



Stock code: 300425

江苏华大

HUADA CENTRIFUGE

Global service provider of filtration and separation engineering technology



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中建环能



江苏华大

SCIMEE · Jiangsu Huada Centrifuge Co., Ltd.

LEAN, INNOVATIVE, AND WIN-WIN

HUADA
江蘇華大



COMMUNICATE WITH CUSTOMERS
LEADING TOGETHER

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30⁺ Years
Technology development

1150 MILLION CNY
Registered capital

2

Production
bases

600⁺

Employees

120⁺

Patents for
invention

Jiangsu Huada Centrifuge Co., Ltd. a subsidiary of SCIMEE (stock code: 300425), was established in 1993 in Zhangjiagang, an emerging port city in China. It is an engineering technology service provider focused on the research and development, production, and sales of filtration and separation machinery. It is one of the largest, most comprehensive, and most competitive and influential high-tech enterprises in China's filtration and separation machinery industry.

The Company spans nearly 150,000 square meters and boasts a registered capital of 115 million yuan. It is equipped with over 650 sets of world-class machining equipment and more than 200 sets of various inspection and testing instruments. The Company houses a Provincial Engineering Technology Research Center and operates two production bases, with an annual production capacity of 5,000 sets of separation and filtration equipment. It has established specialized teams for technical research and development, process design, inspection and testing, and lean production. The Company has successfully developed numerous new products and technologies with independent intellectual property rights, including the Vertical Bag Pulling Automatic Centrifuge, Horizontal Concentration Filtration Centrifuge, and Intelligent Remote Control System. Its product range encompasses over 40 series and more than 200 models, having secured over 120 invention patents, including 2 "China Excellent Invention Patent Awards". These products address the challenges and pain points in the separation process for customers and are exported to numerous countries and regions worldwide.

As a leading enterprise in China's separation machinery industry, Jiangsu Huada adheres to the core values of "Lean, Innovation, Win-Win". It focuses on establishing a modern enterprise mechanism, gathering industry elites, and gradually building a professional, stable, and high-quality team. The Company currently has more than 600 employees, including over 160 engineering and technical personnel with college degrees or above, among whom more than 50 are engaged in the development of high-tech products.

The company leadership comprises management talent with relevant professional backgrounds, possessing a sound business philosophy, pioneering spirit, and innovative capability. They have guided the company in undertaking multiple National Torch Program projects, key new product projects, and science and technology breakthrough projects. The company has successively received honors such as the national "specialized, refined, special, and new" little giant enterprise and national intellectual property advantage enterprise. It is a member unit of the China Separation Machinery Standardization Technical Committee, vice chairman unit of the China General Machinery Association Separation Machinery Branch, national and industry centrifuge standard drafting unit, and a national high-tech enterprise.

For 30 years, Jiangsu Huada has shouldered the Corporate Mission of "Embracing the Greatness of China, Empowering Made in China". Adhering to Technology Leadership and strengthening Innovation Driven, it upholds the Corporate Purpose of "Leading Together with Customers". With strong Technical Strength, exquisite Processing Technology, complete Testing Methods, a comprehensive Quality Assurance System, and thoughtful Engineering Technical Services, it continuously provides Customers with complete, stable, and effective Filtration and Separation Technology Solutions. The Company has over 5,000 customers and thousands of successful application cases in various sub-sectors globally. It can provide personalized and specialized engineering technical services tailored to different customer requirements in different environments. Additionally, it has established multiple customer service outlets nationwide and formed a professional and efficient customer service team of dozens of people, capable of responding to customers' 24-hour service needs in real-time.

Standing at a new starting point, Jiangsu Huada is continuously developing towards large-scale, specialized, and intelligent directions through measures such as exploring emerging markets, improving the R&D system, upgrading the management system, promoting Lean Production, and standardizing professional services. The Company is committed to becoming a "world-class centrifuge engineering technical service provider," winning customers through service, creating value for customers through service, and empowering the high-quality development of the Chinese manufacturing industry through service.

DEVELOPMENT HISTORY

SINCE 1993

1993
Zhangjiagang Huada Centrifuge Co., Ltd. was established.

1998
It was the first in the industry to pass the machine safety certification for the entire series of centrifuge products.

2000
Huada Company completed the Shareholding Reform.

2001
The Company passed the ISO9001 Quality Management System certification.

2002
Australasia Huachang invested in Zhangjiagang Huada, Huada has become a Sino-foreign joint venture and launched the LGZ-type scraper Centrifuge.

2003
Continuously strengthening technological research and development, new generation centrifuges of models LW, GK, etc. have been successively launched.

2005
The AUT1250 product has won the National Torch Project Certificate, and the LGZ1250 product has been awarded the 'Second Prize for Scientific and Technological Progress in the Machinery Industry'.

2006
Launched the GKF1250 Pharma peeler centrifuge received the 'High-tech Product Certification'; the AUT1250 product won the 'Second Prize for Scientific and Technological Progress in the Machinery Industry' and the 'National Key New Product Certificate'.

2007
The Huada Qinxing road factory has been put into operation. Huada has becoming the vice-chairman unit of the China Separation Machinery Association.

2008
GK1250(GMP) Horizontal peeler Centrifuge received the 'National Torch Program Project Certificate'

2009
The PLD Bag-pulling Centrifuge was launched, and an invention patent for the "Discharge Device in Centrifuge" was filed.

2010
The Jiangsu Provincial Separation Machinery Engineering Technology Research Center and the Jiangsu Provincial Sludge Separation Research Center have been established.

2011
Huada Phase II project has been put into operation, with an additional factory area of nearly 30,000 square meters, becoming the leading unit of the Filtration and Separation Technology Professional Group of the China Petroleum and Chemical Industry Federation.

2012
Jiangsu Huada was wholly transformed into Huada Co., Ltd., with the registered capital adjusted to 60 million yuan.

2014
The PLD1600NF model has obtained the 'High-tech Product Certification' from the Jiangsu Provincial Department of Science and Technology.

2015
Scimee Technology Co., Ltd. has fully acquired Huada. The invention patent for the discharge device of centrifuge has been awarded the China Patent Excellence Award.

2017
PLD products have been rated as 'Specialized, Refined, Characteristic, and Innovative Products' in Jiangsu Province, and the same year Huada was recognized as a 'National Intellectual Property Advantage Enterprise'.

2018
The LLW1000 large mining centrifuge has won the 'Jiangsu Machinery Industry Science and Technology Progress Second Prize', and the key technology and application of the LLW series centrifuges have received the 'China Industry-University-Research Collaboration Innovation Achievement Award'.

2019
China State Construction(CSCEC) Holdings Scimee, Huada becomes a state-owned holding company.

2020
Phase III construction of Huada has started, with a total investment of nearly 300 million yuan; in the same year, it was rated as a 'Little Giant' enterprise in the second batch of specialized, refined, unique and innovative companies by the Ministry of Industry and Information Technology.

2021
Huada has implemented 'Lean Management' and introduced high-end automation manufacturing equipment to promote the lean digital development of the enterprise.

2022
Huada Phase III 'High-Performance Automated Centrifuge Production Base' has gradually begun production; registered capital changed from 60 million yuan to 115 million yuan (paid-in).

2023
The ultra-high-speed horizontal scroll centrifuge has been launched, filling the domestic gap. The core technology patent for explosion-proof centrifuges has been awarded the China Patent Excellence Award.

2024
Huada established a separation machinery R&D center in Chengdu, driving continuous efforts in R&D

ENTERPRISE QUALIFICATIONS AND HONORS



2015: "Discharge Device in Centrifuge"
2023: "Gas Protection Method for Centrifuge Chamber"

2 China Excellent Invention Patent Awards



- National High-Tech Enterprise
- National Torch Program Project
- National intellectual property advantage enterprise



In 2005, won the Second Prize of China Machinery Science and Technology Progress Award
In 2018, won the China Industry-University-Research Cooperation Innovation Achievement Award

Second Prize of National Science and Technology Progress Award



- China Patent Excellence Award
- China Innovation Achievement Award
- China Machinery Industry Science and Technology



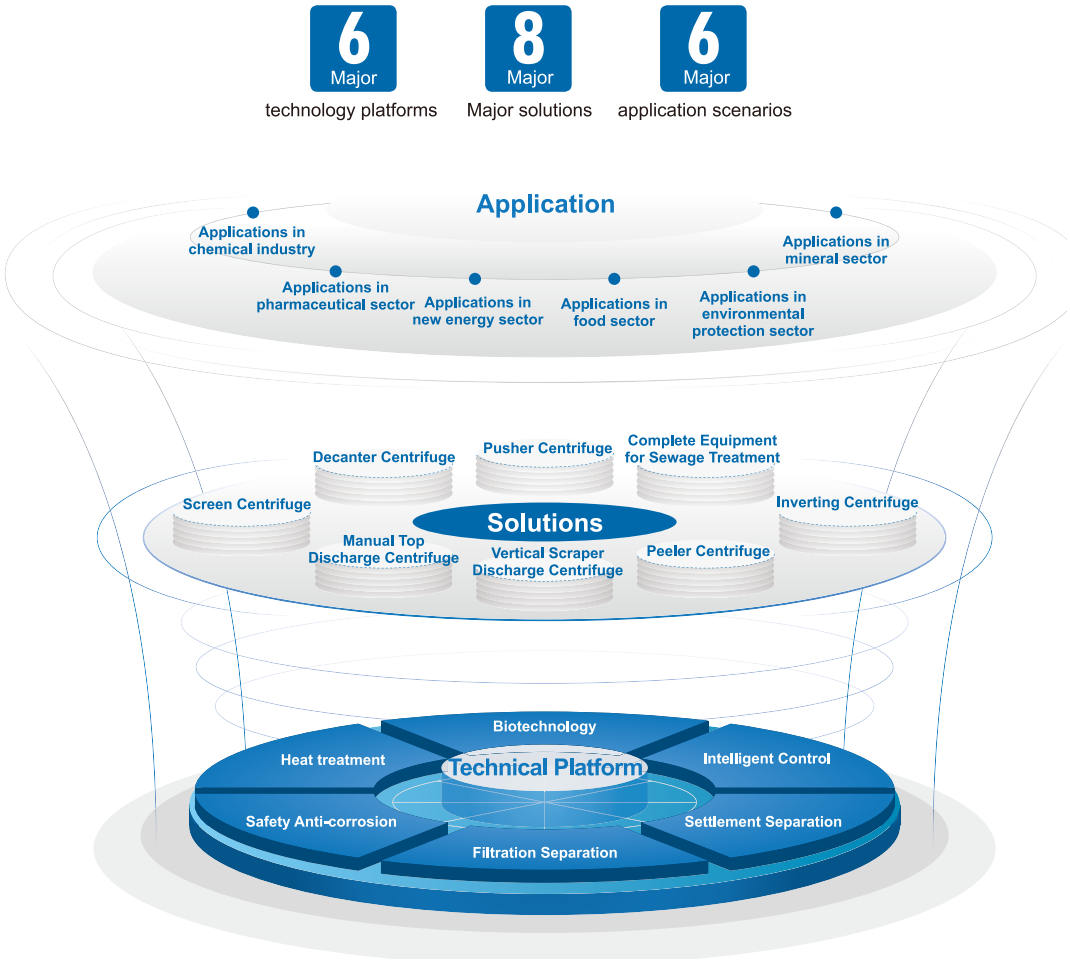
In 2020, recognized as the second batch of Specialized and New "Little Giant" Enterprise by the Ministry of Industry and Information Technology

National "specialized, refined, special, and new" little giant enterprise



- National Specialized and New "Little Giant"
- National and Industry Centrifuge Standard
- Vice Chairman Unit of China General Separation Machinery Association
- Member Unit of China Separation Machinery Standardization Technical Committee.

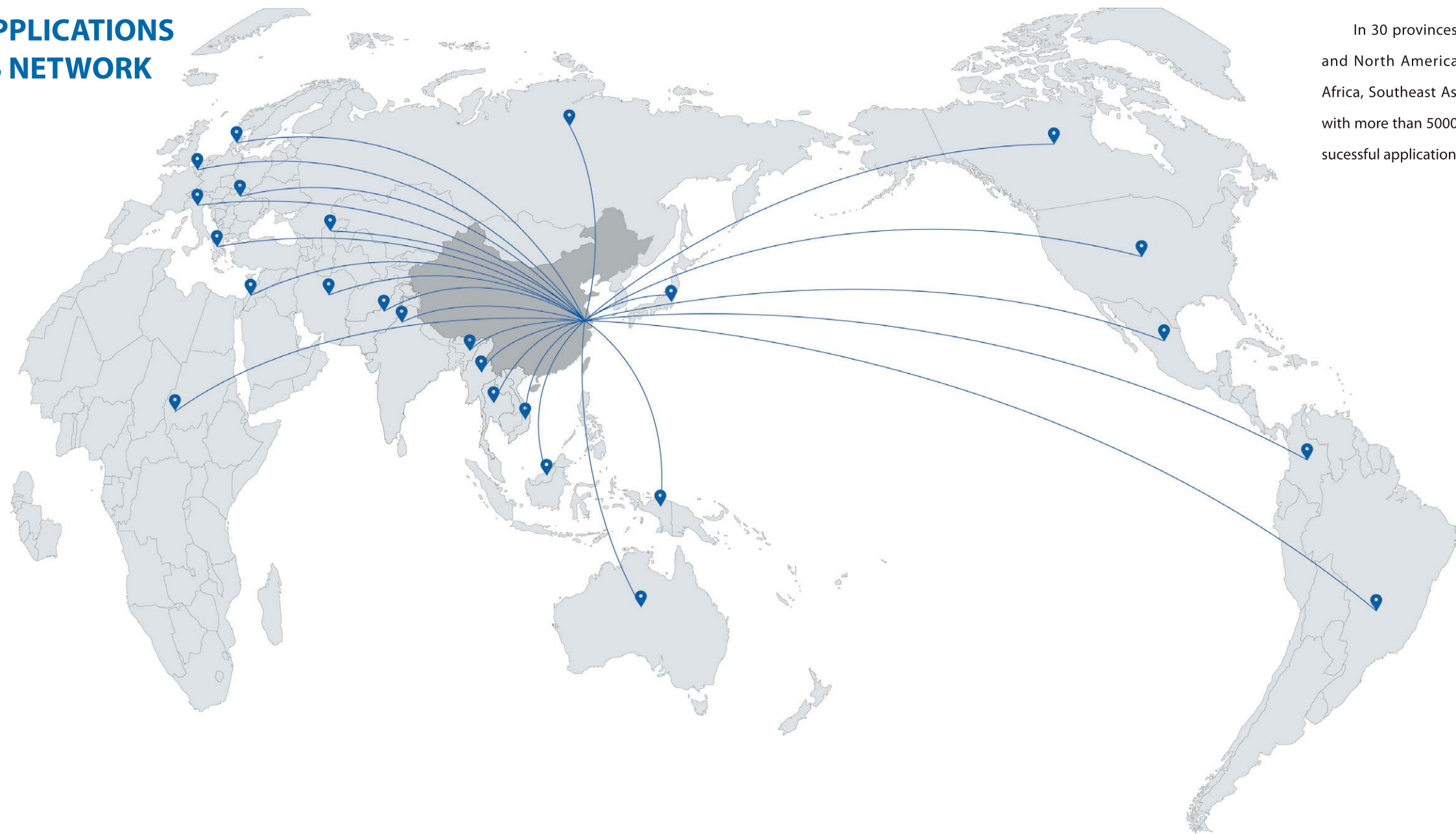
TECHNOLOGICAL INNOVATION AND PRODUCT DEVELOPMENT



	Accumulated over 120 national patents 120⁺	More than 50 engineering and technical personnel 50⁺
	Over 40 product series 40⁺	More than 200 product models 200⁺
	1 provincial research center 1	3 national standards 3
	4 software copyrights 4	5 industry standards 5

Jiangsu Huada is committed to establishing an open and mutually beneficial cooperation system, always prioritizing customers, and boasts a comprehensive product equipment system and technological innovation capabilities. The company aligns with the nation's trend of accelerating the development of the equipment manufacturing industry, promotes product innovation, and continuously improves the technological innovation and application system through customer usage. With six technological platforms including filtration separation, sedimentation separation, intelligent control, biochemical treatment, safety anti-corrosion, and sludge drying, the company has gradually expanded to form over 40 product series and more than 200 models, mainly including vertical scraper bottom discharge automatic centrifuge, Automatic peeler centrifuge, manual top discharge centrifuge, Horizontal Screen Worm Centrifuges, Decanter Centrifuges, and SDDR low-temperature sludge drying complete equipment.

MARKET APPLICATIONS AND SALES NETWORK



In 30 provinces, municipalities, autonomous regions
 and North America, South America, Europe, Australia,
 Africa, Southeast Asia, the Middle East and other regions
 with more than 5000 customer groups and more than 3000
 successful application cases of industry segments.



01

Chemical engineering

Copper Sulfate, Potassium Chloride,
 Borax, Pigments, Resins, Pesticides, etc.



02

Pharmaceuticals

Vitamins, Antibiotics, Raw Materials,
 Intermediates, Finished Drugs, and
 Herbal Extracts, etc.



03

New energy

Nickel-Cobalt-Manganese Ternary
 Battery Materials, Lithium Battery
 Ternary Precursor Separation, etc.



04

Food

Monosodium Glutamate, Salt, Food
 Additives, Chemical Seasonings,
 Starch, Sugar Production, etc.



05

Environmental protection

Sewage Sludge, Water Purification
 Sludge, Pharmaceutical Sewage,
 Domestic Sewage, etc.

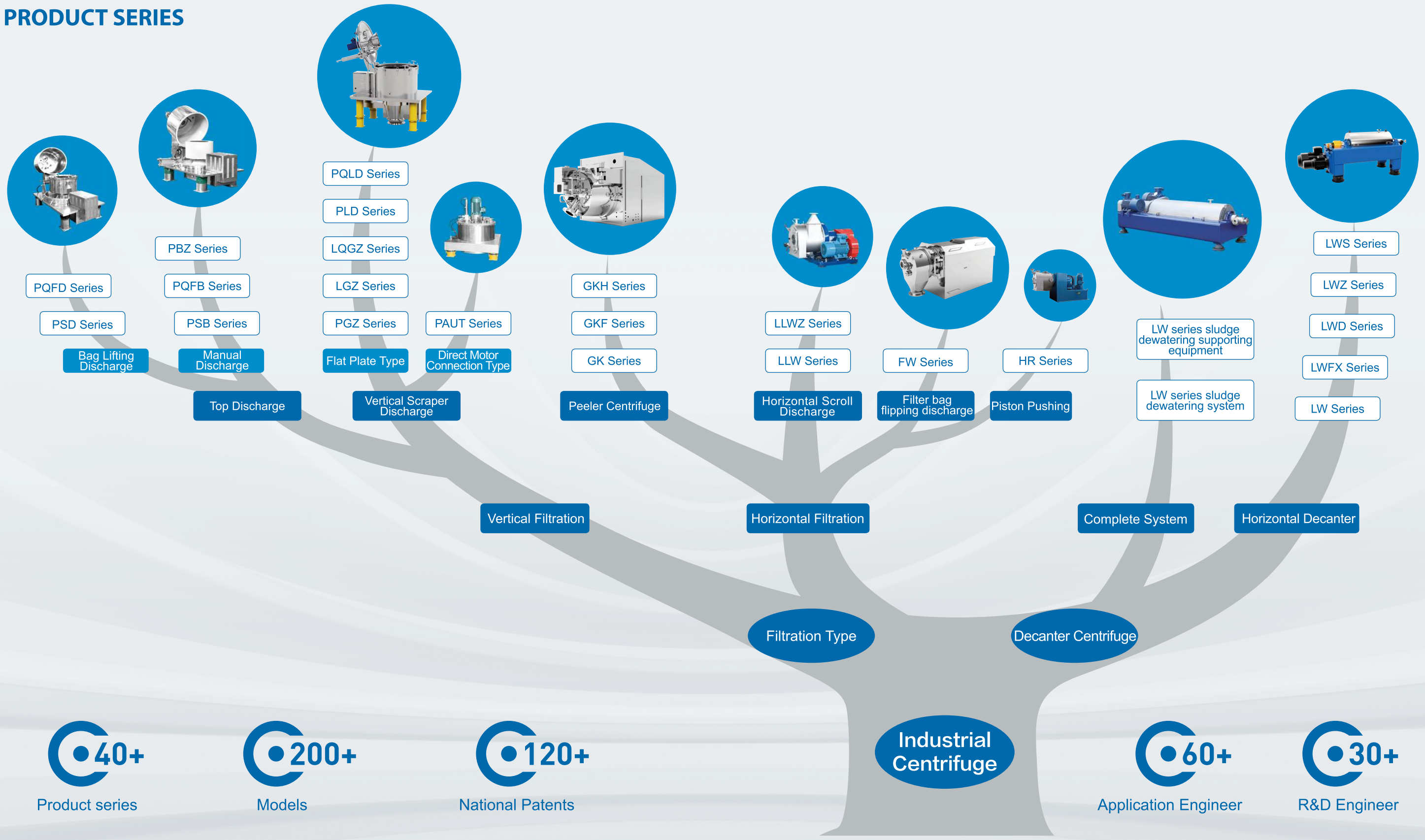


06

Mineral

Copper, Zinc, Aluminum Metals,
 Gypsum Refining, and Metallurgy,
 etc.

PRODUCT SERIES



PRODUCT SERIES

Classification Of Industrial Centrifuges

According to our nation's National Standards, industrial centrifuges are generally classified based on structure and separation requirements into:

01

Filtration Centrifuge

A filter media (screen, filter cloth, etc.) is laid on the perforated basket wall of the centrifuge. The suspension added to the basket rotates along with it. The liquid in the suspension is thrown out through the filter residue layer (solid layer), filter media (screen, filter cloth), and the perforations in the basket wall under the action of centrifugal inertial force, while the solid particles are retained on the surface of the filter media, forming a filter residue layer, thereby achieving solid-liquid separation.

Suitable for the separation of suspensions with high solid content and larger solid particles (generally greater than 10μm).

02

Decanter Centrifuge

In a centrifuge with a non-perforated basket, the suspension added to the basket rotates along with it. Due to the different densities, the centrifugal inertial forces acting on the solid and liquid phases differ. The solid phase, experiencing a greater centrifugal inertial force, settles on the basket wall forming sediment, while the liquid phase, experiencing a smaller centrifugal inertial force, settles in the inner layer. Different discharging methods are then used to separately expel the solid and liquid phases from the machine, achieving separation.

Suitable for the separation of suspensions with low solid content (low concentration) and smaller solid particles.

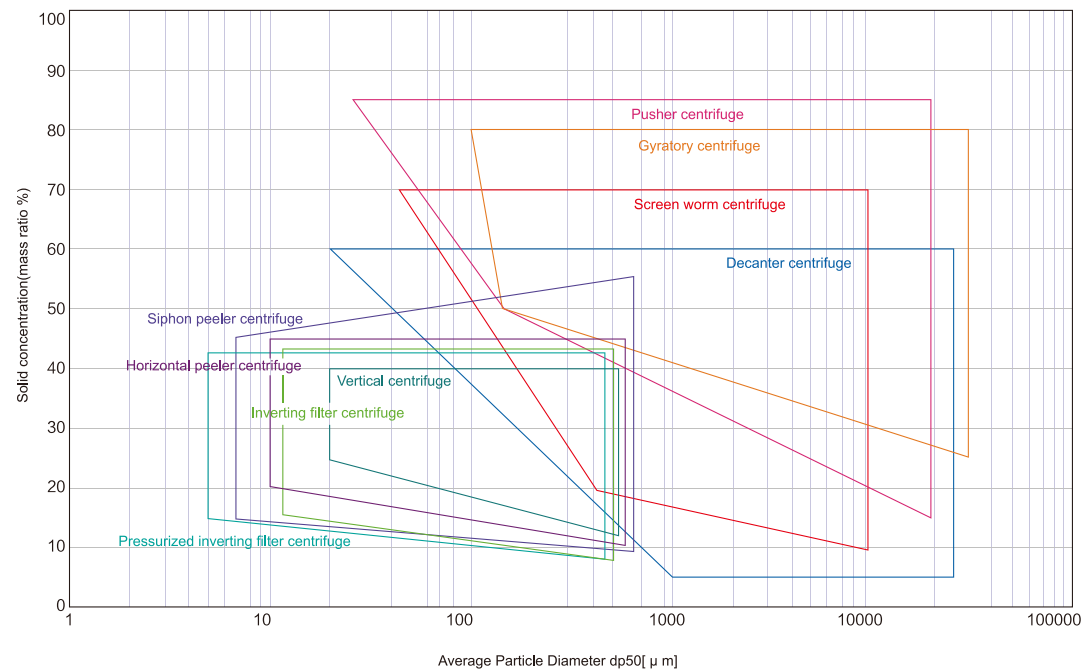
03

Separator

Specifically refers to the separation of emulsions of two immiscible phases or emulsions containing trace amounts of solids. Due to the small density difference between the two liquid phases, it is necessary to enhance the centrifugal field (high-speed rotation) to separate the two liquid phases. The heavier phase is on the outer layer, and the lighter phase is on the inner layer. Through certain devices, the heavy and light phases are separately extracted from the machine to achieve separation. This type of high-speed centrifuge is called a separator.

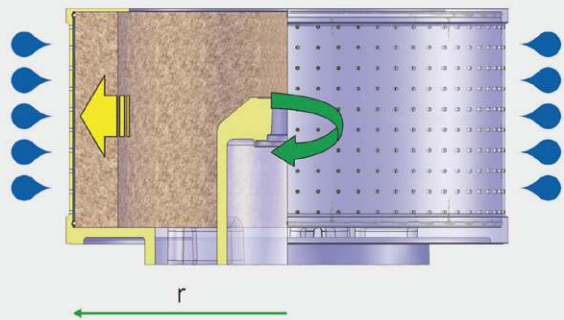
Suitable for the separation of suspensions with very low solid content (less than 1%), very fine solid particles, very small solid-liquid density difference, or emulsions with a very small density difference between the light and heavy phases.

Scope of application



FACTORS AFFECTING CENTRIFUGE SELECTION

Separation factor



The separation factor is an important factor affecting the separation effect of the centrifuge. The separation factor is proportional to the square of the working speed of the centrifuge, and generally, it is increased by increasing the working speed of the centrifuge.

$$F_n = \frac{r\omega^2}{g} \approx \frac{Dn^2}{1800}$$

D	Centrifuge basket diameter (m)
n	Centrifuge operating speed (r/min)
g	Gravitational acceleration

Material characteristics

Material Parameters

The solid concentration in the material, the size, shape, and nature of the solid material, the water absorption of the solid, the coefficient of friction, temperature, pH value (acid-base composition), as well as the solid-liquid density difference, viscosity, etc., play a decisive role in the selection of the centrifuge.

Material Requirements

Although the separation of materials is not complex, the choice of centrifuge type varies according to process requirements. Requirements such as the allowable moisture content of dewatered solids, whether solids can be crushed, and the allowable solid content in the liquid have a certain impact on the selection of the centrifuge model. Generally:

- High solid concentration, solid particles are crystals with larger particle size (relatively >10μm) — Filtration centrifuge can be selected. Material crystals cannot be crushed — Manual discharge, bag pulling discharge, bag flipping type centrifuges can be selected.
- Material crystals are slightly crushed — Scraper discharge, piston pushing (low-speed scraping) centrifuges can be selected.
- Material crystals can be crushed — Scraper discharge, scroll discharge (high-speed scraping) centrifuges can be selected.
- Low solid concentration, very fine solid particles, and high material viscosity — Decanter Centrifuge can be selected.

Operating Environment

For materials with special characteristics, such as flammable, explosive, highly corrosive, and abrasive properties, the structure and material selection of the machine are determined.

SOLID-LIQUID SEPARATION PROBLEM SOLVING SOLUTION

Scope Of Application



PLD(LGZ) Series Automatic Centrifuge

It is mainly used for solid-liquid separation of the suspension of various kinds of solid particles and fibrous materials, especially toxic, flammable and explosive materials and those materials with high viscosity and fine particle size. It is widely used in the solid-liquid separation in industries such as chemical, pharmaceutical, food, new energy, metallurgy, and environmental protection.



PAUT Series Top Suspension Automatic Centrifuge

PAUT series of centrifuges are applicable to washing and solid-liquid separation of suspension media containing solid particles, as well as solid-liquid separation of media containing a crystalline solid phase, which can be widely used. This product is commonly used for the treatment of gypsum, ammonium sulphate, mirabilite, ferric sulphate, copper sulphate, nickel sulphate, potassium chloride, acetic acid, borax, soda, rubber additive, dye, starch, sugar, vitamin, antibiotic, herbicide, insect repellent, copper, zinc, aluminum, acid discharge gypsum, metal refining, sludge after water purification, sludge in sewage and other kinds of chemicals and pharmaceuticals.



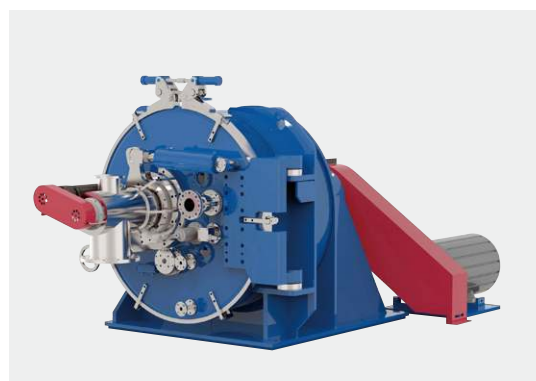
PQFB Series Fully opening Top Discharge Centrifuge

PQFB series centrifuges are applicable to the solid-liquid separation in the clean areas with certain requirements for sanitation. PQFB centrifuges are suitable for the washing and solid-liquid separation of suspensions containing solid particles, with the particle size of 0.02mm~5mm and solid content above 10%, 50% to the maximum.



FW Series Inverting filter centrifuge

FW Inverting filter centrifuge is a new type of precise centrifugal filtering equipment featuring automatic discharge, intermittent operation and high performance, which complies with the GMP standards for pharmaceutical production and can realize CIP in place cleaning, soaking & cleaning and disinfection. Filtering and separation of 2mm-10mm cake layers are available.



GKH Siphon Peeler centrifuge

The GKH Siphon Peeler centrifuge is suitable for scenarios with high production volume, low filter cake moisture content requirements, and thorough washing. It has excellent separation effects for suspensions with filter cake density between 0.8~2.5, particle size of 0.05-1mm, and solid phase concentration of 15%~80%.



GKF Pharma peeler centrifuge

Characterized by automatic control, batch processing, continuous working, short circulating period, large handling capacity, low moisture and good washing effect, the product is applicable to the solid-liquid separation of toxic, hazardous, inflammable and explosive media of low viscosity and with high requirements for sanitation. It has been widely applied in the pharmaceutical application, food production and other fields.



LLW(Z) Series Horizontal Filtering Centrifuge

It is mainly applicable to materials with larger particle sizes and no strict requirements on particle breakage, such as various crystals, fibers, and plastic particles. It is an advanced solid-liquid separation equipment with low energy consumption, high performance, continuous operation rate, and high degree of automation.



LW Series Horizontal Decanter Centrifuge

LW series products are decanter centrifuges that can work continuously and are mainly used for solid-liquid separation, dehydration, fractionation, clarification, and concentration of materials. This product has been widely applied to chemical, pharmaceutical, environmental protection, food, mining, energy and other industries.

SOLID-LIQUID SEPARATION PROBLEM SOLVING SOLUTION

► Material selection and anti-corrosion treatment of centrifuge



The materials separated by centrifuges have a certain degree of corrosiveness, and the materials in contact with wet must meet the requirements of corrosion resistance to ensure the safe use of the equipment.

We will provide various materials for products based on the corrosion data of the separated materials or through physicochemical experiments, such as: carbon steel, stainless steel (304, 321, 316L, 2205, 2507, 904L, etc.), titanium and titanium alloys (TA1, TA2, TA8, TA10), Hastelloy (C series, B series), Monel alloy, zirconium materials, tantalum materials, carbon fibers, etc.

In cases where the base material of the equipment cannot meet corrosion resistance requirements, surface anti-corrosion treatments can also be applied, such as: plastics lining (PE lining, PO lining), rubber lining, fluorine materials lining (F30, F40, F46, PFA), etc (F30, F40, F46, PFA), etc.

Filter media selection

To select the filter cloth, it is necessary to consider the compliance with anti-corrosion requirements first, and then choose corresponding filter cloth material, such as nylon, polypropylene, polyester, F30, F40, PTFE, polypropylene fiber andterylene, according to the chemical properties of the separated materials.The mesh size of the filter cloth is determined according to the particle diameter and particle size of the separated materials. Generally, the filter cloth with mesh size slightly larger than the diameter of particles to be retained shall be chosen. in the initial stage of filtration, a small amount of small particles may pass through. When the larger particles are trapped, forming a cake layer, the pass-through phenomenon can be eliminated, which is conducive to improving filtration efficiency.

Plain weave		
Twill weave		
Satin weave		
Double-layer weave		





For specific materials, such as those with large particles, filter media such as sintered mesh and Dutch wire mesh can be used.

Cross Section of Sintered Mesh

Cross Section of Dutch Wire Mesh

► CIP online cleaning of centrifuge

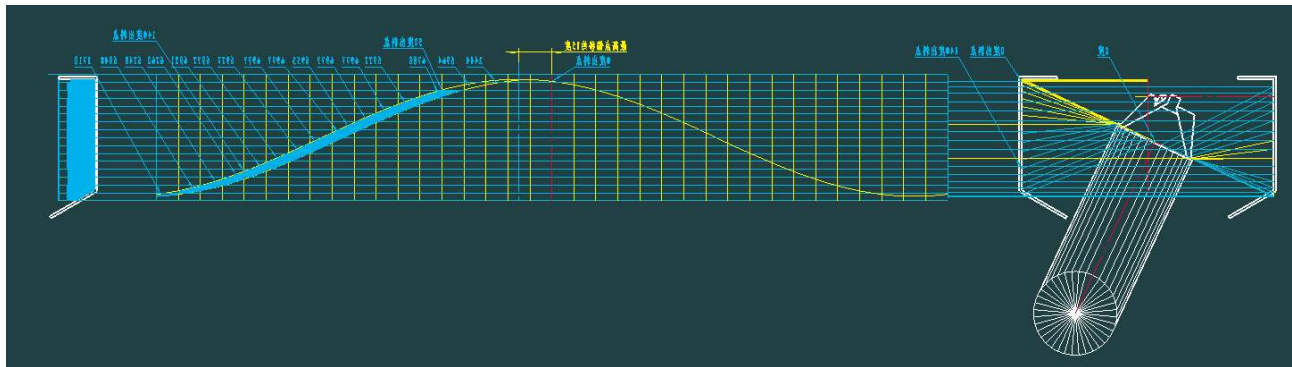
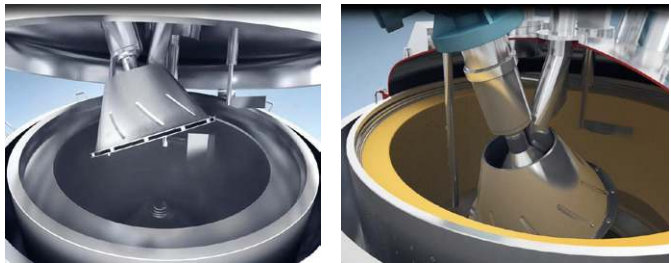
Since the requirements for hygiene in the centrifuge market are increasing and the manual cleaning often brings new contamination while overcoming cross-con-tamination of materials, we have made continuous exploration and improvement inthe equipment cleaning design and configured the CIP online cleaning system, which can realize all-round internal cleaning under the airtight or running state of the centrifuge and meet GMP specifications and hygiene requirements.



► Distribution technology of centrifuge inclined feeding

During the operation of the centrifuge, uneven distribution may often lead to large machine vibration, poor separation effect and low processing capacity, which seriously affects the product qallty and equipment service life. to better solve the problem, our company has developed an inclined feeding distribution device based on the side distribution and middle distribution.

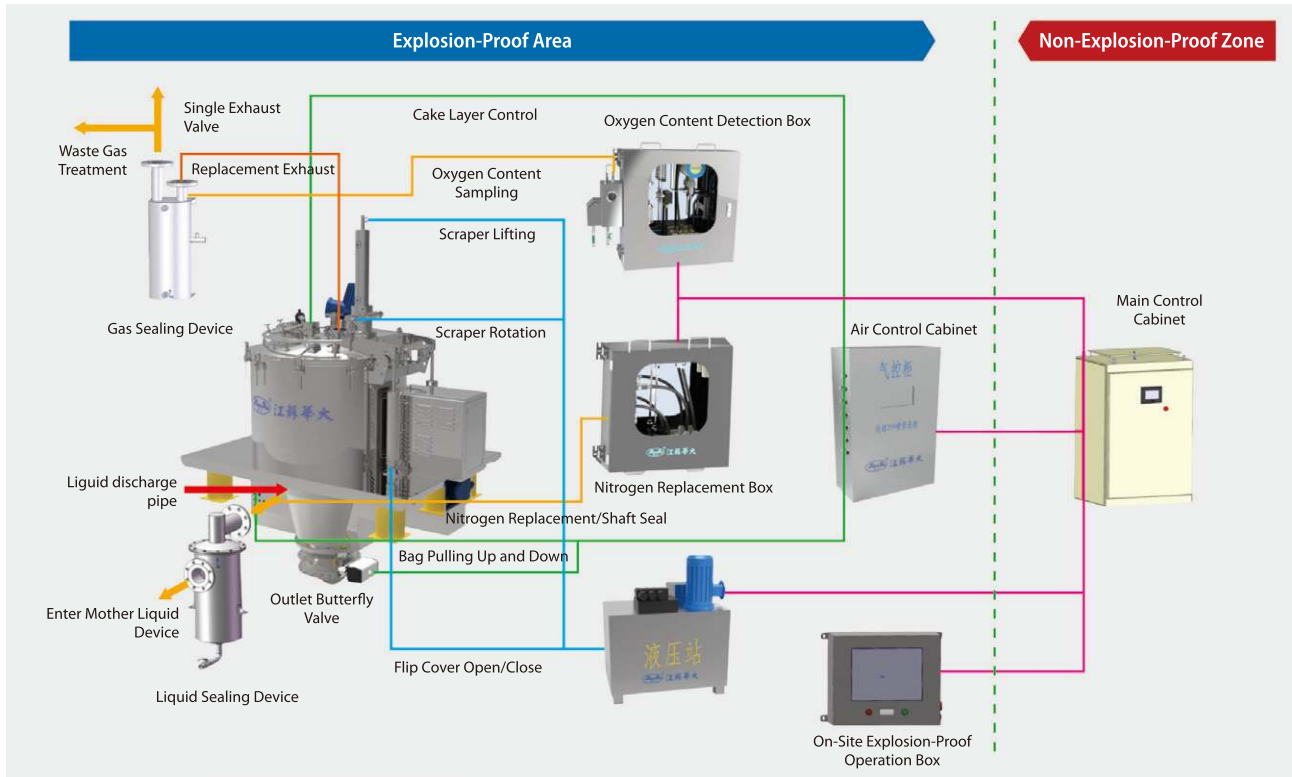
This device adopts a unique streamlined design based on the principle of fluid mechanics, which can improve the distribution balance and evenness and reduce the distribution vibration for the materials with high viscosity and poor fluidity. The distribution plate, with the circumferential solid discharge port projection in sinusoidal distribution, forms a cake layer with uniform thickness on the inner wall of the basket by controlling the material injection sector.



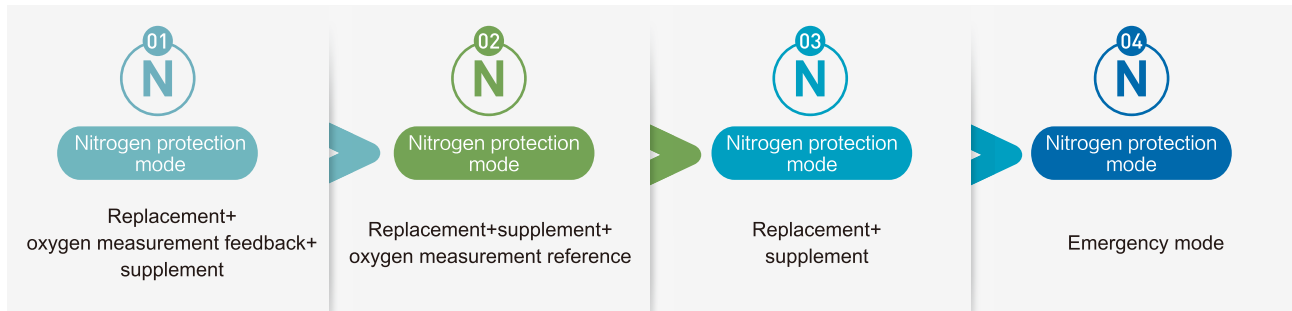
SOLID-LIQUID SEPARATION PROBLEM SOLVING SOLUTION

► Explosion-proof of centrifuge

The safe application of centrifuges in flammable, explosive and highly corrosive environments is a common concern for us and our customers. We never cease to design explosion-proof structures for centrifuges, optimize the explosion-proof configuration and upgrade the explosion-proof control systems, and we have rich field experience in explosion proof and a professional safety and explosion-proof planning team, which can provide you with the best solution according to different material characteristics and explosion-proof sites.



► Multiple control modes



► Frontier technology of huada centrifuge



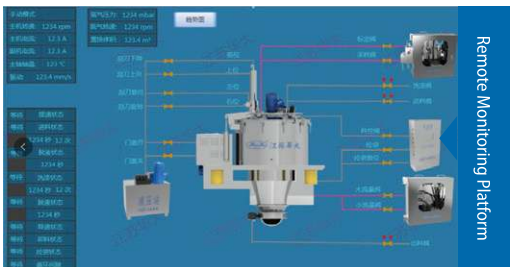
Based on visual technology, dynamic capture of fabric conditions is performed using AI intelligent algorithms to achieve contactless material level detection.



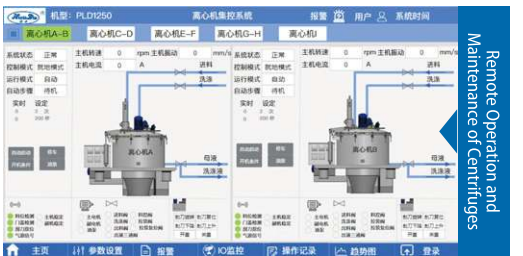
By preprocessing images collected through machine vision and extensive training, automated analysis of material properties and parent wave liquid properties is completed, ultimately realizing intelligent control of the entire process of feeding, de-liquidization, washing, and dewatering.



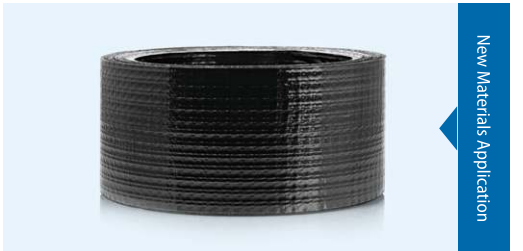
Through IoT technology, the control system's data is uploaded to the cloud server, achieving data collection, fault warnings, data storage, program remote transmission, and monitoring.



Remote operation and maintenance of equipment: maintenance of equipment records, information management, maintenance requests, preventive maintenance, etc.
Remote data analysis: energy consumption forecasting and planning, equipment efficiency analysis, etc.



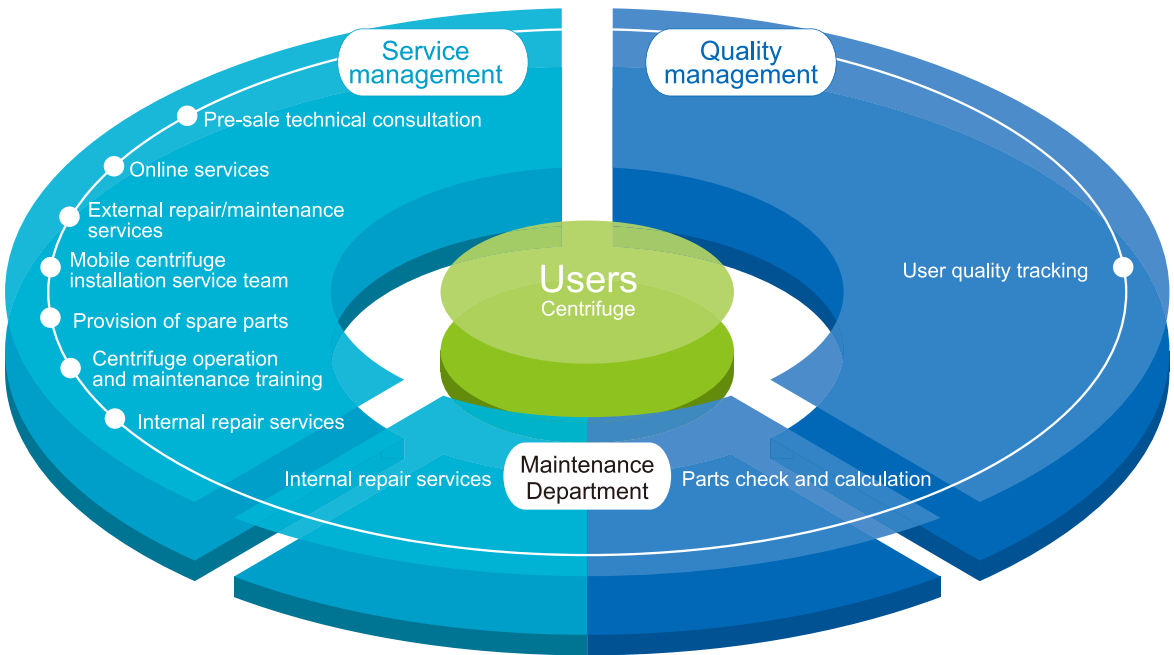
Application of new materials and technologies in the production of centrifuges: Using new engineering materials or composite carbon fiber materials to manufacture the main critical components of centrifuges, significantly optimizing the key operating indicators of centrifuges.



CUSTOMER SITE AND ENGINEERING SERVICES

► Making services more efficient

We have been adhering to the development concept of “service as the core and customer satisfaction as the purpose”. Over the years, we have continuously improved company service management, service team building and service quality to provide customers with more professional and standardized services.



30⁺ Years

customer on-site service

5000⁺

Experience serving customers

100,000⁺

Total service volume

50⁺

Regular after-sales service personnel

15

Emergency service personnel

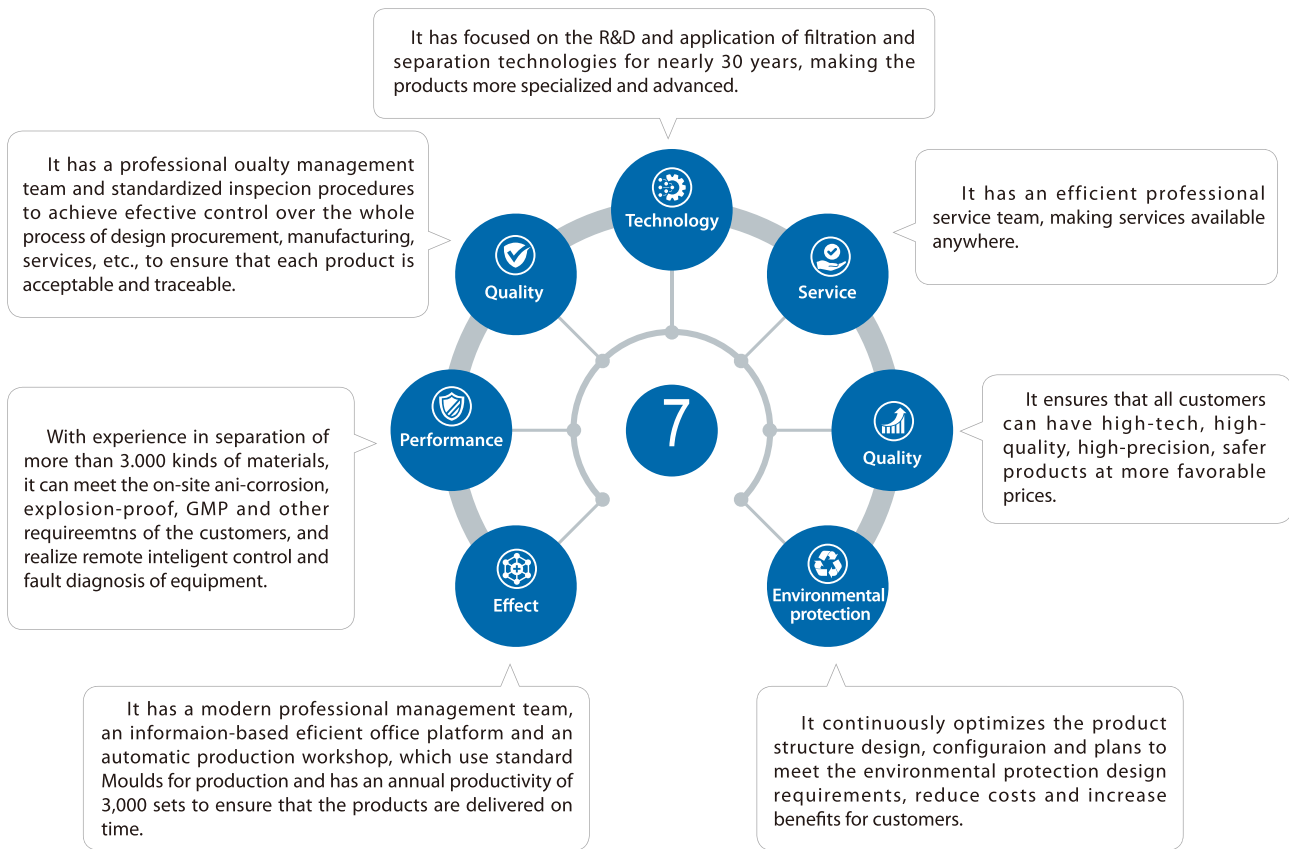
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Mobile service personnel

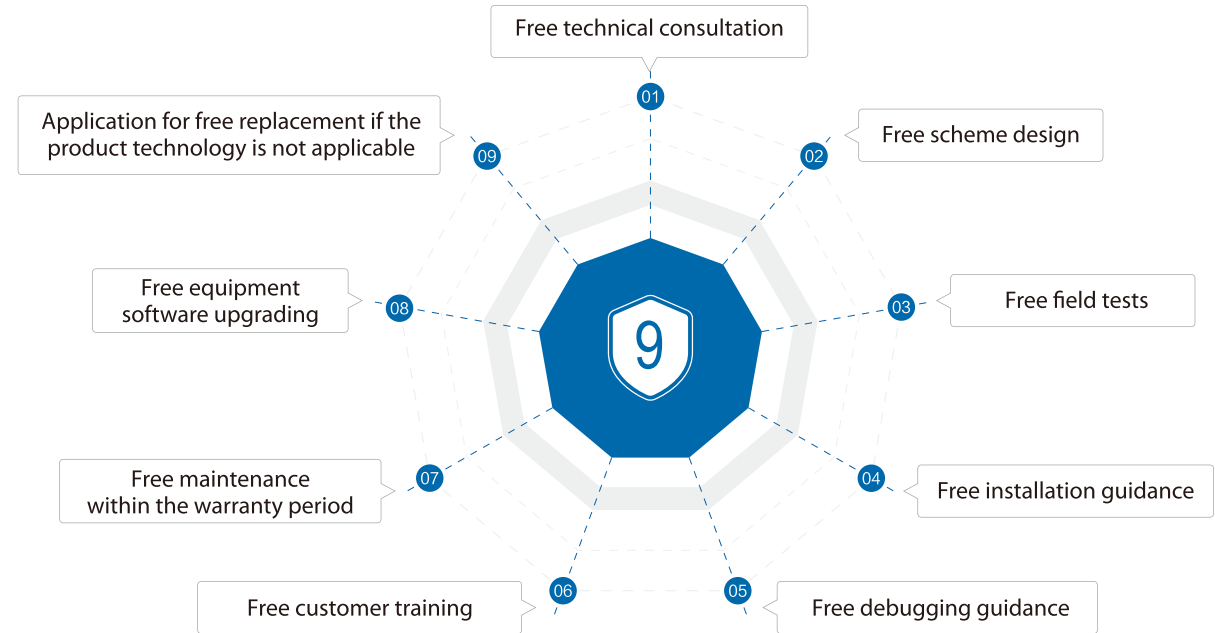
Among them, 65% have more than 10 years of service experience, 25% have 5-10 years of service experience, and 10% have 3-5 years of service experience.

► Making services more reassuring

SEVEN GUARANTEES FOR PRODUCTS



► Nine reassuring services



CUSTOMER SITE AND ENGINEERING SERVICES

► Making services more convenient



Jiangsu Huada Headquarters	Zhejiang Taizhou Service Network	Shandong Zibo Service Network
Sichuan Chengdu Service Network	Hubei Yichang Service Network	Hebei Cangzhou Service Network
Ningxia Zhongwei Service Network	Jiangxi Nanchang Service Network	Liaoning Fuxin Service Network
Heilongjiang Daqing Service Network	Inner Mongolia Wuhai Service Network	Xinjiang Karamay Service Network
Henan Jiaozuo Service Network	Guangdong Shenzhen Service Network	Guangxi Nanning Service Network
	Hunan Zhuzhou Service Network	Yunnan Kunming Service Network

► Case of application on customer site



Hebi City, Henan Province

Product Name: Rubber Additive
Model selection : PLD1250NF/PLD1600NF
Quantity selected: 30 units+



Tongliao City, Inner Mongolia

Product Name: Rubber Modifier
Model selection : PLD1600NF
Quantity selected: 20 units+



Vietnam

New Production Base for Zirconium Compounds (Zirconium Intermediates)
Model selection : PAUT1600N; PAUT1600S
Quantity selected: 20 units+



Baiyun City, Gansu Province

Model selection : LGZ1600NXG
Quantity selected: 15 units+

Project Case Drug Production



Project Case New Energy



Wuhan City, Hubei Province

Selected model: LGZ1250NF/PLD1250NF/PLD1400NF
 Quantity selected: 30 units+



Fuxin City, Liaoning Province

Selected model: GKF1000N/ GKF1000
 Quantity selected: 10 units+



Longnan City, Jiangxi Province

Annual output of 50,000 tons of cobalt-nickel and 100,000 tons of precursor project
 Model selection : LGZ1250NXG
 Quantity selected: 60 units+



Yichun City, Jiangxi Province

Separation products: Carbonated
 Model selection : LGZ1600NX
 Quantity selected: 30 units+



Hefei City, Anhui Province

Selected model: PSB450/ 800/ 1000
 Quantity selected: 70 units+



Taizhou City, Zhejiang Province

Selected model: LGZ1250/ GKF1000/ PSB1250
 Quantity selected: 100 units+



Qingyuan City, Guangdong Province

High-performance ternary lithium battery material precursor project
 Model selection : LGZ1250NXG
 Quantity selected: 100 units+



Jiujiang City, Jiangxi Province

Model selection : PLD1250NF/LGZ1250NF/LGZ1600NF
 Quantity selected: 40 units+

Project Case

FOOD

Project Case

Environmental Protection



Xinjiang Uygur Autonomous Region

Separation product: Monosodium glutamate
 Selected model: LGZ1250NF/LGZ1600NF
 Quantity selected: 30 units+



Zibo City, Shandong Province

Selected model: PLD1000NF
 Quantity selected: 20 units+



Shangqiu City, Henan Province

Phase I: 500,000 tons/year methanol project, Phase II: 400,000 tons/year acetic acid project
 Selected model: LWV650N
 Quantity selected: 10 units+, single unit processing capacity: 25m³/h



Jining City, Shandong Province

High saltwater treatment
 Main process: Efficient pretreatment + Deep demineralization + Multi-stage membrane concentration + MVR + Cold crystallization separation
 Treatment capacity: 13480m³/d



Malaysia

Selected model: LWX355aN
 Quantity selected: 30 units+



Taizhou City, Zhejiang Province

Selected model: PLD1400NF
 Quantity selected: 30 units+



Zhangjiagang City, Jiangsu Province

Sewage Treatment
 Model selection : LWV450N/LW530N
 Quantity selected: 10 units+



Chuzhou City, Anhui Province

Treatment capacity: 50 tons/day
 Main process: Spiral dewatering + low-temperature drying + ton bag packaging
 Sludge moisture content: 83% > 30%

Inspection And Testing

► Advanced experimental equipment

To ensure product quality, Jiangsu Huada has established a comprehensive inspection and testing system, equipped with various advanced inspection and testing instruments and equipment, such as metallographic analyzers, carbon-sulfur analyzers, and hardness analyzers for testing welding quality, and X-ray flaw detection rooms, tensile laboratories, ultrasonic detectors, and magnetic particle flaw detectors for testing weld and machining quality.



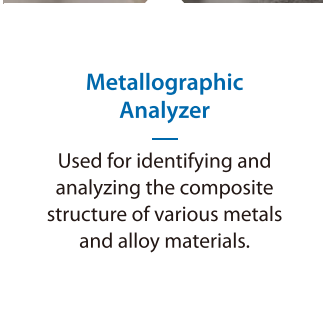
Oxygen-Nitrogen-Hydrogen Analyzer

Used for analyzing the oxygen, nitrogen, and hydrogen content in metals and other solid materials.



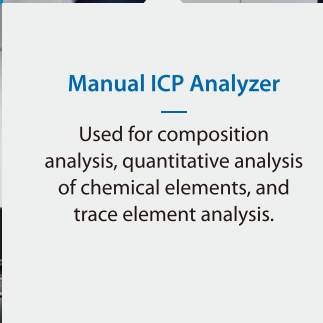
Hardness Analyzer

Used to measure the Vickers, Brinell, and Rockwell hardness of various materials.



Metallographic Analyzer

Used for identifying and analyzing the composite structure of various metals and alloy materials.



Manual ICP Analyzer

Used for composition analysis, quantitative analysis of chemical elements, and trace element analysis.



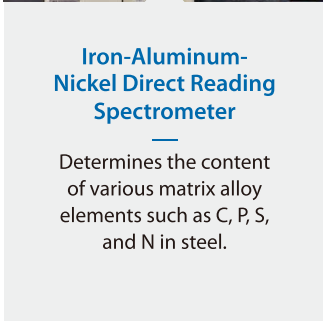
Carbon-Sulfur Analyzer

Used for quantitative analysis of carbon and sulfur elements in steel materials.



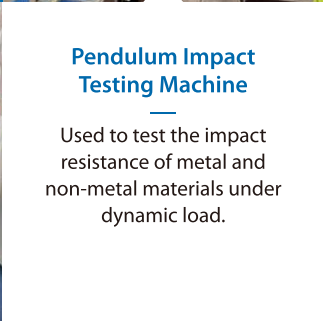
Intergranular Corrosion

Used to evaluate the corrosion resistance of materials, study and improve the microstructure of materials, etc.



Iron-Aluminum-Nickel Direct Reading Spectrometer

Determines the content of various matrix alloy elements such as C, P, S, and N in steel.



Pendulum Impact Testing Machine

Used to test the impact resistance of metal and non-metal materials under dynamic load.

► Testing and experimentation

High-precision dynamic balancing test machines for testing the balance quality of baskets, and high-precision coordinate measuring machines for testing the quality of metal processing. It is precisely because of such a rigorous quality inspection system and advanced inspection and testing equipment that we can ensure the delivery of high-quality products with excellent performance and stability to each customer.



PLD Test Platform



Decanter Test Platform



Ultrasonic Testing



Material Testing



Flaw detection testing



Dynamic balance testing

Production Workshop



Production Workshop



Production Workshop



PLD Type Bag Pulling Centrifuge Assembly Line



LGZ Type Scraper Discharge Centrifuge Assembly Line



GKH Siphon Type Horizontal Centrifuge Assembly Line



GKF Clean Type Horizontal Centrifuge Assembly Line



LLWZ Horizontal Filtering Centrifuge Assembly Line



LW Horizontal Decanter Centrifuge Assembly Line

Production Workshop

► Processing equipment



Fully Automatic Spiral Robot Welding Center

In 2023, Fully Automatic Plasma Transferred Arc (PTA) Technology was introduced into the scroll blade coating process, significantly improving the wear resistance and maximum service life of scroll workpieces.



CK5240E
CNC Double Column Machining Center

The High Precision Heavy Duty CNC Double Column Machining Center, equipped with an imported CNC system, can handle workpieces weighing up to 30T, ensuring the machining precision of the Centrifuge basket's outer circle and end face.

Used for welding the upper and lower seams of the base plate, it offers high welding efficiency and stable, aesthetically pleasing weld quality.

Fully Automatic Base Plate Robot Welding Center



Utilizing a mainstream imported CNC system and Spanish FAGOR Grating Closed-Loop Control, it features four-axis linkage control, ensuring the precision and production efficiency of basket machining.

KiMi B-2
CNC Horizontal Milling and Boring Center



Fully Automatic Basket Robot Welding Center

Used for welding the inner and outer seams of the Basket, it effectively ensures stable and aesthetically pleasing weld quality.



TX6111D
Digital Display Horizontal Milling and Boring Center

Used for various machining processes such as boring and milling of large and medium-sized parts and box-shaped parts of the centrifuge, it offers a wide machining range and high precision with an error margin of $\leq 0.01\text{mm}$.

In 2022, a High-Precision CNC Cutting Center was introduced, processing over 12,000 tons of sheet metal annually, with part precision error $\leq 0.05\text{mm}$.

V6025
CNC Laser Cutting Center



It can effectively ensure the concentricity of the centrifuge cover installation seats and the front and rear bearing seats, with an error $\leq 0.01\text{mm}$.

TK6516A
CNC Desktop Boring and Milling Center



MT-300
CNC Stamping Center

Mainly used for processing metal thin plates such as centrifuge liners and motor enclosures, with high precision, high rigidity, and stable processing quality.



XKW2420
CNC Gantry Boring and Milling Center

It has automatic polyhedral processing functions, used for large plane milling, precision milling, precision grinding, and high-gloss processing of centrifuge castings and steel parts.

01

Vertical Automatic Bottom Discharge Centrifuge



PLD TYPE BAG PULLING SCRAPER AUTOMATIC BOTTOM DISCHARGE CENTRIFUGE



MAIN APPLICATION

It is mainly used for solid-liquid separation of the suspension of various kinds of solid particles and fibrous materials, especially toxic, flammable and explosive materials and those materials with high viscosity and fine particle size. For example, medical products such as antibiotics, vitamins and medical intermediates, food such as salt, monosodium glutamate, food additives, starch, sugar and chemical seasoning, chemical materials, such as ammonium sulphate, gypsum, mirabilite, copper sulphate, potassium chloride, borax, dye, pigment, resin and pesticide, and materials related to industries concerning lithium ternary precursor new energy, mining, metallurgy and environmental protection.

PLD CLASSICAL TYPE



PLD HALAR LINING TYPE



PQLD PHARMA CENTRIFUGE



PLD INSULATION-TYPE

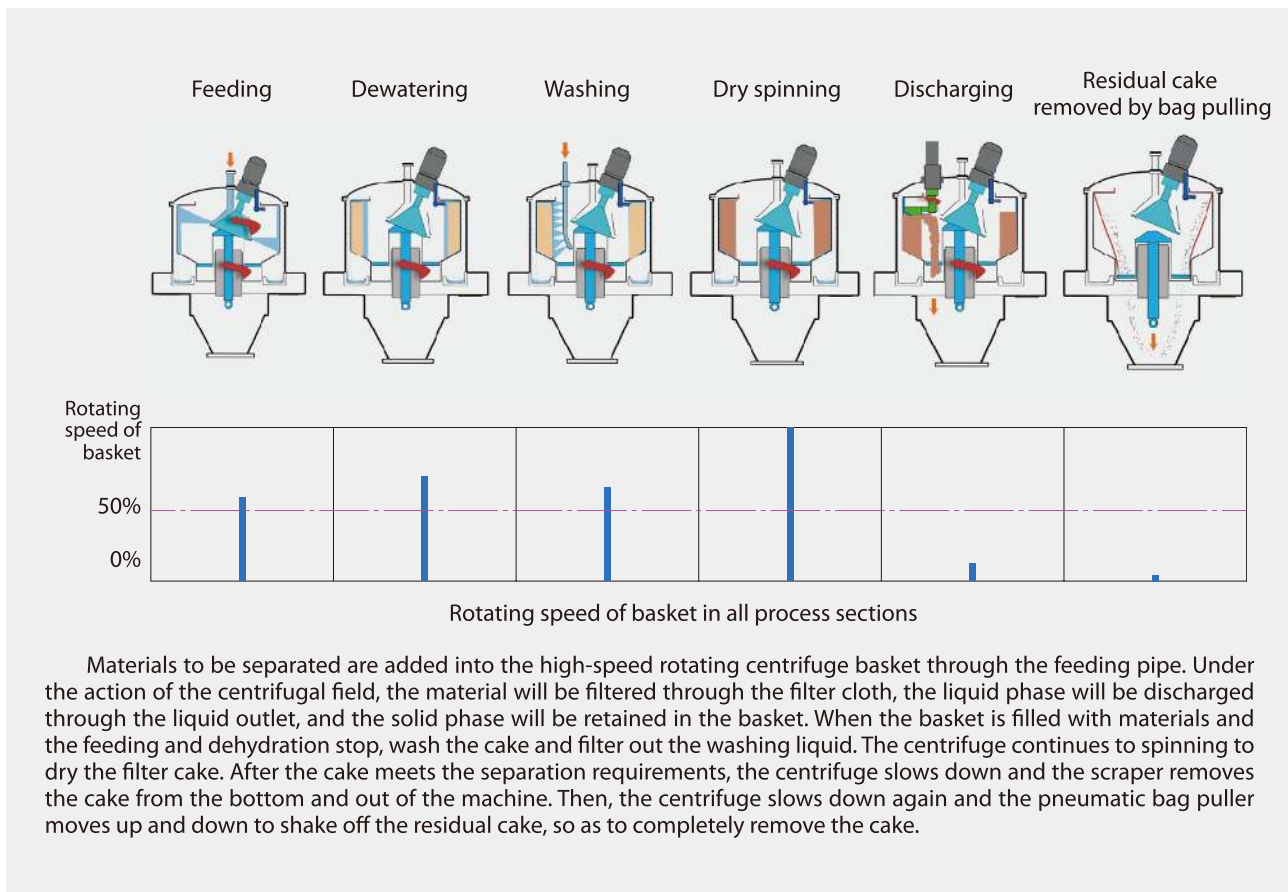


PLD automatic bottom discharge scraper centrifuge is a new type of product that are developed independently by HUADA, with multiple patents and completely independent intellectual property rights. This series of products is batch-processing separation centrifuge. After discharge, the filter bag can be regenerated, with good filtration and high efficiency, and it can effectively reduce the influence of the residual cake layer on the filtration performance of materials, avoid the cross contamination during material separation, and meet the requirements of GMP and FDA, thus realizing remote intelligent control and automatic production and online fault diagnosis.

The product is designed with an fully opening cover, and the transition of the whole structure is smooth and flat, which can give a thorough cleaning, effectively putting an end to the dead corners and can remove online residuals to avoid cross-contamination of materials. It is suitable for material separation requiring high purity and hygiene.

Adhering to the excellent characteristics of conventional PLD products, it is designed in an insulation layer structure with low or high temperature resistant bearings and seals, and it can achieve solid-liquid separation of materials in low or high-temperature environment. Insulation layer: single insulation layer (insulation agent filling layer) or double insulation layer (insulation agent filling layer + cold and hot media circulation chamber).

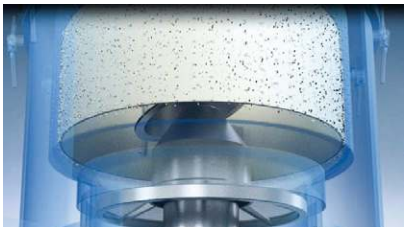
► Working principle



► Main features

Cake removal rate higher than **99%**

The filter bag is designed with a renewable structure and it can well remove the residual cake, avoiding cross contamination of materials. Moreover, it can improve the filtering efficiency and prolong the service life of the filter bag.





After scraping

Single Bag-pulling Removal

Multiple Bag-pulling Removal

► Main features



Stable operation

- The liquid damping shock absorber technology is adopted with small vibration, low noise.
- Frame square box design: The chassis weight is increased, the centrifuge center of gravity is lowered, and the vibration speed is reduced.
- No foundation installation form, which effectively reduces the vibration of the centrifuge and facilitates the installation and maintenance of the machine.

Smooth discharge

Automatic scraper device has the functions of speed regulation and pitch adjustment, and the scraper is designed with multi-structures, including double-blade (wear-resistant: carbide tip, wear-resistant coating, etc.).The cutting angle has been improved, with smaller scraping resistance, and the layered scraping technique shall be selected for hard materials.

Uniform distribution

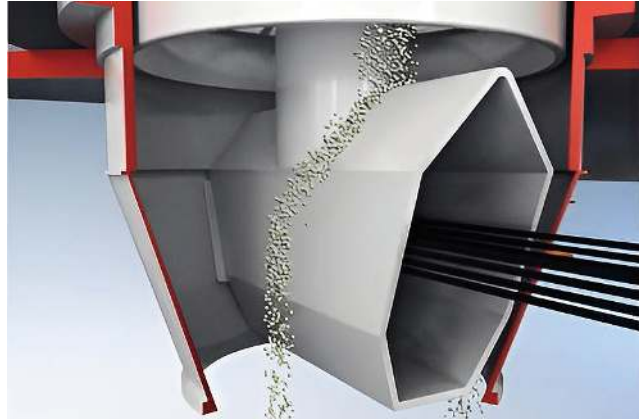
Streamline distributor can improve the distribution balance and reduce the distribution vibration for the material with poor fluidity.

Compliance with GMP specifications and anti-explosion requirements

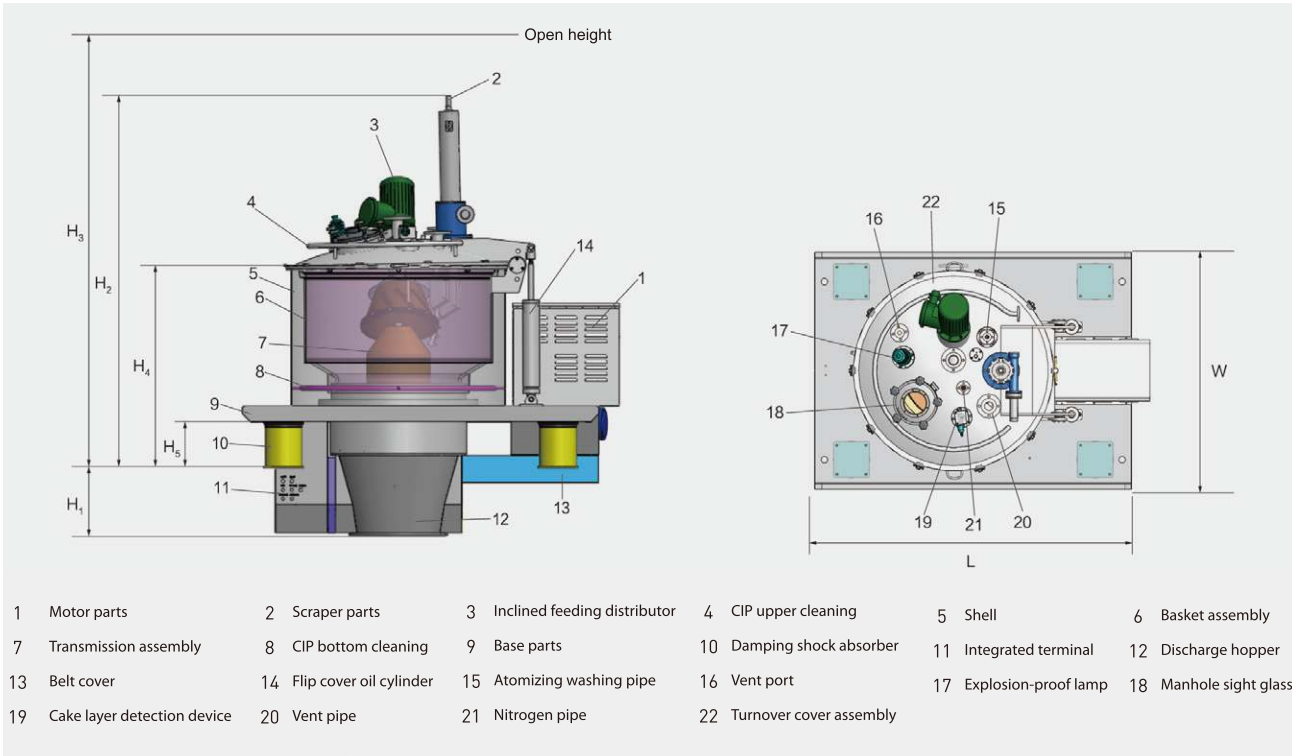
- The high surface cleanliness and roughness up to Ra0.2-0.4μm are in line with GMP requirements.
- The structure of a large turnover cover or fully opening cover + CIP online cleaning system can achieve thorough cleaning in centrifuges.

Multiple safety protection and guarantee

- The basket is comprehensively machined and undergoes 100% weld flaw detection, with high machining precision and large filtering area, conducive to ultrafine particle filtration.
- The cake layer control device and electromechanical material level detection device are provided to effectively control the feeding amount, prevent the centrifuge from overload work, prevent the material from escaping, and ensure the automatic operation of the feeding process.
- It has multiple protections, including overvibration protection, overcurrent protection, temperature control protection, scraper in-situ position protection, scraper stroke protection, cap protection, interlock protection, scraper blocking protection, nitrogen protection, etc.
- Fully enclosed structure: The material is completely separated from the transmission, which can protect the nitrogen filling inside the equipment, effectively prevent material from contamination, and ensure the safety of personnel.



► Main structure and technical parameters



Model	Code						
	L	W	H1	H2	H3	H4	H5
PLD800	2050	1250	620	2000	2100	965	250
PLD1000	2200	1530	635	2250	2500	1185	320
PLD1250	2550	1800	635	2500	2950	1370	370
PLD1350	2600	1900	635	2600	3050	1370	370
PLD1400	3000	2100	740	2770	3340	1575	400
PLD1600	3200	2400	810	3050	3700	1750	425
PLD1670	3250	2400	800	3000	3780	1750	425
PLD1800	3500	2500	880	3450	4400	2100	425

Items	Model							
	PLD800	PLD1000	PLD1250	PLD1350	PLD1400	PLD1600	PLD1670	PLD1800
Basket Diameter(mm)	800	1000	1250	1350	1400	1600	1670	1800
Effective Basket Height(mm)	460	570	700	710	800	900	920	1000/1100
Basket Volume(L)	100	180	400	450	600	800	900	1100/1250
Loading Capacity(kg)	130	230	500	560	700	1000	1125	1350/1500
Motor Power(kw)	7.5/11	15	22	30	30/37	37/45	45	55
Max. Speed(r/min)	1200/1500	1100/1200	1000/1200	1000/1200	950/1200	850/950	850	800
Max. Separation Factor	645/1007	678/805	707/1007	755/1088	700/1128	647/808	675	645
Machine weight (kg)	Platform construction	3500	5000					
	Square box structure	2000	4000	6000	6500	9000	12000	12500
								17500



► Product configuration selection

Configuration selection	Models					
	PLD	PQLD	LGZ	LQGZ	PGZ	PAUT
Full turnover cover		√		√		
Big turnover cover	√		√		√	
Flat cover	√		√		√	√
Platform construction	√	√	√	√	√	
Square box structure	√		√		√	√
Insulation structure	√		√			
Lateral permeability	√				√	√
Feeding method	Inclined feeding, Side feeding,central feeding					Side feeding
Discharging method	Scraper + pull bag discharge, layered scraper		Scraper discharge, layered scraper			
Washing method	CIP online cleaning, atomizing nozzle washing, spray ball washing, spray pipe cleaning, distribution plate washing and pulse washing					
Control system	PLC control, man-machine interface, frequency conversion control, energy consumption braking or feedback braking,etc					
Drive motor	General motor, energy-saving motor, frequency conversion motor, explosion-proof motor and plateau motor					
Safety protection	Explosion-prod device, nitrogen protection system, oxygen content detection system, vibration protection, temperature protection, electromechanical interlock, speed detection, overload protection, material level detection, cover-opening protection device, antistatic protection, etc					
Filtration performance	1,Basket volume (maximum loading capacity) 2,Basket rotating speed (maximum separation factor) can be designed according to customer's process requirements					

L/PGZ-TYPE AUTOMATIC BOTTOM DISCHARGE CENTRIFUGE

LGZ series centrifuge is a kind of fully automatic and highly technical centrifuge with scientific structure design, large processing capacity and simple operation and maintenance.



LGZ Square Box Type



MAIN APPLICATION

It is mainly used for solid-liquid separation of the suspension with various kinds of solid particles and fibrous materials, especially toxic, flammable and explosive materials and those materials with high viscosity and fine particle size. For example, medical products such as antibiotics, vitamins and medical intermediates, food such as salt, monosodium glutamate, food additives, starch, sugar and chemical seasoning, chemical materials, such as ammonium sulphate, gypsum, mirabilite, copper sulphate, potassium chloride, borax, dye, pigment, resin and pesticide, and materials related to mining, metallurgy and environmental protection industries, etc. The centrifuge can achieve remote control, with high automation and large processing capacity.

► Main advantages

01

It has scientific structure design, low center of gravity, smooth operation, and no foundation installation, convenient for installation and maintenance of the machine. The liquid damping shock absorber system is adopted, with good vibration absorption and better vibration isolation and vibration attenuation. The CIP online cleaning system is configured to conduct thorough cleaning and disinfection inside the machine to prevent cross contamination.

02

The fully-enclosed structure prevents the material from being contaminated, and achieves the nitrogen filling protection of the machine chamber, bearing seat, scraper chamber and distribution chamber. The feeding system with inclined feeding and cake layer control device is adopted to control the distribution and make it uniform, and realize automatic control. Gas recoiler and roller scraper device can effectively remove cake residue for cloth regeneration.

03

DCS control interface and automatic man-machine interface control can realize intelligent remote control. An independent transmission assembly is convenient for assembly/disassembly, and a double seal of labyrinth and oil seal is applied between spindle and basket to make spindle completely isolated from corrosive gas.



LGZ Online Cleaning Type



LGZ PE lining Type

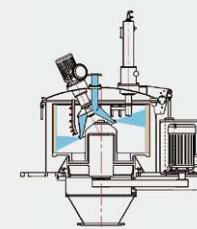
► Scope of application

It is suitable for solid-liquid separation of fibrous material with solid-containing content of 5%~40%, suspension, materials with high viscosity and fine particle size of 10μm~a few millimeters, and toxic, flammable and explosive materials. It is featured by aseptic sanitation, airtight explosion-proof performance and multiple safety protection, and can operate in plateau working condition. Moreover, it has been widely used in pharmaceutical, fine chemical, new energy, food and other industries.

► Working process

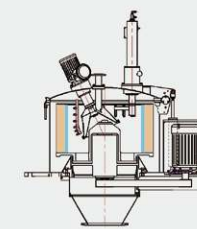
01

Feeding



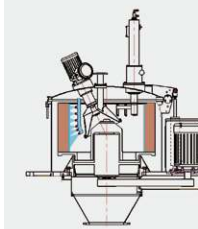
02

Dewatering



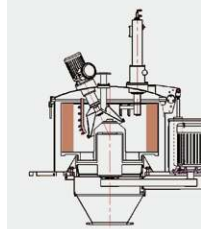
03

Washing



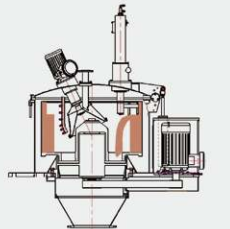
04

Dry spinning



05

Discharging



PGZ series of products, with the advantages of LGZ products, is designed with fixed cover, suitable for the separation of toxic, volatile, inflammable and explosive materials.



PGZ Halar lining Type

Working principle

The bottom discharge scraper centrifuge is the automatic vertical filtering centrifuge. The motor drives the basket to rotate at a high speed through the belt, and the materials to be separated enter into the centrifuge basket at a high speed through the feeding system under the control of the pre-programmed program. Under the action of the centrifugal field, the material will be filtered through the filter media (filter cloth/screen), the liquid phase will be discharged through the liquid outlet, and the solid phase will be retained in the basket. The material detection device will detect the filling level of the material in real time. When the basket cake reaches the loading capacity specified by the machine, it stops feeding. The filter cake is then washed and dried. After the cake meets the dehydration requirements, the centrifuge reduces to the scraping speed, and the scraper removes the cake under the hydraulic (pneumatic) drive, and then the cake is discharged through the solid discharge port of the centrifuge at the lower part.



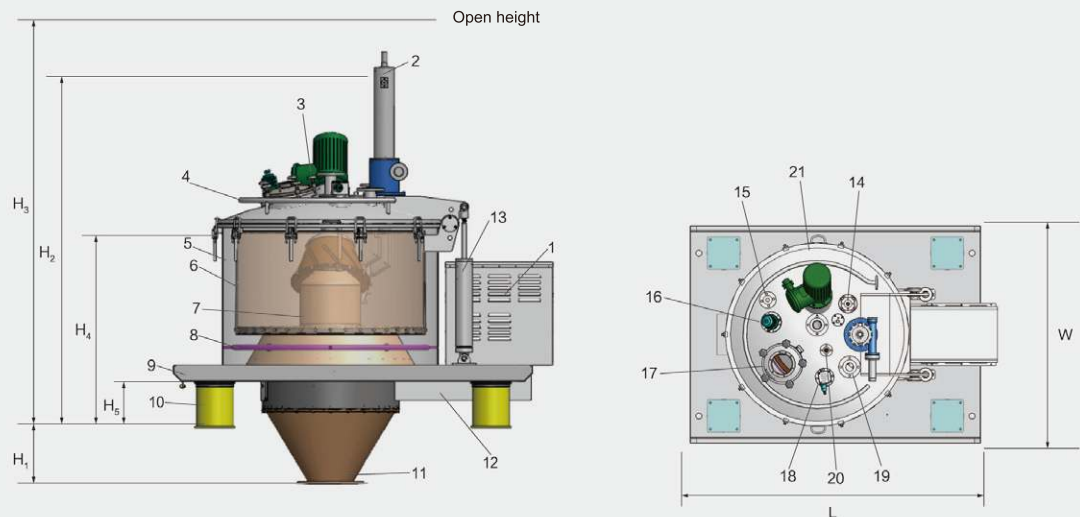
PGZ Square Box Type

Technical parameter

Model	Code						
	L (mm)	W (mm)	H1 (mm)	H2 (mm)	H3 (mm)	H4 (mm)	H5 (mm)
LGZ600	1460	1150	150	1200	1750	850	250
L/PGZ800	1900	1250	170	1900	2060	955	250
L/PGZ1000	2200	1530	275	2300	2500	1185	320
L/PGZ1250	2550	1800	275	2550/2900	2950/3150	1370/1540	370
L/PGZ1400	3000	2100	390	2800	3340	1575	400
L/PGZ1600	3200	2400	400	2850/3100	3700/3900	1750/1830	425
L/PGZ1800	3500	2500	500	3400	4400	2100	425

Items		Model						
		LGZ600	L/PGZ800	L/PGZ1000	L/PGZ1250	L/PGZ1400	L/PGZ1600	L/PGZ1800
Basket Diameter(mm)		600	800	1000	1250	1400	1600	1800
Effective Basket Height(mm)		340	420	550	630/800	750	800/1000	1000
Basket Volume(L)		45	100	190	400/500	600	800/1000	1250
Loading Capacity(kg)		60	135	230	500/600	700	1000/1250	1500
Motor Power(kw)		5.5	7.5/11	15	22/30	30/37	37/45	55
Max. Speed(r/min)		1800	1200/1500	1100/1200	1000/1200	950/1200	850	800
Max. Separation Factor		1087	645/1007	678/805	700/1007	707/1128	647	645
Machine weight (kg)	Platform construction	1400	2000	3500	5000	9000	12000	17000
	Square box structure			4000	6000		13000	

Structure diagram



- 1 Motor parts

2 Scraper parts

3 Inclined feeding distributor

4 CIP upper cleaning

5 Shell

6 Basket assembly
- 7 Transmission assembly

8 CIP bottom cleaning

9 Base parts

10 Damping shock absorber

11 Discharge hopper

12 Belt cover
- 13 Balance cylinder

14 Atomizing washing pipe

15 Vent port

16 Explosion-proof lamp

17 Manhole sight glass

18 Cake layer detection device
- 19 Vent pipe

20 Nitrogen pipe

21 Turnover cover assembly

PAUT SERIES

PAUT TOP-SUSPENDED BOTTOM

DISCHARGE SCRAPER CENTRIFUGE



MAIN

APPLICATION

PAUT series of centrifuges are applicable to washing and solid-liquid separation of suspension media containing solid particles, as well as solid-liquid separation of media containing a crystalline solid phase, which can be widely used. This product is commonly used for the treatment of gypsum, ammonium sulphate, mirabilite, ferric sulphate, copper sulphate, nickel sulphate, potassium chloride, acetic acid, borax, soda, rubber additive, dye, starch, sugar, vitamin, antibiotic, herbicide, insect repellent, copper, zinc, aluminum, acid discharge gypsum, metal refining, sludge after water purification, sludge in sewage and other kinds of chemicals and pharmaceuticals.

► Main advantages

EXPLOSION-PROOF, ANTI-CORROSION AND ANTI-POLLUTION

It has a fully enclosed structure, and the motor and shaft are directly connected, without belt transmission or environmental pollution due to friction dust.

Nitrogen protection device can be configured for explosion-proof applications.

Anti-corrosion alloy material and coating treatment can be adopted.

AUTOMATIC CONTROL + MULTIPLE SAFETY PROTECTION EQUIPMENT OPERATION, WITH HIGH RELIABILITY

Automatic program control, reliable operation, and high safety.

The frequency conversion speed regulation drive is adopted, with stable start, and effective overload protection of the motor.

Multiple safety protection + non-polar layered scraping control.

IT IS DESIGNED WITH A SIMPLE STRUCTURE, STABLE AND SIMPLE OPERATION AND EXCELLENT DAMPING PERFORMANCE

The top-suspended dynamical straight connected structure is adopted, in which, the transmission and the gyration center of the basket are aligned with the machine center, with stable operation.

It is provided with a square box base + liquid damping shock absorber system, with a low center of gravity and excellent vibration attenuation.

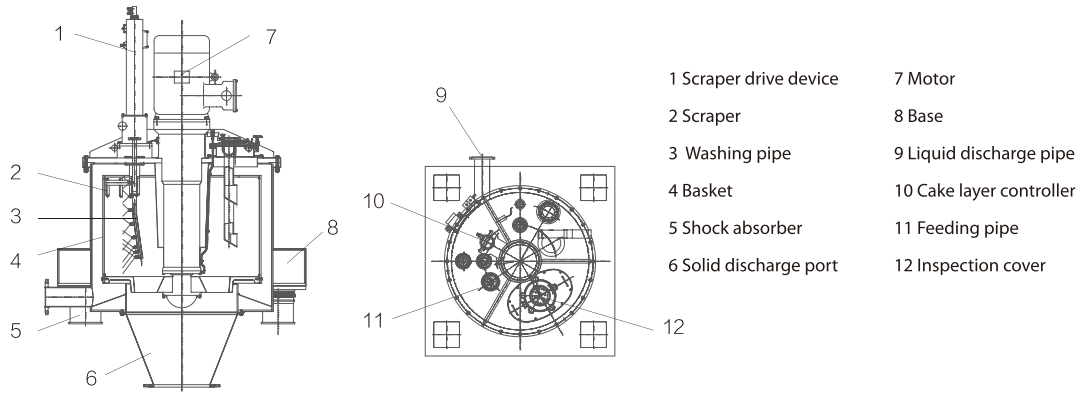
An independent bearing seat is adopted, with large bearing span, low center of gravity, large bearing capacity and great operation performance.

The body is designed with a full load-bearing structure, with high rigidity, simple structure and good appearance.

HIGH EFFICIENCY AND LARGE PROCESSING CAPACITY

Large length-to-diameter ratio and large loading volume

Wide application of materials

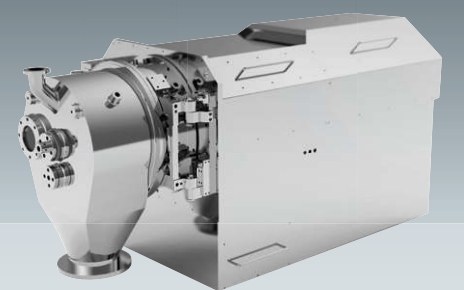
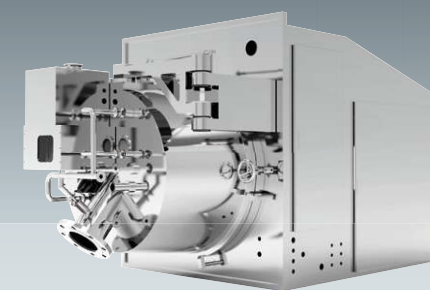


► Technical parameter

Items	Code		
	PAUT1250	PAUT1320	PAUT1600
Basket Diameter(mm)	1250	1320	1600
Effective Basket Height(mm)	800	800	1000
Basket Volume(L)	450	490	1000
Loading Capacity(kg)	560	620	1250
Motor Power(kw)	30	30	45
Max. Speed(r/min)	970	900	850
Max. Separation Factor	658	600	647
Dimension (mm)	2100x2000x2600	2100x2000x2600	2700x2350x2900
Machine weight (kg)	5000	5500	10000

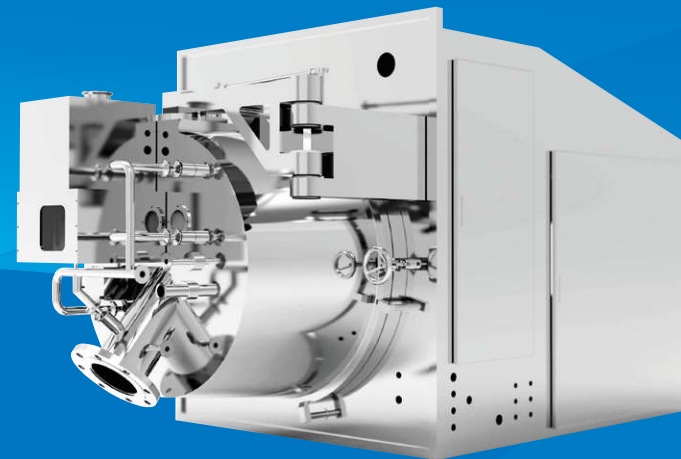
02

Horizontal Automatic Discharge Centrifuge



GKF SERIES Pharma peeler centrifuge

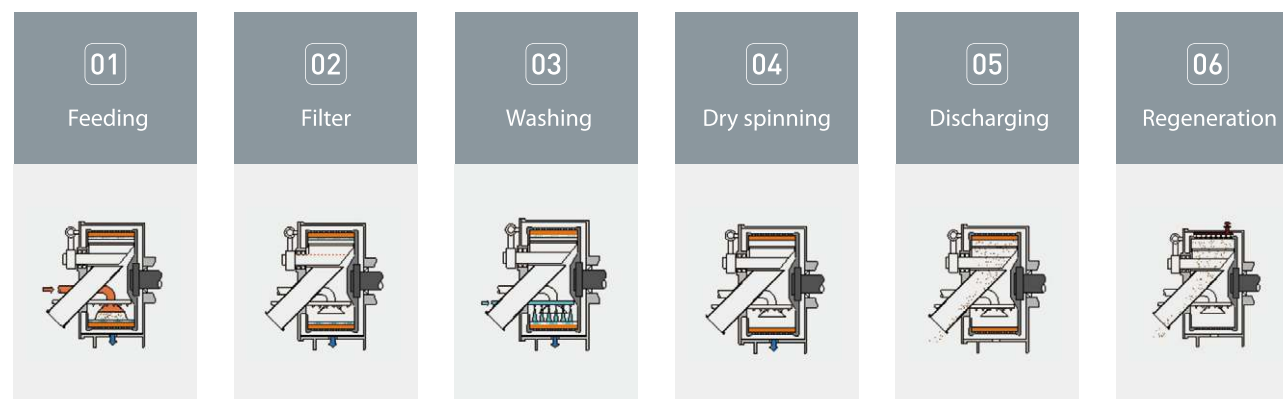
GKF Peeler centrifuge is a new type of centrifuge that integrates multiple patents. Its unique through-wall design separates the power area from the production area, and can separate pharmaceutical products or intermediates that meet GMP (FDA, COS, TGA) standards with reasonable consumption. It does not generate new impurities or contamination during operation.



MAIN APPLICATION

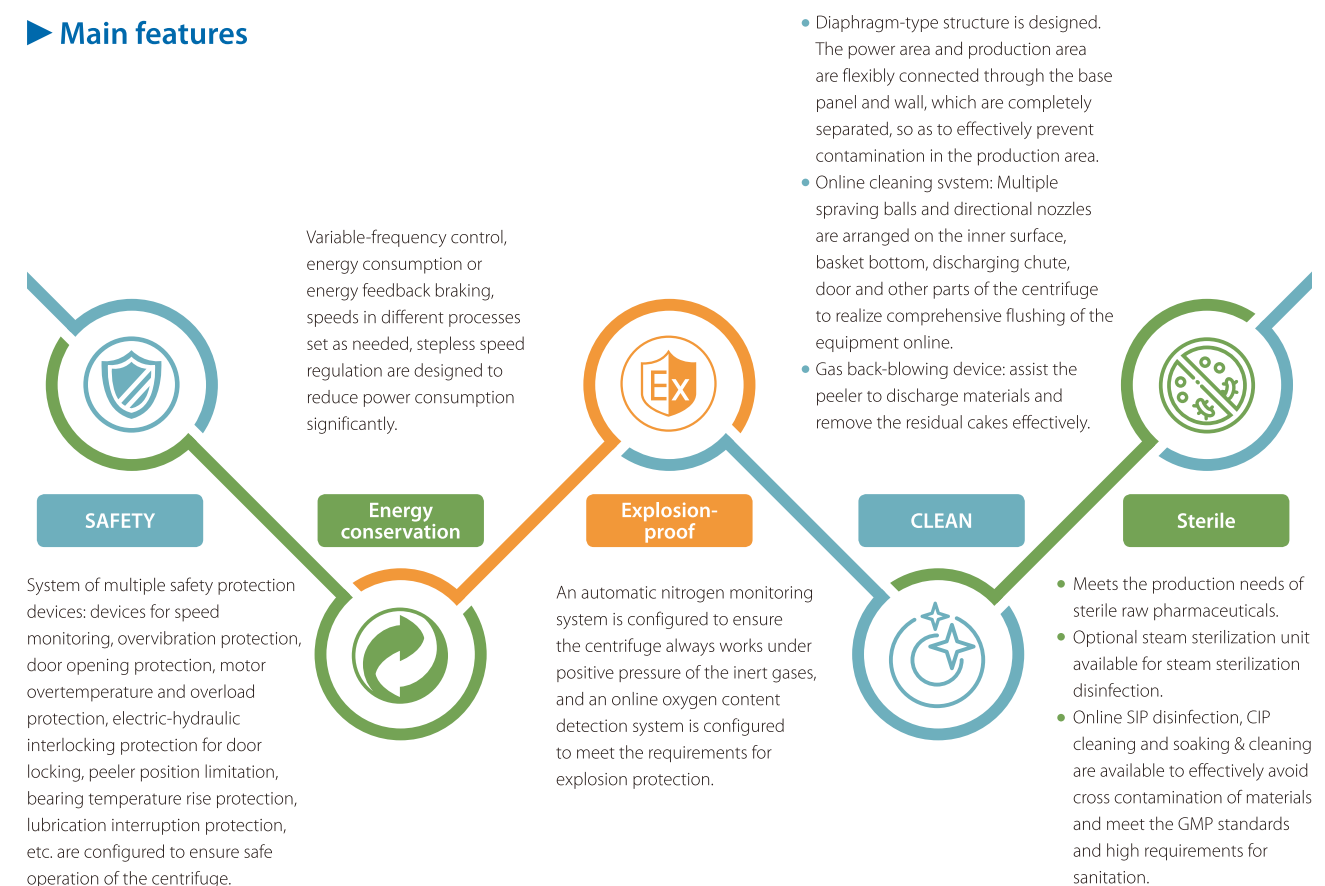
Characterized by automatic control, batch processing, continuous working, short circulating period, large processing capacity, low moisture and good washing effect, the product is applicable to the solid-liquid separation of toxic, hazardous, inflammable and explosive media of low viscosity and with high requirements for sanitation. It has been widely applied in the pharmaceutical production, food production and other fields.

Working principle and process

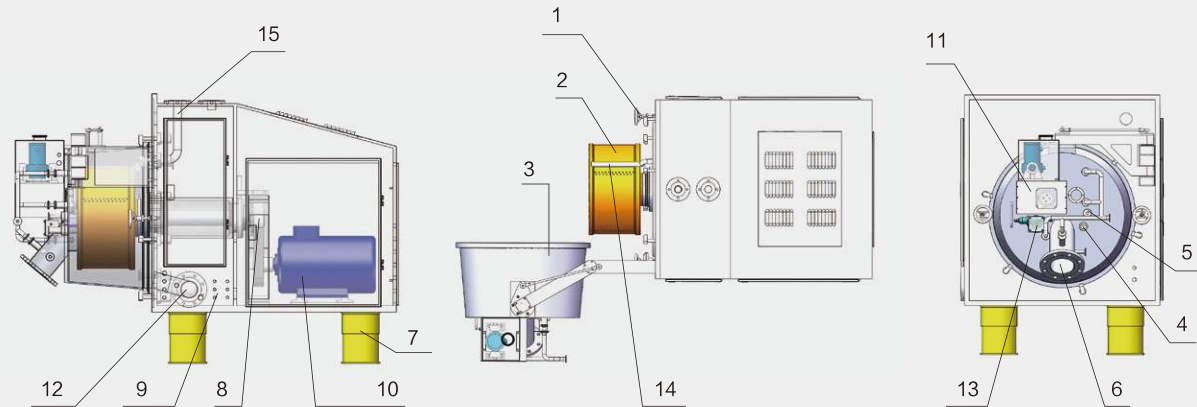


The main machine is filled with nitrogen or other inert gases. Once the predetermined indicators are reached, the main machine starts and automatically accelerates. When the basket reaches the feeding speed, the feed valve automatically opens, and the material level detection begins. When the material layer touches the material level detection plate, the feed valve automatically closes, stopping the feed. Under the action of centrifugal force, most of the liquid in the suspension is expelled through the filter cloth and basket holes. After a certain period of drying, according to process requirements, the centrifuge automatically decelerates to the washing speed, and the washing valve automatically opens. When the washing liquid reaches a certain thickness, the washing valve automatically closes, and the centrifuge accelerates to a high speed for further drying. Once the material is fully dried, the centrifuge automatically decelerates to the set speed. At this point, the discharge valve opens, the discharge cylinder operates, and the scraper automatically rotates and rises. The solid material is scraped into the scroll conveyor hopper and discharged from the machine through the valve. When the scraper rises to a certain distance, the stopper on the scraper device approaches the proximity switch, the scraper stops rising, and after a short period, it quickly retracts, entering the next cycle.

Main features



Structure diagram



- 1 Locking device

2 Basket

3 Flippable cover of shell

4 Feeding pipe

5 Washing pipe

6 Discharging pipe

7 Shock absorber

8 Transmission assembly

9 Base

10 Driving motor

11 Peeler assembly

12 Liquid discharge pipe

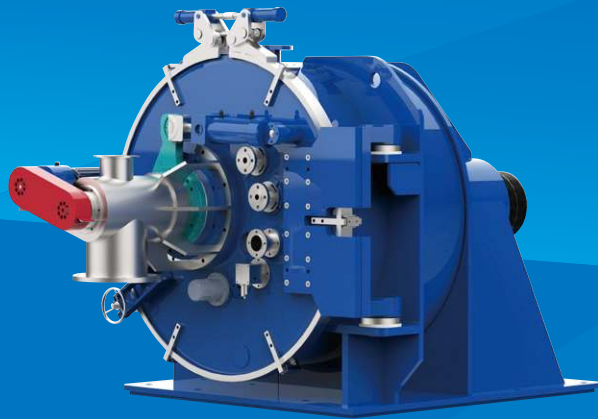
13 Cake layer controller

14 Gas back-blowing

15 Exhaust pipe

GKH SERIES
AUTOMATIC SIPHON PEELER CENTRIFUGE

GKH siphon centrifuge is a new type of product that is developed on the basis of the ordinary peeler centrifuge. Based on the siphon principle, this product discharges the filtrate out via a siphoning device or skimming device. The filtering impetus can be changed by adjusting the liquid level at the suction inlet of the siphon pipe (skimming pipe) to further regulate the filtering rate, processing capacity, cake moisture and washing effect.



Technical parameter

Items	Models							
	GKF600	GKF800	GKF1000	GKF1050	GKF1250	GKF1350	GKF1600	GKF1800
Basket Diameter(mm)	600	800	1000	1050	1250	1350	1600	1800
Basket Length(mm)	325	400	500	500	600	680	800	1000
Filtering Area	0.61	1	1.57	1.65	2.36	2.88	4	5.65
Basket Volume(L)	45	88	165	205	355	465	700	1100
Max. Loading Weight(kg)	60	120	225	275	450	600	930	1500
Basket Speed (r/min)	2400	1600	1400	1350	1200	1200	950	800
Separation Factor	1930	1146	1098	1070	1008	1088	808	645
Power of Driving Motor(kw)	22	30	37	37	55/75	55/75	90	132
Dimension (LxWxH) (mm)	Machine	2400x1390x1700	2850x1600x1950	3250x1800x2200	3420x2000x2400	3950x2150x2600	4350x2150x2700	5100x2500x3100
	Installation	3100x1900x1700	3600x2400x1950	4100x2900x2200	4300x3000x2400	5000x3300x2600	5200x3600x2700	6400x4400x3100
Weight(kg)	3500	5500	9000	10000	16000	18000	25000	36000

Scope of application

High G-force

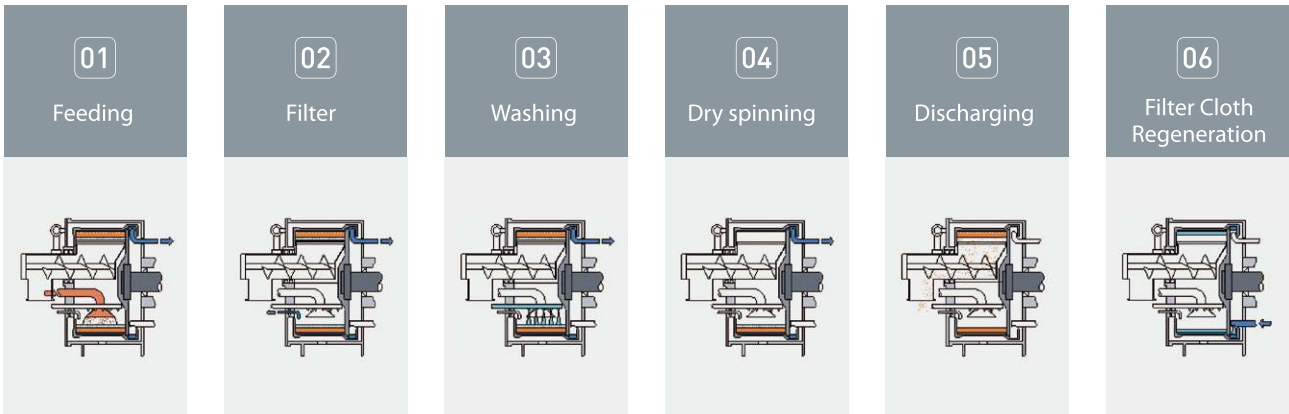
Short cycle time

Large processing capacity

Low filter cake moisture content

The siphon-type peeler centrifuge is applicable to the occasions involving large-scale production and requiring low cake moisture and sufficient washing, and therefore is commonly used for the separation of starch, sodium bicarbonate, potassium chloride, calcium phosphate and other materials. Currently, it has been widely applied in such industries as pharmaceutical production, food production, bioengineering and chemical engineering.

Working process



► Main features



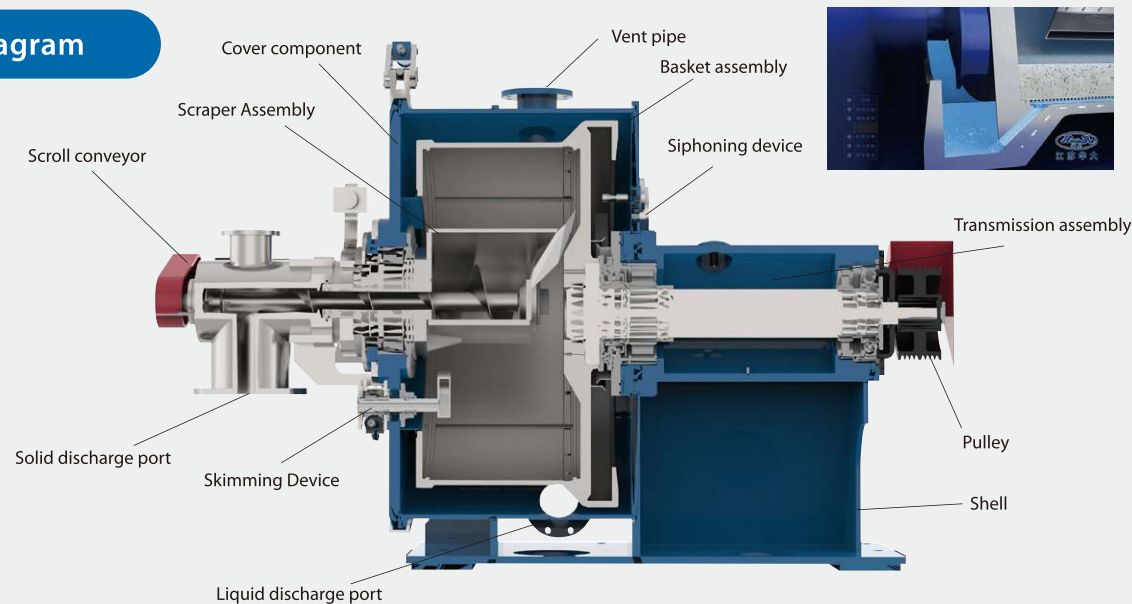
- Scroll discharge, high filter cake collection rate, stable discharge, and effective prevention of material blockage.
- Equipped with a cake layer controller, it effectively controls material thickness, prevents overload operation, and avoids material spillage.
- Enclosed and explosion-proof design is employed for the whole structure to meet the GMP standards and the requirements for the application in flammable and explosive places of the pharmaceutical industry.

- Full-hydraulic locking door and dual-locking protection are designed to ensure structural reliability and easy operation..
- Dovetail slot design is adopted for door and base fitting flange to ensure reliable sealing.
- Detachable were-resistant hard-alloy blades are configured to expand the service life. Peeler support is welded and polished as a whole, with high structural strength and high rigidity to ensure smooth scrapping.



- Integrated design of floating platform and vibration attenuation system. Anti-slip base plate, without fixing the equipment with bolts. Dynamic load isolated positively, with no need to lay a foundation, easier to be installed. Large bearing capacity and good vibration attenuation effect.
- Imported damper adopted for the vibration absorber, with special structural design to effectively improve the vibration isolating capacity as well as the equipment running safety and stability.

► Structure diagram



► Technical parameter

Items		GKH800	GKH1000	GKH1250	GKH1600	GKH1800
Chute and Floating Platform	Machine	2550x1750x1300	2850x2100x1550	3550x2200x1900		
	Installation	3400x2500x1900	4100x2600x2200	4600x3200x2600		
Chute and Steel Platform	Machine	2200x2100x1700	2600x2400x2100	4300x2100x2600		
	Installation	2800x2100x1700	3400x2600x2100	5300x2700x2600		
Floating Platform		2300x2600x400	2700x2400x450	3100x2600x500	4040x3400x700	4700x3600x800
Screw Discharge and Floating Platform	Machine		3600x2100x1550	3900x2200x1900	5200x2750x2300	5850x2880x2700
	Installation		4400x3600x2200	4800x4000x2600	6300x5000x3500	6900x5600x4000
Screw Discharge and Steel Platform	Machine		2900x2400x2100	4600x2100x2600	5300x3100x3100	
	Installation		3400x2900x2100	5500x2800x2600	6300x4800x3100	

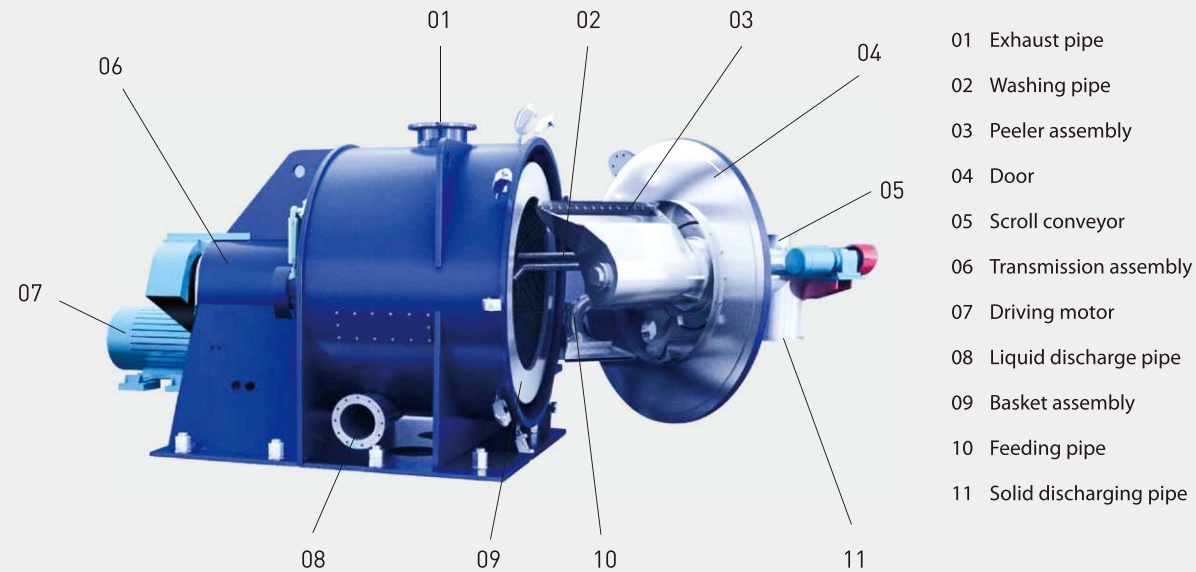
Items	Models				
	GKH800	GKH1000	GKH1250	GKH1600	GKH1800
Basket Diameter(mm)	800	1000	1250	1600	1800
Basket Length(mm)	450	500	600	1000	1250
Filtering Area	1.13	1.57	2.36	5	7
Basket Volume(L)	100	165	355	830	1325
Max. Loading Weight (kg)	135	225	450	1000	1780
Basket Speed (r/min)	1550	1400	1200	950	800
Separation Factor	1076	1098	1008	808	645
Power of Driving Motor (kw)	45	55	90	132	200
Weight	Chute Weight	4500	6500	10000	
	Chute and Steel Platform	7000	11000	20000	
	Weight of Floating Platform	5000	6500	9000	21000
	Screw Discharge Weight		6800	10500	16000
	Screw Discharge and Steel Platform		11300	22000	33000

GK SERIES HORIZONTAL AUTOMATIC PEELER CENTRIFUGE

GK horizontal centrifuge is a type of automatic filtration centrifuge featuring continuous running, intermittent operation and high-speed peeling, which is able to complete feeding, separation, washing, dry spinning, discharging, back-blowing and other processes at full speed, and therefore is commonly applied to the washing and solid-liquid separation of suspension medium containing solid particles.



Structure diagram



Technical parameter

Items		GK600	GK800	GK1000	GK1050	GK1250	GK1350	GK1600	GK 1800
Chute+Floating Platform	Machine		2500x1890x1300	2760x1980x1550	2750x2000x1550	3400x2170x2020		4000x2750x2480	
	Installation		3400x2500x1900	3900x2500x2200	3800x2360x2600	4600x3200x2600		5700x4100x3500	
Chute +Steel Platform	Machine	2400x1350x1400	2200x2100x1700	2460x2400x2100	3300x1800x2100	3660x2100x2600	4400x100x2700		
	Installation	2800x1800x1400	2800x2100x1700	3300x2400x2100	4000x1800x3000	4800x2900x2600	5400x3000x2700		
Floating Platform			2600x2300x400	2630x2360x450	2630x2360x450	3100x2600x500		4040x3400x700	4700x3600x800
Screw Discharge +Floating Platform	Machine				3600x2000x1550	3800x2170x2020		4850x2750x2480	5650x2850x2700
	Installation				4400x2360x2500	4800x4000x2600		6100x4700x3500	6500x5600x4000

Items		Models							
		GK600	GK800	GK1000	GK1050	GK1250	GK1350	GK1600	GK1800
Basket Diameter(mm)		600	800	1000	1050	1250	1350	1600	1800
Basket Length(mm)		325	450	500	500	600	680	800	1000
Filtering Area		0.61	1.13	1.57	1.65	2.45	2.88	4	5.65
Basket Volume(L)		45	100	165	205	355	465	700	1100
Max. Loading Weight (kg)		60	135	220	275	460	600	930	1500
Basket Speed (r/min)		2400	1550	1400	1350	1200	1200	950	800
Separation Factor		1935	1076	1098	1070	1008	1088	808	645
Power of Driving Motor (kw)		22	30	37	37	55	55	90	132
Weight(kg)	Chute		3500	6000	6200	8000		14000	
	Chute + Steel Platform	3500	6000	10000	10200	13500	21000		
	Weight of Floating Platform		5000	6000	6000	9000		21000	33000
	Screw Discharge host				6800	8500		15000	23000

Scope of application

High G-force

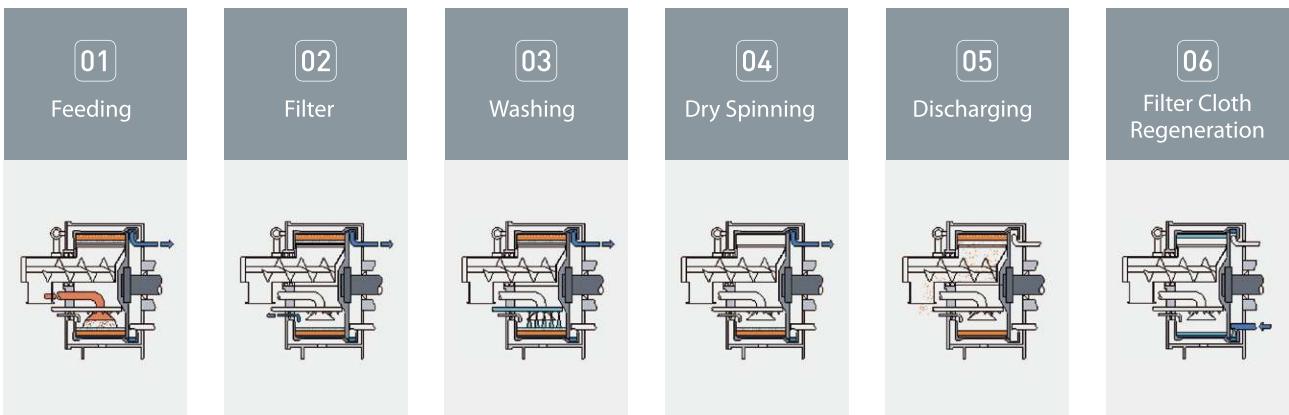
Short cycle time

Large processing capacity

Low filter cake moisture content

This centrifuge adopts PLC program control, with variable frequency speed regulation. The braking system uses dynamic braking or feedback braking. Through level detection, speed detection, bearing temperature detection, and vibration detection, it achieves fully automatic cyclic operation for the entire separation process. Manual operation mode and fully automatic operation mode can be freely switched.

Working principle and process



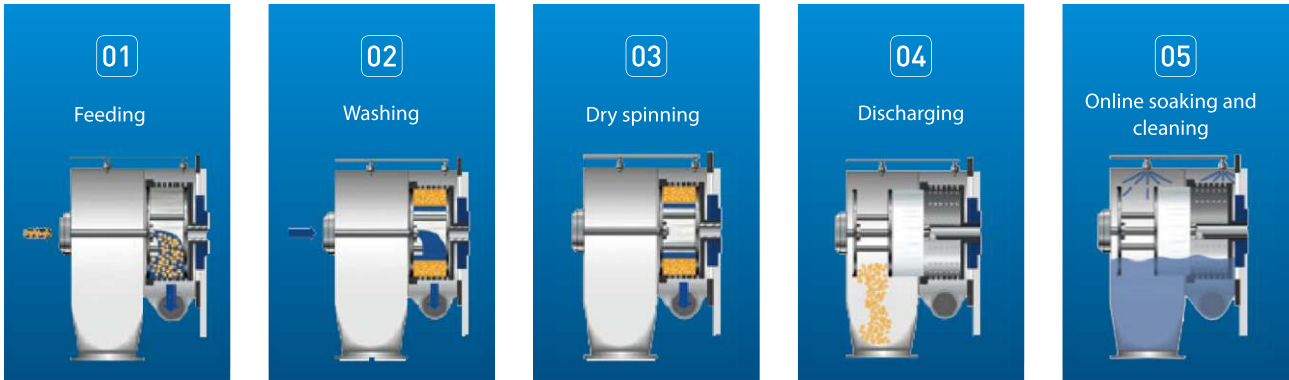
FW SERIES

AUTOMATIC INVERTING FILTER CENTRIFUGE

FW inverting filter centrifuge is a new type of precise centrifugal filtering equipment featuring automatic discharge, intermittent operation and high performance, which complies with the GMP standards for pharmaceutical production and can realize CIP in place cleaning, soaking & cleaning and disinfection. As no scrapping or squeezing force is applied on the cake particles during discharging, shapes of these particles can be reasonably maintained. This product is highly applicable to those materials that are extremely difficult to be filtered, as the filter cloth can be properly washed and regenerated, leaving no residual cake layers that affect the filtration next time. It is applicable to the filtration and separation of materials in the pharmaceutical production, food production, chemical engineering and other industries.



Working process



With low-speed running of the basket, the materials enter the basket through the feeding pipe.Under the action of centrifugal force, the materials are evenly distributed onto the filter cloth inside the basket, where the liquid phase is filtered out through the cloth pores, screen apertures and filtration pores on the basket and then discharged out through the liquid discharge pipe, while the solid phase is retained on the screen to form filter cake layers. Ater the materials are iniially dehydrated at a high speed, the washing liquid enters the basket through the feeding pipe to wash the materials, which will again be dehydrated at a high speed. Then, the centrifuge lowers the speed for discharging and starts the discharging motor, which will then push the dropping tray out of the basket, and the filter cloth starts to flip inside out to discharge the materials through the discharging port under the action of the centrifuge and gravity.

Working principle

The basket operates at a medium-low speed, and the material enters the basket through the feeding pipe. Under the action of centrifugal force, the material is evenly distributed on the filter cloth inside the basket, while the liquid phase is expelled through the filter cloth pores, screen gaps, and basket filter holes, exiting through the liquid outlet pipe. The solid phase is retained on the filter to form a ring-shaped filter cake layer. After preliminary dehydration at high speed, the washing liquid enters the basket through the feeding pipe for material cleaning. After high-speed dehydration, the centrifuge reduces to the Discharge speed, the Discharge motor is activated, the discharge plate is pushed out from within the basket, and the filter cloth is turned inside out. The material is discharged through the Discharge port under the action of centrifugal force and gravity.



Technical parameter

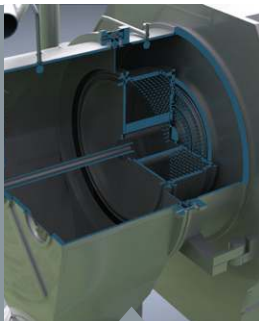
Models	Basket Diameter(mm)	Filtrating Area(m ²)	Basket Volume(L)	Max. Speed (r/min)	Max. Separation Factor(xg)	Dimension (LxWxH) (mm)	Weigh (kg)
FW300	300	0.12	6.8	3000	1500	2050x900x1050	1600
FW630	630	0.56	72	1950	1330	2900x1050x1600	3550
FW800	800	0.87	122	1600	1137	4000x1450x1850	4300
FW1000	1000	1.28	205	1270	938	4850x1700x2060	5700
FW1300	1300	2	350	1100	873	5800x2150x3100	6650

Main features



It is designed to meet the requirements for through-wall installation and clean production.

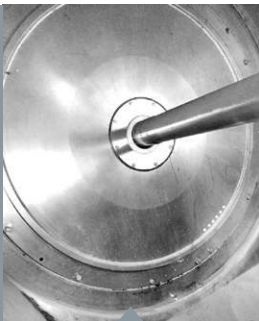
Automatic control, high technology and high accuracy requirements, and stable operation.



Grains are less prone to damage. Special bag-inverting structure is designed to prevent the cake from clotting.

Flip design is adopted for the door structure for easier cleaning and maintenance.

Compared to the horizontal automatic centrifuge, the inverting centrifuge is able to realize 100% recovery of the cakes, without residues.



Materials are fed from the central position to ensure airtightness and reduce the impact of the airflow on the cloth during separation.



Filtrating and separation of 2mm-10mm cake layers are available.

Filtration yield per unit area is high and filtration and washing quality per cycle is stable.

Between different batches, soaking, beating and washing of the filter bags can be realized inside the centrifuge to regenerate the filter cloth online.



Enclosed and well-sealed structure and small working cavity are designed to effectively reduce nitrogen consumption.

It can effectively avoid cross contamination of materials and meet the GMP standards and high requirements for sanitation.

HR SERIES

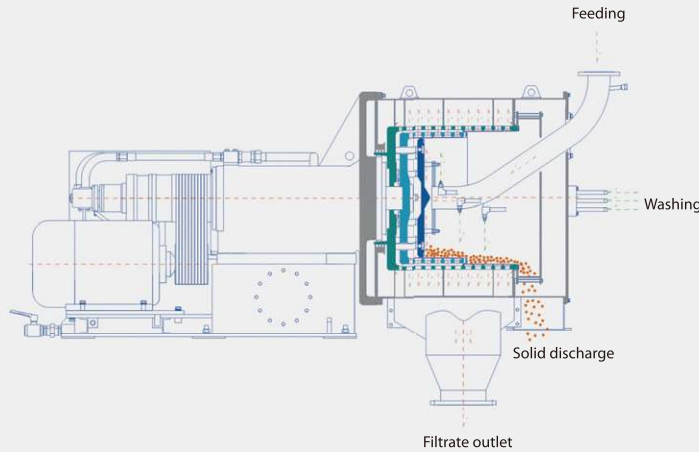
HR PUSHER CENTRIFUGE

HR pusher centrifuge is a type of filtering centrifuge characterized by continuous feeding and intermittent discharging.

Composed of hydraulic system, pushing mechanism, base, enclosure, transmission mechanism, basket, etc., this product is able to realize continuous feeding, separation, washing, discharging and other processes at full speed.



WORKING PRINCIPLE



Driven by the driving motor, the transmission device operates at full speed to bring the materials into the inner basket through the feeding pipe. Under the action of centrifugal force, the materials are evenly distributed onto the screen wall of the inner basket, where the liquid phase flows into the liquid discharge pipe through the screen and pores on the basket wall, while the solid phase is retained on the screen to form a cake layer. The inner basket and outer basket revolve at the same speed. Driven by the piston, the inner basket moves in the axial direction repeatedly and reciprocally to make the pushing tray to push the materials from the inner basket to the outer basket for further separation, where annular cake layers are formed. Continuously pushed by the outer end face of the inner basket, the materials are discharged out of the outer basket and then be conveyed out of the equipment through the material scrapping slot.

Main featurres



Fully automatic continuous operation completes feeding, separation and washing, drying, and discharging processes without the need for manual intervention.



Depending on different materials, pipe feeding or scroll feeding can be selected, making it applicable to a wider range of materials.



High production capacity, high recovery rate, low filter cake moisture content, and low energy consumption.



The pushing frequency is adjustable, better adapting to process changes.



Parameters can be optimized according to specific situations to better meet user needs.



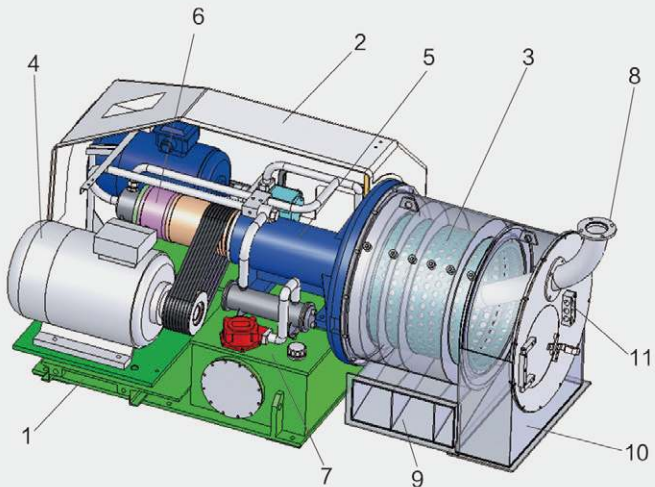
Minimal grain breakage, and the filter cake can be washed.

Industrial application

This product is applicable to the filtration of sodium chloride, ammonium chloride, ammonium bicarbonate, urea, polyethylene, polypropyl ethylene, ammonium nitrate, oxalic acid, sodium sulfate, caffeine, etc. in the chemical, fertilizer, alkali production, salt production and other industries.

Technical parameter

Items	Models			
	HR400-N	HR500-N	HR630-N	HR800-N
Basket Diameter(mm)	337/400	430/500	560/630	720/800
Filter area length(mm)	320	360	480	600
Speed (r/min)	1500-2400	1200-2100	1000-1800	800-1600
Separation Factor(xg)	504-1280	403-1235	353-1143	286-1146
Pushing stroke(mm)	40	50	50	50
Pushing times (N/min)	30-80	50-70	30-80	30-80
Power of Driving Motor (kw)	7.5-15	30-55	45-75	55-90
Motor power of Oil pump (kw)	5.5	22	30	45
Weight (kg)	2400	3600	4100	6100
Dimension (LxWxH)(mm)	2800x1130x1250	3800x1450x1650	3130x1430x1380	3860x1890x1810



- 01

Base
- 02

Shell
- 03

Basket
- 04

Motor
- 05

Transmission device
- 06

Pushing mechanism
- 07

Hydraulic system
- 08

Feeding pipe
- 09

Liquid discharging port
- 10

Discharge port
- 11

Washing pipe

03

Horizontal Screen Worm Centrifuge



LLWZ SERIES LLWZ HORIZONTAL THICKENING SCREEN WORM CENTRIFUGE

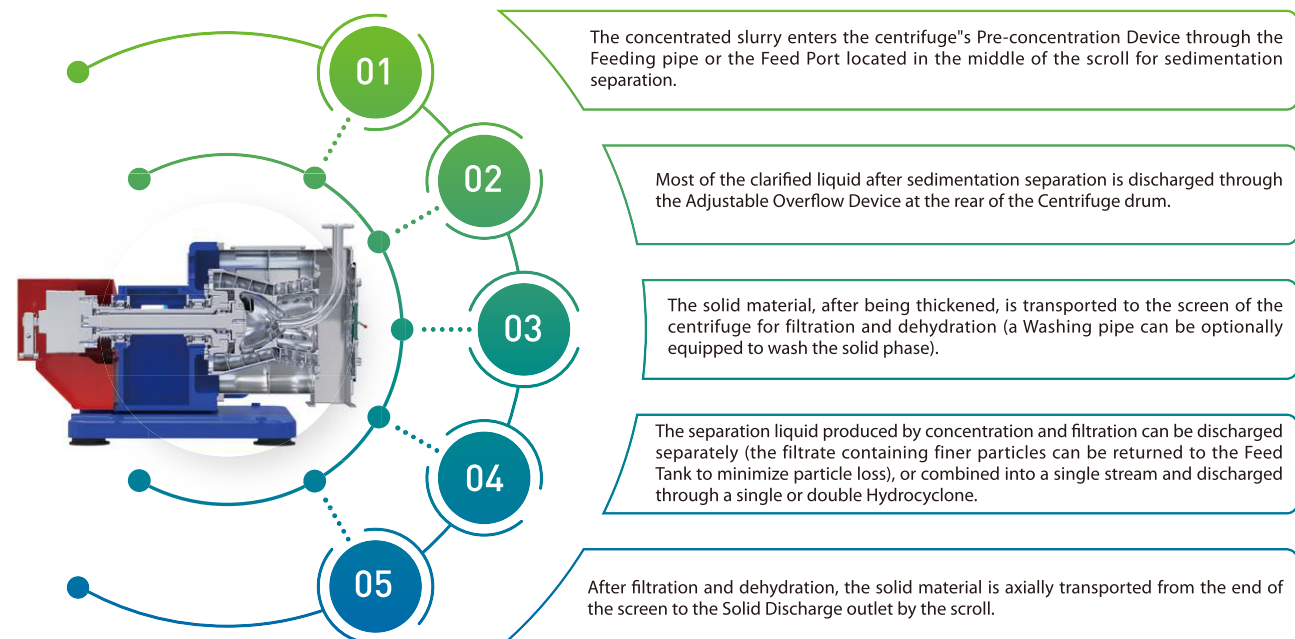
The LLWZ Thickening Screen Worm Centrifuge perfectly combines the structural characteristics of the Decanter Centrifuge and the Filtration Centrifuge. It adds a Pre-concentration Device on the basis of the Filtration Centrifuge, enabling efficient separation of slurries with low solid content. It is particularly suitable for conditions where the mother liquid has low solid content or contains a small amount of viscous substances, and it effectively recovers fine particles.



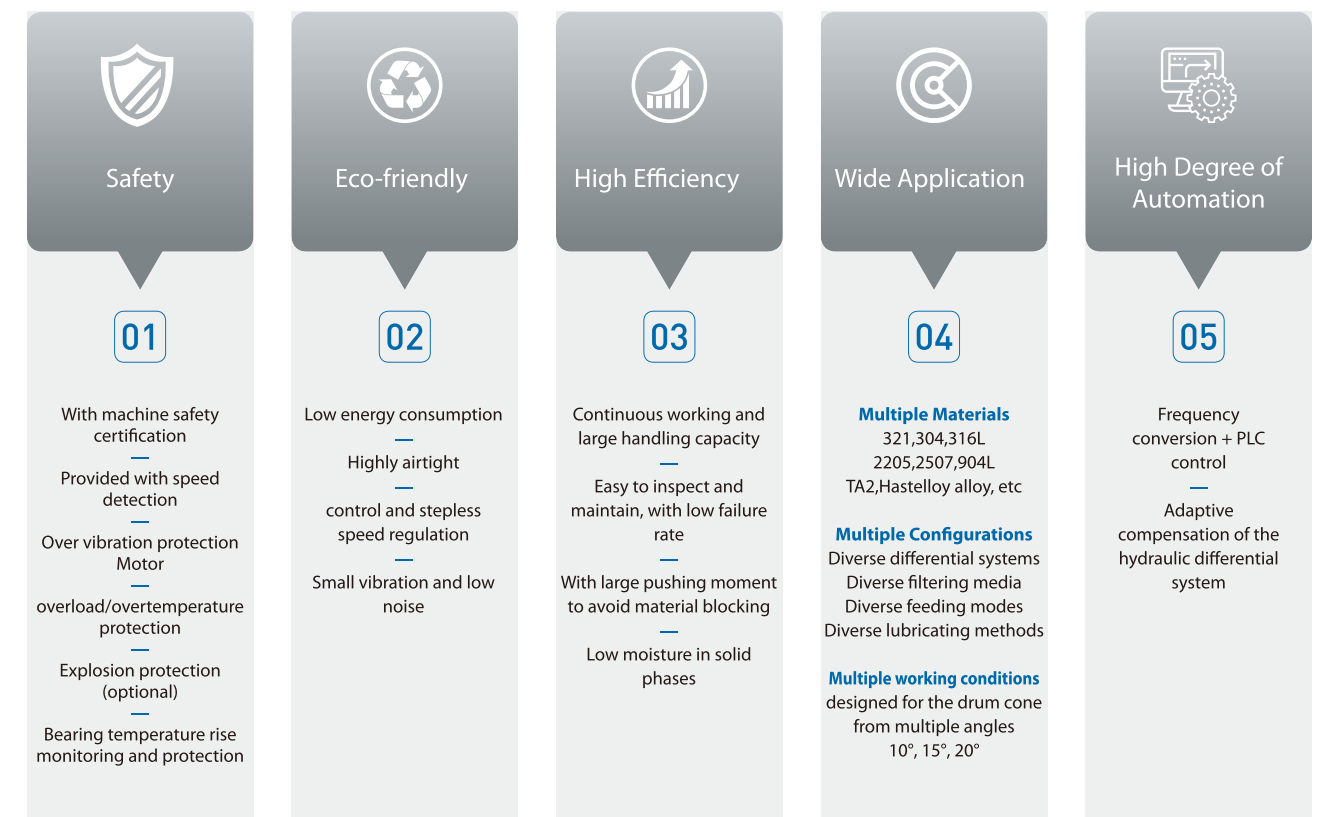
MAIN APPLICATION

Horizontal screen worm centrifuge has been widely applied in the chemical, food, salt, mining, pharmaceutical and other industries. Based on its separation principle, structural characteristics and relatively specific separation objects, this product is mainly applicable to the separation of materials with relatively large particle sizes and without strict requirements for the integrity of the particles, such as various crystals, fibers, crop shells, and plastic particles.

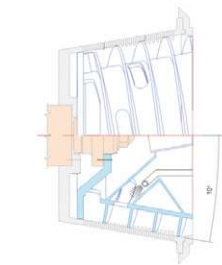
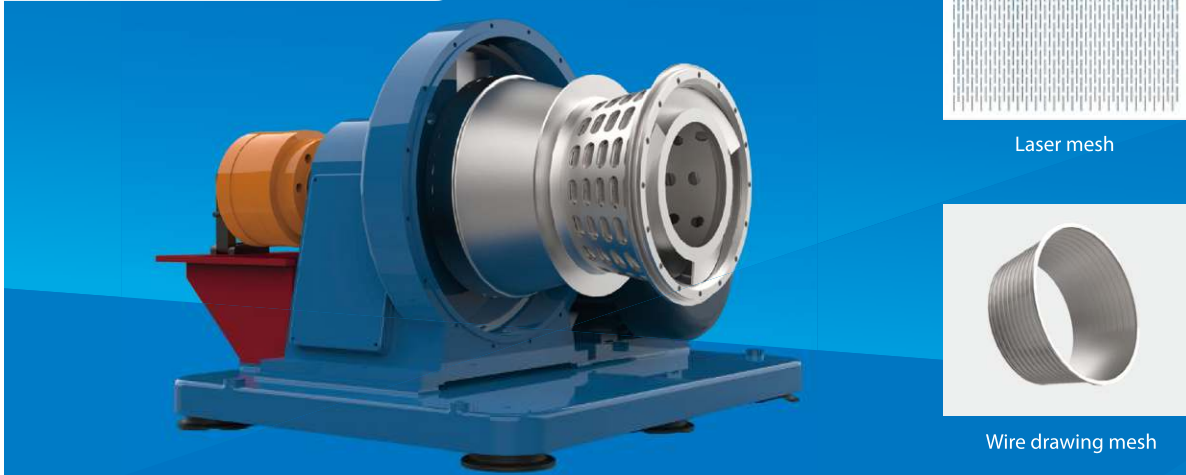
Working process



Product advantages

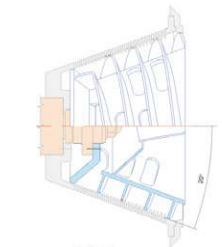


Special rotating components



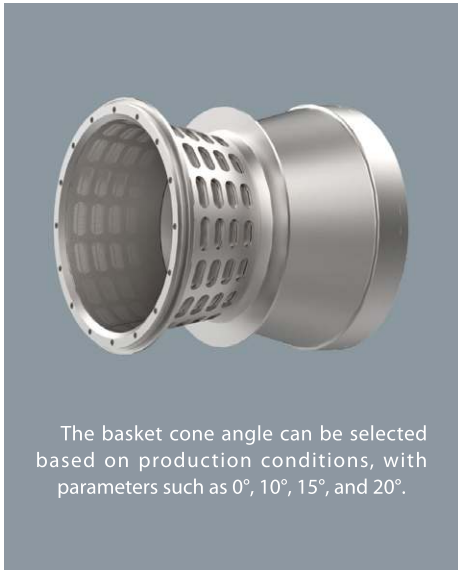
10°

This angle of the basket is preferred when washing the cake is required.



20°

This standard angle has proven excellent for the separation of most materials. The solid phase slides from the small end to the large end with increasing centrifugal force, requiring almost no significant pushing force from the Scroll.



An external planetary gearbox is used as the differential drive device, providing faster heat dissipation, greater torque, better adaptability to materials, and strong operational stability with resistance to impact and vibration. High transmission efficiency, with the maximum value of 0.97~0.99;



Main parameters of the Scroll

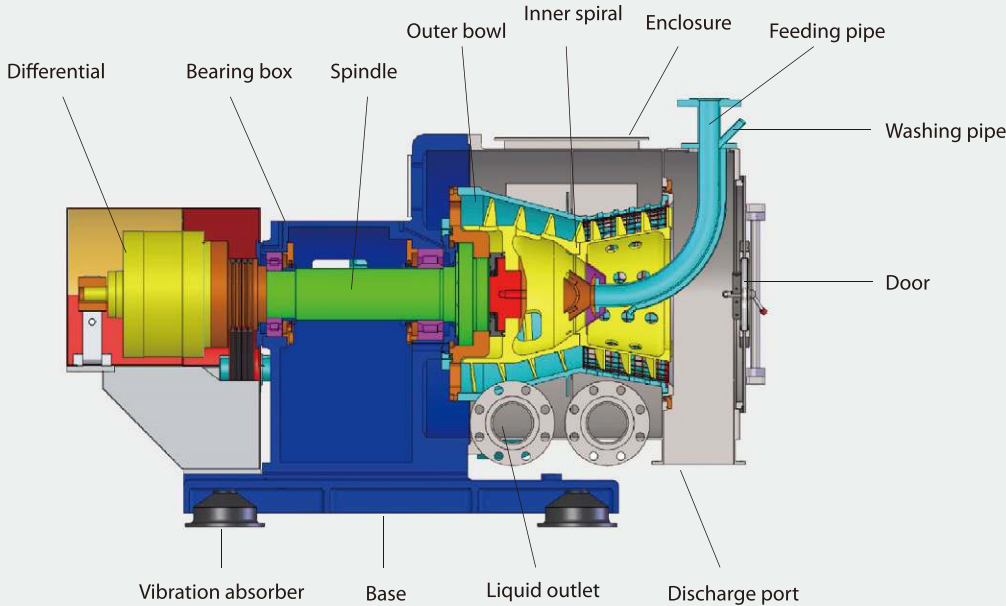
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number of scroll heads

scroll rise angle

pitch

Main structure



Technical parameter

Models	Bowl Diameter(mm) Sedimentation/ filtering	Bowl Speed (r/min)	Separation Factor Sedimentation/ Power	Production Capacity (m³/h)	Solid output (t/h)	Power of Driving Motor (kw)	Weight (kg)	Dimension (LxWxH) (mm)
LLWZ350	400/350	3000	2016/1765	1-5	0.5-1.5	22	1400	1650x1430x1000
LLWZ450	500/450	2500	1750/1575	2-8	1-3	30	1800	1800x1400x1250
LLWZ530	550/520	1800	998/944	3-10	1.5-4	45	3400	2450x1700x1500
LLWZ650	650/615	1600	930/882	5-15	2-6	55	4000	2650x1700x1600
LLWZ800	800/740	1500	1007/932	8-20	4-8	75	5000	3000x2200x2000
LLWZ900	900/650	1200	725/524	10-25	6-12	75	7000	3000x2200x2000

LLW SERIES(STANDARD TYPE)

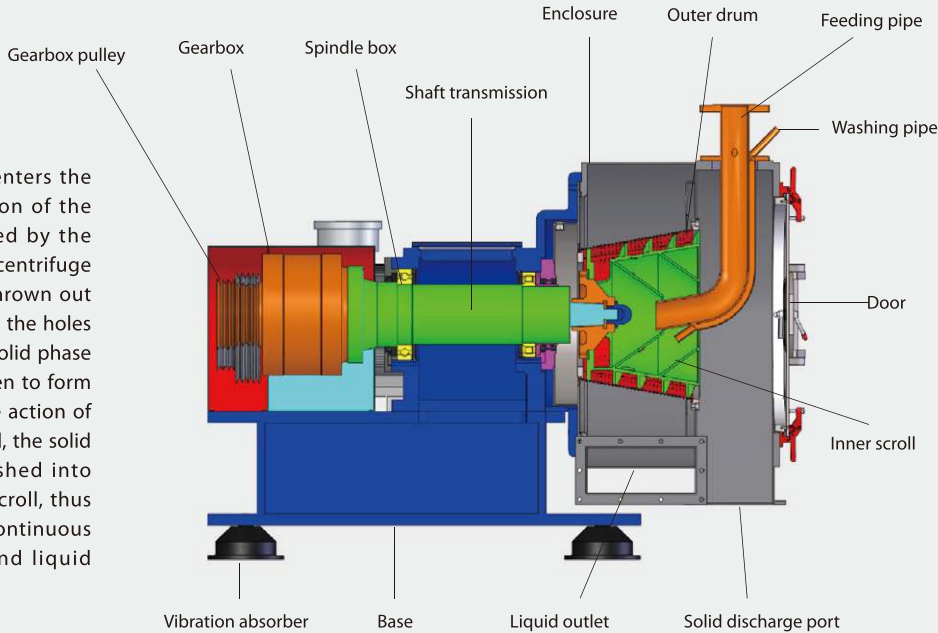
LLW Screen Worm Centrifuge (Standard Type)

Horizontal screen worm centrifuge is an advanced solid-liquid separation equipment featuring low energy consumption, high performance, high automation, high production efficiency, good separation effect, and continuous working capability. Horizontal screen worm centrifuge has been widely applied in the chemical, food,salt, mining, pharmaceutical and other industries.



Working principle

After the suspension enters the centrifuge, under the action of the centrifugal force generated by the high-speed rotation of the centrifuge drum, the liquid phase is thrown out through the filter screen and the holes in the drum wall, while the solid phase is trapped on the filter screen to form a filter cake layer. Under the action of the relative differential speed, the solid phase is continuously pushed into the discharge port by the scroll, thus achieving automatic and continuous separation of the solid and liquid phases.



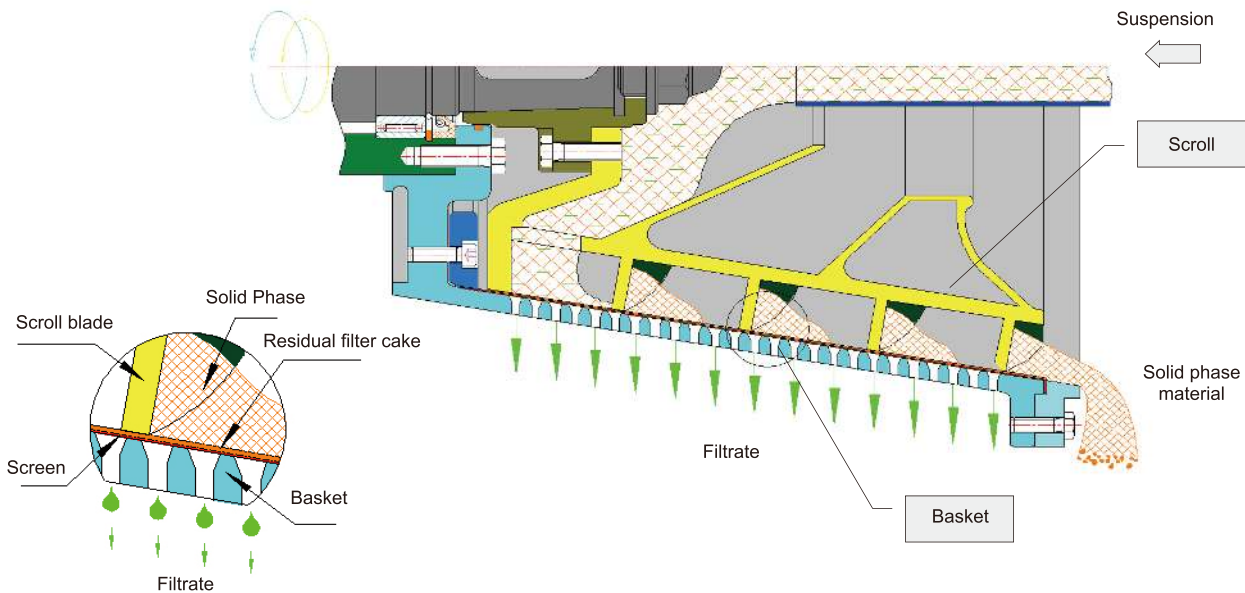
Technical parameter

Models	Drum Diameter (mm)	Drum Speed (r/min)	Separation Factor	Production Capacity (m³/h)	Solid output (t/h)	Power of Driving Motor (kw)	Weight (kg)	Dimension(LxWxH) (mm)
LLW320	320	2630	1240	0.5-3	0.2-0.8	7.5	700	1050x1350x1000
LLW350	350	3000	1765	1-5	0.5-1.5	11	1300	1520x1380x1190
LLW450	450	2500	1575	2-8	1.5-3	22	1700	1570x1240x1200
LLW530	530	2000	1187	3-10	2-4	30	2400	1680x1390x1340
LLW630	630	1800	1140	5-15	3-5	37	3500	2100x1430x1530
LLW800	800	1500	1007	8-20	4-8	55	5000	2500x2200x1800
LLW900	900	1200	725	10-25	6-10	75	6000	2600x2320x1870
LLW1000	1000	900	450	10-40	8-15	90	6200	3200x2200x2300

Application Cases

Successful Applications								
Adipic acid	Mirabilite	Pyrazole	AH-Salt	Ammonium persulfate	Gypsum	Silver nitrate	Ammonium phosphate	Ammonium sulfate
Ion exchange resin	Sodium chloride	Anthracene	Sodium chlorate	Acetylsalicylic acid	Sodium formate	Manganese sulfate	Borax	Methyl cellulose (MC)
Calcium formate	Sodium nitrate	Sodium perborate	Sodium phosphate	Citric acid	Sodium sulfate	Polystyrene	Polystyrene alcohol	Sodium thiosulfate
Potash (potassium carbonate)	Tartaric acid	Crystalized soda	Potassium vanadium	Trisodium phosphate	Potassium bicarbonate	Zinc sulfate	Pentaerythritol	Plastic particles
Ammonium thiosulfate	Sodium metaborate	Copper sulfate	Glacial acetic acid	Potassium chloride	Potassium pentasulfide	Potassium phosphate	Potassium sulfate	...

Separation Principle

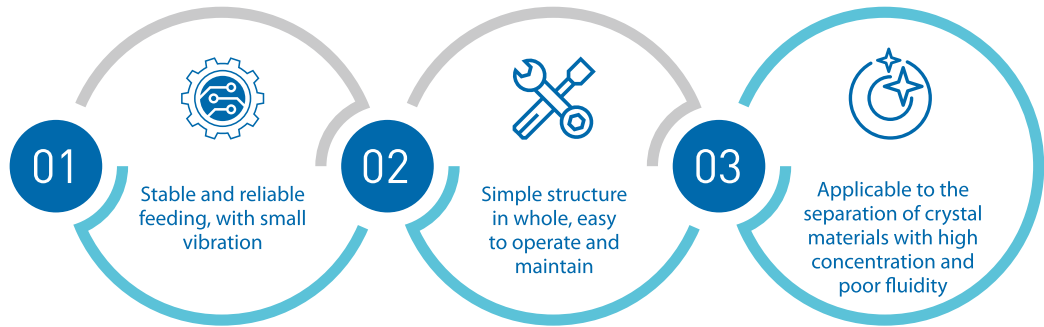


LLW SERIES (Scroll Feeding Type)

Screen Worm Centrifuge (Scroll Feeding Type)



► Main featrues



► Technical parameter

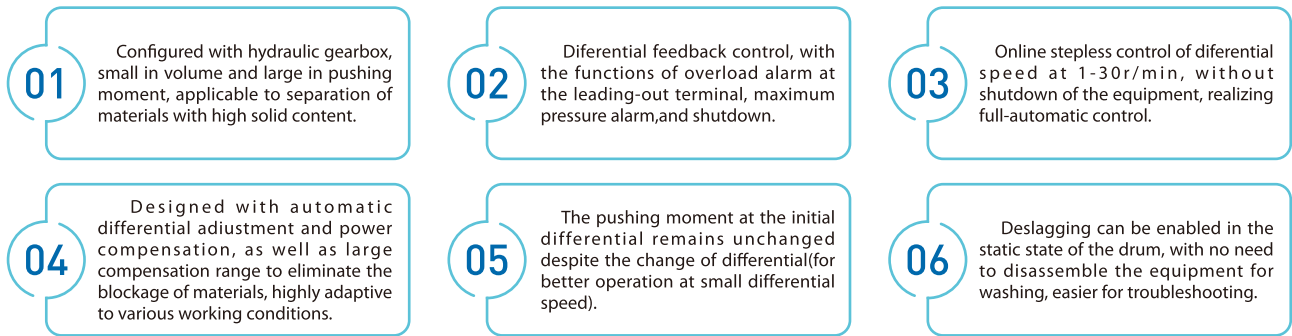
Models	Drum Diameter(mm)	Drum Speed (r/min)	Separation Factor	Production Capacity (m ³ /h)	Power of Driving Motor (kw)	Weight (kg)	Dimension(LxWxH) (mm)
LLW350LX	350	2500	1765	1-5	11	1400	2300x1180x1000
LLW450LX	450	2500	1575	2-8	22	2000	2360x1210x1040
LLW530LX	530	2000	1190	3-10	30	2800	2650x1350x1230
LLW630LX	630	1800	1140	5-15	37	4200	3050x1580x1400

LLW SERIES (HYDRAULIC GEARBOX TYPE)

SCREEN WORM CENTRIFUGE (HYDRAULIC GEARBOX TYPE)



► Main featrues



► Technical parameter

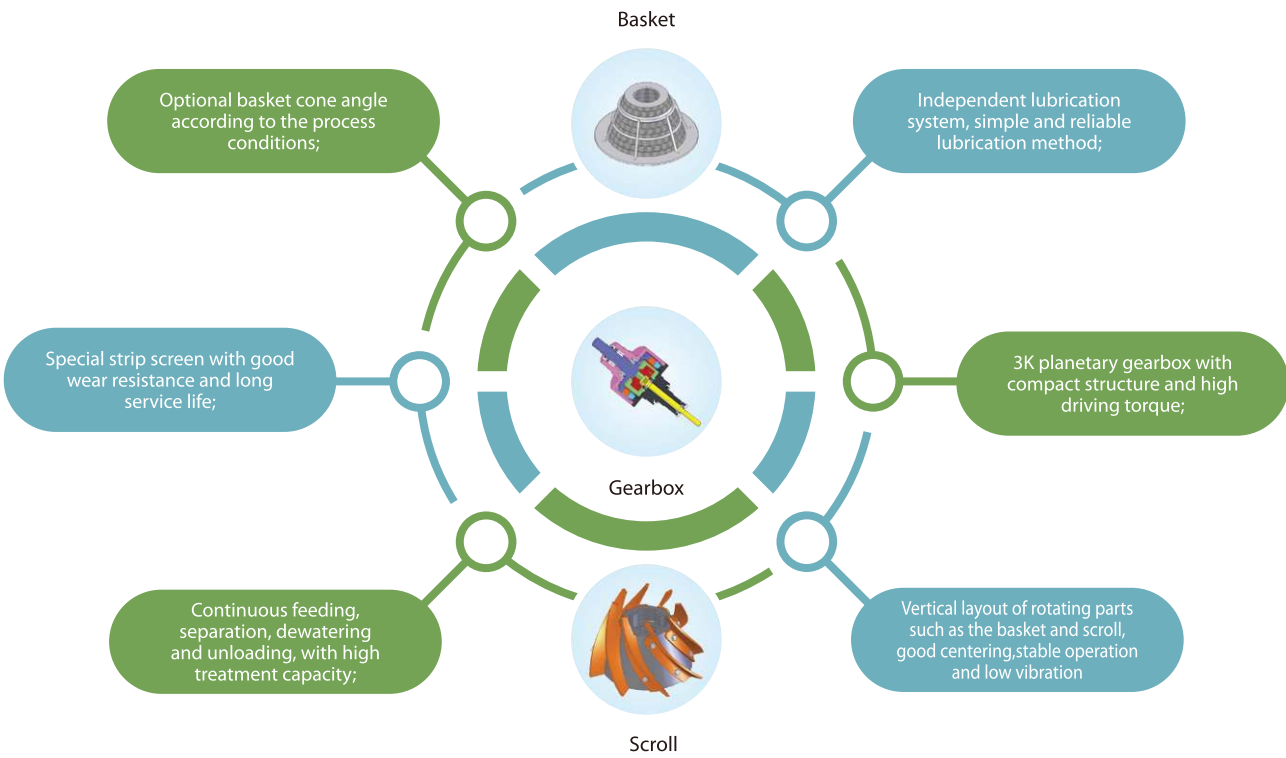
Models	Bowl Diameter (mm)	Bowl Speed (r/min)	Separation Factor	Production Capacity (m ³ /h)	Power of Driving Motor (kw)	Power of Hydraulic Station Motor (kw)	Weight (kg)	Dimension(LxWxH) (mm)
LLW530Y	530	2000	1190	3-10	30	11-18.5	2500	1680x1390x1340
LLW630Y	630	1800	1140	5-15	37	15-30	3500	2100x1430x1530

LLL SERIES

LLL Vertical Scroll Discharge Centrifuge (Cuttings Dryer)



► Main featrues



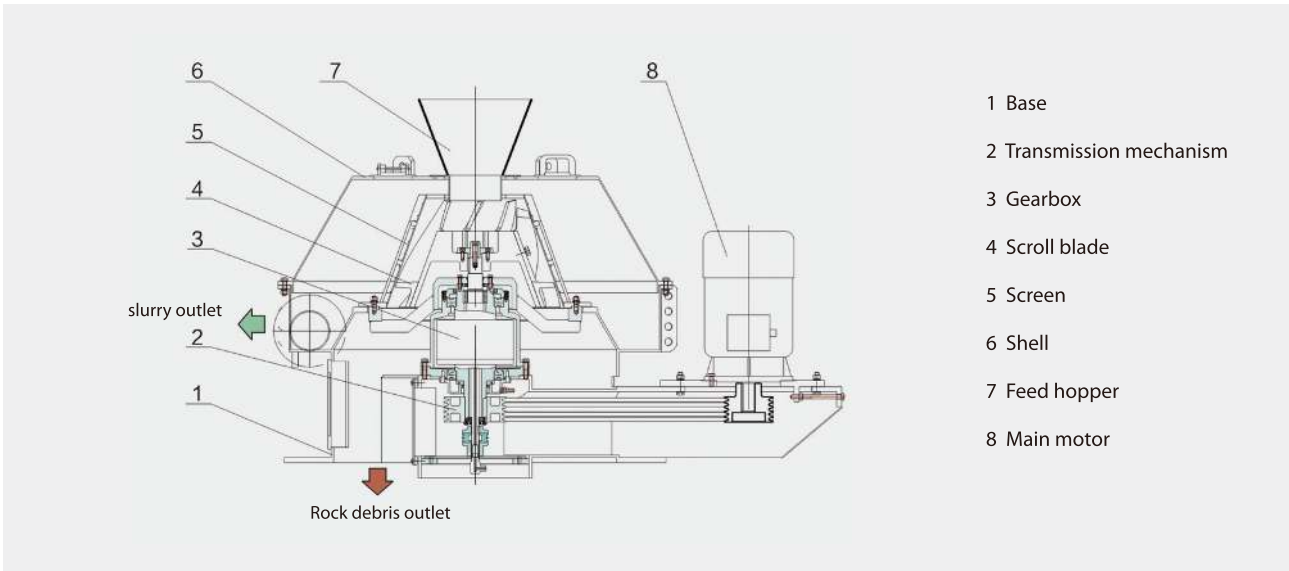
► Technical parameter

Models	LLL500	LLL600	LLL700
Basket Diameter(mm)	500	600	700
Max. Speed(r/min)	2000	1600	1300
Separation Factor	1120	860	660
Number of screens	20-70	20-70	20-70
Production Capacity(T/H)	20	40	60
Motor Power (kw)	15	30	45
Voltage(V)	380/460	380/460	380/460
IP grade	IP56	IP56	IP56
Dimension(LxWxH)(mm)	1520x1180x1200	1800x1100x1450	2250x1580x1500
Weight(kg)	1550	2980	3440

► Working principle

The slurry enters the scroll inner chamber from the feed pipe and then enters the basket through the feed port at the top of the scroll. Under the action of the centrifugal force field, the liquid in the slurry is filtered out through the screen laid on the rotating wall, and the solid particles are trapped in the basket. At the same time, the solid particles in the basket move from the top (small end) of the basket to the bottom (big end) of the basket under the action of centrifugal force and the relative differential speed between the scroll and the basket. During this movement, the centrifugal force is rapidly increased due to the increase in the rotation diameter, and the solids change from a high moisture content at the time of initial entry to the lowest moisture content at the time of discharge, realizing the automatic and continuous separation of solid and liquid phases.

► Main structure



04

Horizontal Decanter Centrifuge



LW SERIES DECANTER CENTRIFUGE



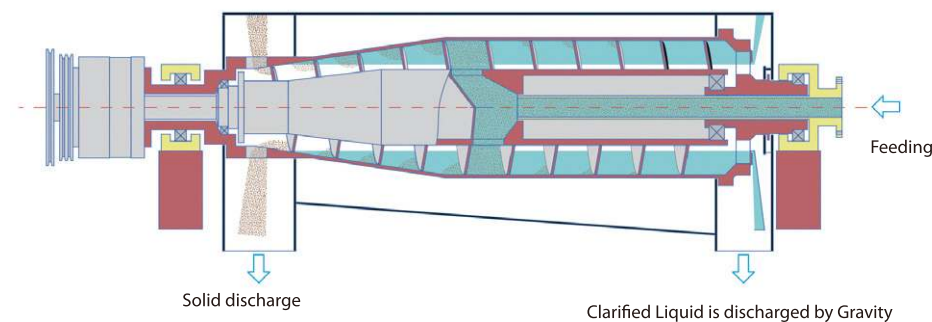
MAIN APPLICATION

- Separation of industrial wastewater and municipal sewage
- Fractionation and dehydration of dyes and pigments
- Dehydration of flotation clean coal and coal slime
- Fractionation and dehydration of mineral processing slurry
- Drilling mud treatment
- Washing, separation, and dehydration of starch
- Dehydration of soybean and wheat protein
- Purification of fruit juice and dehydration of pulp fiber
- Dehydration of fish meal and fish meat
- Dehydration of distiller's grains
- Separation of mycelium from antibiotic fermentation broth
- Separation and purification of coal tar
- Particle size fractionation of kaolin and graphite
- Separation and purification of animal and vegetable oil

► Main features

LW series products are decanter centrifuges that can work continuously and are mainly used for solid-liquid separation, dehydration, fractionation, clarification, and concentration of materials. Based on different phase densities, it separates the solid phases and liquid phases under the action of the centrifugal force generated by the high-speed revolution of the Bowl. The solid phases are conveyed to the conical end of the Bowl through a scroll and then discharged, and the liquid phases are discharged out from the overflow port at the big end of the Bowl.

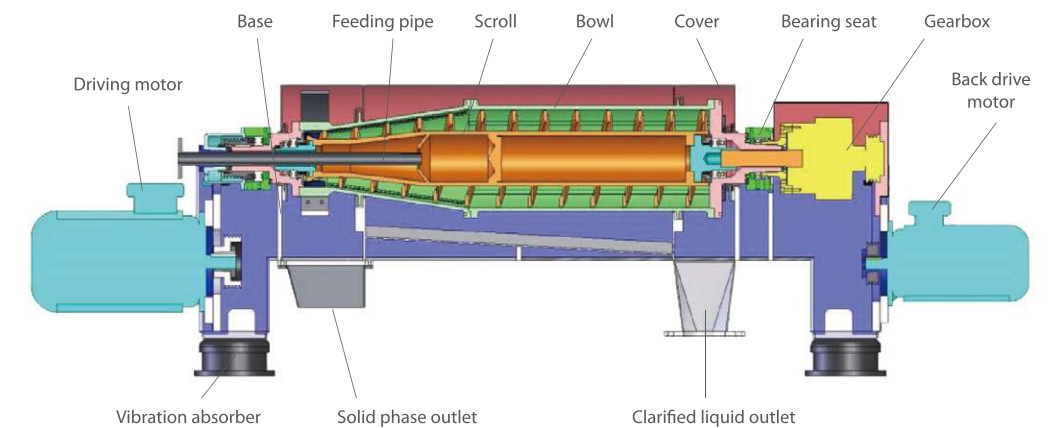
Characterized by simple design, high efficiency and scientific configuration, this product has been widely applied to chemical, pharmaceutical, environmental protection, food, mining, energy and other industries.



► Working principle

The suspension enters the middle of the bowl through the feeding pipe and is distributed by the distributor. Under the action of the centrifugal field, the solid particles with a larger specific gravity accelerate to settle on the inner wall of the bowl.

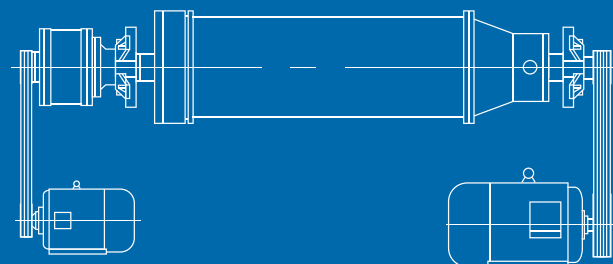
The settled solid phase is pushed by the scroll conveyor blades from the settling zone (cylindrical bowl) through the drying zone (conical bowl) to the solid phase outlet; the continuously added mother liquid settles while flowing along the scroll blades towards the large end of the bowl, and the clarified liquid phase is discharged from the overflow port (or via the centripetal pump) at the large end cap of the bowl. Thus, achieving the separation of solid-liquid two-phase or solid-liquid-liquid three-phase.



► Technical parameters

Model	Bowl Diameter (mm)	L/D	Bowl Speed (r/min)	G-force	Power of Driving motor (kw)	Power of Back drive motor (kw)	Weight (kg)	Dimension (L×W×H) (mm)
LW220×880	220	4	4800-5200	2840-3325	11	5.5	1100	2660×740×780
LW300×1290	300	4.3	4400	3250	15	5.5	1700	3250×960×1000
LW355×1460	350	4.17	4000	3130	22-30	7.5-11	2450	3550×1010×1030
LW450×1800	450	4	2800-3200	1575-2580	30-37	11-15	4300	4150×1090×1250
LW450×2050	450	4.5	3200-3600	2575-3260	30-37	11-15	4400	4350×1090×1250
LW530×2120	530	4	2800-3200	2330-3040	45-55	15-22	5300	4850×1230×1450
LW530×2650	530	5	2500	1850	55	22	6000	5400×1230×1450
LW630×2300	630	3.65	2500	2205	75	22-37	8000	5250×1440×1750
LW650×2800	650	4.3	2500-3100	2275-3498	90-132	45-55	12000	5400×1750×1600
LW750×2815	750	3.7	2400	1610	110-132	45-55	15600	6050×2050×1800
LW850×3200	850	4	2000	1900	160	55-75	16000	6750×2280×1900
LW1000×3000	1000	3	1500	1260	132-160	55-75	16000	5200×2500×2000

► DRIVING TECHNOLOGY



Dual-motor and dual-frequency driving mode is adopted for better differential regulation

It is more adaptive to the change of working conditions to ensure the separation effect

Dynamic feedback design is employed to reduce power consumption effectively.

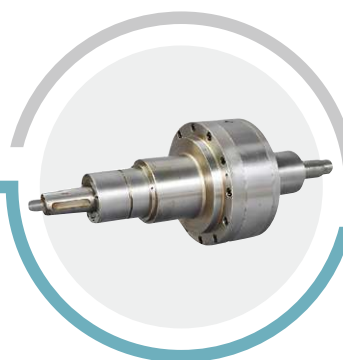
► Various pushing technologies



Hydraulic gearbox



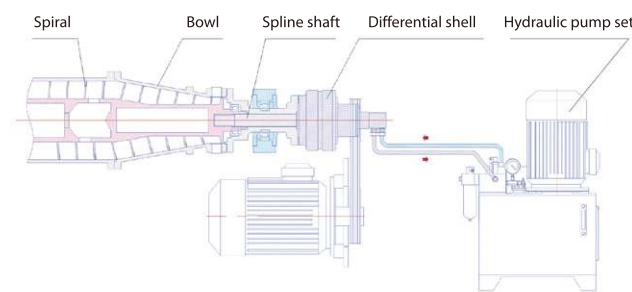
Planetary gearbox



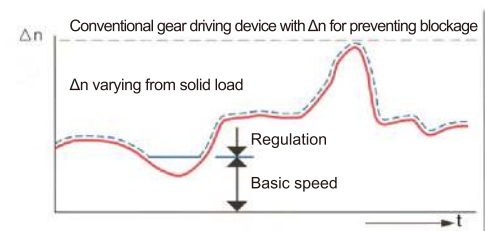
Cycloidal gearbox

► Hydraulic gearbox system

The housing of the hydraulic gearbox is connected to the bowl of the centrifuge, rotating at high speed together; the spline shaft on the gearbox rotor is connected to the scroll, rotating at different speeds under the drive of high-pressure oil, forming a differential speed Δn . The scroll gearbox is connected to the hydraulic pump set through high-pressure hoses, eliminating the need for a gearbox between the bowl and the scroll. The scroll torque is applied to the hydraulic system, and under this pressure, the differential can be increased or decreased by adjusting the hydraulic oil supply flow.



Working principle diagram



Hydraulic scroll drive differential variation curve

► Advanced structural design

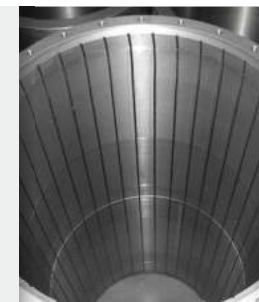
Large Length-to-Diameter Ratio (L/D) Design (≥ 4)

Increase the processing capacity, Extend the decanting duration and reduce the solid content in the clarified liquid to achieve 99% recovery of materials.



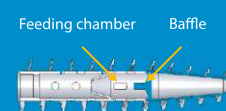
Special Scroll Blade Design

Reduce the friction with materials, reduce the material-pushing torque, decrease the adherence of materials.



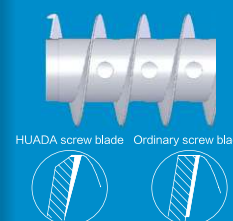
High-strength Self-cooling Bearing Seat Design

High structural strength, good cooling effect.



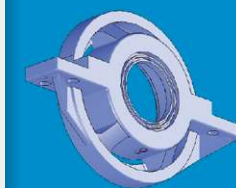
Optimized Scroll Design

Adopt the special vortex design, reduce the impact on materials, avoid the blockage of materials, reduce the solid content in clarified liquid.



Centrifugal Casting Process Design

Centrifugal casting is adopted for manufacturing the bowl and scroll shaft to improve the structural strength significantly.



► Advanced anti-wear technology



Introducing Fully Automatic Plasma Transferred Arc (PTA) Technology into the scroll blade coating process significantly improves the wear resistance and maximum service life of the scroll workpiece.



Hot-sprayed hard alloy sheets, inlaid tungsten carbide tiles or high wear-resistant ceramic tiles are configured for scroll blades.



The feeding port, solid discharge port, and liquid discharge port use replaceable wear-resistant alloy or ceramic sleeves.



Resistance to clotting of materials Axial wear-resistant steel is adopted for the Bowl, and replaceable wear-resistant sleeve (hard alloy or ceramic sleeve) is adopted for the feeding port and solid discharge port.

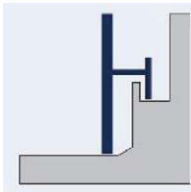
LWFX SERIES (EXPLOSION-PROOF TYPE)

DECANTER CENTRIFUGE

This type of centrifuge is mainly used in the chemical, petrochemical and pharmaceutical industries involving flammable and explosive occasions. in the process of solid-liquid separation, gases are not allowed to leak into the extraneous air, or extraneous air is not allowed to enter the equipment, or it may lead to explosion. The product is configured with an airtight seal with automatic compensation function, which allows a dynamic enclosed space with micro-positive pressure to be formed inside the centrifuge during the process of operation, so as to realize good sealing and explosion-proof effect.

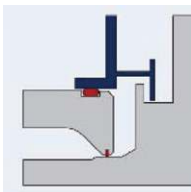


► Unique sealing structure



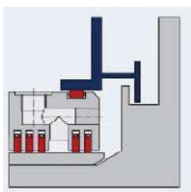
Open sealing

It is applied in the occasions where no material or gas inside the equipment will be emitted to the environment and it is not necessary to separate the bowl from the ambient atmosphere.



Vapor-tight sealing

It is applied in the occasions where the process medium will disperse and pollute the atmosphere, or the process medium is not expected to contact the atmosphere.



Air-tight sealing

It is applied to ensure operation safety in the occasions where inert gases are added to the equipment from the sealing position and toxic and corrosive or flammable medium is used.



► Main features



Safety

Multiple driving and sealing structures to achieve full explosion-proof functionality

Centrifugal casting bowl with higher strength

Various wear-resistant protection measures

Multiple safety protection mechanisms



Stability

Continuous operation, fully automatic control

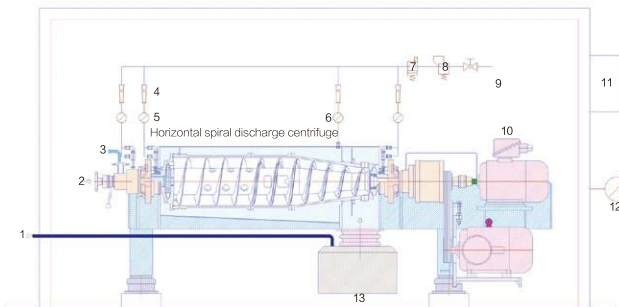
Larger bowl length/diameter ratio for better liquid phase effect

Configurable CIP online cleaning device

Variable impeller adjusts liquid level in real-time.




► Product structure



1 Exhaust of nitrogen with impurities

2 Feeding

3 Liquid pressure release

4 Flowmeter

5 Differential pressure gauge

6 Pressure gauge

7 Solenoid valve

8 Pressure relief valve

9 Nitrogen source

10 Explosion-proof motor

11 Hazardous gas detector

12 Ambient gas pressure

13 Solid discharge

► Technical parameters

Model	Bowl Diameter (mm)	L/D	Bowl Speed (r/min)	G-force	Power of Driving Motor (kw)	Weight (kg)	Dimension (L×W×H) (mm)
LWFX355x1460	350	4.17	4000	3130	22-30	2200	3450x1010x1030
LWFX420x1680	420	4	3600	3050	30-37	4200	3500x1450x1300
LWFX530x2120	530	4	3000	2670	45-55	6220	4100x1600x1450
LWFX720x2880	720	4	2000	1610	110	11000	5300x2050x1750

Horizontal Decanter Centrifuge

LWS SERIES (THREE-PHASE TYPE) DECANter CENTRIFUGE



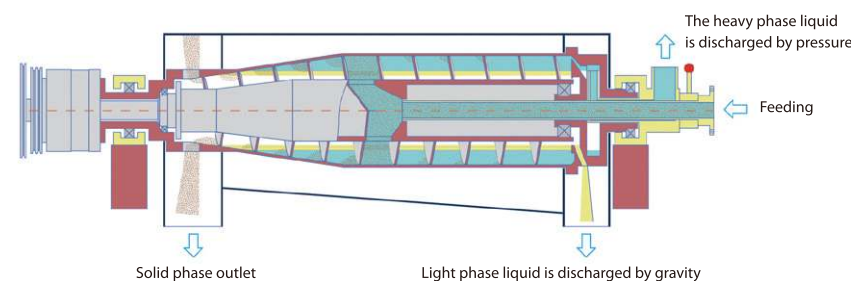
LWZ SERIES (SCREEN BOWL) DECANter CENTRIFUGE

LWZ centrifuge series are integrated with the advantages of both centrifugal sedimentation and centrifugal filtration, which are also designed to be mutually complementary to enhance the separation effect and separation efficiency and expand the scope of product application, so as to realize optimal application. It is especially applicable to the solid-liquid separation of suspension liquids containing crystals, particles, fibers or others. In the particle size scattergram, the particles with $d > 0.08\text{mm}$; The feeding concentration of solid matters entering the centrifuge is 5~60Wt%; It can also be used for separating the materials containing a small amount of organic or adhesive substances (such as tar).



Product introduction

This type is mainly used for solid-liquid-liquid separation, which means to separate a solid phase (with its density being the maximum) with two liquid phases of different densities. Based on a certain differential, the Bowl and scroll rotate in the same direction at high speeds, and the materials enter the equipment through the feeding pipe. Under the action of centrifugal force, the solid matters will deposit to form a sediment layer on the Bowl wall, and the two liquid phases will form a light liquid ring and a heavy liquid ring respectively, successively forming a solid layer, light liquid layer and heavy liquid layer inward from the Bowl wall. The scroll works continuously to push the solid matters on the Bowl wall to the conical end of the Bowl and then discharge them out of the equipment through the solid discharging port. The light liquid phase continuously flows out of the overflow port at the big end of the Bowl, while the heavy liquid phase is discharged out through the centripetal pump also at the big end. Thus, continuous separation of three phases is realized.



Technical parameters

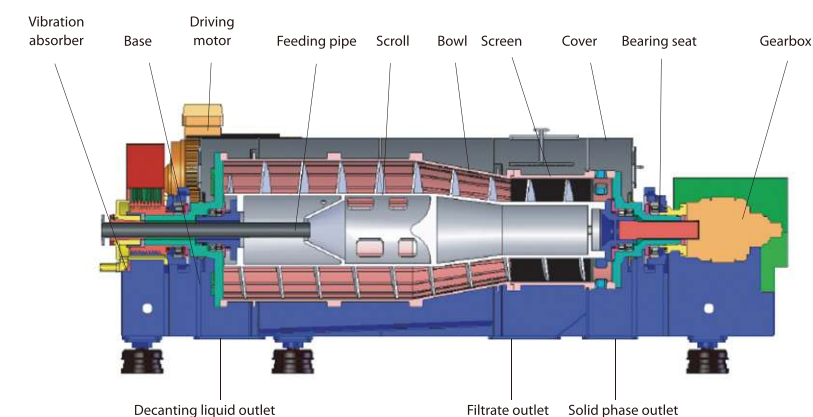
Model	Bowl Diameter (mm)	L/D	Bowl Speed (r/min)	G-force	Power of Driving Motor (kw)	Weight (kg)	Dimension (L×W×H) (mm)
LWS355x1460	350	4.17	4000	3130	22-30	2250	3450x1010x1030
LWS420x1680	420	4	3600	3050	30-37	4000	3500x1450x1300
LWS530x2120	530	4	3200	3040	45-55	5500	4100x1600x1450
LWS720x2880	720	4	2000	1610	110	11000	5300x2050x1750

Scope of application

- Separation of ammonium sulfate wastewater and process products
- Separation of ammonium chloride wastewater and process products
- Separation of potassium sulfate products
- Separation of Nitrocellulose products
- Separation of degradable plastic products
- Separation of CPE insulating materials

Technical parameters

Model	Bowl Diameter (mm)	L/D	Bowl Speed (r/min)	G-force	Power of Driving Motor (kw)	Weight (kg)	Dimension (L×W×H) (mm)
LWZ530x2120	530	4	2800	2330	45-55	5500	4870x1230x1520
LWZ650x1950	650	3	2500	2260	90	7500	4750x1720x1560
LWZ1000x3000	720	3	1500	1260	132	16000	5200x2500x2000



LWD SERIES (Double Cone Type)
DECANTER CENTRIFUGE



MAIN APPLICATION

The Double Cone Angle High-Speed Horizontal Scroll Discharge Decanter Centrifuge is commonly used for the separation of soft materials, such as fermentation liquid, starch production, beer liquid, protein liquid, yeast liquid, ultrafiltration permeate, juice by-products, and plant extraction.

Product Introduction

The LWD Double Cone Centrifuge combines the advantages of traditional Horizontal Scroll Discharge Decanter Centrifuges and modern High-Speed Centrifuges, with a separation factor reaching 6000 to 10,000g, achieving clarification effects close to Disc Centrifuges and Tubular Centrifuges. Its special Double Cone bowl Structure design allows it to continuously handle high solid content materials like a Decanter Centrifuge.

Working principle

01

The Bowl and Scroll rotate at high speed in the same direction with a differential speed. The suspension material to be separated is fed through the Feeding pipe to the end of the double cone bowl, then entering the bowl through the feed port located at the end of the small cone of the scroll.

02

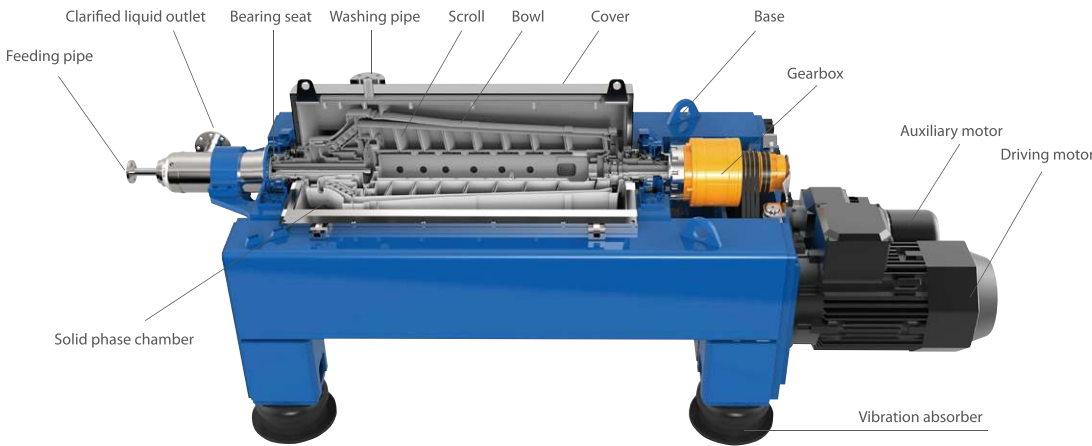
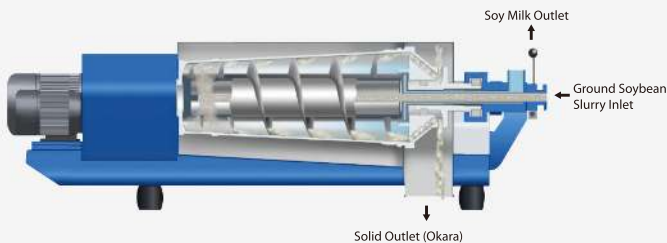
The material is gradually concentrated by the action of the cone bowl and scroll with gradually increasing diameters, and then enters the large cone section bowl through the largest end of the bowl. It is gradually dehydrated by the action of the cone bowl and scroll with gradually decreasing diameters.

03

Finally, the solid phase material is discharged out of the machine through the solid discharge port at the cone end of the large cone bowl. The clarified liquid is discharged through the variable impeller at the end of the clarification section under pressure.

04

The depth of the liquid pool in the bowl can be adjusted online by the variable impeller, thereby changing the static pressure of the liquid on the solid cake, and then changing the compaction and dryness of the discharged solids by externally adjusting the variable impeller.



Technical parameters

Inner Diameter of the Bowl	Effective Working Length of Bowl	Bowl Speed	Differential Speed	G-force	Power of Driving Motor	Auxiliary Motor Power
φ350mm	970mm	6000r/min	5-30r/min (adjustable)	7050	22kw	7.5kw
φ450mm	1300mm	5000r/min	1-30r/min (adjustable)	6295	30kw	11kw
φ530mm	1500mm	4000r/min	1-30r/min (adjustable)	4750	45kw	15kw

05

**Vertical Top Discharge
Centrifuge**



PSB SERIES

PSB VERTICAL TOP DISCHARGE

CENTRIFUGE

The PSB series are enclosed manual top discharge and filtration centrifuges designed in line with the GMP standards and environmental protection requirements, which can be used for separating a wide range of materials. This product is highly applicable to the separation of various suspensions and fibrous materials with high temperature, strong viscosity and small particle sizes (minimum size of 1μm).



MAIN

APPLICATION

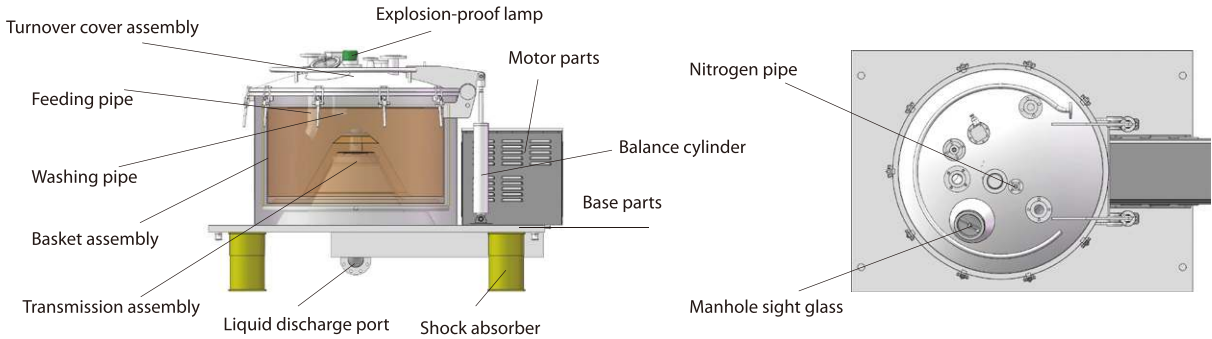
This product can be used for the solid-liquid separation of suspensions containing solid particles, as well as for the solid-liquid separation of fibrous materials, such as gypsum, copper sulfate, potassium chloride, borax, dyes, pesticides, salt, monosodium glutamate, food additives, starch, sugar, chemical seasoners, antibiotics, vitamins, copper, zinc, aluminum and other minerals, metal refining, sludge treatment, sewage treatment, etc. It has been widely used in the pharmaceutical, chemical, food, environmental protection, energy and other industries.

► Main features



- High separation factor designed for better separation effect.
- Grains less prone to breakage, with a wide scope of application.
- In compliance with the GMP standards: enclosed structure designed to effectively avoid contamination of materials.
- Configured with CIP online cleaning system to realize all-around cleaning.

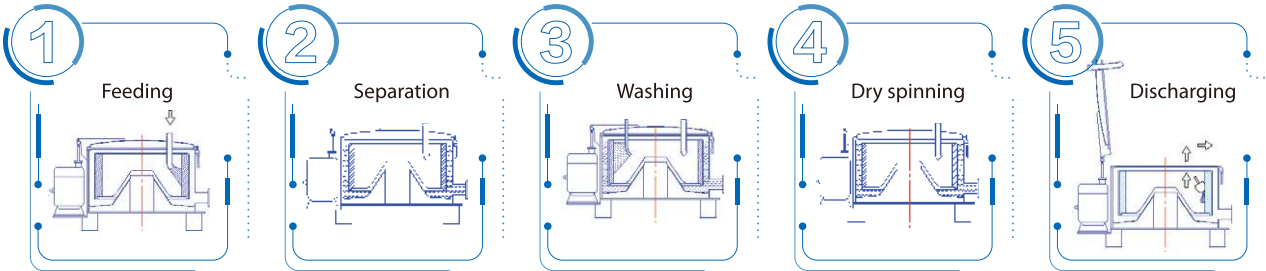
- Small floor covering area, easy maintenance, low failure rate and long service life.
- Light in structure, simple in operation, low in gravity center, small in vibration and stable in operation.
- Multiple safety protection configurations, variable frequency control to realize stepless regulation of speed.



► Technical parameters

Items	Models						
	PSB450	PSB600	PSB800	PSB1000	PSB1200	PSB1250	PSB1500
Basket Diameter (mm)	450	600	800	1000	1200	1250	1500
Effective Basket Height (mm)	300	325	450	520	550	630	680
Basket Volume(L)	20	47	120	200	270	400	555
Loading Capacity (kg)	30	70	150	250	340	500	700
Max. Speed(r/min)	2000	1600/1800	1500	1200/1400	1100	1000/1200	850
Max. Separation Factor	1007	860/1087	1007	805/1096	812	700/1007	606
Motor Power(kw)	3	314	7.5	11/15	15	18.5/22	30
Weight (kg)	500	1000/1200	1500	2400/2600	3000	3800/4800	6200
Dimension(LxWxH) (mm)	1230x850x940	1470x990x1150	1730x1200x1320	1970x1400x1500	2300x1550x1500	2550x1800x1780	2750x2200x1750

► Working principle



PBZ SERIES

PBZ VERTICAL TOP DISCHARGE CENTRIFUGE

Characterized by high separation factor, simple structure and high performance, the PBZ300 and 450 products are commonly selected as testing machines by various research institutions.



► Main advantages

- Grains less prone to breakage, with a wide scope of application.
 - High separation factor designed for better separation effect.
 - Light in structure, simple in operation, low in gravity center, small in vibration and stable in operation.
- Small floor covering area, easy maintenance, low failure rate and long service life.
 - In compliance with the GMP standards: enclosed structure designed to effectively avoid contamination of materials.



► Technical parameters

Items	Models				
	PBZ300	PBZ450	PBZ600	PBZ800	PBZ1000
Basket Diameter (mm)	300	450	600	800	1000
Basket Volume(L)	5	20	40	100	155
Max. Loading Weight (kg)	7.5	30	55	135	200
Basket Speed(r/min)	2825	1900	1500	1200	1000
Separation Factor	1340	910	755	645	560
Motor Power(kw)	1.1	1.5	3	5.5	11
Dimension(L x W x H)(mm)	605x605x830	800x800x1000	1200x1050x1300	1500x1250x1400	1600x1400x1450
Weight(Standard Type)(mm)	200	300	1100	1500	2000

PSB·P SERIES

LOW-TEMPERATURE EXTRACTION CENTRIFUGE

This product is a special low-temperature extraction centrifuge, which is mainly used for steep extraction and solid-liquid separation of herbs, plant roots, etc. Equipped with an enclosed filter bag, it can separate materials with the solid particle sizes $\geq 0.10\text{MM}$ and has been widely applied in the fields of food, pharmaceutical, chemical, and others. Soaking temperature designed to be -40°C , customizable as needed by customers. Optional basket volumes, large in filtering area and good in soaking & separation effect.



► Main advantages

- Solid particles less prone to breakage, easier in replacement of filter bag.
 - In compliance with the GMP standards, enclosed structure and zero sanitary dead angle designed to effectively avoid contamination of materials.
 - Multiple safety protections: pressure detection, overvibration protection, cover opening protection, electromagnetic interlocking, etc.
- Variable control and energy consumption braking adopted to realize stepless speed regulation and bidirectional (forward and reverse) revolving.
 - Small floor covering area, easy maintenance, low failure rate and long service life.



Direct motor drive type

► Technical parameters

Items	Models					
	PSB300P	PBZ320P	PBZ400P	PSB420P	PSB550P	PSB600P
Effective Volume (L)	18	50	100	100	200	200
Basket Volume(L)	10	30	50	62	120	140
Basket Diameter (mm)	300	320	400	420	550	600
Basket Height (mm)	165	380	450	450	550	500
Shell Diameter(mm)	364	400	500	500	650	700
Shell Height(mm)	215	450	545	555	700	620
Max. Loading Weigh(kg)	7	7.5	15	15	30	30
Basket Speed(r/min)	1970	1800	1500	1500	1300	1500
Separation Factor	650	580	500	529	520	755
Motor Power (kw)	1.5	2.2	4	4	7.5	5.5
Transmission Mode	Belt drive	Direct motor drive	Direct motor drive	Belt drive	Belt drive	Belt drive
Dimension(LxWxH)(mm)	950x600x1100	700x700x1200	800x800x1350	1250x800x1100	1200x900x1500	1670x1100x1250

PSD SERIES

PSD VERTICAL BAG LIFTING TOP

DISCHARGE CENTRIFUGE

Aided mechanical discharge is adopted for the PSD centrifuge. Combining high efficiency of the automatic scraper centrifuge and wide application scope of the top discharge centrifuge, this product is advanced in structural design, small in floor covering area, low in failure rate and high in cost performance.



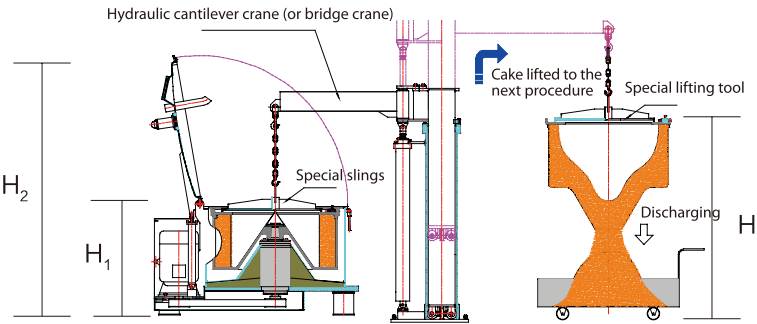
MAIN

APPLICATION

This product can be used for the solid-liquid separation of suspensions containing solid particles, as well as for the solid-liquid separation of fibrous materials, such as gypsum, copper sulfate, potassium chloride, borax, dyes, pesticides, salt, monosodium glutamate, food additives, starch, sugar, chemical seasoners, antibiotics, vitamins, copper, zinc, aluminum and other minerals, metal refining, sludge treatment, and sewage treatment has been widely applied in the pharmaceutical, chemical, food, environmental protection, energy and other industries.

Working principle

Under the action of centrifugal force, the materials reach the basket wall, where the liquid phase passes through the filtering medium covered on the basket wall and then flows through the pores on the wall to the inner wall of the enclosure, then drops off to the bottom tray and is discharged out via the liquid discharge port. While the solid matters are retained inside the basket and fully washed to complete the solid-liquid separation. After the equipment is shutdown, open the flippable cover, remove the filter bag with special lifting devices, transfer it to the unloading area for discharging. After that, install the basket lip and filter bag back, lock the basket lip, close the flippable cover and lock it, and at this time, the next circulation can be started.



Code	Models						
	PSD800	PSD1000	PSD1200	PSD1250	PSD1500	PSD1600	PSD1800
H ₁	1950	2180	2350	2650	2850	3600	3350
H ₂	990	1110	1110	1370	1310	1750	1650
H ₃	2080	2430	2650	2950	3210	3720	3930

Technical Parameters

Items	Models						
	PSD800	PSD1000	PSD1200	PSD1250	PSD1500	PSD1600	PSD1800
Basket Diameter(mm)	800	1000	1200	1250	1500	1600	1800
Effective Basket Height(mm)	450	520	550	630	680	800	750
Basket Volume(L)	120	200	270	400	555	800	910
Max loading Capacity (kg)	150	250	340	500	700	1000	1100
Max. Speed(r/min)	1500	1200/1400	1100	1000/1200	850	850	780
Max. Separation Factor	1007	805/1096	812	700/1007	606	647	612
Motor Power(kw)	7.5	11/15	15	18.5/22	30	37	37
Dimension(LxWxH)(mm)	1730x1200x1320	1970x1400x1500	2300x1550x1500	2550x1800x1780	2750x2200x1750	3200x2400x2150	3300x2500x2150
Weight (kg)	1500	2500/2700	3200	4000/5000	6500	8500	10000

Product features



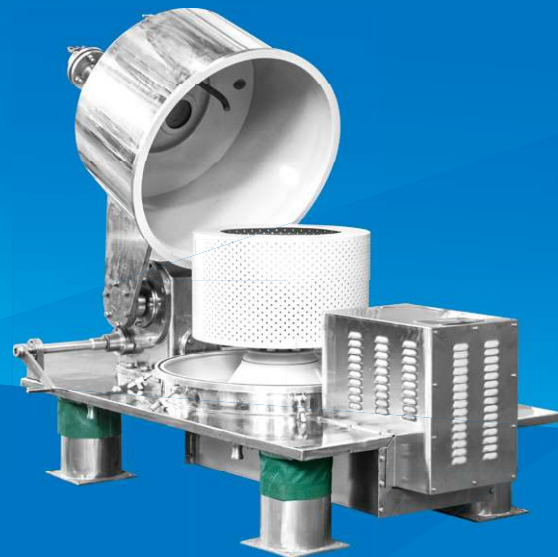
- Low labor intensity and high efficiency: configured with a hydraulic cantilever crane for mechanical discharge.
- Variable frequency control: stable startup and adjustable separation factor.
- Easy replacement of filter cloth: basket lip designed with special structure that can be disassembled fast.

- Multiple safety protections: nitrogen protection system, overvibration protection, cover opening protection, overload protection, electromagnetic interlocking, etc.
- Cover opening mode: hydraulic drive and mechanical drive.

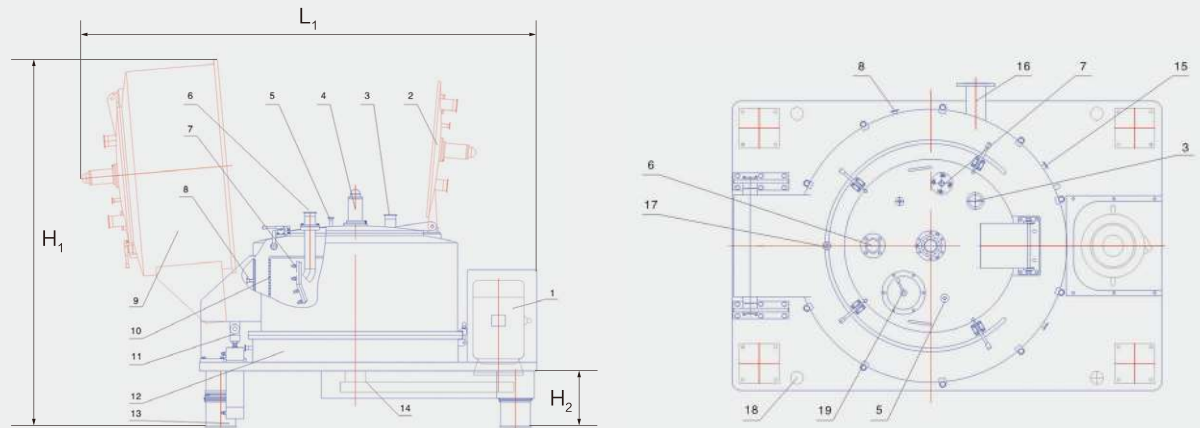


PQFB/PQFD SERIES VERTICAL FULLY OPENING TOP DISCHARGE CENTRIFUGE

PQFB/PQFD series centrifuges are applicable to the solid-liquid separation in the clean areas with certain requirements for sanitation. Being aesthetic in appearance, high in manufacturing technology, stable in operation, easy in maintenance, and complying with the GMP standards and high requirements for sanitation, this product has been broadly applied in pharmaceutical production, food production and fine chemical engineering and other industries.



PQFB Food Grade Halar Lining Type



- | | | | | |
|-----------------------------|------------------------|----------------------------------|--------------------------|--------------------|
| 1 Motor | 2 Small turnover cover | 3 Exhaust pipe | 4 Explosion-proof lamp | 5 Nitrogen pipe |
| 6 Feeding pipe | 7 Washing pipe | 8 Side washing joint | 9 Overall turnover cover | 10 Basket |
| 11 Turnover cover mechanism | 12 Base | 13 Liquid damping shock absorber | 14 Transmission device | 15 Bottom CIP pipe |
| 16 Liquid discharge pipe | 17 Top CIP pipe | 18 Lifting lug | 19 Observation mirror | |

Product dimension

Items	Models							
	PQFB450	PQFB600	PQFB800	PQFB1000	PQFB1250	PQFD800	PQFD1000	PQFD1250
(LxWxH) (mm)	1430x850 x1070	1880x1100 x1100	2200x1250 x1310	2460x1400 x1400	2770x1800x 1470	2200x1250 x1310	2370x1400 x1490	2770x1800 x1510
H ₁	1400	1700	2020	2220	2770	2020	2430	2770
H ₂	330	280	330	380	370	330	380	370
L ₁	1760	2340	2800	3150	3600	2800	3200	3600

Technical parameters

Items	Models							
	PQFB450	PQFB600	PQFB800	PQFB1000	PQFB1250	PQFD800	PQFD1000	PQFD1250
Basket Diameter(mm)	450	600	800	1000	1250	800	1000	1250
Effective Basket Height(mm)	300	325	400	425	485	400	425	450
Basket Volume(L)	20	47	100	145	320	100	145	300
Max loading Capacity(kg)	30	70	140	200	400	140	200	375
Max. Speed(r/min)	2000	1600	1200/1500	1100/1200	1000/1200	1201500	1101200	1000/1200
Max. Separation Factor	1007	880	645/1007	680/805	700/1007	645/1007	680/805	700/1007
Motor Power(kw)	3	4	7.5	11	18.5/22	7.5	11	18.5/22
Weight(kg)	600	1200	2000	2600	4300	2300	3000	5000

Scope of application

PQFB/PQFD centrifuges are suitable for the washing and solid-liquid separation of suspensions containing solid particles, with the particle size of 0.02mm~5mm and solid content above 10%, 50% to the maximum.

Main application

This product is commonly used for the treatment of gypsum, ammonium sulphate, mirabilite, ferric sulphate, copper sulphate, nickel sulphate, potassium chloride, acetic acid, borax, soda, rubber additive dye, starch, sugar, vitamin, antibiotic, herbicide, insect repellent, copper, zinc, aluminum, acid discharge gypsum, metal refining, sludge after water purification, sludge in sewage, and other kinds of chemicals and pharmaceuticals.

Main features



WIDE APPLICATION SCOPE

It can be used for the separation of not only suspensions containing solid particles but also fibrous materials.



MULTIPLE SAFETY PROTECTIONS

Nitrogen protection system, liquid seal, gas seal, overvibration protection, cover opening protection, overload protection, electromagnetic interlocking, etc.
Stainless steel, anti-corrosion alloy or anti-corrosion coating is adopted for the parts requiring contact with materials.
Internal nitrogen filling structure and nitrogen protection system are configured to meet the requirements for explosion protection in occasions involving toxic, flammable and explosive materials.



ADVANCED STRUCTURAL DESIGN

Enclosed modular structure is adopted to avoid contamination caused by belt-worm dust and foreign matters.



MEET THE GMP STANDARDS

Precise polishing is adopted for the parts that in contact with the materials and no sanitary dead angle exists inside the equipment.
CIP online cleaning system is configured to complete all-directional cleaning and disinfection of the inner cavities, meeting the GMP standards and the requirements for cleanliness.



EASY MAINTENANCE

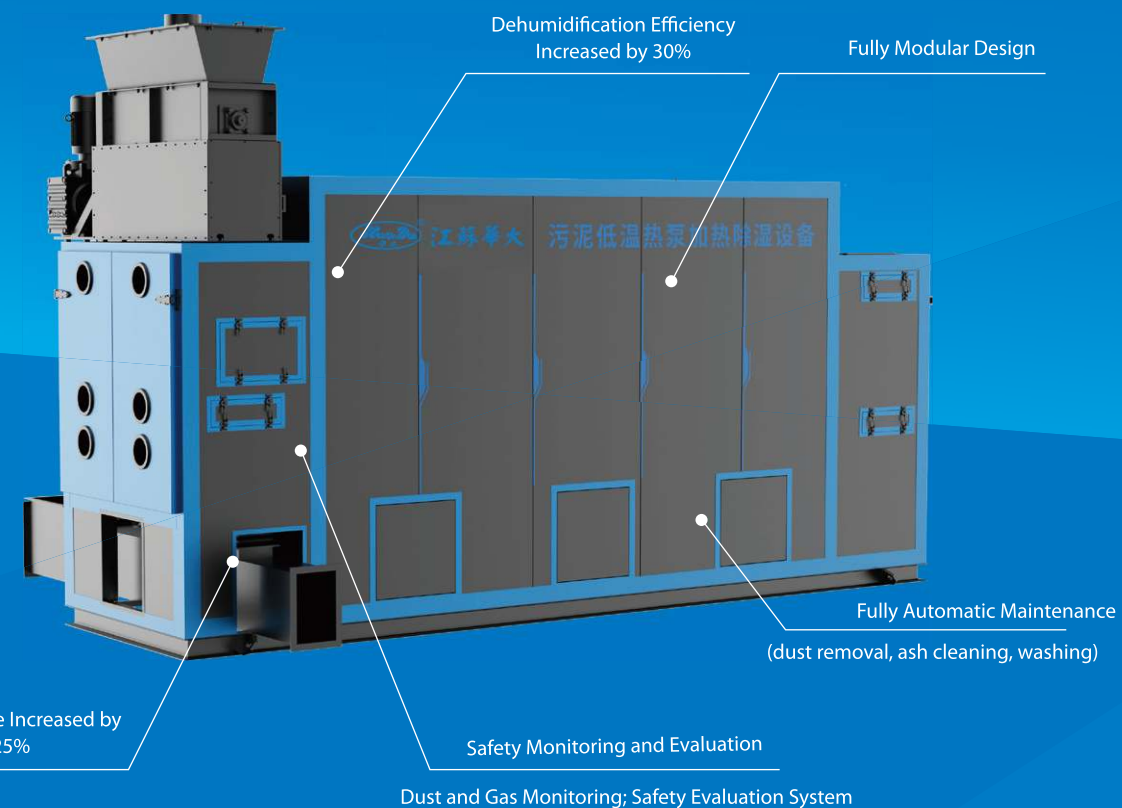
Complete fully opening cover design allows flip angle of over 90°; overall structure of basket is exposed for easier cleaning of the machine and replacement of the filter cloth.

06

Environmental Protection Complete Equipment

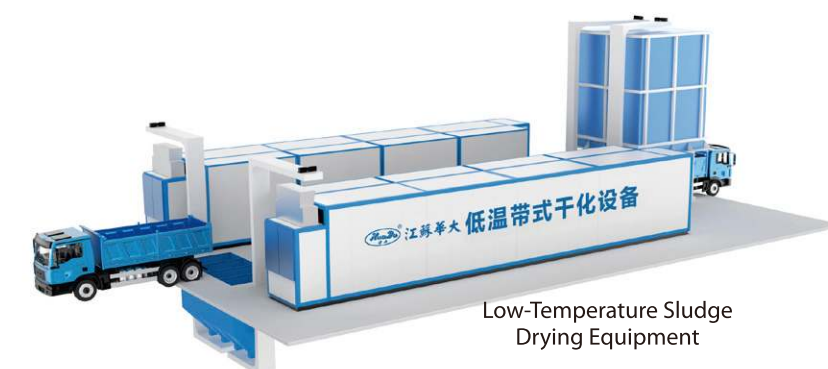


SDDR SERIES SLUDGE LOW-TEMPERATURE DRYING COMPLETE EQUIPMENT



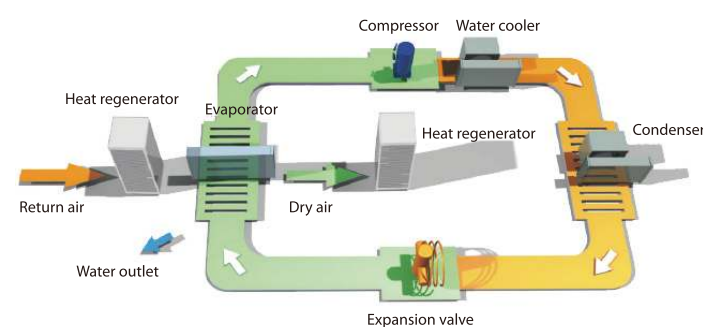
MAIN APPLICATION

SDDR sludge low-temperature heat pump heating and dehumidification equipment is sludge deep dewatering equipment, which can effectively treat the sludge with a moisture content of 85% or lower to a minimum of 10%. It is widely used in the treatment of municipal sludge, industrial sludge and solid waste, hazardous waste and other sludges.

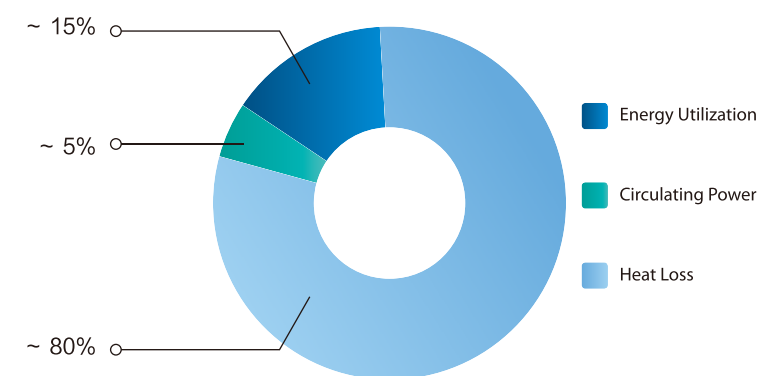


Working principle

Inject dry air into the airtight drying chamber, and take out the moisture in the sludge through humidity exchange, then use the evaporator to condense and remove the moisture in the air, and at the same time, take advantage of the heat pump principle to recover the latent heat of moisture condensation, use it to heat the dry air and blow the air back into the drying chamber. Since the heat recovery technology is adopted, no waste heat is emitted in the airtight drying mode.



Energy Consumption Distribution of Low-Temperature Drying



Higher Dehumidification Ratio (SMER)

≥4.3kg/kWh

Power Supply, 1.22 times higher than the Group Standard

≥3.7*10⁻⁴kg/kJ

Heat Source, 1.23 times higher than the Group Standard

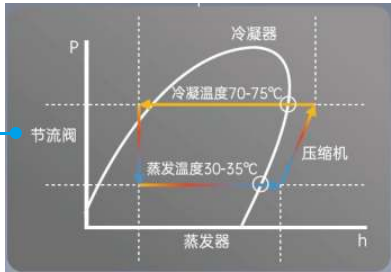
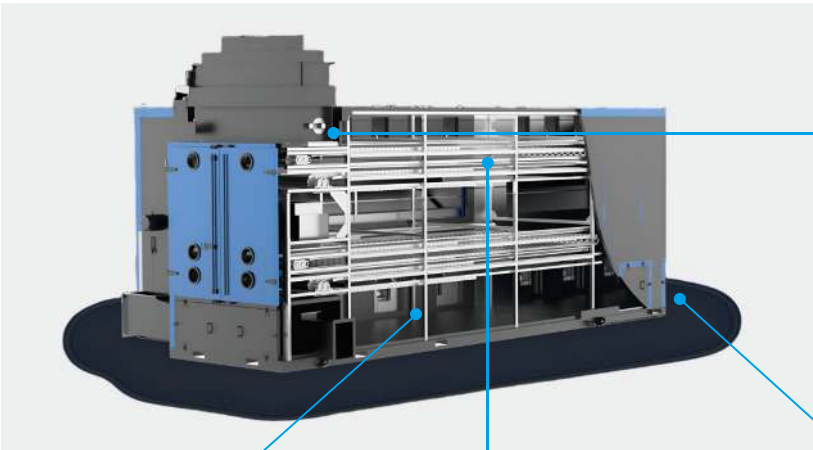
Stronger Stability

Precise Dust Filtration / Anti-Scaling and Anti-Corrosion / Ergonomic Design

More Intelligent Control System

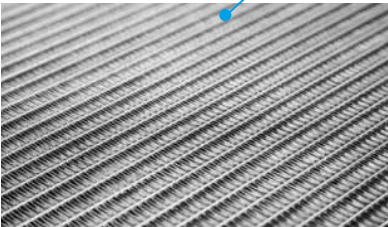
Dynamic Thermal Balance / Linear Energy Management / Real-Time Load Monitoring

Working process



Self-Balancing of Heat and Cold

Match the actual evaporation and condensation temperature requirements, optimize the operating points of the heat pump system, and achieve self-balancing of heat and cold in the system.

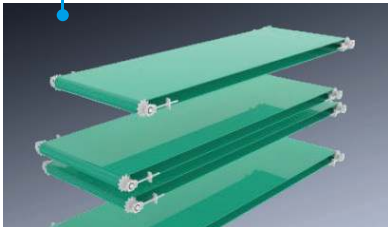


High Heat Exchange Efficiency

High Thermal Conductivity
> 8000 W/(m²·K)

Larger Specific Surface Area
1000-2000m²/m³

Low Thermal Resistance
0.0005-0.0015m20C/KW



Longer Drying Retention Time

Number of Mesh Belt Layers
≥3 Increased Contact Time
30-50%

Evaporation Capacity per Unit Area
≥20kg/h/m²



Multi-Scale Sludge Forming

Ensure Porosity
> 30% Strip Diameter
3-10mm

Paving Thickness 2-3cm
2-3cm

Lower Wind Resistance
Smaller Air Volume
More Energy Efficient

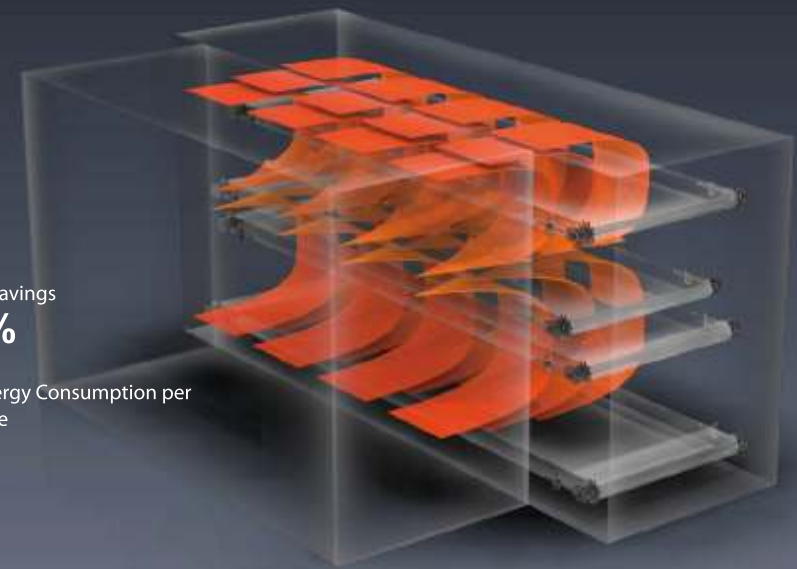
Compared to Traditional
Reduced Technical Wind
Resistance

20~25%

Reduced Fan Power
25~29%

Air Volume Savings
5~10%

Reduced Energy Consumption per
Ton of Sludge
15%+



Success stories

Sludge type	Amount of wet sludge	Front-end dewatering	Moisture content of wet sludge	Moisture content of dry sludge	Equipment spec
Industrial sludge	1.5T/D	Plate-and-frame filter press	80%	20%	SDDR1500 x1 set



Sludge type	Amount of wet sludge	Front-end dewatering	Moisture content of wet sludge	Moisture content of dry sludge	Equipment spec
Municipal sludge	8T/D	Centrifugal dewatering machine	80%	20%	SDDR6000 x1 set



Equipment selection

List of Skid-mounted Products of Commonly Used Sludge Low-temperature Heat Pump Heating and Dehumidification Equipment (equipment treatment capacity can be customized according to customer requirements)							
Models	SDDR1500	SDDR3000	SDDR4500	SDDR6000	SDDR7500	SDDR12000	SDDR18000
Wet sludge treatment capacity(80%-40%)	2/2t	4/4t	6/6t	7.5/7.5t	10/10t	15/15t	22.5/22.5t
Standard water intake(24h)	1500kg	3000kg	4500kg	6000kg	7500kg	12000kg	18000kg
Operating power	16-20kw	32-40kw	48-60kw	64-80kw	80-100kw	128-160kw	192-240kw
Power supply	380V/3H/50Hz						
Drying temperature	50-65°C (return air) / 65-85°C (supply air)						
Moisture content of dry material	Variable frequency regulation: 10% at a minimum						
Number of compressors	1set	2sets	3sets	4sets	5sets	8sets	12sets
Dimension (LxWxH)(mm)	3000x2950x3000	4500x2950x3000	5100x3300x3000	6600x3300x3000	8100x3300x3000	11600x3300x3000	6600x3300x3000
Spiral feeding elevator	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Secondary strip cutting machine	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Tail gas deodorization at the solid discharge port	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Sludge feed hopper	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Weight	3t	5t	6t	7t	8.5t	10t	15t

Note: If there is sufficient available waste heat(such as high-temperature flue gas, hot water and steam)at the customer site, the operating power of the equipment with the same sludge treatment capacity can be reduced by more than half.

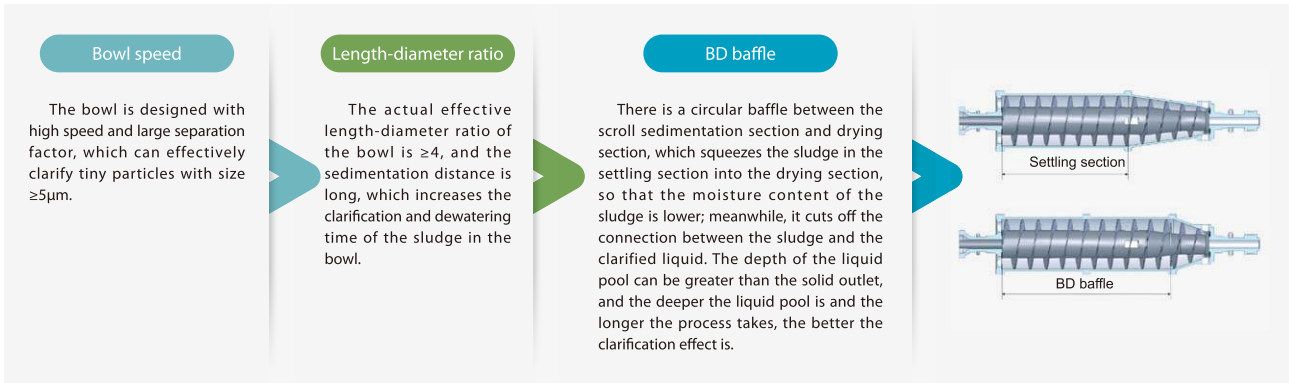
LW SLUDGE DEWATERING-DEDICATED DECANTER CENTRIFUGE



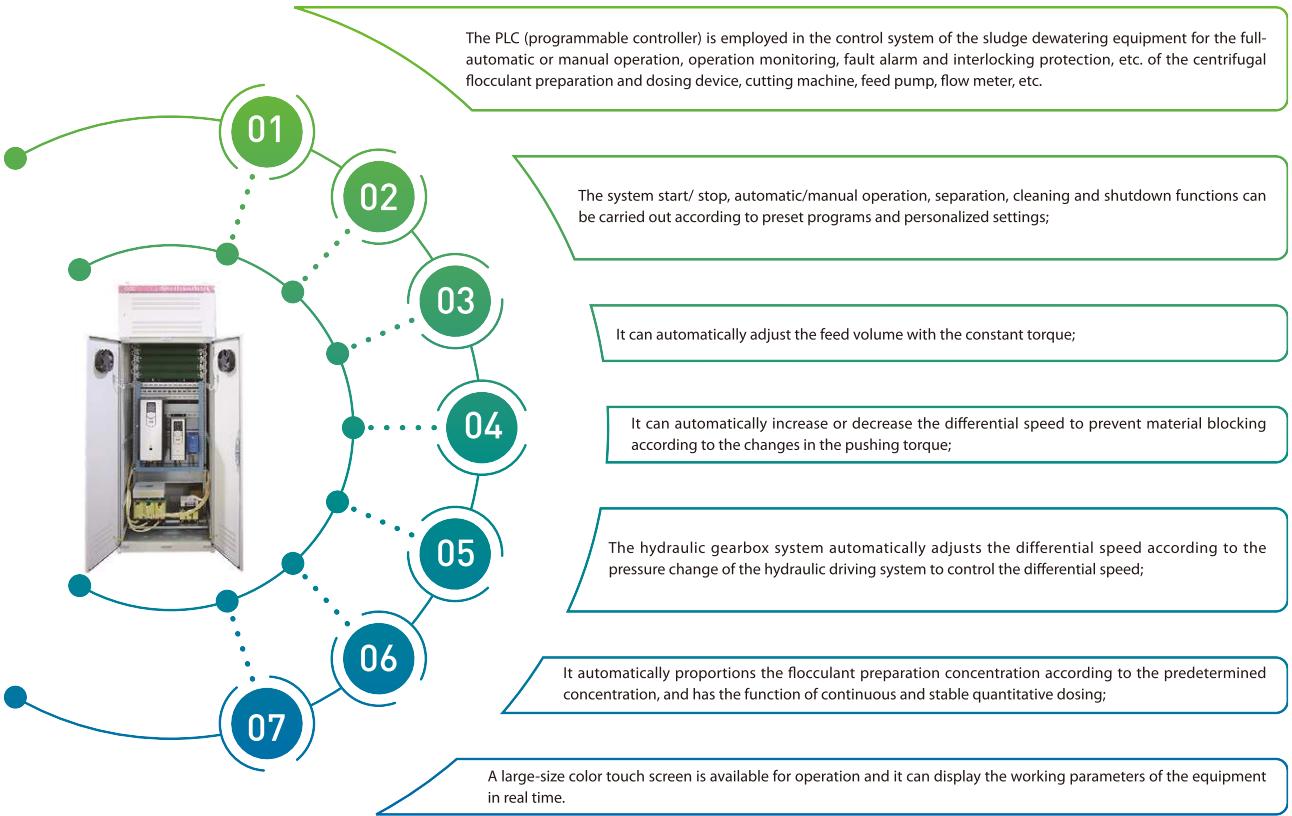
The centrifuge is composed of a bowl rotating at high speed, a scroll that runs in the same direction as the bowl and has a certain speed difference, as well as a gearbox, a base, a feeding and discharging system, etc. The sludge and flocculant enter the bowl after being mixed in a specially designed feeding chamber. Under the action of centrifugal force, the flocculated particles are quickly separated and sedimented in the sedimentation zone, and the clarified liquid is discharged through the overflow hole at the end of the bowl. The sedimented solids, after being squeezed and dewatered by the BD baffle, is pushed by the scroll conveyor to the drying section of the bowl for further compression, and then discharged through the solid outlet. The dewatering time of the solids in the bowl can be controlled by adjusting the differential speed between the scroll and the bowl.



► Main features



► Electrical control system



► Technical parameters

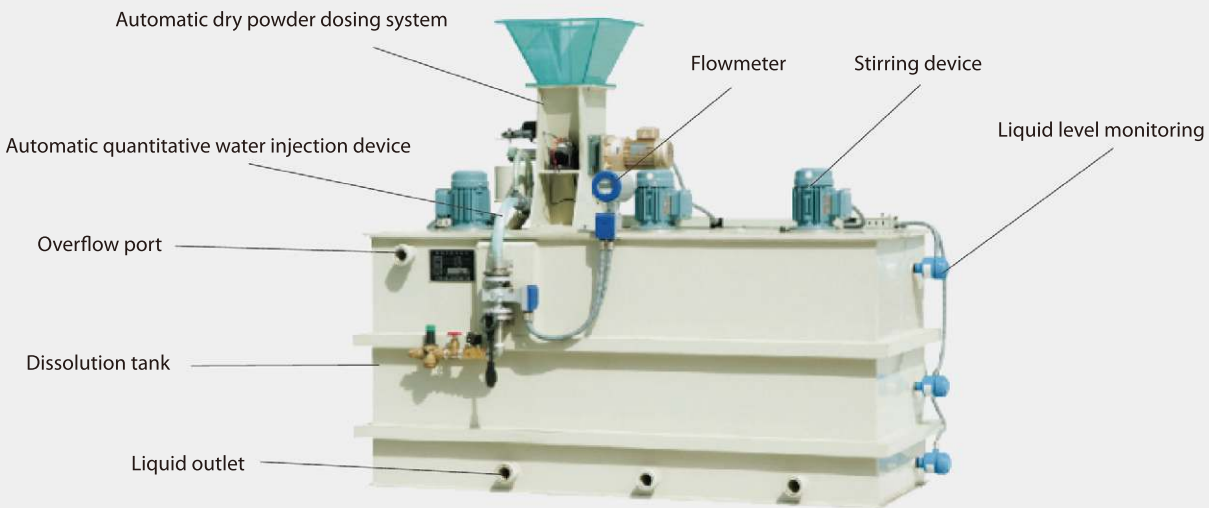
Items	Models			
	LW355 x 1460	LW450 x 1800	LW530x 2120	LW650 x 2800
Bowl Diameter(mm)	350	450	530	650
Bowl Speed(r/min)	4000	3200	2800	2500
G-force	3100	2580	2300	2270
Processing capacity (m³/h)	8-15	20-35	30-50	40-70
Main motor power(kw)	22	30	55	70

JY SERIES PAM SOLUTION AUTOMATIC DOSING DEVICE

JY series PAM solution automatic dosing device, mainly composed of an automatic dry powder dosing system, an automatic quantitative water injection device, a vortex prewetting device, a liquid level monitoring device, a stirring device, pipelines, valves, etc., is a system device integrating dry powder storage, feeding, wetting, dissolution and curing. The system under full-automatic control can be used for batch and continuous preparation of high-molecular polymer solution. It is widely used in sewage treatment, drinking water purification, industrial wastewater treatment, papermaking, ore smelting, etc.



► Structure diagram



► Technical parameters

Items	Models					
	JY500	JY1000	JY1500	JY2500	JY4000	JY6000
Effective volume(m ³)	1030	1160	1570	2640	4500	6500
Dosing chamber volume(L)	70	70	70	70	70	70
Dosing motor power(kw)	0.18	0.18	0.18	0.18	0.18	0.18
Preparation capacity(L/h)	500	1000	1500	2500	4000	6000
Proportioning concentration(%)	1-3	1-3	1-3	1-3	1-3	1-3
Water inlet pressure(Mpa)	0.3	0.3	0.3	0.3	0.3	0.3
Water inlet flowmeter(m ³ /h)	0-3	0-3	0-3	0-4	0-4	0-6
Maximum dosage(kw/h)	0.85-3.6	0.85-3.6	1.7-7.2	2.5-9	3.4-14.4	4.5-20
Tank material	304	304	304	304	304	304
Power supply(V)	380v/50hz	380v/50hz	380v/50hz	380v/50hz	380v/50hz	380v/50hz
Weight(kg)	400	420	500	600	750	880
Dimension(mm)	2000x1000x1830	2200x1000x1830	2200x1200x2150	2600x1450x2150	3000x1500x2200	4000x1750x2500

Note: The maximum dosage refers to the dosage per hour at the minimum - maximum speed of the dry powder dosing spiral under the premise of full curing. In actual operation, the speed of the dosing spiral can be adjusted according to the concentration requirements to adjust the dry powder dosage; the inlet water pressure (flow rate) can be adjusted to meet the preparation concentration requirements and output requirements. On special occasions, the design can be changed to increase the dosage of dry powder per unit time. To increase the dosage per hour, please put forward such request while placing the order.

► Working principle

PAM powder passes through a high-efficiency vortex wetting device, is then mixed with water, fully stirred and dissolved into a PAM solution with a concentration of 0.1~0.5%. Later, the solution is cured and put in the storage tank for standby application. The curing time of the prepared solution depends on the nature of the agent, the required flow rate of the process and the effective volume of the device, and generally, the dissolution and curing time of the solution shall reach 45-60min to ensure the dissolution and curing effect of the solution and the full curing of the agent. Feed water according to the set flow rate and at the same time, automatically add quantitative dry powder; wet the power in the prewetting device, put it in the dissolution tank for mixing and dissolution; when the liquid level reaches the overflow height, put it in the curing tank for stirring and curing and at the same time, stir the solution in the dissolution tank; when the liquid level reaches the overflow height, put it in the storage tank for storage and standby application; after the curing, when the solution in the storage tank rises to the high liquid level, use the prepared PAM solution. After the first preparation, the device supplies solution required for the process while preparing a new solution, which can meet the needs of continuous operation for 24 hours.

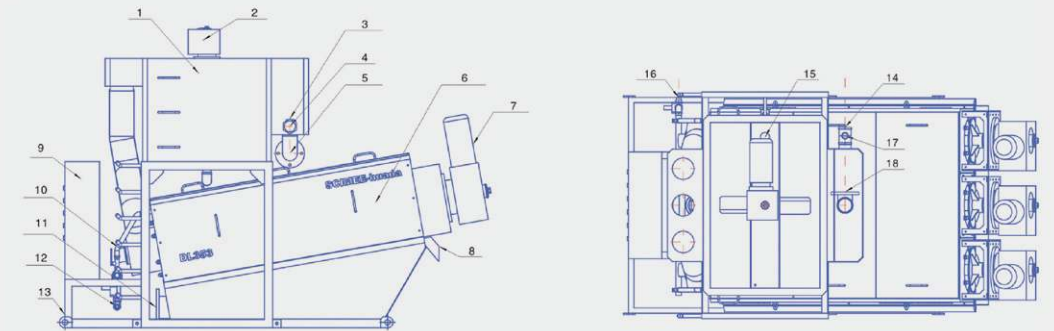


DL SERIES SLUDGE DEWATERING SYSTEM-SCREW PRESS

The separation unit of the screw press is composed of a fixing ring and a floating ring which are stacked on each other with a small gap in between. The spiral shaft passes through it and rotates to drive the floating ring to move circumferentially. The water in the flocculated mud pie is filtered out through the gap between the fixing ring and the floating ring, and the floating ring moves circumferentially to prevent blockage. The gap between the fixing ring and the floating ring becomes smaller along the direction of the cake outlet from the thickening zone to the dewatering zone, and forced dewatering is achieved under the back pressure formed by the back pressure plate of the sludge outlet.



► Structure diagram



- | | | |
|--------------------------|---------------------------|----------------------------|
| 1 Flocculation tank | 2 Flocculation & stirring | 3 Flocculant inlet |
| 4 Sludge inlet | 5 Sludge overflow port | 6 Spiral filter unit |
| 7 Spiral motor/reducer | 8 Sludge outlet | 9 Electric control cabinet |
| 10 Cleaning device | 11 Filtrate outlet | 12 Flushing water inlet |
| 13 Rack | 14 Sludge inlet | 15 Liquid manometer |
| 16 Flushing water outlet | 17 Dosing inlet | 18 Overflow port |

► Operating principle

01

The floccules in the spiral separation unit are under gravity thickening while moving towards the dewatering zone under the action of the spiral. The gap between the floating ring and the fixing ring in the dewatering zone is narrowed, and the sludge is further pressurized and dewatered under the action of the back pressure plate, and is discharged from the sludge outlet as cake.

02

The sludge is sent by the sludge transfer pump to the sludge inlet, and the flocculant is metered and sent to the flocculation mixing tank, where the sludge is fully stirred with the flocculant and flocculated. After being flocculated into large floccules, the sludge enters in the spiral separation unit from the spiral sludge inlet.

03



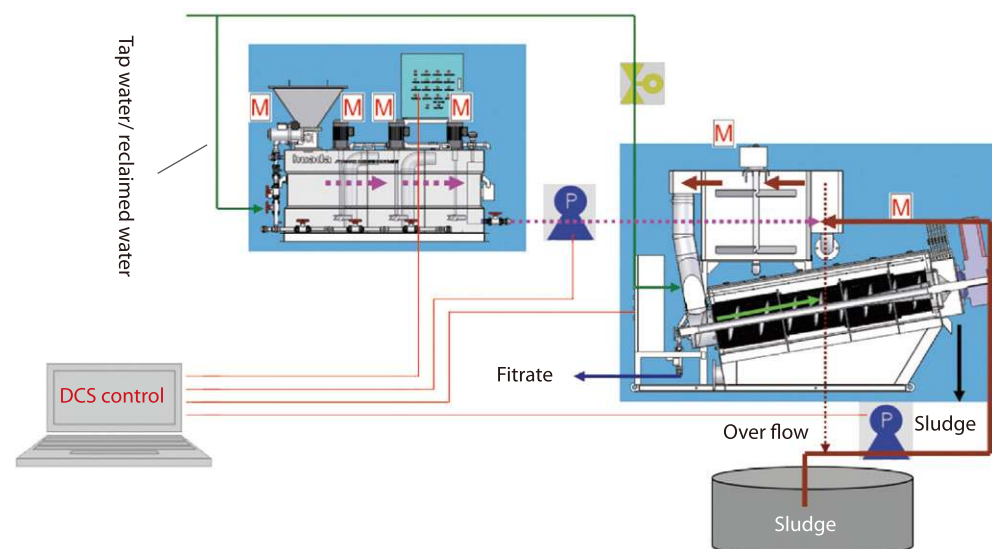
► Technical parameters

Items	Models			
	DL201	DL351	DL352	DL353
Motor power of dehydration unit(kw)	0.25	1.1	2.2	3.3
Motor power of flocculation mixer(kw)	0.55	1.1	1.1	1.1
Treatment capacity(kg DS/H)	40-60	100-150	200-300	300-450
Power supply(V)	380V, 50hz	380V, 50hz	380V, 50hz	380V, 50hz
Machine weight(kg)	580	1340	2080	2820
Dimension(mm)	2700x1000x1850	3115x850x2175	3115x1215x2175	3115x1700x2175

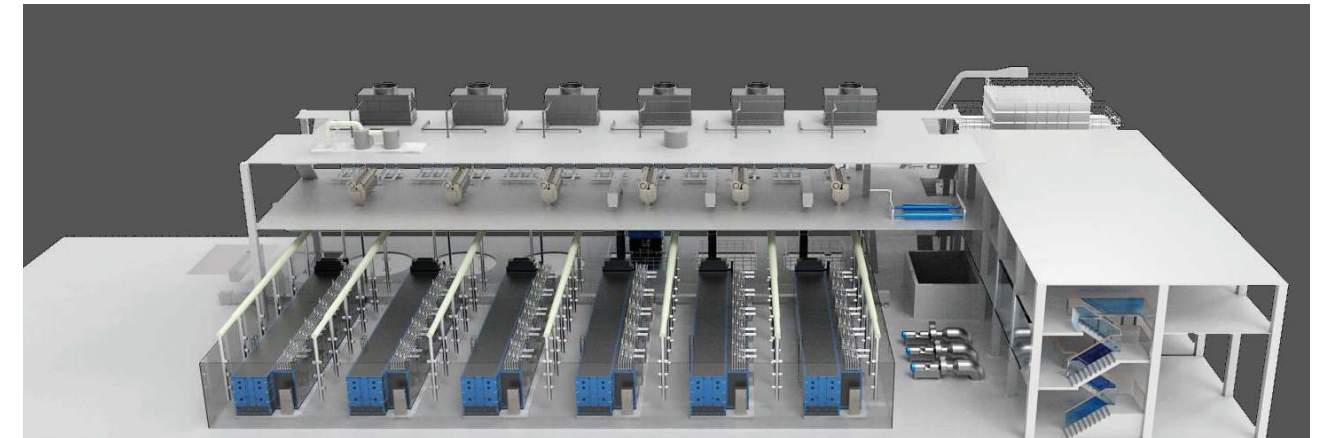
► Scope Of application

Scroll press is widely used for sludge dewatering in such industries as municipal sewage, food, beverage, slaughter and breeding, printing and dyeing, papermaking, leather and pharmaceuticals.

► Dewatering process

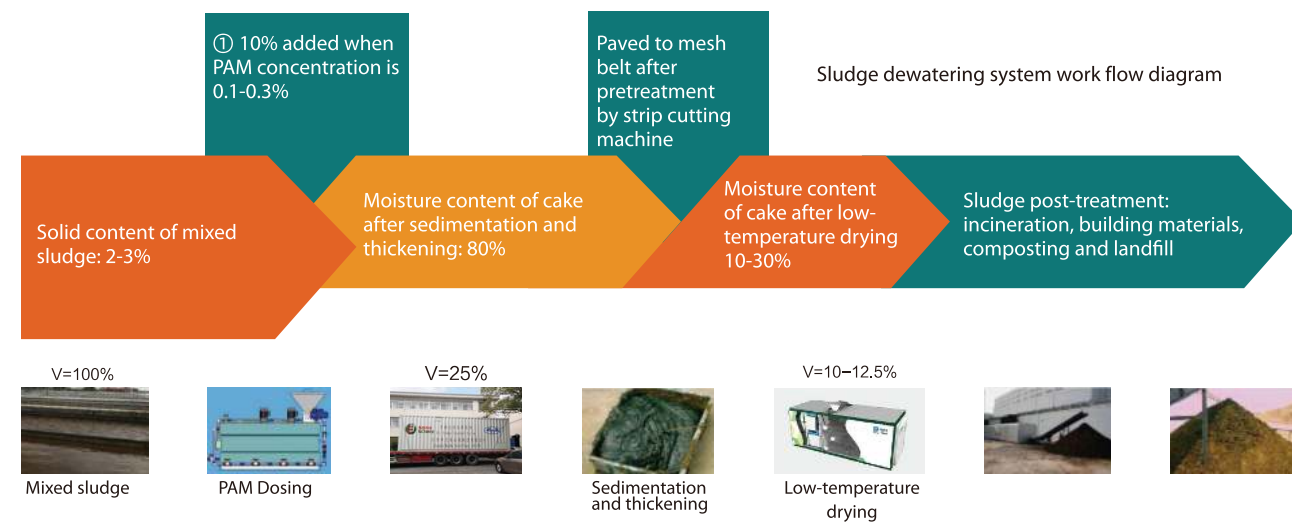


SLUDGE DEWATERING AND DRYING COMPLETE SYSTEM



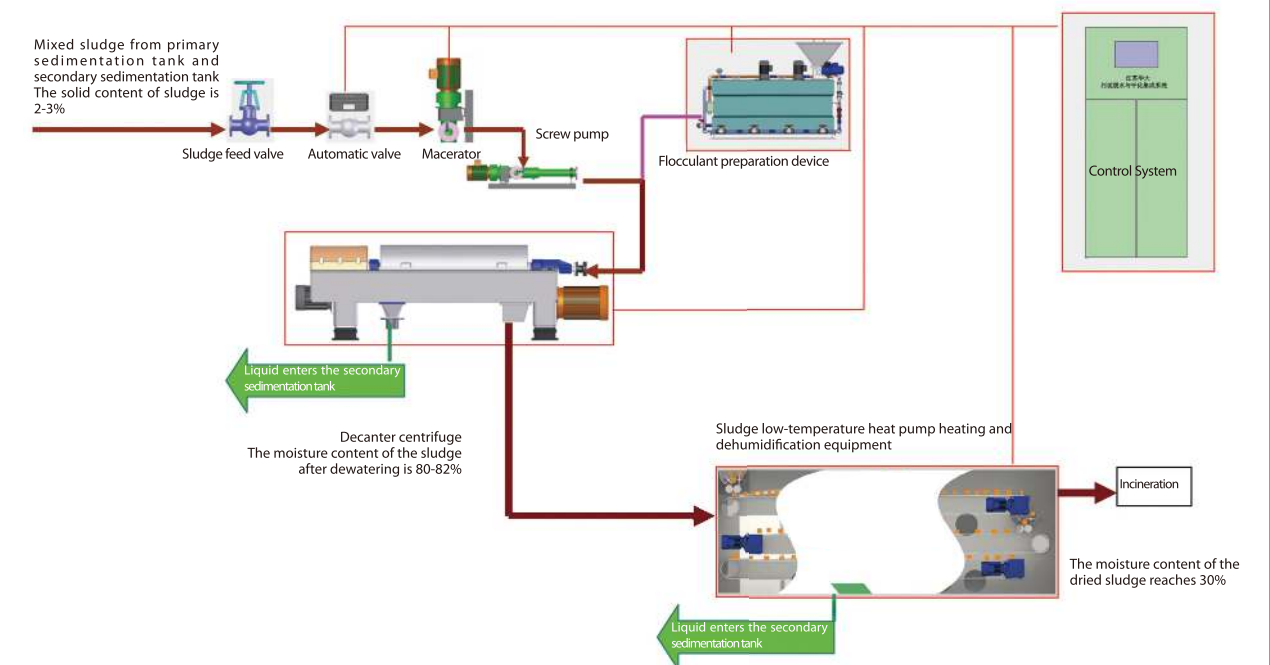
The centrifugal sludge dewatering and drying equipment produced by our company, usually used for sludge thickening and dewatering, is mainly composed of a LW series decanter centrifuge (or scroll press), a full-automatic flocculant preparation and dosing device, a sludge crushing and cutting machine, a sludge feed pump, a dosing pump, a shaftless scroll conveyor, a flowmeter, a control valve and a complete full-automatic control system. Characterized by advanced structure, reasonable configuration, high degree of automation, continuous airtight operation, safe and reliable operation, etc., it is applicable to the treatment of municipal sewage, rural sewage, hospital sewage, etc. as well as various types of industrial sewage.

Working process



The mixed sludge from the municipal sewage that has undergone primary sedimentation and secondary sedimentation normally has a solid content of about 2-3%. It is then dewatered and thickened with a decanter centrifuge (or belt filter, screw press) and the discharged sludge has a moisture content of about 80-85%. Later, the sludge enters the sludge low-temperature heat pump heating and dehumidification equipment for dehumidification and drying, and the moisture content of the treated sludge drops to about 30%. Thus, the harmless treatments of the sludge, such as incineration or utilization after pyrolysis, can be conducted.

Diagram of sludge dewatering and drying system



The whole system is under intelligent control and can carry out continuous production.

The dried sludge has a low moisture content and meets the incineration conditions.

It is an integrated system that is easy to move with low operating cost.

Jiangsu Huada Centrifuge Technical Inquiry Form

★ Customer name			Customer Address			
★ Contact Information	Name:	Telephone:	★ Talk to	Technical:	Sales:	
★ Project name						
★ Selection purpose	☐ New Process Selection ☐ Automation Upgrade ☐ Increased production capacity ☐ Safety and Environmental protection upgrade ☐ Others:					
Belonging Industry	☐ Environmental Protection ☐ Food ☐ Pharmaceuticals ☐ Chemical Industry ☐ Petroleum ☐ New Energy ☐ New Materials					
★ Required Model	Continuous Type: ☐ Decanter centrifuge ☐ Screen Worm centrifuge ☐ Thickening Screen Worm centrifuge ☐ Others:					
	Intermittent type: ☐ Vertical Top Discharge centrifuge ☐ Vertical Scraper Bottom Discharge centrifuge ☐ Peeler Centrifuge centrifuge ☐ Others:					
★ Explosion-Proof Requirements	☐ None-explosion-proof ☐ Electrical explosion-proof ☐ Nitrogen protection ☐ Oxygen Content Detection					
★ Installation Environment	☐ Indoor ☐ Outdoor ☐ Humidity ☐ Gas Corrosion ☐ Others:					
★ Separation Purpose	☐ Solid-Liquid Separation ☐ Liquid Phase Clarification ☐ Particle Grading ☐ Liquid-Liquid Separation ☐ Three-Phase Separation: ☐ Solid-Liquid-Liquid ☐ Solid-Liquid-Solid					
Existing Separation Method And Separation Effect	☐ Centrifuge type and model: ☐ Filter press ☐ Suction filter tank ☐ Three-In-One ☐ Others:					
	Processing Capability:			Processing Effect:		
★ Material Information	Material Name or Molecular Formula		Solid Phase Composition		Liquid Phase Composition	
	Solid Content (wt%)		Material Temperature (℃)	Acid Ph Value/Acid Concentration	Dynamic Viscosit cp	Washing Requirement
						☐ Yes ☐ No
	Solid True Density g/cm³		Bulk Density g/cm³	Slurry Density g/cm³	Liquid Density g/cm³	Solid breakage
						☐ Allowed ☐ not allowed
★ Material properties	☐ Flammable and explosive ☐ Volatile ☐ Toxic ☐ Corrosive ☐ Sticky ☐ Easy to form ☐ No Requirements					
Particle shape	☐ Cube ☐ Fiber shape ☐ spherical ☐ needle-shaped ☐ Flake shape ☐ snowflake-shaped ☐ Others:					
Particle size distribution	D10=μm; D20=μm; D60=μm; or range: %< μm; %< μm; %< μm; ★ Note: It is best to provide a particle size feedchart. If it cannot be provided, please provide the model of the filter cloth used in the centrifuge, mesh number (or air permeability) and material.					
★ Sedimentation performance	Method A: Left for hours, the layer will stratify; Left for hours, the volume components will no longer change.Method B: Test with desktop tube centrifuge, check the stratification after running at 3000 rpm for 1 minute					
Washing Liquid	Name	Composition	Temperature ℃	Viscosity cp	PH value	
★ Operating conditions and expected handling requirements	Feeding method		Working Hours		Material requirements	
	☐ High-level continuous ☐ Intermittent		Hours/Day: Hours/Year:			
	Processing capacity m³/h	solid output capacity t/h	Solid discharge moisture content %	Liquid phase solid content %	Useful ingredient	
					☐ Solid ☐ Liquid	
	Special requirements for three-phase separation:					
	Other requirements: removal rate/automation control/explosion-proof requirements/sealing/surface treatment/washing/thermal insulation/anti-oxidation/services, etc.					
Supplementary instructions	Items marked with ★ are important mandatory fields; please fill in the rest as completely as possible, which will be beneficial for reasonable selection. Meeting the corrosion and explosion-proof requirements for the operating conditions is the primary condition for selection, which pertains to the safe use of the centrifuge and must be confirmed. Customers should provide the corresponding processing requirements (such as output, treatment capacity, quality requirements, etc.) while putting forward selection requirements. Customers also need to provide control requirements that meet the operating conditions (automation control, remote operation and maintenance, etc.). Before selecting the centrifuge model, prioritize the selection of corrosion-resistant materials. Commonly used corrosion-resistant materials include: 304, 321, 316L, 2206, 2507, 904L, titanium and titanium alloys (TA2, TA8, TA9, TA10), Hastelloy alloys (C276, C22, B2, B3), etc. Common surface corrosion protection measures include: lining with PE, PO, natural rubber, spraying with box plastics (HLF30ECTFE, F4Q/ETFE, F46FEP, PFA), etc. Continuous equipment does not use plastic or fluoropolymer lining.					

First edition in November 2024

Statement:

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All technical specifications, configurations, and images in this catalog are for your reference during model selection.

All processing capabilities in this catalog are related to material concentration, particle size, and other parameters, and are for reference only.

Specific configurations and parameters shall be subject to the factory technical documents.