or with a pencil that can be erased



Monter skrivepladen på kassetten.

Der er plads til at montere flere skriveplader.

Fix the writing board onto the cartridge.

There is room for more than one writing board.



Kassetten placeres i råmælksbanken.

The cartridge is placed in the colostrum bank.







### Når kalven er født

Tag straks en portion råmælk i råmælksbanken.

## When the calf is born

Immediately take a portion of colostrum from the colostrum bank.



Placer kassetten med engangsposen i vandbadet. Sørg for at kassetten sættes ordentligt fast.

Vandet skal dække råmælksposen, når kassetten står i lodret position.

Tænd for motoren i vandbadet og vent 20 minutter.



Tip: Sæt eventuelt en alarm på mobiltelefonen.

Put the cartridge with the disposable bag into the water bath. Make sure the cartridge is properly fixed.

The water must cover the colostrum bag, once the cartridge is in upright position.

Turn on the motor in the water bath and wait for 20 minutes.



Tip: Set the alarm, if any, on your mobile.





Bemærk at råmælk er et naturprodukt – derfor kan optøningstiden variere. I de fleste tilfælde vil råmælken være klar efter 10-15 min, men i nogle få tilfælde kan der gå op til 20 min. Hvis der sættes 2 kassetter i ad gangen bør tiden øges til 25 min.



Please note that colostrum is a natural product – and therefore thawing time may vary. In most cases the colostrum will be ready in 10-15 minutes, but in some cases it may take up to 20 minutes.

If you add two cartridges at a time, you must increase time to 25 minutes.









## Mens råmælken opvarmes

Fjern hurtigst muligt kalven fra

Sørg for at kalvens luftveje er frie

Gnid kalven tør, hvis det er nødvendigt.

## While the colostrum is heated

As soon as possible separate the calf from its mother.

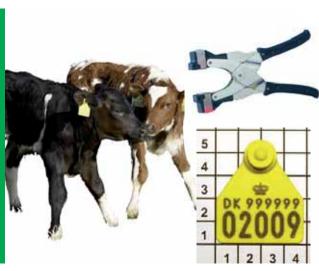
Remove mucous matter from the mouth and throat.

Rub the calf dry, if necessary.



Desinficer kalvens navle.

Disinfect the navel of the calf.



Isæt øremærker.

Put on an ear mark.







## Når råmælken er klar

Tag kassetten op af vandbadet. Stil kassetten på højkant med posens låg opad.

## When the colostrum is ready

Take the cartridge out of the water bath.
Place it in upright position with the lid of the bag up.



Skru låget af posen.

Kontroller råmælkens temperatur engang imellem lige før udfodring.

Husk at råmælken på grund af den store overflade m.m. afkøles hurtigt. Unscrew the lid.

Spot check the temperature now and then just before feeding.

Remember that due to the large surface of the bag the colostrum will cool quickly.



Skru mælkeslangen på – til sut eller sonde.

Connect the tubing – for teat or esophageal tube feeder.

















## Håndtering af kassetten

Bær kassetten over skulderen med en strop.

Bær kassetten som en rygsæk med to stropper.

# Handling of the cartridge

Wear the cartridge over your shoulder by a belt.

Wear the cartridge as a rucksack by two belts.



Hang up the cartridge on intermediate bars on a holder.





Ovennævnte er eksempler – dette kan gøres på flere måder.



The above are just examples – may be handled in other ways,









## Fodring med sut

Kalvens suttebehov og evne til at udnytte råmælken er størst kort efter fødslen. Så også derfor: Hurtigst mulig fodring efter kælvning.

Vær sikker på råmælken har den korrekte temperatur. Vigtigt at den ikke er for varm.

Undlad at stresse kalven.

Undgå forstyrrelser og afbrydelser, når kalven er kommet i gang med at sutte.

Hold sutten, så kalvens hals er strakt ud.

Pas på at råmælken ikke bliver for kold.

Det kan være nødvendigt at genopvarme råmælken.

### The calf's need to suck and its

Feeding by teat

ability to utilise the colostrum is most distinct immediately after birth. So therefore: feed as soon as possible after birth.

Make sure the colostrum has the right temperature – and most important, not too hot.

Do not stress the calf.

Avoid any disturbance or interruption, once the calf is sucking.

Hold the teat so the neck of the calf is stretched out.

See to it that the colostrum is not getting too cold.

If necessary, repeat warming

Lad kalven drikke så meget som muligt.

En normal kalv på 40 kilo drikker normalt cirka 2 ½ liter råmælk.

Hvis kalven ikke får ca. 4 liter råmælk, skal den have råmælk med et endnu højere indhold af antistoffer.



Sut m.v. skal rengøres grundigt og skoldes efter brug. Brug altid engangshandsker.

Let the calf drink as much as possible.

A normal calf of 40 kos will normally drink approx. 2 1/2 litres of colostrum.

If the calf has less than approx. 4 litres of colostrum, it must be fed with colostrum with even higher contents of antibodies.



Teat, etc. must be cleaned up thoroughly - and scalded after

Always wear disposable gloves.



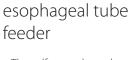




## Fodring med sonde

- · Kalven skal altid stå op.
- Placer sonden over tungen, indtil sutterefleksen stimuleres.
- Skub sonden langsomt ned i spiserøret.

Sondespidsen skal kunne mærkes på venstre side af halsen.



Feeding by

- The calf must always be standing up.
- Place the esophageal tube feeder above the tongue, until the sucking reflex is stimulated.
- Slowly push the esophageal tube feeder down into the gullet.

You must be able to feel the tip of the probe at the left side of the throat.



Only when the esophageal tube feeder is placed correctly you may open to the milk.

It is important that no milk is spilt, which may end in the windpipe.

Be sure that the colostrum holds the right temperature – and important that it is not too hot.

Turn off the tap of the probe, before it is removed.



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Først når sonden er helt på plads, må der åbnes for mælken.

Det er vigtigt, at der ikke spildes mælk, som kan gå i luftvejene.

Vær sikker på råmælken har den korrekte temperatur. Vigtigt at den ikke er for varm.

Luk for hanen på sonden før den fjernes.





Brug altid engangshandsker.

Se også under Faktablade forrest i brugervejledningen.



Remember always to wear disposable gloves.

Please also see the section "Fact sheet" previously in this manual.





## Rengøring

#### **Fyldestationen**

- Gør fyldestationen ren efter hvert brua.
- Skyl først med koldt vand.
- Vask derefter med varmt vand (min. 50°C) og rengørings-
- Skyl efter med rent vand.

## Cleaning

#### Filling station

- Clean the filling station after use every time.
- Start by rinsing with cold water.
- Then wash with hot water (min. 50°C) and detergent.
- · Rinse with clean water.



### Optøningsenheden

- Udskift vandet i vandtanken og skyl efter.
- Vask derefter med varmt vand (min. 50°C) med rengøringsmiddel. Skyl rengøringsvandet ud.

#### Thawing unit

- · Change the water in the water bath – and rinse with
- Then wash with hot water (min 50°C) with detergent. Sweep away cleaning water.

#### Sonde/sut og slange

- · Sørg for omhyggelig rengøring af sonde/sut og slange straks efter brug.
- Først skylles sonde og slange godt igennem med koldt vand.
- Gør sonde/sut og slange ren udvendigt med en svamp eller lignende.
- Derefter skylles sonde og slange godt igennem med varmt vand - gerne 80°C.
- Tøm sonde og slange for vand.
- · Læg sonde og slange m.m. ind i fryseren, så bakterievækst forhindres.

#### Probe / teat and tubing

- Be sure to thoroughly rinse probe/teat and tubing immediately after use.
- Probe and tubing are rinsed thoroughly with cold water.
- Clean the outside of probe /teat and tubing with a sponge or the like.
- Then scald probe/teat and tubing thoroughly with hot water - preferably 80°C.
- · Empty probe and tubing.
- Keep probe/teat and tubing in the freezer to prevent bacteria growth.





Husk at temperere sonde/sut og slange inden næste brug.



Be sure to take the chill off probe /teat and tubing before use next







## Hygiejne generelt

Brug éngangshandsker

- under håndtering af råmælk.
- under udmalkning m.m. og ikke mindst.
- når kalven skal fodres.

Brug af éngangshandsker er hygiejnisk og det hjælper til, at man husker at "tænke hygiejnisk".



Always wear disposable gloves

- when handling the colostrum
- when milking etc. and last, but not least
- · when feeding the calf.

The use of disposable gloves is very hygienic and helps you "think hygienically".



Sørg for hurtig nedkøling og indfrysning af råmælken.

Råmælksposerne kan *ikke* genbruges.

Det er ikke muligt at gøre poserne rene nok til genbrug. En eventuel skoldning vil ødelægge råmælksposernes bakteriebarriere.

#### Råmælksjournal:

Brug poserne som råmælksjournal eller anvend de skemaer, der ligger i kassen med råmælksposer. See to it that the colostrum is quickly cooled down and frozen.

The colostrum bags *cannot* be reused.

It is not possible to clean the bags for reuse. If they a scalded the bacterium barrier of the bags will be destroyed.

#### Colostrum journal:

Instead use the bags as a colostrum journal or use the forms in the box with the colostrum bags.







Vær meget omhyggelig med at undgå, at kalven får bakterier i sig. Bakterier i tarmen giver syge kalve og en dårlig udnyttelse af råmælkens antistoffer.

Hvis kalven eksempelvis får gødning i munden på størrelse med en ært, inden den får råmælk - er udnyttelsen af råmælken lig



Be very careful to avoid that the calf ingests any bacteria, which being in the guts will cause sick calves and a bad utilisation of the antibodies of the colostrum.

If for example the calf gets manure in its mouth the size of a pea, before it gets any colostrum – the utilisation of the colostrum is practically ni!!!







## Pasteurisering

Når råmælken er testet ok - og fyldt i poser, placeres den i Pasteur'en.

### Pasteurisation

Once the colostrum has been checked for good quality – and has been poured into bags – place it in the Pasteur.



Umiddelbart efter pasteurisering køles råmælken hurtigt ned - f.eks. i en balje med koldt vand.

Immediately after the pasteurisation – quickly cool down the colostrum – e.g. in a bucket of cold water.



Kassetten tørres grundigt - og placeres i fryseren.

Dry the cartridge thoroughly – and add it to the deep-frozen colostrum bank.



Pasteurisering er en varmebehandling, som har til hensigt at eliminere skadelige bakterier - uden at beskadige de vigtige immunstoffer.

Råmælken pasteuriseres ved 60°C i 60 minutter.



Pasteurisation is a heat treatment in order to eliminate as many harmful bacteria as possible – without damaging the important antibodies.

The colostrum is pasteurised at 60°C for 60 minutes.



