



cyclonaire®

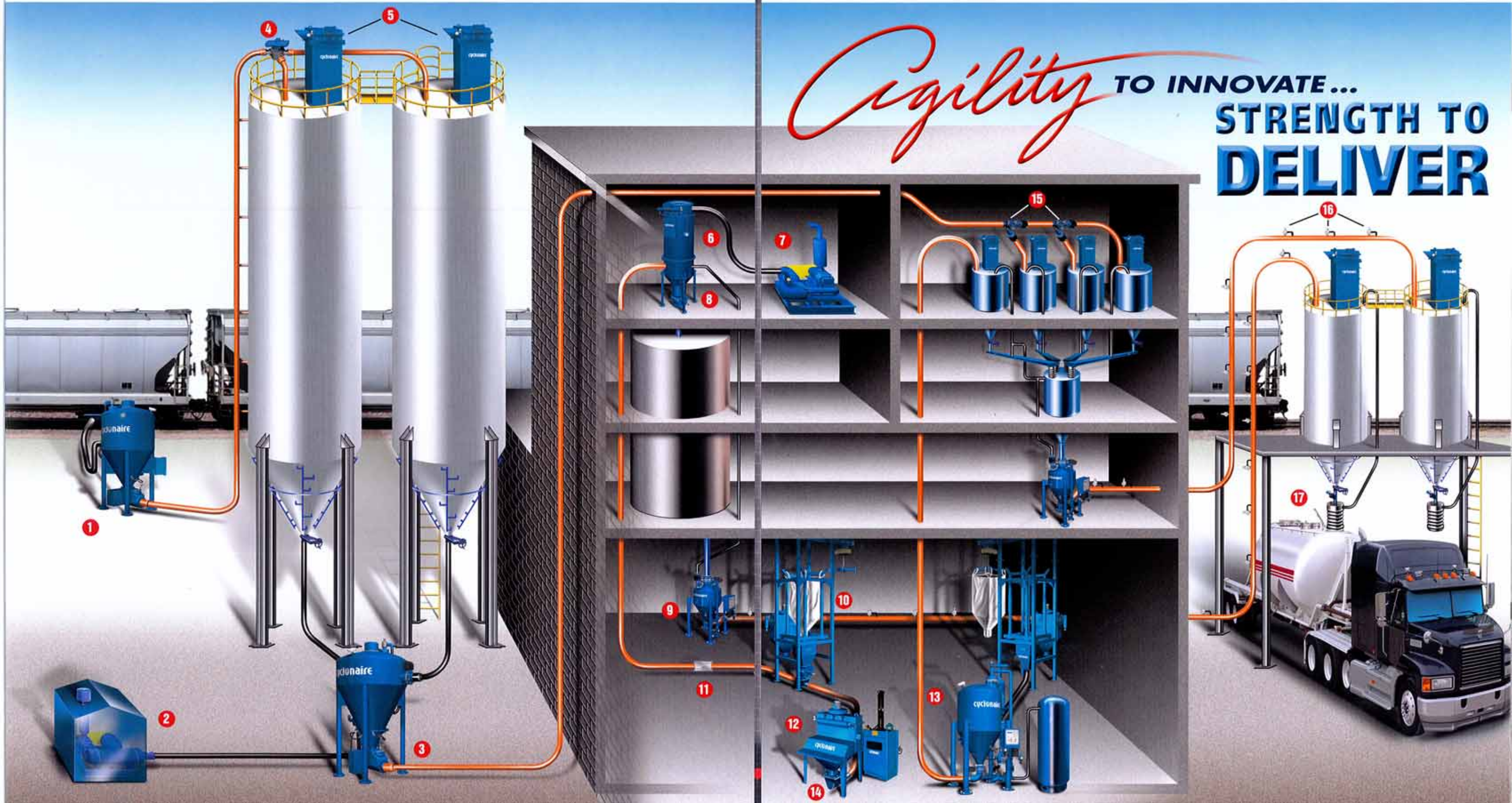
PNEUMATIC CONVEYING SYSTEMS



CONVEYING **POWERFUL** SOLUTIONS

Cyclonaire moves material from truck or rail and throughout your plant for a complete integrated process.

Agility **TO INNOVATE...**
STRENGTH TO DELIVER



DILUTE PHASE CONVEYING

3,500 - 6,000 FEET PER MINUTE

Dilute phase conveying is characterized by a positive displacement blower, usually in the range of 2-10 PSIG, with a rotary feeder for dispensing material into the air stream. Dilute phase uses high-velocity, low-pressure air. It is most effective when degradation and abrasion are not limiting factors.

SEMI-DENSE PHASE CONVEYING

1,500 - 3,500 FEET PER MINUTE

Cyclonaire's unique Semi-Dense phase technology offers lower material velocities than conventional dilute phase systems. The conveyor is vacuum or gravity filled, then pressurized – conveying the material to the destination. Our technology uses a **proprietary** venturi to create the vacuum for loading the conveyor. Using this approach allows material to be vacuum loaded without the use of filters.

DENSE PHASE CONVEYING

100 - 1,000 FEET PER MINUTE

Dense phase is often the most efficient way to pneumatically transport dry materials. Using high-pressure air, it achieves higher solids-to-air ratios and minimized degradation and abrasive wear by conveying slow moving, tightly packed slugs.

DILUTE PHASE CONVEYING



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Filter Receiver

Quality, custom built, and specially matched for Dilute Phase conveying. Automatic timer for pulse jet reverse air flow for material reclaim.

Blower Package / Vacuum Pump

2,7

Designed and specially matched to Dilute Phase conveying. Provides a dependable and economical air supply with premium inlet and exhaust silencers. Custom engineered for elevation and temperature requirements.



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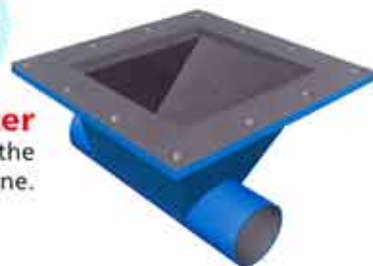
Rotary Airlock

Use for any free-flowing materials. Custom rotor types to suit various applications and materials – powders, granules, and pellets.

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Discharge Adapter

For smooth transition from the rotary feeder to the convey line.



SEMI-DENSE PHASE CONVEYING



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HC Series

Including Portable HC Conveyors
High capacity for fluidizable, abrasive materials. Unique side inlet for faster loading. Integral dust separator to reduce component wear is included.



3

CB Series

Adds weigh batching and blending of two or more materials to the functionality and application of the HC Series.



C Series

Including Portable Conveyors
Gravity or vacuum loaded, efficient, and versatile. Designed for portability in diverse applications. Vacuum load from one or more sources. Optional load cells add weighing/batching capabilities.



HV Series

Designed for low abrasion and low dusting materials such as plastic pellets. Multiple applications – railcar / truck and bulk bag unloading to in-plant transfer. Special valving design for improved efficiency.



GF Series

Designed for high-capacity transfers with a range of capabilities up to 100+ TPH. Gravity-loaded unit used medium-pressure blower air to convey material. Excellent replacement for worn out rotary valves.

DENSE PHASE CONVEYING



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DPV Series

Patented system to vacuum load products from silos, truck, or railcars. Top or bottom discharge. Less headroom is required and pits are eliminated.



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DPG Series

Including Dual DPG Conveyors
Gravity load, top or bottom discharge offers low-velocity conveying and high material-to-air ratios. For transferring powdered, granular, or pelletized products.



CycloLok®

Economical solution for low-volume transfers or reclaim of material from dust collectors or precipitators. Well suited for highly abrasive materials and harsh environments.

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Convey Line Injector

Patented solutions to improve high-pressure dense phase slug flow in the convey line.



CYCLONAIRE COMPONENTS

Cyclonaire's propriety components and accessories enhance your pneumatic conveying system or complete it. Components are available as a single unit or grouped together to form a complete system.



Companies worldwide come to **Cyclonaire**

a leading manufacturer of bulk material handling systems and controls – for practical, cost-effective dry bulk handling solutions. Whether it is a simple dust-reclaim system or a complex process, the flexibility and reliability of Cyclonaire equipment will maximize your operation's productivity and profitability.

Cyclonaire

specializes in pneumatic conveying – services range from concept engineering and project management to start-up supervision. We make vacuum, pressure, and vacuum/pressure systems, individual conveyors, and related components to provide conveying solutions for all pneumatically transportable materials from A to Z.

Quality

in all respects, is built into each project we handle. Our custom-built systems tailored to suit your specifications will help you comply with today's regulations without compromising effectiveness. Whatever your industry, Cyclonaire has the experience and dependable products that deliver exactly what you need.

MISSION

Cyclonaire Corporation will aggressively strive to enhance its position as a leader in technology and service in the markets we serve. We will focus our resources to build long-standing and meaningful relationships with our customers, employees, sales organizations, and suppliers.



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Ball Diverter Valve

For high-pressure, high-temperature conveying. Redirects material flow and extends the range of the pneumatic system when variable angle divergence and convergence flow is required.



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Pinch Diverter Valve

Suited for medium and high-pressure conveying, the convergence or divergence angle can be made to match system requirements. Excellent for abrasive materials.



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Bag Dump Station

Provides a clean workspace for the handling of bags. Minimizes dust and spillage.



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Sight Glass

Heavy-duty flanged sight glasses assist set up and troubleshooting of systems by permitting visual observation of material flow.



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Dust Collector / Bin Vent

Provide excellent filtration at destination points such as bins, hoppers, and silos. Sizes to match any application. Automatic timers clean the filter media with efficient pulse jet reverse air flow.



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VibraPad™ Discharge Aerators

A combination of vibration and aeration, inducing flows from hoppers and silos in non-free flowing materials that tend to bridge or pack.



10

Bulk Bag Unloader

Sizes to match all types of bulk bags. Large variety of options available to suit your application.



Bulk Bag Filler

Fills any free-flowing dry material with customizable bag sizes. Custom features are available.



C&C Dust Reclaim

Preserve air quality and conserve material by capturing product dust from silo-filling operations and automatically returning it directly to the source silo. Convenient servicing from ground level.



Turbo-Inductor

Unloads bulk materials from pneumatic trailers and railcars at high rates and over long distances. Self-contained systems, custom-built to accommodate applications.



FlexFlite™

Versatile tool for conveying a wide range of dry solids over distances up to 100 feet. Easy-to-operate, easy-to-clean units are ideal for use with bags, bins, hoppers, or weigh stations.



Transloader

Dual-purpose, load-and-discharge units use a diesel-driven positive displacement blower to move dry bulk materials from railcars to pressure discharge trailers for reliable delivery to plant sites.



Controls

Customized control options for individual units or integrated systems. Options available for software and hardware for single machines, as well as for systems integrating several machines into a single control architecture.



PortoVeyor™

Provide efficient pneumatic transfer of material from bulk bags into silos that are normally serviced by pneumatic trailers or railcars. Make delivering bagged product to storage silos easy.



CycloLift™

Railcar/truck connectors make unloading hopper-bottom railcars easier. Connectors install easily between existing tracks; pneumatic lifters extend to elevate the boot for mating with the hopper; rubber seals on the adapter plate minimize product leakage.



Air Shoot™

A low-pressure, air-activated gravity conveyor that moves fluidizable material on a near horizontal plane – ideal for source and destination points with limited headroom.

Quality Service

Technology

www.cyclonaire.com

CONVEYING

DRY BULK MATERIALS FROM A TO Z



From Acetylene Black to Zircon Sand, Cyclonaire's efficient material handling equipment pneumatically conveys hundreds of material types – thereby serving multiple industries. Whether you want to transfer material, bag it, unload it, or convey it over long distances, Cyclonaire has the process equipment to meet your needs.

EXAMPLES OF MATERIALS CONVEYED

Acetylene Black	Ceramic Powder	Feldspar	Lime Dust	Polystyrene Pellets	Sodium Fluoride
Activated Carbon	Charcoal Dust	Ferro Oxide	Limestone	Polyvinylchloride	Sodium Sulphate
Aeromycin	Clay	Flour	Liquin Sulfinate	Portland Cement	Sodium Triphosphate
Alumina	Clay Lathe Turnings	Fluorspar	Magnesite	Potato Starch	Soy Flakes
Alumina Hydrate	Clinker Dust	Fly Ash	Magnesium Oxide	Potassium Nitrate	Soy Grits
Alumina Oxide	Coal	Foundry Bond	Magnesium Powder	Precipator Dust	Soybean Powder
Alumina Trihydrate	Coal Dust	Foundry Sand	Magnesium Silicate	Precipitated Silica	Soybean Hulls
Aluminum Fluoride	Coke	Fullers Earth	Manganese Dioxide	Pulverized Lime	Starch
Aluminum Powder	Coke Fines	Fumed Silica	Manganese Oxide	PVC Pellets	Stone Dust
Aluminum Silicate	Coke Flour	Glass Grinding Sludge	MBT Catalyst	PVC Resin	Sugar
Aluminum Trihydrate	Copper Chloride	Glyphosate (Wet)	Metal Silicone	Quicklime	Talc
Amorphous Silica	Copper Powder	Grain Dust	Molecular Sieve	Red Iron Granules	Terephthalic Acid
Anthracite Coal	Corn	Granulated Limestone	Molybdc Oxide	Refinery Sludge	Titanium Dioxide
Antimony Oxide	Corn Flour	Graphite	Nickel Powder	Regrind Plastic	Toner
Arsenic Trioxide	Corn Meal	Grechic	Oat Hulls	Resin Beads	TPA
Barite	Corn Starch	Ground Glass	Oxides	Resin Pellets	Urea Prills
Barium Carbonate	Corncob Grits	Ground Titanian Slag	Paraformaldehyde	Resin Powders	Vitamin A Powder
Bauxite	Cryolite Dust	Gypsum	Peanuts	Roaster Ore	Wheat Flake
Bentonite Clay	Dextrose	Hydroquinone	Pebble Lime	Rouge	Wheat Flour
Bisphenolic Acid	Diamond Ore	Hydrated Lime	Pentasulfide	Rye	Wheat Germ
Bubble Gum	Diatomaceous Earth	Hydrated Alumina	Perlite	Salts	Whiting
Burnt Lime	Dibutylotin Difluoride	Hydrated Lime Dust	Perlite Ore	Sands	Wood Ash
Calcium Carbonate	Dicalcium Phosphate	Hydrocete	Petroleum Coke	Sludge	Zeodent
Carbon	Dolomite Lime	Iron Oxide	Phosphates	Shale	Zeofree
Carbon Black	Dried Sewage Pellets	Iron Powder	Plaster of Paris	Silica Flour	Zeolite
Carbon Black Powder	Dust	Isophthalic Acid	Plastic Powders	Silica Sand	Zinc Oxide
Carbon Black Prills	EPS Beads	Kaolin Clay	Plastic Pellets	Silicon Dioxide	Zircon Sand
Catalyst	EPS Dust	Lactose	Polyethylene	Slag	
Cement	Feather Meal	Land Plaster	Polymer	Soda Ash	
Cement Kiln Dust	Feed Grain Fines	Lead Oxide	Polypropylene	Sodium Bicarbonate	
Ceramic Dust	Feed Premix	Lime	Polypropylene Powder	Sodium Carbonate	

For more information about the types of materials conveyed, product photographs, dimensional drawings, specifications, or a project estimate, contact:

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