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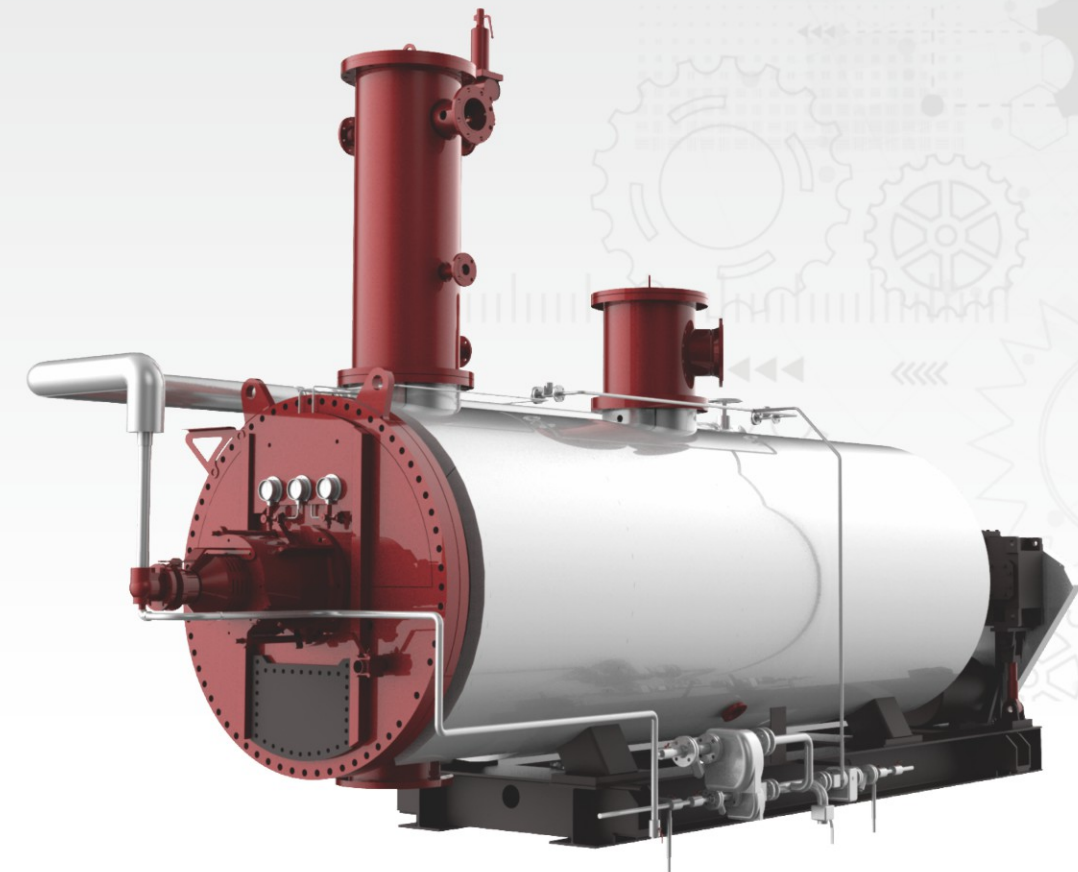
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CONNECT

TURNKEY SOLUTION FOR RENDERING AND FEED MILL PROJECT



MILL PROCESSING EQUIPMENT

**CONNECT GROUP FOR
POULTRY PROJECT**

www.connectpoultrygroup.com

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To CONNECT customers' needs in providing turnkey solution for Poultry and large animal slaughtering project.

CONNECT is the exclusive turnkey poultry project provider in China to build advanced poultry project including slaughterhouse, rendering plant, chicken houses, feed mill and its related poultry field project. Trademark of CONNECT is widely used and accepted by the worldwide clients. The service range are including project consulting, designing, equipment manufacture, installation and after service. All products are manufactured according to EU. Standard, and highest world quality standards

CONNECT has five major manufacturing bases in China, the agent and distributors are spreading many countries worldwide. We are working together to build excellently projects with high quality equipment and supply best- after sale services to all customers.

CONNECT group mill equipment including National standard rendering equipment, EU standard rendering equipment, feed mill equipment and fertilizer equipment. The companies in our group have a complete set quality control system, advanced designing idea, CNC producing equipment which found the first foundation for our products.

Through continuous R&D and innovation cooperation, the companies are always customer-oriented and continuously develops products that meet customer' individual needs. With Advanced product design concepts, advanced production technology, exquisite production technology, excellent product quality, and sincere after-sales services, we win the width recognition of customers and partners.





VISION

In the more competition and fast poultry business growing conditions from world-wide, how to keep the leading position in poultry project builders, CONNECT firmly following the four optics.



CLEAR MISSION

To consider for customers, maximum do what ever clients request, build high quality project and try best to save investment for clients. With great supporting on technical and project civil work guiding ,and after service!



CONSTANT INNOVATION SPIRIT

Keeping the great competition of products,we take technical Innovation as our company spirit,which consider from animal welfare, healthy,environmental protection and energy saving.
Modestly to learn advanced technology.

Integrity management with heart and assurance service, to communicate and coordinate with customers All for customers to solve any problem with first action. Regular project investigation and engineer re-checking of project after running.



TEAM WORK

Keeping the work team in great union ,active,Harmonious. Team work is the core concentric for corporate culture, company and individual create a better future with unity,Cooperation and hard working of all the staff.



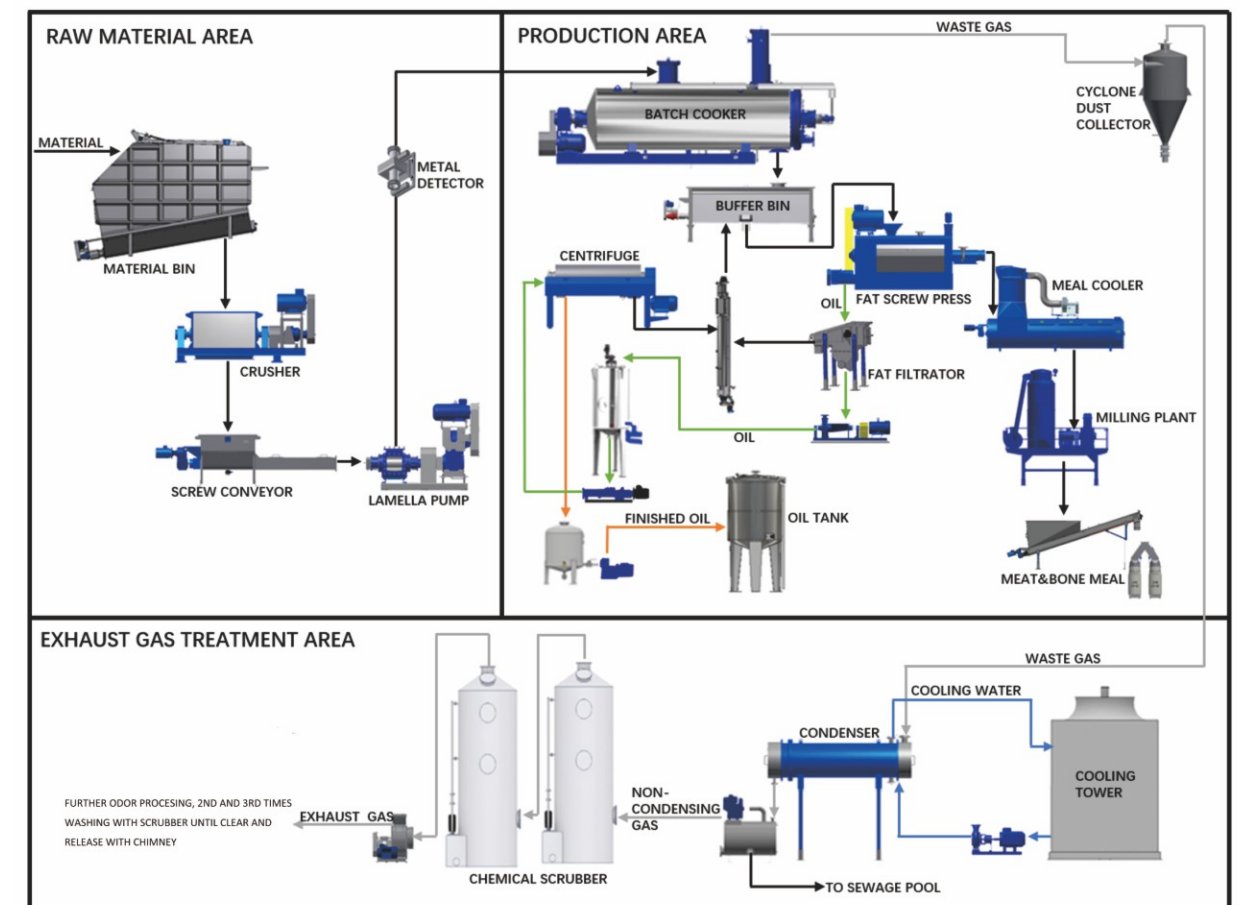
According to different type of raw material, the rendering plant working processes are different. The technical working process normally can be divided for mixed poultry waste raw material from slaughterhouse, and mortality chicken from farm; The mixed raw animal waste from animal slaughterhouse such as cattle, sheep, camel and pig slaughterhouse or farm; The raw material of poultry feather only; Also including the animal tallow rendering system, blood meal system. The fat separation, oil purification system are optional arranged according to final mill standard as per client request. The odor control system is applied based on the odor control standard of client request.

CONNECT rendering plant consists of:

- Mixed mill rendering plant
- Bone meal rendering plant
- Feather meal rendering plant
- Other rendering plant

Mix mill rendering plant layout

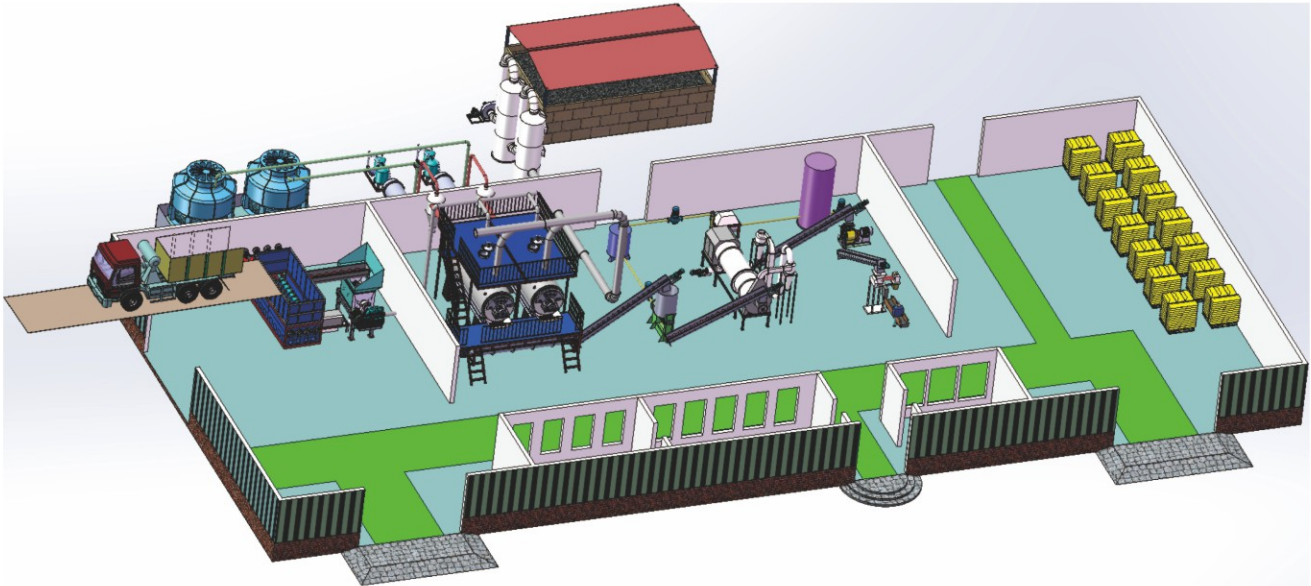
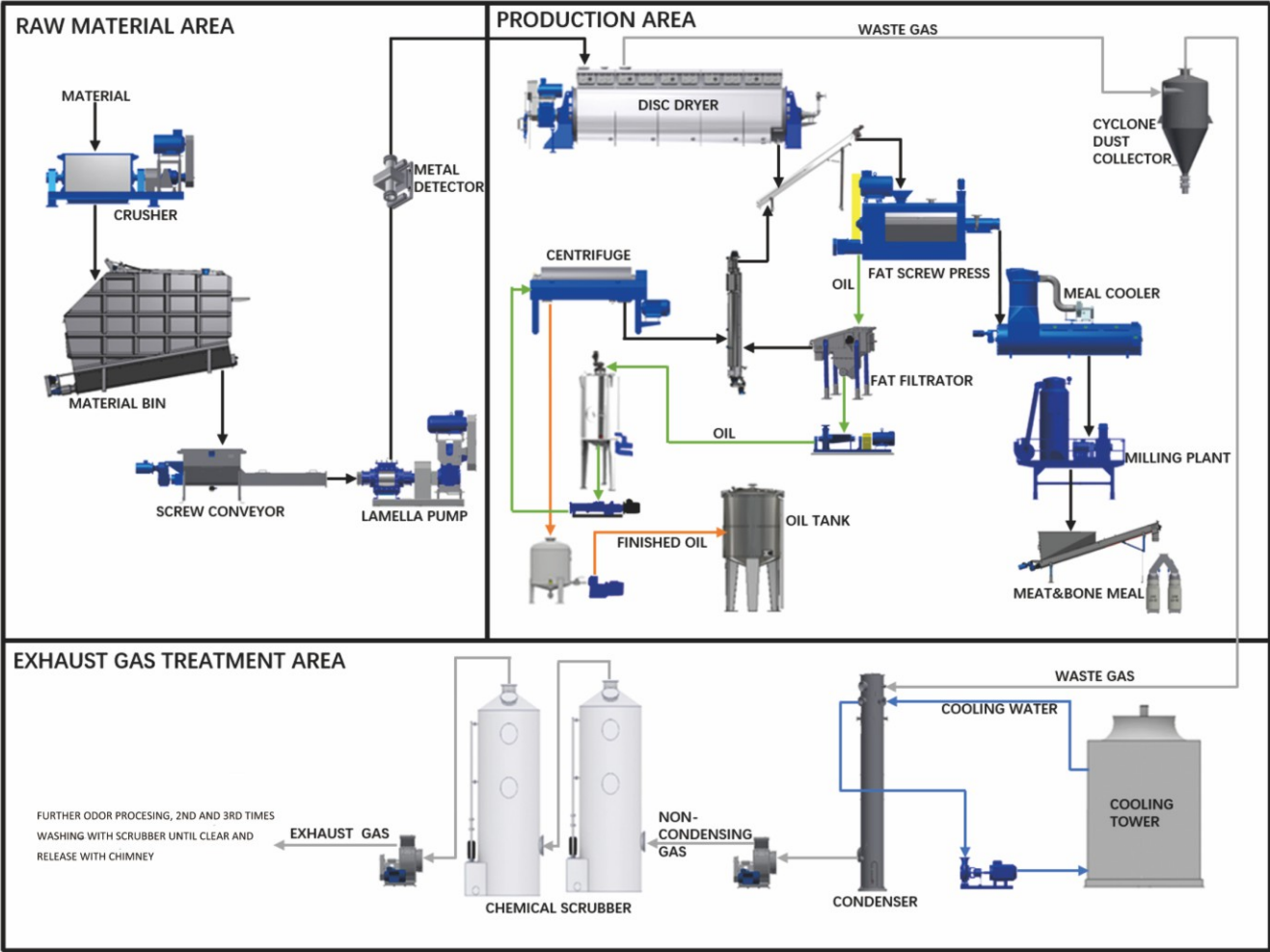
Mixed mill rendering plant is used for dead animals and poultry, which will be transformed into oil, meat powder and other economic products



Bone meal rendering plant layout



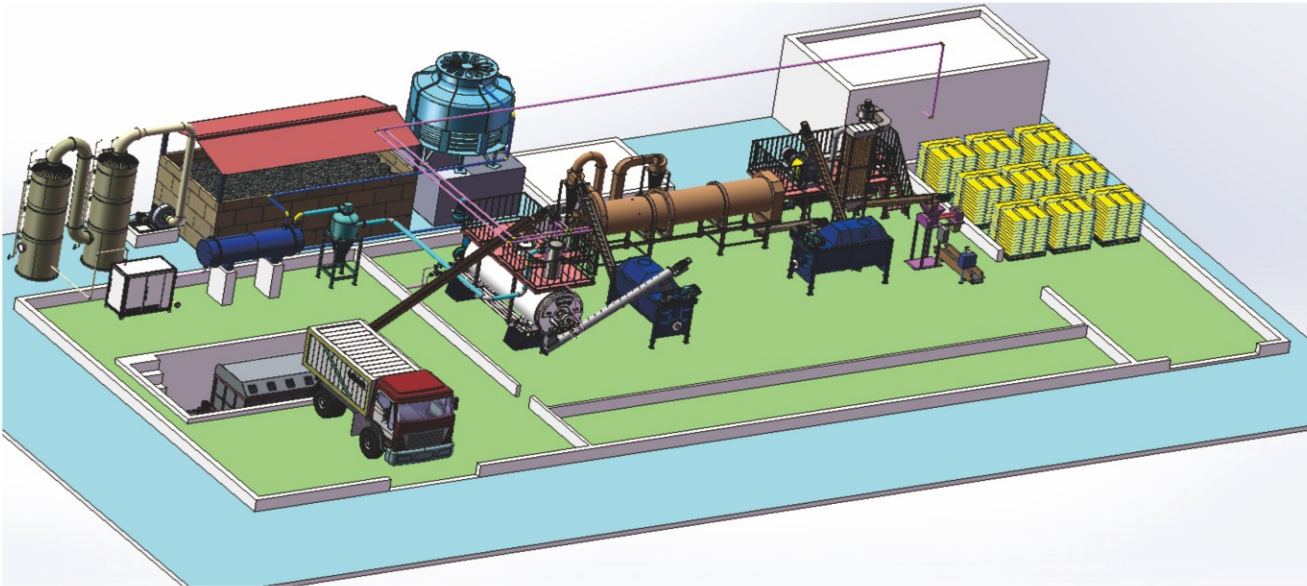
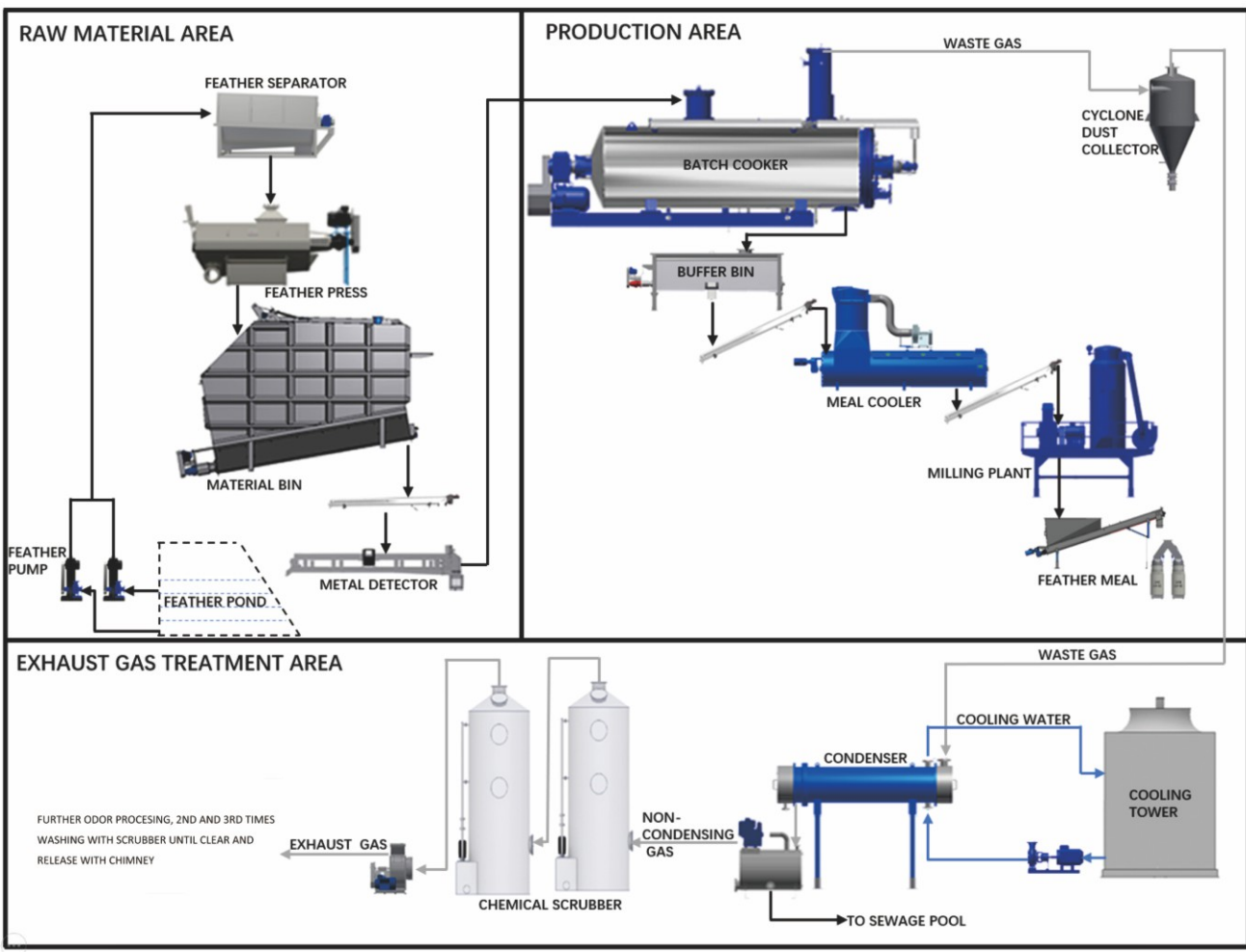
Bone meal rendering plant is used for slaughterhouse waste from animal and poultry, which will be transformed into animal oil, meat, and bone meals.



Feather meal rendering plant layout



Feather meal rendering plant is used for poultry slaughterhouse waste feather, which will be transformed into more valuable feather meal.



PRE-BREAKER



Pre-breaker is a commonly used machinery and equipment for crushing large or hard materials into smaller particles or powder. The Pre-breaker is designed for pigs, cows, sheep, and other large animals, and is divided into single-shaft type and double-shaft type according to different production situations to choose different Pre-breakers for more efficient production.

Advantages:

- Crushing of raw materials for the drying process of animal waste, slaughtering waste, has the following advantages
- Improve drying efficiency: Crushing the raw material increases the surface area of the waste, making it easier to evaporate and dry. Crushed raw materials have a larger surface area and finer particles, which is conducive to the evaporation and volatilization of water, thus improving the drying efficiency. And the volume of the crushed material is reduced, the weight is reduced, which can reduce the energy consumption required for transportation and reduce the pressure on the screw conveyor. The particles of the crushed material are relatively uniform, and there are no large pieces of material. This makes the material more stable during transportation and reduces the risk of accumulation and collapse of the material.
- Promote heat transfer: Crushing the raw material increases the efficiency of heat transfer within the waste. The smaller particles of crushed raw material allow heat to be transferred more quickly into the waste, accelerating the evaporation of moisture and the drying process.
- Uniform drying: Crushing the raw materials can make the waste dry more evenly. The relatively uniform particle size of the crushed raw materials makes the heat and humidity in the drying process more evenly distributed in the waste, avoiding the problem of insufficient or excessive drying caused by uneven humidity.
- Reduced disposal costs: Crushing raw materials reduces the energy and time costs of the drying process. By crushing the waste, the raw material can be made easier to evaporate and dry, reducing drying time and energy consumption, thus reducing working hours.

Model	Material	Teeth distance (mm)	POWER (kw)	Capacity(t/h)	Dimension(m)	Weight(ton)
CZYX-40	Carbon steel	40mm	11	4~5	3.5*1.3*1.7	5
CZYX-50	Carbon steel	50mm	37	8~10	3.8*2*1.4	6
CZYX-80	Carbon steel	80mm	45	15~20	4.45*2.22*1.6	10
CZYX-80A	Carbon steel	80mm	22*2	15~20	4*2.2*1.3	6
CZYX-80AS	Carbon steel	80mm	30*2	15~20	4*2.2*1.3	6
CZYX-80A2	Carbon steel	80mm	37*2	15~20	4.6*2.5*1.3	8

According to the different needs of customers, the crusher can be adjusted according to the granularity requirements of the crushed material, motor power and other functions

FEATHER SQUEEZER

Feather squeezer is a kind of equipment used for feather dewatering treatment, mainly used to squeeze out the excess water from feathers before feeding to cooker for subsequent treatment and utilization. Compared with the traditional water squeezer, the screw water squeezer has higher squeezing efficiency and lower energy consumption. The raw material of feather contains about 70% of water which just transport from slaughterhouse, after pressing by our machine, the water contains decreased to 50%. The water leaking wall and machine cover is stainless steel

Feather squeezers work by squeezing water out of feathers by rotating a screw. Usually, the feathers are first separated from the water and then put into the feather squeezer. The feather squeezer mainly consists of a spiral shaft and a sieve cylinder. Feathers are put into the sieve cylinder and the water is squeezed out of the feathers through the rotating movement of the spiral shaft.

The main design

- Spiral Shaft and Sieve Cylinder: The spiral shaft and sieve cylinder are the core components of the Spiral Squeezer and are used to contain the feathers and apply mechanical pressure. Spiral shafts and shells are usually made of stainless steel or corrosion-resistant materials to ensure a long service life.
- Motors and Transmission Systems: Motors and transmission systems are used to drive the rotary motion of the screw shaft. Adequate power is provided by using electric motors and gearboxes etc.
- Drainage system: Drainage system is used to remove the extruded water. Drainage outlets or pipes are provided for efficient drainage of water.

Advantages:

- high squeezing efficiency, low energy consumption, low failure rate, small footprint, easy operation, etc.
- It has a wide range of application prospects in slaughtering industry and feed industry.
- It should be noted that when using the spiral feather squeezer, choose the corresponding matching model to ensure the squeezing effect and product quality. At the same time, it is also necessary to regularly maintain and repair the equipment in order to extend the service life of the equipment.

Usage

- Reduce moisture: Feathers contain a large amount of moisture, squeezing water can effectively remove moisture from feathers, which can reduce energy consumption and time in the subsequent drying process, making feathers easier to process and handle. After removing the moisture, it effectively reduces the energy consumption of the back-end equipment, reduces the cost, improves the processing efficiency, and shortens the working time.
- Improve product quality: Squeezing water can remove impurities, dirt, and microorganisms in feathers, etc., and improve the purity and quality of feather meal. Pure feather meal is more able to meet customers' needs in application.
- Feather squeezer in the feather powder production process is mainly reflected in the improvement of processing efficiency, improve product quality, and reduce costs and so on.



SQ	MODEL	POWER(KW)	SHAFT DIA.(MM)	Capacity	Dimension(mm)	Weight(ton)
1	CZJS-350	11	350	10000-15000 head/h	2550*1500*950	1250
2	CZJS-400	18.5	400	20000-25000 head/h	3100*1800*1100	1800

FEATHER WATER SEPARATOR



Feather Water Separation Sieve is a device for separating feathers and liquids. Feather-water separation sieves separate feathers from the mixture by centrifugal force through the rotation of the screen drum. It usually consists of a sieve mesh with fine apertures and a support structure. As the mixture passes through the sieve, the feathers are held back while the liquid passes through the screen into a collector or pipe below

MODEL	Diameter(mm)	Power(kw)	Capacity(m ³ /h)	Materials	Dimension(mm)	Weight(ton)
CZFL-700-3	700	3kw	100-200m ³ /h	SS304	4350*1550*1400	0.98 T

According to the different needs of customers, can provide different models of equipment to respond to different needs

Feather Pump

Feather pump is a device used to transfer liquid and feather mixtures, utilizing the centrifugal principle to transfer feather-water mixtures.

Principle of operation: The feather pump works on the centrifugal principle so that the mixture is sucked into the pump. It consists of a rotating impeller and a sealed chamber. When the impeller rotates, it pushes the gas or liquid into the chamber and draws it into the pump by means of depressurization.



MODEL	Power(kw)	Conveying distance(m)	Capacity(m ³ /h)	Dimension(mm)	Weight(ton)
CZXM-100	30 KW	120-150	100-200 m ³ /h	850*700*1100	0.5 T
CZXM-100	22 KW	80-120	85-170 m ³ /h	850*700*1100	0.49 T

According to the different needs of customers, select different models of feather pumps

Raw Material Bin



Raw material bin is a general-purpose feeding and conveying machinery, the power is driven by a deceleration motor, the cover cylinder control, pull-out type; bin bottom with three-axis or four-axis screw conveyor, each screw conveyor separate control and automatic separate cycle control; can be used as a material storage and conveying, with simple operation, easy to use, and wide range of uses characteristics

The Bin is used to collect raw material to make automatic, continuous work. We have series models to match with different capacity production line. After the raw material of poultry feather and viscera, dead chicken, red meat by-products, or dead animals pre-break it and then put in the raw material bin, with the screw conveyors transportation, the raw material is automatically feeding to the batch cooker.

The main design

Door: the door is equipped with an electronically controlled pneumatic system, which can be set to automate the opening of the door for convenient and quick collection of raw materials, and automated closing of the raw materials after collection.

Reduce odor leakage and improve hygiene standard.

Bin body: The material of the body of the raw material bin is stainless steel and carbon steel, which has the advantages of high hardness and wear resistance. Carbon steel is usually harder than ordinary steel, more wear-resistant.

Raw material bin shell surface with corrosion-resistant coating to reduce oxidation and corrosion, to extend the service life.

The shell of the raw material bin can also choose different materials according to different situations, such as: stainless steel, special hard alloy and so on. To cope with different use cases.

Bottom of the bin: The bottom of the raw material bin is equipped with a screw conveyor, which provides stable and efficient transportation of the collected materials, improves the production efficiency, and prevents the accumulation of materials.

The screw conveyor at the bottom of the bin is equipped with electric control components to adjust the conveying speed of the materials according to the different conditions of production to achieve the function of speeding up the conveying, slowing down the conveying, and stopping the conveying.

MODEL	VOLUME(m ³)	MATERIALS	POWER(KW)
CZYL-10	10m ³	CARBON/SS STEEL	4KW*3sets
CZYL-10	10m ³	CARBON/SS STEEL	5.5KW*2 sets
CZYL-15	15m ³	CARBON/SS STEEL	7.5KW*3sets /11KW*3sets
CZYL-20	20m ³	CARBON /SS STEEL	7.5kw*3 sets/11kw*3sets
CZYL-30	30m ³	CARBON /SS STEEL	11kw*3sets
CZYL-40	40m ³	CARBON /SS STEEL	5.5kw*2sets
CZYL-50	50m ³	CARBON /SS STEEL	5.5kw*2sets

Raw material bin can be produced with different volumes and materials according to the different production conditions of customers.

Batch cooker(Hydrolyzer)



Batch cooker is a device used for feather processing, which is mainly used to hydrolyze feathers to extract proteins and other valuable components from them.

The main design of the batch cooker

Tank: tank is a sealed container made of heat and pressure resistant materials to withstand the effects of heat and pressure.

Heating System: The heating system is used to provide high temperatures (135 to 200 degrees) and uses steam to heat the tank. The high temperature helps to accelerate the hydrolysis reaction.

Pressure control system: The pressure control system is used to control the pressure inside the tank to ensure that proper pressure conditions (0.5~0.7MPa) are maintained during the hydrolysis process.

This helps to improve hydrolysis efficiency and product quality.

The application of batch cooker is mainly focused on the feed industry. In the feed industry, hydrolyzed feathers can be used as a high protein feed additive for improving the nutritional value of animals.

When using batch cooker, the temperature, time, and pressure of hydrolysis should be controlled to ensure the effect of hydrolysis reaction and product quality. At the same time, it is also necessary to carry out the treatment of waste liquid and waste gas in order to avoid pollution to the environment.

Extraction of valuable components: Feathers are rich in proteins and other valuable components, which can be effectively extracted through the treatment of hydrolysis tanks.

These extracted components can be used as feed additives to improve the nutritional value of the product.

Resource utilization: Feathers are often a by-product or waste product that can be converted into a useful product through treatment in a batch cooker.

This helps to increase the efficiency of resource utilization and reduce waste.

Improve product quality: the protein of feather meal made from hydrolyzed feathers can be broken down into smaller peptide chains and amino acids, which

This improves the availability and digestibility of the protein. This makes hydrolyzed feather meal a high-quality protein source that can be used in animal feed and aquatic feed.

It can be used in animal feed and aquaculture applications.

Improve production efficiency: Feather hydrolysis tanks usually have an automated control system, which allows precise control of parameters such as temperature, time, and pressure.

Improve the efficiency and stability of the hydrolysis reaction. This helps to improve productivity and product consistency.

Principle of Operation

After raw material hydrolysis in cooker for 30 minutes, Stamp the seal to make temperature reach 130 degrees in order to kill the E., and break the keratin molecules, keep the working pressure for 15 minutes when it reaches 0.3mpa, discharge vapor in the tank. Heating was continued for 20 minutes, then the discharge spout into the dryer for drying, Cooled, and crushed into powder. so it Becomes, protein content > 80 %, moisture <10%, tawny hydrolyzed feather meal.

MODEL	SIZE OF TANK		STEAM CONSUMPTION (kg/h)	CAPACITY (T/BATCH)	MOTOR POWER (KW)	REDUCER MODEL	steam in jacket (unit:kg/h)	steam in shaft (unit: kg/h)	Max.pressure of safety valve (jacket shaft) (unit: mpa)	Max.pressure of safety valve (inside tank)unit: mpa)	Jacket space M³	main shaft space M³	inside tank space M³
	INNER DIAMETER.	LENGTH (mm)											
CZSJ-1400-6	1400	4500	800-1000	1.0-1.5	37	ZSY 280	500-600	100-200	0.75	0.45	1.7	0.19	6
CZSJ-1500-7	1500	5000	1000-1400	1.5-1.7	45	ZSY315	600-800	200-300	0.75	0.45	1.94	0.34	7
CZSJ-1600-8	1600	5000	1200-1500	1.7-2.0	55	JZQ850.PV	800-900	300-400	0.75	0.45	1.42	0.38	8
CZSJ-1800-12	1800	6000	1800-1900	2.5-2.7	55	JZD850	900-1150	450-550	0.75	0.45	2.73	0.89	12
CZSJ-1800-14	1800	7000	1800-2000	2.7-3.2	55	JZD850	1100-1200	500-600	0.75	0.45	3.22	1.9	14

Digester (Combined with cooking and Drying process)



Digester is a commonly used equipment for the treatment of animal carcasses or by-products produced in the process of animal slaughtering, in animal and slaughtering waste harmless treatment.

Working Principle: After the raw material is hydrolyzed at room temperature for 30 minutes in the digester, the lid is sealed to make the raw material temperature reach 140 degrees to kill E. coli and break the keratin molecules, the working pressure reaches 0.3MPa and then keep it for 15 minutes, and then discharged the steam in the tank. Continue to heat for 20 minutes into the vacuum drying, until drying to the required moisture.

Digester realize the easy handling of odor process result, which is the upgrade of Batch cooker and combined cooking and drying in one equipment. Clients are easy to operate the odor system, and processing is more stable.

The working process is same as batch cooker for cooking stage, after cooking, the meal dried in same machine, no need discharges it and drying in dryer. The cooking time is about 1.5hours, and the drying time is about 2.5 hours. Water contains is around 10% after drying.

The cooker has the following applications in the animal and slaughter waste rendering:

Animal residue treatment: the digester can deal with animal carcasses or animal and poultry slaughtering process of residue, viscera, bones, and other waste, will be heated and boiled, decomposed into meat and bone powder, grease, or organic fertilizer raw materials.

Advantages; has a compact structure, high temperature resistance, smooth transmission, low noise easy installation, easy maintenance, reliable operation, energy saving and other advantages.

Disinfection: The cooker can treat waste at high temperatures and pressures, effectively killing bacteria and viruses and reducing the risk of environmental pollution and the spread of infectious diseases.

Resource Recovery: By treating the waste through the cooker, it can be converted into reusable products such as meat and bone meal, oil and fat, organic fertilizer, etc.,

High efficiency: The cooker usually has high processing efficiency and processing capacity, which is suitable for all kinds of poultry feathers, animal hides and skins, animal bones, offal, minced meat, intestines, and inner residues to be made into feather meal, meat and bone meal through high temperature, high pressure, and sterilizing.

Precise control: By controlling parameters such as heating temperature, pressure and time, precise control of the process can be realized to meet the needs of different products.

Reliability: Cookers typically have a rugged design that can operate over long periods of time and in harsh environments.

Automation: The cooker can be integrated with automation systems for automatic control and monitoring, improving ease of operation and efficiency.

MODEL	SIZE OF TANK		STEAM CONSUMPTION (kg/h)	CAPACITY (T/BATCH)	MOTOR POWER (KW)	REDUCER MODEL	steam in jacket (unit:kg/h)	steam in shaft (unit: kg/h)	Max.pressure of safety valve (jacket shaft) (unit: mpa)	Max.pressure of safety valve (inside tank)unit: mpa)	Jacket space M³	main shaft space M³	inside tank space M³
	INNER DIAMETER.	LENGTH (mm)											
CZHZ-1300-4	1300	4000	800-1000	0.7-0.8	22	JZQ650	600-700	150-250	0.75	0.45	1.45	0.27	4
CZHZ-1400-6	1400	4500	1000-1200	1.1-1.2	30	ZSY 280, JZQ650	800-1000	250-300	0.75	0.45	1.7	0.69	6
CZHZ-1600-8	1600	5000	1200-1500	1.5-1.8	45/55	JZQ750, JZQ850.PV	900-1100	350-450	0.75	0.45	1.42	0.92	8
CZHZ-1800-10	1800	5000	1500-1800	2.0-2.3	55	JZD850	1100-1300	400-500	0.75	0.45	1.5	1.05	10
CZHZ-1800-12	1800	6000	1700-1900	2.3-2.5	55	JZD850	1300-1400	450-550	0.75	0.45	2.73	1.13	12
CZHZ-1800-14	1800	7000	1800-2100	2.7-3.0	75	JZQ850	1400-1500	550-650	0.75	0.45	3.22	1.35	14

The equipment is available in different models according to the different needs of customers.

Disc. Dryer



In animal rendering, slaughter waste treatment, Disc. dryers can be used to sterilize and dry slaughter waste at high temperatures, reducing the volume and weight of the waste, as well as reducing its pollution of the environment.

Working Principle:
Disc dryer utilizes the principle of heat conduction and heat radiation, the materials are stirred and pushed in the closed cavity under negative pressure by the paddle fins on the coiler, and move from the feeding end to the discharging end, so that the materials and the high-temperature coiler are fully contacted, thus achieving the effect of rapid drying.

Drying: Slaughter waste contains a large amount of moisture, through the disc dryer can dry the waste, the water content is reduced to a certain level. This reduces the volume and weight of the waste and facilitates subsequent disposal.

Sterilization and disinfection: Disc dryers can sterilize and disinfect slaughter waste through heating and high temperature treatment. High temperature can effectively kill bacteria, viruses and parasites and other harmful organisms, reducing their harm to the environment and animals.

Resource recovery: In slaughter waste, there are still some valuable components such as fat, protein, and collagen. Through the treatment of coil dryer, the valuable components can be extracted and used to produce fertilizer, feed, or other industrial products, realizing the recycling of resources.

Environmental protection: Slaughtering waste contains many organic substances, which will cause serious pollution to the environment if it is directly discharged without treatment.

Through the treatment of coil dryer, the organic substances in the waste can be decomposed and dried, reducing its pollution to the environment and reduces the risk of odor and the spread of infectious diseases.

Good drying effect: Coil dryer adopts the design of coil, which can provide a large area of heat exchange surface and accelerate the evaporation of moisture. At the same time, it makes the material heated evenly during the drying process to achieve better drying effect.

Precise temperature control: The coil dryer can control the temperature and flow rate by adjusting the high-pressure steam. This enables the coil dryer to precisely control the drying temperature and drying speed of the material, avoiding damage to the material caused by too high or too low temperature.

Easy to operate: Disc. dryer is simple in structure and easy to operate. It usually adopts automatic control system, which can realize automatic operation and monitoring, reduce manual intervention, and improve production efficiency.

MODEL	POWER (kw)	Heat exchange area(m ²)	Volume (m ³)	Tank diameter (mm)	Tank length (mm)	material	Dimension (mm)	Weight(kg)
CZPG-1400-7	30	69.3	7.95	1400	7000	Carbon steel	9100*2120*2710	14500
CZPG-1500-7	37	74	8.8	1500	7000	Carbon steel	9150*2350*2785	16500
CZPG-1800-8	55	125.4	13	1800	8000	Carbon steel	10700*2350*3350	28000

Paddle Dryer



Paddle dryer takes saturated water vapor or high temperature heat conduction oil as the heat supply source, takes electric motor as the power source, drives the stirring paddle on top of the main shaft to do rotary movement inside the cylinder of the equipment, stirs and heats up the materials, so that the materials with large water content are fully contacted with the surface of paddles under the stirring of paddles to achieve the purpose of drying, and the low-speed stirring of the materials to keep the material color and luster, and the structural form of the dryer is generally horizontal. In this process, the high temperature paddle, and the material uniform continuous contact, so that it gradually loses moisture and complete the drying. In addition, the paddle dryer also has the advantages of simple structure, convenient operation, and low maintenance cost, so it is widely used in industrial production.

Paddle dryer has the advantages of compact structure, smooth transmission, easy maintenance, large heat dissipation area, low noise, simple installation and maintenance, low operating cost, energy saving and so on.

The wedge-shaped paddle of paddle dryer has self-cleaning ability, the dispersive force generated by the joint motion of the inclined surface of the rotating paddle and the layer of particles or powder, so that the materials attached to the heating slant are automatically removed to ensure that there is no cover on the leaf surface, the paddle maintains a high efficiency of the heat transfer function, and the uniformity of the heat transfer, which can improve the role of the paddle heat transfer.

Paddle dryer hollow paddle, for indirect heating dryer, the heating medium and the material is not in direct contact with the jacket and many special hollow fan-shaped blade conduction heat transfer low-speed mixing dryer.

Paddle dryer rotating shaft and cylinder seal, standard with a simple non-pressurized combination of mechanical seals, the selection of wear-resistant, high temperature, acid, and alkali erosion-resistant sealing materials. The transmission adopts medium hardened gear reducer, which is characterized by smooth transmission, vibration reduction and durability.

It is suitable for drying all kinds of poultry feathers, broken animal hides and skins, animal bones, offal, minced meat, intestines and inner residue and other materials.

A variety of discharge methods are used to meet the installation requirements of different customers.

MODEL	Diameter (mm)	Length (mm)	Cooling area(m ²)	Volume (m ³)	power (kw)	Dimension (mm)	Weight(kg)
CZJY-1400-7	1400	7000	51.6	7.5	37	9270*2200*2720	16800
CZJY-1500-7	1500	7000	65.7	8	37	9270*2400*2790	18500
CZJY-1800-8	1800	8000	95.5	12.2	45	10700*2350*3350	29000

Meal Transit hopper



Meal Transit hopper which used after the meal cooking in batch cooker and before feeding to the next process of drying or pressing which gives the enough time for continuously working for meal drying or fat pressing. The system is constructed by the screw shaft which mixing the meal and drives meal from entry to exist.

The features are simple in structure, stable is operation, low energy consumption, durable for lifetime. Tank diameter is 1200mm, the thickness of tank body is 10mm. The main shaft diameter is 219 mm, shaft material thickness is 14mm, The tank length according to the different line capacity request, from 5meters ling to 8 meters or some other dimensions. The material is carbon steel with the stainless-steel cover. The system with driving system of gear box motors. The power is from 7.5kw to 15kw.

Meal Transit hopper is used in the production process, due to too much raw material, not suitable for assembly line production, the material must be buffer storage. The principle utilizes the mechanical spiral separation rotor rotation, the material will be cached in the warehouse body, so that the material into the production line at a uniform rate of quantitative

It plays several important roles in the production process as follows

Balancing the production line: The semi-finished material silo can be used to balance supply and demand in the production line. During the production process, there may be differences in production speeds between different processes, resulting in the output of some processes exceeding the processing capacity of the subsequent processes. By storing semi-finished materials in a cache, a buffer zone can be created between the different processes, allowing the production line to run more smoothly.

Improve production efficiency: The semi-finished material silo can improve production efficiency. When a process on the production line fails or stops, the semi-finished materials in the silo can provide a certain degree of production continuity, avoiding the entire production line because of the interruption of a certain part of the production line and stagnation. This reduces the idle time of the production line and improves production efficiency and capacity utilization.

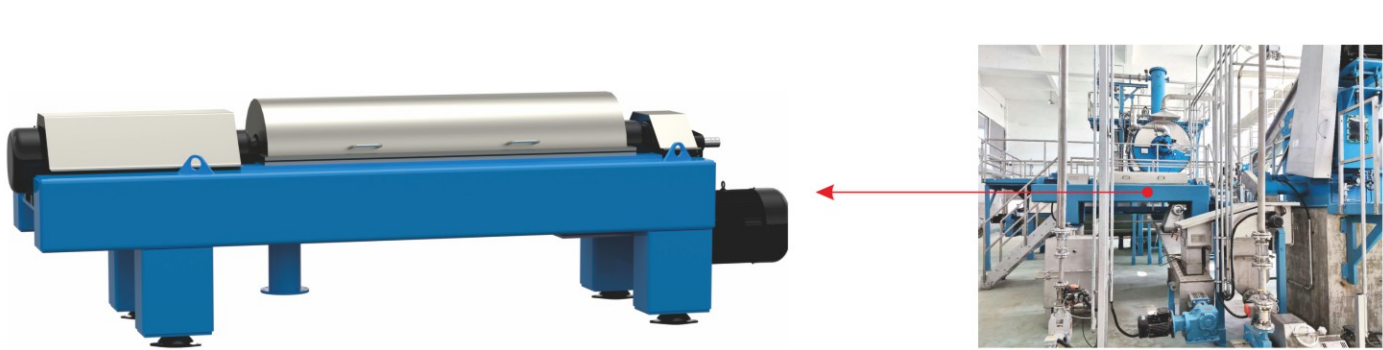
Optimize material scheduling: The semi-finished material silo can be used as a staging area for material scheduling. When the production line needs to adjust the production plan or switch products, the cache warehouse can provide a centralized management and scheduling place. By reasonably arranging the capacity of the cache warehouse and the way of storing materials, it can realize the rapid scheduling and transfer of materials, and reduce the downtime of the production line and the waste of materials.

Controlling Inventory and Costs: Semi-finished material cache bins can be used to control inventory levels and reduce costs. By properly managing the capacity of the cache and the flow of materials in and out of the warehouse, excessive inventory buildup and material waste can be avoided. At the same time, cache bins can also provide a place to inventory and manage materials to ensure accuracy and traceability.

Quality control: The semi-finished material silo can be used for quality control and problem tracing. During the production process, if a batch of semi-finished material is found to have quality problems, it can be temporarily stored in the cache warehouse for further analysis and processing. At the same time, the silo can also record the batch information and quality inspection results of the material, which is convenient for traceability and quality management.

MODEL	VOLUME(m³)	Main shaft diameter(mm)	Main shaft thickness(mm)	material	Power(kw)
CZHC-2	2	159	12	Carbon steel	3
CZHC-3	3	180	12	Carbon steel	7.5
CZHC-4	4	180	12	Carbon steel	7.5
CZHC-5	5	219	14	Carbon steel	15
CZHC-6	6	219	14	Carbon steel	18.5

Horizontal centrifuge



Horizontal centrifuge using a mixture of liquid with different densities and immiscible light, heavy liquid, and solid phase, in the centrifugal force field or gravity field to obtain different settling speed principle, to achieve the separation of layered or solid particles in the liquid settling purpose.

Mixed liquids in the gravity field or centrifugal force field, with different densities and immiscible light and heavy liquid and solid phases, respectively, to obtain different settling velocities, to separate the stratification. In the gravity field is called gravity separation, in the centrifugal force field is called centrifugal separation.

High-efficiency separation: Decanter utilizes the centrifugal force of high-speed rotation to separate solid particles or liquids from the mixture. It has high separation efficiency and separation speed, and can complete the separation process quickly and effectively.

Versatility: Decanter is suitable for different types of separation tasks, including solid-liquid separation and liquid-liquid separation. It can handle materials with different particle sizes and different concentrations, and has strong adaptability and versatility.

Stability: The decanter has good stability and reliability. It adopts a sturdy structure and balanced design, which can maintain balance during high-speed rotation, reduce vibration and noise, and ensure safe and stable operation.

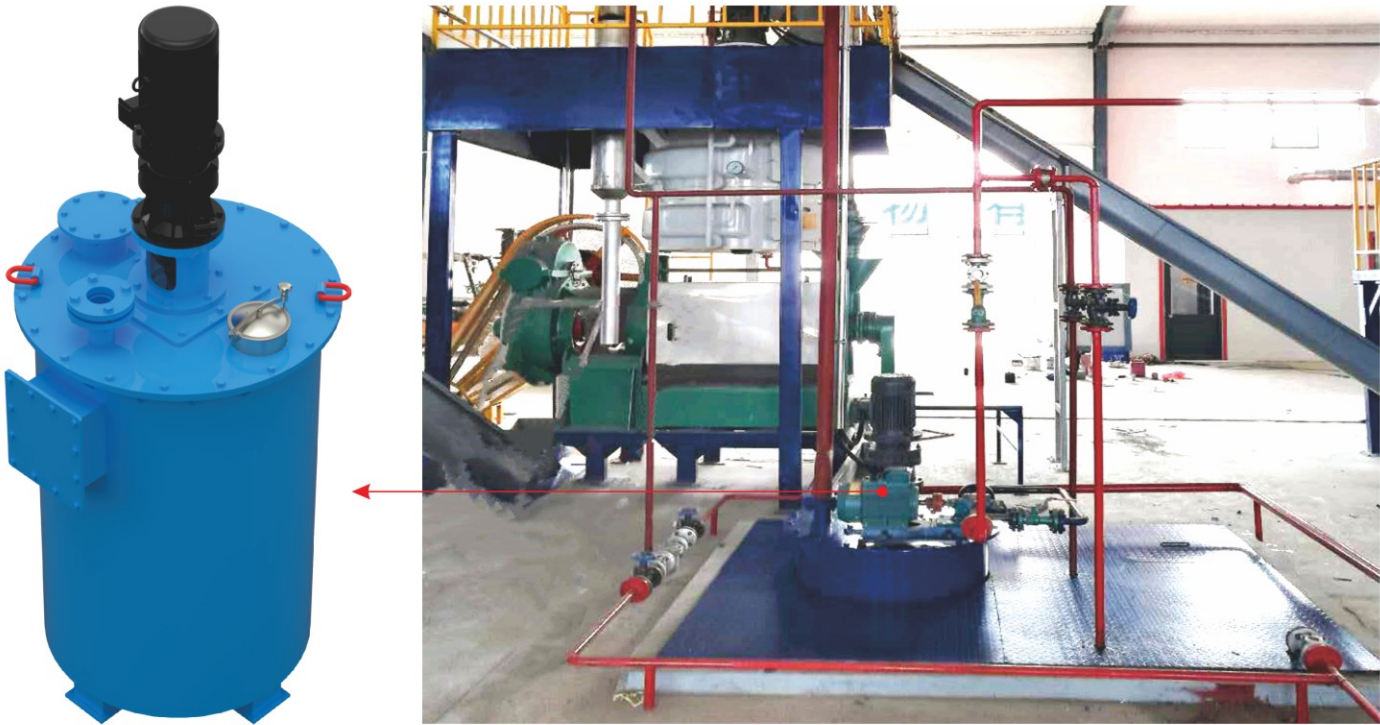
Automation control: Horizontal centrifuges are usually equipped with automation control system, which can realize automated operation and monitoring. By setting parameters and adjusting the rotational speed, precise control of the separation process can be realized, improving work efficiency and product quality.

Easy maintenance: Decanter are relatively easy to maintain. It usually has a structure that is easy to disassemble and clean, which is convenient for routine maintenance and repair. At the same time, it also has fault self-diagnosis and alarm function, which can find and solve problems in time.

Decanter has the advantages of high efficiency separation, versatility, stability, automatic control, and easy maintenance. It plays an important role in industrial production and is widely used in solid-liquid separation, liquid-liquid separation, and solid-phase extraction processes.

MODEL	material	Power(kw)	Capacity(kg/h)
CZWL-0.75	Carbon steel	7.5	300-400
CZWL-355-1600	Carbon steel	18.5+5.5	1300-1500

Heat stirring tank



Oil heat stirring tank with saturated water vapor or high-temperature thermal oil as a heat source, electric motor as a power source, driving the spindle above the blade inside the cylinder to do the rotary movement, stirring, heating, so that the material in the leaf of the piece of churning, to prevent the material from settling, to achieve the uniformity of the liquid slag content in the tank.

Heating function: The grease heated tank is equipped with a heating system that can heat the grease to the desired temperature. Usually steam heating is used.

It can heat the grease quickly and evenly to improve the separation effect.

Cache storage: The grease heated tank has a certain storage capacity to temporarily store the heated grease. This allows to meet the demands of the production line and

This ensures continuous production and reduces energy consumption and the frequency of equipment start-ups and stops.

Stirring Function: The grease heated tank is equipped with a stirring device, which can maintain the uniformity and fluidity of the grease through stirring. Stirring can prevent the grease from stratification, sedimentation and caking, ensuring the stability of product quality.

Convenient operation: The operation of grease heated tank is relatively easy. It is usually equipped with human-machine interface control system, which can realize automatic operation and monitoring.

The operator can start and stop the tank by touch screen or buttons, which reduces manual intervention and improves working efficiency.

Grease Heated Tank has the advantages of heating function, cache storage, stirring function, temperature control, convenient operation, improving production efficiency and ensuring product quality. It plays an important role in food processing, cosmetic, pharmaceutical, and other industries for heating, storing, and stirring oil and grease to meet the needs of the production line and ensure product quality and production efficiency.

MODEL	TANK DIAMETER (mm)	THICKNESS (mm)	VOLUME	MATERIAL	power (kw)	Dimension (mm)	Weight(kg)
CZJB-1000	800	4	0.5m³	CARBON STEEL	3	1250*1150*2000	490
CZJB-1500	1200	4	1m³	CARBON STEEL	3	1700*1500*2000	640

Oil storage tank



Finished oil storage tanks are used to store finished grease and are made of metal materials such as carbon steel or stainless steel.

The main design

Storage capacity: The capacity of finished oil tanks can be designed and customized according to the demand, which can store a large amount of finished grease. The choice of capacity depends on the production scale, storage cycle and storage requirements.

Seal-ability: Finished oil storage tanks have good sealing performance, which can effectively prevent the leakage of oil and the entry of external impurities. Good or bad sealing is very important to maintain the quality and stability of the grease.

Safety: Finished oil storage tanks are equipped with safety devices such as pressure relief valves, temperature controllers and liquid level monitors. These safety devices can monitor and control the pressure, temperature, and liquid level inside the tank to ensure the safety of operation.

Corrosion resistance: Since the finished oil may have certain corrosive properties, the storage tank is made of corrosion-resistant materials, such as stainless steel. This can extend the service life of the tank and ensure that the stored oil is not contaminated.

Convenient operation: the finished oil storage tank is equipped with human-machine interface control system, which can realize automatic operation and monitoring. Operators can set and adjust through the touch screen or buttons, which is convenient for operation and management.

Temperature control: Finished oil tanks are equipped with a heating or cooling system to control the temperature of the oil. This is important for certain fats and oils that require specific temperature conditions to maintain the stability and quality of the fats and oils.

Level monitoring: Finished oil tanks are usually equipped with level monitors, which can monitor the level of oil in real time. This can keep you informed of the storage condition of the oil and avoid over or under storage.

Finished oil tank is characterized by large storage capacity, good sealing, high safety, strong corrosion resistance, convenient operation, temperature control and liquid level monitoring. It plays an important role in food processing, cosmetic, pharmaceutical, and other industries for storing finished oil and grease to maintain its quality and stability.

MODEL	Volume(m³)	material	Dimension(mm)	Weight(kg)
CZCY-10	10	Carbon steel/stainless steel	2250*2250*4800	1480
CZCY-15	15	Carbon steel/stainless steel	2500*2500*6800	1950

Meal Cooler& Filter



Cooling & Filter, a new type of cooling equipment adapted to feather meal and meat and bone meal.

Working principle

The production of feed, which discharged from the dryer must filtered and chilled by this cooling machine to achieve the purpose of cooling and dewatering. In the existing equipment configuration, there are mainly two kinds of granular feed cooling device, one is vertical type cooling machine, the other is the counter flow type cooling machine. Its principle is with feed high temperature which discharged from drying machine which is generally 70 ~ 80℃, The water contents of feed can reduce about 3% after chilled by fans, and cooling and drying the meal.

Cooler & Filter cooling performance, stable operation, easy to operate, suitable for feed, chemical industry, high temperature material cooling, cooling materials throughout the closed without dust, is a new generation of environmental protection equipment cooling industry. Adopting frequency conversion motor to drive the rotor, the cooling time of the material can be adjusted, and the cooling of the material can be completed quickly in the cold season.

Rotor: The rotor is the core part of the rotary air-cooled screen and is used to cool the material. The rotating drum is driven to rotate by the motor, so that the materials are cooled inside the drum.

Cooling system: The cooling fan introduces cold air into the outer cylinder of the rotating drum through forced ventilation, so that the materials are cooled down rapidly inside the rotating drum, and the materials are cooled down to ±5℃ of the room temperature.

Simple operation: The operation of the rotary air-cooled sieve is relatively simple, only need to set the cooling parameters and start the equipment. The operator only needs to monitor the running status of the equipment to ensure the cooling effect and equipment safety.

Structural stability: rotary drum air-cooled sieve usually adopts sturdy structural design with high stability and durability. Components such as cooling system and discharging system inside the rotary drum are reasonably arranged and designed to ensure stable operation and long-term use of the equipment.

Wide range of application: rotary air-cooled screen is suitable for cooling various granular materials, such as fertilizers, feed, grain, chemical raw materials and so on. It has strong adaptability and can meet the cooling needs of different materials.

It is suitable for the cooling of various granular materials, such as fertilizer, feed, grain, chemical raw materials and so on. It has the advantages of simple structure, convenient operation, and good cooling effect, which can effectively improve product quality and production efficiency.

MODEL	Capacity (t/h)	Diameter (mm)	Length (mm)	Material	power (kw)	Air cooler power(kw)
CZZS-1300-7	1.2-1.7	1300	7000	Carbon steel	4+3	5.5
CZZS-1300-8	1.2-1.8	1300	8000	Carbon steel	4+3	5.5
CZZS-1500-9	2-2.3	1500	9000	Carbon steel	7.5+4 kw	5.5
CZZS-1500-10	2-2.5	1500	10000	Carbon steel	7.5+4 kw	5.5

Meal Grinder



The Main use

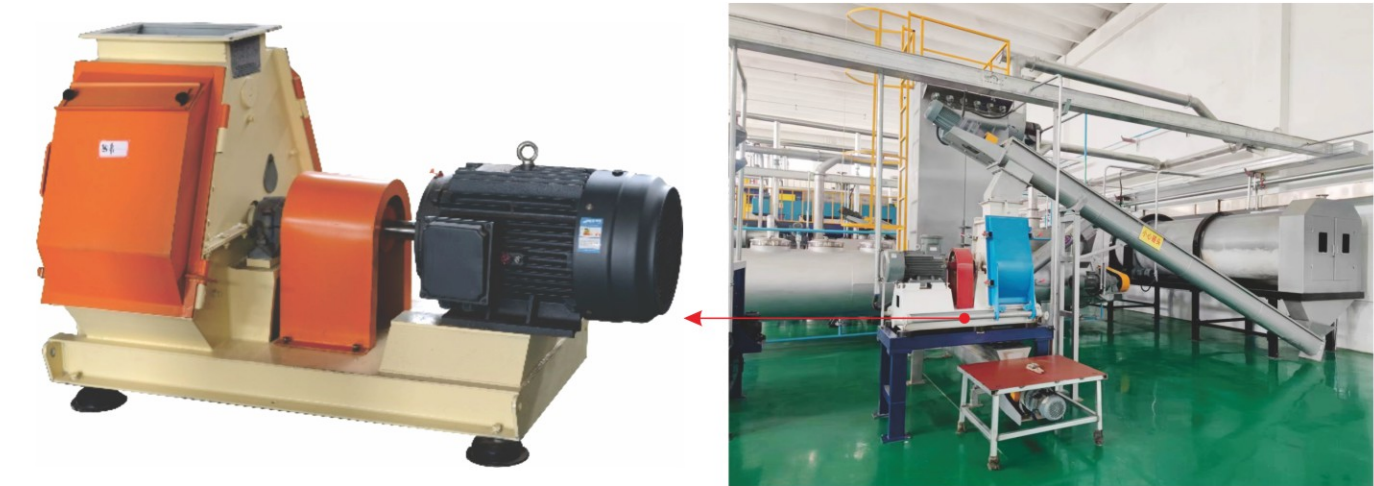
This grinder is mainly used to crush the granular or strip feed, such as corn, rice, wheat, Gu Li, Bakelite, plastics, fish meal, feather powder, hay, straw, dry beans and so on, also can be used for other purposes, such as crushed charcoal, bone carbon. After crushing fineness can borrow the choice of proper aperture sieve adjusted. Artificial feeding, screw feeding, with dust collector, can be equipped with 0.5T or 1T mixer into supporting units (with 2.5 meters elevator).

Hammer type crusher adopts a direct drive; optional high intensity magnetic separation device; optional automatic uniform feeding mechanism, the feeding quantity can achieve automatic control; the main part of the rotor, the high-precision dynamic balance test, can rotate in positive and negative direction; special hammer after heat treatment processing, good quality, long service life, the crushing rate high; with self-locking device operation door, convenient and flexible, safe and reliable. Advanced and reasonable, the machine overall design, compact structure, beautiful appearance, yield better than similar products, low power consumption, convenient operation, and repair. It is widely used in food, feed, wine, food, chemical plant raw material pulverization, simple installation.

Technical parameters

Auxiliary power	18.5kw
Spindle speed	2900/min
The crushing chamber width	270mm
Hammer number	16 pieces
The hammer sheet size	50mmx160mm
Cutting face	270mm
Sieve quantity	1
Sieve size	270mmx860mm
Size	1200x520x1500
Production capacity	1-2T/h

Hammer mill Pulverizer



Working Principle:

Material from the top of the crusher inlet into the crushing chamber, driven by the high-speed rotor hammer blade broken, particle size smaller than the aperture of the sieve material quickly out of the sieve to reach the particle size of the material and the rotor, the surrounding air with the rotor to do the same rotation and centrifugal movement, not by the hammer blade blow. When the material and air to reach the regurgitation tank, was to change the direction of the original movement, so that the material movement to the position hit by the hammer blade, to ensure that the material is repeatedly struck, randomly out of the sieve, thus improving the efficiency of the crushing.

The role and significance of pulverizers are as follows

Adaptation conditions; can be crushed grain, rice hulls, cake meal, herbs, puffed material, meat and bone meal and other materials, suitable to produce livestock, poultry, fish, shrimp feed, but also for the rice industry, wine industry, pharmaceutical industry, the crushing process.

Improved resource utilization: Meat and bone meal is a high protein feed ingredient made from animal bones and meat waste. By pulverizing meat and bone meal, its surface area can be increased, which is conducive to the action of digestive enzymes and the release of nutrients. Crushed meat and bone meal is easier for animals to digest and absorb, which improves the utilization of resources.

Improve the quality of feed: crushing meat and bone meal can make its particle size uniform, which is favorable to the mixing uniformity and stability of feed. At the same time, crushing can remove the impurities and indigestible parts in meat and bone meal and improve the quality of feed.

Reduced feed cost: By pulverizing meat and bone meal, you can increase the release of its soluble proteins and improve its nutritional value. This helps reduce feed costs and minimizes feed waste.

Promoting environmental protection: Meat and bone meal is a kind of organic waste, which will pollute the environment if it is directly discharged without treatment. By crushing meat and bone meal, its volume can be reduced for subsequent treatment and utilization, which is conducive to environmental protection.

Adapt to different feed formulas: By adjusting the parameters and equipment of the grinder, the grinding size of meat and bone meal can be controlled to adapt to the needs of different feed formulas.

The role and significance of meat and bone meal pulverizer is to pulverize meat and bone meal into fine particles or powder, to increase resource utilization, improve feed quality, reduce feed cost, promote environmental protection, and adapt to the needs of different feed formulations. It plays an important role in animal husbandry, helping to improve the nutritional value and economic benefits of feed, while reducing the negative impact on the environment.

MODEL	Power(kw)	Capacity(t/h)	Material	Dimension(m)	Weight(ton)
CZCF-60	30+3	3~8	CARBON STEEL	3820 × 1000 × 2050	820
CZCF-450	30+5.5	2~3	CARBON STEEL	3200 × 830 × 3200	900

Vacuum Station



Vacuum pump station is used to generate and maintain the vacuum environment of the equipment system, consisting of vacuum pumps, valves, piping, instrumentation, and control systems. Its main function is to pump out the gas in the front-end equipment such as: chemical system machine, hydrolysis tank, dryer through vacuum pump. By pumping out the gas in the system, it reduces the air pressure to speed up the evaporation of water. At atmospheric pressure, the boiling point of water is 100 degrees Celsius, but at low pressure, the boiling point of water is lowered, making it easier for water to evaporate from the surface of objects. At the same time, rapid exhaust reduces the collision between gas molecules and water molecules, reduces heat transfer resistance, and improves drying efficiency.

MODEL	Volume(m³)	Power(kw)	Vacuum value MPa	Dimension(m)	Weight(kg)
CZBZ-0.4-A	0.4	5.5+2.2	-0.089	2400*1200*1900	850 kg
CZBZ-0.4-2	0.4	11+2.2	-0.089	2400*1200*1900	1000 kg

Cyclone



Cyclone is used to treat particles in industrial waste gas, its function is mainly to reduce the concentration of particles in the air, purify the waste gas and protect the back-end equipment.

Cyclone is used to collect large particles when the Batch cooker Digester start to relief pressure, also the pressure goes away with odor. Cyclone is pressure resistance.

MODEL	Diameter(mm)	Thickness (mm)	Materials	Dimension(m)	Weight(kg)
CZJC-700	700	3	Stainless steel	860*860*2000(adjustable)	280
CZJC-800	800	3	Stainless steel	990*990*1980(adjustable)	350
CZJC-900	900	3	Stainless steel	1100*1100*3900(adjustable)	390

Condenser



Condensers are used in exhaust gas treatment to condense exhaust gas or dirty vapors into liquid. Our condensers are divided into two types: water-cooled condensers and air-cooled condensers.

Difference between two types of condensers:

Cooling medium: Water-cooled condensers use water as the cooling medium, absorbing heat through the circulating flow of water and condensing gas or vapor into liquid. Air-cooled condensers use air as the cooling medium, and condensation is realized through convection and heat transfer of air.

Cooling method: Water-cooled condenser takes away the heat through the circulating flow of water to realize condensation. Cooling towers or chillers are usually used to lower the temperature of the water, which is then recycled. Air-cooled condensers, on the other hand, utilize air convection and heat transfer to cool, and increase air flow through a fan to improve the cooling effect.

Application environment: air-cooled condensers are suitable for places with low ambient temperature and good air flow, such as outdoor or well-ventilated areas. Water-cooled condensers are suitable for places with high ambient temperatures or where large amounts of heat need to be discharged, such as high-temperature industrial environments.

The choice of air-cooled or water-cooled condenser requires a combination of factors such as application environment, efficiency requirements, maintenance costs and economic costs to find the most suitable solution.

Advantages of air-cooled condensers:

Simple and convenient: air condenser does not need additional cooling medium, just use the convection, and heat transfer of air to realize condensation, installation and maintenance is relatively simple.

Wide range of application: Since it does not rely on a specific cooling medium, air condenser is suitable for a variety of environments and places, including home air conditioning, automotive cooling systems, etc.

Energy saving and environmental protection: compared with water condenser, air condenser does not need additional water circulation and treatment, which reduces the consumption of water resources and is more energy saving and environmental protection.

Advantages of water-cooled condensers:

Efficient Cooling: Water condensers typically have high cooling efficiencies and can remove heat more efficiently, making them suitable for applications with high cooling requirements.

Suitable for large-scale systems: Water condensers are suitable for large-scale industrial equipment or systems because of the high heat capacity and heat transfer efficiency of water.

Good stability: water condenser can provide relatively stable cooling effect, not affected by the ambient temperature and air flow, suitable for some applications with high stability requirements.

The right type of condenser needs to be selected based on specific application requirements, environmental conditions, and economic costs to maximize the benefits and meet the needs.

MODEL	Heat exchange area(m²)	Power (kw)	Material	Dimension (mm)	Weight(kg)
CZSL-1000-70	70		Stainless steel tube Tank carbon steel	3722*1356*1158	2150
CZSL-1000-90	90		Stainless steel tube Tank carbon steel	4722*1466*1202	2250
CZFL-8000-252	2020	2.2*6	Stainless steel	8530*1860*1475	3000
CZFL-9000-400	3000	5.5*5	Stainless steel	8580*2100*1350	3600

Chemical Washer



Chemical washer tower is used to remove the pollutants in the gas, by contacting the gas with the liquid, and transferring the pollutants in the gas to the liquid by utilizing the dissolution, absorption, and chemical reaction in the liquid, to realize the purification and treatment of the gas. Usually, we equip our customers with 3 washing towers, with three levels of washing by acid, strong oxidizer, and alkali. Ensure the purification of waste gas and environmental protection standard.

Main design:

Tower: Air washer tower consists of tower barrel, air inlet, air outlet and liquid spraying system. The tower body is the main area where the gas and liquid meet each other, and it usually adopts the form of tower cylinder, and the internal packing or plate structure can be set up to increase the surface area of gas-liquid contact and improve the scrubbing effect.

Liquid spraying system: The liquid spraying system is used to evenly spray the washing liquid into the tower, and fully contact with the gas entering the tower. The spraying system usually includes nozzles, spraying pipes, liquid circulation system, etc. By adjusting the spraying volume and spraying method, it can realize the effective washing and purification of the gas.

Foul Liquid Collection System: The liquid in the scrubber tower absorbs and collects contaminants from the gas, so a foul liquid collection system is installed to collect the contaminant-containing liquid for treatment. It is used to separate the contaminated liquid from the scrubbing liquid and for subsequent treatment or recycling.

Control system: The air washer tower is equipped with a control system for monitoring and controlling the operating parameters of the air washer tower, such as liquid level, flow rate, pressure and so on. Through the control system, automatic control and adjustment of the scrubber tower can be realized to improve the scrubbing effect and operation stability.

Model	Diameter	Height	Materials	Power
CZXD-1200	1200 mm	5000 mm	Main Body stainless steel	3 kw
CZXD-1400	1400 mm	5000 mm	Main Body stainless steel	5.5 kw
CZXD-1800	1800 mm	6000 mm	Main Body stainless steel	11 kw
CZXD-2000	2000 mm	6000 mm	Main Body stainless steel	11 kw

Screw conveyor

Screw conveyor is a common material conveying equipment, which conveys materials from one location to another through screw rotating movement. It consists of screw body, inlet, outlet, transmission device and support frame.

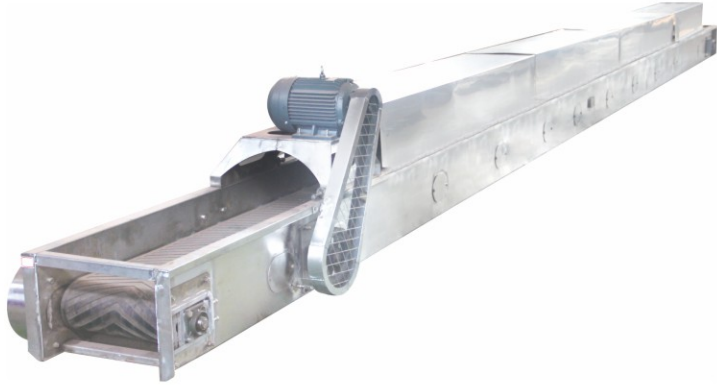
The spiral body is the core component of the screw conveyor, which consists of the spiral blades and the screw shaft. The spiral blades are fixed on the spiral shaft, when the spiral shaft rotates, the spiral blades push the material along the helix direction of the spiral body. The shape of the spiral blades can be designed according to the nature of the material and conveying requirements.



MODEL	Shaft diameter	Shaft thickness	Shield diameter	Shield thickness	Power (kw)	Material
CZLO-219	89 mm	6~8 mm	219 mm	4 mm	2.2kw/3 kw	Carbon steel/stainless steel
CZLO-350	114 mm	6~8 mm	350 mm	4 mm	5.5kw	Carbon steel/stainless steel
CZLU-250	89 mm	6~8 mm	250 mm	4 mm	3kw/4kw	Carbon steel/stainless steel
CZLU-300	114 mm	6~8 mm	300 mm	4 mm	4kw/5.5kw	Carbon steel/stainless steel
CZLU-350	114 mm	6~8 mm	350 mm	4 mm	5.5kw/7.5kw	Carbon steel/stainless steel
CZLU-400	140 mm	10 mm	400 mm	4 mm	5.5kw/7.5kw	Carbon steel/stainless steel
CZLU-450	168 mm	14 mm	500 mm	4 mm	7.5kw/11kw	Carbon steel/stainless steel

Belt conveyor

Belt conveyor is a common material conveying equipment, which conveys materials from one location to another by utilizing a continuous belt. It consists of conveyor belt, transmission device, support frame and conveying auxiliary equipment.



Model	Power	Width	Material
CZPD-600	5.5kw	600 mm	Carbon steel/stainless steel
CZPD-500	3kw/5.5kw	500mm	Carbon steel/stainless steel

Odor digestion treatment system

The odor digestion treatment system is a device for catalytic combustion purification treatment of organic waste gas (ethyl acetate, ethanol, toluene, hydrogen sulfide, ammonia, methyl mercaptan, etc.) collected by organizations during the production process of livestock and poultry innocuous treatment, slaughtering waste treatment, spray painting and printing, etc. It adopts the regenerative catalytic combustion treatment process to fully combust the organic substances inside the waste gas and then the combusted waste gas enters the spray tower to be purified and absorbed by spraying. It adopts regenerative heat catalytic combustion treatment process to fully combust the organic substances inside the exhaust gas, and the combusted exhaust gas enters the spray tower to be purified and absorbed by spraying, and then finally meets the standard discharge. The combustion device of this system realizes multiple

The main feature;

The use of regenerative heat catalytic combustion treatment process, the malodorous gas inside the material for the full combustion, combustion of waste gas into the spray tower by the three-stage spray purification and absorption, and ultimately meet the emission standards.

The porous refractory heat accumulator in the combustion furnace is loaded with a specialized catalyst with catalytic capacity. The catalyst is adsorbed and deposited inside the heat accumulator and has stable chemical properties. At the same time, the catalyst will maintain good cyclic regeneration characteristics at high temperatures, and the service life matches the full cycle life of the equipment.

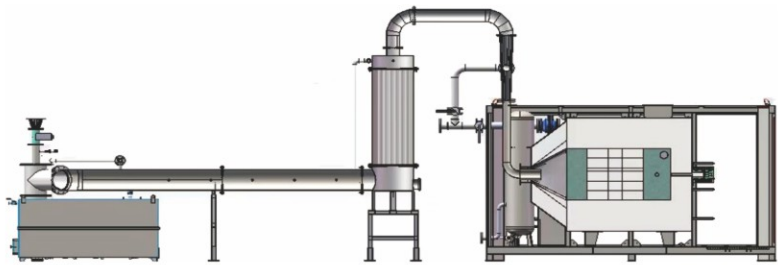
The combustion system realizes multiple safety interlocks and has an automated power distribution system that monitors gas pressure, wind pressure and flame temperature, providing safety and industrial reliability.

The equipment is simple to operate, using liquefied natural gas as fuel, the average hourly consumption of liquefied natural gas is about 5m³, and the malodorous gas treatment capacity can reach up to 500m³, and the operation cost is low.



Odor digestion treatment system flow

This system adopts catalytic combustion to catalyze the odor molecules inside the organic waste gas to eliminate the odor. The flow chart of odor digestion treatment system is shown in the following figure. Specific realization of the process is as follows: first, the organic waste gas after pre-dewatering, and then into the gas-fueled combustion catalytic furnace, through the burner combustion to ensure that the temperature inside the furnace to maintain 700-800 °C. After the waste gas enters the combustion catalytic furnace, the organic matter is fully oxidized and cracked and combusted, and the malodorous organic matter is transformed into substances that can be easily absorbed (carbon dioxide, water and nitrogen or nitrogen oxides, etc.). After combustion, the waste gas is cooled down by the condenser and then goes to the spray tower for absorption, and finally meets the standard emission.



Model	Power	Capacity	Dimension	Material
CZ-XJWQ-800	120kw	500m³/h	4900*2400*3500	Carbon steel/stainless steel

COMPACT rendering equipment (Modular mini rendering units)



Modular mini rendering unit is a modular equipment specially designed for the treatment of animal carcasses and slaughter wastes, which will be harmlessly treated to reduce the risk of environmental pollution and the spread of infectious diseases. The following is the introduction of the integrated mini rendering unit for animal rendering.

Working Principle: Modular mini rendering units usually adopt high temperature and high-pressure treatment technology to steam and pressure treat animal carcasses or slaughter wastes at high temperature to achieve harmless treatment. It can effectively kill pathogenic microorganisms, viruses, and parasites, etc., and reduce the risk of spreading infectious diseases.

Equipment Composition: Modularized mini rendering units are usually composed of cooker, heating system, cooling system, odor treatment system and control system. These components work together to realize the high temperature and Processing effect: The modular integrated mini unit can process animal carcasses into rendering products and further refine fertilizers, oils, and fats. The treated products can be used in agriculture, energy, and other fields to realize the recycling of resources.

high-pressure treatment of animal carcasses and the purification of odor.

Features and Advantages: The modularized mini rendering unit is characterized by small size, small footprint, easy operation, full PLC control and high processing efficiency. It can be flexibly applied in rural areas, farms, and slaughterhouses to solve the problem of animal carcass disposal and reduce the risk of environmental pollution and infectious diseases.

CZW Serial main parameter

Model	Batch cooker Dimension(mm)			Capacity (T/batch)	Heating type
	Inner/Out tank size(mm)	Inner &out Tank sheet thickness (mm)	Tank length (mm)		
CZW-500	800/900mm	8/6	2100	0.5	Steam &Electricity
CZW-1000	1100/1300	16/10	2100	1	Steam &Electricity
CZW-2000	1200/1400	16/10	3250	2	Steam &Electricity
CZW-3000	1400/1600	18/12	4500	3	Steam &Electricity

Pre-breaker, raw material bin & pump feeding device

This is the special design for fully automatic livestock farm to render the dead animal or animal slaughterhouse waste, which realize the fully automatic working from large items pre-breaker to automatic feeding system to Cooking system. The whole process is closed working, don't have blood or residue leaking, greatly saving the labor work, especially for the big capacity rendering plant.

The raw material is transport which truck and directly unloading it into the raw material bin, which gradually feeding into re-breaker to crush it into small size, and feeding it into cooking system with pumping system.

Basic Structure:

The upper one is raw material bin which is suitable for slaughterhouse poultry or animal wastes, or farm dead livestock or poultry.

The middle part is pre-breaker with the function of reduce the large raw material size into small items which size is less than 5cm, the system is self-washing, disinfection, whole chamber is full closed, which stop workers touch livestock or poultry and stop the bacteria spreading.

Specification:

Silo and Pre-breaker Model and Capacity are optional according to capacity

Pump: Model: CZSB-5 Power: 18.5KW Material: Carbon steel



Raw material hydraulic pump

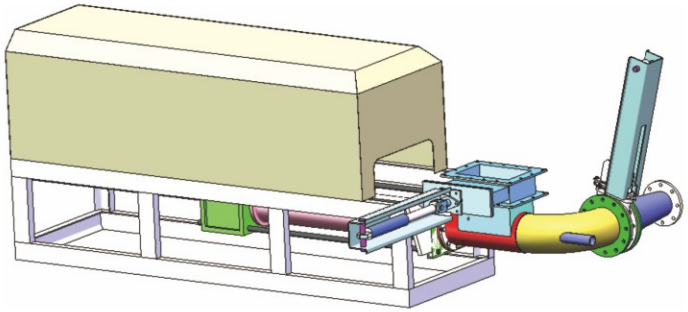
Model CZSB-5 raw material pump is working with hydraulic power, with the piston in feeding cylinder reciprocates motion to squeeze the material inside the cylinder. By adjusting the opening and closing time of feed inlet and discharge valves, the raw material is squeezed into the pipeline and continuously squeezed to transport it to batch cooker.

The pump system structure is compact, easy installation and maintenance, fast reciprocating hydraulic cylinder, sealed material during transportation without exposure the raw material to air, and working with reliable PLC control.

This model pump this is suitable working for crushed animal carcasses, and slaughterhouse waste from large dead animals, and poultry. The broken animal fur, animal organs, minced meat, and other type of raw materials.

The main structure of this pump system including raw material pushing device, cylinder cooling device, hydraulic system, and electric control system.

The overflow pressure range is 15-16Mpa, the unloading valve pressure range is 12 MPa.



Screw conveyor



Application

EU standard screw conveyor is specially designed for material transportation

Used for: rendering, slaughtering, pet food, fish meal

Design characteristics

U shape screw conveyor is designed in stainless steel material, increase the corrosion resistance of equipment.

Between screw shaft, we use alloy steel pipe and spiral blade welding, select screw blade with standard diameter, screw pitch, to guarantee material delivery stability.

The design for low-carbon steel wear plate avoids the direct friction between blade and body, increase the service life of the equipment.

Independent drive and design from leading part let the overhaul more convenient.

Cover is designed with stainless steel, sealed with body, create a closed workspace, prevent odor leakage.

Leg is designed with stainless steel.

Stand material is carbon steel with galvanized or colour painted.

Cover material is stainless steel

Options:

A. Standard screw conveyor: characteristic is as above.

B. Pre-heating (or water cooled) screw conveyor.

Increased jacket and one set pipe valve at bottom of U shape groove

When the internal medium of system jacket is saturated steam, screw conveyor preheats the material in transportation as preheating screw conveyor.

When the internal medium of system jacket is cooled water, screw conveyor cools the material in transportation as water cooled screw conveyor.

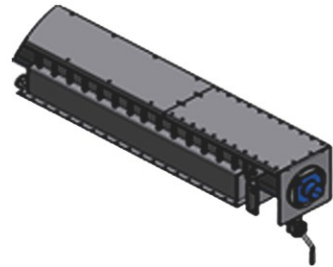
C. Drain screw conveyor:

Design the strainer at the bottom of U groove, the diameter of drainer is adjusted according to the material.

D. Air cooled screw conveyor:

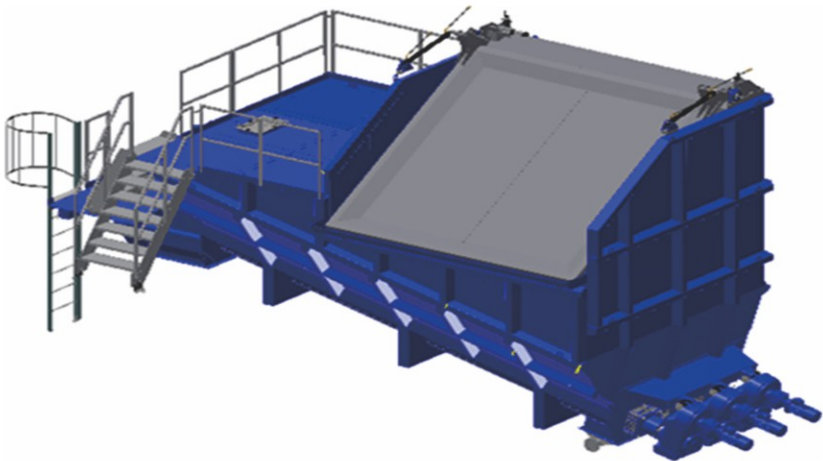
At the top of screw, we designed air cooled system, material is cooled by air in transportation.

Used for cooling less material, cooling capacity is calculated according to the material throughput.



Model	Screw Shaft Length(mm)	Buffer Bin Volume(m³)	Power(kw)	Dimension(mm)	Weight(kg)
LS290	2600	1	2.2	4946*1780*640	1350
LS290B	2750	1	7.5	4056*1780*770	1500

Material bin



Application

EU standard is Used for the storage of waste material.

The bottom of the material bin is equipped with screw conveyors for accurate conveying of materials.

The main body of the bin adopts an inclined design, and the bottom is designed with a filter screen, which can collect the liquid during the material conveying process and improve the treatment effect of the subsequent process. A low carbon steel wear-resistant plate is used between the screw and the shell to avoid direct friction between the blade and the groove bottom and increase the service life of the equipment.

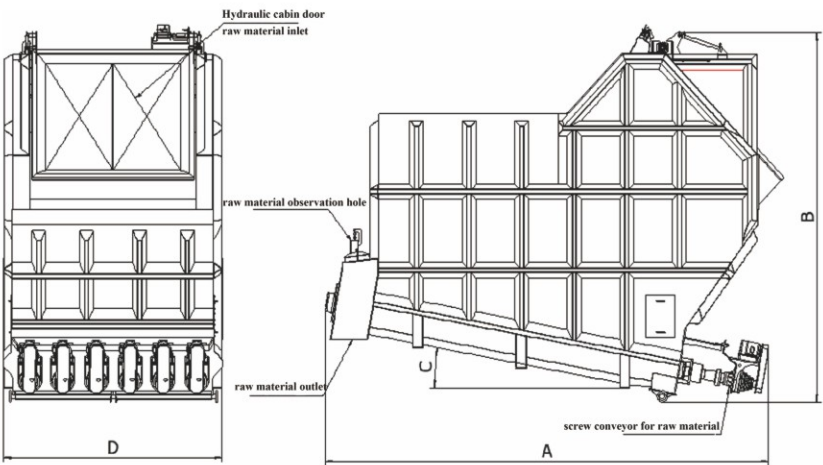
The feeding port of the raw material bin is equipped with a stainless-steel hydraulic hatch cover device, which is only opened when feeding, and closed during the rest of the time, which can meet high hygienic standards and reduce odor leakage

Design characteristics

Designed as body with screw transportation, it can satisfy the accurate delivery of materials

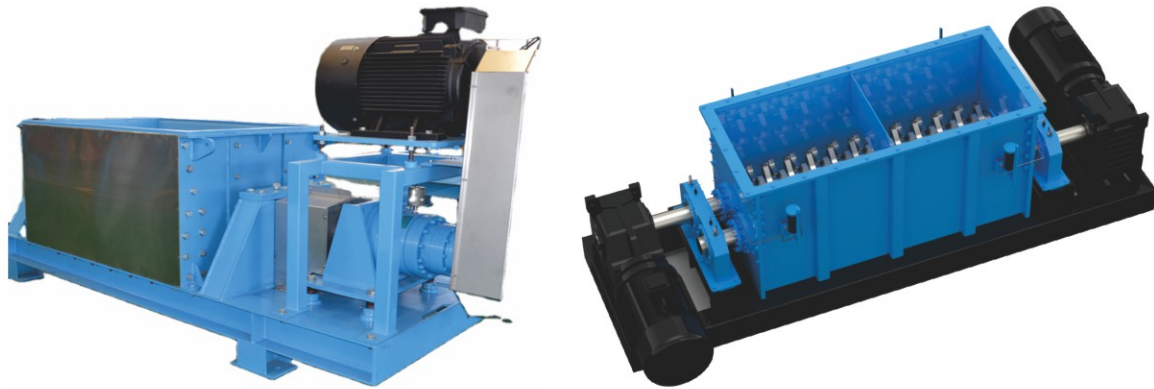
Hydraulic cover at inlet can satisfy high sanitary standard

The size of the bin is according to the material quantity, the processing of the follow-up equipment and the types of material.



MODEL	Internal volume(m³)	Feeding form	spiral diameter(mm)	No. of spiral axes(pcs)	Power (kw)	Dimension (mm)	Weight(kg)
YLC0120	20	Side entry	500	3	3*4	7945*5700*2925	11000
YLC035-C	35	Side entry	500	3	3*4	3215*1730*1290	15000
YLC035-H	35	Rear feed	500	3	3*4	8685*6190*4190	17000
LXLC0145	45	Rear feed	500	3	3*7.5	9800*6580*4840	1800

Pre-crusher



Application:

EU STANDARD Pre-crusher is a heavy crushing machine, specially designed for animal by-product industry, before the rendering process, we can use the pre-crusher for size reduction of complete carcasses of cattle, sheep, horse, and pig as well as all sorts of offal and bones from slaughterhouse.

pre-crusher is extremely robust, with strong carbide electro-welded to each crushing face, which cuts off any metal impurities mixed in with the material.

The Pre-crusher is equipped with a speed sensor. Once encountering large metal foreign matter, the sensor will automatically shut down the motor to protect the equipment.

Design characteristics:

Rotating blade and the cutting surfaces of anvil are made surface-hardening treatment, the tool has strong wear resistance.

Low speed crushing shaft ensure that pre-crusher can handle metals in the raw material.

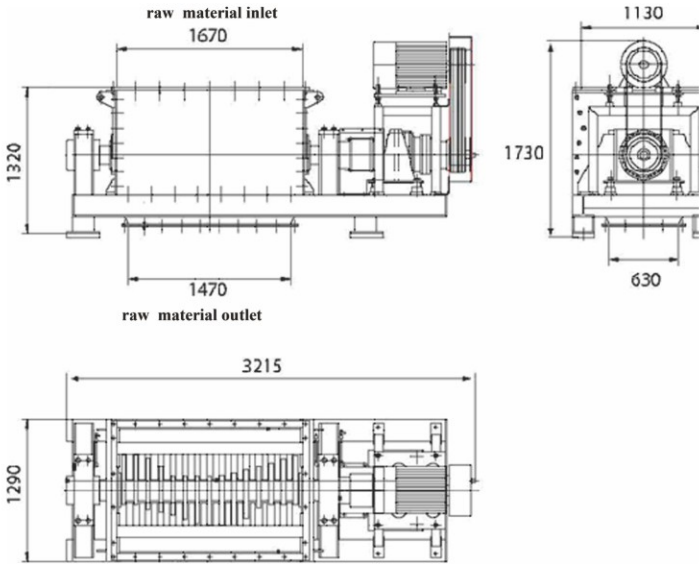
According to standard's requirement, installed the electronic speed monitor on the drive device, which will instantaneously shut off the motor in case of large pieces of metal entering the pre-crusher

The crusher shaft is fitted into heavy-duty spherical rollers, which can resist radial and axial impacts of up to 80 tons.

Transmission from motor to crusher shaft is made of standardised component parts

Crusher shaft main bearing houses are fitted into tapered guides, which allows quick maintenance and replacement of crusher shaft.

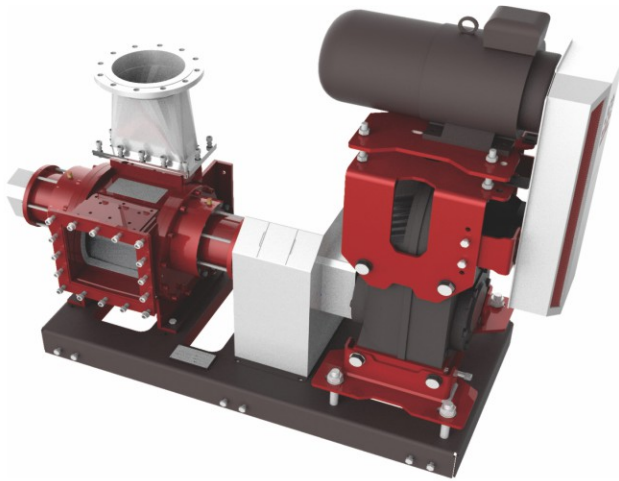
The design of crushing knife assures crush the material to maximum 48mm pieces on one side



Technical specification	Unit	Model: YPS1545/1555/1575
Capacity	t/h	10-15
Anvil gap	mm	48
Power	kW	45-75
Crusher shaft	Rmp/min	10-50
weight	kg	7000

MODEL	Capacity (t/h)	Crushing Size(MM)	Crushing surface	Power (kw)	Dimension (mm)	Weight(kg)
PS-25T	25-30	≤48	Hard alloy	75	3835*1970*1290	8200
PS-25TB	25-30	≤48	Hard alloy	75	3835*1970*1290	7500

Material pump



Application:

material pump used for pumping the material with big particle (such as pre-crushed animal byproduct, fishes, or pet food), liquid with higher viscosity. It is highly suitable for closed system, it used for feeding the material to various cooking equipment and other processing equipment.

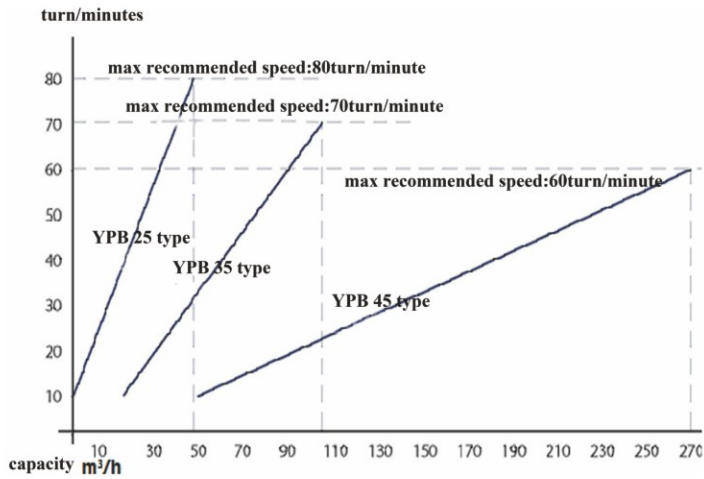
To satisfy special requirement, all size of material pump can be assembled with cast-iron or stainless-steel pump shell.

We use replaceable wear parts; they are made of special steel.

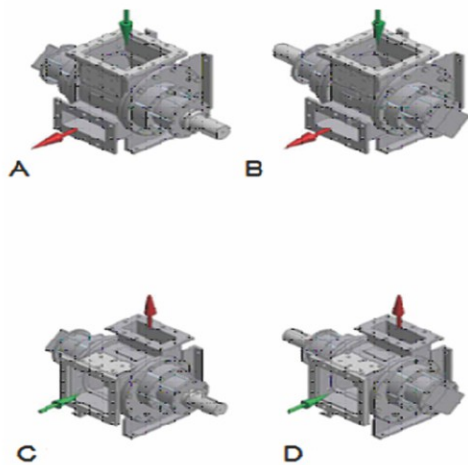
Material pump has only 4 moving parts, it can assemble bearing with mechanical seal or standard bearing with stuffing box.

According to the type of material and specific requirement for performance, YPS material pump can be driven by electric gear motor or hydraulic motor.

Theoretical performance



Optional model



MODEL	Capacity (t/h)	Power (kw)	Dimension (mm)	Weight(kg)
YPB-5.5	5-10	5.5	2100*1815*915	2350
YPB-15	15-20	15	2100*1815*915	2350
YPB-22	25-30	22	2100*1815*915	2350

Metal detector



Application:

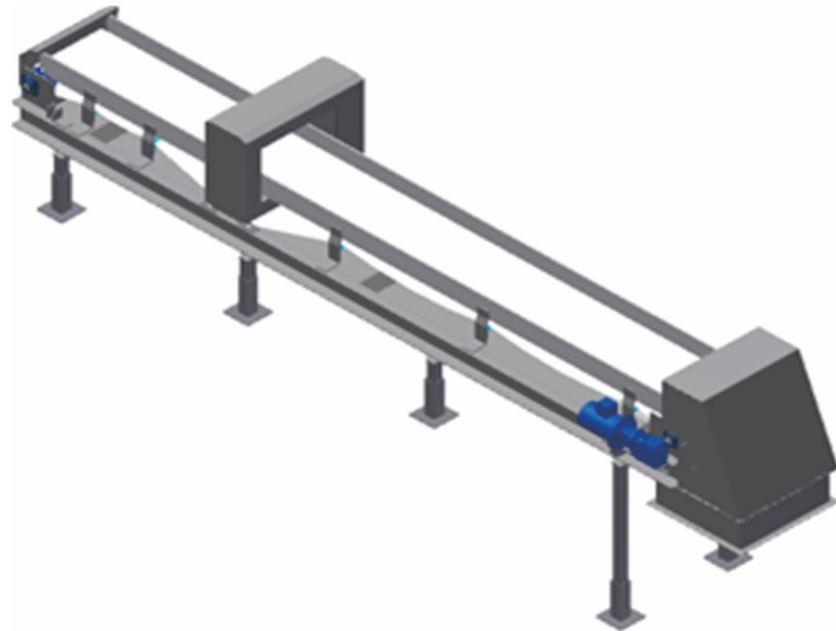
metal detector is designed for separating metal from crushed or cooked material.

Design characteristics:

The metal detector is equipped with a detector head with adjustable sensitivity for your specific requirements. The detected metal pieces are manually removed or efficiently separated with a minimum rejection of material.

A.Belt conveyor with metal detector

The belt conveyor is always designed to order and may be manufactured either in stainless steel or mild steel. A deflector can be mounted at the end of the conveyor or metal can be removed manually



B.Vertical metal detector

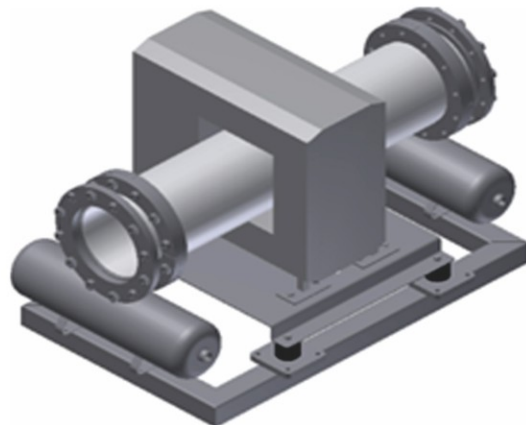
The vertical metal detector detects metal while the material falls through a non-ferrous pipe.

The vertical metal detector is delivered with adjustable metal sensitivity and includes a pneumatically operated separator



C. Pipe metal detector

When the material is transmitted through the pump pipe, the metal detector can detect the metal and divert it.

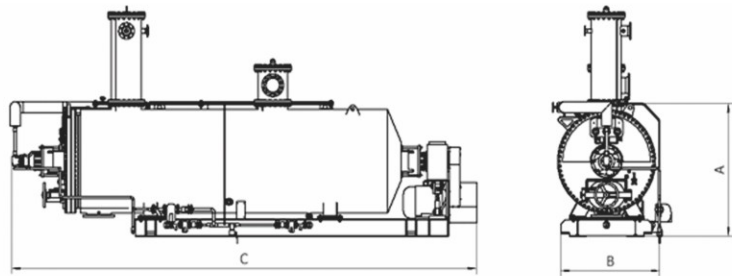


EU STANDARD Batch cooker



EU STANDARD batch cooker is designed for sterilization, hydrolyzation, and drying of animal by-products.

Design characteristics:



Technical specification	Unit	Model		
		ZZ065	ZZ10	ZZ16
Size A	mm	7100	8400	9000
B	mm	2070	2305	2500
C	mm	1600	1775	2100
Designed pressure-jacket and shaft	bar	10	10	10
Designed pressure-cooker	bar	5	5	5
Heating area	m ²	35.3	47	63.1
Power	kW	45	75	110
Shipping weight	kg	13500	22000	36000

Options:

Automatic moisture control with end point signal.

Automatic process control equipment.

Weighing sensor

The design of the batch cooker complies with GB national standards and each machine is produced, inspected, and tested in accordance with GB pressure vessel standard and regulations.

MODEL	Volume(L)	FEED RATE (KG/BATCH)	HEATING AREA(M ²)	Power (kw)	Dimension (mm)	Weight(kg)
ZZ-050	5000	3000	27	37	5450*2070*1600	12000
ZZ-085	8500	5000	41	55	7400*2305*1775	20000
ZZ-10	10000	6000	47	75	8400*2305*1775	22000
ZZ-16	16000	10000	63	110	9000*2500*2100	36000

Disc Dryer

The disc dryer is a kind of drying equipment with low energy consumption and high efficiency. It has the features of compact design, small footprint, easy installation and commissioning, and can adapt to the drying requirements of a variety of materials.

The dryer is mainly used for the continuous cooking or drying of low fat animal or poultry by-products, fish and Hydrolysed feather meal.

The disc dryer is indirectly heated with steam and has a very concentrated heating surface, enabling a large evaporation capacity in a compact design and ensuring fast and uniform drying. The steam is circulated between the hollow intermediate tube and the double-armed tray, resulting in an enlarged drying area.



MODEL	Disc diameter(mm)	No. of discs(pcs)	Heating area(M ²)	Power (kw)	Dimension (mm)	Weight(kg)
SWGZ1850	1800	50	215	90	11100*3500*2560	52000
SWGZ1850	2200	64	375	110	14000*3000*3850	80000

Fat Press

Application

EU Standard fat screw press is designed for continuous mechanical extraction of fat from cooked animal byproducts to obtain fat.

Design characteristics

Continuous and high yield fat extraction.

Simple but effective design, reduce the maintenance cost.

Uses standard industrial gear box.

T-type screw press is fitted with one short shaft, and is equipped with a hydraulic choke tube in the outlet end.

To maintain certain pressure by using choke tube to regulate pressure manually or automatically in processing

This will increase the capacity of screw conveyor, let the quality of tallow and pressed cake stable.

Using the choke tube, in processing engineering, also can adjust screw press.

We can use this technology when rendering plant make treatment of different raw material or feeding quantity to screw press changed.



MODEL	Capacity (t/h)	RESIDUAL OIL RATE(%)	HYDRAULIC PUMP	Power (kw)	Dimension (mm)	Weight(kg)
DYZ10	1000	9-14	45	1.1	3170*1720*1600	3800
DYZ25	2000	9-14	90	1.1	3990*2210*1600	5700
DYZ45	41000	9-14	132	1.1	4270*2620*1880	10600

FAT SCREW PRESS

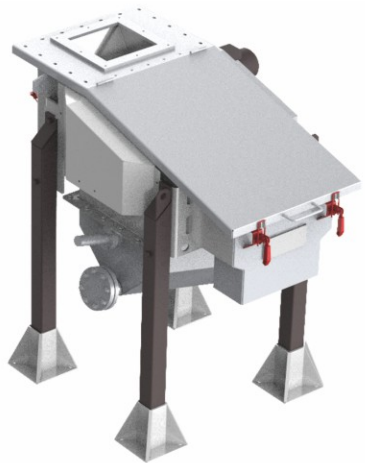
Fat filtrator

The fat filtrator is used to screen the oil and solids discharged from the screw press. It has the characteristics of large processing capacity, good separation effect and easy maintenance.

The fat filtrator adopts the inclined screen structure, the oil and solids enter the screen body, the oil goes through the screen body into the lower oil collection tank. The solids stay at the top of the vibrating screen and are sent to the outlet with the help of the incline and the vibration of the screen body.

The main body of the vibrating screen relates to the shell by the springs, which reduce the resonance of the shell and increases the service life of the shell.

The upper part of the fat filtrator is provided with a top cover, which can be used to inspect, clean and replace the screen body from the top.



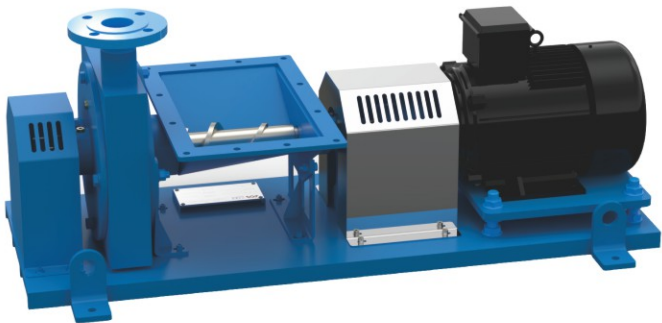
MODEL	Capacity(KG/h)	Shaker Area(mm)	Power(kw)	Dimension(mm)
ZDS-0.37	200	450*700	0.37	1500*1030*1600

Special tallow pump

EU STANDARD tallow Pump is designed to pump fat liquid containing small particles, especially animal tallow from screw press. The tallow pump can transport animal tallow with a solid content of less than 40%, and has the characteristics of small volume, large transport flow and not easy to block.

The pump adopts centrifugal structure. The grease enters the impeller through the variable section feeding screw at the front end of the pump shaft, and the impeller drives the grease in the flow channel to make a circular motion.

Under the action of centrifugal force, the grease moves along the impeller from the middle of the impeller to the outer edge at a large speed and a high pressure, and flows to the discharge pipe through the volute, to meet the transportation requirements of high solid content animal oil.



MODEL	Design Flow(m ³ /h)	Rated Lift(m)	Power(kw)	Dimension(mm)	Weight(kg)
YZB-4	5	15	4	1430*710*545	310

Oil storage tank



Application

EU standard oil storage tank is used for storing grease before oil residue separation. The oil tank is made of stainless steel, which increases the corrosion resistance of the equipment. The oil tank is designed with triangular legs, which makes the tank placed stably. The internal design has heating coil and stirring shaft to keep the grease warm and stir during the storage period to prevent the grease from solidifying. The oil tank is equipped with automatic control valve set, which can automatically adjust the tank inside temperature to keep the grease state stable.

Design characteristics

The tank design adopts stainless steel or carbon steel material, and the triangular leg design makes the tank stable.

Internal design coil heating and agitating shaft to prevent grease solidification.

The upper part of the tank is designed for overflow and the flange.

External design insulation layer, insulation thickness 50mm, 0.7mm stainless steel wire drawing board outside insulation layer

Model	Volume (L)	Power (kw)	size
JRJBG025	2500	1.1	φ1260x4800
JRJBG05	5000	2.2	φ1900x5000
JRJBG10	10000	2.2	φ1900x7000
JRJBG15	15000	2.2	φ1900x9000
JRJBG20	20000	2.2	φ2200x8500
JBG25	25000	2.2	φ2200x9500
JBG30	30000	2.2	φ2200x11000

MODEL	VOLUME(L)	POWER(KW)	HEIGHT(MM)	WEIGHT(KG)
G-JRJB-2500	2500	1.1	4750	1000
G-JRJB-5000	5000	1.1	4300	1200

Meal cooler



Application

EU standard meal cooler (cold air cooler) is designed to cool the product after the dryer.

Design characteristics

Simple and sturdy construction with few components and wearing parts, making it an efficient and reliable solution.

Continuously working machine with a cooling principle based on the counter flow of cooling air and hot product.

It consists of a stator and a rotor, the stator and rotor are made of mild steel

The stator is designed as a cylindrical pipe with end plates and supports at each end. The stator is equipped with sight glasses including cleaning brushes and openings with counter flanges for air intake and outlet. A centrifugal fan installed at the air outlet end extracts the hot air from the CAC through a bag filter, air flow is adjusted by manual throttle.

The rotor consists of a rotor pipe with agitating arms and paddles to lift the product up into the cold air stream. The paddles are adjustable to control the retention time in the cooler.

The rotor is supported by roller bearings at each stator end plate and is driven by an electric motor and a gear box.

The rotor is equipped with agitating arms and paddles lifting the product up into the stator drum where it is cooled by the contact with the air stream that is drawn through the stator by the centrifugal fan.

To avoid loss of product a bag filter is built on to catch minor product particles that would otherwise leave the process with the cooling air. The filter unit is provided with automatic time-controlled pneumatic self-cleaning system, eliminating the risk of blocking the filter bags.

Remark: Other models can be designed according to customer requirement.

Nominal capacity depends on the product category and processing temperature, so the above value is for reference only

Model	Technical specification				
	Size Depth length(m)	Nominal capacity(kg/h)	Stator volume(m³)	Motor/Fans(kW)	Rotating speed (rpm)
GFLQ1270	1.2x7.0	1200	9	15.0/5.5	24
GFLQ1650	1.6x5.0	2300	10	15.0/5.5	24
GFLQ1609	1.6x9.0	3350	18	18.5/11.0	24
GFLQ2070	2.0x7.0	4000	22	30.0/15.0	21
GFLQ2090	2.0x9.0	5250	28	30.0/15.0	21
GFLQ2012	2.0x12.0	7000	28	37.0/18.5	21
GFLQ2985	2.9x8.5	10500	56	55.0/30.0	17
GFLQ29120	2.9x12.0	14500	79	75.0/37.0	17

MODEL	CAPACITY(KG/H)	SPEED(RPM)	POWER(KW)	DIMENSION(MM)	WEIGHT(KG)
LF-1600-6000-FL	2300	24	15+5.5	7990*4900*2390	6500
LF-1600-9000-FL	3350	24	18+11	10950*4850*1750	7500

Milling plant



Application

EU standard milling plant is used to reduce the particle size of the greaves after fat extraction, make the meat and bone meal even

The reduction in size required at this stage depends on whether the meal is used directly in compound feeds or it will be passed through a further stage of size reduction.

Design characteristics:

The milling plant is of a robust construction manufactured entirely from mild steel. The interior chamber of the mill has replaceable wear plates at each end of the rotor assembly and a stone trap at the bottom.

The hammers, which are case-hardened to give extended life, are reversible so that all four edges can be utilised before a new set is required.

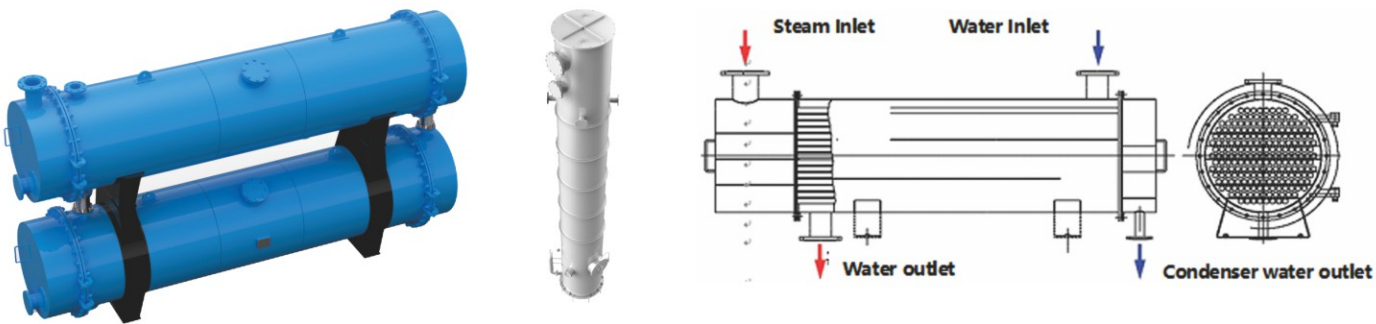
The milling plant consists of: hammer mill, coupling and motor mounted on a common base frame fitted with vibration dampers. A separation fan and a Co-Jet filter ensure high capacity and prevent excessive temperature increases.

Model	Material	Capacity (t/h)	Dust removal system	POWER(KW)	WEIGHT(KG)
FS-45	Q235B&S30408	1000	Cyclone dust collector x 2	37kw(Main motor) 2.2kw(Fan)	5500
FS-45B	Q235B&S30408	1000	bag type dust remover	37kw(Main motor) 2.2kw(Fan)	5700

Meat and bone meal density is 600 kg/m³, mesh is Ø10mm. Capacity depends on bone quantity, grease and water quantity, pressed cake temperature.

Fish meal density is 500 kg/m³, mesh is Ø16mm. Capacity depends on fish type, moisture and oil quantity and temperature.

Shell and tube condenser



Application:

EU standard shell and tube condenser condenses the processing vapours emitted from cookers and dryers.

Shell and tube condenser have two types: Vertical condenser (LSLN) and horizontal condenser (WSLN) .

Design characteristics:

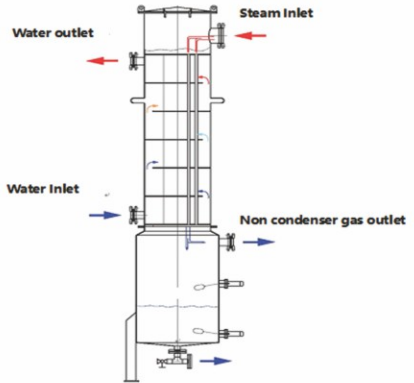
In shell and tube condensers the process vapours flow through the tubes while cooling water is passing over the external surface in a counter flow arrangement.

All connections are mounted with captive loose flange connections.

The shell and tube condensers can also be used as heat exchangers when recovering waste heat from the cooking processes.

The condensers can be equipped with a vacuum tank lowering the temperature and thereby increasing the effect.

These two kinds of condensers can be designed and manufactured according to meet customer specific requirements and process.

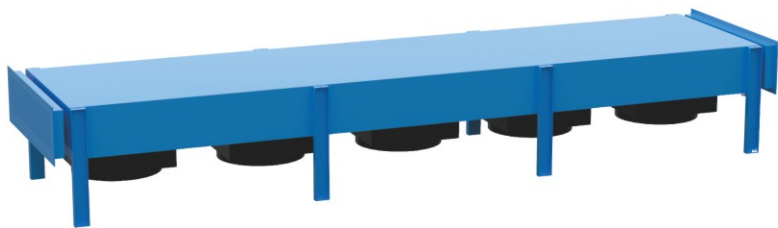


Horizontal condenser

Model	Capacity(KG/H)	POWER(KW)	Shell material	Dimension(mm)	WEIGHT(KG)
HRQ-FL-34	2000	2*7.5KW	hot galvanizing	4450*2300*4020	3000
HRQ-FL-55	3300	3*11KW	hot galvanizing	6400*2300*4080	5700
HRQ-FL-72	4300	4*11KW	hot galvanizing	8350*2300*4200	5700
HRQ-FL-90	5400	5*11KW	hot galvanizing	10300*2300*4200	7000

Model	Heat exchange area(m²)	Material	Shell diameter (mm)	Shell length (mm)	Weight (kg)
HRQ-WS-90	90	S30408 (Heat exchange tube) Q345R (subject)	1000	3690	2400
HRQ-WS-120	120	S30408 (Heat exchange tube) Q345R (subject)	1000	4685	2900
HRQ-WS-130	130	S30408 (Heat exchange tube) Q345R (subject)	1000	5550	3000
HRQ-LS-130	130	S30408 (Heat exchange tube) Q345R (subject)	800	8800	2000
HRQ-LS-270	270	S30408 (Heat exchange tube) Q345R (subject)	800	8800	2800

Air cooled condenser



Application

EU standard air-cooled condenser is designed for condensing the processing vapours emitted from cooking or drying of fish or meat by-products.

Design characteristics:

Ambient air is blown through the bundle of tubes by several fans. Each fan is driven by a directly coupled low-speed electric motor.

All parts in contact with vapour, condensate and/or non-condensable gases are manufactured in stainless steel.

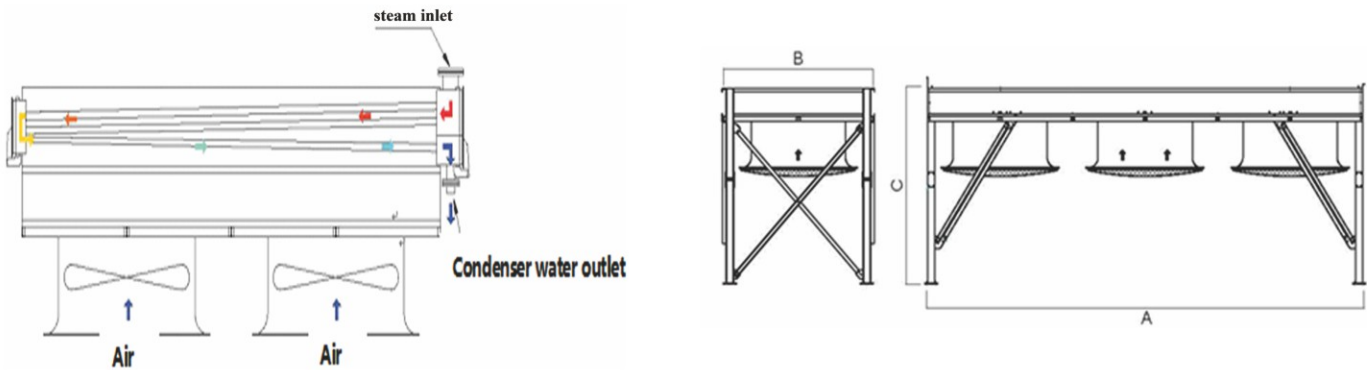
All other steel parts are hot-dip galvanized steel or aluminium.

Large diameter tubes for long intervals between cleaning.

Twin pass for best condensate cooling.

Options: working platform, non-condensing gas fan.

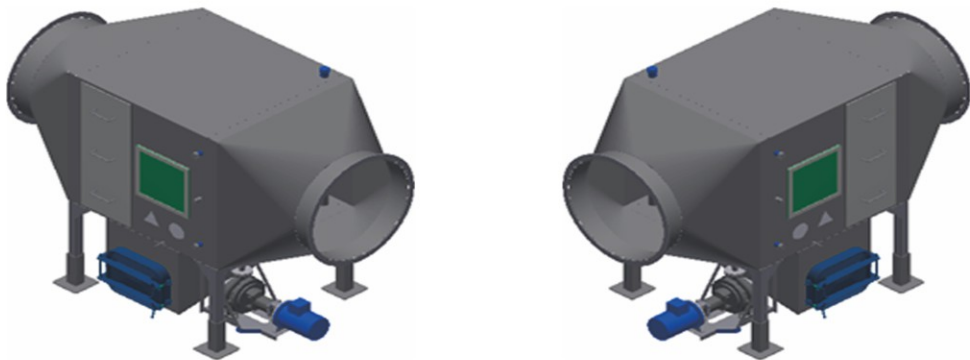
Technical parameters:



MODEL	Capacity (t/h)	Size			Power/ Motor (kW)	Weight(kg)
		A	B	C		
KQLQ15	900	3050	1800	3950	1 × 7.5	2200
KQLQ42	2500	6400	2300	4050	3 × 5.5	4600
KQLQ55	3300	6400	2300	4050	3 × 11	4800
KQLQ72	4300	8350	2300	4150	4 × 11	5700
KQLQ90	5400	10300	2300	4200	5 × 11	7000

Condensation and cryogenic cooling to more than 15 °C above ambient temperature.

Air washer



Application

EU standard washer humidifier is designed to increase air humidity and remove impurities such as dust and grease particles.

In addition, the humidifier can also be used as an air cooler if the warm process air needs to be discharged into the channel system.

Design characteristics:

The sprinkler can increase air moisture, and the water receiver can remove water droplets. Water droplets fall into the sewage pool at the bottom of the moistener.

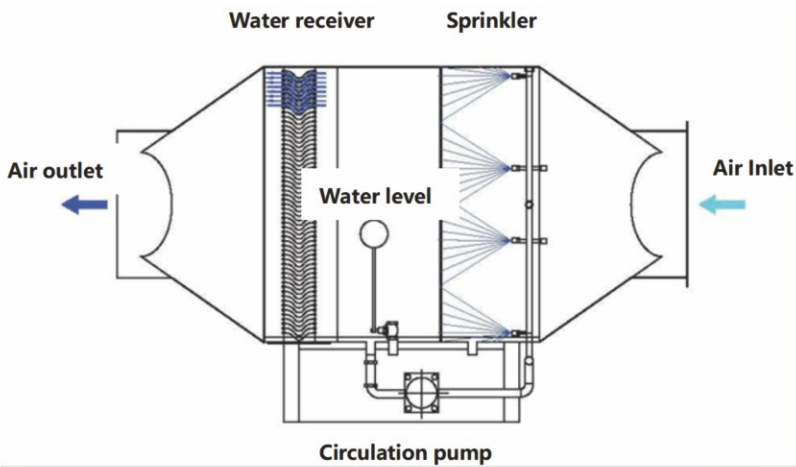
The supply of fresh water is endless.

The overflow water level can be adjusted by the water level controller in the humidifier.

All parts in contact with vapour, condensate and/or non-condensable gases are manufactured in stainless steel.

The humidifier can be attached to the water receiver, circulating pump and necessary valve.

Technical parameters:



Air washer

MODEL	Capacity (t/h)	Size			Power (kW)	Air inlet (mm)	Air outlet (mm)
		Length	Width	Height			
KQJS12	12,000	3050	1800	3950	1.5	400	575
KQJS25	25,000	4450	2300	4150	1.5	800	800
KQJS35	35,000	6400	2300	4050	5.5	800	800
KQJS60	60,000	6400	2300	4050	5.5	2 × 800	2 × 800
KQJS75	75,000	8350	2300	4150	5.5	1000	1000

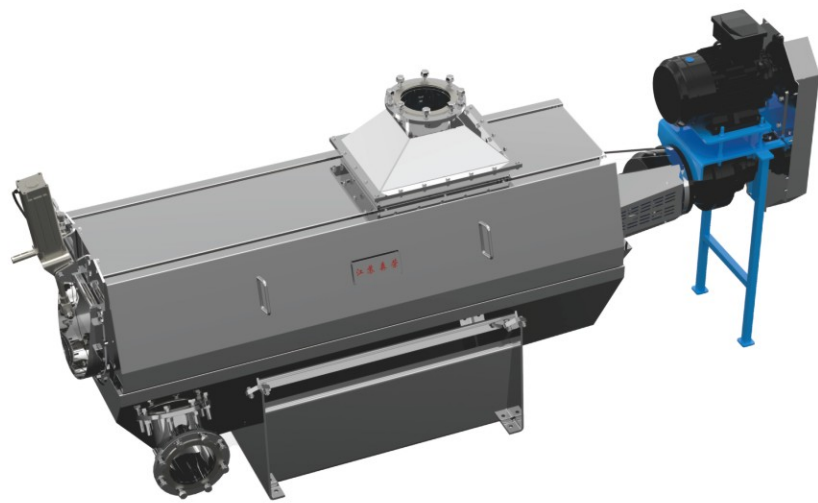
Transit hopper



The buffer bin is used to temporarily store the materials unloaded from the cooker or dryer and convey the materials to the screen screw conveyor through the screw conveyor at the bottom of the buffer bin. The buffer bin adopts reverse screw design and closed structure at both ends of the blades, so that the materials are conveyed circularly in the bin to ensure that there is no accumulation of materials and to improve the conveying accuracy and efficiency. The bottom of the buffer bin is designed with steam jacket and thermal insulation layer to maintain the temperature of the material in it and avoid the material from solidifying due to the lowering temperature.

MODEL	Volume(m³)	Helix diamter (mm)	No. of Spiral shafts(pcs)	Power (kw)	Dimension (mm)	Weight(kg)
JLC065	6.5	400	2	5.5	6500*1700*2050	4850
JLC100	10	400	2	4	7850*1720*3350	7120

EU STANDARD Feather press



It is used to squeeze the feathers containing water to dehydrate them quickly, saving a lot of time for the subsequent process.

Model	Shell Material	Squeezing Cage material	Power (kw)	Dimension (mm)	Weight(kg)
JSJ-400-11	S30408	S30408	11	3810*1070*1720	1500

Cyclone Dust Collector



It is used to collect the material particles carried in the dirty steam discharged by the front-end equipment

Model	Barrel Diameter(mm)	Height(mm)	Texture of Material	Weight(kg)
XFFL900	900	3030	STAINLESS STEEL	390
XFFL1000	1000	3420	STAINLESS STEEL	530
XFFL900	1500	5652	STAINLESS STEEL	1450

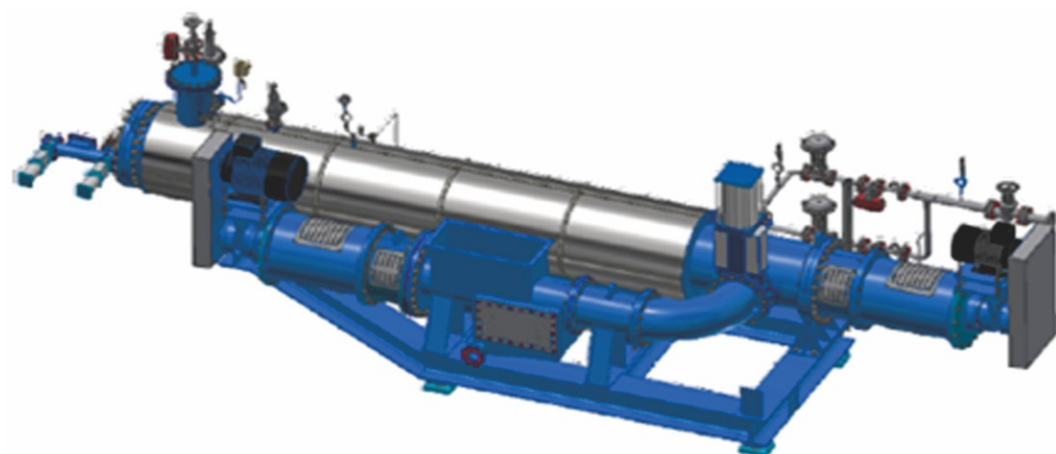
Chemical Scrubber



Acid alkali washing of waste gas

Model	XDT-2000-6000
Barrel Diameter(mm)	2000
Height(mm)	6000
Texture Of Material	STAINLESSSTEEL
Pump Power(kw)	11

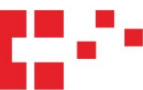
Continuous Hydrolyser



Model	LXSJ-5
Shell material	S30408
Rotor material	Q235B
Feeding motor power(kw)	37
Hydrolysis motor power(kw)	18.5
Capacity(t/h)	5
Dimension(mm)	9250*2650*2600
Weight(kg)	1600

OTHER RENDERING EQUIPMENT

Chicken oil or Tallow Plant



Chicken oil or Tallow Plant



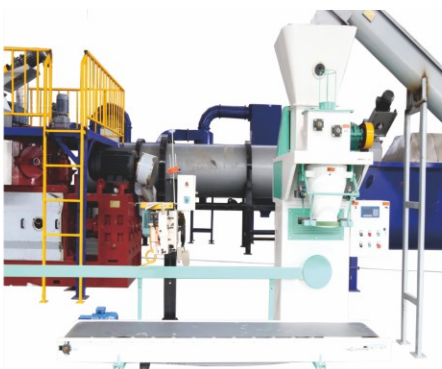
Chicken oil or Tallow Plant



Meal cooler



Final mill silo



Bag Packing Machine



Cooling Tower



Electric control panel



Central PLC Control



Feather meal plant

SAMPLE PROJECT VIEW



Raw material silo



Raw material silo



Batch cooker



Cooker and Dryer



Fat press Unit



Fat Press Unit



Plant View



Plant View



Plant View



Plant View

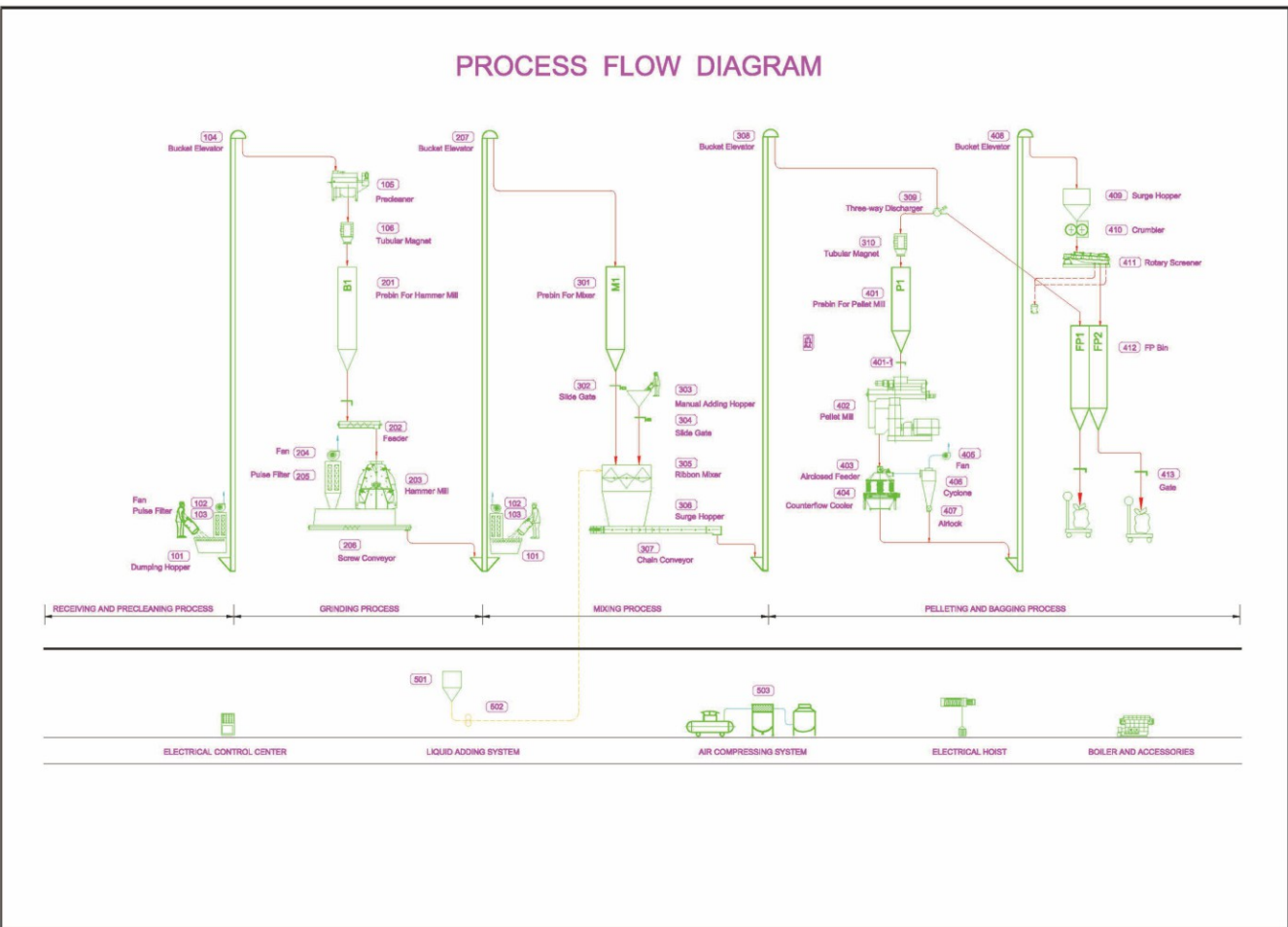


Odor Control



Odor Control

FEED MILL EQUIPMENT



Feed mill equipment are widely used in the fields of animal husbandry, poultry, aquaculture and other fields, and provided convenience for feed processing, transportation and storage.

In the breeding industry, the feed pellet machine can adjust the feed particles to the appropriate size to improve the feed rate of animal feed; the feed mixed machine can allocate various feed to achieve accurate nutritional balance; the feed conveyor can transport the feed to appropriate Storage equipment.

Feed mill equipment can be classified according to their functions and uses.

1. Feed pellet machine

The feed pellet machine is a mechanical and equipment that changes the feed raw materials into a granular material that meets the needs of the feed. According to the different forms of granules, it can be divided into flat and ring mode.

2. raw materials pre-breaker

The raw materials pre-breaker is a mechanical equipment that makes the feed raw materials that make it easy to mix and granulate. Depending on the crushing method, it can be divided into grooves and hammer type.

3. Feed mixer

The Feed mixer is a mechanical equipment that mixes different feed raw materials and distribute evenly. According to different mixed methods, it can be divided into single -axis and dual axes.

4. Feed conveyor

The feed conveyor is a mechanical and equipment that transports the grain -made feed to the storage device through the pipeline. You can be divided into force conveyor and mechanical conveyor according to different transportation methods.

SFSP66 Series Fine Grinding Hammer Mill

SFSP66 series hammer mill is used for fine grinding mill in petfood and fish feed production, compound feed and other flour milling Industry.



MODEL	Capacity (t/h)	Power (kW)
SFSP66 45	1.4~3.5	37~45
SFSP66 60	1.5~6.0	55~75
SFSP66 80	4.5~9.0	90~110
SFSP66 100	6.6~13.0	132~160
SFSP66 120	9.8~19.5	160~200

Features

- 1.With Hammer rod locking device. convenient and quick replacing hammer:
- 2.Tear-Circle grinding chamber, effectively eliminates circumfluence during grinding, high throughput.
- 3.U-shaped second grinding mechanism on the bottom of the grinding chamber, increases product beating frequency, more uniform particle size.
- 3.The gap between hammer and screen can be adjusted through changing the position of hammer bar, realize normal and fine grinding.
- 4.Rotor passes accurate balance test, smooth rotating, and low noise.
- 5.Hammer slice blade using hard alloy vacuum sintering, long service life.
- 6.Key parts is imported products, long life, low maintenance cost:
- 7.Hammer spacer and hammer configuration is consistent;
- 8.Feeder is mounted on top of the hammer mill to obtain a uniform feed rate.
- 9.It is also function as heavy particle and iron separator.
- 10.Remote control of the direction of products feeding direction and rotor rotation.
- 11.SKF bearing smooth operation, low temperature rise.

SFSP998 Series Hammer Mill

998 Series hammer mill can be applied to feed mills in high-grade production of livestock and poultry, aquatic material, etc. can also be used for alcohol plant, citric acid fac-tory, etc.



Features

- 1.Inner rotor can prevent material came out from the side, guarantee fineness and more uniform;
- 2.The bottom is of the gravity flow discharge, reduce energy consumption by 15%:
- 3.Adjustable secondary wind inlet device, increase the rate of material sieving, prevent excessive crushing mate-rials;
- 4.Tear-Circle grinding chamber. effectively eliminates circumfluence during grinding. high throughput.
- 5. U-shaped second grinding mechanism on the bottom of the grinding chamber, increases product beating frequency, more uniform particle size.
- 6.The gap between hammer and screen can be adjusted through changing the position of hammer bar, realize normal and fine grinding.
- 7.Rotor passes accurate balance test, smooth rotating. and low noise.
- 8.Key parts is imported products, long life service. low maintenance cost;

MODEL	Capacity (t/h)	Power (kW)
SFSP120x300	10~15	55/75
SFSP120x400	12~20	90/110
SFSP120x500	15~25	110/132
SFSP120x600	25~35	132/160
SFSP120x800	38~50	200/220/250

SDHJ Serious Single Shaft Paddle Mixer



SDHJ single shaft paddle mixer is a high-performance batch mixer, can be able to mix free flow of dry solid materials. It is mainly used in feed flour, and other grain processing industry. Due to the features of raw material and adding the liquid, this high-speed mixer can add liquid ratio is 59%, also it can provide the capacity range of 1000 to 8000 liters of various types.



Material	Effective Volume(m³)	Mixing Capacity Per Batch(kg)	Mixing Time Per Batch(s)	Power(kw)
SDHJ0.2	0.2	100		2.2
SDHJ0.5	0.5	250	30-120	75
SDHJ1	1	500	Time can be	15
SDHJ2	2	1000	properly extended	18.5
SDHJ4	4	2000	according to	30
SDHJ7	7	3000	different materials	37
SDHJ8	8	4000		45

1.The best mixing precision high quality

SDHJ single shaft paddle mixer ensure product to achieve the strictest quality standards, it can keep the product quality excellent mixing uniformity, (CV) less than 5%.

2. Efficient Mixing, save time

With best geometric design mixing chamber and high-speed mixer blades ensure superior Performance: mixing time is around 1.5 minutes

Dual discharge door makes discharge time of less than 10 seconds Up to 20 batches / hour production means double times efficiency than normal mixer.

Excellent design, good sanitation

Reasonable design of chamber surface area can benefit for the whole plant, can prevent the material re.

dual and avoid pollution.

It can be convenient to clean the mixing chamber and blade

Solid structure, Easy maintenance

The main shaft sealing performance is stronger to ensure easily maintenance, and help customer save maintenance cost.

SSHJ Series Double- -shaft High Efficiency Mixer



Good Stability

Long-term stable operation, less failure;
Mixing uniformity still perfect when increasing mixing time, the growth of the use of time;
Mixing uniformity will not change when change different material.

Remark

Mixer in feed production plays an important role in batching system left the mixer. The quality of the mixer so directly related to the survival and development of feed industry. Stable performance of the device not only can long continue to create benefits for enterprises, but also save substantial maintenance and repair costs.



Material	Effective Volume(m³)	Mixing Capacity Per Batch(kg)	Mixing Time Per Batch(s)	Power(kw)
SSHJ0.2	0.2	100		2.2
SSHJ0.5	0.5	250	30-120	75
SSHJ1	1	500	Time can be	15
SSHJ2	2	1000	properly extended	18.5
SSHJ3	3	1500	according to	22
SSHJ4	4	2000	different materials	30
SSHJ6	6	3000		37
SSHJ8	8	4000		45

It is widely used to mix the materials in the shape of powder, granule, flake, piece, and sticky materials in the industries of feed, grain, food, chemicals, medicine, pesticide, etc.

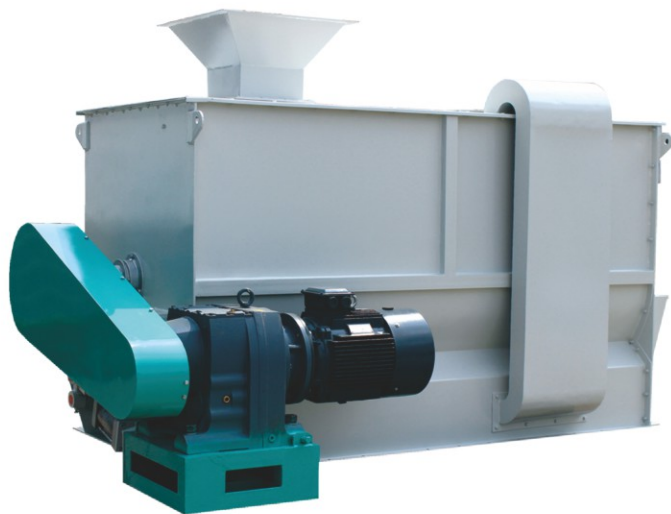
It also can dry and cool various materials.

Features

- 1.Suitable for production of poultry & livestock feed and normal aqua feed. It can also be used for premix production (Stainless steel)
- 2.Fast speed mixing, high uniformity: CV≤5% ;
- 3.Driven by means of direct-coupled gear motor, smooth running, low noise, long life service.
- 4.Enlarged design of mixing chamber. Good mixing effect.
- 5.Double entire length opened doors, big opening angle, low residue.
- 6.Special shaft and door seal structure, no leakage.
- 7.Can be equipped with air purging device, decrease residue.
- 8.The gap between the mixing chamber and paddle can be adjusted.
- 9.The advanced liquid adding and spraying system can add many liquids, solids with great accuracy.
- 10.The unique air return system ensures smooth air flow during the feeding process.

SLHY Series Horizontal Ribbon Mixer

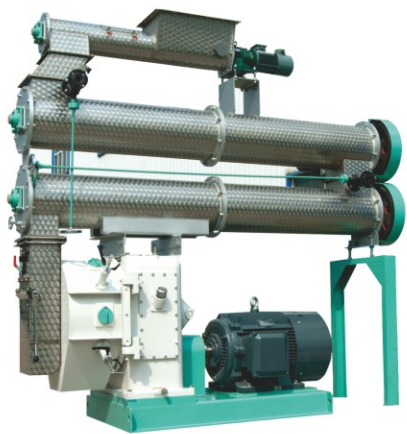
- 1.Mixing uniformity CV≤7%, mixing time :3-6 minutes
- 2.It can equip multiple spray nozzles for liquid adding.
- 3.Large open-door discharge, less residue inside.
- 4.It is widely used in compound feed plant, chemical, food, flour mixed materials and other industries.



Model	SLHY0.6	SLHY1.2	SLHY2.5	SLHY5	SLHY7.5	SLHY10
Power(kw)	5.5	11	18.5	30	37	45
CapacityPerBatch(kg)	250	500	1000	2000	3000	4000



SZLH420D- II Series Pellet Mill



SZLH400D Series Pellet Mill



SZLH508D- III Series Pellet Mill



SZLH508M Series Pellet Mill

SZLH Series PELLET MILL

- Features
- 1.Enlarged and strengthened full stainless-steel feeder and frequency - convertible speed adjustable controller with built-in high performance magnet.
 - 2.Full stainless-steel conditioners with axial jacket steam spraying device and liquid inlet and bolted door for inspection and cleaning.
 - 3.External discharging unit.
 - 4.High - precision gear driving system for overload protection with strong impact to ensure full load running and long service life.
 - 5.Imported SKF or NSK bearing and oil seal.
 - 6.High power flexible couple with strong compensation displacement, Full stainless steel cutting unit with dial.
 - 7.Fast and convenient positioning, loading, and unloading of die. Die lift device can be supplied. High quality stainless steel
 - 8.die processed with world advanced technology.
 - 9.Suitable for producing all kinds of high-quality livestock and poultry feed and aqua feed.

Model	SZLH400D	SZLH420D	SZLH508D	SZLH578D
Main Power(kw)	75/90	110	110/132/160	160/180/200
Capacity(t/h)	3-12	5-15	6-20	8-22
Feeder Power(kw)	1.5	1.5	1.5	1.5
Conditioner Power(kw)	5.5	5.5	7.5	7.5
Die Diameter(mm)	400	420	508	572
Pellet Size(mm)	Φ2-Φ18	Φ2-Φ18	Φ2-Φ18	Φ2-Φ18

It is mainly used for cooling of pellet feed in the feed pelleting section. It cools the pellet feed coming from pellet mill and with a temperature of 70° C– –90° C to a temperature 3°C ~ 5°C slightly higher than ambient temperature, and can lower to a safety moisture content.

The cooled pellets not only improve in hardness but also can prevent from going moldy, which facilitates the transportation and storage of pellet feed.

SZLH Series PELLET MILL



Features

- 1.The counter flow cooling principle is adopted to cool the pellets with high temperature and moisture.
- 2.Hot air touches hot pellets and cool air touches cool pellets to avoid the pellet surface crack caused by sudden cooling produced by direct touching between cool air and hot pellets. At the same time, the airlock is used for feeding and space of air inlet bigger, therefore it can get better cooling effects.
- 3.Slide reciprocating discharger has smooth and reliable discharging, low residue.
- 4.Low pow consumption, easily operation.
5. Pellet temperature after cooling is less than +3–5 ° C ambient temperature.

SKLN Series swinging counter flow cooler

- 1.Increase the cooling capacity and prolong the material cooling time, improve the cooling effect;
- 2.Airlock is used for feeding and air in area is large, so the cooling effect is remarkable.
- 3.Taper spreader serves to spread and make the pellet feed evenly accumulate in the cooling bin.
- 4.Top part is made of stainless steel, strong anti-Corrosion, long service life.
- 5.Cooling chamber is octagonal design, eliminating residue at dead corners.
6. Advanced high- and low-level switch control is adopted, high automation degree.
- 7.Slide type discharging mechanism, smooth and reliable running, low residue.



Model	SKLB2.5	SKLB4	SKLB6	SKLB8	SKLB10	SKLB12
Capacity(Uh)	5	10	15	20	25	30
Cosing Volanre(on)	2.5	4	6	8	10	12
Power(kw)	1.5+0.55	1.5+0.55	1.5+0.55	1.5+0.55+1.1	1.5+1.1+0.75	1.5+1.1+0.75

SWDB Series Stabilizer

- 1.Used for the post-cooking of fish and shrimp feed, increase the water stability of the feeds (2–5 hours).
- 2.The chamber is adopted jacket structure, outside insulated by thermal insulation soon cotton, steam heated, equipped with safety valve, safe and reliable.
3. Flap type gentle discharging, chamber and discharging hopper are round corner designed, no bridge.
4. Adopt unique closed wind closed airlock, Using a new octagonal structure, no dead Angle.
- 5.Suitable for cooling of extruders or fragile products.



Model	SWDB2	SWDB4	SWDB6	SWDB8
Capacity(t/h)	1–3	3–5	5–8	6–10
Cooling Volume	2	4	6	8
Power(kw)	2.05	2.05	3.37	3.37

SSLG Series Triple-Roller Crumbler

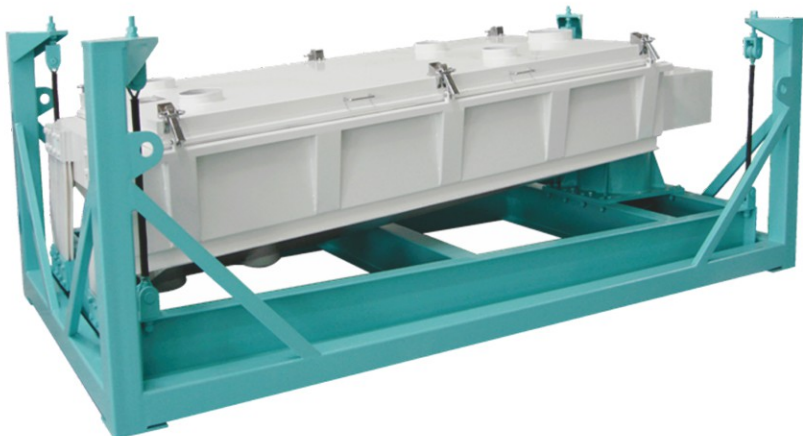


Features

- 1.It is used for grain crushing, as well as in flour production, oil processing and implementation in the biofuels industry for coarse and fine grinding.
- 2. Module size does not occupy a space, and excellent design for the main drive, makes SSLG crumbler has the very high production efficiency. At the same time, it greatly save the running cost
- 3.Highly flexible to meet the various needs of customers
- 4.It satisfies the customers for specific technical requirements. Modular design and different rollers combination operation provides a considerable production flexibility. The equipment can be assembled manually or automatically adjustment for the rollers gap.
- 5. With frequency control, quantitative feeding system can convenient choose production, ensure that the material evenly into the roll; Rollers distance adjustment can be easy to complete, and the product particle size can be detected in the process of production; So it is easy to use and very efficient.

Model	SSLG20x80x3	SSLG20X110X3	SSLG20X140X3	SSLG20X170X3	SSLG30X180X3
Capacity(t/h)	3-5	5-8	8-10	10-15	18-25
Power(kw)	5.5+1.1	7.5+1.1	11+1.1	15+1.1	22+1.1

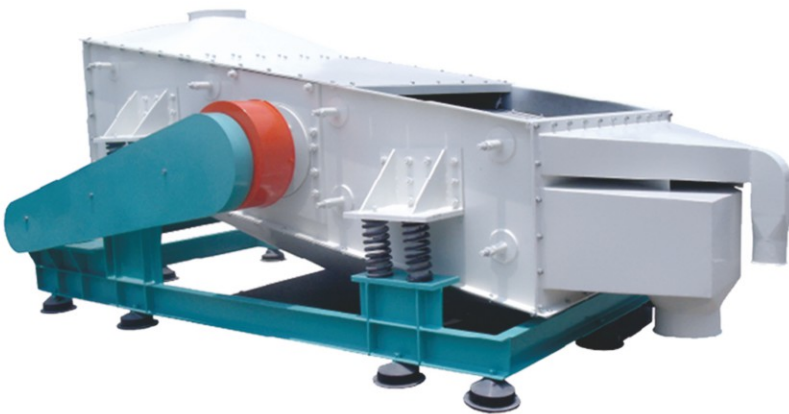
SFJH Series Rotary screener



- 1.Combination of circular motion, oral motion, and linear motion, long product moving track, Screening hull driven by belt, tail part with clastic support. Balanced and low noise. results in good screening quality.
- 2.Reinforced support ensures stable running of equipment; suspension structure can also be adopted to meeting customer requirement.
- 3. Using Combo or combined screening frame, ensure the lower weight of the screening cover, stronger and more seal effect.
- 4.Convenient Screening structure, easily changeable.
- 5. Widely used for grain store, feed, flour. chemical industries, sugar industries, mining and paper making. Ensure the good effect for meal and pellet processing,

Model	SFJH80	SFJH100	SFJH130	SFJH140	SFJH150	SFJH165	SFJH210
Power(kw)	1.5	2.2	3	5.5	5.5	5.5	7.5
GranuleFeed Capacity(t/h)	5-7	7-9	11-15	13-16	15-18	18-22	22-25
PowderFeed Capacity(t/h)	3-4	5-7	7-9	8-10	10-12	12-15	13-15

SFJZ Series vibrating screener

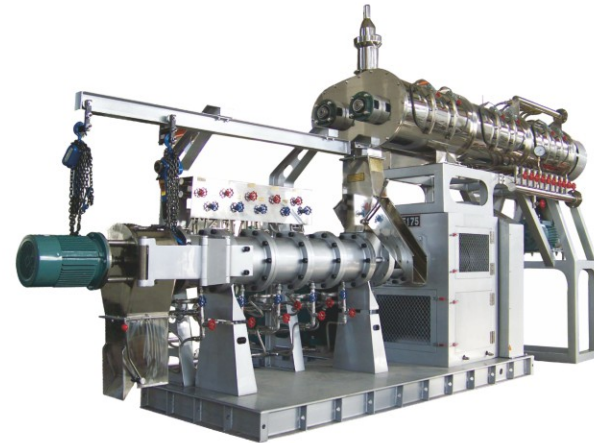


SFJZ Series Vibrating Screener is used to screen and size the mash feed or pellet feed in feed mill, and also pre- clean the raw materials in feed mill in the industries of grain, food, chemicals, sugar making, mining, papermaking, etc.

SPHS Series Double Screw extruder

Features

1. With full stainless-steel double-shafter, different diameter conditioner.
2. Screw sleeve is in a structure of sandwich where cool water or steam can be inducted for cooling or heat keeping respectively. thus, ensuing the best cooking effect and obtaining the best extruding quality.
3. The movable knife housing is used. Which result is good elasticity of knife. The rotational speed can be adjusting stepless. Die plate can be changed due to the requirement to produce the extruded feed with different pellet diameter and shape.
4. Stainless steel external discharge mechanism
5. It can produce pet food and sinking and floating aqua feed.



SPHS Series single Screw extruder

Features

1. SPHS single-screw extruder is tailored for the customer, can provide a full range of solutions for different needs of customers. It has high output, flexible configuration, in the production of various kinds of fish feed, shrimp feed, pet food. It is also used in raw materials processing such as soy puffing, puffed corn and rice bran and so on.

2. Simple operation and convenient maintenance

SPHS series extruder machine is for convenient operation design, the layout of the machine is easy to control, all kinds of control element are easily touched by worker. Also it is easy to clean, avoid the cross contamination after change the various materials.

3. Drive configuration

Driving system consists of triangle belt transmission, low noise operation, ensure the transmission efficiency, easy maintenance.

4. Flexible Mold

We Can provide the mold according to the customer's specific needs in the design, manufacture and supply.

5. Barrel

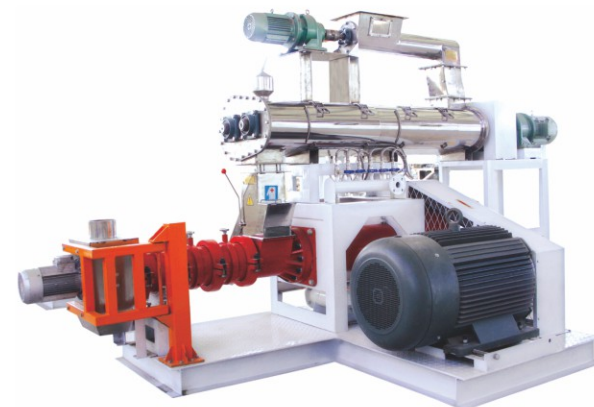
New SPHS single screw extruder equipped with s unique split barrel, to adjust the length of screw; that offer convenience for cleaning the change screw; Screw, bushing, and shear lock adopts special wear-resisting material, long service life; barrel temperature has digital display; Equipped with cooling water screw and steam heating screw.

6. Cutting Knife System.

The mold and cutting knife can change the distance between them, when the machine no need to stopping.

8. Conditioner.

Double layer stainless steel conditioner, equipped with stainless steel steam drum and various add components; Paddle adjustment convenient and flexible, cooking time can choose; Cleaning and maintenance is convenient.



DCS Series bag scale

1. Bagging scale adopt control instrument, loadcell and pneumatic element with imported technical, high measuring accuracy, stable performance.
2. Automatic error correction, alarm for over and under tolerance, fault auto diagnose.
3. Stainless steel contacted parts, long using life.
4. Reserve RS232/485 interface, with peripheral management system for data communication



DCS-50CS High Speed Bagging Scale



DCS-50CS High Speed Bagging Scale



DCS-50CW Electronic Quantitative Scale



DCS-25CW Electronic Quantitative Scale

Computerized scale



- 1. PLC computerized proportioning system is integrated with proportioning and management function ; high accurate weighing . stable and reliable ; widely applied in feed ,flour and other industries.
- 2. The system consists of host , control console , analog panel and scale hopper.
- 3. It can be supplied with one, two, three and four scales according to requirements.

SYPG950 Drum Coater



- 1. It is suitable for post coating of extrudates and shrimp feed. It employs continuous drum coating, ensure uniform coating of the products.
- 2. It is equipped with belt feeder, ensure uniform feeding and product quality. The drum body is with gear driving, more reliable and low failure rate; length ened design, good affect.

SYTV Liquid Adding Machine



- It is Suitable for addition of oil, molasses etc. To improve the quality of feed Mill.
- The capacity of daily tank is designed in accordance with different throughput, meeting different adding quantities
- A compact mixing system can be selective for special liquids.
- With heating system, high and low liquid level indicator, all of them can controlled and monitored automatically.
- Integral type design ensures no pollution to surrounding environment.
- Compact structure, with high accuracy weighing unit.

SYPM Liquid and Enzyme Spraying Equipment



It is used for the continuous spaying of the microelement like liquid enzyme. F low scale firstly measures the amount and the calculation pump adjusts the amount automatically according to the set adding ratio. The liquid enzyme is then coated on the surface of the pellet. This coater has the function of automatic stop, error alarm, etc.

Flow scale accuracy	above 1%
Liquid scale accuracy	above 1%
Liquid adding amount	0.04-0.4L/t
Spraying uniform degree	90%

SWFL Series Vertical Pulverizer

SWFL series vertical Pulverizer is a new kind of superfine grinding processing equipment, suitable all kinds of coarse crushing materials such as corn, sorghum, wheat and barley, soybean meal, small fish and shrimp

Model	Capacity(t/h)	Power(kw)
SWFL82	15~3.0	75/90
SWFL110	1.8~3.5	90/110
SWFL130	3.0~5.0	132/160



SWFL Series Vertical Pulverizer



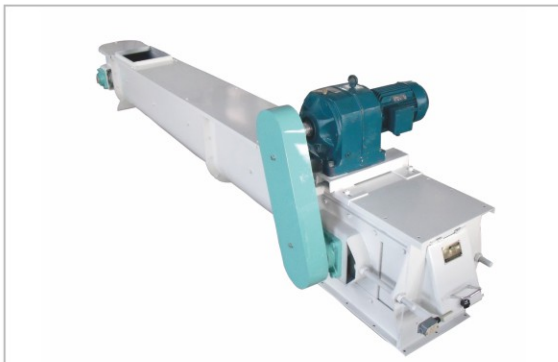
GKLW Series drum cooler



TGSS Series drag conveyor



SGWG series drum dryer



TGSU series U drag conveyor



TDTG series bucket elevator

Control System

We can supply various types of single and complete set of feed mill production line and automatic control system include:

- Pellet mill automatic control system.
- Extruder and expander automatic control system.
- Hammer mill automatic control system.

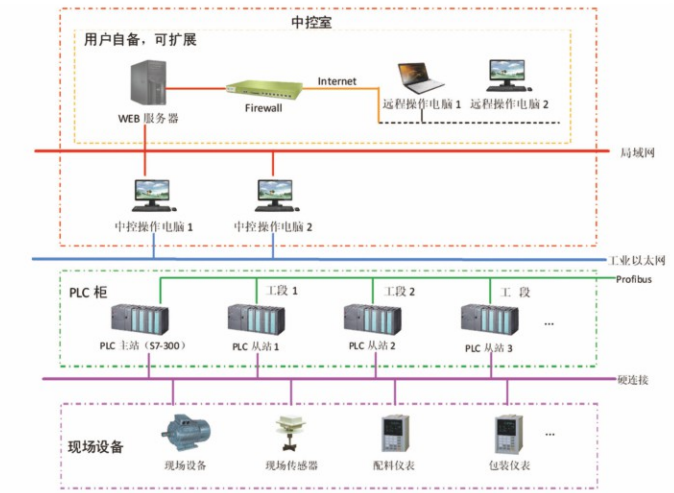
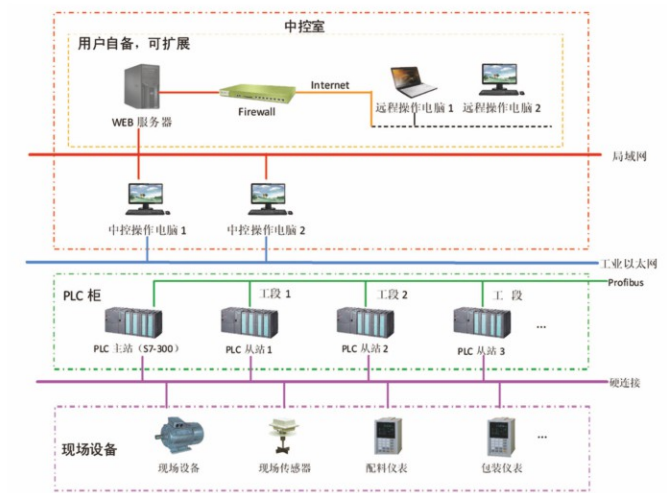


Bus Full Control System



Mimie Centralized Control

Electrical control system uses distributed control system (DCS) include industrial control computer, batching industrial control computer, PLC (main achievement section interlock control and sequence control devices) and smart instrumentation, strong electric control center (MMCC cabinet), onsite control equipment, etc.

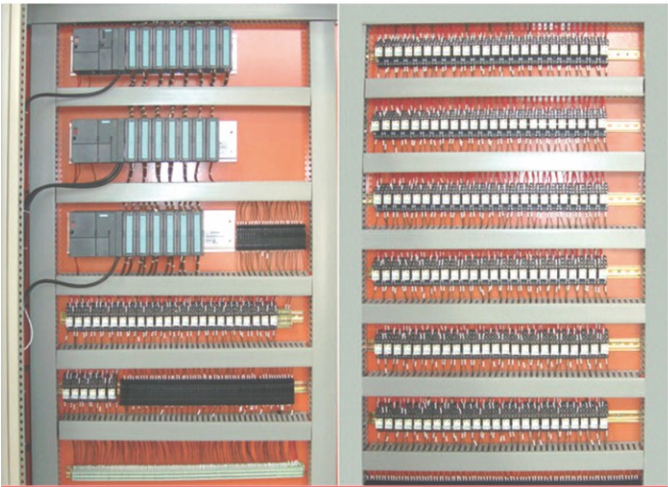




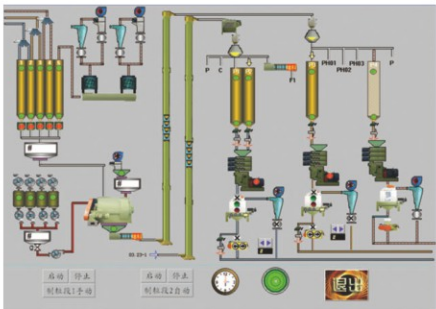
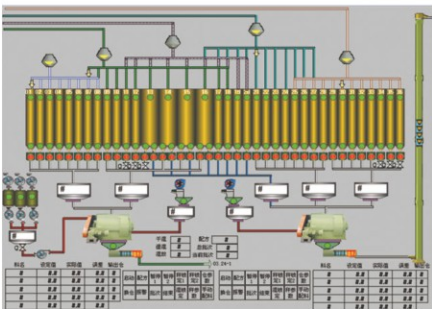
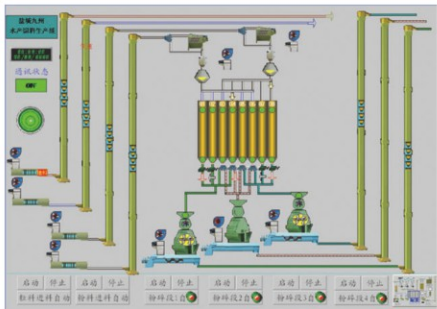
Centralized Control Onsite



Cabinet with GB ARM low-pressure sealed cabinet or similar standard products like GGD cabinet shell



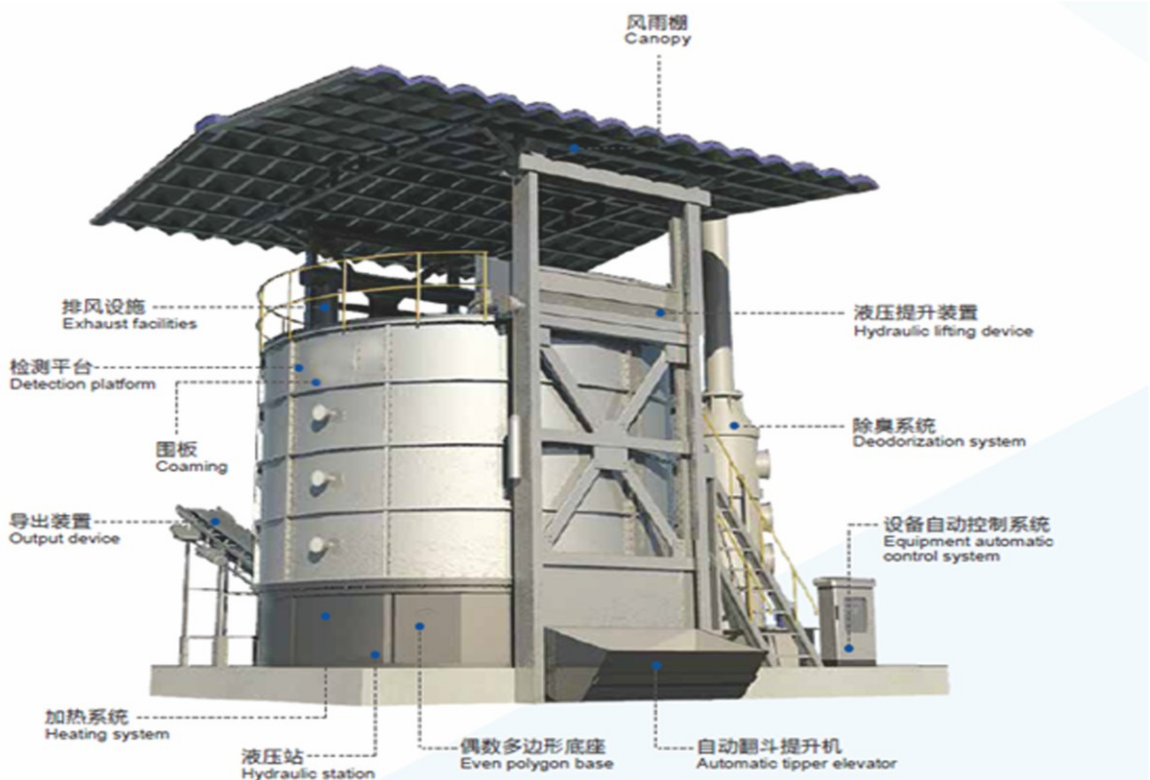
Inside the control loop coherent



FERTILIZER EQUIPMENT

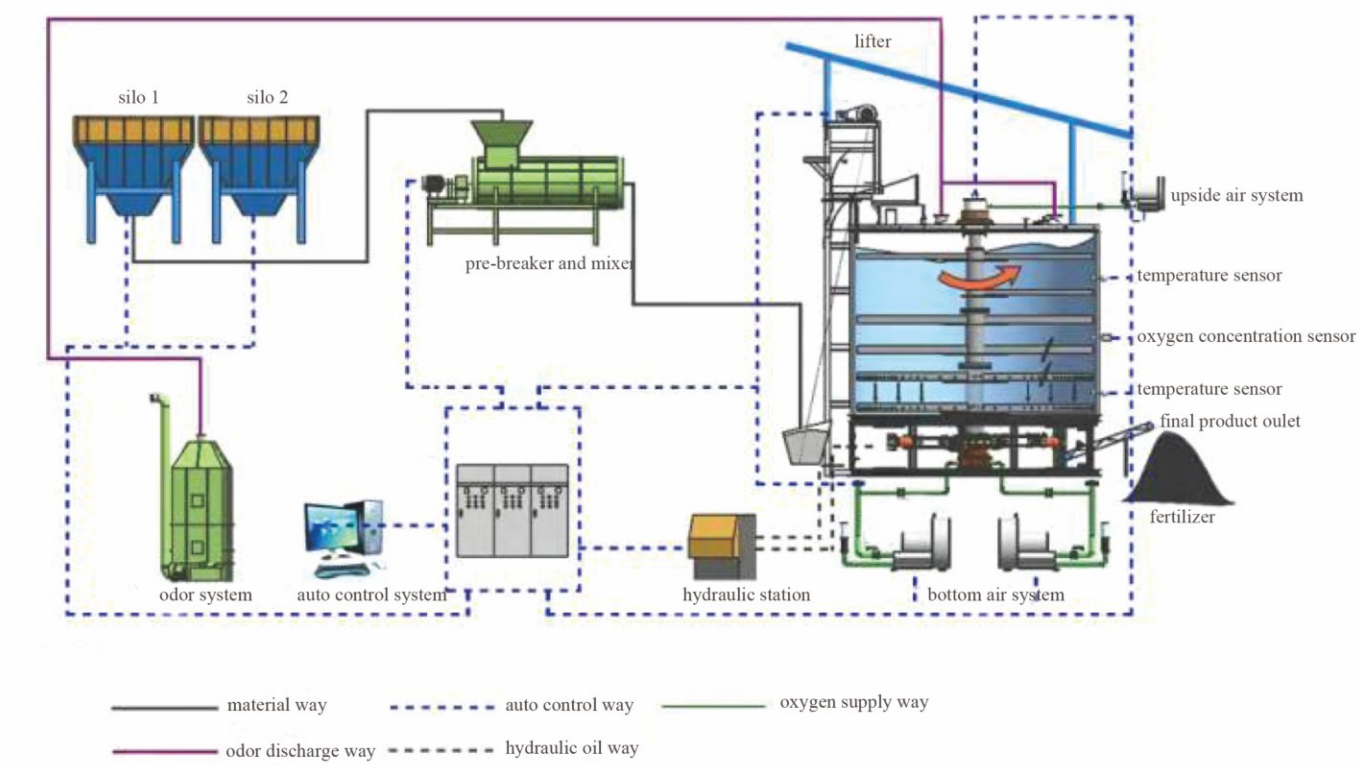
Organic waste harmless treatment equipment is suitable to different manure, livestock and poultry carcasses, kitchen waste, domestic sewage sludge. There is no need to add auxiliary materials if the water content of organic waste is under 70%, can be input into the tank directly. The equipment can adapt to different region, like high humidity and high cold, and it adopts a vertical closed tank structure, which reduces the installation area. The equipment adopts the aerobic fermentation principle of aerobic microorganisms, so that the microorganisms use the organic matter and residual protein in livestock and poultry manure and carcasses to multiply rapidly under a certain temperature, humidity, and sufficient oxygen environment, thereby realizing the organic waste Harmless treatment.

It is a continuous system that organic waste can be input into the compost tank every day and organic fertilizer is produced every day. The bucket elevator lifts the organic waste and puts it into the (tank) automatically. Organic waste is mixed well in the tank by stirring blades. Special heat exchanger uses the heat of exhaust gas to heat fresh air and let it enter the tank, and the hot air is blown out from the holes in the blades. The warm air accelerates the aerobic fermentation of organic waste and evaporation of water. Seven days later, organic waste is converted into high-quality organic fertilizer.



ADVANTAGES:

- 1、Equipment is in small size, can be fixed in the room, no need building, can be a movable factory, which solves the high-cost problems of building construction, long distance transportation, Centralized processing.
- 2、Airtight treatment, 99% deodorizing, little pollution.
- 3、good insolation, not limited by cold seasons, can work under -10℃ environment.
- 4、Fermentation period is around 7 to 15 days, capacity is according to requirement to add more sets
- 5、Tank is with 3 layers structure, inner is made of good materials S.S 304, solved the corrosion problem of strong acid and alkali, the using life is more than 10 years
- 6、Simple operation and management, PLC automatic control putting into the raw materials of animal’ s manure, etc. Easy to learn and operate
- 7、High temperature strain can live and reproduce in 25℃ to 80℃, forms beneficial bacteria can kill harmful bacteria in raw materials.



MODEL	11FG-280	11FG-160	11FG-145	11FG-120	11FG-102	11FG-90	11FG-60	11FG-48
TANK DIA(mm)	9000	7000	7000	6000	6000	5500	4500	4000
Total Height(mm)	8440	9000	9000	9000	8440	8440	8000	8000
Tank height(mm)	4500	4500	5500	4500	3900	3900	3900	3900
Min footprint(m²)	100	70	70	60	60	55	45	40
Tank volume (m³)	280	160	145	120	102	86	57	44
Daily water consumption (m³)	2	1.5	1.5	1	1	1	0.6	0.6
Hopper volume (m³)	1.6	1.35	1.35	1.35	1.35	1.35	0.7	0.7
Handling capacity (m³) (50-70% moisture content manure, animal carcasses)	20-28	12-18	12-16	8-14	8-12	7-10	4-7	3-4
Power	380V 50HZ							
Bottom blower (KW)	12.5*6	12.5*3	12.5*3	12.5*2	12.5*2	11*2	4*4	4*4
Hydraulic station (KW)	11+4	7.5+3	7.5+3	7.5+3	7.5+3	7.5+3	4	4
Induced draft fan (KW)	-----	4	4	3	3	3	2.2	2.2
Spray Tower (KW)	1.5*2	1.5	1.5	1.5	1.5	1.5	0.75	0.75
Auxiliary heater (KW)	12	6	4	4	4	4	4	4
Discharge device (KW)	2.2*2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Installed power (KW)	110	62	56	46.5	46.5	43.5	29.2	29.2
Operate power (KW)	65	35	35	27	27	25	13	13