PNEUMATIC TRANSFER FROM STORAGE

by
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FLSmidth Pneumatic Transport Distribution Systems
Methods of Transport from Storage

- Air/Gravity Conveying
- Mechanical Line Injection
- Pneumatic Line Injection
The Effect of Fluidization

- Fluidizable product poured onto an Airslide™
- Watch what happens when the air is turned on
Air/Gravity Conveyor

Pneumatic Flow in an Airslide™

Fluidizing and air assisted gravity conveying
Airslide™ Conveying System

A wide range of accessories adapts the airslide conveying system to a variety of applications. These components have a performance-proven reputation in the conveying of dry, free-flowing solids.
Fuller Airlift®

The Fuller Airlift System is characteristically a predominantly maintenance-free, reliable, vertical conveyor.

The only moving parts are the material and air supply. The totally enclosed design provides a completely dust-free operation when connected to a dust collection system.

A Fuller Airlift System consists of a feed bin, pipe, disengaging bin (alleviator) and one or two air supplies. The aeration air aerates the bottom of the feed bin, fluidizing the material within. The primary air conveys the material upward through the Airlift pipe.

In operation, the Airlift System is a self-compensating system. As the product feed rate increases or decreases, the fluid level and conveying rate conform to such changes. Therefore, the Airlift System matches the conveying rate to the incoming feed, and compensates for any variations of the feed rate.

Each Fuller Airlift System is engineered for each application. For exact product specifications, contact your local Fuller Bulk Handling sales representative.
Airslide™ Conveyors

- No moving parts
- Material is contained/enclosed in Closed Type
- Rate of flow can be easily controlled and re-directed
- Low power consumption
Mechanical Line Injection

FK Pump

Ceramic Feeder
Rotary Valve

- Low Cost
- Low Headroom
- Easy to install
- Low maintenance
- Medium power consumption

Mech. Line Injection
Mech. Line Injection

Fuller-Kinyon™ Pumps
What is a Fuller-Kinyon Pump?

- Screw type volumetric line charger
- Compression pitch screw for material seal
- Minimal blowback at <32 psi
- Continuous/semi-continuous operation
Vane Compressor

Ful-Pak Rotary Vane Compressor
Fuller-Kinyon™ Pump

- Low capital cost
- High reliability / availability
- Simple operation & commissioning
- High tolerance to changes in material characteristics
- Relatively low headroom requirement
- Continuous conveying
- Line splitters to feed multiple points
- Medium to high power consumption
Pneumatic Line Injection

- Single Tank
  - Batch Feed
- Dual Tank
  - Continuous Feed
Process Line Injection

- Batch or continuous
- Volumetric or gravimetric
- Controlled feed
- Line splitters to feed multiple points
- High convey line pressures
- Can handle process backpressures without back-flow
Screw or Vane Compressor

Sahara™ Screw Compressor

Or

Ful-Pak Rotary Vane Compressor
Pneumatic Line Injection

- No moving parts
- Material is contained/enclosed
- Flow can easily be redirected within the pipeline
- Long convey distances can be achieved
- Medium to high power consumption
System Comparisons
## System Comparison

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World Leaders in Pneumatic Transfer Systems