



Separation Technology from GEA Westfalia Separator for Oilfield Applications

Protection of the environment

Mechanical Separation Technology Enables You to Progress

Separators and decanters are centrifuges with which liquid mixtures can be separated with simultaneous removal of the solids.

Separators are vertical bowl high speed centrifuges, up to 10,000 G, which are primarily applied for the clarification and separation of liquids with and without solids content. Max. particle size is 0.5 mm and a total solids content of 0.1 - 3 percent can be separated. The throughput capacities of separators range from 50 to 250,000 l/h; a comfortable spectrum which accommodates the units for all process steps of separation technology.

When the solids content in the suspension to be processed is too high, up to 60 percent, it's time to call in the decanters. They are often placed upstream of a centrifuge and achieve high clarification efficiencies and maximum dewatering. They are also employed for the separation of liquids with simultaneous removal of the solids. The essential preconditions here are a high bowl speed, up to 4000 G, a powerful drive for the scroll and a scroll speed that is automatically adapted to the solids concentration in the feeds.



Available separator and decanter features

- High separation efficiency
- No impact from ship / platform movement
- Achieve down to 5 ppm oil in water
- IMO MEPC.107(49) approved
- Reduced need of chemicals
- Gastight design available
- Self-cleaning or manual centrifuges
- Nozzle centrifuges
- Ex-Zone 1 & 2
- ATEX approved
- Compact and robust design
- Plug and play system

Perfection Counts on Oilfields

Demand and requirements applicable for processing rigs and FPSOs for the oil industry are increasing. Operating reliability, weight and space requirements are major parameters. GEA Westfalia Separator supplies plug and play processing systems which comply with even the most stringent environmental requirements and feature the latest weight and space saving designs.

They handle continuous liquid-liquid-solids separation in a wide range of applications and a wide range of capacities. The centrifuges are specifically designed to cope with the needs and circumstances on site, with permanent reduction of costs.

They are used in the following applications:

Upstream			Downstream
On- and offshore installations Oil & gas production			Oil refineries Gas treatment plants Tank terminals
Drilling	Production	Utilities	
<ul style="list-style-type: none"> ■ Brine ■ Drain water ■ Drilling mud ■ Slop water ■ Solids control ■ Tank cleaning 	<ul style="list-style-type: none"> ■ Crude oil ■ Drain water ■ Produced water 	<ul style="list-style-type: none"> ■ Bilgewater ■ Fuel oil ■ Hydraulic oil ■ Lube oil 	<ul style="list-style-type: none"> ■ Cat fines ■ MEG ■ Slop oil ■ Slop water ■ Tank bottoms

Always at Your Side

GEA Westfalia Separator is regarded worldwide as a leader in the field of centrifugal separation technology. Centrifugal separators have been in the company's production schedule since its founding in 1893.

GEA Westfalia Separator is a market leader in the field of centrifugal treatment of mineral oils and their derivatives. Modern production facilities at the headquarters in Oelde, in Niederrhein/Germany and Château-Thierry/France guarantee a high standard of workmanship.

The first centrifuge was applied for the purification and dewatering of mineral oil back in 1907. Today, ten thousands of centrifuges take care of the reliable and economical treatment of fuel and lube oils as well as oily and watery sludges.

The sales programme comprises centrifugal separators, decanters and the associated system technology for applications on board of ships, in power plants, for crude oil recovery and in industry. With the further development of tried and tested solutions as well as the new development of innovative technology,

solutions are found for the centrifugal duties in the marine, oilfield, and energy sectors.

Optimum service with warranty

No matter what happens – GEA Westfalia Separator. The service team will help you locally, quickly, reliably and naturally with original spare parts from GEA Westfalia Separator. Further, GEA Westfalia Separator offers a bowl exchange service with warranty and individual service contracts with corresponding guarantees.

At your service worldwide

The Customer Support Center in Hamburg and over 50 service partners over the world ensure the best support worldwide. Quality, reliability and safety are top priorities.



We live our values.

Excellence • Passion • Integrity • Responsibility • GEA-versity

GEA Group is a global engineering company with multi-billion euro sales and operations in more than 50 countries. Founded in 1881, the company is one of the largest providers of innovative equipment and process technology. GEA Group is listed in the STOXX(®) Europe 600 Index.

GEA Mechanical Equipment

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