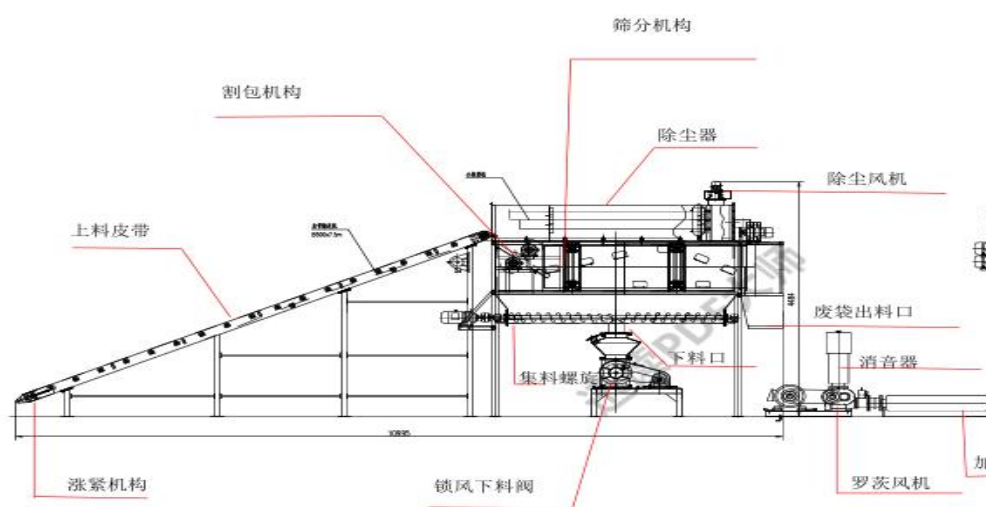


Automatic stripping machine

Product introduction: Automatic unpacking machine for 25kg-50kg bags of powder and granular material unpacking and unloading operations, mainly in chemical, petroleum, building materials, metallurgy, electric power, food, medicine, food, environmental protection and other fields of dry powder material automatic unpacking and unloading operations. For example, saltpetre ash, magnesium oxide, quartz sand, limestone, wood chips, protein powder, activated carbon, milk powder, PVC powder, fly ash, urea, clay, gypsum, cement, sewage treatment adding powder, etc., can be automatically unbagging and unloading operations, which automatically feed the bag through the belt conveyor and automatically break the bag with the cutter device. Vibrating screen automatic bag material separation, unloading and other steps by gravity into the storage bucket to complete the bag unloading work. The dust generated in the industry is filtered by the dust removal device carried, thus realizing the dust-free unpacking process.

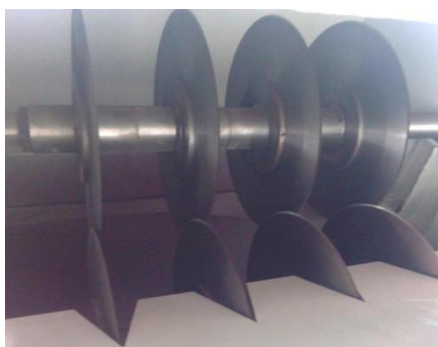


Product component: The charter machine is mainly composed of two parts: the inclined belt machine and the main machine. Among them, the feeding belt conveyor can be customized according to the requirements of the work site, independent material delivery, and finally make the bag material into the feed port of the main machine. The main machine is composed of main box, bag breaking device, screening device, material output device, waste bag output device and dust removal device.



Bag breaking device: The main working part of the bag breaking device is the cutter. The bagged powder materials are transferred by the belt conveyor to the 45 degree Angle of the skateboard and then slide down the skateboard by gravity. In the sliding process, the packaging bag is cut in multiple ways by the rotating cutter, so that the material is quickly separated from the packaging bag. The cut waste bags and materials slide into the roller screen for screening. The entrance of the bag machine is equipped with a PVC door curtain to prevent materials and dust from splashing out of the box.

Screening device: The screen wall of the roller is covered with screen holes, and the screen plate surface is fixed with 6 movable guide plates, which play the role of internal helix. The waste bags and materials enter the drum screen, the drum screen rotates at a low speed to accelerate the material through the screen into the cone bucket, the waste bags are spirally transported from the drum screen to the drum outlet, and fall into the waste bag conveyor.



Product advantage:

- 1、 Materials in the bag breaking process and material separation process are completely closed, and each process has a dust collection device, no dust leakage, low noise, improve the working environment of workers.
- 2、 Only one to two people need to place the bag on the belt conveyor on the site, which reduces the working intensity of the workers.
- 3、 The equipment runs reliably, the failure rate is low, and the maintenance workload is reduced.
- 4、 The equipment is specially designed, the broken bag is perfectly separated from the material, will not be doped into the material, and will not be hung in the separation device.
- 5、 The equipment automatically counts, can be arbitrarily set the bag amount, reach the set bag amount, the equipment automatically shut down.
- 6、 Equipment failure automatic alarm, emergency stop, protect equipment and avoid personnel misoperation.
- 7、 After breaking the bag, discharging and separating, it can be used with other conveying equipment to complete the function of powder conveying and storage.
- 8、 Different sizes of bags can be handled without the need to adjust the equipment.

On-site renderings:



Clean feed station

The dust-free feeding station is also known as the manual unpacking machine, which refers to the manual unpacking and dumping of small bags of packaged powder or granular materials, so that the materials fall into the storage hopper by gravity to complete the unpacking and unloading work. During the whole unpacking process, the dust is removed by the filter and dust removal fan, and the dust will not leak out, so that the workers can work in a clean environment.

Equipment characteristics:

The equipment is equipped with dust removal function to prevent dust flying in the process of opening bag feeding and reduce material loss;

A vibrating screen can be installed in the dust collecting bag opening station to effectively remove foreign matter in the material;

The equipment adopts intelligent control, high degree of automation, easy operation;

No dead Angle design inside the equipment, easy to disassemble and clean;

Function configuration:

Feeding specification: 0~6T/H, feeding method: single feeding port,

Material lifting: Manual/bucket/lift truck/forklift truck

Broken arch type: pneumatic high frequency vibration/activated hopper vibration,

Blowback type: pneumatic pulse

Optional equipment: iron remover/single-layer vibrating screen/coarse crusher/bag collection device/metering, weighing and conveying/waste bag collection

Technical parameter:

Feeding capacity: 0~6T/H、 Equipment material: carbon steel/304/316L

Voltage: 220V/380V、 Power: 0.75~2KW、 Atmospheric pressure: 0.6MPa Magnanimity: 0.8m³/min



KB-T Simple ton bag unloader

KB-T The ton bag unpacking device is to lift the ton bag from the lifting device to the rack of the bag unpacking machine, open the bag clamping device, place the lower discharge port of the ton bag in the bag clamping device, close the bag clamping device, untie the rope of the ton bag, and start the operation. In the process of blanking, the flow is assisted by tapping to improve the blanking speed and ensure that the material has no residue. The device can effectively protect the production environment, reduce the work intensity of the workers, and improve the production efficiency, and solve the phenomenon that the large bag is caked and the bridge is not easy to discharge due to moisture absorption in the work of opening the bag.



KB-T BFull enveloping ton bag unloader

Full enveloping ton bag unpacking machine is suitable for large bag packaging materials such as food additives and plastic resin and other dry powder, granular material automatic unpacking equipment, it is a

set of air percussion flow, vibration flow, dust removal in one of the large bag unpacking machine. It has high degree of automation, fast unpacking speed, low power and good environmental protection effect. The equipment is mainly used in plastics, rubber, food, medicine, minerals, food, building materials, feed, chemical and other fields.

Functional characteristics:

1. The equipment adopts a fully enclosed structure, no dust spill, to achieve synchronous dust collection site environmental indicators to meet the requirements of national labor health standards.
2. Fast unpacking speed, high efficiency, low power consumption.
3. The operation is simple, and the material will not be broken and leaked.
4. The overall structure design is compact, exquisite and beautiful, and the discharge valve can be configured.
5. After bagging, the material shall be transported by pneumatic conveying or pipe chain conveyor to the specified storage device (material point).



Continuous intelligent ton bag unloader

The continuous intelligent ton bag unpacking machine is mainly used for the continuous unpacking of 500-2500KG tons of bag materials, the continuous unpacking speed can reach more than 150 bags/hour, and the automatic production line such as ton bag conveying, automatic unpacking, automatic packaging of waste bags, etc. The production line has fast unpacking speed, high degree of automation, no manual participation. In building materials, chemical, pharmaceutical, feed, plastic, coal and other industries have a wide range of applications.

Intelligent control: automatic conveying, unpacking, waste bag transfer; One-key start and stop, touch screen display, visual monitoring, automatic counting, maintenance tips, one-key lubrication, fault alarm, ambient temperature, humidity, air quality detection and other functions.

Recommended package:

- 1, tons of bags after the unpacking of materials can be through the pipe chain conveyor, screw conveyor, pneumatic conveying system and other conveying equipment to achieve unpacking and feeding integration.
2. The waste bags after the unpacking of tons of bags can be matched with the waste bag packaging robot to realize the automatic collection, bundling and packaging of waste bags.

Process flow:

叉车或桁车上料

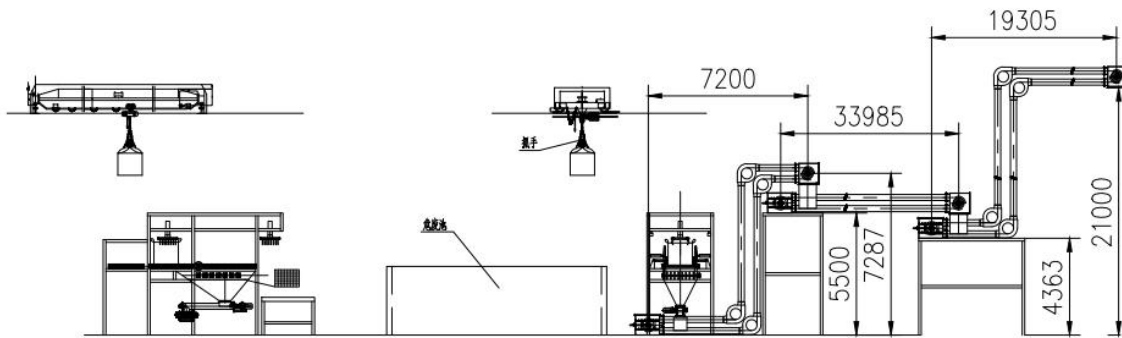
板连线输送

至割刀处破袋

高压气体对冲清料

废袋收集

重复以上动作



说明:

- 1、将危废品倒入危废池中;
- 2、远程控制抓手将危废品吨包从池中抓取;
- 3、远程控制抓手将吨包放入拆包卸料机中;
- 4、自动拆包并将料运出,拆包后吨袋进入打包机打包;



Layer stripping machine

The layer unpacking machine can realize the unpacking of bagged raw materials, the automatic lifting and collection of the card, and the automatic collection of waste bags. Compared with the traditional dismantling machine, the efficiency is increased by 3 times.

Advantage: Remove one layer of bale at a time (5-8 bale/layer)

There is no requirement for tidiness of palletizing and placing

Adaptable to maximum stack size 1800 (L) x1500 (W) mm (Max)

Suitable material: bagged granule

Bag weight: 25-50kg

Packing material: PE bag, kraft paper bag, woven bag, etc

Tipping rate: 99.99% (depending on the flow characteristics of the bagged material)

Maximum processing capacity: 1200 packets/hour



Intelligent dismantling machine

1. The bagged material is placed on the belt by manual or manipulator and transported to the cutting area (after the material is in place, the cutting system is raised to reduce the distance from the cutter, and the sliding plate in the cutting area is a roller sliding pneumatic control structure).

2. After the bagged materials are in place, the mechanical arms on both sides grab both ends of the bag, start the rotary knife, quickly drop from the middle of the bag, and cut the bag to two sections. At the same time, the control system of the cutting area falls, and the rotary knife rises.

3. The mechanical claw hand moves the bag to the top of the blanking port, simulates the manual bag shaking process, and at the same time, the second bag enters the area to be cut. After the material is separated from the bag, the mechanical claw puts the bag into the waste bag collection device at the end, resets and grabs the second bag, and goes into the second unpacking process

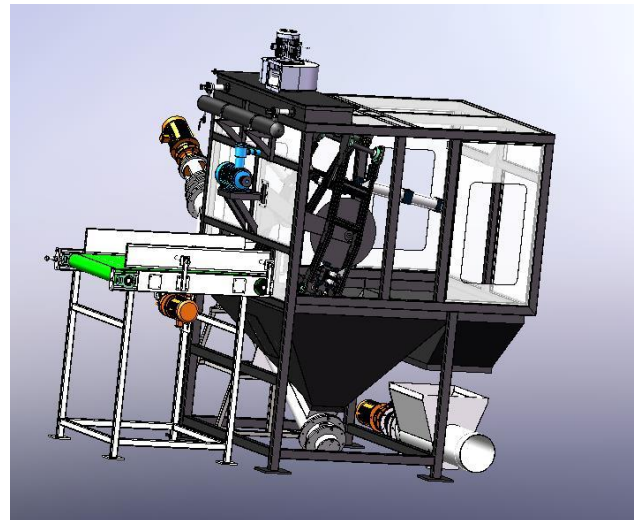
4. Considering the particularity of the material, the rotor motor can be replaced by the air motor.

Major component: It consists of feeding device, whole bag device, waiting to be cut device, cutting device, capturing bag, cleaning bag system, waste bag removal system, internal filter and dust collection device, waste bag collection system, electric control system, etc.

Advantage: Small footprint to solve the problem of limited space, to solve the unpacking of bulk materials, reduce the debris problem caused by the broken bag process, built-in dust removal system to solve environmental requirements, low energy consumption.

Pipe chain conveyor

Pipe chain conveyor is a continuous conveying equipment for conveying powder, small particles and small pieces of bulk materials, which can be combined with horizontal, inclined and vertical transportation.



In the closed pipe, the chain piece is used as the transmission component to drive the material to move along the pipe. When conveying horizontally, the material particles are pushed by the chain in the direction of movement. When the internal friction between the material layers is greater than the external friction between the material and the tube wall, the material will move forward with the chain, forming a stable material flow; When vertically transported, the material particles in the tube are pushed upward by the chain, because the lower feed prevents the upper material from sliding, resulting in lateral side pressure, so the internal friction of the material is enhanced, when the internal friction between the materials is greater than the external friction of the material and the inner wall of the pipe and the material's own weight, the material is transported upward with the chain, forming a continuous material flow.

Product advantage:

1、 Compact structure, small space, can change the direction of three-dimensional transport, not affected by terrain, Angle and height;

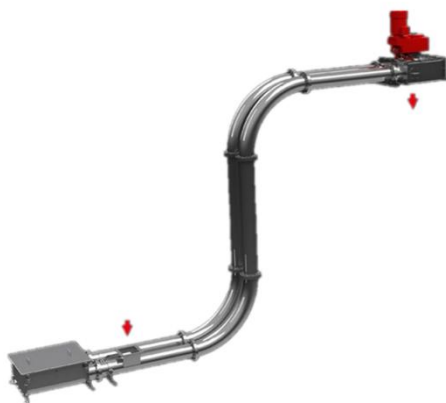
2, the conveying process is balanced, the material is smoothly transported along the pipe, there is basically no internal movement between the materials, less damage, to ensure the quality of the material, suitable for abrasive materials;

3, will not produce system blockage, suitable for conveying a variety of forms of materials; The conveying of mixed materials will not produce material stratification; Special conveyor disc, with very low friction coefficient and stable conveying capacity;

4、 The positive displacement conveying device can realize the conveying and measuring of materials. It is easy to achieve centralized control, improve the degree of automation, and meet the requirements of modern enterprises for environmental protection.

5, can achieve long-distance transportation; Multiple inlet and outlet can be deployed at will to meet process requirements; According to different feeding conditions, the distance between the inlet can be more than 10 meters.

6, the conveying process is carried out in the closed pipeline, the material is pollution-free, no dust flying; There is no need to set a dust collector at the exit, and no dust leakage can be ensured during transportation. Protective gas can be filled when conveying materials.

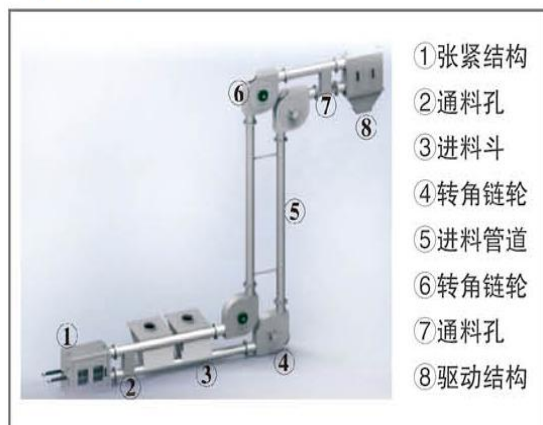


S-type structure, the chain is connected by a ring
The footprint is relatively large for water
Materials with higher rates are transported smoothly.



O-type structure: the chain is connected by a ring, for
The material fluidity is better and the lifting height is higher
Materials are transported.

结构图:



Z-type structure, the chain adopts plate conveyor chain
Small footprint, compact structure, low noise,
Smooth operation, for large dry proportion
Smooth transportation of powder and particle materials.

Technical parameter

Model number	Tube diameter (mm)	Transport capacity (m ³ /h)	Transport distance (m)	Power (KW)
GL-50	DN50	0.5-1.5	0-60	0.18-2.2
GL-80	DN80	1-2	0-60	0.18-3

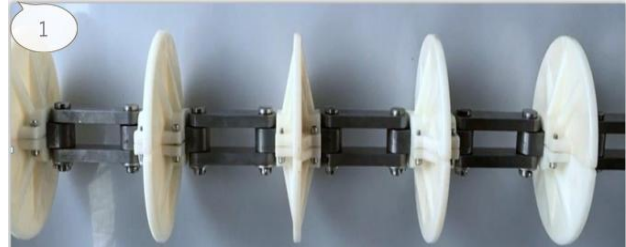
GL-100	DN100	1-5	0-60	0.55-4
GL-125	DN125	2-8	0-60	1.1-5.5
GL-150	DN150	5-16	0-60	2.2-7.5
GL-200	DN200	8-28	0-60	3-15
GL-250	DN250	20-48	0-60	5.5-18.5
GL-300	DN300	50-90	0-60	7.5-22
GL-400	DN400	60-120	0-60	11-45

Two kinds of drive chain: plate chain and ring chain

The difference is that the chain linking the scraper is different (there are plate chain and ring chain illustrations in the attachment).

Plate chain: plate chain conveying chain has strong tensile resistance, suitable for high-strength conveying.

Ring chain: The ring chain is flexible and can be transported flexibly.

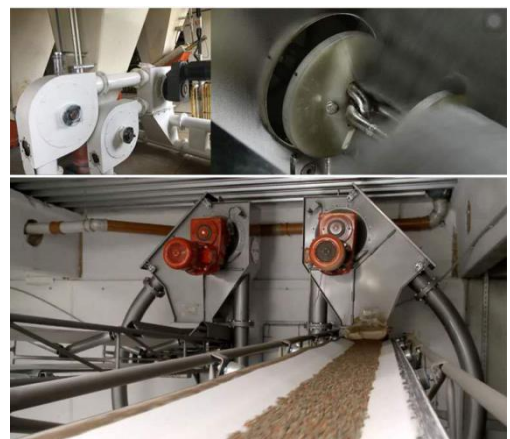


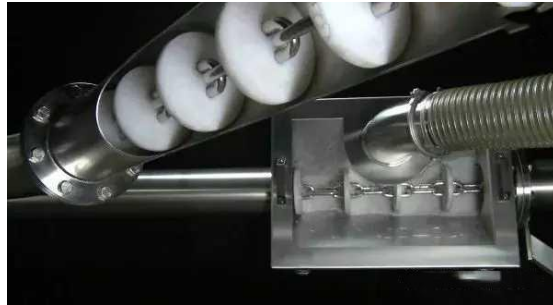
Drive sprocket and transfer platter:

Integral precision casting sprocket, greatly extend the service life, wear-resistant modified POM (polyformaldehyde), nylon 66 and other conveyor platters, conveyor platters for the latest two-half structure, disassembly and replacement is extremely convenient, greatly reduce the replacement of the platter time and labor intensity of workers, if the high temperature use, the conveyor platters can be changed to PPS, metal and other temperature resistant materials, in order to complete the transport operation requirements.



Product internal structure diagram:





On-site renderings





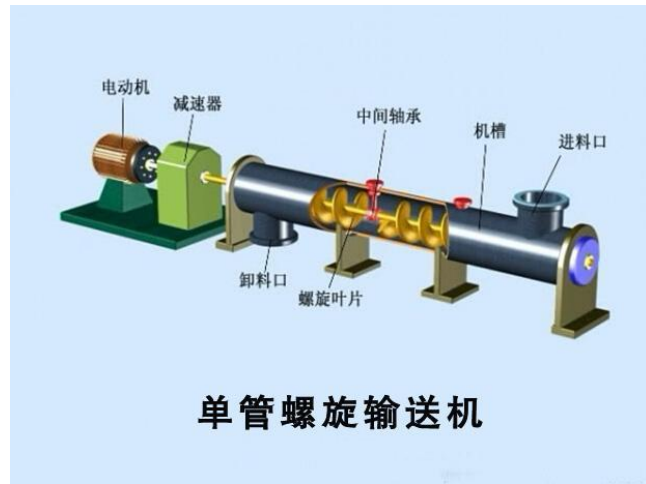
Other conveying equipment

Screw conveyor

Screw conveyors are generally divided into shaft screw conveyors and shaftless screw conveyors. The shaft screw conveyor is composed of a screw, U-groove cover plate, inlet and outlet and a driving device, while the shaftless screw conveyor changes the screw into a shaftless screw, and is equipped with a replaceable liner in the U-groove, which has a simple structure. The material is input by the inlet and output by the outlet after being pushed by the screw. The whole process can be carried out in a sealed tank, which reduces the noise and reduces the discharge of odor.

Screw conveyor features:

- 1、 The screw conveyor head and tail bearings are moved outside the housing, eliminating the possibility of reduced bearing life due to leaky sealing.
- 2、 Screw conveyor middle hanging bearing using rolling, sliding can be interchangeable two structures, are equipped with dust sealing device, labyrinth seal, seal with nylon and plastic king, strong sealing, wear resistance, sliding tile need to add lubricant cast copper tile, alloy wear-resistant cast iron tile and copper stone ink less oil lubrication tile, bearing life of up to 10,000 hours.
- 3、 The surface of the screw blade of the screw conveyor is coated with wear-resistant material, and its life can be doubled compared with the conventional blade.
- 4、 The transmission part adopts cycloidal gear reducer, the whole machine has low noise, strong adaptability, easy operation and maintenance.



Type Z elevator

The Z-type elevator, also known as the rotary bucket elevator, is in a closed housing, through the suspension of the chain hopper to transport material. Can horizontal - vertical - horizontal combination transport. Can be single point or multi-point feeding, through the discharge device to complete single point or multi-point unloading. Fully enclosed, no leakage, no pollution. It is suitable for conveying all kinds of powdery materials and granular materials, in order to transport non-viscous substances. The major advantage of this equipment is that the composition is flexible, the damage rate of the material is low, and the production of defective products can be eliminated, and it is suitable for various occasions that require gentle treatment of materials.



Bucket elevator

Bucket elevator is suitable for lifting from low to high, the supply material is put into the hopper through the shaking table, and the machine automatically and continuously runs upward. According to the amount of transmission can adjust the transmission speed, and choose the lifting height as needed, the hopper is designed and manufactured by itself, all sizes are designed and manufactured according to the actual needs, for the supporting vertical packaging machine, computer metering machine design, suitable for food, medicine, chemical industry products, screws, nuts and other products to lift the loading, through the signal recognition of the packaging machine to control the automatic stop of the machine.

Working principle

The hopper scoops the material from the storage below, and as the conveyor belt or chain is raised to the top, it flips down around the jacking wheel, and the bucket elevator dumps the material into the receiving tank. The transmission belt of the bucket elevator with transmission is generally made of rubber belt, which is installed on the transmission drum under or above and the reversing drum above and below. Chain driven bucket elevators are generally equipped with two parallel transmission chains, with a pair of transmission

sprockets above or below, and a pair of directional sprockets below or above. Bucket elevators are generally equipped with a housing to prevent dust from flying in the bucket elevator.

Bucket elevator: suitable for lifting from low to high, supply materials through the shaking table into the hopper after the machine automatically continuous operation upward transport.

Main member

Bucket elevator is composed of hopper, drive device, top and bottom rollers (or sprockets), tape (or traction chain), tensioning device and housing.



Belt conveyor

Belt conveyor, also called belt conveyor or belt conveyor, has strong conveying capacity, long conveying distance, simple structure and easy maintenance, and can easily implement programmed control and automatic operation. The continuous or intermittent movement of the conveyor belt is used to transport items below 100KG or powdery and granular items, and its operation is high-speed, stable, low noise, and can be transmitted up and down the slope.



MB pulse bag dust collector

The design of pulse bag filter conforms to the requirements of environmental protection index. It is a new type of improved and efficient pulse bag filter, which has the advantages of large gas processing capacity, stable performance, easy operation, long filter bag life and small maintenance workload. Suitable for machinery, metallurgy, rubber, flour, chemical, pharmaceutical, carbon, building materials, mining enterprises. Moreover, structural and electromagnetic reforms have been carried out to solve the problems of open-air placement and low compressed air pressure.

Pulse bag dust collector is mainly composed of control system, spray system, filter system and ash cleaning system. The control system is mainly controlled by the controller or the control cabinet for the spray system and the ash discharge

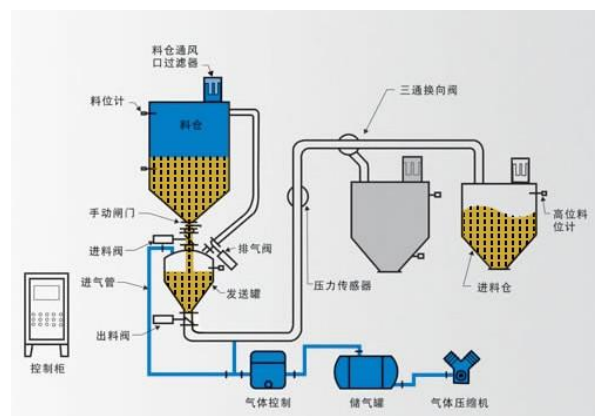
system. The spray system refers to the dust cleaning work of the filter system carried out by the solenoid valve under the control of the control system. The main work of the filtration system is: the dust-containing gas enters the filtration system, the inner wall of the filter bag is supported by the cage bone and suspended by the porous plate, and the upper part of the bag cage is designed with Venturi tube, which is closely matched with the filter bag mouth.

The working principle is: When the pulse bag type dust collector works normally, the dust-containing gas enters the ash hopper through the air inlet. Due to the rapid expansion of the gas volume, some coarse dust particles fall into the ash hopper due to inertia or natural settlement, etc. Most of the remaining dust particles rise with the air flow into the bag chamber. After being filtered by the filter bag, the dust particles are retained on the outside of the filter bag, and the purified gas enters the upper box from inside the dust filter bag. Then through the valve plate hole, exhaust outlet into the atmosphere, so as to achieve the purpose of dust removal.



Pneumatic conveying system

- a. Pneumatic conveying, also known as air conveying, is a conveying method for transporting powder and granular solid materials in pipelines under certain conditions, using air flow as the carrying medium. The system is mainly composed of sending equipment, conveying pipeline, material and gas separation equipment, air source and purification equipment and electrical instruments. According to the conveying state of the material in the pipeline, the entire pneumatic conveying system can be divided into the following two categories:
- b. Thin phase pneumatic conveying air flow speed is high, the material suspended in the plumb pipe is evenly distributed, in the horizontal conveying is flying state, the voidage is very large. The conveying of materials mainly depends on the energy held by the high speed air flow.
- c. The dense phase pneumatic conveying material is no longer evenly distributed in the pipeline, but is in a dense state, but the pipeline is not blocked by the material. So it still relies on the energy held by the air stream. This kind of flow state design of the device has high pressure pressure and fluid transport and so on.



High level palletizer

High palletizing machine is as a automatic bag, automatic weighing, automatic folding and sealing, weight detection, metal detection, out of the machine, automatic whole bag mechanism, bag guide bag import transport, packaging bag positioning, packaging bag grouping, stacking, lifting mechanism composed of automatic packaging and palletizing production line.

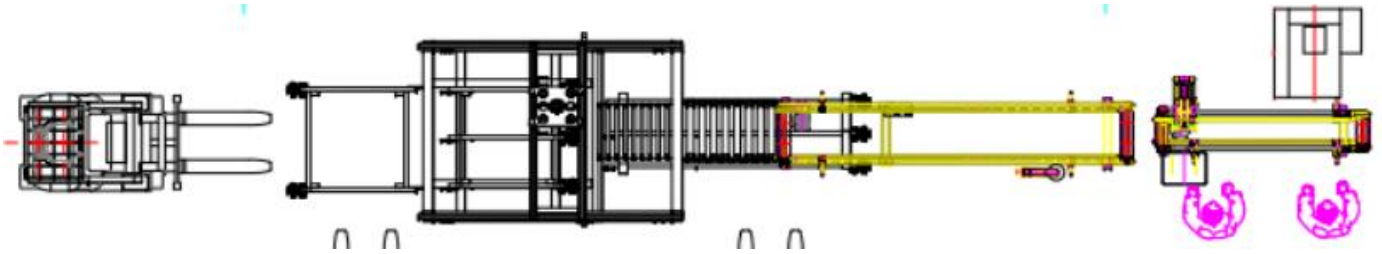
Peculiarity:

Using German technology, low failure rate; The host is highly integrated; Servo motor drive, gear drive; Simple and durable structure; Automatic oiling maintenance; Low noise: precise control, diverse stack type.

- 1、 The structure is very simple, low failure rate, easy maintenance and repair;
- 2、 The host automatic cycle refueling maintenance;
- 3、 The main machine has three sides which can be arbitrarily selected as feeding and discharging ports, which can adapt to the site to the maximum extent;
- 4、 Servo motor control bag, positioning, pallet lifting, smooth operation, high accuracy, low noise, to solve the shock problem, no longer use hydraulic cylinder lifting;
- 5、 The palletizing machine arm is set in the most effective space, the host is highly integrated, and the site is used efficiently.
- 6、 To achieve man-machine dialogue, all operations can be completed on the control cabinet screen, including setting the stack type and selecting the stack type, the operation is very simple; A variety of pile type choice: five-blossom pile, six along pile;
- 7、 The application of the palletizing robot arm is very flexible, one machine can adapt to many types of products at the same time, and a fully automatic palletizing machine can handle different products of up to 3 production lines at the same time. When the product is updated, it only needs to input new data and run after recalculation, without modification and setting of hardware and equipment;
- 8、 The stacking type and the number of stacking layers can be set arbitrarily, and the stacking type is neat and convenient for storage and transportation.
- 9、 High palletizing efficiency;
- 10、 The main machine is highly integrated, integral installation, easy to install on site, docking with the discharge port, you can use.



High palletizing conveyor line:



Palletizing robot

Palletizer robot is loaded into containers (such as: cartons, woven bags, kraft paper bags, etc.) materials or packaged and unpackaged regular items, according to a certain arrangement on the pallet (wood), automatic stacking, stacking multiple layers, and then pushed out, easy to continue the next step of packaging or forklift transport to the warehouse storage. Palletizing machine to achieve intelligent operation management, can greatly reduce labor and reduce labor intensity. Design of palletizing robot to save energy and resources. It has the ability to use power rationally, so that the power it consumes can be reduced.

Peculiarity:

Simple structure, high degree of specialization

Low failure rate, reliable performance

Maintenance is simple, fewer inventory parts required

Small footprint, save space

Simple operation, strong applicability

Flexible grouping mode

