

Liquids to Value



Separators and Clarifiers for the Dairy Industry



Special Separator Features

With GEA Westfalia Separator, dairies benefit from over a century of knowledge in milk processing. This experience has yielded technical and engineering advancements that enhance the quantity and quality of product our equipment can deliver.

Westfalia Separator® hydro**soft** feed system

Our hydro**soft** system combines gentle acceleration with a low pressure level and offers a high degree of flexibility in terms of feed capacity. During operation, the centripetal pump is immersed in liquid so the inlet chamber is hydrohermetically sealed from the air. This keeps the product air-free and guarantees the highest possible separation efficiency. The system has no mechanical seals and does not require additional cooling water.

Westfalia Separator® hyvol® **proplus** separators

Besides superior separating efficiency, with hyvol **proplus** separators dairies can expect a significant reduction in milk losses as well as savings in both operating water and waste disposal costs. Further, the process keeps more of the protein in the milk, allowing production of additional high value products. This is possible because of a new design and fluid mechanics model. Since fewer solids are generated, ejection cycles can be extended two- to three-fold. Hence, less water is required and solid waste levels shrink to one-quarter of their original volume.

Because of its modular construction, the **proplus** system can be retrofitted to separators already in operation. The component parts ensure the same benefits provided by a new installation.

Westfalia Separator® **procool**

Our **procool** separators provide unrivaled skimming efficiencies, process safety and economy when separating raw, whole milk at temperatures between 40° and 86°F. The many advantages of cold milk separation include an improved bacteriological profile of the final product, a reduction in energy costs since heat addition is eliminated and a reduction in protein denaturation. As an added benefit, the **procool** system allows for a fast, problem-free changeover between warm and cold milk processing in the same separator.

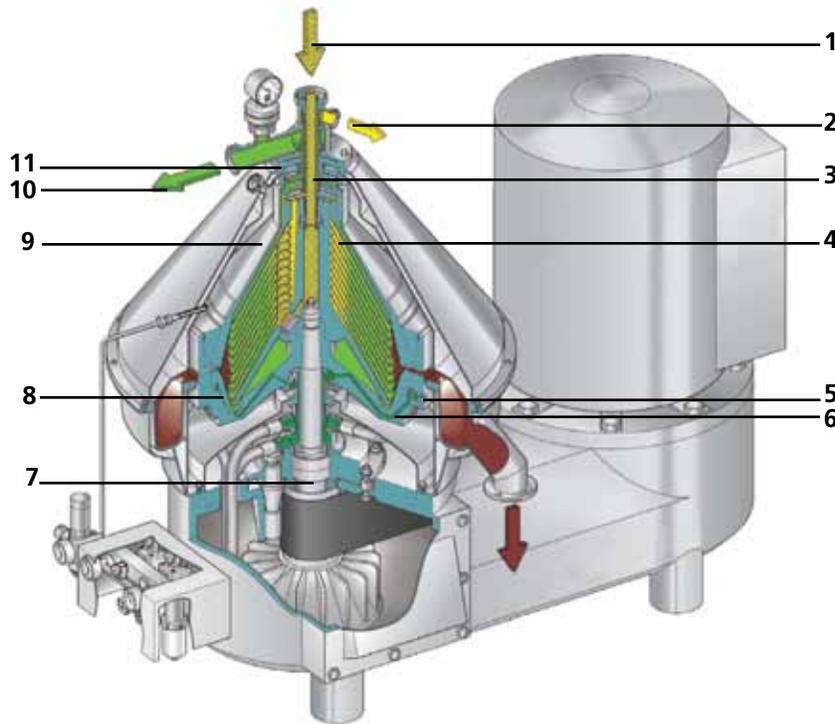


Application-based capacity and motor requirements

SKIMMING			
	CAPACITY		MOTOR (HP)
	(GAL/H)	(LB/H)	
MTC-3-03	160	1,320	1.5
MTE-15-00	790	6,600	5.5
MSE-25-01	790	6,600	10.0
MSE-55-01	1,300	11,000	15.0
MSE-75-01	2,000	16,500	20.0
MSE-85-01	2,600	22,000	20.0
MSE-100-01	4,000	33,000	30.0
MSE-140-01	5,300	44,000	40.0
MSE-180-01	6,600	55,000	40.0
MSE-230-01	7,900	66,000	50.0
MSE-350-01	9,200	77,000	60.0
MSE-400-01	10,600	88,000	60.0
MSE-500-01	13,200	110,000	75.0
MSE-600-01	15,900	132,000	100.0
MILK CLARIFIER			
	CAPACITY		MOTOR (HP)
	(GAL/H)	(LB/H)	
MSE-35-06	4,000	33,000	20.0
MSE-100-06	7,900	66,000	40.0
MSE-200-06	10,600	88,000	60.0
MSE-250-06	14,500	121,000	75.0
MSE-350-06	19,800	165,000	100.0
WHEY CLARIFIER			
	CAPACITY		MOTOR (HP)
	(GAL/H)	(LB/H)	
MSE-35-96	2,600	22,000	20.0
MSE-100-96	6,600	55,000	40.0
MSE-200-96	9,200	77,000	50.0
MSE-250-96	13,200	110,000	75.0
MSE-350-96	19,800	165,000	100.0
BACTERIA CLARIFIER			
	CAPACITY		MOTOR (HP)
	(GAL/H)	(LB/H)	
CSE-45-01	2,000	16,500	15.0
CSE-140-01	4,000	33,000	30.0
CSE-230-01	7,900	66,000	50.0
CSE-400-01	10,600	88,000	60.0
CSE-500-01	14,500	121,000	75.0
COLD MILK			
	CAPACITY		MOTOR (HP)
	(GAL/H)	(LB/H)	
MSE-140-48	4,000	33,000	40.0
MSE-500-48	13,200	110,000	75.0

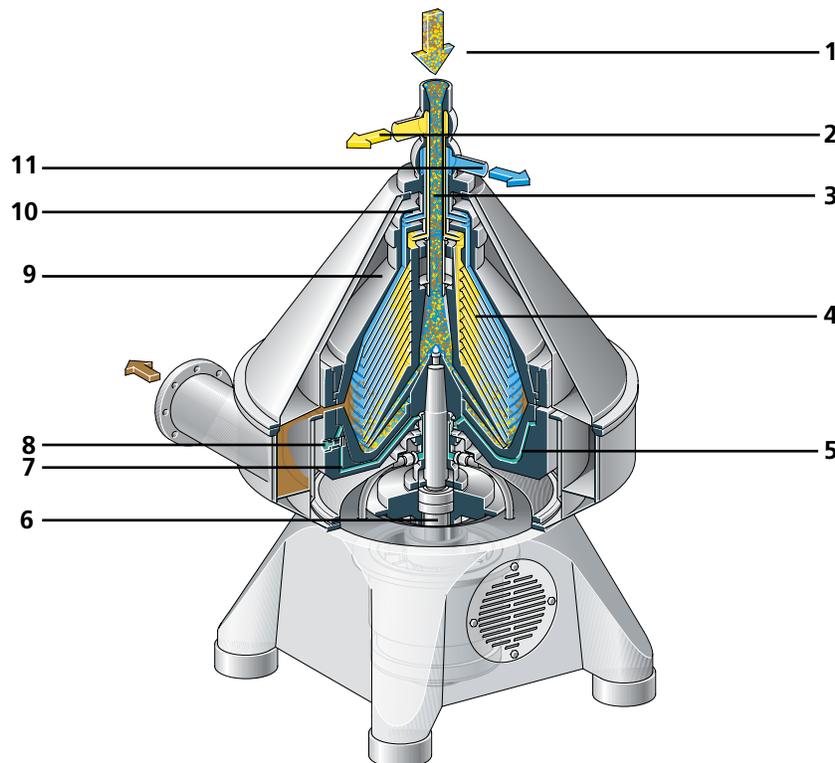


MSE 500 with Flat Belt Drive



- 1 Westfalia Separator® hydro**soft** feed
- 2 Light phase
- 3 Hydrohermetic feed gentle acceleration
- 4 Process-dependent disc configuration
- 5 Piston valves
- 6 Adjustable solids ejection system
- 7 Short spindle drive with flat belt smooth running and low vibration robust and reliable
- 8 Sliding piston
- 9 Hygienic design
- 10 Heavy phase
- 11 Hydrohermetic product seal non-contacting gasket

MSE 500 with Integrated Direct Drive



- 1 Westfalia Separator hydro**soft** feed
- 2 Light phase
- 3 Hydrohermetic feed gentle acceleration
- 4 Process-dependent disc configuration
- 5 Sliding piston
- 6 Short spindle drive with flat belt smooth running and low vibration robust and reliable
- 7 Adjustable solids ejection system
- 8 Piston valves
- 9 Hygienic design
- 10 Hydrohermetic product seal non-contacting gasket
- 11 Heavy phase

Available Drives for Dairy Separators

Flat belt drive

The power transmission from the torque controlled motor to the bowl spindle is via a single flat belt without an intermediary clutch. The design is simple, robust and maintenance friendly. The spindle can be removed together with the complete bearing assembly and can be serviced outside the machine. This reduces maintenance downtime.

Advantages of the flat belt drive

- Longer oil change interval
- Longer maintenance interval
- Lower maintenance cost
- Reduced noise level



Integrated direct drive

The drive is installed directly underneath the bowl in the frame, so there are no radial forces and less strain on the bearings for a longer service life. The design allows the motor and drive to be exchanged in only a few hours. Compared to other drives, integrated direct drive provides a higher degree of efficiency and improved reliability. Other positive attributes include a smaller footprint and a low noise level.

Advantages of integrated direct drive

- Lower operating costs
- Improved reliability
- Reduced maintenance costs
- Less space required
- Lowest noise level



Westfalia Separator® **wewatch**®

Integrated direct drive machines are equipped with our exclusive **wewatch** service package. This program offers 24/7 online monitoring, so that maintenance is performed precisely when required and downtime is avoided. Machines equipped with flat belt drives can also be ordered with the **wewatch** system. Older machines can be upgraded.

Westfalia Separator®
wewatch

- Beverage Technology
- Dairy Technology
- Renewable Resources
- Chemical / Pharmaceutical Technology
- Marine
- Energy
- Oil & Gas
- Environmental Technology
- Engineering
- Factory Reconditioned Machinery
- Original Manufacturer's Service

GEA Mechanical Equipment US, Inc.
GEA Westfalia Separator Division

East Coast Headquarters:

100 Fairway Court · Northvale, NJ 07647
201-767-3900

Midwest:

725 Tollgate Rd, Suite B · Elgin, IL 60123
630-503-4700

South:

4725 Lakeland Pkwy, Suite 4
Lakeland, FL 33805
863-669-1500

Southwest:

2408 Timberlock Pl, Suite C-4
The Woodlands, TX 77380
281-465-7900

West Coast:

Western Region Customer Support Center
555 Baldwin Road · Patterson, CA 95363
209-895-6300

GEA Westfalia Separator Canada, Inc.

835 Harrington Ct · Burlington, ON L7N 3P3
289-288-5500

Toll-Free: 800-722-6622

24-Hour Technical Help: 800-509-9299

www.wsus.com

Westfalia and GEA Westfalia Separator are registered trademarks of GEA Westfalia Separator GmbH.

