

Separator CSI 400-01-772

Technical Data | Bacteria removal from skim and whole milk



This separator has been designed for bacteria removal from skim or whole milk. The self-cleaning bowl makes the machine suitable for fully automatic cleaning-in-place (CIP). Opening and closing of the bowl for discharging the solids takes place hydraulically using water. The optionally available GEA Westfalia Separator **proplus** system enables an extension of the ejection intervals and consequently a reduction of the solids discharge. The product is fed into the machine through a closed-line system.

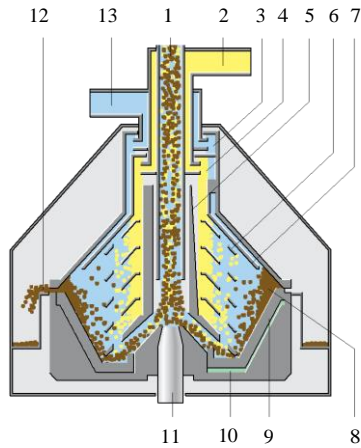
A centripetal pump likewise discharges the clarified product in a closed system. The product feed and discharges in the bowl are hydrohermetically sealed and do not feature mechanical seals. The product connections can be designed according to DIN 11864 or ISO 2852 (TriClamp). The bowl is directly driven by a frequency-controlled 3-phase AC motor, GEA Westfalia Separator **directdrive**^{CS}. The GEA Westfalia Separator **wewatch**[®] system permits permanent monitoring of bearing condition and smooth rotation

as a basis for targeted pro-active maintenance.

The cast iron frame is varnished in grey. The motor is located inside the machine and protected by the frame. All product-contacting parts are made of stainless steel. FDA approved materials are available for the seals. The hygienic design of the separator is certified by 3-A sanitary standards.

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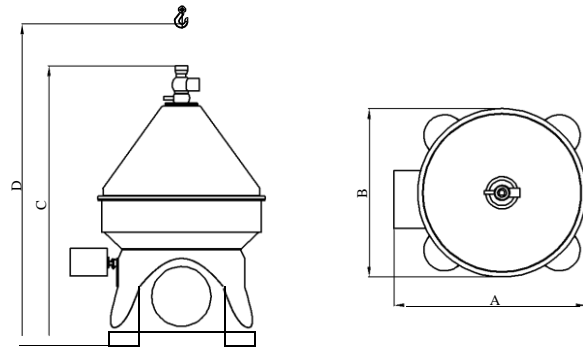
Operating principles and constructional features



- | | |
|------------------------------------|--------------------------|
| 1 Product feed | 7 Separating disk |
| 2 Light phase discharge | 8 Solids holding space |
| 3 Centripetal pump,
heavy phase | 9 Sliding piston |
| 4 Centripetal pump,
light phase | 10 Closing chamber |
| 5 Distributor | 11 Spindle, drive |
| 6 Disk stack | 12 Solids ejection port |
| | 13 Heavy phase discharge |

Capacity	
Bacteria removal from milk	45,000 liters/h
Process data	
Feed pressure	1.0 bar
Useful discharge pressure	2.5 bar
Energy requirement	
Motor rating	45 kW
Integrated lubricating unit	0.12 kW
Operating water	150 liters/h
Cooling water	200 liters/h
Control air	0.02 Nm ³ /h
Weights	
Separator, complete	2600 kg (5732 lb)
Bowl	1250 kg (2756 lb)

Dimensions in mm (inch)



A	B	C	D
1495 (59)	1320 (52)	1920 (76)	3000 (118)

Standard scope of delivery

- 3-phase AC motor
- Foundation frame
- Manual flow control for concentrate recirculation
- Special tools
- Basic spare parts
- Gear oil

Options

- Solids tank or solids discharge
- Feed flow control
- Back pressure control
- Process control (PLC)
- Motor control (MCC)
- **proplus** system for extending ejection intervals
- **wewatch**[®] condition monitoring for pro-active maintenance

GEA Mechanical Equipment

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