Leading the Way To a Cleaner Environment

Westfalia Separator is a worldwide leading supplier of mechanical separation equipment, with over 110 years of engineering excellence.

Westfalia Separator’s technological leadership is based on years of extensive R&D coupled with the commitment to quality you expect from German engineering. Throughout the world our name is synonymous with the newest, cutting edge technology, innovative design, and superior manufacturing techniques. Our equipment delivers proven, reliable and cost-effective solutions to our customers’ challenging needs. Thousands of municipal and industrial plants worldwide provide testimony to our expertise and level of service.

Only from Westfalia

We offer the widest range of centrifuge capacities from 8” – 41” bowl diameters, with flow rates from 5 – 1500 gpm. Our patented technology provides benefits not found elsewhere, including:
- Vari-Pond® for on-the-fly optimization of pond levels
- High torque 2-Gear Drive® for dry solids and optimum differential speed regulation
- Positive scroll drive for minimum energy consumption
- Naturally deep ponds for maximum clarification
- Proven 3,000+ G force operation for maximum efficiency.

Locations and Staffing to Serve You

In North America, Westfalia Separator has six offices staffed by engineers and service technicians with industry-specific and process-specific expertise. Each office is strategically located throughout North America to lend swift assistance when needed. Parts, service, repairs or just verbal “tech support” are dispatched quickly and efficiently to our Canadian and American customers. Our commitment to customer service is backed by:
- Over $10 million in parts inventory
- Genuine & guaranteed Westfalia Separator parts
- 24 hour turn-around on parts shipping
- A scroll exchange program to keep you up and running, and minimize downtime
- The largest network of factory-trained service technicians
- Engineers and technicians with unsurpassed process, mechanical and electrical expertise to solve any problem.
Westfalia Separator

Under the Hood

Westfalia Separator high performance centrifuges generate high G-forces, optimum torque control and pond control for maximum dewatering and thickening efficiency. Operators and owners alike value the construction features and trouble-free process control of Westfalia Separator decanter centrifuges. Reduced operating and maintenance costs can be directly attributed to such features as:

- Field-replaceable wear parts
- Variable Frequency Drive technology
- Vari-Pond®
- Automatic torque control
- Operator-friendly mechanical layout
- Extended service intervals
- Compact, modular design.

Safety & Simplicity

The closed design of the decanter centrifuge offers inherent advantages to the environment, and to the safety and comfort of the operator in the treatment of biosolids:

- Aerosol & odor free
- Low noise, minimal vibration
- C-I-P programming; no manual cleaning required
- Minimal operator attention and maintenance required
- Easy to operate Interface Touch Screen.

ISO 9001 Certified

In the quest for quality the bar is set very high. That is why Westfalia Separator is proud to be among a select few companies in the world whose total organizations meet or exceed the prestigious ISO 9001 standards. Our dedication to quality has resulted in clearly superior equipment, designed with intelligence, yielding - in turn - important operating benefits for our customers, including:

- Unsurpassed reliability
- Ultimate process flexibility
- Superior control
- Maximum energy efficiency
- Optimal cost efficiency.

Performance for the Long Haul

For those who seek the best, we have designed our equipment with the most rugged features for a simple and compelling reason: the equipment performs better and lasts longer.

Professional quality, rugged features minimize the normal wear and tear on a machine that is often in service 24/7. They also translate to unsurpassed reliability – in short, equipment built to provide trouble-free, uninterrupted performance for the long haul. Consider these attributes:

- Corrosion-resistant duplex stainless steel construction
- All process-wetted parts of stainless steel
- Centrifugally-cast bowl shells with wear ribs
- Rugged frame and scroll conveyor design
- 2-Gear Drive® scroll drive system
- Sintered tungsten carbide tile scroll conveyor protection.

Among a Handful of Elite Companies
The Patented 2-Gear Drive®
Westfalia Separator decanter centrifuges come equipped with our patented 2-Gear Drive®, designed to provide torque-dependent control of the differential speed to yield a high degree of solids dryness, especially in situations where there are large variations in the feed conditions.

Less is More
Municipalities and industry are obligated to dispose of growing quantities of biosolids in an environmentally safe and economical manner. In order to recycle or dispose of biosolids in accordance with regulatory requirements, optimum dewatering is necessary. Dewatering significantly reduces sludge volumes and the cost for disposal, whatever the method – drying, incineration, composting or landfill.

Our equipment proves the adage that less-is-more by designed-in attributes that yield a small overall footprint:

- Compact, modular in-line drive design
- End-pull-out for ease of maintenance
- Vertical T-mount motor configuration to reduce stress on the bearings.

The controller reacts to the solids loading and the nature of the solids in the bowl, reducing or increasing the differential speed of the scroll conveyor to maintain constant torque. This continuous feedback system improves operating efficiency and yields solids with a consistent TS content.

- Finer control
- High torque capabilities
- Automatic torque control
- Horsepower savings
- Easy repairs

Advanced Controls Technology
In an effort to maximize efficient operation of the centrifuge, while minimizing the burden on the operator, Westfalia Separator has designed-in some of the most advanced controls technology in the industry.

- Simplicity – First we design each centrifuge according to the customer’s specs. It fits into their systems, solves their problems, uses their terminology and meets their standards.
- Diagnostics – Our equipment “thinks” for itself and monitors itself in order to eliminate operator error and provide an early warning system. We also offer remote monitoring systems, such as WeWatch®, to assess the health of the equipment.
- Safety – All of our components meet NEMA standards and are UL and CSA approved.
- Partnerships – For integrated components we partner with the top companies in their industries in order to provide our customers quality assurance and peace of mind.
On-the-Fly Adjustments

Vari-Pond® stands for “variable pond depth”. In the past it was necessary to stop and modify decanters in order to achieve a constant discharge concentration. Vari-Pond® now allows this adjustment to be made while the machine is at full operating speed using a throttling disc that does not rotate. Vari-Pond® can be operated in either a manual mode or an automatic mode. The machine easily adapts to changing feed conditions, which ensures optimum thickening.

Predictability in an Unpredictable World

Regulatory restrictions on phosphorous and nitrogen levels have made the thickening of waste activated sludge necessary. Mechanical thickening cuts capital costs substantially and results in up to a 90% decrease in sludge volumes. Vari-Pond® ensures consistency in solids concentrations, even when feed characteristics, flow rates and polymer dosages fluctuate.

Advantages of mechanical thickening of waste activated sludge include:
- Reduction of the load on the existing digester
- Smaller dimension in new plants
- Energy savings: a smaller volume needs to be heated
- Improved digestion and higher gas yield due to longer solids retention times
- Improved volatiles destruction
- Better dewaterability.

Dewatering with Vari-Pond®

Vari-Pond® technology is also available for dewatering systems and offers these advantages:
- Improved process performance (drier cake solids)
- No liquid discharge from the solids end at start-up
- Easy adjustment of the pond depth for a given set of process conditions
- 33% increased capacity of the system
- Improved capture.
From Drinking Water to Industrial Wastewater

Potable Water, a Life-Sustaining Resource.

The world’s supply of drinking water comes from either ground water or surface water, both subject to pollution. This makes treatment a necessity. Centrifugal separation with decanters fulfills two roles: the removal of undesirable constituents and the dewatering of solids generated by treating the water with chemicals. Westfalia Separator decanters were developed for high performance clarification and the highest possible dewatering of solids.

A Variety of Industrial Needs – from A to Z

Westfalia Separator offers fluid process engineering expertise for many applications and industries. Recycling, making a material useful in a circular production system by separation, is ideally handled by a decanter centrifuge. The use of stainless steels for all components in contact with the product ensures a high degree of durability and a long service life for the equipment. Innovative features such as high G-forces, large clarifying surfaces, optimized feed systems, special drives and a degree of dewatering which can be adjusted externally during operation ensure optimal clarification and economical operation.

Comprehensive Testing

Our complete laboratory testing facility in Northvale, NJ will test your sludge to determine polymer conditioning requirements, and predict feedrates, cake solids dryness and solids recovery. Should it be necessary to perform full-scale testing, Westfalia Separator has completely equipped mobile centrifuge systems available for a real world demonstration.

Our After Sales Service Commitment

As an ISO 9001 company we stand behind the quality of both our products and our service. Our continuing focus is to provide customers with the support they need in order to maximize productivity and minimize downtime. You can count on round-the-clock assistance for:

- Spare parts – Over $10 million in inventory, ready to be shipped out within a 24 hour turn-around. All genuine Westfalia Separator parts are manufactured under the same strict quality control as the original equipment.
- Maintenance and/or repairs – We offer our customers maintenance service contracts that include scheduled safety and performance inspections, the option of storing and managing an inventory of parts, personnel training, safety and process-specific consulting, and vibration analysis.
- Field Service – Factory-trained technicians are strategically located throughout the country for quick response. We offer a scroll conveyor exchange program to get your equipment back online when reconditioning or repairs are needed. Our dedicated toll-free service line is 1-800-509-9299.

Clear-Cut Solutions for Many Applications

![Separator Technology from "A" to "Z"](image)