



**MIX S.r.l.**

MIXING SYSTEMS AND  
COMPONENTS FOR PLANTS

[www.mixitaly.com](http://www.mixitaly.com)

# Filtering Division

Dust collectors



 ATEX-RATED PRODUCTS AVAILABLE

# Quality and Innovation

## AIR POLLUTION

Air pollution, with dusts emitted into the atmosphere, causes detrimental effects to people and things.

## SOCIAL ENGAGEMENT

Technological progress and environmental protection, job and health, economy and ecology must proceed hand in hand; a need for the present, and a commitment for the next future.

## MIX SRL PRODUCTS AND SOLUTIONS

Mix srl has designed a complete range of dust collectors, with round or rectangular shape; good working solutions and different filtering surfaces, up to 400 sq. m. and more.

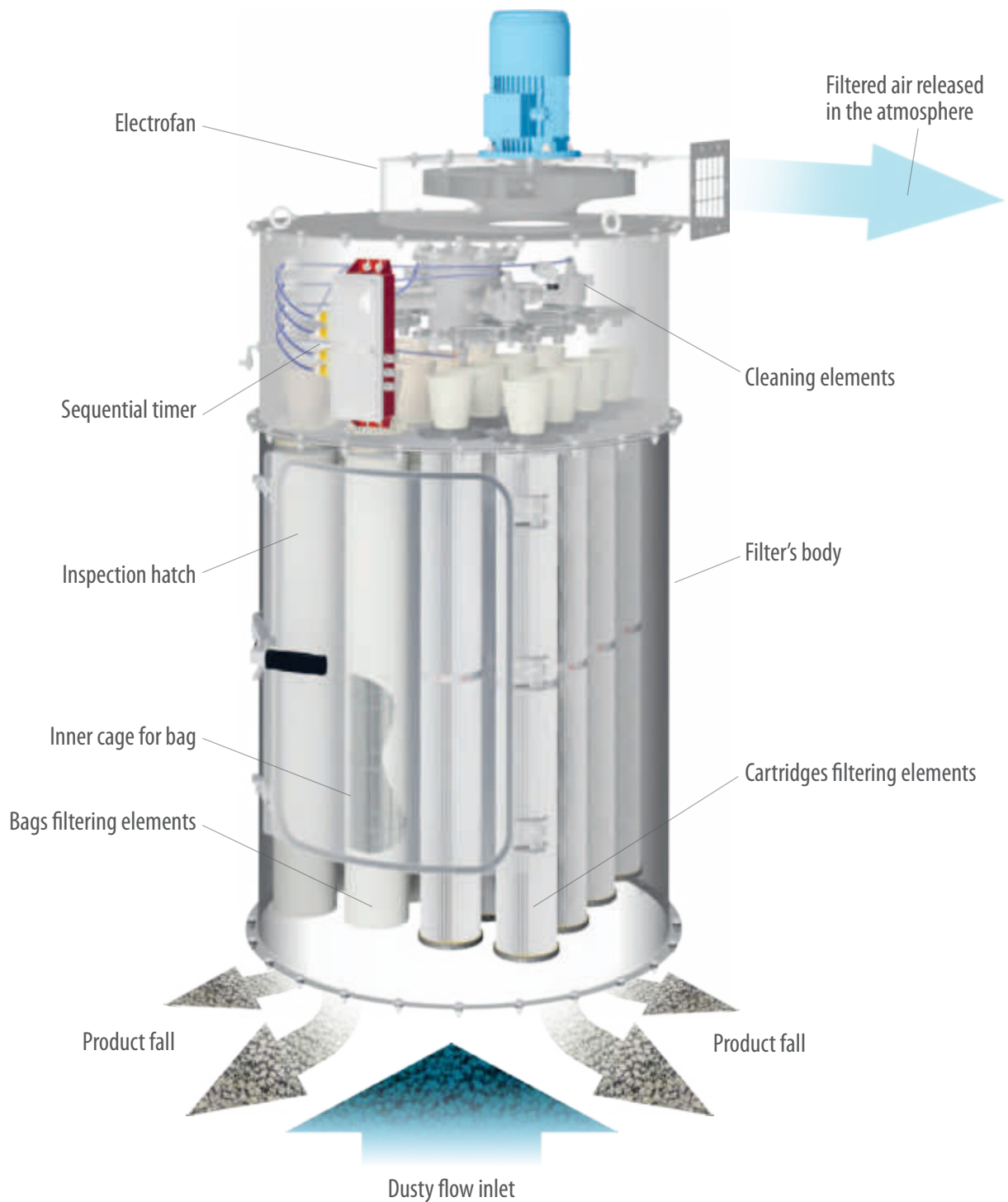
## DUST COLLECTORS WITH ROUND SHAPE



# Purpose

Dust collectors are designed to separate dusts conveyed by a dusty air flow. Powders must be kept outside the filtering element, while the fluid passes through the filter cloth and becomes de-dusted.

Dusts which remain inside the dust collector fall inside a container, set under the dust collector; while the clean air is released into the atmosphere. The separation of dust from air is never complete: the filter's task is to reduce the dust rate, and to bring it back to the levels permitted by laws.



# Application areas

Our Company is specialized in design and manufacture of dust collectors for the applications below:

## FAN-ASSISTED DUST ASPIRATION



## DUST ASPIRATION FROM PNEUMATIC CONVEYING



## DUST ASPIRATION FROM VACUUM CONVEYING



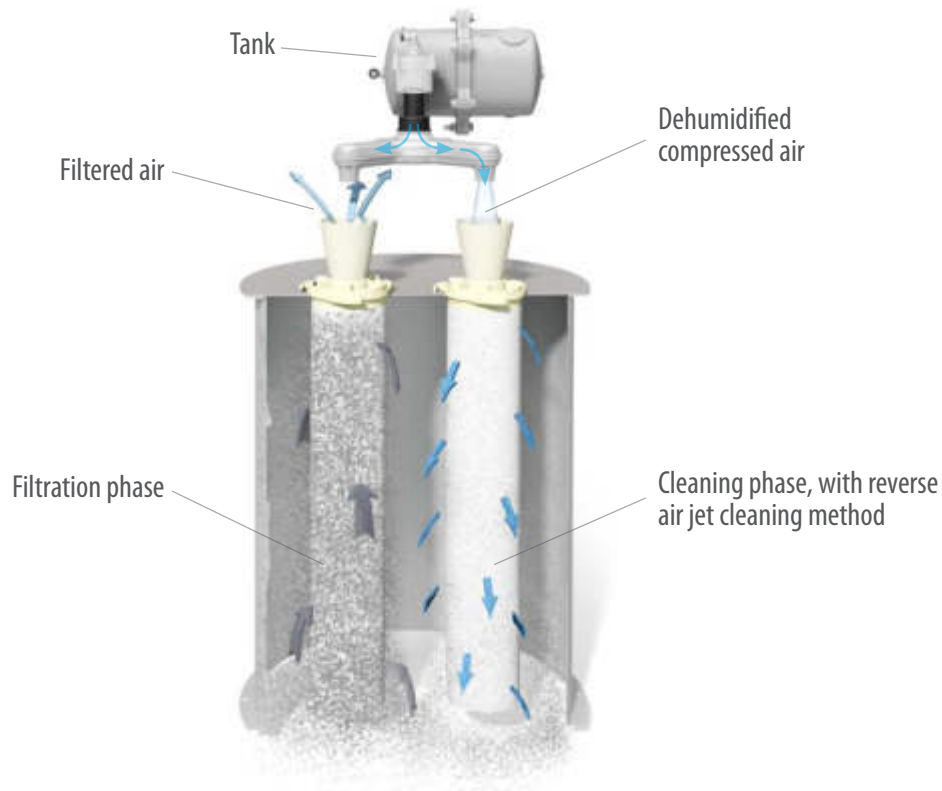


# Cleaning Method

Self-cleaning dust collectors are provided with proper cleaning methods that periodically cleanse the filtering elements.

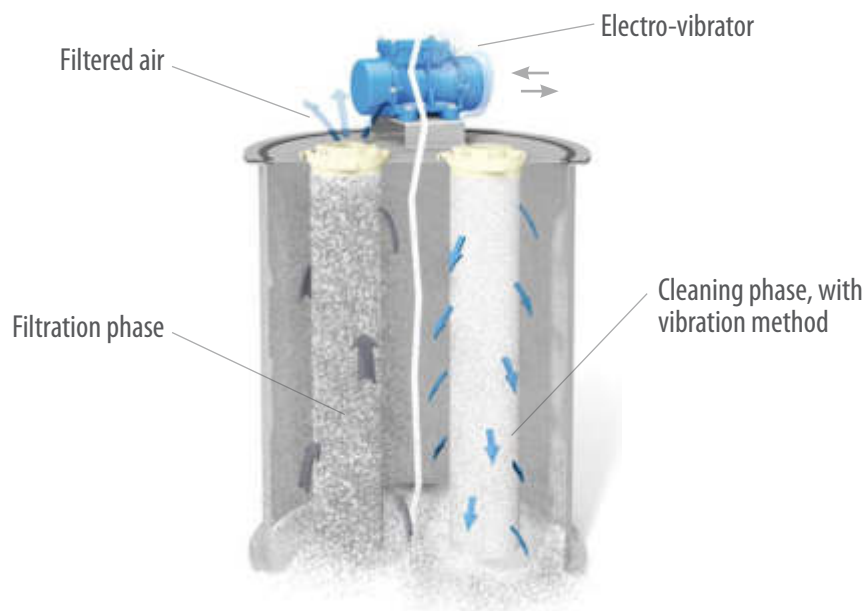
## REVERSE AIR JET CLEANING METHOD

A buffer tank is fed with dehumidified compressed air; the ends are connected to a group of “impulse valves”. A sequencer, complete with a programmable timer, sends its impulses to the “impulse valves”, which open themselves outright, and let the compressed air go out from the buffer tank towards the filtering elements; the dust is detached from the outer surface of the filtering element.



## VIBRATION CLEANING METHOD

An electric vibrator, fed with electric power, is installed above the bag-holder / cartridge-holder disc. The vibrator carries out some vibration cycles, where all the filtering elements are shaken. This solution is cheap, but less efficient than the previous one.



# Bags and Cartridges filtering elements

## FILTERING BAGS

Manufactured of a specific soft cloth, with a cylindrical shape, our bags have filtering surfaces calculated multiplying their diameters by their height.

## FILTERING CARTRIDGES

Manufactured of a non-woven rigid cloth, star-shaped, our filtering cartridges have filtering surfaces determined multiplying the amount of folds by the length of folds, and the height of the cartridges. If we consider the same diameter and the same amount of filtering elements and the same height, the filtering surface obtained with cartridges is 3 up to 4 times higher than the surface obtained with a bag filter. Filtering cartridges are suitable for all dry products except for perishable food powder.



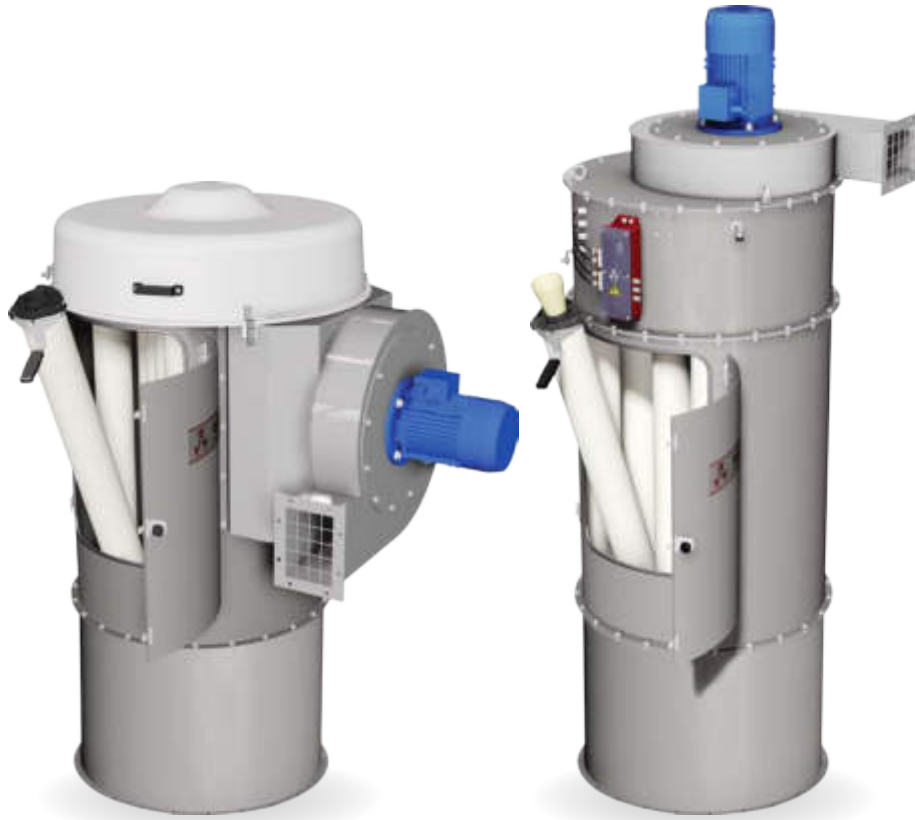
| AVAILABLE BAGS FABRICS                                    |
|-----------------------------------------------------------|
| Polyester needle felt                                     |
| Antistatic polyester needle felt                          |
| Polyester needle felt with a polyurethane film            |
| Antistatic polyester needle felt Teflon coated            |
| Polyester needle felt with Teflon coat                    |
| Antistatic polyester needle felt with a P.T.F.E. membrane |
| Polyester needle felt with P.T.F.E. membrane              |

| AVAILABLE CARTRIDGES FABRICS        |
|-------------------------------------|
| Premium Polyester                   |
| Antistatic Premium Polyester        |
| Vibro-Polyester                     |
| SKYFILTER®                          |
| Water- and Oil- Repellent Polyester |
| Polyester Plus                      |
| Polyester                           |

# Maintenance of the filtering elements

The life of filtering elements depends very much on the filter exploitation, and on the characteristics of the filtered product. It is possible to extend the life of filtering elements, by cleaning them (with compressed air, or with water)

Accessing to filtering elements: from the top, or through an access door in the side. For both cases, the dust collector is equipped with a tool for the quick installation and dismantling of the filtering elements.



**FILTERING ELEMENTS REMOVED FROM A SIDE ACCESS DOOR**



**FILTERING ELEMENTS REMOVED FROM THE TOP**



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QUALITY  
SERVICE  
TECHNOLOGY  
INNOVATION

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