



## Airalt Operating Principle

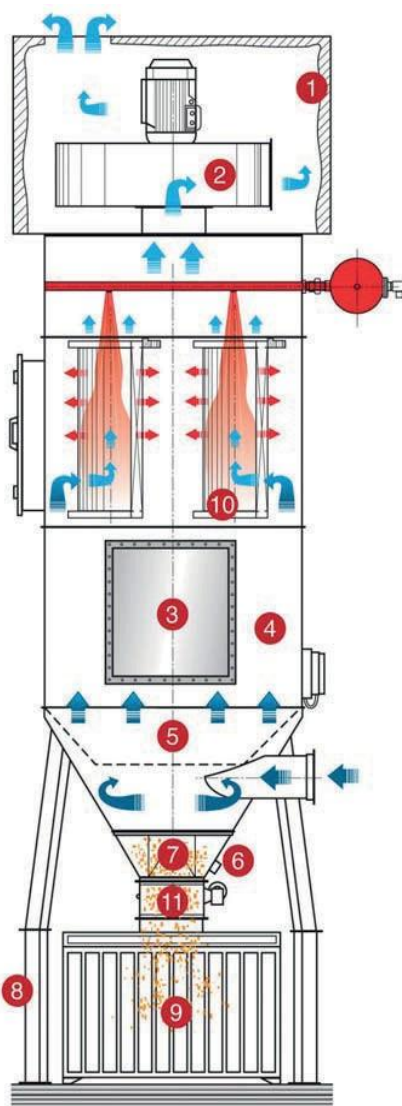
The contaminated air enters from the hopper inlet and due to the abrupt decrease of velocity and the 18T stage impact filter, the larger particles decant and fall into the dust collection bin.

The finer or lighter particles flow through the cartridges (AIRALT) or the sleeves (AIRALT/M) from the outside to the inside, therefore the dust deposits outside and the air flows through the filters and is emitted in a purified condition. The gradual accumulation of dust requires periodical cleaning of The filters: the backwashing cleaning is carried out by a compressed Air blast which causes a high frequency oscillating motion to the filters. This air blast technique, also known as shock wave cleaning " helps the backwashing process.

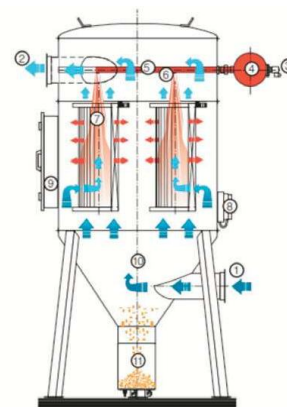
The cleaning sequence is carried out on each filter section, by means of diaphragm magnetic valves managed by a cycle timer, which determines both pause and operating period or by a PLC mounted on the control board, considering the pressure differential between clean and dirty zones of the filter. In this way the conditions of efficiency of the filters are always maintained at a maximum. Thanks to this highly reliable cleaning method, after an initial operating period, the filter reaches a nearly constant pressure drop throughout the operating life.

The unit is fitted with a differential pressure switch for monitoring the cartridges clogging and the subsequent pneumatic cleaning cycle. The standard mounted cartridges or sleeves made from polyester fibers with [FA/BQIA L-PES classification, ensure a high separation efficiency rates (>0,1%) only with filtration lower than 0.056ms, with inlet dust concentration of 200 mg/m and particle size between 0.2 and 2 m.

The AIRALT-AIRALT-M filter equipment allowed a maximum vacuum of 5000 mm H<sub>2</sub>O/0,5 bar on the outlet. In case of special request for bigger loose charges or version requesting Atex versions (filter positioned in zone 2221 dust/2-1 gas) please contact our Technical Department. We suggest protecting the unit against hard weather conditions to ensure a longer life.



- 1- Polluted air inlet
- 2- Filtered air outlet
- 3- Electrovalve
- 4- Compressed air tank
- 5- Distribution pipe
- 6- Nozzles
- 7- Filtering cartridge
- 8- Cyclic programmer
- 9- Maintenance door
- 10- Hopper
- 11- Collection bin (Up to 2000 mm)



## Optional

- 1- Sound proofed
- 2- Fan
- 3- Explosion relief panel
- 4- Additional module for venting area
- 5- Inner cone
- 6- Level control with rotated blade
- 7- Fitting
- 8- Legs with extension
- 9- Dust container

For other models, capacities and Atex versions please contact our company.