

Pneumatic Conveying



...a world of experience to meet your powder handling challenges

 **IEDCO** VEYORS

Industrial Equipment & Design Company

Pneumatic Conveying Systems

IEDCOveyor Conveying Systems



IEDCO has been a leader in pneumatic conveying systems for over a decade.

Our experience and expertise in this field result in the designing of successful solutions to many dry solids handling challenges.

IEDCO's success has been attributed to our continuous development and innovative approach taken to satisfy the ever increasing variety of applications for vacuum technology.

Our IEDCOveyor Systems are custom designed to suit a wide range of duties and have set new benchmarks in relation to economy, quality and cost-performance-ratio.

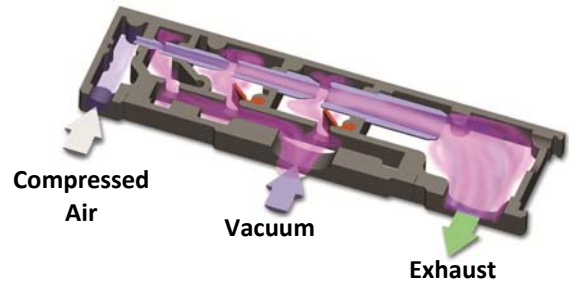
The IEDCOveyor Conveying Systems transport the most diverse materials, including: powder, dust, pigments, granulated material, tablets, capsules, small parts, etc.



Vacuum Pumps



The heart of the system is the vacuum pump, which creates the reduction in low pressure or suction that moves the material from its source to the collection container. By using a compressed air-driven vacuum pump, the unit is inherently explosion-proof and can ramp up to 90% of a full vacuum, as necessary.



Vacuum pumps driven by compressed air also have the advantage of being virtually maintenance-free, whisper quiet and not emitting any heat. In addition, they are easier to control as they react very quickly. The pump only runs during the suction period and is at rest, saving energy, at other times.

Control System

All vacuum conveying systems require a control system. This may be designed in many different configurations to suit the application and environment. To satisfy these demands, controls may be fully pneumatic, fully electrical or a combination of both.

Systems may incorporate separate units requiring independent control, or be part of an integrated control system where slave units receive signals from a client's management system. IEDCO can design the controls to meet your application specific needs.



Filters

When the material, together with the conveying air, enters the collection container, most particles are separated out, due to a drop in velocity.

A small amount of fine particles follow the air to the filters, where they are collected. The clean air continues through the vacuum pump exhaust.

The filter material used can be of a number of choices depending on specific applications: Polyester PTFE, Stainless Steel, HEPA, UHMWPE (Polyethylene).



IEDCO Porta-Lift

The IEDCO Porta-Lift is a pneumatic column lift (on which a vacuum conveyor can be mounted) that is configured with a counterweighted base, casters and outriggers.

This allows the system to be used throughout the plant without modification to any downstream equipment.

A single air connection is all that is required and all lift and conveyor controls are integrated compactly into the counterweight base.

The castors are non marking Pevolon casters with stainless trucks, swivels and caster locks.



IEDCO's Porta-Batch System

Designed to batch product from bulk containers, the Portable IEDCO-Batch System allows operators to use a single system in different areas within a processing facility.

Specifically developed to eliminate operators scooping product from container to container - along with all the safety & ergonomic issues that involves.



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Feeder Valve



Butterfly Valve

In order to create a vacuum and to then discharge product, the conveyor is normally fit with a sanitary butterfly valve. If the conveyor is part of a batching system, a sanitary rotary valve is used as a highly accurate discharge feeder. Each includes:

- 4", 6", 8", 10" or 12" Tri-clamp ferrule on both sides of valve, as required
- Two (2) Tri-clamp gaskets, white EPDM, FDA accepted
- Two (2) clamps for attachment



Rotary Valve

Vacuum Feed Wand

A Vacuum Feed Wand is furnished as the standard method of feed of the product into the vacuum transfer system from a drum or other similar container. A Vacuum Feed Lance Holster is also provided and comes in handy for a convenient place to store the wand, in the upright position, when not in use.



Feed Station Hopper



As an alternative to a Feed Wand, **IEDCO** can provide feed station hoppers of any size or configuration to introduce the product into the conveying stream.

This configuration allows for optimum material conveying and offers full adjustability. Further, it allows for additional system automation and reliable feed of material into the system.

Fluidization cones can be provided for difficult to flow materials. These cones prevent bridging and provide for a finely distributed air stream that creates a cushion or film that reduces friction between materials and the pick-up components, enhancing particle movement. Vibrators are also available.

