

CremaViva cold milk separator

Gentle treatment to keep your product alive



CremaViva cold milk separator

The first skimming separator with extraction tubes only

Thanks to more than 100 years of experience in the dairy industry working close to its customers, ANDRITZ Frautech has developed a unique technology: CremaViva, the very first cold milk separator with extraction tubes, which allows skimming at temperatures as low as 5 °C. It ensures gentle treatment of the milk fat globules, producing higher quality cream at low temperatures, with significant energy savings. By increasing the cream's temperature by just 1 °C, the end product remains alive with flavour. Hence the name: CremaViva.

A unique bowl with extraction tubes

Cold milk skimming is becoming a preferred solution today instead of warm milk skimming for all dairies that want to increase the quality of their products and reduce energy consumption. Cold milk is usually separated at temperatures of 5 °C to a maximum of 20 °C. Due to the low temperatures, high viscosities are a factor that may have a negative effect on the quality of the end product if not handled with care. To avoid this risk, ANDRITZ Frautech has designed a special and unique bowl without centripetal pumps and which features extraction tubes for product discharge. Both the skimmed milk and the cream are discharged from the separator thanks only to the initial hydrostatic thrust, allowing an extremely gentle flow free of any strong turbulence. The temperature increase between milk inlet and cream outlet is less than 1 °C. Thus, milk and cream maintain integral fat globules during separation and all the chemical-physical and organoleptic properties remain unchanged. With CremaViva, the quality of any kind of cheese – soft, hard, raw or matured cheese – is improved. And in the production of milk powder or UHT products, cold milk skimming avoids double heating and cooling of the skim and surplus cream, thus saving energy.

Hermetic design

Special rotating mechanical seals ensure that the entire circuit through which the product passes is closed off hermetically. This hermetic design is essential in order to handle high cream concentrations at low temperatures, and at the same time it avoids air inclusion, thus there is no risk of oxidation or micronized foam forming inside the separator.

Top feed

CremaViva is the first fully hermetic separator in the dairy industry with a top feed. This means that the bowl, which is in contact with the product, and the drive concept are kept entirely separate. With CremaViva, we offer a belt-driven separator without any flushed seals so that there is no risk of the product being contaminated by the flushing water. Installation, operation, service and maintenance of CremaViva are just as easy as in standard warm milk separators.

Your benefits

- Higher product quality
- Minimal damage to fat globules
- Low temperature increase of only 1 °C
- No oxidation and no micronized foam
- No contamination of the product by the seal flushing water
- Easy to operate and to maintain
- Minimal downtimes and reduced maintenance costs



▲ CremaViva cold milk separator

Fields of application

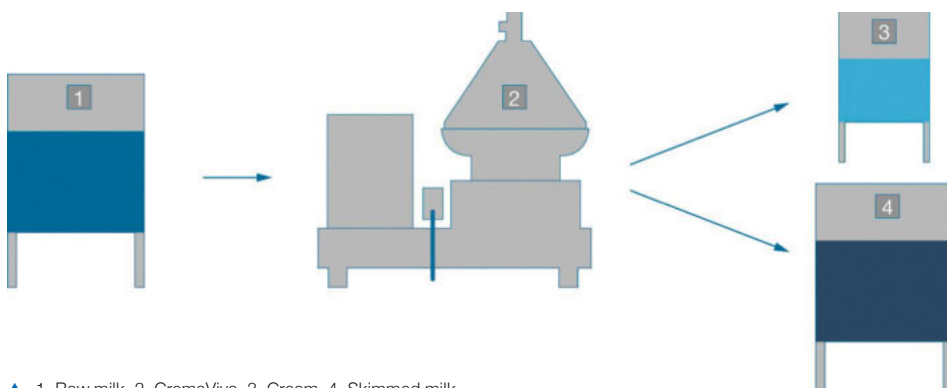
- Skimming of cold milk (min 5 °C)
- Skimming of pre-heated milk (12 °C to 20 °C)

Scope of supply

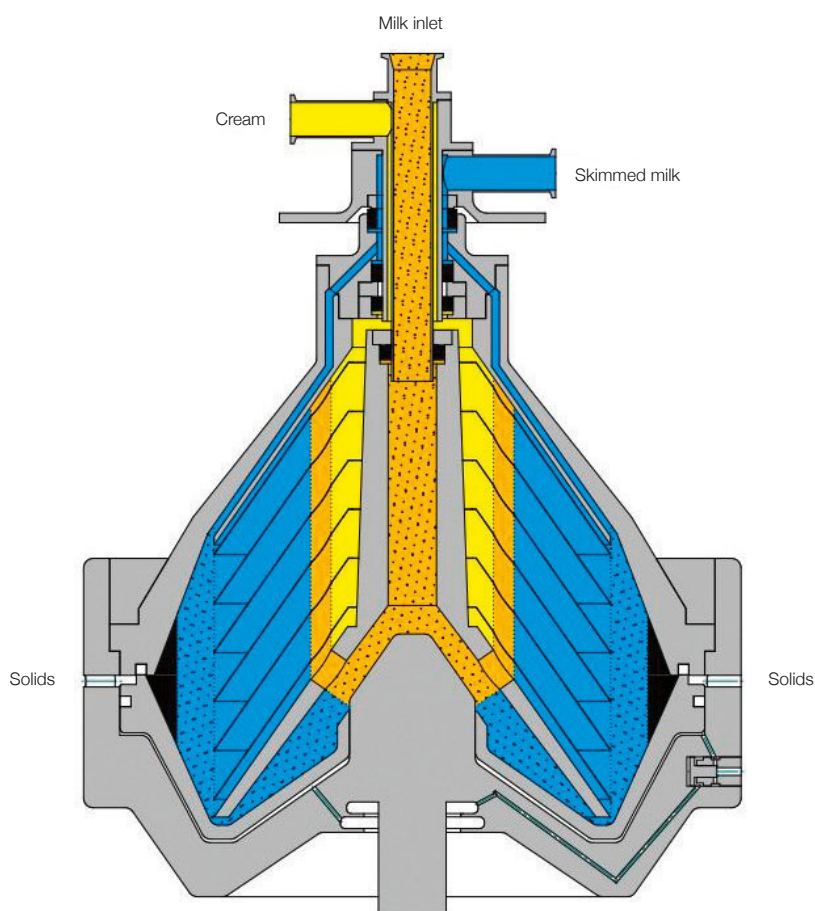
- CremaViva cold milk separator
- Color touch panel with graphic visualization of the clarification process
- Variable frequency drive to allow optimum acceleration and deceleration of the centrifuge
- Operating water system with open and close solenoids for the bowl
- Back-pressure control valve with pressure transducer for skimmed milk
- Integration with fully automatic CIP (cleaning-in-place) system

Optional features

- Solid tank with level indicator
- Solids discharge pump
- VolCon, the universal volume control discharging device
- Flow meter and control valve in feed line
- Sampling valve in skimmed milk and cream outlet



▲ 1. Raw milk, 2. CremaViva, 3. Cream, 4. Skimmed milk.



VolCon – universal volume control discharging device

VolCon is based on a volumetric piston that ensures perfect control of the discharging volume

- Minimized product losses as a result of shorter and more precise discharging time
- Higher yield, no in-out deviation is needed during processing due to short discharge times
- Low product losses because of the high hydraulic water pressure and the high bowl speed maintained during the short discharge action
- Not affected by fluctuations in plant water conditions



The strength to support your needs

We call it 360 degrees of separation

Model	*Effective capacity (l/h)	*Hydraulic capacity (l/h)	Motor (kW)	Footprint (m x m)	Height (m)	Weight (kg)
CA 91-F	3,000	15,000	18.5	1.50 x 0.88	1.47	1,250
CA 171-F	6,500	32,500	30	1.95 x 1.05	1.80	2,100
CA 301-F	10,500	52,500	45	2.20 x 1.40	1.90	3,700
CA 401-F	14,000	70,000	55	2.22 x 1.40	2.00	4,100

* Hydraulic capacity is the maximum throughput capacity of the bowl. Effective capacity can be obtained at ≤ 5 °C (full skimming)

With more than 100 years' experience in the food and beverage industry, ANDRITZ SEPARATION is one of the world's largest suppliers of solid/liquid separation and automation equipment. Whether you're an international group or a family company, our

mission is the same: to provide reliable, efficient solutions that improve the quality of your wines. We have both the technology and the process knowledge to help you create the product your customers demand. It's a 360-degree approach that

gives you all the right ingredients for your success in the food and beverage industry.

Let's sit down and see how we could take your operations to the next level.

Contact us today.

AFRICA

ANDRITZ Delkor (Pty) Ltd.
Phone: +27 (11) 012 7300
Fax: +27 (86) 636 2122
separation.za@andritz.com

AUSTRALIA

ANDRITZ Pty. Ltd.
Phone: +61 (3) 8773 4888
Fax: +61 (3) 8773 4899
separation.au@andritz.com

EUROPE

ANDRITZ Frautech S.r.l.
Phone: +39 (0445) 57 5695
Fax: +39 (0445) 57 6723
separation.it@andritz.com

SOUTH AMERICA

ANDRITZ SEPARATION Ltda.
Phone: +55 (47) 3387 9100
Fax: +55 (47) 3387 9104
separation.bra@andritz.com

ASIA

ANDRITZ Singapore Pte. Ltd.
Phone: +65 (6512) 1800
Fax: +65 (6863) 4482
separation.sg@andritz.com

CHINA

ANDRITZ (China) Ltd.
Phone: +86 (757) 8258 6802
Fax: +86 (757) 8258 6828
separation.cn@andritz.com

NORTH AMERICA

ANDRITZ SEPARATION Inc.
Phone: +1 (817) 465 5611
Fax: +1 (817) 468 3961
separation.us@andritz.com

www.andritz.com