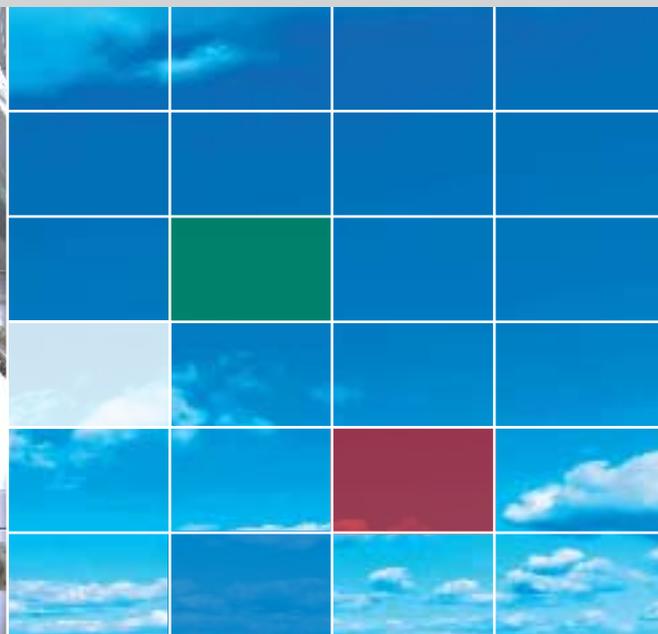




Pneumatic conveyors **APPLICATION**



Pneumatic conveyors for dust and granules

Why using pneumatic conveyors?

Nilfisk-CFM pneumatic conveyors have been designed to draw the materials directly from sacks, Big Bags and other containers and convey them to the required location in the selected quantities and within the desired time.

The product conveying process takes place in perfect hygienic conditions, therefore respecting both the environment and the operators' health thanks to the high quality of the filtration systems and their quietness.

Pre and post assistance, spare parts and sales network present all over the world.

Main advantages

- Customized design
- Easy and fast installation
- Compact
- Customized discharge systems
- Stainless steel AISI 316L and 304 versions available

Main benefits

- Time saving
- Money saving
- Increase of productivity
- Reduced production down-time
- Increase of efficiency and production quality
- Respect of the environment and operators' health

Research and specialization

The Pharmacology Department of the University of Parma collaborated with Nilfisk-CFM and certified that, while pharmaceutical powder mixtures were being handled, a particular conveyor model did not alter the percentages of the various products in the mixture. This made the conveyor a guaranteed and essential system for production purposes in chemical, pharmaceutical and food industries.





Nilfisk-CFM pneumatic conveyors: the range

The standard range is extremely wide. The conveyors are available with 0.37 to 22 kW power ratings and flow rates that can vary from 100 to 3,000 kg/h and beyond. They can be equipped with single phase or three phase motors and with hoppers that are always in stainless steel.

The flexible conveying system is another salient feature of the conveyor range since the machines are always sized to suit the specific production requirements. This is why the most important companies in the world have chosen Nilfisk-CFM systems to automate and complete their batching and weighing cycles, thereby obtaining enormous advantages from all aspects.

How does a pneumatic conveyor work?

Let's see how the pneumatic conveyors work.

The hopper is loaded with powder or granules thanks to the vacuum created by the motor. Once the loading phase has terminated, the discharge valve opens and allows the product to discharge by gravity or by a selection of available valves. An automatic filter cleaning system ensures that the filter returns to maximum efficiency after every cycle. The time it takes to load, discharge and clean the filter can be simply adjusted from the conveyor's control panel.

Adaptability to any existing system makes the pneumatic conveyor both ideal for use in production lines while also being a strongly differentiating element.



3VT



Big Bag



E55KC



FVQCV



P56XC



P46XV



A128XR



A36XR



A36XP



56XCFP

Ceramic industry



Feeding of installations

When it comes to ceramic tiles, pneumatic conveyors are widely used in the production process by companies who have made automation a major strategy. Pneumatic conveyors are used throughout the production phase for:

- supplying granulators and dry glazing machines.
- conveying glazes, micronized materials, pigments and colours in the press department when “technical porcelain” is produced.
- extracting and conveying excess grit and glaze from the tiles.



Efficiency and safety during the conveying of powders



Feeding of colouring powders

Chemical - pharmaceutical industry

The chemical - pharmaceutical industry always needs to handle powders and granules within the production departments and to supply the machines that fill bottles, pellets, tablets, capsules, packets, etc. Our pneumatic conveyors have been designed for these explicit purposes, with particular attention to safety and hygiene.

Pneumatic conveyors are particularly useful for:

- feeding mixers with powders of all types
- supplying reactors
- supplying vibrating sifters
- supplying granulators
- automatically feeding packaging machines
- automatically feeding encapsulating machines, compressing machines, etc.

Some of the conveyors models are specifically designed for feeding encapsulating machines with empty caps of varying format without damaging them and above all prevent them from breaking as they are conveyed. The parts of the conveyors that contact the products are made of AISI 316L steel while the structural parts are made of satin-finished AISI 304 steel. This means that they can be fully washed and sterilized while contributing towards compliance with the GMP standards governing the chemical-pharmaceutical sector.



Food - agrifood - wine and oil making industry



Feeding of a packaging machine

Part of the conveyor range has been specially designed for the food industry. Nilfisk-CFM has been chosen by the most important food producing companies to which it supplies suction systems. These include pneumatic conveyors for both powders and granules.

Tea, powders, candies, sugar and other food products: we supply specific pneumatic conveying systems for these and other products, in compliance with the standard government hygiene and the European norms.

For the wine-making and the oil-making sector, we have a pneumatic conveying system for the powders used to filter the wine and oil. This system can be associated with Nilfisk-CFM's automatic machine that empties big bags and is of particular use in food industries that produce large quantities of waste.

For roasting products, Nilfisk-CFM's pneumatic conveying system replaces the conventional conveying systems which uses belts, elevators, screws and so forth. Moreover it also prevents the products from being damaged and guarantees that they are treated in a hygienic way.



Pneumatic conveyors for the powders used to filter the wine



Feeding of a coffee plant



The product remains intact during the conveying



Rubber - plastic industry

Nilfisk-CFM's pneumatic conveyors are ideal for moving plastic, rubber, paraffin and other chemical products in granular and/or powder form in a fast and reliable way.

In particular, protagonist companies in the sector that produce plastic materials for electronics or biomedical equipment have chosen Nilfisk-CFM conveyors for their high level conveying "quality".

All the models in the pneumatic conveyors range are equipped with control panels that can be customized to a very high extent. Thanks to their power, the conveyors can achieve highly intensive production rates both in terms of speed and quantity. The material drawn in is filtered, making the working environment ultra-safe for the operator. All these features are essential for the most advanced production processes.



Feeding of an extruder



Powder and granules: a pneumatic conveyor for many uses



Feeding system on a plastic conveying process



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- please call me by phone
- I need a visit of a vacuum specialist
- please send me free brochure

Pneumatic conveyors

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