

Pneumatic conveyors

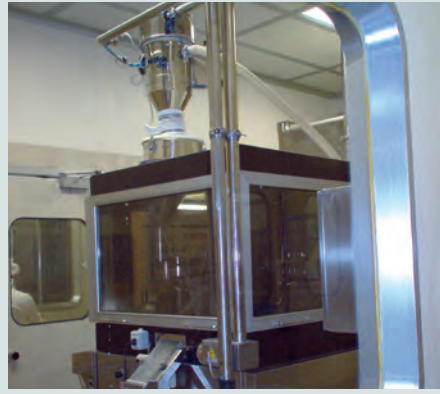
# Pneumatic conveyors







Feeding system on a plastic conveying process



Pneumatic conveyor on a tablet press machine



Feeding of colouring powders



Feeding of a coffee plant

# Pneumatic conveyors for dust and granules

Pneumatic conveyors draw material from containers to the required location in the selected quantities and within the desired time

### Why using pneumatic conveyors?

Nilfisk pneumatic conveyors 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 the high silentness.

### Main advantages

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

### 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 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.

# The advantage of conveying material efficiently

## Nilfisk pneumatic conveyors: the range

The standard range is extremely wide. The conveyors are available from 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.

Flexibility 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 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.



At every suction and discharge phase the filter is automatically cleaned



The powder mixture preserves its integrity



Three filtration stages assure a decontaminated environment



Absolute filtration before the air goes into the conveyor to avoid contamination



The material is conveyed in pre-set speed to avoid them to be damaged or opened



The discharge air is clean thanks to the filter on the hopper