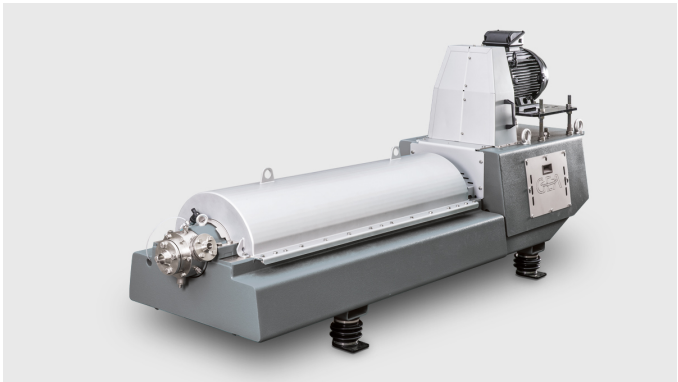
ЦЕНТРИФУГИ И ОБОРУДОВАНИЕ РАЗДЕЛЕНИЯ

ДЕКАНТОРЫ

Технические характеристики



Overview

The solid-wall bowl has a cylindrical section for efficient clarification of the liquid and a conical section for drying the solids. Due to the centrifugal forces, the solids are flung onto the bowl wall and are transported by the scroll to the solids discharge. There are several possibilities to discharge the clarified and separated heavy and light liquid phases. Both phases can either be discharged freely by gravity or one liquid phase is discharged under pressure via centripetal pump while the other liquid phase flows off under gravity. The decanters are completely CIP-compatible.

The housing consists of a frame with supporting feet, protective plates and catchers for the discharged phases. The machines are driven by a frequency-controlled 3-phase AC motor via V-belts.There are different drive concepts available which permit automatic torque measurement and differential speed control. All product contacting parts are made of stainless steel. FDA approved materials are availablefor the seals.

Features & Benefits
summationdrive for always full torque, thus always full performance
Optimally set differential speed for always best separation results
Optimized power flow, no energy recirculation thus minimum transmission losses
External gears for reliable operation especially for hot applications
Oil lubrication of all bearings for exacting demands
High-quality wear protection
Use of high quality stainless steels

Clarifying Decanter drymaster

Overview

This flat-pond decanter centrifuge has been customized for clear clarification and dewatering in chemical and mineral processing applications. The solid-wall bowl has a cylindrical section for efficient clarification of the liquid and a conical section for drying the solids. Due to the centrifugal forces, the solids are flung onto the inner bowl shell and are transported by the scroll to the solids discharge. On decanter type dryMaster series, the clarified liquid is discharged freely into a liquid catcher and flows off under gravity. CIP-compatability of the decanter can be assured. The housing consists of a frame with supporting feet, protective plates and catchers for the discharged phases. All product-contacting parts are made of stainless steel.

GEA summationdrive
Drive with intelligent kinematics for high differential speeds and torques which enables processing of high solid capacities

Full torque up to the maximum differential speed; this allows processing of high solid capacities
High efficiency of the drive as the variable speed motor feeds in energy instead of braking
Automatic adaptation of the differential speed by means of frequency-controlled motor
Good accessibility to all drive parts
Changing the differential speed without replacing the complete gear

Features & Benefits
Options according to model:

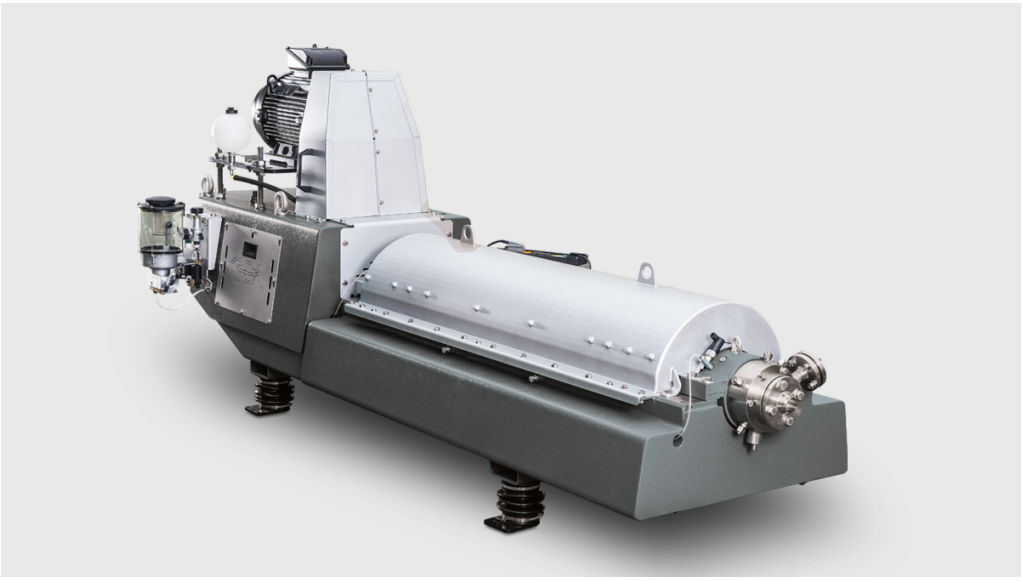
All product-contacting parts are made of high-alloyed duplex steels, super duplex steels or Hastelloy C276. Depending on the application, the gaskets are made of NBR, FKM, FFKM, EPDM
Chemical cleaning after separation possible
Explosion-protected centrifuges available:
· Gas-tight decanters from GEA comply with the test criteria of the strict European ATEX standard o other EX regulations
· The oxygen atmosphere in the separator is displaced with inert gas and the excess pressure i maintained during operation to assure inert gas blanketing.
Available for temperatures up to 130 °C.

Decanter pharmMaster for Extraction Products

This decanter has been designed for extraction products.

Decanters for Extraction
Decanters are a very efficient means of carrying out solid-liquid extraction with a high solids content. Before entering the decanter, the extraction product, which has previously been comminuted, broken down or ground down, is mixed intensively with the extraction agent in a separate mixer. The inlet through which the suspension flows into the decanter is arranged axially in relation to the rotating bowl. The solid-wall bowl has a cylindrical section for efficient clarification of the liquid and a conical section for dewatering the solids. The scroll, which rotates with a slight differential speed relative to the bowl, conveys the solids (extraction residue) to the solids discharge at the conical end of the bowl. The extract is conveyed to the cylindrical end of the bowl where it is discharged via a centripetal pump.

Explosion-Protected Centrifuges
Gas-tight decanters from GEA comply with the test criteria of the strict European ATEX standard.
The oxygen atmosphere in the decanter is displaced with inert gas and the excess pressure is maintained during operation to assure inert gas blanketing.
Features & Benefits
GEA summation-drive with intelligent kinematics for high differential speeds and torques which enables processing of high solid capacities. High efficiency of the drive since the variable speed motor feeds in energy and does not brake
All product-contacting parts are made of high-alloyed stainless steels
Depending on the application, the gaskets are made of NBR, FKM or EPDM
Chemical cleaning after separation



DECANTER PHARMMASTER FOR EXTRACTION PRODUCTS

Decanters for Extraction
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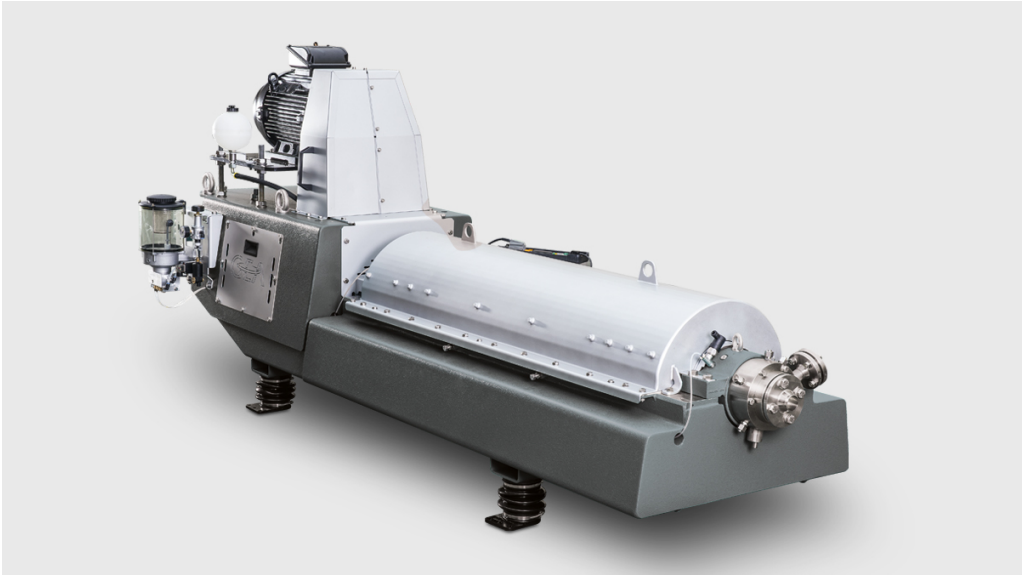


GEA MARINE SEPARATOR PRIME SETS NEW STANDARDS IN SEPARATION TECHNOLOGY WITH HIGHER EFFICIENCY

Based on the CWA 15375 standard, the GEA marine Separator sets new standards in separation efficiency, offers the best certified flow rates (CFR) on the market and is tailored exactly to the dimensions of your machines. With the current generation of centrifuges with integrated direct drive, ship operators are heading directly into a future that will be even more economical, requires less maintenance and saves space on board thanks to the GEA marine Separator prime.

GEA separators for economical operation of marine engines
GEA centrifugal separators specialize in fuel and lube oil treatment, bilge water treatment and sludge removal in marine applications. With their high accelerating power, the separators ensure reliable performance and economical operation of marine engines and increase service life even under extreme conditions.

Direct drive now leads into the future
The GEA marine Separator with integrated direct drive represents the latest generation of separators with its characteristics of saving energy and reducing the carbon footprint. The market has already accepted the innovation very well. With the direct drive, the GEA marine Separator does not require a conventional separate motor, belt or clutch. Only after 16,000 operating hours or after two years the drive unit is replaced by a GEA OEM certified exchange unit with full new warranty.

One of the biggest advantages for all ship operators is that, for the first time, the spindle and motor are available as a compact plug-and-play exchange drive unit - making maintenance of the separator very easy. Thanks to the efficiency of the drive and the absence of belts, almost all the energy is transferred directly to the bowl. This saves up to 30,000 kWh per year and ensures sustainability.

The future of marine is digital
With the GEA marine Upgrade Kit, GEA automates the functionality of its separators for marine applications. For GEA customers, this means optimized operation of their plants, an improved carbon footprint and realized cost savings. The Upgrade Kit is available as a retrofit solution for OSC, OSD and OSE separators.
For new vessels, the GEA marine Separator prime is the right choice. The Upgrade Kit is already included in the scope of the prime line.

The GEA Wine Decanter range

We offer the GEA Wine Decanter as the standard machine for wineries, pre-mounted on a skid frame with all required connection and control modules – so it is ready to use. For greater or smaller volume requirements, a great range of the GEA Wine Decanter machine sizes is available.

All GEA Wine Decanters have been improved for efficiency, compared to previous model generations. For longer service times, reduced maintenance effort and improved separation results, GEA Wine Decanters feature the innovative GEA **summation**drive concept, which offers a higher bowl speed as well as higher flexibility in speed difference and easier servicing.

All machines are perfectly suited to the gentle handling of wine products, thanks to the sensitive, deep pond, centripetal pump, gentle distributor and rotating feed pipe. Patented GEA improvements over standard decanter centrifuge solutions include the hydrohermetic sealing system to prevent oxygen pick-up and in-built jets for adding fining agents.

FLOW RATES FOR DIFFERENT WINEMAKING PROCESSES

GEA Wine Decanter Skid type	Juicing		Wine recovery from		
	Red grape [m³/h]	White grape [m³/h]	juice lees [m³/h]	flotation lees [m³/h]	wine lees [m³/h]
8000	30 – 32	25 – 28	12 – 14	6 – 7	4 – 5
7000	25 – 30	18 – 22	9 – 12	5 – 6	3 – 4
6000	18 – 22	12 – 15	6 – 8	3 – 4	2.5 – 3
5000	12 – 15	8 – 10	4 – 5	2 – 3	1.5 – 2.5
4000	8 – 10	5 – 6	3 – 4	1 – 2	1 – 1.5
3000	5 – 6	3 – 4	2 – 3	0.5 – 1	0.5 – 1

2-PHASE SEPARATING DECANTERS FOR OIL RECOVERY

This special decanter was developed by GEA in the early 1990s. With this system up to 90 percent of dilution water can be saved which correspondingly also reduces the waste water. In addition to the ecological and economical issues, the 2-phase system is also impressive from an economic perspective of the recovered olive oil. It ensures the best possible oil quality by retaining the highest possible polyphenol content. The taste is intense, because many flavors and ingredients are washed out to a much lesser extent due to the addition of less water. At the same time, these oils have an exceptionally long shelf life.

GEA has also introduced this separation method to the palm oil industry as the so-called ecod decanter. Also for palm oil, this system combines extremely short process times and significant environmental compatibility with excellent product quality as well as a significant reduction in oil losses and fresh water requirement. Vertical clarifier and sludge tank are not necessary. In this way, the process time is considerably reduced, and the energy consumption is also lower. The amount of effluent is reduced to less than 25 % in relation to the volume of processed fruits. This is nearly half the quantity created in the conventional process.

In conventional processes, huge ponds are necessary in order to handle the effluent which is very organically contaminated. These ponds release large quantities of the greenhouse gas methane. Our ecod system considerably reduces the methane emission because the ponds are much smaller.

Features & Benefits – For olive oil recovery
No addition of dilution water necessary in most cases
The olive oil obtained in the 2-phase process contains all natural constituents of oil (polyphenols), giving the oil a more intense taste
Solid / water mixture can be processed relatively easily (e. g. for pit separation, water separation and olive oil recovery
Features & benefits – For palm oil recovery
Extremely short process time
Virtually no dilution water
Low energy consumption
No vertical clarifier and sludge tanks
Much smaller ponds – considerably reduced methane emission
Higher product yield
Palm oil in premium quality
Recycling of nutrients
Increased FFB production by organic fertilizer

GEA MANURE DECANTER

Customizable GEA manure Decanter prime
Dewatering environmental Decanter prime
Can be flexibly configured for highly complex preparation processes with individual requirements and large capacities
Excellent performance
Lowest power consumption (e.g. 0.7 kWh/m3/h)
GEA summationdrive® for automatic torque measurement and differential speed adjustment

Standardized GEA manure Decanter pro
GEA manure Decanter pro
Standardized machine configuration for plug & play integration in processes with little need for adjustments

High performance, economical investment and lifecycle costs

Low power consumption (e.g. 0.9 kWh/m3/h)

Inline secondary mo

Features and benefits GEA manure Decanter
Highest separation efficiency of N (40%) and P2O5 (70%) by the use of g-forces
No need for chemicals
Closed material flows
No filtration system, therefore no blockages
Lowest space requirement (m3/h per m2)
Easy installation and operation
PLC controlled and therefore a completely independent operating system
Adjustable bowl speed and automatic control of differential via VFD
Ability to build on mobile unit, complete with pumps and other equipment

GEA DECANTER FOR PLANT-BASED BEVERAGES

GEA Decanter – indispensable for plant-based beverage production
Think plant-based: A decanter centrifuge is the indispensable tool for beverage producers to extract liquid product from mashed and watered cereal grains, ensuring high yield, optimum hygienic purity and premium taste. The slurry is fed into the GEA CF Decanter Centrifuge for the central step: to separate the undesired fibers and keep the desired starch and β-glucans in the product. This decanter has been designed for the food and beverage industry. The machine is completely CIP-able in special hygienic design.

The clarified liquid is discharged under pressure by a centripetal pump. The solids are discharged by gravity via a funnel. The product connections are designed according to DIN 118564. The machine is driven by a frequency-controlled 3-phase AC motor via V-belts. GEA summationdrive with intelligent kinematics for high differential speeds and torques which enables processing of high solid capacities. Full torque up to the maximum differential speed; this allows processing high solid capacities. High efficiency of the drive since the variable speed motor feeds in energy and does not brake. Automatic adaptation of the differential speed by means of frequency-controlled motor. All product-contacting parts are made of stainless steel. FDA-approved materials are available for the seals.

Features & Advantages:
Maximum yield from a highly efficient extraction process
Multi-purpose flexibility
Perfect for continuous processing and high solid contents
Full safety and purity for sensitive product
Optimized CIP program
Available in a plug & play skid design

3-PHASE SEPARATING DECANTERS FOR OIL & GAS

Slop oil, which may consist of residues and upstream products from refineries, which do not meet the specifications with regard to water and salt content as well as oils from leakages for instance. In many oil-producing countries, for instance in South America, in the Middle East or in Russia, the common practice for many decades has been to pump these contaminated oils into lagoons or intermediate storage; these lagoons are each capable of storing up to one million barrels of oil. The lagoons frequently hold an undefined mixture of oil, water and sediments. The water content can vary between 10 and 70 percent, as can the oil content, and the solids content can range between 3 and 15 percent. Everything is conceivable, from a relatively aqueous low-viscosity mixture right through to substances which are similar to tar with a viscosity of more than 1000 Centistokes.

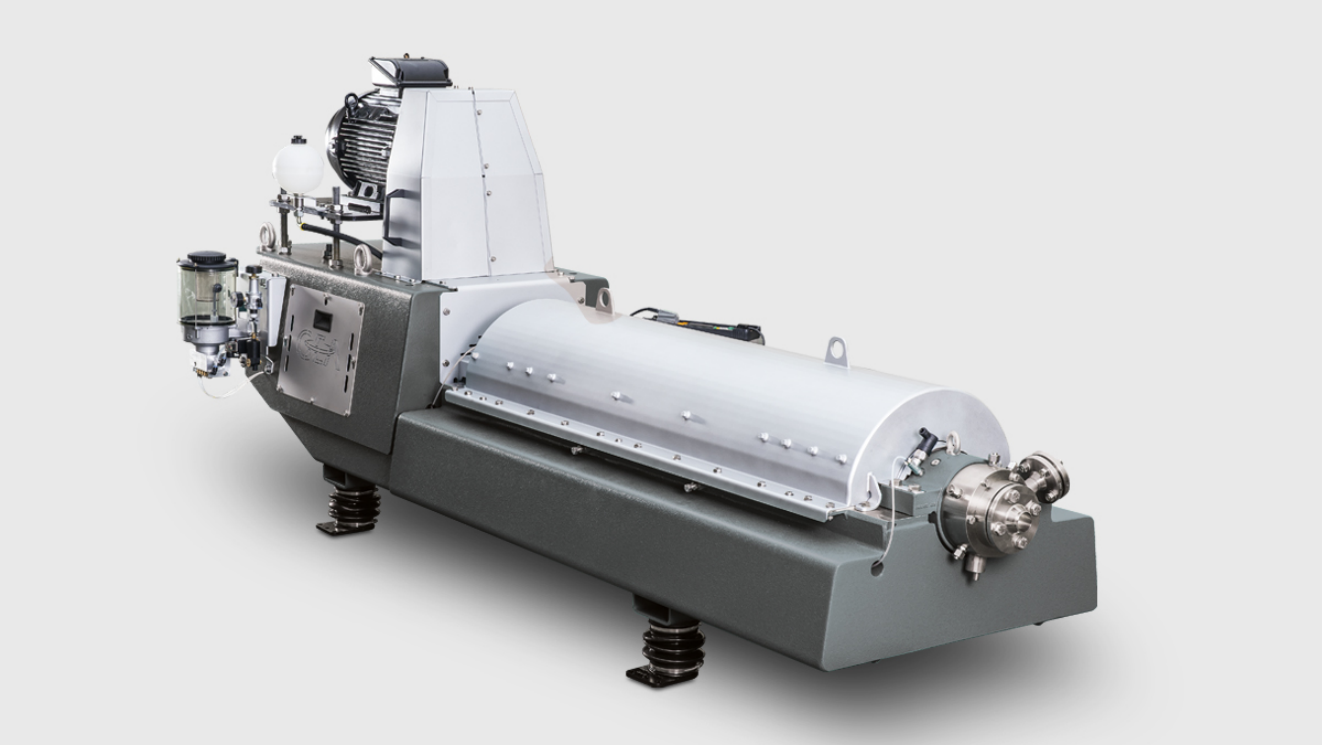
Our available decanters for this application have a low bowl angle for optimal thickening and a hydraulic scroll drive for maximum power. We have also the patented bowl design for handling of brine with a specific gravity of up to 1.5 sg.

GEA tackles this challenge with a successful combination consisting of mechanical separation technology, minimum use of chemical agents and the right process. Our 3-phase decanters of the new ecoforce series combine high performance with low energy consumption. Together with the decanter featuring the super pond depth design, the integrated summationdrive ensures that energy consumption has been reduced by a further 30 percent. With the summationdrive, a primary drive drives the bowl and a secondary drive drives the scroll, and the performance of both motors is combined. An intelligent kinematic solution combines the capacities of the two motors (“summation” arrangement), and then forwards them precisely to the bowl and scroll. Unnecessary conversion losses, such as those encountered with other solutions featuring back drive, are not encountered with the summationdrive. A further major aspect of the new generation is the fully automatic facility for adjusting the differential speed in a broad range as well as the low space requirement. With its high speed and high g-force as well as the super deep pond design, our decanters ensure optimum performance with a minimum space requirement.

Features & Benefits
Super Deep pond design for enhanced performance by optimized process configuration
Tungsten carbide tiles or hard faced scroll for longer operational life
Stainless steel wetted parts and hood
Welded rigid frame
Pillow block design for easy and fast service
GEA summationdrive for minimum energy consumption and highest flexibility due to a broad differential speed range

3-PHASE SEPARATING DECANTER FOR INDUSTRIAL FLUIDS

Features & Benefits
All product-contacting parts are made of stainless steel
Shallow pond design
Minimal power consumption
Highest g-force for maximum efficiency
Innovative adjustable scroll drive with the following features:
- GEA summationdrive with intelligent kinematics for high differential speeds and torques
- High efficiency of the drive since the variable speed motor feeds in energy and does not brake
- Very sensitive regulation of the torque, even with fluctuating feed conditions
- Automatic adjustment of the differential speed due to the frequency controlled variable speed motor
The scroll can be operated also with stationary bowl
Gentle feed geometry for optimum flocculation and low wear
Low space requirement
Good accessibility to all components
Easy to operate and maintain
Explosion-proof design available
High torque gearbox
Liquid discharge: free gravity discharge or under pressure

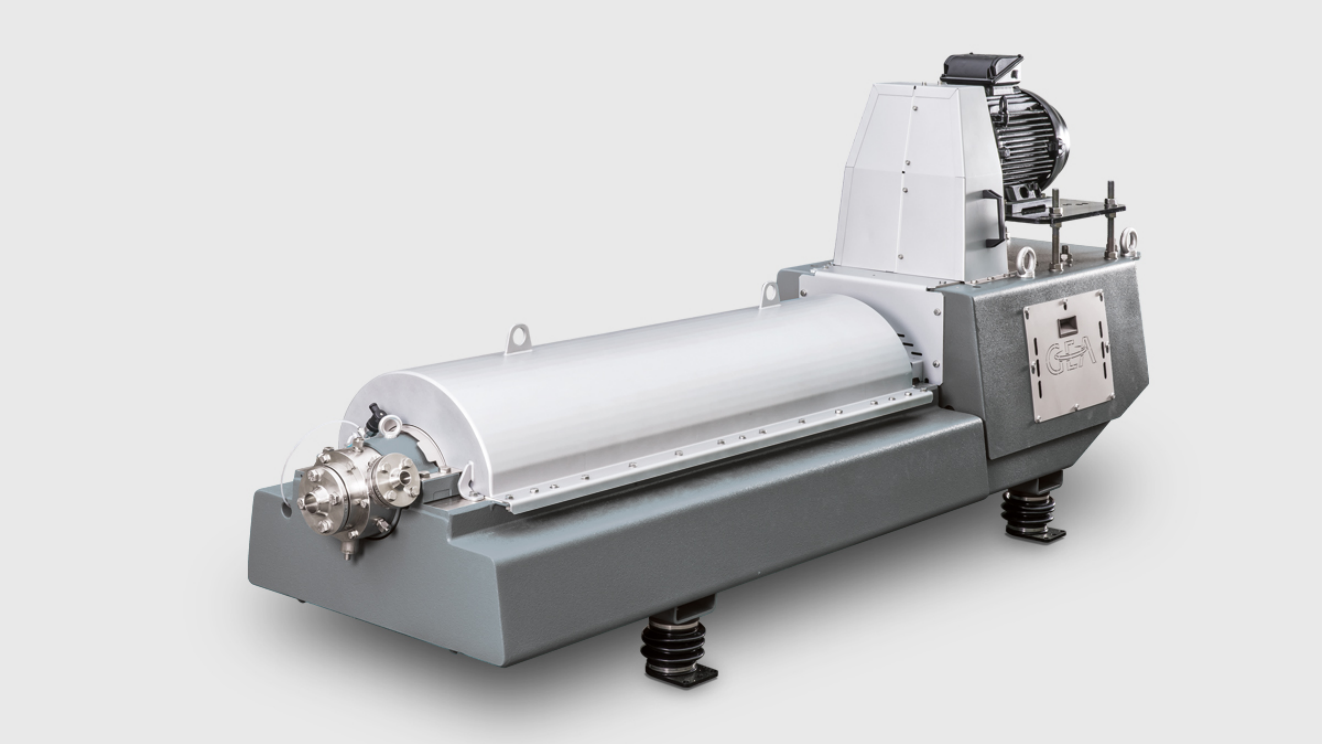


3-PHASE SEPARATING DECANTERS FOR OIL RECOVERY

3-Phase decanters separate both, the olive pulp or the palm oil sludge into oil, water and solids.

This 3-Phase separation requires a comparably high amount of dilution water. In olive oil production GEA also offers 3-Phase decanters for treating the waste water from the olive oil recovery process. They reduce the volume of waste water and its COD value and the oil mill gains up to an additional 0.5 percent of oil relative to the quantity of olives processed. When it comes to the recovery of palm oil our 3-Phase decanters are used in the conventional as well as the crude oil process setups.

Features & Benefits
High speeds for maximum separation precision and even further improved throughput
Optimally set differential speed at all times
Full torque at all times, thus full performance at all times
Long service life and maximum availability
Easy operation and monitoring
High efficiency – rapid amortisation
Maximum product yield
GEA cetec technology for 1 – 2 percent additional yield in olive oil recovery

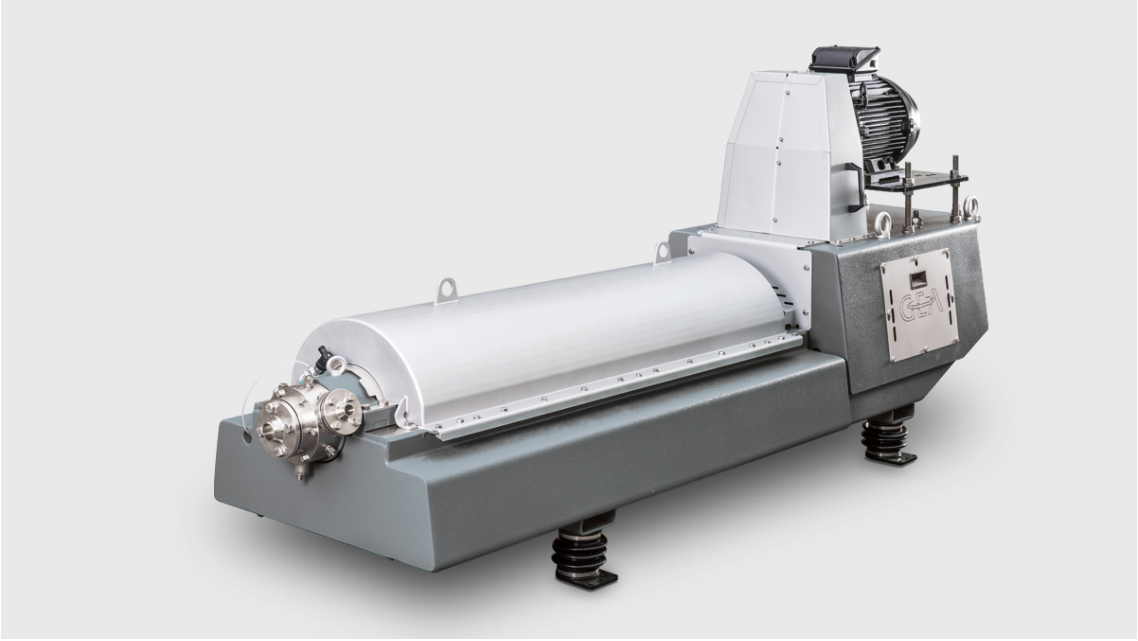


3-PHASE SEPARATING DECANTERS FOR ANIMAL AND FISH BY-PRODUCTS

Whether fish or meat: our new GEA ecoforce decanters feature optimum design to cope with the frequently difficult working conditions in the two sectors.

With this new decanter platform GEA has now combined the demands for high mechanical and sanitary reliability as well as the wish for maximum flexibility for investment and practical operation. The result: GEA offers an entire decanter family in a uniform design concept from the smallest right through to the largest decanter, ranging from the drive to the identical pedestal bearing principle. The advantage for the user, operating personnel and spare part maintenance: uniformity across the board. Nonetheless, due to its modular principle every decanter can be customized right down to the smallest detail: Low or high torque, flat or steep conical angle, low or high differential speed, hot or normal operation, oil or grease lubrication, special alloys for corrosion and erosion resistance or hygienic design with rotating feed pipes, spray nozzles and food grade materials.

Features & Benefits
External gears for high gear protection
Oil lubrication of all bearings for exacting demands
High-quality protection against wear
High degree of dynamic stability
Use of high-quality stainless steels
CIP capability, spray nozzles and sanitary design



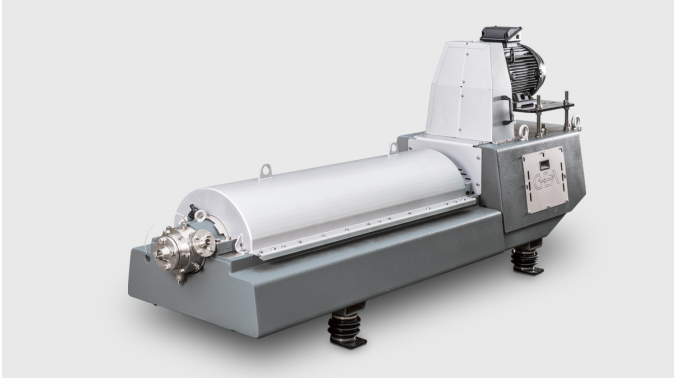
CLARIFYING DECANTERS FOR CHEESE CURD, CASEIN AND LACTOSE

The decanters ensure the efficient production of processed cheese base, raw goods for curd cheese bars or bakers cheese. The decanters are also ideally suited for reprocessing cheese fines and for lactose and casein production thanks to their design, which has been optimized for the production of delicate foods.

Outstanding efficiency
The latest GEA decanters, the ecoforce series, impress with top performance, which is achieved with an adapted bowl speed, combined with a low energy consumption. The high-torque GEA summationdrive reliably provides the optimal differential speed, which guarantees the best possible operation. Only the power that is actually required is supplied to the motors, which means that the drive works extremely energy efficiently.

Simple maintenance
GEA gearboxes for GEA decanters: The gearboxes for the ecoforce series are manufactured in our in-house production facilities because of the need to adapt them optimally to the respective decanter design configuration. In total, seven gearbox sizes are available for integration in the series along with three gearbox types classified by decanter size and model. The decanters have been consistently designed for continuous operation and maximum availability. The gearbox has therefore been taken out of the product space and placed outside. This makes it not only less easily affected by product temperature but also very quickly accessible for the service technician. This applies for all areas of the decanter that require regular maintenance, so the machine is quickly ready for use again.

Decanter series in hygienic design
The GEA ecoforce decanters can be offered with different levels of hygienic design to ensure an exceptionally high product and process safety for microbially sensitive products. This special design guarantees the user processing and production of foodstuffs at the highest level, in a way that is hygienic and reproducible and which guarantees the consumer comprehensive process and thus product safety through complete CIP-ability and reproducible cleaning.

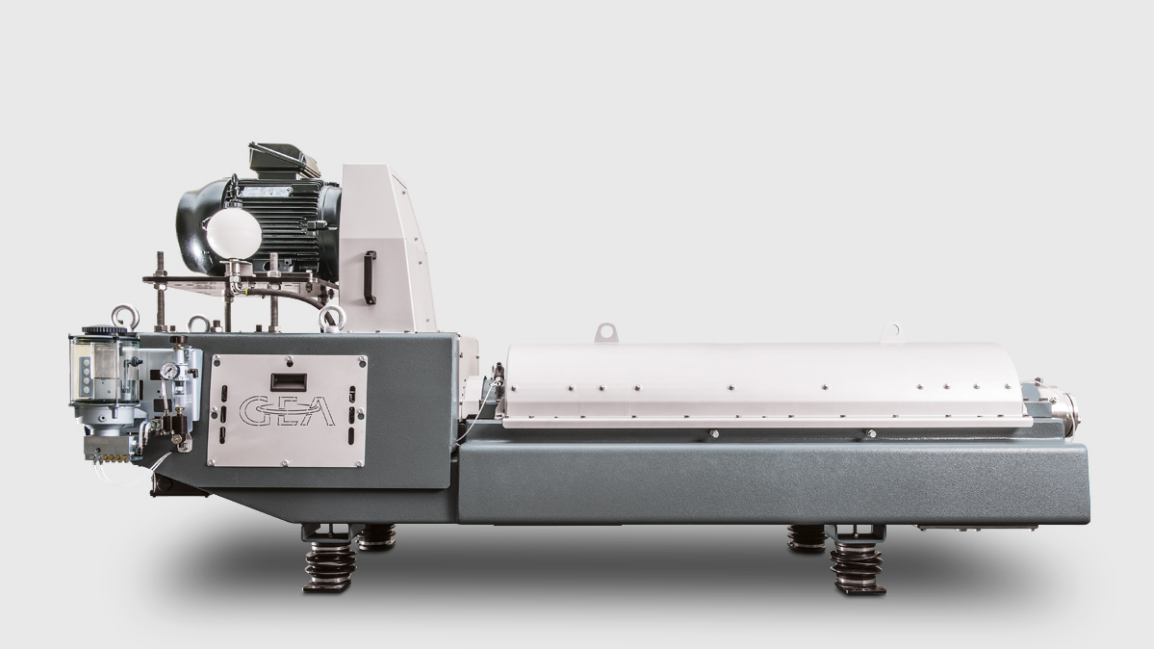


CLARIFYING DECANTERS FOR EDIBLE OIL REFINING

The decanter separates the solids from the oil in fully continuous operation. Solids are discharged continuously which results in a continuous solids recycling into the press.

Using a decanter combines foots removal with partial degumming, in case of chemical refining the result of this combination of two process steps is often sufficient. On top, GEA decanters are easy to operate and automate and they need only little space. With their robust design our decanters can handle oil temperatures of up to 105° C. The external gears which segregates product from drive room, oil lubrication of all bearings, special materials and high quality wear make our GEA ecoforce decanters especially suited for hot applications and continuous heavy duty.

Features & Benefits
Continuous solids separation
Low cost of automation
Lower space requirement
Simultaneous degumming
Rugged and robust design
External gear concept of GEA ecoforce decanters
Oil lubrication of all bearings



CLARIFYING DECANTERS FOR INDUSTRIAL FLUIDS

Features & Benefits
All product-contacting parts are made of stainless steel
Shallow pond design
Minimal power consumption
Highest g-force for maximum efficiency
Innovative adjustable scroll drive with the following features:
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The scroll can be operated also with stationary bowl
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Low space requirement
Good accessibility to all components
Easy to operate and maintain
Explosion-proof design available
High torque gearbox
Liquid discharge: free gravity discharge or under pressure

CLARIFYING DECANTERS FOR ANIMAL AND FISH BY-PRODUCTS

Whether fish or meat: our new GEA ecoforce decanters feature optimum design to cope with the frequently difficult working conditions in the two sectors.

Processes in the fish and animal by-products industry usually impose particularly stringent requirements on the hygienic design as well as the robustness and corrosion-resistance of the materials. These tasks have been solved by the design features of GEA ecoforce generation; high-performance stainless steels, special chute designs for ease of cleaning, additional spray nozzles at critical points as well as high quality wear protection have been installed, and the frame construction has been provided with maximum dynamic stability. The gear is also situated outside the production area, so that the gear is not unnecessarily heated by the product. GEA offers oil lubrication for the bowl bearings; this further boosts the reliability of the machine, and also reduces the amount of manual maintenance work compared with grease lubrication solutions. This stabilizes the entire system and it is also more attractive in terms of current operating costs.

Features & Benefits
External gears
Oil lubrication of all bearings for exacting demands
High-quality protection against wear
High degree of dynamic stability
Use of high-quality stainless steels
CIP capability, spray nozzles and sanitary design

CLARIFYING DECANTERS FOR FOOD INGREDIENTS

In the field of protein recovery, the decanters are used for extracting, concentrating, recovering and washing the protein. In algae processing our decanters concentrate and dewater biomass.

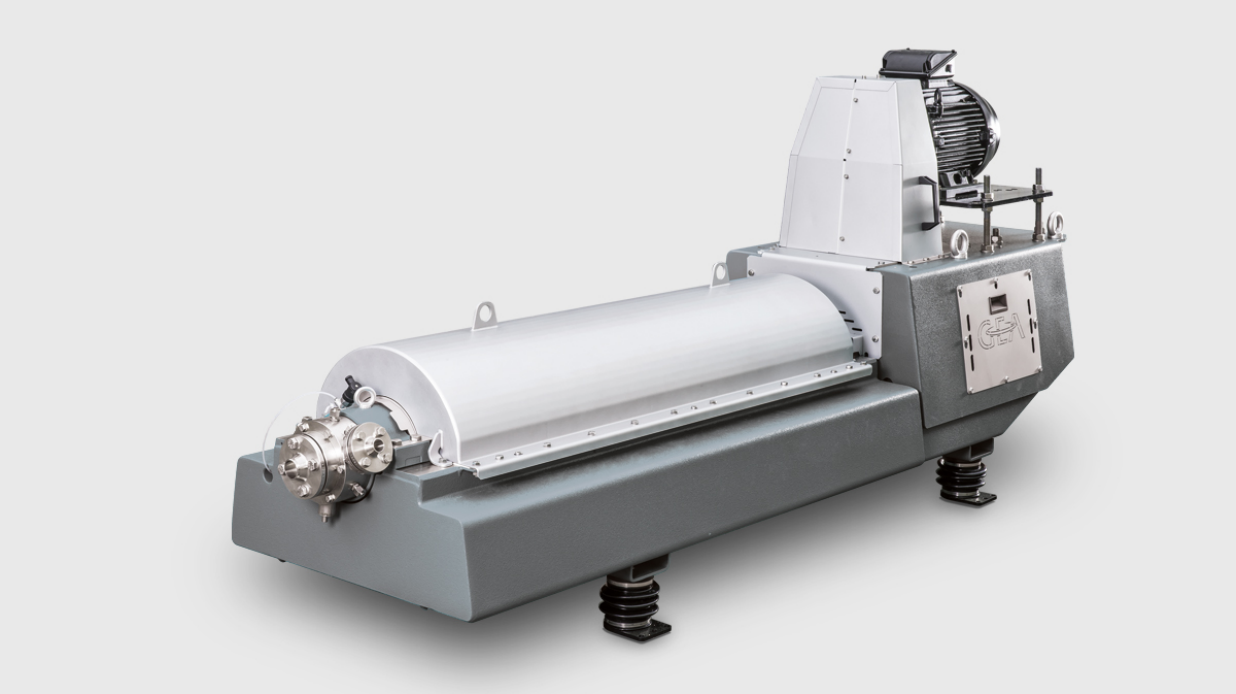
Features & Benefits
High differential speed range without pulley change for maximum process flexibility
Full torque at all times, thus full performance at all times
External gears: segregation of process and drive room
Separate lubrication of gear and main bearings avoids cross contamination and thus possible damages
GEA summationdrive with optimized power flow
Patented adjusting weir – GEA varipond®: The pond depth can be adjusted while the machine is running in order to improve separating efficiency automatically
Optimum pond depth for optimum dewatering and low energy consumption
Paring disk: Hydrohermetic operation to avoid protein losses and energy saving due to small diameter
Hygienic design to meet all food requirements

CLASSIFYING DECANTER FOR OIL & GAS

Special treatment is required for the heavy mineral barite (barium sulphate), which has a minimum specific density of 4.20 g/cm3. The comparatively expensive barite is added to the drilling mud on board in order to thicken the drilling mud. This rare and valuable mineral would have to be disposed of together with the dried drilling mud if it could not be separately precipitated. In order to recover the precious barite and recycle it back into the process GEA has developed a special classifying decanter. This special decanter removes only very heavy solids from the mud.

In order to recover the precious barite and recycle it back into the process GEA has developed a special classifying decanter. This special decanter removes only very heavy solids from the mud. Our GEA rigMaster CF series from the new ecoforce decanter generation is used for this application – with the inherent advantages such as high torque, maximum availability, high throughput capacities, excellent classifying results and low energy consumption.

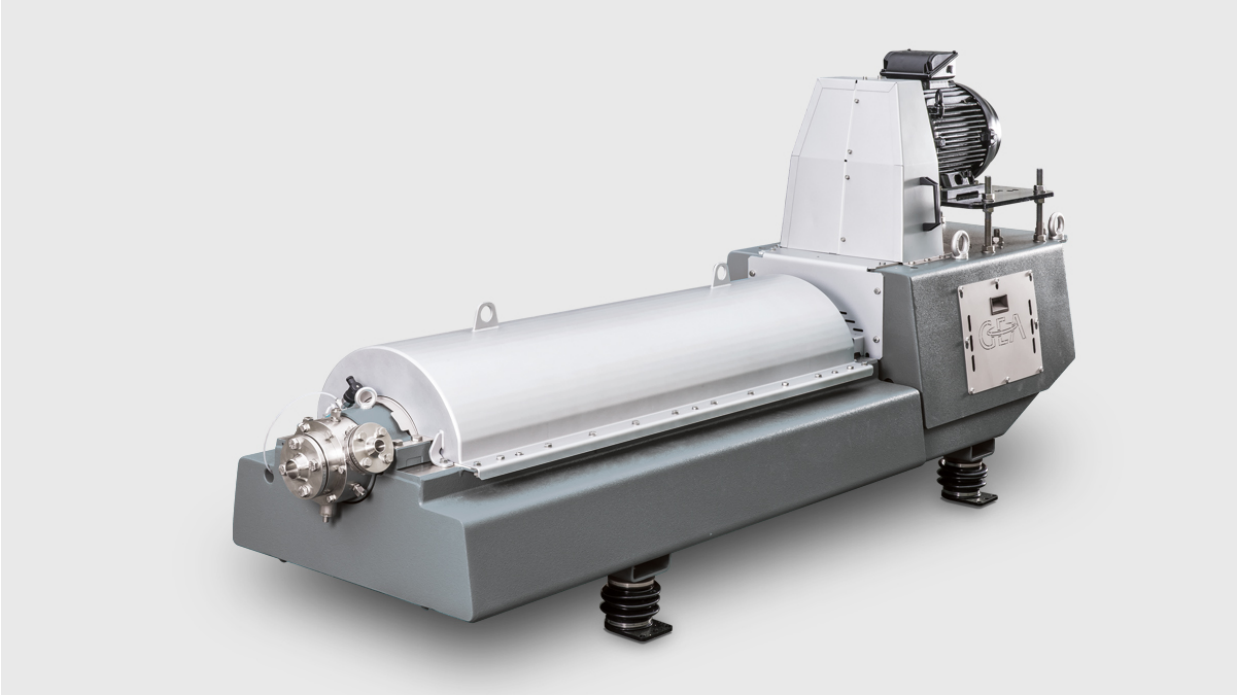
Features & Benefits
High quality wear protection
External gear system for maximum gear protection
Oil lubrication for all bearings for exacting demands
High quality stainless steel for all product-contacting parts
Gas-tight and explosion protected design for hazardous zones
High-torque GEA summationdrive for optimum differential speed at all times and minimum energy consumption



CLARIFYING DECANTERS FOR STARCH RECOVERY

The decanter centrifuges separate solid and liquid phases with the help of centrifugal force. The clarified liquid is discharged under pressure to avoid oxygen pick-up, while the solids are forced to the bowl wall and conveyed by the scroll to the solids outlet.

Features & Benefits
No unplanned downtime anymore due to Active Torque Control
Hygienic design for top cleanability of your decanter centrifuge
Minimize drier costs: automatic optimization of torque and differential speed for maximum dry matter independent of feed conditions
Automatic optimization of torque and differential speed for always maximum dry matter independent of feed conditions
Reliable and robust technology: high protection lubrication systems, external gears, high quality wear protection
Energy efficient operation: no conversion losses of the drive system

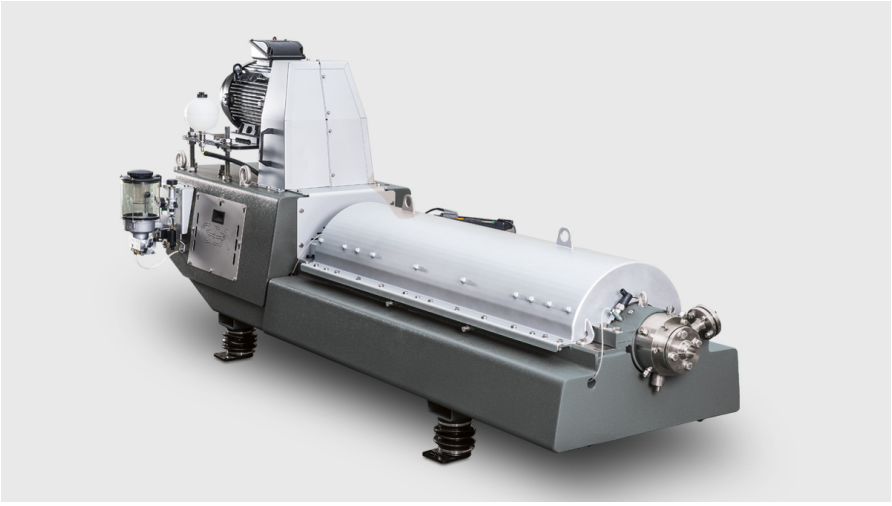


GEA DECANTER FOR PLANT-BASED BEVERAGES

GEA Decanter – indispensable for plant-based beverage production
Think plant-based: A decanter centrifuge is the indispensable tool for beverage producers to extract liquid product from mashed and watered cereal grains, ensuring high yield, optimum hygienic purity and premium taste. The slurry is fed into the GEA CF Decanter Centrifuge for the central step: to separate the undesired fibers and keep the desired starch and β-glucans in the product. This decanter has been designed for the food and beverage industry. The machine is completely CIP-able in special hygienic design.

The clarified liquid is discharged under pressure by a centripetal pump. The solids are discharged by gravity via a funnel. The product connections are designed according to DIN 118564. The machine is driven by a frequency-controlled 3-phase AC motor via V-belts. GEA summationdrive with intelligent kinematics for high differential speeds and torques which enables processing of high solid capacities. Full torque up to the maximum differential speed; this allows processing high solid capacities. High efficiency of the drive since the variable speed motor feeds in energy and does not brake. Automatic adaptation of the differential speed by means of frequency-controlled motor. All product-contacting parts are made of stainless steel. FDA-approved materials are available for the seals.

Features & Advantages:
Maximum yield from a highly efficient extraction process
Multi-purpose flexibility
Perfect for continuous processing and high solid contents
Full safety and purity for sensitive product
Optimized CIP program
Available in a plug & play skid design
Service products



CLASSIFYING DECANTER FOR OIL & GAS

Special treatment is required for the heavy mineral barite (barium sulphate), which has a minimum specific density of 4.20 g/cm3. The comparatively expensive barite is added to the drilling mud on board in order to thicken the drilling mud. This rare and valuable mineral would have to be disposed of together with the dried drilling mud if it could not be separately precipitated. In order to recover the precious barite and recycle it back into the process GEA has developed a special classifying decanter. This special decanter removes only very heavy solids from the mud.

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Features & Benefits
High quality wear protection
External gear system for maximum gear protection
Oil lubrication for all bearings for exacting demands
High quality stainless steel for all product-contacting parts
Gas-tight and explosion protected design for hazardous zones
High-torque GEA summationdrive for optimum differential speed at all times and minimum energy consumption

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