

Powder Handling Solutions

Pneumatic Conveying System (Powder Transfer System)

All kinds of manufacturing industries processes need different kinds of pneumatic conveying systems and we at Vision are proud to have the best and the widest range of these systems. Different kinds of industries need different specifications when it comes to these pneumatic conveyors and we have something to match all requirements. Our conveyor systems used in industries as varied are pharmaceuticals, chemical industries, and various food industries and even in the packaging industry.

The quality and accuracy of our conveying systems are built on a solid foundation of dedication to client satisfaction and with the latest updated technology. Our team of specialists and engineers are industry experts and can not



only design the best pneumatic systems but also ensure that the features suit the individual client as well.

Key Features:

- Added flexibility.
- Low maintenance.
- Elevated safety.
- Less spillage and dust.
- o Improved sanitation.
- Custom designed system solutions by our experts.
- Reliability and performance by implementing highend, proven system components.
- Transportation over long vertical and horizontal distances.
- Minimum space required.
- Easy cleaning features of system components.
- GMP compliant design, high quality surface finishes, no dead spaces.





Powder Handling Solutions

Belt Conveyor

Vision Turnkey Projects designs and manufactures Belt Conveyors to meet the needs of many industries, such as Chemical, Minerals Processing, Food, Wood Products and Wastewater Treatment.

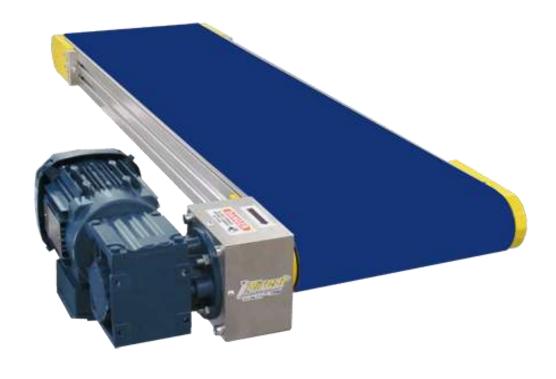


Vision's Belt Conveyors are custom

designed for your application based on proven industry standards. Bulk material characteristics, feed-rate, loading requirements and temperature are some of the parameters that we consider when designing belt conveyors.

Available Features / Options:

- Dust-Tight Construction To Eliminate Dust Emissions.
- High Torque Drive Units To Power Through Upset Conditions.
- Heavy-Duty Structural Frames and Supports To Provide System Rigidity.
- Heavy-Duty Idlers with Anti-Friction Bearings To Increase Idler Life and Reduce.
 Horsepower Requirements.
- Abrasion Resistant Belting To Reduce Wear and Increase Life.





Powder Handling Solutions

Screw Conveyor

We design and manufacturing of screw conveyors in all configurations: vertical, inclined, plug screws, feeders, mixers, heating/cooling. We have excelled in delivering quality products and exceptional customer service. Discuss your custom needs with one of our project engineers today!

Features and Options:

- Heavy duty construction ex mild steel, SS304/316 or special alloys
- Customised designs to suit each application
- Sanitary design to dairy standards
- Outboard bearings and packed gland / air purged shaft seals
- o Tubular / trough designs with access and
- Variable pitch augers to encourage mass flow.
- Half pitch augers to prevent flushing of freeflowing fluidised products.
- Double flight designs to provide even continuous discharge rates
- Live Bed multi auger designs for cohesive or easily bridging products
- Suitable for Indoor or Outdoor applications
- Multi inlet / outlet designs to suit special applications
- GMP compliant design, high quality surface finish, no dead spaces.







Powder Handling Solutions

Roller Conveyor

Our roller conveyers offer good support for the bottom surfaces of items to the be These transported. roller systems will ensure that your items will be moving smoothly along the



belt. With our commitment to customer service we are driven to ensure only the top of the line product for our greatest asset, you the customer. Our qualified staff is standing by to answer any questions you may have. If you need more information fill out the enquiry form on our contact us page or send us a personalized email.

Features:

- Rollers are designed for smooth rotation, low noise, and long service life.
- Diameter range: 35mm to 50 mm, other diameters available on your request.
- o Pipe length: 180mm to 3500 mm, other length available on your request.
- Water proof and dust proof.
- Each roller come out through strict inspection and test to ensure high level quality.
- o Roller Surface Colour: Any colour as per customer request.





Powder Handling Solutions

Bag Dumping Station

- Vision offers filtered and non-filtered bag dump station units for breaking open small bags (25kg, 50Kg, etc.).
- O If your project or product requires dust containment, the dual filter system provides greater cleanliness and productiveness for your manufacturing facility and BDS with glove box arrangement is also useful for the handling of hazardous materials in closed loop.
- Our manual bag dumping stations allow for efficient dumping of small bags of bulk materials while effectively reducing loss of product through dusting.
- Our Automatic Bag Emptying System helps in conveying, cutting and emptying of small bags in larger quantities with minimal wastage of material.
- Our Bag Dumping Station comes with the dust collection system reduces the dust that is naturally generated when material is emptied from bags, boxes, drums, and other containers, into the collection hopper.
- O This creates a more effective, efficient, and ergonomic bag dispensing system. All Stainless Steel constructed bag dumping stations.







Powder Handling Solutions

Drum Containment System

The DCS (Drum Containment System) is a cylindrical glove box made of Stainless Steel, which comes with glass cover and two glove ports. DCS ensures precise evacuation of drums, free of contamination in a closed loop.

Drum containment system (DCS) is usually used where the product to be handled is hygroscopic or hazardous and needs to be evacuated dust free and spill free.

Drum containment system (DCS) is supported by the pneumatic conveying system to empty the drums or bags through vacuum, in closed loop.

Salient Features:

- Glove Box arrangement.
- In feed & out feed idler conveyor.
- Inflatable Bellow.
- Suction lance with lifting arrangement.
- Online weighing.
- Inbuilt De Dusting System.



Vision Turnkey Projects can design the suitable containment system for your purpose based on the application.

Advantages:

- Hazardous and hygroscopic products can be dealt with safety.
- System can trolley mounted for more feasibility.
- Can be integrated with other equipments for a suitable unloading system.
- Various material of construction can be used: SS316, SS304, MS etc.



Powder Handling Solutions

Big Bag Unloading System

Our Big-Bag unloading systems are specifically designed for unloading a large variety of products different types of Big Bags. They eliminate dust emissions, product loss or product contamination. This modular range encompasses the discharge of single or Multi-trip bags, with or without plastic liner. Also, a of unique options number available for the safe and hygienic discharge of food ingredients. pharmaceutical products and toxic materials.

Features and options

- Bulk Bag Support Hopper-Designed to seat and seal the bulk bag before it is opened.
- Dust Control- Standard twopoint dust collection.
- Massaging System- This assures complete emptying of the bulk bag contents without need for repositioning or adjusting the bulk bag.
- Clamping system To achieve a dust-proof connection of the outlet spout (very suitable for hygienic application and to form a vacuum in the emptied Big-Bag)
- De-dusting unit- Multiple types and sizes available, attuned to the product
- Product discharge system- Metering screw conveyors, slide or rotary valves
- Closed housing/chamber- For toxic or very dusty powders
- Powder diverter valve to avoid contamination of the product by dust/dirt at the outside of Big-Bag.
- Integrated Sifting, Lump breaking and Milling Systems
- · Weighing system; to monitor the product flow





Powder Handling Solutions

Conical Blender

Conical Blender is normally used for mixing pigment, dyestuff, chemicals, battery, etc.

- The main features are: Full discharge and no leftover; Gentle mixing, No damage to fragile material.
- Material can be carbon steel, manganese steel, ss304, 316L and 321; different material can also be used in parts, between the part contact with the raw material and the parts don't contact with the raw material.
- Surface treatment for stainless steel can be Sandblasting, Wiredrawing, Polishing, Mirror polishing, Glass bidding. The driven unit and power is varied according to different raw
 - material, starting method, and processing. Double screw conical mixer is equipped with appropriative double output reducer, which combines pinwheel, gear and warm and gear.
- Spherical valve or plum-blossom dislocation valve is matched to the double screw conical mixer.
- The surface of the valve matches the track of the bottom of screw, to reduce the mixing dead zone to the maximum, and to make the largest discharging area, so as to make sure no leftover.
- Spherical valve has excellent sealing effect to powder, liquid and even in the negative pressure state.
- o Plum-blossom dislocation valve is easy to operate and control the discharging speed.
- Equipped with circulation medium of jacket, the double screw conical mixer can realize the temperature control in mixing process.
- o In the mixer barrel, the part contact with material can coat some antiriot, anti-caking and metal isolation material according to different ingredient.
- In some severe wear conditions, the screw surface can be overlaid by some wear proof alloy.
- o If a small quantity of liquid is required during mixing, spraying or atomizing unit is necessary in order to mix the liquid evenly with the main ingredient. The liquid-adding system is basically composed by the three parts: pressure source, liquid storage pot and spraying nozzles.





Powder Handling Solutions

Octagonal blender / Double Cone Blender -

- The Octagonal/Double Cone Blender is an efficient and versatile blending machine for mixing and lubrication process of dry granules homogeneously.
- Two third of the volume of the Cone Blender is filled to ensure proper mixing.
- The Octagonal Blender gives best result for granules due to very slow speed and octagon shape of container.
- It can be used for Pharmaceutical, Food, Chemical and Cosmetic products etc.
- o In Octagonal Blender the granules come from all sides due to the octagonal shape of the product container, hence requirement of RPM is less.
- O It is Suitable mainly for Crystalline & Granular type material. This type of material gets sufficient continuous movement due to their shape if containers have only slow movement and will results in good quality of blending / lubrication of granules.







Powder Handling Solutions

Ribbon Blender

Ribbon Blenders is design to provide high mixing efficiency, blending small proportions into large stocks. Ribbon Blender is primarily designed for use with dry materials, although gas and liquid streams can also be introduced.

- A wide variety of configurations, for either batch or continuous mixing, are available.
- Application specific rotor mixing element design allows shorter batch cycle times due to increased mixing efficiency.
- Efficient mixing also provides good heat transfer through optional ASME Code designed jackets for heating or cooling applications.
- The compact and robust construction dust proof operation ensures their negligible running costs.
- We can offer these in various customized sizes/finishes.
- We provide custom made size design of the Ribbon Blender to meet your specific mixing requirements.
- Mixing vessels can be standard U-shape or cylindrical depending on internal pressure or vacuum requirements.
- Material finishes available ranging are from industrial coatings to dairy grade polishes.

The classic Ribbon Blender serves multi-purpose uses in the manufacture of

- Food, beverage
- o Pharmaceutical
- Cosmetic
- Chemical
- o Plastic
- Agricultural and other products.

Given its versatility and economy, the Ribbon Blender is often the choice for most straight forward blending requirements. In a well-made Ribbon Blender, precisely designed and fabricated ribbons turn within a close-tolerance horizontal trough to produce a balanced lateral and radial movement of the batch materials. Blending cycles are relatively fast and mix quality is not hard to duplicate from batch to batch. In principle, it requires very little maintenance even when subjected to frequent product changeovers. Scaling up from a pilot Ribbon Blender operation to large volume production is also generally uncomplicated. Despite these proven advantages, as with other types of mixers and process equipment, optimal mixing performance in the Ribbon Blender still starts with proper sizing, specification and customization





Powder Handling Solutions

Specialized Equipment's

Hopper / Silo / Tanks -

We offer factory welded silos manufactured from steel, stainless steel. Every job is custom built per customer specifications by Certified Welders. We also offer design and engineering for custom applications



Rotary Airlock Valves

Rotary Valves are one of the most common means of feeding pneumatic conveying systems, both pressure and vacuum types. There are many other applications where they are used simply for metering of a controlled feed rate. Conveying systems with rotary valves can be turned into pressure or suction systems. Vision offers an extensive product range including standard rotary valves as well as hygienic valves, suitable for food and pharmaceutical industries.

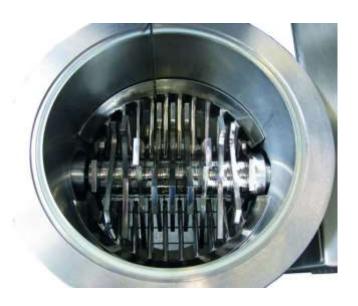




Powder Handling Solutions

Lump Breaker (Delumper)

Our lump breakers are the perfect solution for grinding materials that tend to form lumps. The device allows breaking the lumps that form during the production or transportation process of friable materials in powder or grain. The fast rotation of



specially shaped blades through a fixed mesh gives an efficient lump breaking action.

Dust Collecting Solutions

The particles released during manufacturing processes are hazardous to both worker and equipment health, quickly leading to a number of problems if particles are not captured by dust collection equipment and filtered from facility air. Dust collection addresses this problem by drawing contaminated air through a filter separator, trapping harmful particles and releasing cleaner air into the atmosphere or back onto the work floor. Industrial dust collectors come in various types and sizes, including fabric filter bag houses and jet dust collectors, cartridge collectors, small dust collectors, portable dust collectors, and dust collecting systems complete with multiple suction hoods and overhanging ductwork.





Powder Handling Solutions

Small Bag Filling Machine

We offer our clients with Big Bag Filling Machine which are precision engineered to fill material which are difficult to handle. This high precision weighing is coupled with a truncated table with pyramid high power vibrators. The iumbo bag filling machines can be customized, as per clients drawing and specifications.

The salient features are as follow:

- Before leaving the filling station the filled material is weighed desecrated & dandified Bags are stable, stackable, safe & easy to handle
- Empty bags are mounted by four loops hanging of the bulk bags on the suspended weigh frames making them easy to reach posts
- The inlet spout is protected to the flared end of filling head by a slip ring seal which allows appropriate positioning of the liner
- Filling cycle is controlled by the micro-controller for efficient filling
- Roller conveyor is also used for making it more durable.
- Available Quantities: 25, 50, 100 kgs.
- Available Sizes: 900 x 900 x 1200 mm or 900 x 900 x 1400 mm
- The SBFM can customised for any bag size or filling rate.





Powder Handling Solutions

Jumbo/Big Bag Filling Machine

We are manufacturer of Big-Bag unloading systems which are specifically designed for unloading a large variety of products from different types of Big Bags. They eliminate dust emissions, product loss or product contamination. This modular range encompasses the discharge of single or Multi-trip bags, with or without plastic liner. Also, a number of unique options are available for the safe and hygienic discharge of food ingredients, pharmaceutical products and toxic materials.

The salient features are as follow:

- Long-lasting robust frame designed for your special bag size and application.
- Fit tight spaces with a customdesigned frame when you need to work around or straddle another piece of equipment or obstruction or have restricted headroom.
- Manually dump smaller bags/minor ingredients with our integral bag dump station.
- o Pneumatic Bag Agitation.
- Pneumatic side puncher bag agitation.
- Weighing of Big Bag during discharge.
- o Integral dust handling.
- GMP compliant design, high quality surface.

