

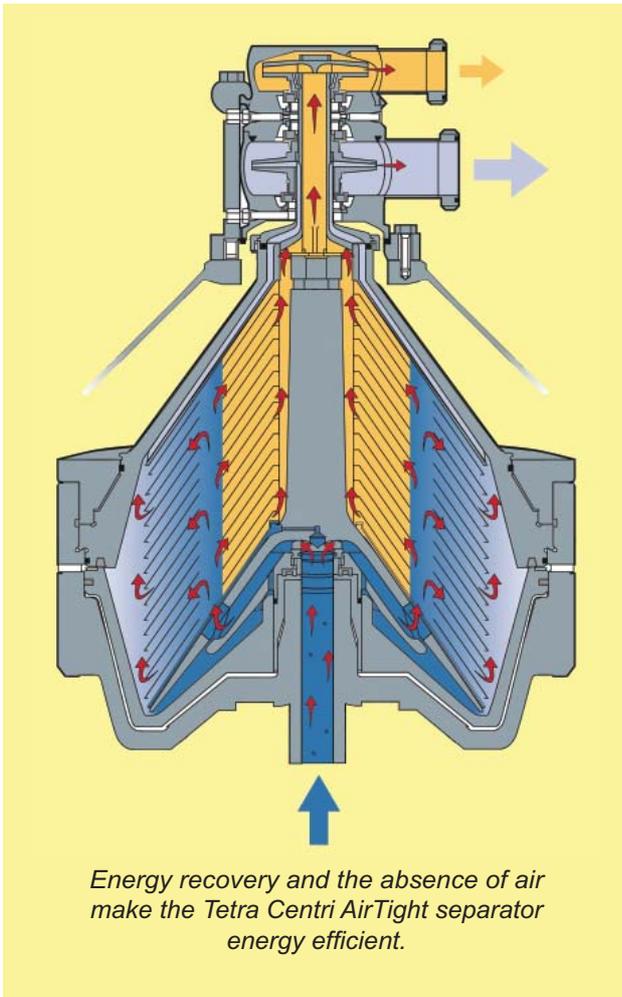
# Tetra Centri<sup>®</sup>

Self-Cleaning AirTight<sup>®</sup> Hot Milk Separator



## Application

Separation, standardisation and clarification of hot milk.



## Tetra Centri® - AirTight® design

Proven AirTight design combined with advanced fluid dynamic technology is the basis for Tetra Centri AirTight separators.

### Inlet

Product is gently fed into the separator bowl through a hollow spindle. The hermetic seal at the inlet prevents destructive air from entering.

### Separation

Smooth acceleration, together with absence of air, maintains fat globule size – resulting in improved skimming efficiency.

Centrifugal force conveys the skim milk to the periphery of the rotating bowl, while the cream is led to the centre of the bowl.

### Discharge

The sediment is discharged at preset intervals through ports in the periphery of the bowl.

The sediment discharge is hydraulically operated, ensuring that only a controlled volume is ejected each time.

### Outlet

The skimmed milk and cream are discharged with two pumps that rotate with the bowl. The outlet is air-tight.

## AirTight® separation

### Excellent product quality

As AirTight design prevents creation of free fat dispersal the fat globules remain intact. Tetra Centri separators give the highest possible skimming efficiency.

### Flexibility in production capacity

All AirTight separators handle a wide range of capacities without mechanical modification. As cream leaves the centre of the bowl, fat contents up to 72% can be achieved with high skimming efficiency.

### Low energy consumption

The AirTight design recovers energy by extracting the product from the centre of the bowl. This, together with the gentle treatment of fat globules, results in a separation process that consumes a minimum amount of energy.



## Tetra Centri® - safe and easy to operate

Tetra Centri AirTight separators are designed for easy operation and can handle a wide range of capacities without mechanical modification. They can be included in the Tetra PlantCare concept, which offers these benefits:

- Planned service stops
- Predictable maintenance costs
- Long uninterrupted operation



## Environment

Tetra Centri AirTight separators are not only cost effective, they also reduce the environmental load. The Tetra Centri design reduces energy and water consumption, while minimising food product loss.

### Energy

Energy consumption is reduced by extracting the product from the centre of the bowl. Power consumption is reduced by up to 40%.

### Water

No make-up water consumption during production. Re-use of water for cooling purposes.

### Effluent load

Accurate discharges result in low BOD and COD.

### Noise

The noise level is very low, approximately 75 dB(A), measured according to ISO 3744.

Energy consumption	H 614	H 714	H 518	H 618	H 718	H 818	H 918
at <b>skimming capacity</b> , kW	10	15	19	20	22	30	36
at <b>standardising capacity</b> , kW	12	16	20	21	23	33	39
kWh per <b>1 000 l product</b> (std)	0.48	0.53	0.57	0.52	0.42	0.55	0.52
<b>Water consumption</b>							
per <b>discharge</b> , l	16	16	16	16	16	16	16
<b>cooling</b> , l/h	150	150	150	150	150	150	150

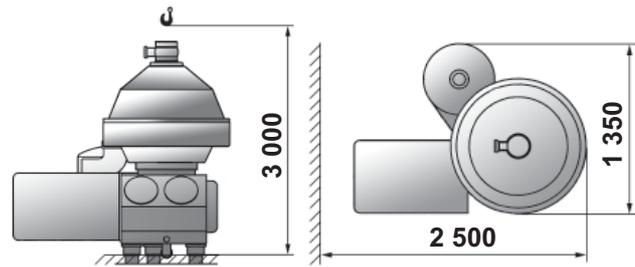


# Tetra Centri® - Self-Cleaning AirTight® Hot Milk Separator

## Auxiliary Equipment

- Set of tools
- Flow controller
- Inlet pipe, complete
- Cream flow meter
- Remixing device
- Manual standardising device
- Constant pressure unit on heavy-phase outlet
- Flushing arrangement for axial seals
- Tetra Centri Control (separator control)
- Tetra Centri Drive (motor control)

## Dimensions (approximate)



Technical data	H 614	H 714	H 518	H 618	H 718	H 818	H 918
Capacity, skimming, l/h	15 000	20 000	25 000	30 000	35 000	45 000	55 000
Capacity, standardisation, l/h	25 000	30 000	35 000	40 000	55 000	60 000	75 000
Motor rating, kW	18.5	22	22	25	25	37	42
Connections, SMS unions							
Inlet	63.5	63.5	63.5	63.5	63.5	63.5	63.5
Light phase	38	38	38	38	51	51	51
Heavy phase	63.5	63.5	63.5	63.5	63.5	63.5	63.5
Sediment space, l	9.6	9.6	17	17	17	17	17
Air pressure							
Discharge unit, kPa	600	600	600	600	600	600	600
Overhead hoist, kN	10	10	15	15	15	15	15
Inlet pressure, max kPa	600	600	600	600	600	600	750
Outlet pressure, max kPa	600	600	600	600	600	600	600

