



# TETRA PAK® SEPARATOR H80

Hot milk separator with AirTight and polynode technology



## APPLICATION

Tetra Pak® Separator H80, with polynode discs, is ideal for separation and standardization. The separator is designed for continuous operation and CIP.

## HIGHLIGHTS

- Excellent product quality
- High separation efficiency
- Unmatched production flexibility
- Low operational cost
- Low noise level

## WORKING PRINCIPLE

The separator is hermetically sealed, both at the inlet and 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 gentle

treatment of the fat globules to maintain their integrity. The separated cream is led all the way to the centre of the bowl, while the skim leaves the bowl over the top disc. Unwanted particles are collected and emptied accurately and hydraulically at preset intervals.

The polynode separator discs in the bowl have a weld-free design. The traditional welded caulks have been replaced with thousands of micro-embossed polynodes. These polynodes increase stability of the disc when they are stacked together in the separator. The many, small and evenly distributed polynodes secure that the discs remain equidistant from one another over the entire disc surface.

By combining AirTight technology with the polynode design, gentle and efficient separation takes place in the separator. The combination of these technologies efficiently reduces water and energy use per litre of product processed, enabling separation at low operational cost and environmental impact.

## BASIC UNIT

### MATERIAL

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

### STANDARD EQUIPMENT

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

### PERIPHERAL EQUIPMENT (NECESSARY FOR OPERATION)

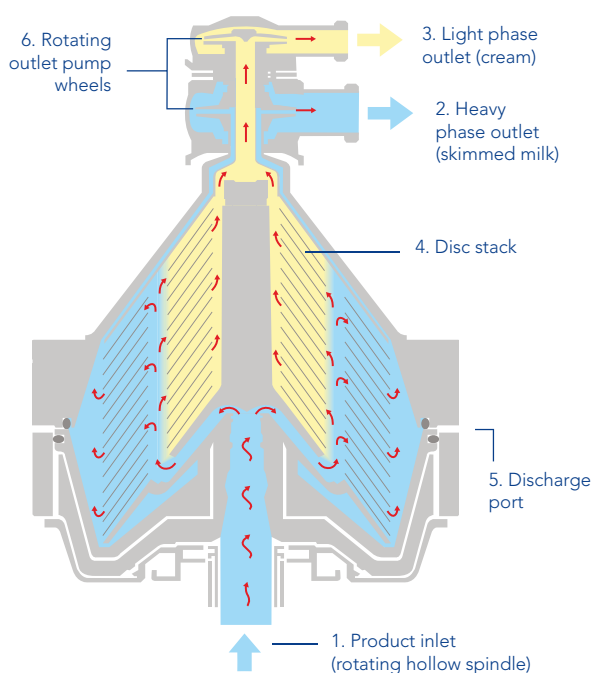
Set of tools, inlet valve, light phase control, heavy phase control on skim milk outlet, flushing arrangement for seals, control panel (PLC), motor control, auxiliary box.

### OPTIONS

Automated light phase and standardisation control.

Encapt™ technology is an option that reduces the friction around the bowl and thereby reduces the energy consumption.

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)	17.3
Air pressure (kPa)	600
Inlet pressure, max (kPa)	700
Outlet pressure, max (kPa)	700

### CAPACITY

Flow rate skimming (l/h)	60 000
Flow rate standardization (l/h)	80 000

### SERVICE MEDIA

Water per discharge (l)	16
Cooling water for seals and oil cooler (l/h)	216
Hood cooling water (l/h)	100

### ENVIRONMENT

Energy consumption/1 000 l product (kWh standardization)	0.46
Water consumption/1 000 l product (l)	3.95
Noise, dB(A)	78
Carbon footprint/1 000 l product (kg CO <sub>2</sub> )	0.3

Noise level as per ISO 3744. CO<sub>2</sub> emissions are based on electricity production generating 0.54 kg CO<sub>2</sub>-eq./kWh<sub>e</sub> (world average)

### PROCESS CONNECTIONS

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

### DIMENSIONS

Depth (mm)	1 273
Width (mm)	1 747
Height, above floor level (mm)	1 935
Service area (mm)	2 800 x 2 800
Service area height (mm)	2 800
Overhead hoist, (kN)	15
Net weight without motor (kg)	2 200
Net weight, only motor (kg)	240–316



Polynode disc