

Pneumatic Conveying Systems —

- **Dilute Phase Pressure —**
for conveying powders, pellets, granules, or flakes at up to 100,000 PPH from one or more points in close proximity, to one or more destinations
- **Dilute Phase Vacuum —**
for conveying powders, pellets, granules, or flakes at up to 50,000 PPH from one or more points to one destination
- **Dilute Phase Vacuum/Pressure —**
typically for rail car or truck unloading to one or more destinations at up to 100,000 PPH
- **Vacuum Batch (semi-dense) —**
for conveying from one or more points to one or more destinations at up to 25,000 PPH
- **Lean Phase (centrifugal fan) —**
low cost conveying of flakes or pellets under pressure or vacuum over medium distances
- **Dense Phase Pressure —**
for conveying abrasive or friable products up to 1500 ft. at rates to 100,000 PPH

Mechanical Conveying —

Custom configured mechanical conveying systems utilizing screw conveyors, belt conveyors, drag conveyors, and/or bucket elevators, at rates to 300 tons per hour

Bag, Box, Drum Handling —

- Discharge 40-50 lb. bags, 30-55 gal. drums, Gaylord boxes, or up to 4000 lb. bulk bags (super sacks) into your process
- Fill 40-50 lb. bags, 30-55 gal. drums, Gaylord boxes, or up to 4000 lb. bulk bags (super sacks) with powders, pellets, granules or flakes

Storage Solutions —

- Welded or Bolted storage silos (up to 90,000 ft³) or complete tank farms
- Surge hoppers or Day Bins to compliment any systems application

Drying & Crystallizing —

- **Hot Air Drying —**
for continuous drying of non-hygroscopic plastic pellets, flakes, or similar materials at up to up to 400°F (200°C) and rates up to 8000 PPH
- **Dehumidified Drying —**
for continuous drying of hygroscopic plastic pellets or flakes at -40°F dew point, up to 400°F, at rates up to 7000 PPH

Drying & Crystallizing (continued) —

- **PET / PLA Crystallizers —**
for surface crystallization of PET or PLA pellets or flake at rates up to 6000 PPH

Metering & Feeding —

Continuous volumetric or gravimetric metering or feeding of powders, pellets, granules, or flakes utilizing screw feeders, vibratory feeders, belt feeders or rotary valves

Blending/Mixing/Homogenizing —

- Continuous gravimetric loss-in-weight or volumetric multi-ingredient blending systems for powders, pellets, granules or flakes
- Gravimetric gain-in-weight batch blending systems
- Gravity blending & homogenizing systems

Weighing & Totalizing —

Batch or continuous weighing systems utilizing weigh hoppers, belt scales, impact scales, platform scales, etc.

Dust Collection Systems —

Utilizing standard or high efficiency cyclones, bin vents, baghouses, cartridge filters, static filters — including all required accessories such as ducting, fans, dampers, airlocks, etc.

Material Preparation Systems —

Including screening, size reduction, metal separation, dedusting, classifying, pelletizing, and compounding.

Liquid Handling Systems —

Employing tanks, pumps, valves, meters, & sensors for transfer or metering of viscous or non-viscous, corrosive, or non-corrosive liquids.

Controls —

PC or PLC based control packages custom configured for every application. Numerous platforms to choose from.

Installation / Project Management / Startup & Training —

An option on every system!

Pneumatic Conveying —

- **PD Blower Packages** up to 15 PSI pressure or 15" Hg vacuum at up to 200 hp configured for pressure, vacuum, or vacuum/pressure
- **Regenerative Blowers** for lower rate and distance conveying
- **Eductors** powered by compressed air or low pressure blowers
- **Fans** — Pressure or material handling
- **Conveying Air Coolers** — air-to-air or water-to-air
- **Airlocks** from 4" to 36" with numerous options
- **Interface Adapters** including pressure or vacuum pickup adapters, vacuum wands, rail-car probes
- **Dense Phase (pressure pot) Conveyors** — 1 to 190 cubic feet capacity — up to 100 PSI
- **Receiving Vessels** — including cyclones, filter receivers, vacuum batch Receivers, self contained loaders, just-in-time receivers
- **In-Line Filters** (vacuum blower protection) — static or pulse jet cleaning
- **Misc. Filters** — static bag, rail car hatch, vacuum intake
- **Valves and Gates** — Including vacuum line tee valves, vacuum breaker valves, receiver proportioning, conveying line diverters
- **Conveying Accessories** — including, tubing and pipe, bends and ells (std. and abrasion resistant), tees, laterals, wyes, couplings, hose and clamps
- **Conveying Controls (all PLC based)** including single & multi-station vacuum batch, rail unload, vacuum or pressure conveying, dense phase

Mechanical Conveying —

- **Screw Conveyors**
- **Belt Conveyors**
- **Drag Conveyors**
- **Bucket Elevators**

Bag, Box, Drum Handling —

- **Sack dump stations**
- **Bulk Bag Dischargers**
- **Box Dumpers and Tilters**
- **Drum Dumpers**
- **40-50 lb Bag Fillers & Sealers**
- **Bulk Bag Filling Stations**
- **Box & Drum Filling Stations**

Storage Products —

- **Bulk Storage Silos** — welded to 10,000 cubic feet, bolted to 90,000 cubic feet - numerous options and materials of const.
- **Hoppers and Bins** — round, square, agitated - sized and configured per application
- **Level Indicators** — point level or continuous
- **Bin Dischargers** — Vibrating, fluidized, vibrators, air cannons, live bottoms
- **Valves and Gates** — Hammer gates, crank gates, gravity diverters, slide & orifice gates, butterfly valves, iris valves

Drying & Crystallizing —

- **Twin Tower Desiccant Dehumidifiers** — to 4000 CFM for product drying, dry air conveying, or space dehumidification — with electric or gas bed regeneration
- **Desiccant Wheel (Honeycomb) Dehumidifying dryers** — Up to 3000 PPH
- **Air Heaters** — gas or electric for drying or crystallizing, or process heating
- **Air coolers & condensers** — for process cooling or VOC removal
- **Fans / Blowers** — for process heating/cooling, drying, crystallizing.
- **Plastics Drying or Crystallizing Hoppers** — gravity flow up to 2000 cubic feet capacity — agitated up to 300 cubic feet capacity
- **Controls** — for new drying & crystallizing systems—or for retrofit to existing equipment

Metering & Feeding —

- **Volumetric screw feeders, vibratory trays, rotary feeders**
- **Gravimetric screw feeders, vibratory feeders, belt feeders, loss-in-weight hoppers**

Blending / Mixing / Homogenizing —

- **Continuous Volumetric multi-ingredient blenders**
- **Continuous Gravimetric multi-ingredient blenders**
- **Gravimetric gain-in-weight batch blenders**
- **Cascade Mixers, paddle mixers, ribbon blenders, vertical screw mixers**
- **Silo Gravity Blenders**

Weighing & Totalizing —

- **Weigh Hoppers** — Atmospheric, vacuum or pressurized
- **Belt Scales**
- **Impact Scales**
- **Continuous Batch Scales**
- **Platform Scales**

Dust Collection —

- **Cyclones** — medium and high efficiency
- **Bin vents**
- **Baghouses** — Pulse jet
- **Cartridge Filters** — Pulse jet
- **Static Filters** — Cartridge and bag
- **Accessories** — ducting and hose, dampers, fans, air seals, broken bag detectors, flow monitors

Material Preparation —

- **Vibratory Screens**
- **Metal Separators & Magnets**
- **De-dusters & Classifiers**
- **Shredders & Grinders**

Liquid Handling —

- **Tanks** — Atmospheric, weighing, pressurized
- **Pumps** — Centrifugal or positive displacement
- **Piping, valves, meters & sensors**

Controls —

- **Custom PLC or PC based**
- **Annunciation & Alarm Panels**
- **Retrofit machine controllers & upgrades**