

Bluewin Co., Ltd.

2P/3P

SEPARATOR

Separate “Oil, Water and Solids” at once!
For Palm Oil Sludge, Food sludge
All kinds of Heavy Oil Sludge

Technology Feature

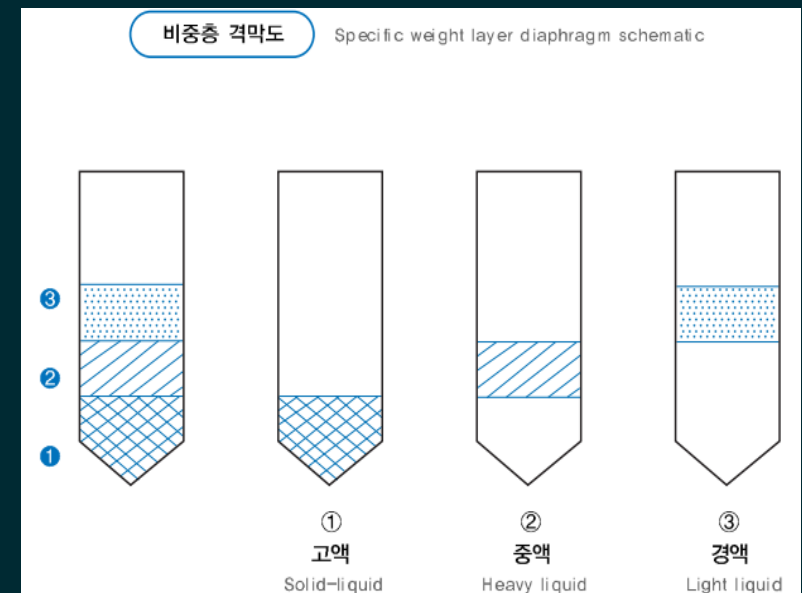
The Concept of Centrifugal Separation

If the floating particles included suspension is left and observed in the air for the time being, bigger mass particles will move to downward and the lighter mass particles will move to upward slowly, and this upward & downward movement is called as precipitation.

If the centrifugal force is applied intentionally on this natural state suspension, precipitation phenomenon of the particles can be accelerated and the centrifuge can be defined as the machine that can separate, refine, enrich and dehydrate the property of matters using this centrifugal force and precipitation phenomenon.

The Concept of Three-Phase Centrifugal Separation

2 phase centrifugation is normally recognized as the typical centrifugation and it mainly separates solid and liquid using centrifugal force. However, 3 phase Centrifuge of SENTEC Technology Co., Ltd can separate and discharge the matters in 3 different phases such as Solid, Light Liquid and Heavy Liquid.



3-Phase Centrifugal Separator

■ Function & Features

Existing 3 phase property separation system has duplicated process that separates the matters to solid and liquid primarily and then separates the heavy and light liquid secondarily. However, this is the 3 phase centrifuge system that SENTEC Technology developed to remove this complicated duplicated process. As the ST-P type 3 phase centrifuge, this can be directly applied to the mixtures such as crude oil sludge or waste oil that has 3 distinguishable different properties (Solid, Light Liquid, Heavy Liquid), and the effectiveness of the operating system can be improved remarkably.

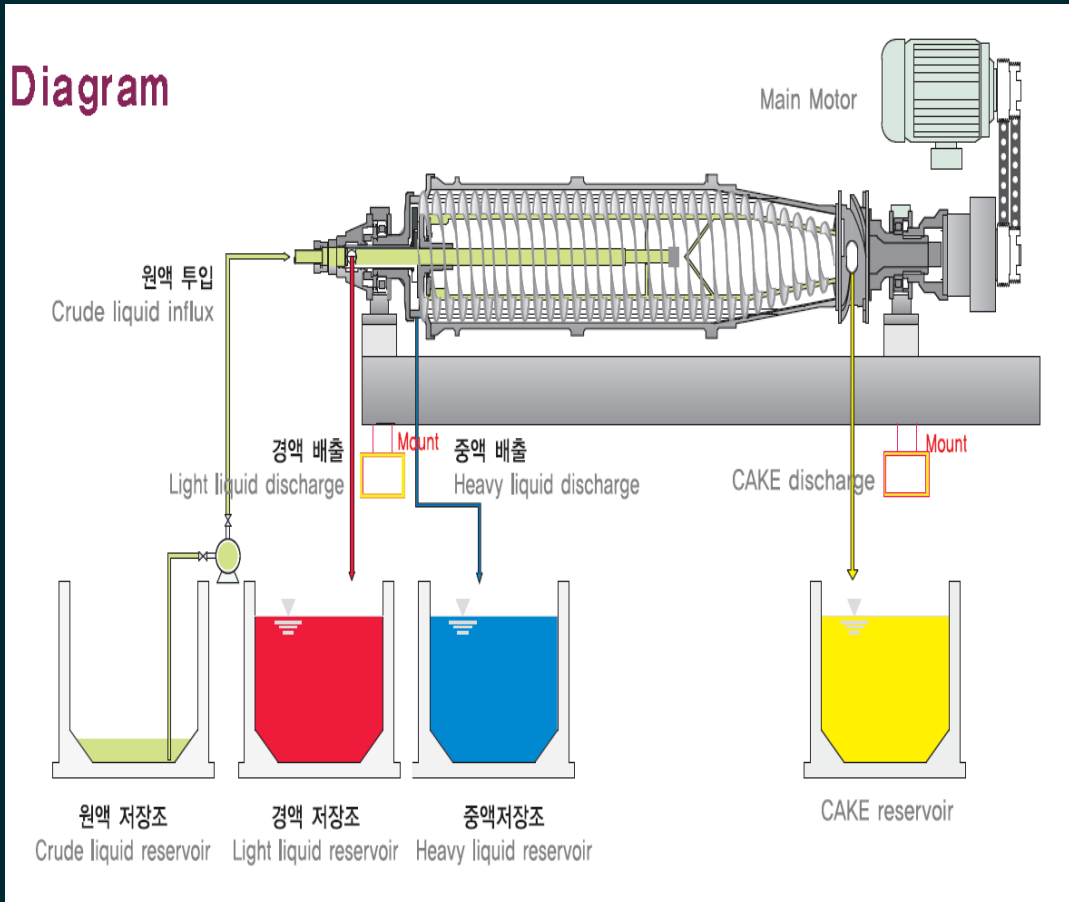
■ Application

- Moisture, sludge, treatment of oil mixed waste oil
- Disposal of sludge inside of crude oil tank, engine oil, waste oil etc.
- Separation of tar and ammonia
- Separation of rolling oil, lubrication oil, cutting oil etc.



3-Phase Centrifugal Separator

Diagram



Property of Matter Distribution Before & After 3 Phases Separation



* Property ratio of matters before and after the separation is different depending on the properties of the mixtures.

2-Phase Centrifugal Dehydrator

■ Function & Features

This system can separate the solid and liquid, and dehydrate them while injecting the sludge such as waste water and foods generated from the food processing process into the rotating bowl continuously. Moisture content of the discharged solid can be adjusted constantly and the separation and discharge process is available by adjusting the speed difference depending on the concentration of the injecting sludge automatically. 0.5~35% of concentration of solid can be separated and discharged with standard system, but the special system that the separation and discharge of sludge from 0.02% of low to 50% of high concentration is available. This also can be applied to the matters that include several micron to several millimeters of particles, and the micron particles can be recollected if Aggregate Reagent is injected.

■ Application

- Waste tap water and sewage, livestock wastewater
- Synthetic resins, chemical products
- Separation of mining & ceramic industry
- Separation of food industries and foods
- Separation of marine fuel and waste water of plant
- Dehydration process of Sedimentation Sludge generated from various waste



2-Phase Centrifugal Evaporator

■ Function & Features

This is the system that concentrate & separate after adjusting the concentration while injecting the excessive sludge or final settled sludge that is generated from the sewage disposal plant and waste water processing plant into the rotor continuously. Over 92% of SS can be removed by converting the low concentration excessive sludge to high concentrated one and they can be discharged and separated without adding Aggregate Reagent. If small amount of Aggregate Reagent is added, processing speed can be improved significantly and 1~12% of concentrated liquid can be discharged. Continuous operation is available by adjusting the change of speed difference of Bowl and Screw while counteracting the change of concentration of inflowing sludge.

■ Application

- Disposal & separation of livestock wastewater and human waste
- Separation & concentration of protein, hypha, leaven etc. of foods.
- Waste tap water and sewage processing final settling tank, sinking property deteriorated excessive sludge



Low Speed Solid-Liquid Centrifugal Separator

■ Function & Features

Low speed centrifugal solid–liquid separating system is the one that controls the centrifugal force depending on the concentration and sludge dehydration rate, which controls the speed depending on the inflowing concentration of the matters, and also is a centrifugation system that separates the solid–liquid property of matters forcibly. Typical perforation type centrifugal solid–liquid separator has the maintenance problems because of the concentration of waste water (food and piggery effluent) and seasonal difficulties. However, Our technology applied low speed centrifugal solid–liquid separator is designed & manufactured to be adjusted and operated while controlling the centrifugal force properly for each of the operation.

■ Application

- Pretreatment of solid – liquid centrifugation of food waste water
- Solid – liquid centrifugation of primary & secondary piggery waste water
- Solid – liquid centrifugation of sewage and waste water that contains much of wastewater sludge
- Pretreatment of solid – liquid centrifugation of livestock excretions
- Primary solid – liquid centrifugation of sewage



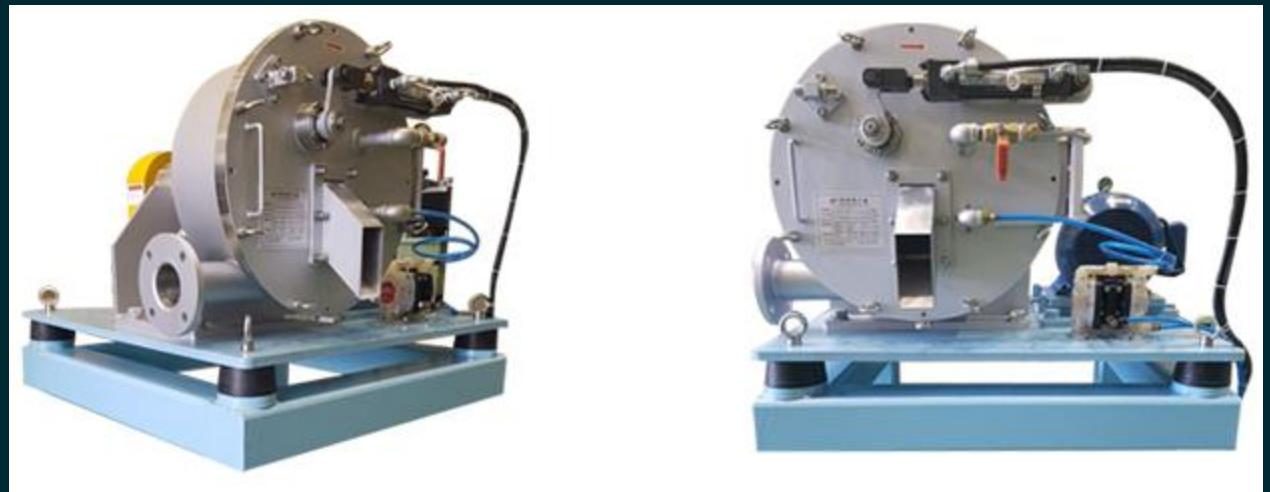
Peeler Type Centrifugal Separator

■ Function & Features

Filler type centrifuge is a batch & horizontal type rotating and dehydrating centrifugation system. This system is rather for the fine solids and can be used for various products extensively due to the high filtering & washing effect. This system can be used easily by varying the rotation speed, and it can increase the speed 1.5~2 times comparing to the non-filtering speed type by adding the suction power of HEAD value on inlet port and filtering mesh by attaching Siphon Type.

■ Application

- Chemical processing industries
- Medical industries
- Food industries



References



3상 원심분리기

Three-Phase Centrifugal Separator



3상 원심분리기

Three-Phase Centrifugal Separator



2상 탈수기

Two-Phase Dehydrator



2상 탈수기

Two-Phase Dehydrator



디스크형 원심분리기

Disc Type Centrifugal Separator



필러형 원심분리기

Peeler Centrifugal Separator

References



필러형 원심분리기
Peeler Centrifugal Separator



필러형 원심분리기
Peeler Centrifugal Separator



저속 고액분리기
Low Speed Solid - Liquid Separator



저속 고액분리기
Low Speed Solid - Liquid Separator



기름 가열시스템
Oil Heating System



기름 가열시스템
Oil Heating System

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We are always ready to reply within 24hours & Serve for you

THANK YOU