Tetra Pak® Separator H10

Hot milk separator with AirTight technology

Highlights

- Excellent product quality
- Superior separation efficiency
- Unmatched production flexibility
- Reduced environmental impact
- Lower operational cost
- Low noise level

Application

Tetra Pak® Separator H10 is ideal for separation, standardization and clarification of hot milk. The separator is designed for continuous operation and CIP.

Working principle

The separator is hermetically sealed, both at the inlet and the outlet. This prevents intake of destructive air. From the inlet, the product is gently fed into the separator bowl through the hollow spindle. As the spindle rotates with the bowl, the product enters the bowl smoothly. This assures that the sizes of fat globules and particles are consistently maintained.

In the bowl, the cream is led all the way to the centre of the bowl, while the skim leaves the bowl over the top disc. Any unwanted particles are collected at the sediment space at the periphery of the bowl. The sediment space is emptied accurately and hydraulically at preset intervals. At the outlets, co-rotating pumps efficiently discharge the separated products from the centre.

The co-rotating pumps and the completely filled bowl is key to production flexibility with unmatched wide capacity range (without mechanical alteration) – no risk of air intake or overflow.

The cream fat content in a hot milk separator can be increased to 60 % with maintained skimming efficiency. If cream is pre-concentrated in an AMF line, for example up to 75 % cream fat can be achieved starting from cream.

All in all, the AirTight technology enables gentle and efficient separation with low operational cost and environmental impact.

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Basic unit

Material

All parts in contact with the product as well as motor casing and sediment cyclone are of stainless steel. Bowl material is of high grade corrosion resistant stainless steel (Duplex). The frame is clad with stainless steel.

Standard equipment

Included is motor, foundation plate, operating water module, cyclone, a service kit.

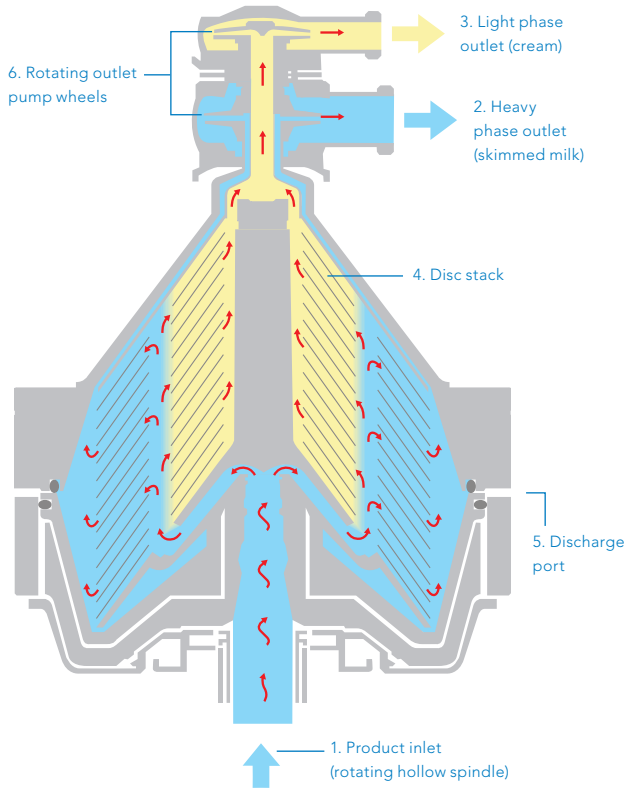
Peripheral equipment (necessary for operation)

Set of tools, inlet valve, cream flow meter, constant pressure unit on skim milk outlet, flushing arrangement for seals, control panel (PLC), motor control, auxiliary box.

Options

Manual standardizing or remixing device, automated light phase control.

To shorten the installation time, the separator and peripheral equipment can be delivered pre-assembled as a module that is in-house tested and ready for installation.



Technical data

Sediment space (l)	5
Air pressure (kPa)	600
Inlet pressure, max (kPa)	700
Outlet pressure, max (kPa)	700

Capacity

Flow rate skimming (l/h)	7 000
Flow rate standardization (l/h)	10 000

Service media

Water per discharge (l)	11
Cooling water for seals and oil cooler (l/h)	180
Hood cooling water (l/h)	100-150

Environment

Energy consumption/1 000 l product (kWh standardization)	1.0
Water consumption/1 000 l product (l)	23-28
Noise, dB(A)	76
Carbon footprint/1 000 l product (kg CO_2)	0.5

Noise level as per ISO 3744. CO_2 emissions are based on electricity production generating 0.54 kg CO_2 – eq./kWhe (world average)

Process connections

Connection, inlet (mm)	63.5
Connection, light phase (mm)	51
Connection, heavy phase (mm)	63.5

Dimensions

Depth (mm)	1 207
Width (mm)	1 618
Height, above floor level (mm)	1 614
Service area (mm)	2 800 x 2 800
Service area height (mm)	2 100
Overhead hoist, (kN)	9
Net weight without motor (kg)	1 210
Net weight, only motor (kg)	164

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