

## **DILUTE PHASE**

## PNEUMATIC CONVEYING

#### Transfer Dry Bulk Solid Materials Efficiently & Cost Effectivly

Dilute phase conveying systems offer a long-lasting, trouble-free alternative to mechanical conveying systems, such as screw conveyors, belt conveyors, vibratory conveyors, aeromechanical conveyors or bucket elevators. The advantages include:

#### **System Types:**

- Pressure System
- Vacuum System
- Vacuum/Pressure Combination

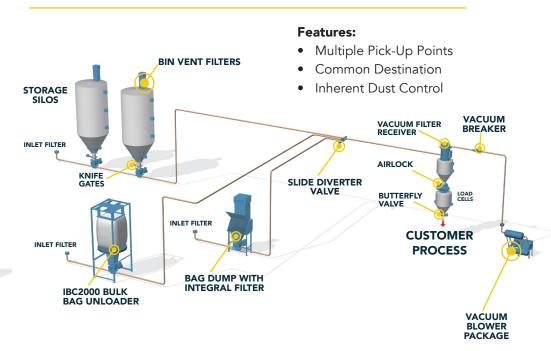
#### **Benefits of Dilute Phase**

- Easier to install and more flexibility in routing
- Lower maintenance
- Easier to route, especially over longer distances
- Easier to clean
- Self-contained with less emissions in many cases
- Easier to expand in the future

## PRESSURE SYSTEM

### Features: • Single Pick-Up Area BIN VENT FILTERS • Multiple Destinations SLIDE DIVERTER VALVE HOPPER TOP VALVES **PRESSURE** BLOWER PACKAGE SCALE ROTARY AIRLOCK VENTED INLET **CUSTOMER SYSTEM PROCESS** IBC3000 BULK BAG FILLER

### **VACUUM SYSTEM**



SLIDE DIVERTER

## BASICS OF DILUTE PHASE CONVEYING

Magnum Systems' knowledge of products/materials and broad range of dilute phase systems and components put the right equipment in place, whether your building one from scratch, reconfiguring or repairing. Our engineers know the components and their properties by heart.

#### **Air Generation Device**

An air generation device is a positive displacement blower, but occasionally a fan, regenerative blower or compressor.

#### **Airlock Valve**

An airlock is most commonly a rotary valve, but can also be referred to as a butterfly valve, flapper/dump valve, knife gate, venture, or other device. Airlocks need to be located at the inlet of a pressure system and the discharge of a vacuum system.

#### **Material to Air Metering Device**

A material to air metering device may be something as simple as a material feeder such as a rotary valve, screw conveyor or vibratory feeder, or as complex as an air inlet management system.

#### **Material to Air Separation Device**

A material and air separation device is usually a pulsejet fabric bag house of some sort. This may be felt or spun bound polyester, square or round, stand alone or in the form of a bin vent. Other less common means of separation and filtration include such items as cyclones.

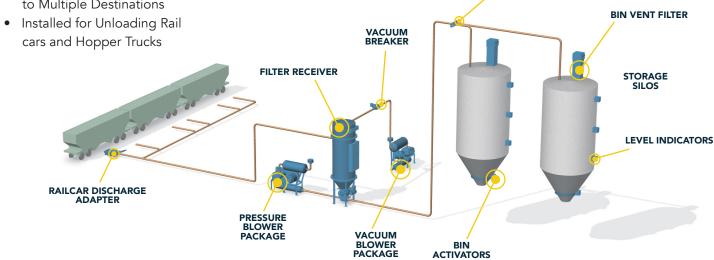
#### **Conveyance Medium**

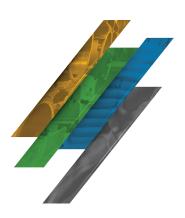
A conveyance medium, typically tubing, piping or hose.

## **VACUUM/PRESSURE COMBO**

#### Features:

- Multiple Pick-Up Points to Multiple Destinations
- cars and Hopper Trucks





# ENGINEERING, DESIGN AND MANUFACTURING TO KEEP THE LINE MOVING.

At Magnum Systems, we take a total system approach, which allows us to look at your complete process and develop the most efficient engineered solution for your production line. Depending your material type, application environment, business objectives and financial goals, Magnum Systems designs a material handling solution that best fits your needs.





