



CYprocess

CHUYAO POWDER ENGINEERING (SHANGHAI) CO., LTD.

Complete Powder Handling Solutions

INTEGRATED SOLUTIONS FOR POWDER & BULK SOLIDS

Bag Dumping

Pneumatic Conveying

Weighing & Dosing

Milling & Mixing

Storage

Automatic Packing

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CHUYAO Powder Engineering (Shanghai) Co., Ltd. is a professional enterprise engaged in the **R&D, manufacturing and sales of powder handling equipment**, providing complete solutions for powder & bulk solids handling systems. We supply efficient and reliable pneumatic conveying systems, weighing & dosing systems, automatic batching systems, milling & screening systems, mixing systems, packing systems, container powder unloading systems, as well as diverter valves, butterfly valves, dome valves and more. Our products are widely used in **pharmaceutical, food, chemical, new-energy battery, building materials, metallurgy and plastics** industries.

From bag breaking & feeding (dump stations, big bag unloaders, automatic bag slitters, container unloading) to conveying (vacuum feeders, continuous vacuum conveying, dense-phase / dilute-phase positive pressure, screw conveyors), weighing & dosing (gain-in-weight / loss-in-weight batching), milling & mixing (block crushers, air jet mills, ribbon / pneumatic mixers), storage & turnover (storage silos, weighing hoppers, IBC mobile hoppers) and packing (small bag / big bag packers, vacuum heat sealing, automatic packaging lines), we deliver a **complete solution covering the entire powder handling process**, helping customers optimize production flow, raise automation and improve material handling efficiency.

①

Process Design · System Integration

Integrated service from scheme design and equipment selection to on-site implementation, based on material properties and working conditions

②

Equipment Design & Manufacturing

Full range of standard and non-standard equipment for feeding, conveying, weighing, milling & mixing, storage and packing

③

Customization · OEM

Tailor-made to customer process requirements, supporting OEM cooperation and machining from drawings

④

Full-Cycle Project Support

Technical coordination and after-sales service from inquiry and selection calculation to delivery and commissioning

8

Product Systems

30+

Standard Series

8+

Industries Served

40

t/h

Container Unloading Case

0.2

%

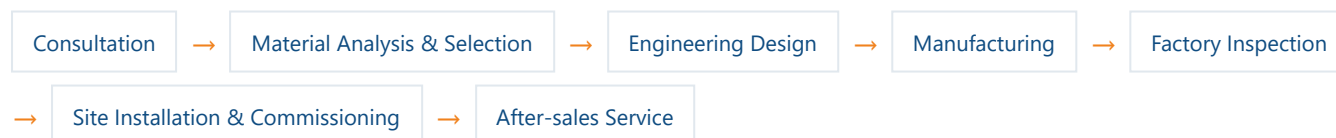
Big Bag Weighing Accuracy

0.3

μm

Vacuum Filter Precision

Service Workflow



Covering the full powder handling process, CHUYAO offers nine product systems together with matching valves and accessories — from raw material intake through to finished product packing and dispatch.



01 Feeding & Unloading

FEEDING & UNLOADING

Bag Dump Station / Big Bag Unloading Station / Auto Unpacking Machine / Container Unloading



02 Vacuum Conveying

VACUUM CONVEYING

Vacuum Feeder / Continuous Vacuum Feeder / Movable Vacuum Feeder



03 Positive Pressure Conveying

POSITIVE PRESSURE

Dense Phase Conveying / Dilute Phase Conveying



04 Mechanical Conveying

MECHANICAL CONVEYING

Trough / Tubular / Shaftless Screw Conveyor / Rotary Valve



05 Crushing & Milling

CRUSHING & MILLING

Block Crusher / Air Jet Mill



06 Weighing & Dosing

WEIGHING & DOSING

Automatic Batching System / Loss-in-Weight Feeder / Weighing Hopper



07 Mixing Equipment

MIXING

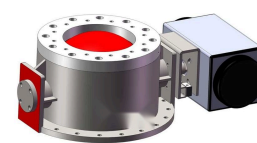
Ribbon Mixer / Pneumatic Mixer



08 Storage & Packing

STORAGE & PACKING

Storage Silo / Mobile IBC / Big / Small Bag Packer / Vacuum Heat Sealer / Automatic Packing Line



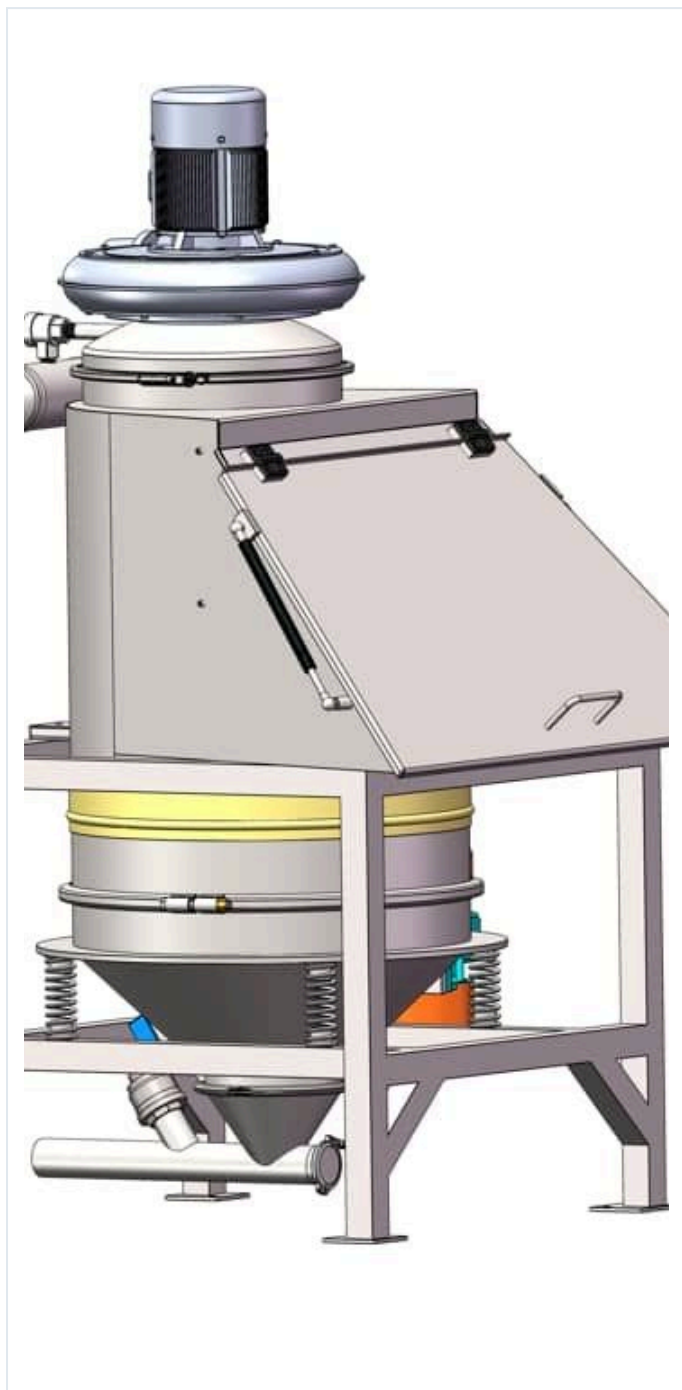
09 Valves & Accessories

VALVES & ACCESSORIES

Diverter Valve / Pneumatic Butterfly Valve / Dome Valve / Inflatable Butterfly Valve / Roots Blower

Typical system flow: Bag opening & feeding → Enclosed pneumatic / mechanical conveying → Weighing & dosing → Milling / mixing → Buffer storage → Automatic packing & palletizing

Selection information: please provide material name and properties (bulk density, particle size, moisture, flowability, temperature, flammability or explosiveness), throughput, conveying distance and lifting height, and site conditions. Our engineers offer free selection calculations and system design.



The CHUYAO bag dump station is designed for manual opening and feeding of 20–50 kg small bags. A dust-collection fan keeps the operating chamber under negative pressure, capturing airborne dust on the spot — eliminating dust emission, keeping the working area clean and minimizing material loss. Material passes through a vibrating safety sieve that intercepts lumps, bag fibres and other foreign matter, protecting downstream equipment and ensuring only compliant particles pass through. Widely used in pharmaceutical and chemical industries for the opening, dumping, screening and discharging of small-bag materials.

Working Principle: Escaping dust is drawn by the negative-pressure air stream into the filter chamber and retained by the filter cartridges, while clean air is discharged by the fan. High-flow pulse jet cleaning periodically back-flushes the cartridges to maintain stable permeability and airflow. Material falls through the safety sieve into the buffer cone and is then transferred downstream by a vacuum feeder or positive-pressure conveying system — dust-free from bag opening through to conveying.

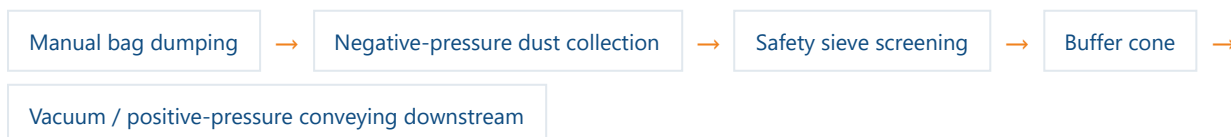
Key Features

- ◆ Dust-collecting filter-type dumping table — no dust escapes during manual feeding
- ◆ High-flow pulse jet automatic cartridge cleaning, triggered on closing the chamber door, maintains operating resistance
- ◆ Built-in safety sieve intercepts lumps and foreign matter, protecting vacuum feeders, mixers and other downstream equipment
- ◆ Product-contact parts in 304 / 316L stainless steel with polished, dead-corner-free internals; modular and demountable for easy cleaning and sanitizing
- ◆ Material in the cone can be connected to vacuum / positive-pressure conveying for dust-free on-site operation
- ◆ Optional magnetic separator, weighing, arch-breaking vibration and explosion-proof motor, integrated flexibly to suit the material and process

Specifications

Model	Dimensions (mm)	Power	Screen	Material
DS-800	1200×800×2350	1.1 kW	None	304 / 316L
ADS-800	1200×800×2350	2.2 kW	20 mesh	304 / 316L

※ Further specifications and screen mesh sizes can be customized to material characteristics.



◆ Selection notes: please provide material properties (particle size, bulk density, flowability, flammability), bag specification, hourly feeding rate and the interface type of downstream equipment. Our engineers can provide selection calculations.

04 Big Bag Unloading Station

BIG BAG UNLOADING STATION

CYprocess
Complete Powder Handling Solutions



The big bag unloading station is a dust-free solution for the rapid unloading of powders from big bags (FIBC) and large sacks. An electric hoist or overhead crane lifts the big bag to the discharge port; once the spout is guided into place, a pneumatic clamping device seals it automatically, and the material discharges by gravity along the pipe after the tie is released. A bag-massage device loosens caked material, which is fed evenly downstream by a screw through a buffer hopper. When unloading is complete, the operator re-ties the bag, releases the clamp and lifts out the empty bag.

Working Principle: The clamping cylinder rises, the bag discharge spout is drawn into the inner ring of the clamp, and the cylinder descends to compress and seal the spout with a sealing ring — no dust leaks during unloading. Material descends by gravity along the pipe; the bag-massage device loosens bridged material, which falls into the buffer hopper and is fed evenly by the screw to the designated equipment.

Key Features

- ◆ Integrated unit: lifting frame + big bag massage device + pneumatic clamping + buffer hopper + weighing + screw conveying
- ◆ Single-unit unloading capacity up to 2 tonnes; heavy-duty tubular frame structure, rugged and durable
- ◆ The base can be connected to a vacuum feeder line for lifting, or mounted directly on mixers, reactors, dissolving tanks and similar equipment
- ◆ Product-contact parts in 316L / 304L stainless steel; carbon steel powder-coated or all-stainless frame options
- ◆ Dust-free connection and complete emptying of big bags; dust is collected during bag changeover, preventing foreign matter from entering the material stream
- ◆ Optional lump breaker, flow-assisting agitator / vibration massage unit, dust collection and explosion-proof configuration; can be combined with a bag dump station into a joint system

Specifications

Model	Material	Power	Dust Collection	Dimensions (mm)
DBU-1	Stainless steel 304	—	No	Φ490×680
DBU-2	Carbon steel / SS 304	—	No	1600×1600×1480
DBU-3	Carbon steel / SS 304	3 kW	Yes	1800×1800×4800
DBU-4	Carbon steel / SS 304	5 kW	Yes	2000×2000×6000

Electric hoist lifting → Manual spout guiding → Pneumatic clamping → Tie release & unloading →

Bag massage loosening → Buffer hopper + screw conveying

◆ Please provide for selection: sling height, big bag height, spout diameter and height, and total weight. Options: vibrating platform (for cohesive materials), big bag massager (to break up compacted material), and an economical simple support frame.



This small bag auto unpacking machine performs automatic bag loading, cutting, separation and discharging in one continuous sequence, replacing manual bag opening and tipper operation. It handles hundreds of bags per hour and suits bagged powders and granules such as limestone powder, quartz sand, cement, fertilizer and food ingredients — particularly where dust levels are high, manual feeding is strenuous, or the material is hazardous or toxic. It is the ideal front-end unit for modern dust-free, automated production lines.

Working Principle: Bags are placed on the conveyor manually or by a robotic arm and enter the bag-opening unit, where two sets of disc cutters slit them into strips. The slit bags and material then pass down a chute into a rotary screening unit: material falls through the screen openings into the hopper below, while empty bags are repeatedly tossed and separated by paddles and guided to the outlet into a waste-bag compactor. Dust generated throughout is filtered by the dust collection unit, keeping the operating area clean.

Key Features

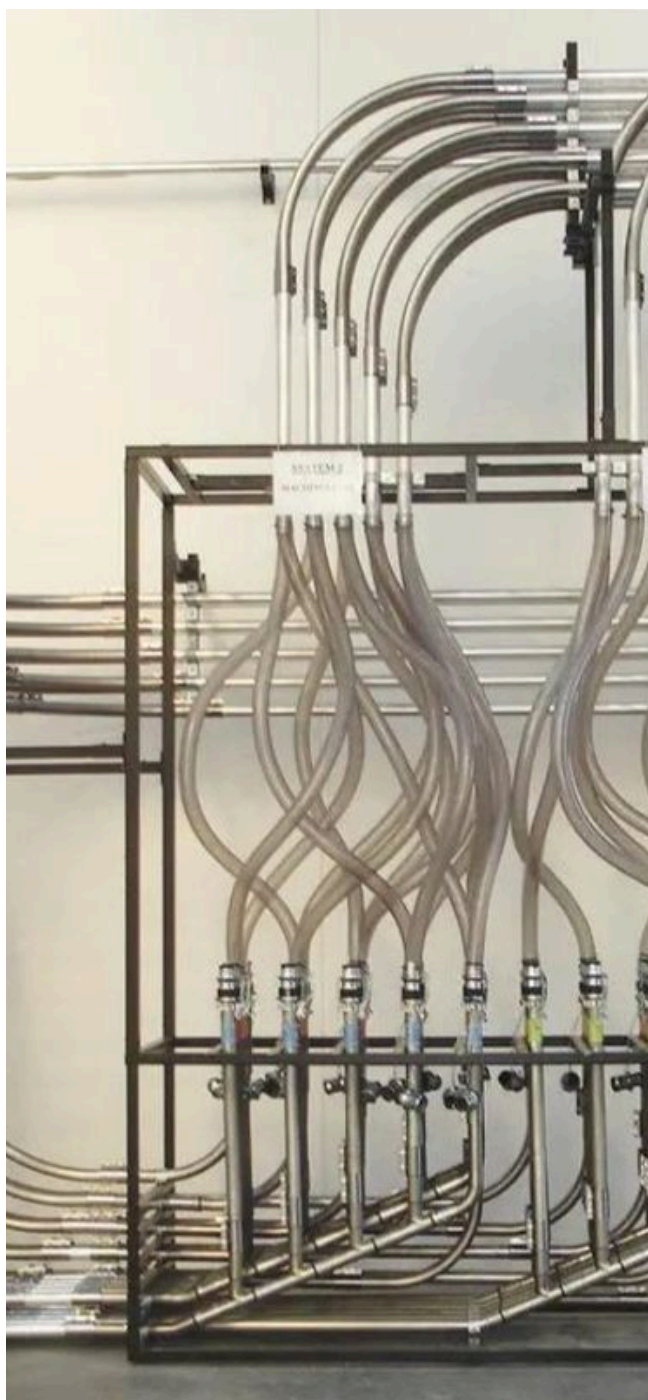
- ◆ Automatic conveying → automatic cutting → screening separation → waste bag compaction, with no manual contact with material throughout
- ◆ Unpacking capacity approx. 300 bags/hour, material particle size ≤ 2 mm, compatible with paper and woven bags
- ◆ Integrated dust collection handles toxic, flammable, highly corrosive or high-dust materials, protecting personnel
- ◆ Optional robotic arm for automatic bag loading, enabling fully unmanned unpacking
- ◆ Simple structure, few wear parts, low power consumption, easy to install and maintain
- ◆ Seamless connection with vacuum feeding and pneumatic conveying systems, integrating into existing production lines

Specifications

Item	Parameter
Unpacking capacity	Approx. 300 bags / hour
Applicable particle size	≤ 2 mm (dry, free-flowing material)
Applicable bag type	Paper / woven bag (20–50 kg)
Installed power	Approx. 11 kW (conveying 1.5 + bag opening 1.5×2 + screening 1.5 + fan 1.5 + waste bag compaction 2.2 etc.)



◆ Selection notes: please provide material name and properties, bag material and specification, and hourly unpacking rate. It can be combined with a bag dump station and conveying system into a complete solution.



An integrated container unloading and conveying system combining unloading and transfer functions. The unloading equipment can be installed horizontally above ground level — no pit excavation required, making installation flexible. Combined with a big bag packer it enables integrated unloading and packing, with controllable dust and enclosed conveying. It handles powders and granular materials and offers high unloading and conveying capacities, with a safe, reliable system and low maintenance cost.

System Composition: Typically comprising a container unloading platform, dust collection system, pneumatic conveying unit (pressure vessel + enclosed conveying pipeline), receiving silo and electrical control system. Powder enters the conveying equipment at the unloading platform and is conveyed through enclosed pipelines to the storage silo or packing station. With pipe-assisted air injection and wear-resistant fittings, continuous unloading over long distances and high lifting heights is achievable.

Key Features

- ◆ Proven at a customer site: 40 t/h unloading capacity, 40 m vertical + 20 m horizontal conveying
- ◆ Ground-level installation, no pit required; quick to deploy and movable between sites
- ◆ Enclosed pipeline conveying with controllable dust
- ◆ Flexibly combined with pneumatic conveying, weighing and big bag packing to form an integrated unload–store–pack line
- ◆ Suitable for powders and granules, high unloading and conveying volumes, low maintenance cost

Materials & Industries

Fine Chemicals

Pigments, coating carbon black, graphite, titanium dioxide, iron oxide, ceramic powder, heavy calcium, kaolin, silica gel powder, activated carbon, PVC powder

Building Materials

Cement, pottery clay, quartz sand, limestone powder, dolomite powder, glass fibre, silicon dioxide, talc powder

Agrochemicals & Minerals

Urea, ammonium chloride, calcium bicarbonate, soda powder, solid pesticides, tungsten powder, pesticide additives, mineral powder, alumina powder

Food Industry

Cereals, milk powder, food additives, white sugar, flour and starch



The CY-VC vacuum feeder conveys powders and granules by vacuum suction in a fully enclosed path, with no dust leakage and no cross-contamination. Flexible in pipe routing, it generates no heat and is intrinsically safe — reducing workshop dust and saving labour. Widely used in pharmaceutical, food, chemical and new-energy industries.

Working Principle: A vacuum source creates negative pressure; material is drawn through the suction nozzle into the pipe and separated from air in the filter chamber — material falls into the hopper by gravity while clean air is filtered out. When the hopper is full the pump stops, the discharge valve opens, and back-flush cleans the cartridge before the next cycle. A cyclone pre-separator prevents fine powder from reaching the cartridge, extending filter life.

Key Features

- ◆ Intermittent or continuous operation with automatic PLC-controlled suction–discharge cycles
- ◆ Vacuum source options: water-ring pump, Roots pump, multi-stage generator
- ◆ High-precision filtration down to 0.3 μm ; cartridges in UHMWPE / polyester+PTFE / sintered titanium
- ◆ Food-grade 304 / 316L stainless contact parts; modular quick-release design for easy cleaning
- ◆ Pneumatically actuated components — no spark risk; explosion-proof and nitrogen-protection options
- ◆ Optional oscillator, secondary filter and arch-breaker available

Specifications

Model	Specification (mm)	Capacity (kg/h)	Power	Filter Area (m^2)	Material
VC-180	$\Phi 180 \times 700$	≤ 250	2.2 kW	0.45	304/316L
VC-250	$\Phi 250 \times 900$	≤ 500	4 kW	0.45	304/316L
VC-320	$\Phi 320 \times 1100$	≤ 1000	5.5 kW	0.9	304/316L
VC-430	$\Phi 430 \times 1500$	≤ 2000	7.5 kW	1.35	304/316L
VC-560	$\Phi 560 \times 1800$	≤ 3000	11 kW	2.7	304/316L
VC-800	$\Phi 800 \times 1600$	≤ 1200	15 kW	6	304/316L
VC-1200	$\Phi 900 \times 2150$	≤ 2500	22 kW	11	304/316L
VC-1800	$\Phi 1100 \times 2600$	≤ 4500	37 kW	15	304/316L
VC-2400	$\Phi 1400 \times 3250$	≤ 6000	45 kW	22	304/316L

※ Capacities are test data for selection reference; the final selection should be calculated by our technicians according to the material and process conditions.



◆ Selection notes: please provide material bulk density, particle size, flowability, moisture, required conveying rate, horizontal / vertical conveying distance and number of bends. Our engineers will calculate the model and vacuum source type.



The continuous vacuum feeder is an upgraded model based on conventional intermittent vacuum feeding: two vessels alternate between suction and discharge, so conveying runs without interruption, without material backflow and without dust leakage. Two feeders can share one vacuum source for a synergistic 1+1>2 conveying efficiency. Its low overall height suits automating production equipment in older plants and low-ceiling workshops.

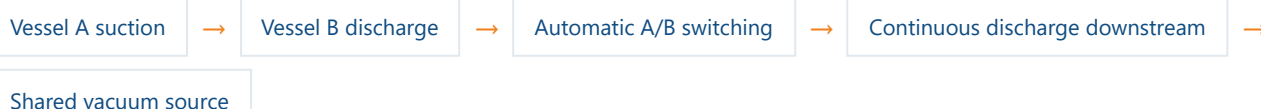
System Features: The unit is constructed in 304 stainless steel, meeting food-material conveying standards. It is equipped with a stainless-steel back-flush device for automatic material control, a multi-channel air-bag supply system for continuous conveying, and an air filtration system for impurity removal. Microprocessor PLC control supports continuous / intermittent switching by production needs.

Key Features

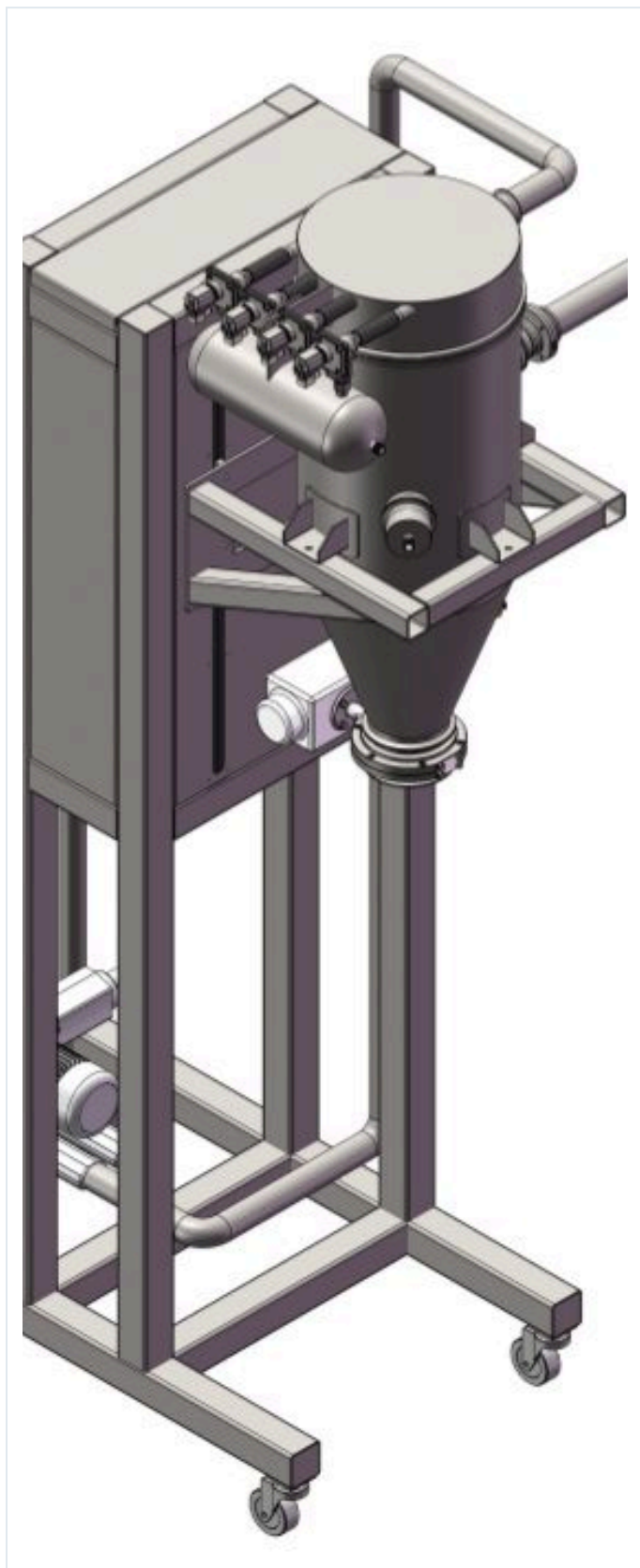
- ◆ Dual vessels working alternately for uninterrupted continuous conveying, eliminating conveying intervals
- ◆ Two feeders share one vacuum pump — high vacuum utilization, low energy and investment cost
- ◆ Low-profile, low-height design, ideal for automating existing lines and space-restricted locations
- ◆ Stainless-steel back-flush device + air-bag supply system keeps material flowing without backflow
- ◆ High-precision filtration; pulse self-cleaning extends cartridge life
- ◆ PLC control with switchable continuous / intermittent modes and upstream / downstream linkage

Specifications

Model	Specification (mm)	Capacity (kg/h)	Power	Filter Area (m ²)
VC-C180	Φ180×700	≤250	2.2 kW	0.45
VC-C250	Φ250×900	≤500	4 kW	0.45
VC-C320	Φ320×1100	≤1000	5.5 kW	0.9
VC-C430	Φ430×1500	≤2000	7.5 kW	1.35
VC-C560	Φ560×1800	≤3000	11 kW	2.7
VC-C250S	Φ800×1600 (with 300 L buffer)	≤1200	5.5 kW	0.9
VC-C320S	Φ900×2150 (with 500 L buffer)	≤2500	7.5 kW	1.8
VC-C430S	Φ1100×2600 (with 1000 L buffer)	≤4500	11 kW	2.7
VC-C560S	Φ1400×3250 (with 1500 L buffer)	≤6000	15 kW	5.4



◆ Industries served: pharmaceutical and chemical, food and beverage, plastics and rubber. The S-type with buffer vessel suits high-capacity continuous feeding. Material: 304/316L.

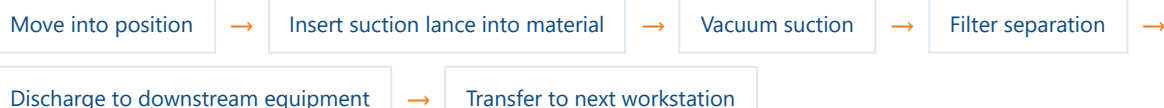


The movable vacuum feeder mounts the feeder on a mobile frame: swivel castors allow rapid transfer between multiple workstations, so one unit can serve several production lines — ideal for workshops with many product variants, small batches and scattered workstations. Negative-pressure enclosed conveying means no dust and no material loss, and the suction lance can be inserted directly into the material pile for plug-and-play operation.

Construction: Vacuum pump unit + feeding vessel + suction lance + conveying hose + electrical control box + mobile frame. The unit is constructed in stainless steel — corrosion resistant and easy to clean — with low operating noise and automatic suction / discharge cycle control requiring no dedicated operator.

Key Features

- ◆ Flexible mobility — one unit shared across multiple workstations, economical investment
- ◆ High conveying efficiency, low energy loss, low operating noise
- ◆ All-stainless construction, corrosion resistant and hygienic, quick to dismantle for cleaning and maintenance
- ◆ PLC automatic control with automatic suction–discharge cycling and adjustable conveying rhythm
- ◆ Suits powders and granules; widely applicable in pharmaceutical, food, chemical and manufacturing industries
- ◆ Optional explosion-proof motor, different vessel capacities and suction lance types



◆ Selection notes: please advise the number of workstations, material properties and conveying rate at each, and power / air supply conditions. We can recommend the complete configuration.



The dense phase conveying system operates on the principle of high pressure, low velocity and a high solids-to-air ratio: material advances through the pipeline as a plug or dune flow at a velocity far lower than dilute phase, resulting in minimal pipe wear and little material degradation — ideal for abrasive, friable materials and for long-distance, high-tonnage applications. Conveying rates reach above 100 t/h, conveying distances can extend several kilometres, and air supply pressure can exceed 8 bar.

Operating Cycle: The inlet valve opens and material enters the pressure vessel by gravity, while the vent valve equalizes vessel pressure to ensure smooth filling. Once full, the inlet and vent valves close and seal, and compressed air fluidizes the material at the vessel base while pressure builds. When the set pressure is reached the discharge valve opens and material is conveyed as a dense-phase plug along the pipeline to the target silo, where air-material separation is completed by the dust collector on the receiving silo. After conveying, purge air clears residual material and the valves reset for the next cycle — all under automatic PLC control.

Key Features

- ◆ Low-velocity dense-phase conveying — minimal pipe wear, little material degradation, no segregation
- ◆ High solids-to-air ratio, low air consumption, reduced load on terminal dust collection, economical energy use
- ◆ Pressure vessel designed to pressure-vessel codes; single-vessel intermittent or twin-vessel continuous conveying options
- ◆ Top-discharge / bottom-discharge / mid-discharge conveying pump options to suit different materials and discharge methods
- ◆ Abrasive materials can be handled with wear-resistant ceramic composite pipes and pipe-assisted air injection to prevent blockage and wear
- ◆ Suits powders with high bulk density, particle size ≤ 5 mm, moisture $\leq 3\%$ and instantaneous temperature ≤ 200 °C, with single-point or multi-point discharge

Typical System Composition



Key Specifications

Conveying capacity: up to 100 t/h and above; conveying velocity: low speed 1–10 m/s; conveying distance: long distance (equivalent distance ≤ 1000 m, vertical rise ≤ 60 m); air source: screw / Roots / piston compressor, pressure up to 8 bar and above.

◆ Selection notes: please provide material name, bulk density, particle size, abrasiveness and flowability, conveying volume, conveying distance and lifting height, and the number of receiving points. Our engineers will determine the vessel volume and air supply configuration.



The dilute phase conveying system suspends material in a high-velocity air stream: a Roots blower provides the low-pressure air source, material is fed evenly through a rotary valve into the acceleration chamber and, after mixing with the air stream, is conveyed in suspension. It suits free-flowing, non-abrasive and non-friable powders and granules. The system can feed from one point and discharge at multiple points, or feed from multiple points and discharge at one point, over conveying distances of 100–300 m. With flexible layout, economical investment and simple maintenance, it is a common solution for packing-line feeding, silo transfer and inter-workshop conveying.

System Composition: Roots blower (air source) → rotary feeding valve (even feeding and air locking) → accelerator → conveying pipeline → multi-way diverter valve → silo / receiver → dust collector. The whole system operates enclosed under positive pressure, and the pipeline can run horizontally, vertically or at an incline, crossing walls and floors without extensive civil works.

Key Features

- ◆ Roots blower low-pressure air source — stable operation, adjustable air volume, low investment and running cost
- ◆ Rotary valve for even feeding + air locking, giving continuous feeding without pulsation
- ◆ High conveying velocity (approx. 16–40 m/s), suspension conveying without deposition
- ◆ Flexible multi-point feeding / multi-point discharge layout, pipeline routing adapted to the site
- ◆ Enclosed conveying, low dust, small footprint, quick installation
- ◆ Suits a wide range of powders and granules such as flour, resin, chemicals, feed and grain

Typical System Flow



◆ Selection notes: please provide material bulk density and particle size, conveying volume, conveying distance and lifting height, and the number of feed and discharge points. Pipe diameter is calculated from material properties and air velocity (recommended pipe-to-particle diameter ratio approx. 20:1).



The CY-SC trough screw conveyor is a modular U-type / V-type trough unit for horizontal or low-incline conveying and feeding of powders and granules. Manufactured in standard 304L / 316L stainless steel, the trough interior is extremely smooth with minimal material retention, making it ideal for food and environmental applications with strict cleanliness and corrosion-resistance requirements; it is also widely used in flour and feed processing, plastics, chemicals and pharmaceuticals. Light-duty and medium / heavy-duty structures are available, all certified to ATEX Zone 22.

Construction: U/V-type trough + end flanges + centre-pipe screw flights + adjustable shaft-seal end bearings + hanger bearings (as required) + bolted trough cover + gear motor. Modular trough and screw sections are assembled to length, with flexible inlet and outlet.

Key Features

- ◆ Standard 304L / 316L stainless steel design with modular trough and screw length combinations
- ◆ Smooth, seamless trough interior with minimal material retention and good self-cleaning
- ◆ External adjustable shaft seal at the end bearing (packing / air-purge options) keeps material out of the bearing
- ◆ Wide choice of intermediate hanger bearings (self-lubricating available) for long conveying distances
- ◆ Screw sections precision dynamically balanced for smooth, quiet running
- ◆ Variable-frequency speed control and multi-position inlet / outlet / vent / inspection openings

Specifications

Model	Shell OD (mm)	Capacity (kg/h)	Speed (r/min)	Motor Power
SC-100	108	20–500	24–132	0.75 kW
SC-125	133	50–1000	24–132	1.1 kW
SC-150	159	200–2000	24–132	1.5 kW
SC-200	219	400–4000	24–132	2.2 kW
SC-250	254	500–6000	24–132	2.2 kW
SC-300	315	600–9000	24–132	4 kW



◆ Note: capacity depends on the working angle, length and material properties; table data is for reference only. Variable-frequency motors available; special specifications designed on request. Optional trough cover (bolted / quick-release), open-bottom trough, inspection openings and chain / belt drive.



The CY-SC tubular screw conveyor is a fully enclosed unit in which granular or powdery material is pushed by screw flights inside a sealed steel tube — no dust emission and capable of inclined conveying. It is particularly suited to cement and concrete admixtures (fly ash, silica fume), ready-mixed mortar (dry mortar, cement, additives), glass (calcium carbonate, soda ash, sand) and foundry (sand, bentonite) applications. Seven tube diameters are available, in powder-coated carbon steel or stainless steel, with a heavy-duty design for long service life.

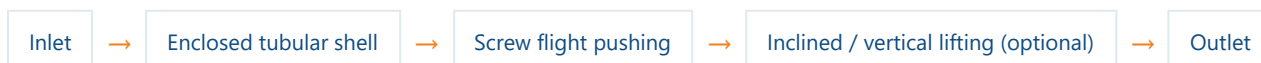
Construction: Tubular shell (flanged at both ends) + at least one inlet and outlet + centre-pipe screw flights + self-aligning shaft-seal bearings at both ends + hanger bearings + inspection opening + gear motor. A maintenance-free version is available, with the fully enclosed structure meeting demanding conditions.

Key Features

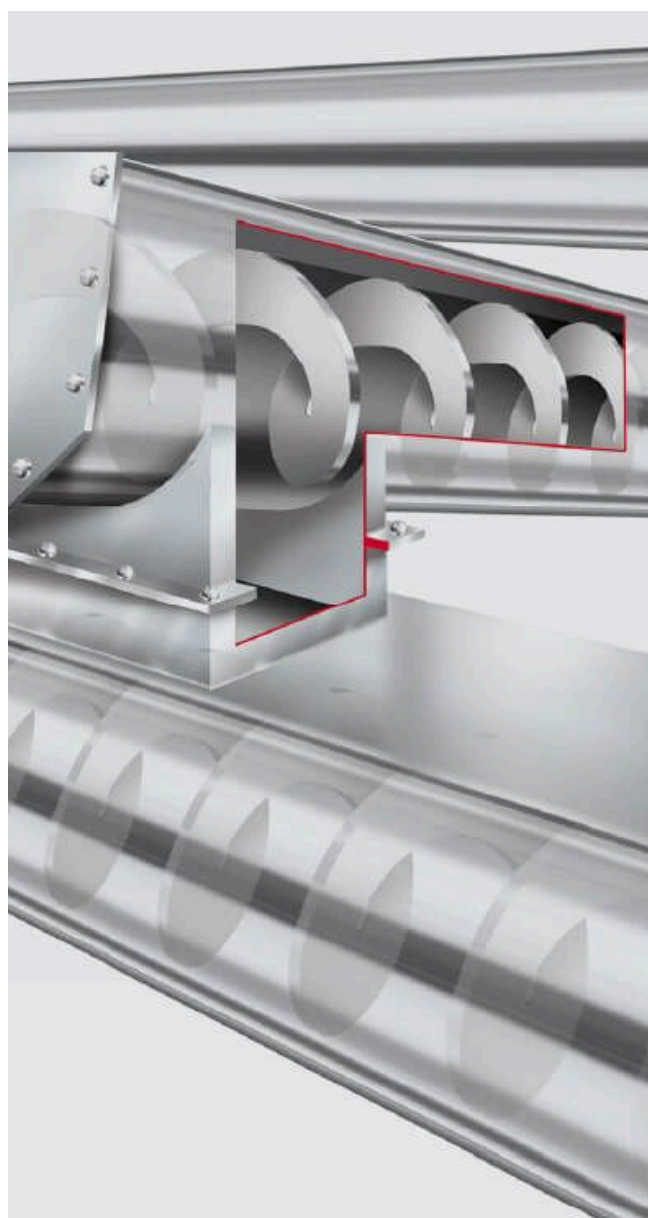
- ◆ Seven tube diameters, fully enclosed shell with no dust emission, for horizontal / inclined / vertical installation
- ◆ Modular design with standardized components — few spare parts, easy maintenance, highly expandable
- ◆ Screw flights fully welded to the centre pipe, connected by splined / bolted couplings
- ◆ Self-aligning shaft seal at the ends, with optional air-purge seal for dusty conditions
- ◆ Lifting lugs on each tube section for easy installation; inspection openings below the inlet and hanger bearings
- ◆ Optional variable-frequency speed control, wear-resistant flights and ATEX Zone 22 certification

Specifications

Model	Shell OD (mm)	Capacity (kg/h)	Speed (r/min)	Motor Power
SC-G100	108	20–500	24–132	0.75 kW
SC-G125	133	50–1000	24–132	1.1 kW
SC-G150	159	200–2000	24–132	1.5 kW
SC-G200	219	400–4000	24–132	2.2 kW
SC-G250	254	500–6000	24–132	2.2 kW
SC-G300	315	600–9000	24–132	4 kW



◆ Note: capacity depends on the working angle, length and material properties; table data is for reference only. Optional direct / chain / belt drive, variable-frequency speed control and quick-release inspection covers.



The CY-SC shaftless screw conveyor eliminates the centre shaft and intermediate hanger bearings: the screw body slides directly on wear-resistant liner plates, so it neither blocks nor tangles and is purpose-built for 'difficult' materials such as municipal sludge, refuse, food waste, screenings, suspended solids and dewatered sludge. Single-screw diameters of 6"–24" and twin-screw diameters of 9"–24" are available, widely used in wastewater treatment, sugar refining, fish and meat processing, fruit and vegetable beverage, paper and pulp, chemicals and food-waste processing.

Structure & Advantages: U-type trough (carbon steel or 304L / 316L stainless steel) + heavy-duty shaftless screw + ultra-high-molecular-weight polyethylene (UHMW) wear liner + end bearing assembly + fully enclosed trough cover. With no intermediate bearing, the material passage cross-section is maximized; the sealed trough cover enables odour-free operation, while the open interior facilitates inspection and cleaning.

Key Features

- ◆ No centre shaft and no intermediate hanger bearings — large material passage cross-section, never clogging
- ◆ UHMW wear liner as the sliding support — low noise, low wear, long service life
- ◆ Fully enclosed trough + sealed cover for odour-free operation and protection from external contamination
- ◆ Handles high-moisture, viscous and tangling materials with strong adaptability
- ◆ Conveying capacity up to 4200 CFH, power 0.75–10 HP, low energy consumption and small footprint
- ◆ Optional inspection / overflow openings, drainage kit, washing nozzles, and various liner and screw pitch options

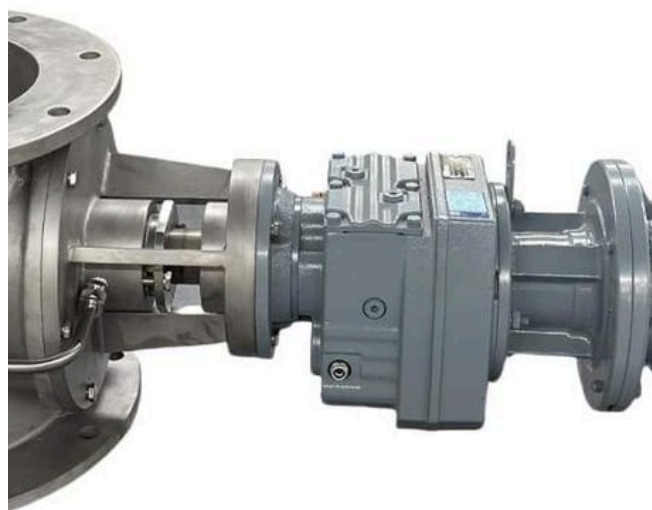
Specifications

Model	Shell OD (mm)	Capacity (kg/h)	Speed (r/min)	Motor Power
SC-W100	108	20–500	24–132	0.75 kW
SC-W125	133	50–1000	24–132	1.1 kW
SC-W150	159	200–2000	24–132	1.5 kW
SC-W200	219	400–4000	24–132	2.2 kW
SC-W250	254	500–6000	24–132	2.2 kW
SC-W300	315	600–9000	24–132	4 kW

Material falls into open trough → Shaftless screw pushes along liner → Fully enclosed and odour-free →

Discharge at the end → Liner wear indication (optional)

◆ Note: capacity depends on the working angle, length and material properties. Optional direct / coupling / chain / belt drive; special diameters and pitches can be customized.



The CY-RV heavy duty rotary valve is a feeding and air-locking device spanning hygienic to extra-heavy-duty applications: the clearance between rotor blades and housing is precision-machined (optionally below 0.25 mm), maintaining good air tightness while discharging continuously. It is the core air-locking discharge component of vacuum / positive-pressure pneumatic conveying systems, and is also used for metered discharge at the base of silos, dust collectors and cyclone separators. Available in cast iron / stainless steel / Ni-hard cast iron, it withstands high temperatures (up to approx. 540 °C) and high differential pressures, and handles a wide range of materials from powders and granules to grain and flakes.

Construction & Configurations: Square or round flanged housings available; 6-blade or 8-blade rotors to optimize volume and air leakage; large external bearings protected from material ingress, pre-lubricated and permanently sealed; optional rotor coatings (hard chrome, nickel, Teflon, tungsten carbide) for abrasive and cohesive materials.

Key Features

- ◆ Precision rotor-to-housing clearance (<0.25 mm optional) for excellent air-locking performance
- ◆ Cast iron / 304 / 316L / Ni-hard cast iron, resistant to corrosion, abrasion, high temperature and high differential pressure
- ◆ 6-blade / 8-blade rotor options; square or round flanges customized to site requirements
- ◆ External pre-lubricated sealed bearings for low maintenance and long life
- ◆ Optional explosion-proof (ATEX), double-body, offset and air-purge special constructions
- ◆ Combines metering and feeding; variable-frequency metered feeding

Specifications

Model	Volume per Rev. (L/r)	Speed (r/min)	Motor Power
RV-150	4	24	0.75 kW
RV-200	8	24	1.1 kW
RV-250	16	32	1.5 kW
RV-300	25	32	1.5 kW
RV-350	40	38	2.2 kW
RV-400	60	38	2.2 kW

※ Construction: housing + rotor + end covers; direct or chain drive available.

Material falls into rotor pockets by gravity



Rotor rotates



Continuous discharge at the bottom



Air lock maintained

◆ Selection notes: please specify material characteristics, throughput, system pressure type (gravity / positive pressure / vacuum), inlet and outlet flange types and drive method (direct / chain). Housing coatings and rotor type should be selected according to material abrasiveness.

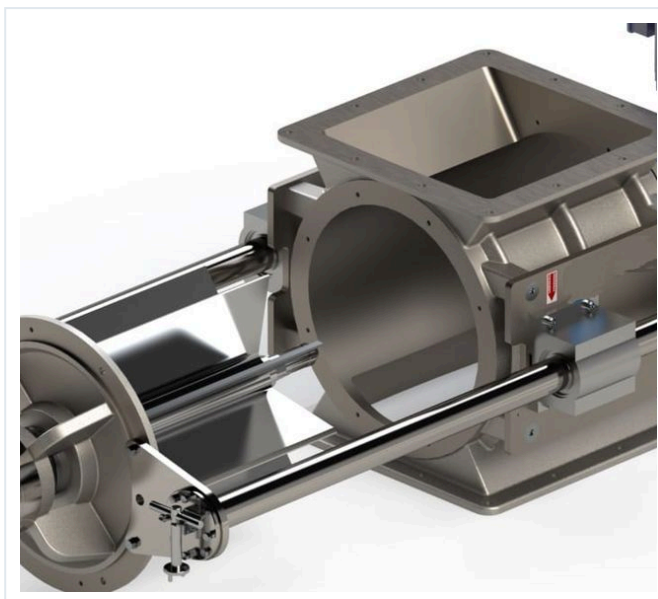


Heavy Duty Blowing Seal Rotary Valve **RV-Z Series**

A blowing-seal rotary valve designed specifically for positive-pressure pneumatic conveying systems: tubular cast iron / stainless steel housing, horizontal V-pocket rotor, and a purge port on the housing side where compressed air forms an air-curtain seal in the rotor-to-housing clearance — significantly reducing air leakage and wear and efficiently forcing powder / granular material into the conveying pipeline. Maximum differential pressure 0.8 bar; ATEX Zone 22 version available.

- ◆ Air-curtain blowing seal for less leakage and wear under positive-pressure conveying
- ◆ V-pocket rotor for smooth, residue-free discharge
- ◆ Cast iron / stainless steel housing, heavy-duty and durable, with large openings for easy maintenance
- ◆ Volume per revolution from 4 to 60 L/r, dimensionally interchangeable with the heavy-duty series
- ◆ Optional ATEX Zone 22 explosion-proof version for combustible dust atmospheres
- ◆ Suits sewage sludge, sugar refining, food and cement packing industries

Model	Volume per Rev. (L/r)	Speed (r/min)	Power
RV-Z150	4	24	0.75kW
RV-Z200	8	24	1.1kW
RV-Z250	16	32	1.5kW
RV-Z300	25	32	1.5kW
RV-Z350	40	38	2.2kW
RV-Z400	60	38	2.2kW



Quick-Clean Hygienic Rotary Valve **RV-Q Series**

A quick-clean rotary valve certified to USDA Dairy and EHEDG hygiene standards: conical bore plus guide-rail design allows the rotor to be withdrawn by hand without scratching, with full-through access from both ends for thorough internal cleaning without special tools, minimizing cleaning downtime. Ideal for frequent product changeovers and high-hygiene food, dairy, pharmaceutical and chemical applications.

- ◆ USDA Dairy / EHEDG hygiene certification meeting food and drug sanitary standards
- ◆ Conical bore + guide rail for tool-free rotor extraction and quick cleaning
- ◆ Full-through openings at both ends for dead-corner-free internal inspection and cleaning
- ◆ Contact surfaces mirror-polished to $Ra \leq 0.8\mu m$, meeting GMP cleanliness requirements
- ◆ Optional IPx9K external high-pressure hot-water wash certification; easily removable Rota-lign bearing assembly
- ◆ Especially suited to frequent changeovers and clean production of high-value materials

Model	Volume per Rev. (L/r)	Speed (r/min)	Power
RV-Q150	4	24	0.75kW
RV-Q200	8	24	1.1kW
RV-Q250	16	32	1.5kW
RV-Q300	25	32	1.5kW
RV-Q350	40	38	2.2kW
RV-Q400	60	38	2.2kW

Selection guide: select according to conveying differential pressure, volume per revolution and speed. For positive-pressure pneumatic conveying systems, prefer the RV-Z blowing seal series; for frequent changeovers and high-hygiene requirements, prefer the RV-Q quick-clean series. Both integrate seamlessly with upstream feeding and downstream conveying equipment.



The PS block crusher is designed for breaking up material that has caked or agglomerated in transport or storage. A cylindrical housing with an internal fixed grating and rotating cutter shaft shears and crushes large lumps into uniform smaller pieces, restoring flowability and bulk density so that downstream conveying, dosing and packing equipment runs reliably. It performs outstandingly on soft, friable lumps, while the gas-tight design meets both dust collection and hygiene requirements.

Structural Features: Flanged circular-section shell, rugged and durable; purpose-matched cutter profiles mounted on a horizontal rotating shaft according to material characteristics; the whole unit can be quickly dismantled for thorough cleaning; all product-contact parts are AISI 316L / 304 stainless steel for corrosion resistance and hygiene; an optional hydraulic lifting system eases maintenance.

Key Features

- ◆ Fixed grating + rotating cutter shaft for continuous crushing and uniform output size
- ◆ AISI 316L / 304 stainless steel contact parts, corrosion-resistant and hygienic
- ◆ Gas-tight design prevents dust and contamination for a clean operating environment
- ◆ Cutter profile and grating tailored to the material, handling varying lump hardness
- ◆ Quick-release construction throughout, easy to clean and maintain
- ◆ Optional integrated dust collection, hydraulic lifting and variable-frequency control

Specifications

Model	Motor Power (HP)	Inlet (inch)	Application
PS-6 (Heavy Duty)	3–5	6"	General caked materials
PS-10 (Extra Heavy Duty)	7.5–10	10"	Thick, compacted lumps
PS-12 (Super Heavy Duty)	10–15	12"	Large, hard lumps

Caked material fed in → Cutter shaft shears and crushes → Fixed grating controls particle size →
Uniform crushed material discharged

◆ Selection notes: please provide the material name, lump hardness and lump size, throughput, and installation position (silo outlet / on the conveying line / inside the bag dump station). Cutter profiles and grating apertures can be customized as required.



The CY-QLM air jet mill integrates jet classification, high-pressure grinding and shear pulverization in one ultra-fine grinding system. Nozzles set at specific angles around the chamber wall accelerate particles into a spiral motion, where high-speed inter-particle impact and shear achieve micron-level size reduction. Fine powder exits with the air stream while coarse powder returns for further milling. The process is media-free, with no temperature rise and no contamination, suited to ultra-fine grinding of dry materials of Mohs hardness below 5.

Performance Features: Variable-frequency disc-speed control fine-tunes fineness and output; closed chamber door for easy maintenance.

Key Features

- ◆ Media-free grinding, no temperature rise or contamination — ideal for heat-sensitive materials
- ◆ Product fineness D97 2–45µm, controllable and repeatable
- ◆ Thin-oil lubricated bearings with external bearing housing, long life and easy maintenance
- ◆ Optional closed-loop, inert-gas protection and cryogenic configurations

Specifications

Model	Feed Size (mm)	Product Fineness D97 (µm)	Capacity (kg/h)	Air Consumption (m ³ /min)	Air Supply Pressure (MPa)	Installed Power (kW)
QLM-03	<3	2–45	2~30	3	0.7–0.85	21.8
QLM-06	<3	2–45	30~200	6	0.7–0.85	42.5
QLM-10	<3	2–45	50~500	10	0.7–0.85	85
QLM-20	<3	5–45	100~1000	20	0.7–0.85	147
QLM-40	<3	5–45	200~2500	40	0.7–0.85	282
QLM-60	<3	5–45	500~3500	60	0.7–0.85	415
QLM-120	<3	5–45	800~7500	120	0.7–0.85	800
QLM-160	<3	5–45	1000~10000	160	0.7–0.85	1100
QLM-240	<3	5–45	1500~15000	240	0.7–0.85	1600



◆ Industries: chemical, pharmaceutical, food, battery materials, coatings and pigments, mineral fillers. An air compressor, refrigerated dryer and dust collector are required; complete package available.



The automatic batching system weighs, proportions and mixes multiple materials according to a recipe: the entire flow from feeding → conveying → weighing & dosing → batching & mixing → discharging is automated, eliminating human error and ensuring batch-to-batch consistency and product quality. It supports free proportioning of up to ten materials and pre-stored multi-recipe recall; the feeding and weighing sequence runs continuously without interruption, and the fully enclosed construction with automatic dust collection keeps the site clean and contamination-free, significantly reducing labour cost and material waste.

Two Dosing Methods: Gain-in-Weight — material is fed by the feeder into a weighing hopper and stops when the set weight is reached; it can receive virtually unlimited materials for simultaneous batching, requiring longer preparation time but offering economical investment. Loss-in-Weight — the loss-in-weight rate of material discharged by each feeder is weighed to control feeding; batching is fast and highly accurate, making it suitable for continuous production lines with demanding cycle times.

Key Features

- ◆ Multi-recipe storage and management with flexible batching values and intuitive operation
- ◆ Multi-stage feeding (high → medium → low speed → jog) approaching the setpoint for high dosing accuracy
- ◆ Gain-in-weight / loss-in-weight dosing methods selected by process cycle time
- ◆ Belt / screw / vibration feeding options + high-precision flow control
- ◆ Air-cushion / agitation / vibration arch-breaking devices prevent segregation and ensure uniform mixing
- ◆ Fully enclosed + automatic dust collection; PLC control with host computer / MES integration for traceability

System Composition

Charging Equipment Small bag dump station / big bag unloader / small bag unpacking machine / container unloading

Buffer Vessel Activation hopper, agitation, vibrator assisting discharge

Weighing Module Load cells + weighing indicators

Control System PLC automatic control + electrical components

Conveying Equipment Vacuum feeder / positive-pressure dense-phase / dilute-phase conveying systems

Feeding Equipment Screw / vibration feeders controlling the discharge rate

Dust Collection Equipment Exhaust dust collection with automatic powder recovery

Dosing Method Gain-in-weight / loss-in-weight dosing

Tare and zero → Dose material A → Dose material B ... → Cumulative target reached →

Discharge to mixing / packing

◆ Optional configurations: arch-breaking devices (air cushion / agitation / vibration), signal protection shielding, level indicators, upgraded weighing modules, explosion-proof electrical components, etc.



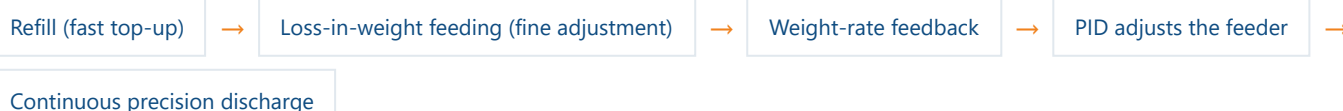
The loss-in-weight feeding system uses the 'loss-in-weight rate' as its control variable: the feeder and hopper are mounted as a whole on load cells, and the control system continuously monitors the weight decay rate of the hopper, dynamically adjusting feeder speed so that the actual feed rate tracks the setpoint precisely. Dosing accuracy is high and unaffected by fluctuations in material characteristics, making it the core equipment for continuous batching and metered feeding in plastics, chemicals, food, battery materials and other industries.

Feeder Options: single / twin screw feeders (powders and granules), vibration feeders (friable materials), rotary valve feeding, liquid loss-in-weight feeders (additive dosing); frame configurations include benchtop (small feed rates) and three-point module (high feed rates), usable as stand-alone units or as multi-component dosing stations arranged around a mixer / extruder.

Key Features

- ◆ Closed-loop loss-in-weight control with $\pm 0.2-0.5\%$ feed accuracy, continuous and stable
- ◆ Screw / vibration / rotary valve / liquid feeders to suit different materials
- ◆ Benchtop / three-point module frames, capacities from grams to tens of tonnes per hour
- ◆ Modular design for rapid integration with existing conveying, mixing and extrusion systems
- ◆ Automated control with recipe management, flow-curve logging and remote monitoring
- ◆ Optional explosion-proof configuration for combustible dust applications

Working Cycle



◆ Selection notes: please provide the material name and characteristics, feed-rate range (min / max), feed accuracy requirements, and downstream equipment interfaces. Multi-component systems can be supplied with centralized touch-screen control.



The CY-LDH horizontal ribbon mixer is a batch mixer for chemical, pharmaceutical, food and building-material industries: inside the U-shaped trough, inner and outer ribbons counter-rotate, mixing rapidly and uniformly through convection, shear and diffusion for high uniformity in short batch times. It handles powder–powder, powder–liquid and powder–granule mixing.

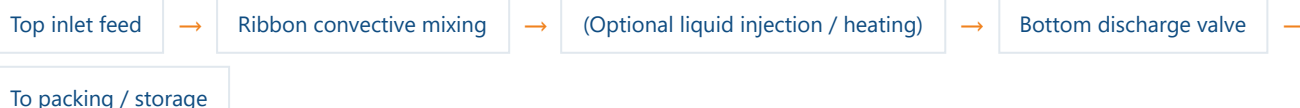
Structural Composition: U-shaped trough + double-ribbon agitator + drive unit + bottom discharge valve + inlet / vent ports. Carbon steel / 304 / 316L / 321; sand-blasted, brushed or polished surfaces; paddle-ribbon and ploughshare agitators customizable.

Key Features

- ◆ Inner and outer ribbons — convective, uniform, fast mixing
- ◆ Central bottom discharge with no dead corners, thorough emptying
- ◆ 0.1–20 m³ batch range, model selected by batch output
- ◆ Optional liquid injection, jacket heating / cooling, weighing module and temperature sensing
- ◆ Materials: carbon steel / 304 / 316L; sand-blasted, brushed or mirror-polished finishes
- ◆ Manual / pneumatic / electric discharge valves; explosion-proof, VFD motors

Specifications

Model	Working Capacity (m ³)	Batch (kg)	Speed (r/min)	Power (kW)	Weight (kg)
LDH-0.3	0.18	200	62	5.5	600
LDH-0.5	0.3	300	62	7.5	900
LDH-1	0.6	600	49	11	1200
LDH-2	1.2	1200	33	15	2000
LDH-3	1.8	1800	33	18.5	2500
LDH-4	2.4	2500	27	22	3500
LDH-5	3	3000	27	30	4000
LDH-6	3.6	3600	27	37	4500
LDH-8	4.8	4800	22	45	5000
LDH-10	6	6000	22	55	6000
LDH-15	9	9000	14	75	7500
LDH-20	12	12000	14	90	10500
LDH-30	18	15000	12	110	13000



◆ Selection notes: please provide bulk density, uniformity requirement, batch output and mixing time, and whether liquid injection / heating is required. Motor power is determined by material specific gravity, flowability and duty.



The CY-QH pneumatic mixer uses air flow as the mixing power: compressed air is blown uniformly into the vessel through a porous fluidizing plate, the powder is fluidized and suspended, forming a bottom-to-top convective circulation that achieves uniform yet gentle three-dimensional mixing. There are no moving parts inside the vessel, so the material is treated gently without breakage and the equipment is maintenance-free; after mixing, it discharges directly into a positive-pressure or unpressurized conveying system. It is particularly suited to fluidizable food and chemical materials such as baking ingredients, coffee powder, milk tea powder, seasonings and additives.

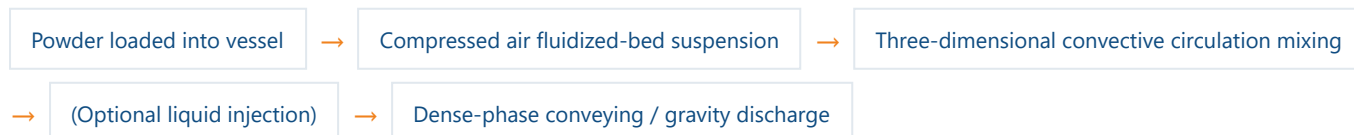
Structural Composition: cylindrical mixing vessel (carbon steel / stainless steel) + bolted porous fluidizing plate (polyethylene or sintered stainless steel) + multiple flanged ports for connecting conveying units + large inspection door. Optional pressure-tight version (for positive-pressure conveying connection) or unpressurized version (gravity discharge), with nozzle and weighing module options.

Key Features

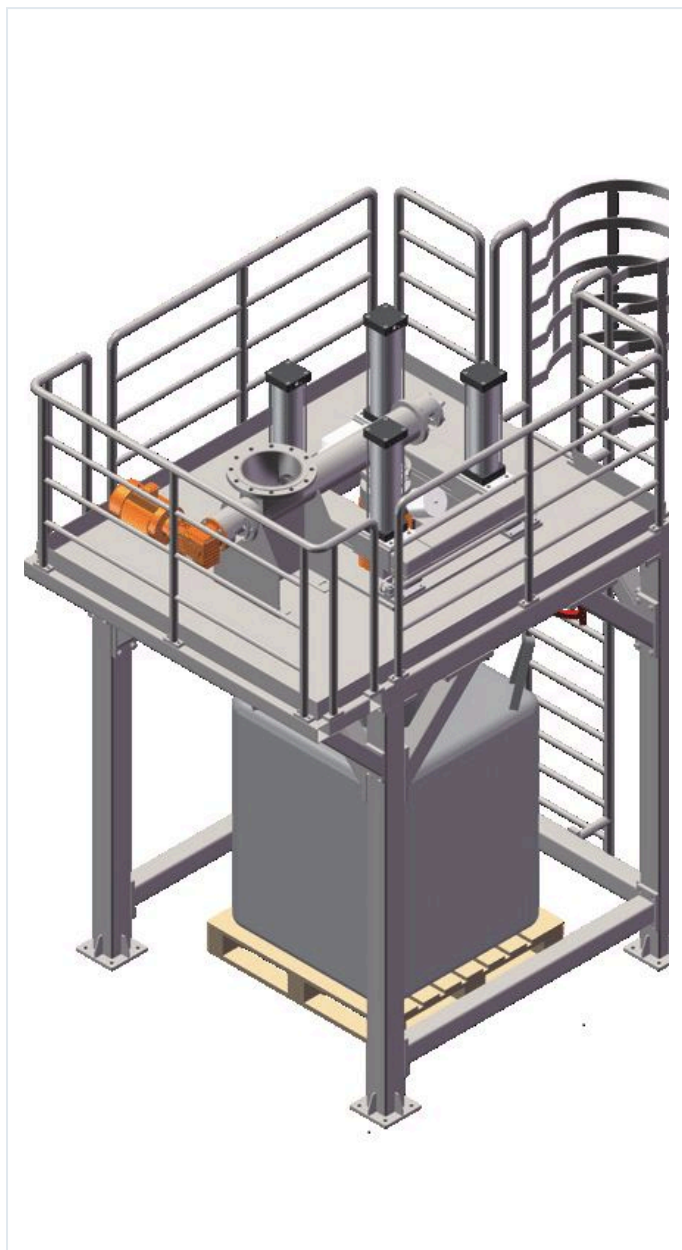
- ◆ Air-fluidized mixing with no internal moving parts — gentle on material, no breakage, maintenance-free
- ◆ Smooth internal walls with no dead corners, large inspection door for fast, easy cleaning
- ◆ Fluidizing plate available in polyethylene or sintered stainless steel, selected by material and hygiene level
- ◆ Pressure-tight and unpressurized versions, connecting directly to dense-phase conveying for segregation-free discharge
- ◆ Optional nozzles for adding liquids / oils and weighing module for metered mixing
- ◆ Expandable with heating, cooling, drying and humidifying functions

Specifications

Model	Volume (L)	Loading Capacity (L)	Vacuum Air Volume (m³/h)	Compressed Air Consumption (m³/h)
QH-2	200	120	80	2
QH-5	500	300	100	3
QH-10	1000	600	150	5
QH-20	2000	1200	200	8
QH-30	3000	1800	250	10
QH-40	4000	2400	300	15



◆ Optional configurations: high-speed star knife (for breaking agglomerates), reversible fluidizing plate (easy cleaning), fluidized-bed pressure monitoring, weighing system, explosion-proof design, etc.



The PB big bag packing machine fills big bags (FIBC) and integrates electronic weighing, automatic bag release and dust collection, with packing specifications of 300–1500 kg available. Automation is high, weighing accuracy is 0.2% and speed is 10–30 bags/h. Two versions are offered — upper weighing (hanging scale) and lower weighing (platform scale) — with screw, gravity or vibration feeding. It can connect with an automatic palletizing line to form an unmanned 'packing–conveying–palletizing' production line, and is widely used for the large-format packing of powders and granules in mining, chemicals, building materials, metallurgy and agriculture.

Working Sequence: The four corners of the bag are hung manually onto cylinder hooks → the cylinder clamps the bag mouth and tares automatically → two-stage fast / slow feeding with a vibrating table compacting in sync → feeding stops automatically at the target weight → the bag is released and unhooked for forklift or roller-conveyor transfer. Dust generated during filling is extracted through the dust collection port, keeping the workplace clean.

Key Features

- ◆ Weighing accuracy 0.2%, packing speed 10–30 bags/h
- ◆ Airbag / double-cylinder belt bag clamping with a fully sealed, dust-proof filling mouth
- ◆ Full sequence: automatic tare → fast feed → slow feed → automatic bag release
- ◆ Synchronous negative-pressure dust collection during filling; dual-layer filling mouth for stable inflation and venting
- ◆ Options: pallet magazine, conveying line, checkweigher, vibrator, bag sewing / heat sealing machine
- ◆ Can connect with an automatic palletizing line to form an unmanned packing line

Specifications

Item	PB-500	PB-1000
Weighing Type	Upper weighing (hanging scale)	Lower weighing (platform scale)
Weighing Range (kg)	300–1000	300–1500
Weighing Accuracy	0.2%	0.2%
Packing Speed (bags/h)	10–30	10–30
Feeding Method	Screw / gravity / vibration	Screw / gravity / vibration
Bag Clamping	Airbag / double-cylinder belt clamping	Airbag / double-cylinder belt clamping
Power & Air Consumption	1.1–3.5 kW	1.1–3.5 kW

※ For selection please provide: lifting strap height, inlet diameter and height, big bag height, and total weight.





The BP small bag packing machine packs 20–50 kg small bags of powder automatically, serving the food, fertilizer, chemical, pharmaceutical, lithium battery and new energy industries. The feeding mechanism, weighing mechanism, bag clamping mechanism, dust collection mechanism and electrical control system are integrated, specifically addressing ultra-fine powder and high-precision packing requirements. The weight sensor supports two-stage (fast / slow) filling; with a heat sealer, bag sewing machine and belt conveyor, it forms a fully automatic packing line.

Model Selection: BP-H25 screw filling type (for free-flowing powders, with a raised frame and chute); BP-S25 screw weighing type (for ultra-fine, poorly aerated materials, with a lifting de-aeration device for bottom-up filling that reduces dust and increases density).

Key Features

- ◆ Weighing accuracy $\pm 0.2\%$ (depending on material characteristics), packing speed 30–60 bags/h
- ◆ Stainless steel frame, modular / open transparent product hopper, tool-free dismantling for cleaning
- ◆ Servo motor driven screw for precise, smooth feeding
- ◆ PLC + touch-screen control with three-stage variable-frequency feeding (fast / medium / slow) and automatic ratio optimization
- ◆ Lifting de-aeration device (some models): bottom-up filling reduces discharge drop and dust while increasing material density
- ◆ Material recovery unit collects packing dust and returns it to the silo for a clean environment

Specifications

Item	BP-H25	BP-S25
Packing Weight (kg)	20–50	20–50
Packing Speed (bags/h)	30–50	40–60
Packing Accuracy	$\pm 0.2\%$	$\pm 0.2\%$
Power (kW)	6	10
Dimensions (mm)	1400×800×3600	1500×800×2800



◆ Optional configurations: pneumatic bag clamping, vibrator, level indicator, weighing module, dust collection and recovery unit. Screw attachments are interchangeable to suit materials from ultra-fine powder to large granules.



The RF vacuum heat sealing machine combines vacuum drawing with hot-press sealing: after the air is evacuated from the bag, both sides are heat-sealed to form a strong seal that blocks moisture, dust and oxygen, extending product shelf life and freshness. Eight working modes (vacuum sealing, direct sealing, gas-flush sealing, cushion gas-flush, etc.) cover different product needs: vacuum sealing suits oxygen-sensitive products such as meat products, cheese and nuts; gas flush (nitrogen / carbon dioxide) suits fresh-keeping products such as fruit, vegetables and baked goods; cushion gas-flush suits fragile items such as potato chips and glassware.

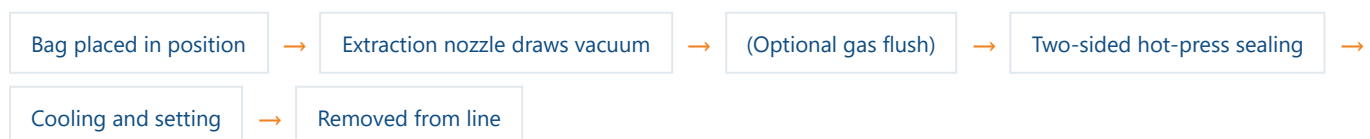
Structural Features: mobile stainless steel body + upper and lower dual heating seal supports + 304 stainless steel extraction nozzle + column for worktable height adjustment; the touch screen stores 10 programs, and the sealing head angle is adjustable from 0–90° with height from 690–1420mm and horizontal position from 990–1490mm freely adjustable, adapting to various bag types and workstation layouts; 4–8 second rapid vacuum drawing for high efficiency.

Key Features

- ◆ Vacuum drawing + two-sided heat sealing in one unit, sealing width 600–1200mm available
- ◆ Eight working modes: vacuum / direct seal / gas flush (modified atmosphere) / cushion gas-flush
- ◆ 4–8 second rapid vacuum drawing with smooth, strong seals
- ◆ Touch screen + 10 stored programs for product changeover without adjustment
- ◆ Sealing head angle 0–90° with adjustable height and horizontal position to suit line layout
- ◆ Optional gas mixer (CO₂ / O₂ / N₂), automatic bag pulling, conveying table, PLC control, two-hand safety buttons

Specifications

Model	RF-600	RF-800	RF-900	RF-1000	RF-1200
Sealing Dimensions (mm)	600×8	800×8	900×8	1000×8	1200×8
Vacuum Pump Power (kW)	0.37	0.37	0.37	0.75	0.75
Heat Sealing Power (kW)	1.1	1.2	1.3	1.4	1.6
Sealing Head Height above Floor (mm)	1–1430	1–1430	1–1430	1–1430	1–1430
Machine Weight (kg)	120	130	155	175	215
Dimensions (mm)	950×960×1800	950×960×1800	1250×960×1800	1250×960×1800	1330×960×1800



◆ Compatible with PE / PP / PVC and other plastic film bags. Optional port for connecting a can-mouth sealer, curing machine or hose to extend sealing functions.



The automatic packaging line integrates automatic bag feeding, weighing and filling, sealing, labelling, inspection and rejection: the entire flow from material supply to finished product output is automated, reducing manual intervention and error rates while ensuring packing consistency. It suits large-scale packaging needs in food, pharmaceutical, chemical, building materials and many other industries.

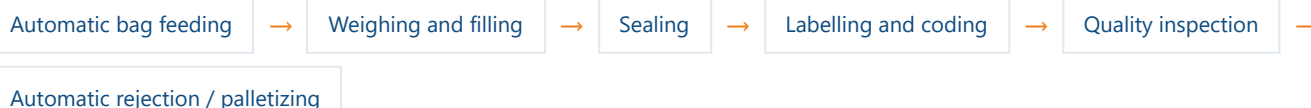
Working Sequence: the automatic bag feeding mechanism delivers bags → the weighing unit meters precisely (with integrated sensors) → heat sealing or vacuum sealing as required → synchronous labelling and coding (batch number / date) → the inspection unit identifies defective packs and rejects them automatically → finished products are conveyed and palletized. The whole line is programmable, with real-time parameter adjustment and support for switching between small-batch and high-volume production speeds.

Key Features

- ◆ High weighing and filling accuracy with integrated sensors to reduce material waste
- ◆ Compatible with plastic, paper and other packaging materials in 5 / 25 / 50 kg formats
- ◆ Gas-tight sealing + precise labelling and coding for complete, attractive packs
- ◆ Built-in inspection sensors automatically identify and reject defective packs
- ◆ Adjustable production speed, suitable for small-batch to high-volume production
- ◆ Complete emergency stop and safety guarding with a user-friendly operator panel

Specifications

Item	Parameter
Packing Specification	5kg / 25kg / 50kg (customizable)
Filling Accuracy	High-precision integrated load cells
Packing Speed	Adjustable by product type and weight
Sealing Method	Heat sealing / vacuum sealing optional
Optional Configurations	Multi-head weigher, date and batch coding, inspection and rejection system



◆ Can connect with upstream feeding, conveying and weighing & dosing systems to form a fully automatic line from raw material to finished product. Specific configurations are customized to capacity and site conditions.



The storage silo & hopper system provides storage and buffering for powders and granules: cylindrical body with conical bottom, mirror-polished walls, 304/316L stainless steel with large-radius transitions and no dead corners, meeting pharmaceutical and food standards. It performs four functions — storage, buffering, batch blending and dosing: long-term storage without deterioration, balancing upstream/downstream supply, homogenizing batches and metered feeding. Auxiliaries: vibrators, discharge valves, load cells, breathing valves, level switches and fluidizers.

Flexible Selection: standard 200L–4000L with custom builds of 1–100m³; cylindrical, conical, square or rectangular designs per site and material; flanged inlet/outlet for flexible interfacing with feeding, conveying, weighing and packing equipment.

Key Features

- ◆ Standard 200L–4000L plus custom 1–100m³ large silos
- ◆ Polished internal walls with radiused transitions and no dead corners, anti-adhesion and easy to clean
- ◆ Cone angle designed around material flowability with arch-breaking devices for smooth discharge
- ◆ Optional weighing module for in-line metering and inventory management
- ◆ Optional vibrator / activation hopper / fluidizing plate / level switch / dust port
- ◆ Sealed against moisture and contamination; dust-explosion protection

Specifications

Volume (L)	Wall Thickness (mm)	Diameter (mm)	Height (mm)	Inlet	Outlet
200	2.5	600	850	DN125	DN150
400	2.5	800	1150	DN150	DN200
600	3	900	1350	DN150	DN200
800	3	1000	1450	DN200	DN200
1000	3	1100	1550	DN200	DN250
1200	3	1200	1635	DN250	DN250
1500	4	1200	1750	DN250	DN250
2000	4	1400	2290	DN300	DN250
3000	4	1500	2180	DN300	DN300
4000	5	1700	2315	DN300	DN300

※ Dimensions for reference; actual size per order. Large silos and special shapes are custom-built per project.

Optional Accessories

Vibrator

Activation Hopper

Weighing Module

Discharge Valve

Fluidizer

Level Switch

Breathing Valve

Dust Collection Port



Weighing Hopper — CZLC Series

A metering storage hopper fitted with load cells and a weighing module: it meters the weight of powder in the hopper in real time and precisely, enabling inventory management, batching and process control. Manufactured in 304 / 316L stainless steel with volumes from 25L–5000L available as custom builds, mirror-polished internal walls with radiused transitions and no dead corners, and an anti-deformation structural design for a service life of more than 10 years.

- ◆ Load cells + weighing module for real-time precision metering, accuracy up to $\pm 0.5\%$
- ◆ Vacuum feeding in / discharge out, low dust and no material loss
- ◆ Pneumatic vibrator breaks arches and assists flow, preventing bridging for smooth discharge
- ◆ Stable leg structure, can be floor-mounted directly with a weighing module
- ◆ Optional CIP spray ball for in-line cleaning and high-pressure washdown compatibility
- ◆ Can interface with mixers, packing scales, elevators, reactors and other equipment



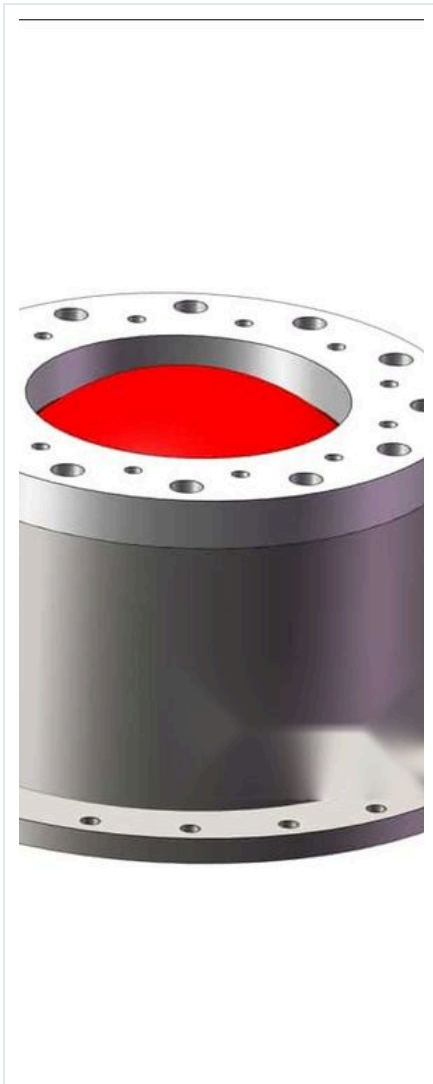
IBC Mobile Container — IBC Series

Intermediate bulk containers (IBC) for the storage, mixing, transfer and transport of powders and granules: a whole batch of material moves with the container through successive production stages, eliminating frequent decanting and providing dust protection, cross-contamination prevention, no segregation and no material loss. High-precision polished internal walls with large-radius 304 / 316L stainless steel and no dead corners meet pharmaceutical and food industry requirements, and polyurethane castors protect cleanroom floors.

- ◆ Whole-batch material transferred as one unit, no decanting between process stages
- ◆ Ball valve hygienic discharge + silicone sealing cover with mis-operation prevention
- ◆ Austenitic 304 stainless steel with radiused internal and external surfaces and no dead corners
- ◆ Can interface with mixers, tablet presses, lifting feeders and other equipment

Volume (L)	Wall Thickness (mm)	Diameter (mm)	Height (mm)	Inlet	Outlet
200	2.5	600	850	DN125	DN150
400	2.5	800	1150	DN150	DN200
600	3	900	1350	DN150	DN200
800	3	1000	1450	DN200	DN200
1000	3	1100	1550	DN200	DN250
1200	3	1200	1635	DN250	DN250

Application notes: The weighing hopper suits precise metering, inventory management and batching integration at fixed workstations; the IBC mobile container suits clean whole-batch transfer between process stages. The two are often combined with mixers and vacuum feeders into a closed 'one material, one container' production pattern, serving the pharmaceutical, food and fine chemical industries.



Dome Valve

Domed valve plate + inflatable sealing ring construction: on closing, the sealing ring inflates and grips the domed valve plate for a gapless gas-tight seal; on opening, the ring deflates and the plate rotates 90° for full-bore material flow. The sealing face does not contact the material and resists wear, making it ideal for isolating dense-phase conveying systems handling abrasive powders and granules, and the valve of choice for the inlet / outlet of transport vessels.



Inflatable Butterfly Valve

Single disc with 90° rotary opening and closing, and an inflatable valve seat: on closing, the sealing ring inflates to press against the disc for a complete seal; on opening, pressure is released rapidly for flow-through. Complete range of 2"-6" and other sizes, with wafer and lug connection options, used for shut-off, regulation and start-stop control of powder conveying pipelines, with reliable sealing and long service life.



Roots Blower

Positive-displacement twin-lobe intermeshing blower: high air volume at medium pressure and stable operation, serving as the air source for dilute-phase positive-pressure conveying and vacuum feeding systems. An oil-free version meets food and pharmaceutical cleanliness requirements; the construction is simple with low maintenance and long life, and it can also be used for material loading and unloading, vacuum drying and inert gas purging.

Also Available

Powder Diverter Valve

Pneumatic Butterfly Valve

Vibrating Screen

Magnetic Separator

Pulse Jet Dust Collector

Activation Hopper

Level Indicator

Weighing Module

Dust Filter Cartridge

Flexible Connection

All the above valves and components can be flexibly combined with feeding, conveying, weighing and packing systems — please contact us for selection assistance.

CHUYAO equipment is widely used in powder handling operations across new energy battery materials, food, pharmaceutical, chemical, plastics, coatings and paints, agrochemicals, building materials, water treatment and other industries.



New Energy · Battery Materials

BATTERY MATERIALS

Feeding, vacuum conveying, weighing & dosing, iron removal and packing of NCM cathode materials, anode graphite, graphene and other powders



Pharmaceutical

PHARMACEUTICAL

Closed-loop conveying and precise dosing of APIs and antibiotics, with hygienic design meeting GMP cleanliness requirements



Food

FOOD

Screening, mixing, conveying and packing of milk powder, food ingredients and additives — safe, hygienic and contamination-free



Chemical

CHEMICAL

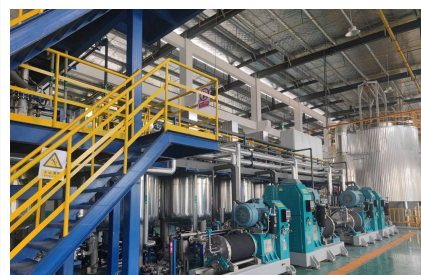
Closed-loop conveying, weighing and packing, and big bag filling of pigments, coatings, PVC, copper oxide and other powders and granules



Polymers & Plastics

POLYMERS & PLASTICS

Pneumatic conveying, automatic batching and mixing of masterbatch and engineering plastic pellets, with precise loss-in-weight proportioning



Metallurgy & Building Materials

METALLURGY & BUILDING

High-flow truck unloading, dense-phase conveying and storage of alumina, mineral powder, cement, quartz sand and other powders and granules



Paints & Coatings

PAINTS & COATINGS

Air jet ultra-fine grinding, de-agglomeration and dispersion, and closed-loop conveying of titanium dioxide and pigment powders with controllable fineness



Agrochemicals & Veterinary Drugs

AGROCHEMICALS

Dust-free feeding, mixing and batching, and automatic packing of pesticide powders and veterinary additives



Water & Wastewater

WATER & WASTEWATER

Shaftless screw conveying of sludge, waste and other difficult materials, plus dust-free feeding and dosing of chemical powders

A selection of our clients (in no particular order), covering new energy, food, non-ferrous metallurgy, chemical and pharmaceutical industries.

New Energy / Battery Materials

Zhejiang Huayou Cobalt; Hunan Brunp Recycling; Jiangxi Zichen Technology; Jiangsu Zhongtian Technology; Xiamen Taiqi Lifei Graphene

Food Industry

Songjiang Baoli Food; Qingdao Jindayang Dairy; Henan Weilong Food; Suzhou Wenda Food Ingredients

Non-ferrous Metals / Metallurgy

Aluminum Corporation of China; Taixing Smelter; Taihe Metal Industry

Chemical Industry

Zhonghao 3F New Materials; Donggang Group Qianjin Chemical Plant

Pharmaceutical Industry

Zhejiang Haixiang Pharmaceutical; Zhejiang Jiuzhou Pharmaceutical; Lianhe Technology

Typical Project Process Routes

Battery Materials Vacuum conveying → Weighing & dosing → Mixing → Screening → Iron removal → Packing

Anode Graphite Drying → Mixing → Vibrating screen → Vacuum conveying → Storage tank → Rotary valve → Iron remover → Big bag packer

Container Unloading Container unloading platform → Enclosed pneumatic conveying (case: 40 t/h, 40 m vertical + 20 m horizontal)

Milk Powder Blending Spray drying → Vacuum conveying → Weighing & dosing → Mixing → Vibrating screen → Vacuum conveying → Packing

Active Pharmaceutical Ingredient Double-cone drying → Milling & granulating → Vacuum conveying → Big bag packer

Chemical Powder Dust-free feeding → Vacuum feeding → Buffer silo → Small / big bag packing → Heat sealing / bag sewing

Selected Engineering Cases

Multi-point Feeding System Centralized vacuum conveying from multiple feeding points, solving low efficiency and easy blockage in multi-station powder feeding

Automatic Batching for Rubber Integrated automatic weighing, dosing and conveying, replacing manual weighing and improving batching accuracy and efficiency

Alumina Polishing Material Vacuum feeding + pneumatic conveying for automatic feeding, achieving dust-free production and a better workshop environment

Dust-free Calcium Carbonate Conveying Combined dust-free feeding + vacuum conveying solution, eliminating manual feeding dust for a clean, environmentally friendly process

The company has complete sheet-metal, welding, machining and assembly capabilities. Every unit is manufactured to a standardized process flow to ensure stable and reliable quality.

01

Sheet Metal Forming

Laser cutting / shearing, edge folding, plate rolling and sheet-metal fitting ensure shell roundness and flatness

02

Welding

TIG and other welding processes produce uniform, strong welds with controlled distortion

03

Grinding & Polishing

Internal and external welds are ground and polished for smooth, adhesion-resistant and easy-to-clean surfaces

04

Pickling & Passivation

Stainless steel surfaces are pickled and passivated to form a protective film and enhance corrosion resistance

05

Machining

Conventional lathes, CNC, milling machines and machining centres precisely produce flanges, shafts and fittings

06

Assembly & Inspection

Complete assembly, powered commissioning, air-tightness and running tests before dispatch



Technology-Driven, Quality-Focused

High value for money — outstanding quality at a reasonable price. From cutting to dispatch, every process step is assigned to a responsible person and critical dimensions are fully inspected, providing users with safe, hygienic and durable powder handling equipment.

304 / 316L

Sanitary material options

Polished Internals

Adhesion-resistant, easy to clean

Pickled & Passivated

Corrosion-resistant surface

Fully Inspected

Controlled critical processes

Critical process stages need a reliable long-term partner. CHUYAO provides six service systems covering the entire project lifecycle, with tailored service plans that keep your production system running efficiently.

Process Engineering

01

ENGINEERING

Conveying solution design and on-site optimization based on material properties and site conditions: integrated engineering from workshop layout, pipe routing and equipment selection to the control system, with layout drawings and process flow diagrams to ensure the system is designed right the first time

Application Assessment

02

APPLICATION ASSESSMENT

Professional assessment and selection trial recommendations for your material and process, using our test platform to evaluate flowability and conveying performance, verifying process feasibility, avoiding investment risk and tailoring the optimal material handling solution

Installation & Startup

03

COMMISSIONING & TRAINING

Site installation and single-unit / linked commissioning by a professional team, pipeline air-tightness testing and system parameter tuning, together with operator training and technical briefing, delivering complete as-built documentation for rapid ramp-up

Monitoring & Prevention

04

MONITORING & PREVENTION

Regular inspection and wear-part condition monitoring to detect wear and hidden risks early; equipment operation records, proactive prevention of unplanned downtime, and seasonal maintenance and annual overhaul recommendations to extend service life

Automated Control

05

AUTOMATED CONTROL

Design and upgrade of PLC / host computer control systems with integrated recipe management, data traceability, remote monitoring and fault alarms; supports integration with factory MES / DCS systems for smarter production and more efficient management

Support & Consulting

06

SUPPORT & CONSULTING

Stock of common spare parts, rapid technical hotline response and process consulting; dedicated technical support for equipment relocation, line expansion and legacy line upgrading — safeguarding your investment throughout

Consultation
CONSULTATION



Material Testing
TESTING



Engineering
ENGINEERING



Manufacturing
MANUFACTURING



Commissioning
COMMISSIONING



Service
SERVICE

24h

Technical Response

72h

On-site Service

Lifetime

Spare Parts & Support

Annual

Complimentary Inspection

Our commitment: free selection calculation and system design · warranty on key components · lifetime technical support · rapid spare parts response. Choose CHUYAO — a partner dedicated to your success.

CYprocess



COOPERATION · INNOVATION · WIN-WIN

TOGETHER FOR BETTER POWDER HANDLING

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Website www.cyprocess.com

Scope Feeding · Conveying · Weighing & Dosing · Milling & Mixing · Storage · Packing · Valves

Specifications in this brochure are for general selection reference; the final configuration is subject to the technical agreement. Custom solutions to your drawings and samples are welcome.