

*Liquids to Value*



Service Center Hamburg  
GEA Westfalia Separator





## Service Center Hamburg GEA Westfalia Separator

Bundled service competence in Hamburg for top-quality service worldwide

**Under the brand capitalcare, GEA Westfalia Separator offers you a holistic range of services designed to maximize the availability and cost effectiveness of your centrifugation equipment and process lines.**

The availability of maximum system performance is a prerequisite for the highest level of process efficiency. The machines must run around the clock on a constant level of effectiveness. Our preventive services are designed to comprehensively secure this performance and availability and to avoid unplanned stoppage times.

Our customers plan their repair and maintenance budgets to be as precise as possible. Customized maintenance agreements include numerous options from basic services up to premium agreements which can be defined and specified within the framework of a budget.

The GEA Westfalia Separator Service Center in Hamburg is available 24 hours, 7 days a week. Located in Hamburg-Harburg we offer all service features under one roof on an area of 3.400 m<sup>2</sup> for repair shop, spare part warehouse, training-center and offices.



Within the short distance from the motorways and Hamburg Airport as well as the port of Hamburg we can offer immediate delivery of our service features worldwide.

Our Service Center is ISO 9001 certified.

Westfalia Separator® **capitalcare** service products:

- Original spare parts
- Authorized Workshops – repairs
- Field service
- Helpdesk / Process Improvement
- Training
- Condition monitoring
- Service level agreements



Westfalia Separator®  
**genuineparts**

## GEA Westfalia Separator Original Parts

Only the original is the original – original spare parts meet extremely high and stringent quality requirements

### Quality cannot be copied

Quality is what matters. Some centrifuges have been operating 24 hours a day for 30 years. Who would not pay extreme attention to the right brakes if he were to use his car to travel around 24 hours every day?

Centrifuges are extremely precise machines that are exposed to extreme loads and require high quality steels.

As with the wings of a civil aircraft, the mechanical strength values of the material have to be exactly right to cope with the movement and deformation. Original parts from GEA Westfalia Separator have been designed specifically for our separators and decanters in terms of: dimension, material quality and production methods.



Separators and decanters meet extremely stringent requirements in terms of the quality and quantity of the product to be processed in continuous operation. If the machines are regularly maintained and if original GEA Westfalia Separator spare parts are used, safe, reliable operation and a high degree of availability are ensured.

Enormous forces are developed in centrifuges. When machines are rotating at speeds of up to 20,000 times gravity, everything right down to the last detail has to be perfect. This is logical. Anybody who is responsible in a company for technology or safety is aware of this.



## Your Benefit at a Glance

Service	What we offer you	Your benefit
Original parts	<ul style="list-style-type: none"> <li>■ Advice on storing spare parts</li> <li>■ Check of design status</li> <li>■ Delivery of small lot sizes</li> <li>■ Availability of spare part kits</li> <li>■ Consulting and preparation of offer for machine conversion</li> </ul>	<ul style="list-style-type: none"> <li>■ Tested safety of calculable criteria</li> <li>■ Long machine life</li> <li>■ Warranty</li> <li>■ High availability, also for older machines</li> <li>■ Short-term production</li> <li>■ Small lot sizes</li> </ul>
Shipping	<ul style="list-style-type: none"> <li>■ Large and pallet consignments by carrier</li> <li>■ Small consignments and packages by courier or express service</li> <li>■ Spare parts delivered to you daily at agreed times</li> <li>■ Shipment worldwide</li> </ul>	<ul style="list-style-type: none"> <li>■ Logistics to suit your needs</li> </ul>

# Authorized Workshop

A seal of quality by GEA Westfalia Separator



## Quick, flexible, efficient

In day-to-day operations, our customers demand precise solutions to meet rapidly changing requirements. Our Authorized Workshop enables us to provide rapid and competent assistance where it is needed. We meet the situation in a flexible manner and provide efficient solutions with original parts from GEA Westfalia Separator.

## Reliable production with original parts

The permanent efficiency of your installations also comprises reliable production and retention of value. In the event of maintenance work or repairs which become necessary, we guarantee rapid and expert repairs using original parts from GEA Westfalia Separator via our Authorized Workshop.

Is it worthwhile to use a no-name workshop if repair work becomes necessary?

In deciding to use equipment provided by GEA Westfalia Separator, you decided in favour of quality – your decision should be the same for repair work.

## You know the workshop!

Do you also know the qualifications of the employees?

We do not wish to denigrate the specialist skills of anybody at this point. But do you not also think that it makes a difference whether a specialist works on a large number of different installations or whether he is able to concentrate on one brand and its specific characteristics? Competence not only involves knowing what was applicable yesterday, it also involves knowing what is appropriate today and in the future. Innovations and product improvements are coming at shorter and shorter intervals, and we are in a position to meet these challenges. However, if access is not available to the necessary and up-to-date manufacturer information, this is a disadvantage which you have to cope with as a customer.



If repairs have to be carried out and if you engage our Authorized Workshop for this work, you have triple security:

- Use of original parts
- Repair work performed in accordance with the latest technical/technological standards of the manufacturer
- Passes through our quality assurance department, i.e. balancing, safety run and function test

### Make the right decision now

If it is essential to maintain the value and functionality of advanced technical installations – such as those supplied by GEA Westfalia Separator – you should not compromise on repair work.

You can accordingly count not only on the innovative process and machine engineering of GEA Westfalia Separator but also on excellent service of our Authorized Workshop.

## Your Benefit at a Glance

Service	What we offer you	Your benefit
Professional repair/replacement	<ul style="list-style-type: none"> <li>■ Repair in Authorized Workshop of manufacturer</li> <li>■ Replacement for decanter modules and separators</li> <li>■ Rental bowl service</li> <li>■ Extensive damage assessment and elimination</li> </ul>	<ul style="list-style-type: none"> <li>■ Securing your production</li> <li>■ State-of-the-art</li> <li>■ Manufacturer know-how integrated in modifications</li> </ul>
Knowledge management	<ul style="list-style-type: none"> <li>■ Structured data management</li> <li>■ We know every machine history</li> </ul>	<ul style="list-style-type: none"> <li>■ Fast and efficient service processing</li> </ul>

# Repair Concept of GEA Westfalia Separator Separator Maintenance & Repairs

The majority of separator repairs concerns repairs of bowl parts.  
The typical repair procedure has the following steps:



## Pre-inspection

Pre-cleaning is done with special cleaning machines and ultrasonic, followed by dye penetration, inspection and marking of cracks and other potential problems. We are experienced in the assessment of all kind of corrosion and erosion phenomena such as surface corrosion, crevice and stress corrosion cracking etc. If necessary we will include comprehensive material lab testing to understand the root causes of damages.



## Lathe operation

The following separator bowl parts are – according to our safety regulations – machined by our lathes: bowl tops, bowl bottoms, sliding pistons, distributors and large lock ring threads.

## Liner repair in spinning machine

Repair of wear liners for bowl bottoms, distributors, and sliding pistons when guiding and seal areas have erosion or corrosion marks.



## Bowl balancing

Our repair center contains a balancing machine for separator bowls. Overspeed runs will be routinely conducted to ensure the safety of your equipment and your operators.



## Testing

After repair and balancing function and vibration tests of the centrifuges with water are conducted. Repair and test reports will be documented and submitted together with the machines back to our customers.



## Decanter Maintenance & Repairs

The majority of decanter repairs concerns repairs of scrolls, bearing hubs and of the gearboxes. The typical repair procedure has the following steps:

### Pre-inspection

- Cleaning of parts with high pressure cleaning device
- Demounting
- Check of bearings and bearing seats, sleeves and scrapers

### Cutting and turning

Flights are cut with plasma cutters and afterwards the remains of the scroll flights are turned on a lathe machine.

### Welding

New flights are welded on the scrolls by using argon arc welding, In case of smaller scroll damage we will only repair by welding the outer scroll diameter.

### Grinding

Grinding of the outer scroll diameter is done before hardfacing and balancing to ensure that the gap between scroll and inner bowl diameter is small and even over the whole scroll length.

### Hardfacing

Flame hardfacing with tungsten carbide powder is applied on the flight outside diameters and flanges. Alternatively ceramic tiles, which are brazed onto the flights can be applied to protect the scrolls.

### Balancing

Repairing of unbalances on bowls and scrolls.

### Gear repair

Gears will be disassembled, inspected, maintained and/or repaired. Gearboxes are sensitive and a gearbox replacement is costly.



## Field Service

A really reliable technical backup: fast, efficient, flexible

### Preventive maintenance using intelligent services

Our customers expect GEA Westfalia Separator, as a service provider, to have the necessary expertise to carry out all maintenance measures in their particular environment.

Services have to be provided worldwide, including all necessary access to workshops and spare parts stores, 24 hours a day, 365 days a year; and rightly so. If a container ship fails to arrive at the next port on time as a result of machine failure, logistical rescheduling results in extremely high costs. In the shipping industry, machine availability is money.

### Always at your side with top-quality service "around-the-clock"

Continuous operation of your equipment is essential for efficient production. Downtimes resulting from machine failure can be very expensive. Particularly if they occur after normal working hours. Only a top-quality "around-the-clock" service ensures that such a situation does not turn into a nightmare.

GEA Westfalia Separator offers you that special service. Westfalia Separator® **capitalcare** secures you maximum operating economy and peace of mind. Our teams of highly skilled service engineers will attend to your machines all around the world at any time.

### Maintenance Programme

Our preventive service agreements will help you to reduce man-hours and spare parts.

The concept includes repairs, free inspection visits, a consultancy service, training and spare part kits.



## Your Benefit at a Glance

Service	What we offer you	Your benefit
Field service	<ul style="list-style-type: none"> <li>■ GEA Westfalia Separator certified field service</li> <li>■ Technical support and helpdesk</li> <li>■ Service advisors</li> <li>■ 24-hour hotline</li> <li>■ Preventive maintenance</li> <li>■ Maintenance according to statutory regulations</li> </ul>	<ul style="list-style-type: none"> <li>■ The right man at the right place for maximum availability</li> <li>■ Fast response times</li> <li>■ Precise backup support</li> <li>■ Reduction of unplanned stoppages</li> </ul>
Technical service consultants	<ul style="list-style-type: none"> <li>■ Joint, continuous development of               <ul style="list-style-type: none"> <li>• Machines</li> <li>• Controls</li> <li>• Processes</li> <li>• Maintenance</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>■ Regular contact partners</li> <li>■ Maximum machine and process efficiency</li> <li>■ Problem-solving</li> <li>■ State-of-the-art techniques and technology</li> <li>■ Fast and efficient service processing</li> </ul>
Knowledge management	<ul style="list-style-type: none"> <li>■ Structured data management</li> <li>■ We know every machine history</li> </ul>	<ul style="list-style-type: none"> <li>■ Fast and efficient service processing</li> </ul>





## Helpdesk/Process Improvement

Customer support “round-the-clock” by highly qualified specialists

### Technical Response Center

GEA Westfalia Separator has rationalised the way in which it meets your requirements: a technical helpdesk service is now provided on a “round-the-clock” basis out of Hamburg. This is not an anonymous call center; instead, it is manned by field service specialists from GEA Westfalia Separator who know what they are talking about. A caller contacting the technical response center can expect to have a response to questions and solutions proposed within ten hours. Highly qualified personnel allow the helpdesk to carry out an initial diagnosis of a fault and to initiate the troubleshooting process in a defined manner.

The specialist provides an expert evaluation of the problem and coordinates the trouble-shooting procedure – either by providing further advice over the telephone or in writing, or by sending out an engineer, shipping a spare part or replacing components. This service is provided quickly and reliably, as operators of oil processing installations are entitled to expect from GEA Westfalia Separator.



## Product support

The GEA Westfalia Separator Service Center Hamburg is also the Competence Center for product support. By analysing findings, it is possible to minimise or even totally avoid similar problems in future. It is also possible to catalogue solutions for rapid problem-solving. A database supported electronic service shop collects the worldwide service and repair reports together with spare parts deliveries. Linked via our special service software, these data are used for weak-point analysis, individual maintenance histories, cost analysis, and improving maintenance.

## What we offer you

- Technical support and helpdesk
- Service advisors
- 24-hour hotline
- Joint, continuous development of
  - Machines
  - Controls
  - Processes
  - Maintenance

# Condition Monitoring Westfalia Separator® **wewatch**®

Additional security for your machines



Westfalia Separator® **wewatch**® permits ongoing condition monitoring and diagnosis. With minimum personnel input, this provides you with reliable information for optimizing the installation availability and avoiding unscheduled downtime.

Westfalia Separator® **wewatch**® – offline or online

Westfalia Separator® **wewatch**® is a monitoring program which can be used “offline” on the premises of the customer or “online” at GEA Westfalia Separator. Any servicing which has to be carried out can be scheduled in good time to maximize reliability and productivity.

Westfalia Separator® **WatchMaster**

The Westfalia Separator® **WatchMaster** monitors the actual condition of the machine permanently and shows it on a trafficlight LED display. With the Westfalia Separator® **WatchMaster** sources of error

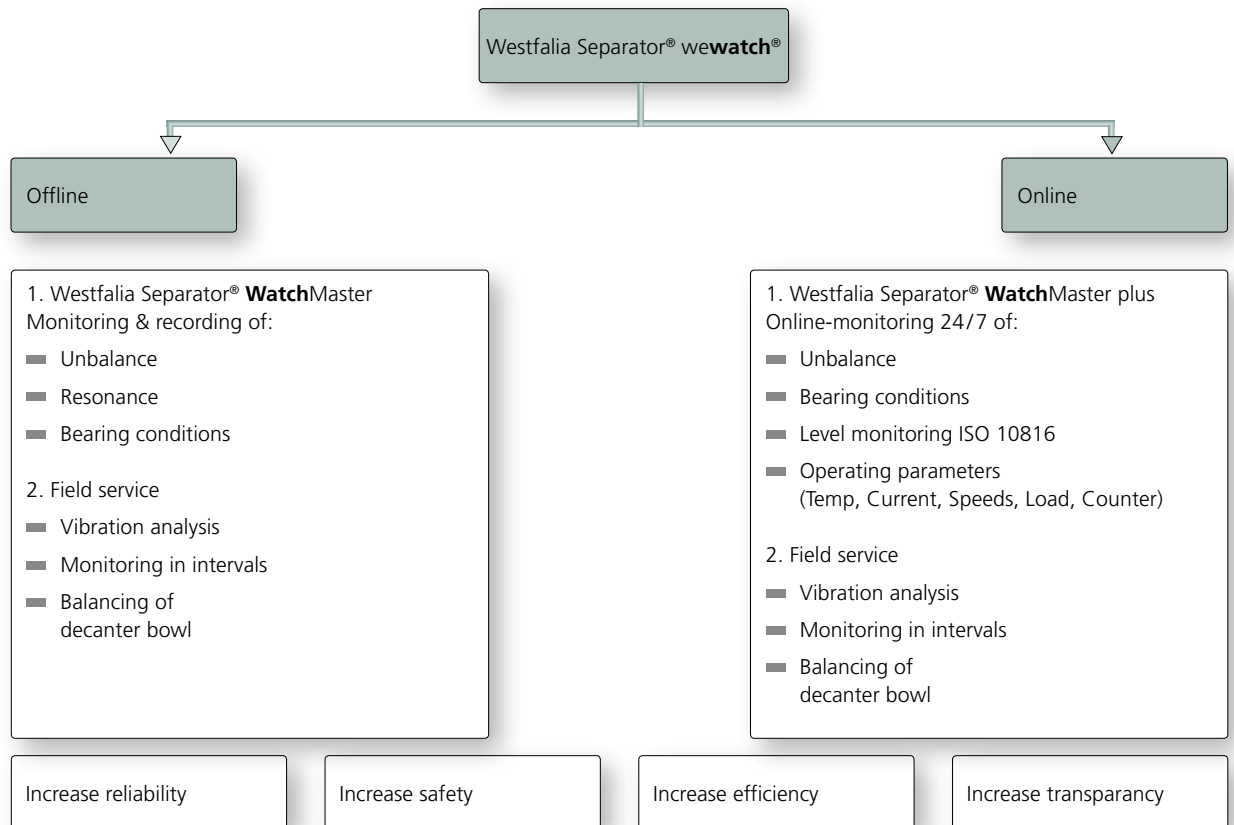
such as unbalance or bearing failure are precisely identified. Unscheduled downtimes and even total losses can be minimized with this system.

- Continuous measurements of vibration and bearing frequency
- Creation of a database for measurement, evaluation and history

Operator benefits

- Plannable condition-oriented servicing
- 24-hour monitoring of the machines
- Early identification of damage to the machine
- Maximum availability

Westfalia Separator® **wewatch**® – in order to fulfill principal task



A GEA Westfalia Separator engineer can download the measurement history of the Westfalia Separator® **WatchMaster** system. The comprehensive analysis and documentation results in concrete action proposals.

- Complete analysis and evaluation of the measured results and detailed report on the condition of the machine
- Recommendations for further procedure (service, repair, measuring etc.)
- Balancing of the machines if necessary

Westfalia Separator® **WatchMaster plus** (based on Westfalia Separator® **WatchMaster**)

Additional features:

- Data connection of all machines and transfer to a central server
- Continuous measured data with detailed status and trend visualized on a monitor
- Machine analyses worldwide via Internet
- Access to all machine data e.g. speed, flow rate, operating hours, outlet pressure etc.



# Maritime Training Center

Skills training for your benefit

## Qualification is a key to success

The fact is that only specially trained personnel can absolutely reliably operate the modern separator installations on board of ships, with maximum efficiency and low maintenance and repair costs.

The Maritime Training Center of GEA Westfalia Separator in Hamburg provides modular training in different qualification stages directly at the manufacturer by product specialists from the certified workshop and the technical product support. E-learning courses are also available for some topics.

## Target group

The target group consists of all those persons assigned the task of safely and effectively operating the separator installations on board. They are naturally first and foremost the crews and the staff of the technical department. However, we also aim at target groups like the technical buyers from the shipping companies as well as design engineers and operating engineers from shipyards, large diesel engine manufacturers and many more besides.



We offer the following training courses in our Maritime Training Center in Hamburg:

## Competence level 1

Basic seminar "Design and function of a standard separator installation", theory

### Training objective

The participants are to be familiarized with the design and function of standard separator installations. Simple malfunctions must be able to be identified and eliminated. The participants are put in a position to safely operate the installation and carry out simple maintenance work.

## Competence level 2

Advanced seminar "Design, function, operation and maintenance of separator installations", theory and practice

### Training objective

The participants are familiarized with the design, function, operation and maintenance of separator installations (including the bowl). Potential malfunctions will be able to be identified and eliminated by the participants on their own and faults avoided. At request, training courses will be held for Westfalia Separator® **BilgeMaster**, Westfalia Separator® **SludgeMaster**, Westfalia Separator® **SeaWaterDistiller** and Westfalia Separator® **ViscoBoosterUnits**.

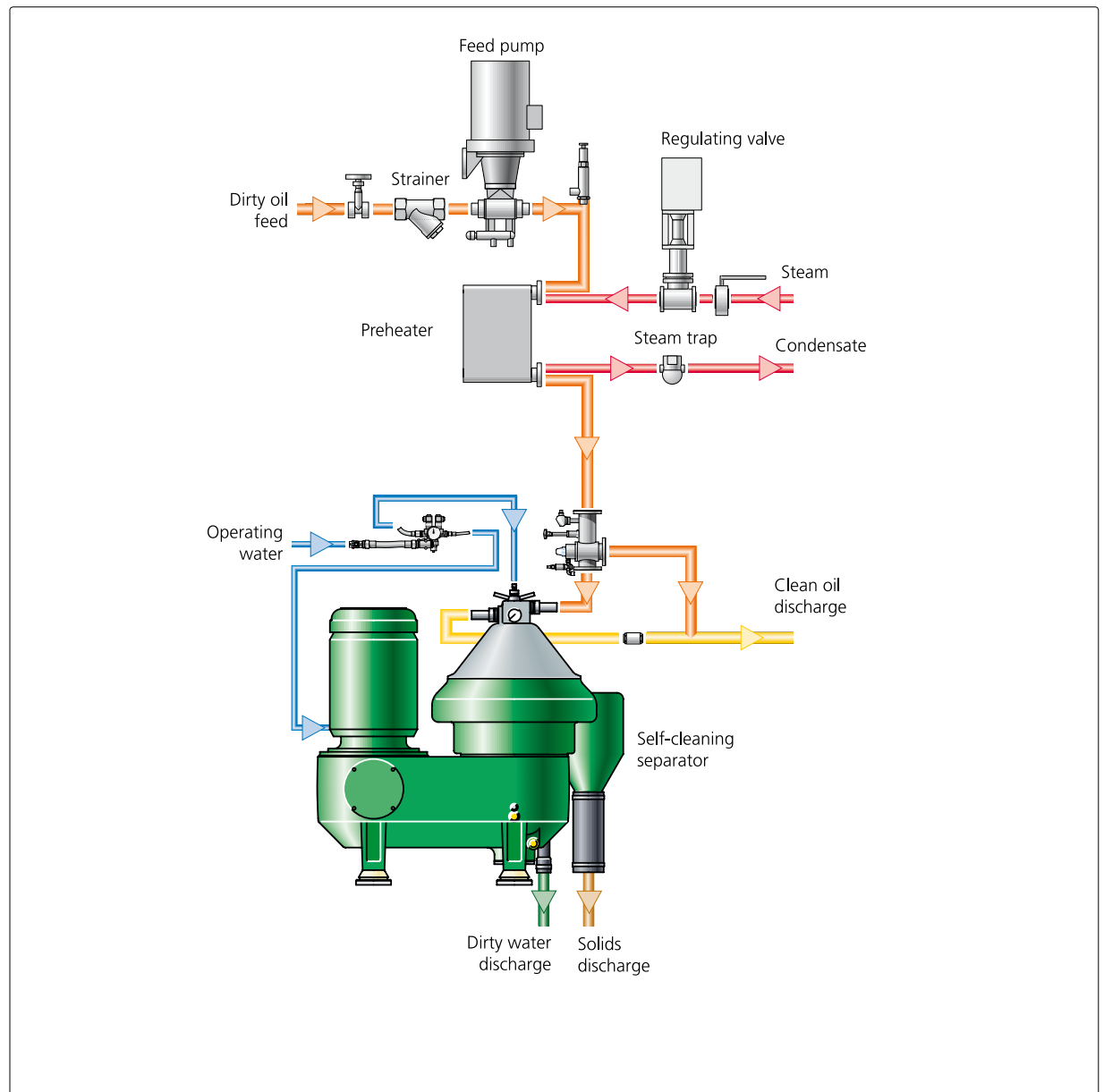
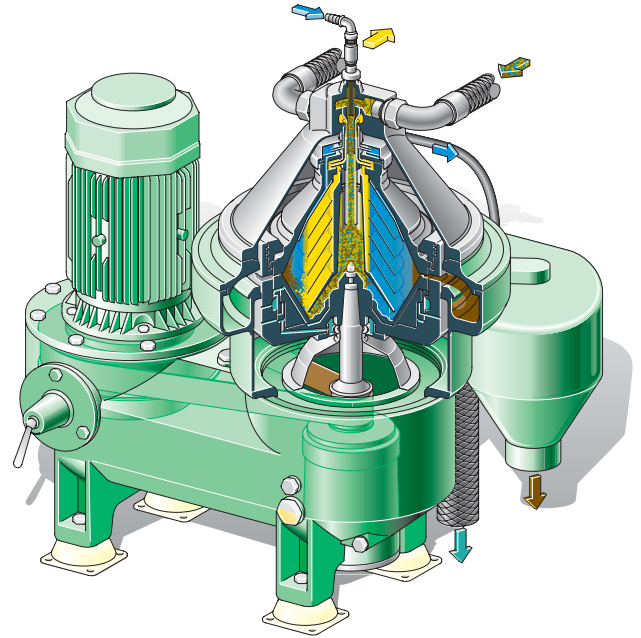


## Project-based training

Project-based individual seminar “Design, function, operation and maintenance of separator installations”, theory and practice

## Training objective

The participant is to learn the design, function, operation and maintenance of “his” separator installations in this tailor-made, project-oriented training course (also: Westfalia Separator® **BilgeMaster**, Westfalia Separator® **SludgeMaster**, Westfalia Separator® **SeaWaterDistiller**“ and Westfalia Separator® **Visco-BoosterUnit** etc.) including accessories, auxiliary units and supervisory equipment. Potential malfunctions will be able to be identified and eliminated by the participants on their own and faults avoided.





## Service Agreements

High machine availability and budget control

Our customers expect high performance, low cost and maximum availability throughout the life cycle of their equipment. In different types of service agreements GEA Westfalia Separator are combining low operating costs with maximum machine availability.

With our service agreements we can offer extensive service, in terms of preventive and planned maintenance, modernizing, training for operating staff and upgrading of equipment including life cycle benefit calculation.

Customized maintenance agreements include numerous options which can be defined and specified within the framework of a budget.



There are many services which can be included in a service agreement.

- Supply of original spares
- Supervision inspection
- Support by service advisor
- Staff training
- Functional test
- Condition monitoring
- Service documentation update
- 24/7 Service helpdesk
- Maintenance planning
- Spare parts stock planning
- 24/7 availability of spare parts
- 24/7 availability of service engineers
- 24/7 availability of workshop facilities
- Fixed rate according to service rendered
- Fixed rate for labour, travel and other expenses
- Fixed price for wear parts
- Fixed price for other spare parts
- Fixed rate for repairs
- Special purchase conditions
- Availability of exchange parts



## Your Benefit at a Glance

Service	What we offer you	Your benefit
Service agreements	<ul style="list-style-type: none"> <li>■ A choice of defined service agreements</li> <li>■ Individual service packages trimmed to your requirement</li> <li>■ First-class support and on-site service</li> <li>■ Exclusively genuine parts</li> <li>■ Training your staff with the latest new information and knowledge</li> <li>■ Planning of your maintenance schedule</li> <li>■ Planning of your spare part stock</li> </ul>	<ul style="list-style-type: none"> <li>■ Optimum machine availability</li> <li>■ Optimum performance</li> <li>■ Budget security</li> <li>■ Plant safety</li> <li>■ Preventive service</li> <li>■ Scheduled maintenance</li> </ul>

- Beverage Technology
- Dairy Technology
- Renewable Resources
- Chemical/Pharmaceutical Technology
- Marine
- Energy
- Oil & Gas
- Environmental Technology
- Engineering
- Second Hand Machinery
- Original Manufacturer Service

The information contained in this brochure merely serves as a non-binding description of our products and is without guarantee.

Binding information, in particular relating to capacity data and suitability for specific applications, can only be provided within the framework of concrete inquiries.

Westfalia®, Westfalia Separator® and **wewatch**® are registered trademarks of GEA Westfalia Separator GmbH.

Printed on chlorine-free bleached paper  
[www.kabutz.de](http://www.kabutz.de)

9997-1732-000/0810 EN  
Printed in Germany  
Subject to modification



GEA Mechanical Equipment

**GEA Westfalia Separator**

Am Neuländer Gewerbepark 6 · 21079 Hamburg (Germany)  
Phone +49 4058 9650-0 · Fax +49 4058 9650-196  
[www.westfalia-separator.com](http://www.westfalia-separator.com)