



PNEUMATIC CONVEYORS

Professional systems for material transfer with vacuum

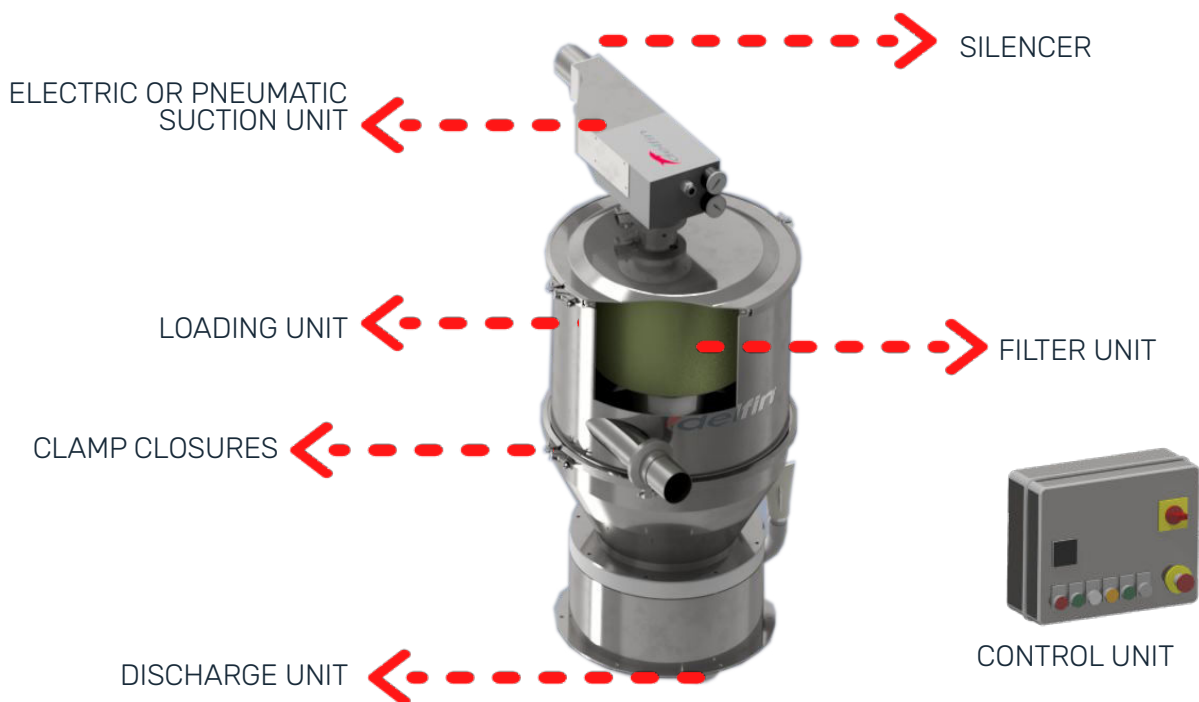
PNEUMATIC CONVEYOR

WHAT IS IT?

A pneumatic conveyor is a system preferred for moving dust, grain and solid material from one point to another, exclusively by means of vacuum power. The system is entirely closed, preventing any risk of contamination due to product dispersion during transport.

HOW DOES IT WORK?

The suction unit generates vacuum inside the system, consequently moving the material thanks to the air flow. The system allows the automatic transfer of the product simply connecting it with one or more processing, production or packaging equipment. Air flow can transport material in dense phase (Venturi unit or lobe pump), avoiding the risk of de-mixing or mechanical breakage, or in diluted phase (side channel blower).



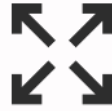
APPLICATIONS

Pneumatic conveyors can be used in several industrial fields to move dust, grain and solid material. Their use can improve their productivity and efficiency up to 30%.

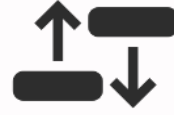
HANDLING



SEPARATION



LOAD/DISCHARGE



DISTRIBUTION



BLENDING



DOSAGE

ADVANTAGES & BENEFITS

- ✓ Low initial economic investment
- ✓ Easy installation
- ✓ Low-wear, no maintenance required
- ✓ Improved security of working environment
- ✓ Easy to use and sanitize
- ✓ No alteration or contamination of the product
- ✓ No encumbrance inside departments
- ✓ Improvement of environmental healthiness
- ✓ Use in potentially explosive atmospheres



Multihead weigher load



Dosing machine load



Mixer load and unload

PICK-UP



Nozzle pick-up



**Automatic pick-up
after dosing**



**Pick-up from a manually
filled up hopper**

DISCHARGE AND FILLING



**Load or discharge
of containers,
bins and Silos**



Automatic machines load
Dicers, roasters,
blending machines,
vibrating sieves,
packaging lines



**Semi-automatic
machines load**
Dosers, vibrating or auger
feeders,
envelope machines

INDUSTRIES

FOOD

AGRI-FOOD
COFFEE
NUTRACEUTICAL
DAIRY SECTOR
DRIED FRUIT BAKERY PRODUCTS
CONFECTIONERY & CANDIES
TEAS-SPICES-AROMAS-HERBS
PET FOOD



PHARMACEUTICAL

POWDER
TABLETS
CAPSULES



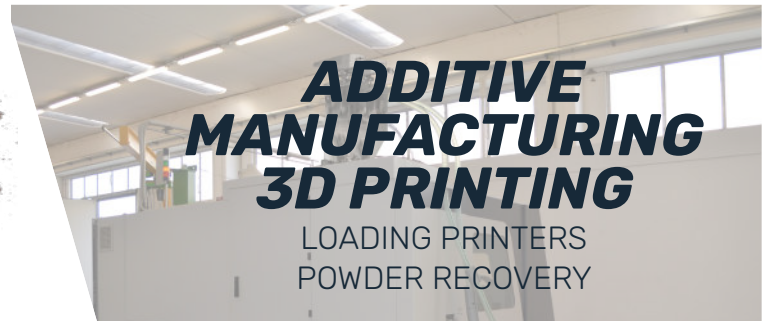
CHEMICAL

DRYING AGENTS



ADDITIVE MANUFACTURING 3D PRINTING

LOADING PRINTERS
POWDER RECOVERY



TOXIC MATERIAL

Pneumatic conveyors are the best solution for moving toxic and harmful products: in fact, since they are closed, the material cannot be dispersed in the working environment.

EXPLOSIVE MATERIAL

When very fine material is close to sources of trigger, it might cause explosions: avoiding the risk of explosion is basically impossible, but it can be minimized by preventing the accumulation of electrostatic charges.



Delfin pneumatic conveyors have high conveying capacities thanks to the extremely efficient and reliable vacuum technology. Designed with high quality standards and first choice components.



PRO RANGE

The **PRO line** is suitable for transferring products with a density between 0.01 and 0.06 lb/ft³

- Excellent value for money
- Suitable for dry and easy flowing products

TECH RANGE

The **TECH line** is the modular range useful for any product density and/or requirement

- Flexibility of use and ease of sanitation
- Suitable for any type of product



Features

- > AISI304 stainless steel manufactured
- > Total customization
- > CE certificate and for contact in the food industry
- > ATEX certificate available
- > Wide range of accessories available



Suction unit

- > Electric singlephase or threephase (1.3 to 28.8 HP)
- > Pneumatic multijet Venturi unit (4 to 15 nozzles)

Loading unit

- > Tangential inlet from 1.58 up to 3.94 in
- > Capacity from 0.26 up to 17.17 gal



		Venturi
Power	hp (kW)	5.36 - 20.1 (4-15)
Water Lift	inH2O (mmH2O)	301.2 (7650)
Air Supply	CFM (lt/min)	13.1 - 49.5 (370 - 1400)
Airflow	CFM (m³/h)	64.7 - 223.7 (110 - 380)



ELETRIC RANGE (50Hz)		230V/1ph	400V/3ph
Power	hp (kW)	1.5 (1.15)	2.9 - 23.2 (2.2-17.3)
Water lift	inH2O (mmH2O)	100.4 (2549)	84.3 - 216.8 (2141 - 5506)
Airflow	CFM (m³/h)	105.9 (180)	187.2 - 706.3 (318-1200)



Discharge unit

- > Discharge size from 3.94 up to 9.8 in
- > Clapet valve, butterfly valve

Filtration unit

- > Food contact certified polyester or AISI316 stainless steel filters
- > Automatic filter cleaning systems



Further optionals

- > Customized finishing
- > Discharge valve line
- > Max level sensor on the conveyor

Further accessories

- > Suction nozzle
- > Hopper for product collection
- > Fixed or dynamic frame



Delfin Pneumatic Conveyors Department

Delfin's Pneumatic Conveying division is aimed at professionals and industries all over the world, finding efficient and effective solutions to increase productivity in all sectors and fields that need to transfer powders, granules or solids.

Not only pneumatic conveyors...
Discover our industrial vacuum cleaners:
the perfect match for your production line



DELFIN INDUSTRIAL CORPORATION



2010 E CENTER CIRCLE BLDG C
SUITE 300 PLYMOUTH, MN 55441



1-877-958-7904



SALES@DELFININDUSTRIAL.COM



WWW.DELFININDUSTRIAL.COM

