

Centrifugal Separator for Milk and Whey



THE PRODUCT

MAXCREAM 30T is a centrifugal separator configured as a concentrator for dairy application, with double paring discs, partial and total automatic discharge capabilities, and ready for Clean-In-Place (CIP).

THE APPLICATION

MAXCREAM 30T has been designed by HAUS for the dairy industry, specifically for milk or whey separation.

Its purpose is to separate the fatty components from milk or whey, concurrently removing contaminating solids. MAXCREAM 30T produces:

- Milk or whey with reduced fat content (standardization) and free from solids
- Cream, with desired fat concentration (skimming, concentration)
- Sludge, composed of solid contaminants and as low as possible milk.

MAXCREAM 30T is also effective in somatic cell and spore reduction.

SPECIAL FEATURES

MAXCREAM 30T belongs to a new generation of separators, designed exclusively for dairy application.

Highest level of efficiency is achieved, whilst the product is treated gently, preserving high hygiene.

Thanks to advanced features like:

- High Rotational Speed: generating a huge centrifugal force, thanks to quality material and mechanics.
- Disc Stack: closely spaced discs of large diameter, creating a large surface of separation.
- Submerged Feed Pipe: a system to introduce and accelerate the product gently, minimizing shear stress, oxygen pick-up and foaming.
- Double Valve Discharge System: able to perform very fast and precise discharges, reducing the loss of milk and valuable components (fat, protein).
- Double Paring Disc Outlets with Counter-Pressure Valves: to regulate the separation and obtaining the required concentration of cream.
- Strict Hygienic Configuration: quality material, polished discs, fine treatment of contact surfaces to avoid product deposits, and an optional CIP system.
- Flushing System: various point of flushing for cooling and solid removal.
- PLC, Variable Frequency Drive (VFD), Human-Machine Interface (HMI): VFD for smooth start and stops with lowest possible energy consumption, PLC for automatic control of centrifuge separation and CIP sequence, HMI to adjust operational parameters and to monitor alarms.
- The belt can be serviced and replaced without removing the bowl, thanks to the special drive design.
- High Stability Basement, made in heavy cast iron covered with stainless steel cladding.
- Double jacket cover, water filled, to reduce noise and surface temperature.

APPLICATIONS

- hot milk separation
- whey separation
- milk and whey skimming
- milk standardization
- cream concentration
- buttermilk separation

HIGHLIGHTS

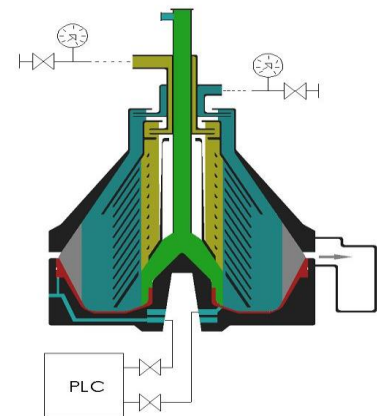
- separation efficiency
- skimming efficiency
- cream concentration
- gentle treatment
- removal of solid
- efficient discharging
- hygienic design
- quality material
- CIP ready
- parameter setting
- energy saving

OPERATING PRINCIPLES

The product mixture is introduced into the bowl, where it is put into rotation. The centrifugal force results in the product mixture being separated according to density differences. The milk is forced to flow through tiny spaced discs, which allows the skimmed milk and the cream to flow in opposite directions.

The skimmed milk overflows from the periphery through the heavy phase paring disc (centripetal pump), to exit under pressure. The lighter liquid flows in the center through the light phase paring disc, also exiting under pressure. The counter-pressure valves on the outlet pipes can be adjusted to regulate the liquid distribution inside the bowl.

Heavier solid particles accumulate in the sludge volume of bowl periphery, from where they are discharged periodically. During partial discharge operation, only the sludge volume is emptied. Differently, the total discharge operation empties the entire bowl volume. Any sequence of partial and total discharge can be programmed into the PLC via the HMI interface, such that it is carried over by the automatic control system. Bowl schematic



STANDART CONFIGURATION

- separator standalone unit
- electrical motor with VFD
- pneumatic proportional valve
- set of special tools and parts for commissioning
- operator manuals

OPTIONALS

- control panel with PLC and HMI
- flow control accessories
- operating water booster pump
- product feed pump and feed valve
- CIP (Cleaning In Place) system
- standardization unit

TECHNICAL DATA

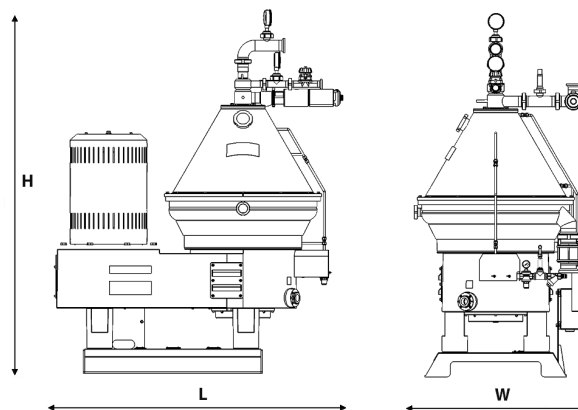
Capacity, skimming*	up to 30.000 L/h
Capacity, standardization**	up to 35.000 L/h
Bowl/ Sludge Volume	38 / 12 L
Installed Motor Power	45 kW
Separator weight (total, empty)	2650 kg
Noise level	85 dB(A)
Dimension (LxW, H) mm	1940x1210, 2440
Bowl weight (alone, empty)	790 kg

* Corresponding to skimming hot milk with <0,05% residual fat

** Corresponding to standardization of hot milk

MAIN MATERIALS

Bowl Body	EN1.4418
Bowl Hood and Sliding Piston	Duplex EN1.4462
Discs	AISI 316 EN1.4401
Other Contact Surfaces	AISI 304 EN1.4301
Cover, Sludge Collector	AISI 304 EN1.4301
Separator Frame	Cast Iron with Stainless Steel cladding
Control Panel cabinet	AISI 304 EN1.4301



CUSTOMER SATISFACTION



USER FRIENDLY



RELIABLE & QUALIFIED SERVICE



CONTINUOUS SERVICE



ORIGINAL SPARE PARTS