

E-finity® Dense Phase Conveying System

- True continuous feed allows use with other continuous processing
- The lowest product degradation available
- Lowest horsepower of any dense phase pneumatic system
- Lower operating costs
- Allows for greater system flexibility
- Space saving design frees up valuable plant real estate
- Stable pressure and flow conditions

Application

E-finity from Coperion is a patented continuous dense phase convey system for fragile materials. Precise pressure monitoring and airflow corrections allow the system to operate efficiently under all conditions, while gently inducing materials through the convey line in slug form. E-finity is ideally suited for granular and pelleted materials, and has proven itself on many projects for pet foods, cereals, nuts and grains.

- Fragile materials
- RTE breakfast cereal
- Pet food
- Grains
- Granular and pelleted materials
- Nuts
- Oil/fat laden
- Prills

Operating principle

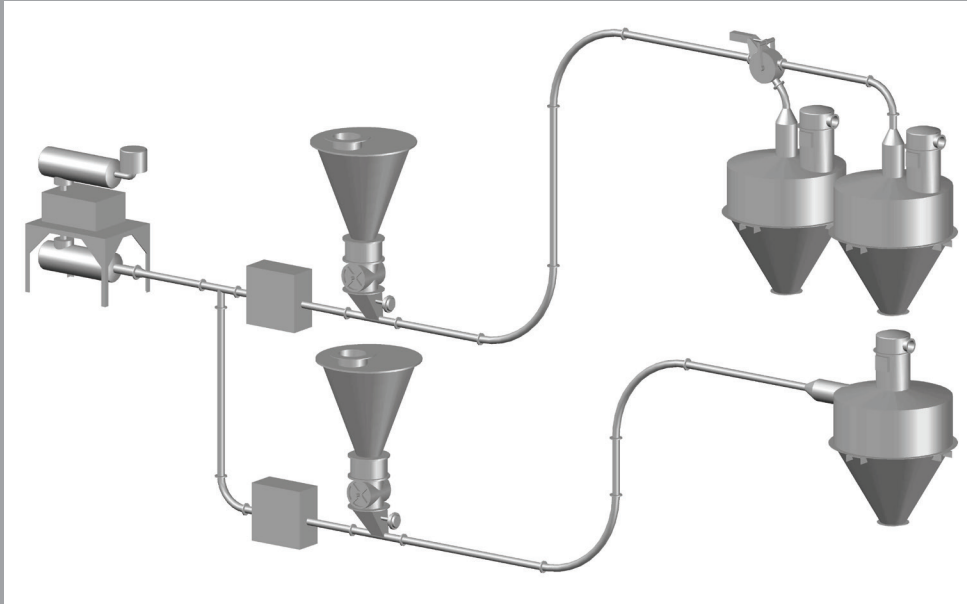
The heart of our air management control (AMC) system is the Macturi – our exclusive Venturi valve. It was designed by



Coperion to control the mass ratio of product to gas and correct air flow adjustments with extraordinary precision. The Macturi keeps the system stable even under turbulent conditions.

The E-finity air controls, along with sophisticated PLC programming, direct the air source to work in tune with the air control valve in a proprietary control methodology. Just the right volume of compressed air is delivered at the minimum pressure required to maintain a stable, smooth movement of materials through the convey line in slug form. This patented air management system saves on energy costs – a real breakthrough in dense phase convey technology.

Unique E-finity air controls can employ a single air source to operate 2-3 different systems simultaneously. The result is a significant cost savings in both equipment and installation, with continued savings in operation and maintenance moving forward. The long-term advantages to operating multiple dense phase pneumatic convey systems from a single low pressure air source are just being realized and have already made a major impact on several projects.



Features

- Available with either vacuum or pressure modulation options
- The blower air source can be located nearly anywhere in the plant
- Multiple E-finity systems can be operated from a single blower air source
- Various systems can be turned on and off as needed, and air delivery from the PD blower compensates automatically
- Pressure pumps can also be used to achieve pressures up to 30 PSIG

Options

- The Coperion no-ledge pipe coupling creates a ledge-free environment on straights and elbows to reduce friction and crevices
- Full port tunnel diverter valves allow material to be directed to multiple destinations in a non-obstructive, clean fashion
- A full line of filter receivers including cleanable versions, allow material to be deposited gently at the destination and filter convey air before it returns to the atmosphere

Coperion

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