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® hydrossoft feed system

Our hydrossoft 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

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<th>SKIMMING</th>
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MSE 500 with Flat Belt Drive

1. Westfalia Separator® hydrosoft 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

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

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