AEROCON

Aero-Conveyors

THE ECONOMICAL AND EFFICIENT METHOD FOR MOVING DRY MATERIAL

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The Aerocon Concept of Aero-Conveying

Aero-Conveying is best defined as the movement of material using the desirable features of both pneumatic and mechanical conveying, and eliminating most of the disadvantages. The result is high volume, controlled transfer of dry materials such as foods, pharmaceuticals and chemical products, efficiently and economically, with little if any effect on the material, however friable and degradable.

Aerocon Systems Are Versatile

With the ability to convey through multi-planes, around corners, at any angle from 0° to 180°, and at a variety of conveying speeds, the Aerocon System is highly versatile.

This versatility is not limited to the ability to match site geometry, but includes the versatility of the product conveyed. The system allows for a range of bulk densities from as low as 5 pounds per cubic foot to 200 pounds per cubic foot, a range of particle sizes from 5 micron to ½" pieces, and a range of powder properties from free flowing to cohesive, all to be handled by the same machine.

True versatility is not just where the machine can be used, but also the range of materials it can handle.

Let Us Test Your Product

Aerocon welcomes the challenge to handle difficult products under difficult conditions. These include non-free flowing materials, friable products and work area cleanliness requirements. Systems are designed to successfully handle many materials that others say cannot be handled aero-mechanically.

Aerocon Conveying Systems Are Engineered to Meet Your Total Process Requirements

As part of the VAC-U-MAX Group of Companies, Aerocon is proud to be able to offer some of the finest Bulk Material Handling equipment available. This includes Bulk Bag Loaders and Unloaders, Volumetric Feeders, Bag Dump Stations, Compactors, Weigh Systems, Control Valves and Control Systems. Each has been tailored to attach to, or with, our conveyors. Our state

Typical Products Handled

Aerocon Conveying Systems around the world are successfully transferring a diverse list of products of the powder, pelletized and granular forms:

CHEMICALS
Carbon black
Chlorine powder
Detergent fines
Diatomaceous earth
Ferric sulphate
Gypsum
Lead oxide
Silica gel
Soap
Titanium dioxide
Zinc stearate

PHARMACEUTICALS
Alkalines
Aspirin
Boric acid
Dental powder
Epsom salts
Gelatin capsules
Lactose
Niacin
Tablet granulations
Vitamins

FOODS
Caffeine powder
Cut tea
Herbal tea
Cake mix
Cereal
Coffee beans
Color powder
Cocoa beans
Dextrose
Flour
Garlic powder
Onion flakes, dried
Pasta shells
Potato chips
Rice
Salt
Starch
Sugar
Waffle Mix

OTHER PRODUCTS
Fiberglass, chopped
Grout
Rubber crumbs

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Typical Applications of Aerocon Conveyor Systems

The following schematic diagram and photographs illustrate a few of the many applications of Aerocon Aero-Conveyors in various configurations. These systems illustrate the flexibility and wide range of products handled. In addition, an extensive range of auxiliary equipment is available, giving true total solution ability to Aerocon Engineers.

Basic "Up and In" Series 200

The original and most simple application of aero-conveying in which product is fed into the sprocket end of the machine from a controlled feed and transferred in a straight line to a discharge point where it leaves the conveyor under centrifugal force. High volume, high linear velocity, lean phase is suitable for non-friable products.

Multi-Plane Series 400

For applications requiring vertical and horizontal combinations of conveying direction using a single drive motor and 90° turn sprockets. May be lean or medium phase conveying, employing either sprocket or tube feed systems, allowing the transfer of semi-friable materials.

Multi-Plane Distribution Series 500

Used where multiple inlets and/or outlets are required or where the layout does not permit the standard close coupling of the conveying tubes. Can accommodate bag frames, bag dump stations, discharge from mixers, and combinations thereof. Also used to feed multiple packing machines, hoppers, reactors and similar machines. Can be either lean or medium phase, non-friable and semi-friable products.

Long Radius Sweep Bend Service Series 300

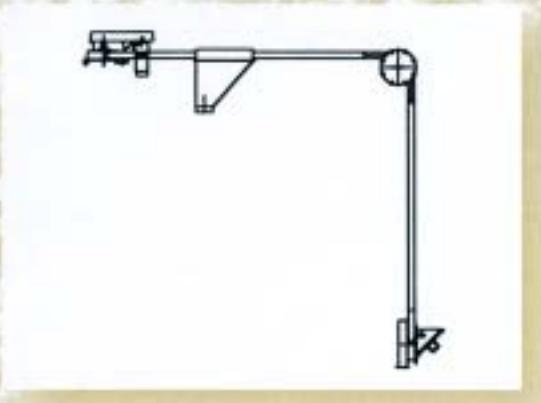
Particularly useful for handling the most friable of materials. Limited to changes of plane not exceeding 60°, this slow speed, dense phase method of conveying still maintains enough velocity to achieve some aeration, yet handles products such as rolled oats, bran flakes and similar friable products.

Combination Systems

By using the combination or combinations of any of the above conveyor types, Aerocon Engineers can tailor almost any application to provide the highest throughputs with the lowest levels of product degradation. Successful installations involving the bulk transfer and distribution of tea, coffee, cake mixes, filter agents and plastic compounds to a variety of packing machines, reactor vessels and mixers have all been achieved using these techniques.

TYPE 250V

TYPE 450H



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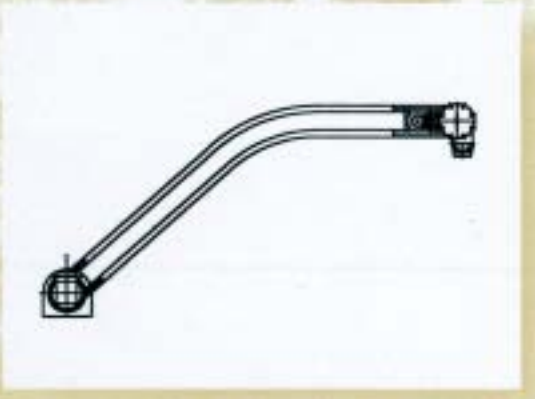

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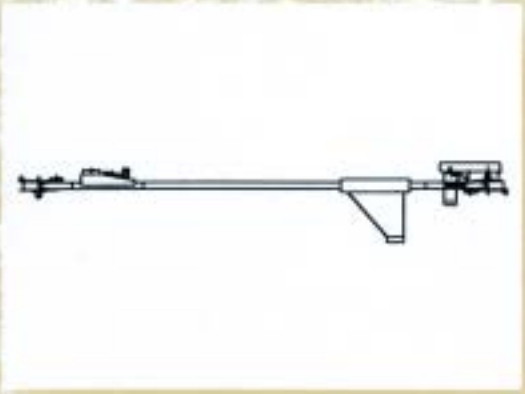

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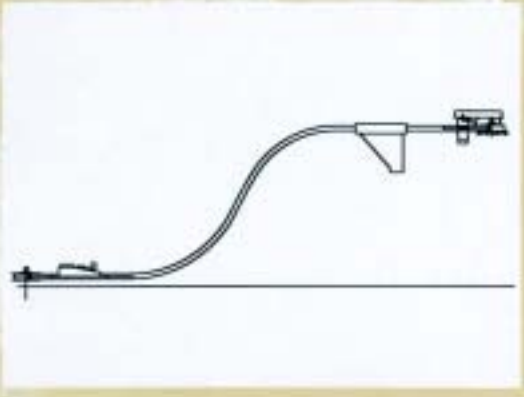

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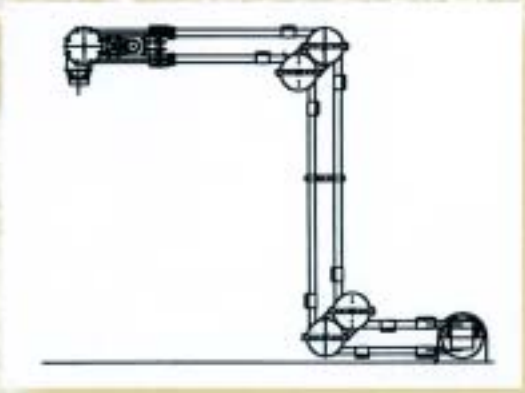

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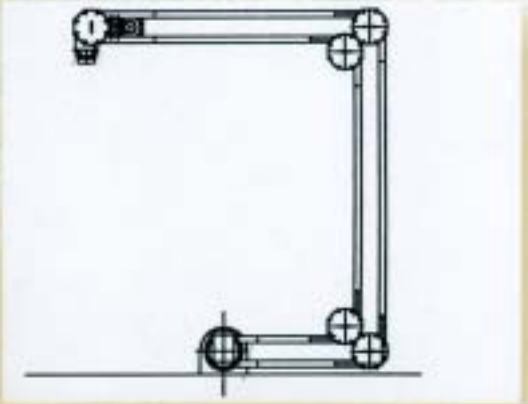

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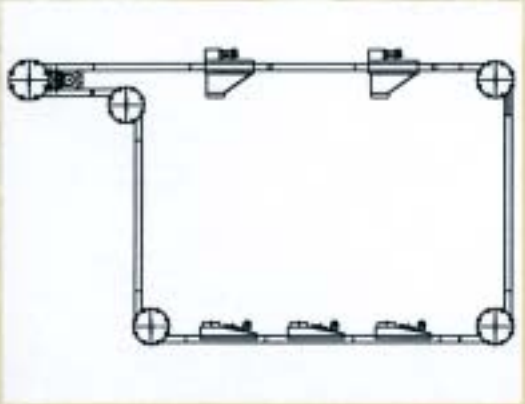

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Each System is Designed Using Our Extensive Range of Products

Inlets

We offer a variety of inlet hoppers, each designed for quick attachment to the conveyor: gravity, vibration or air slide assisted, and direct tube feed, all feature a flow regulating gate that is accessed from outside the hopper.

Outlets

Traditional centrifugal discharge type, gravity tube outlets and zero dead-pocket rotating tube valve outlets (RTV) allow single or multiple outlets to the conveyors. Remote operation of isolation valves or the RTV allows for the selection of individual destination points.

Controls

From simple starter panels to sophisticated PLC based integrated systems, our control department can provide all the necessary equipment to meet the most discerning needs.

Bulk Bag Unloaders

Recipient of the prestigious Food Processing Magazine Design Award and accepted by the USDA for food applications, the Bulk Bag Unloader boasts a list of the most advanced features available. Includes bag tensioning, patented panel agitation for flow promotion, and a variety of outlet designs, bag hook-up configurations, dust suppression techniques, and associated equipment to meet the most demanding of client needs.

Hover-Lift™

The Hover-Lift by VAC-U-MAX is a vacuum lifting device for maneuvering and lifting objects weighing up to 150 pounds, including boxes, bags and drums.

Bag Dump Stations

Sturdy, ergonomic and high efficiency bag dump stations featuring optional bag, cartridge or HEPA filters, reverse jet cleaning, and available in USDA approved variants. Each unit is equipped with integrated dust hood and gas spring assisted lift up door.

Volumetric And Loss-In-Weight Feeders

Designed specifically to fit beneath the Bulk Bag Unloader, these wedge-shaped robust units include Flexwall flow promotion options, and coupled on load cells on the bag frame can provide high accuracy weighing not normally associated with bulk bag unloading.

Sales and Service Support

Through our network of representatives, or by the use of our own direct employees, Aerocon is committed to provide the very best in service to all our clients. This includes installation and startup assistance as well as the expected after-sales service.

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