



**MIX S.r.l.**


MIXING SYSTEMS AND  
COMPONENTS FOR PLANTS

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

# Filtering Division

Centralized filters



 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.

## PRODOTTI E SOLUZIONI MIX

MIX S.r.l. has introduced a complete range of rectangular modular filters type SRD (cartridge) and SRL (bag). Thanks to an innovative design, the MIX dust collectors can operate (with different sizes and technical features) in many productive fields.

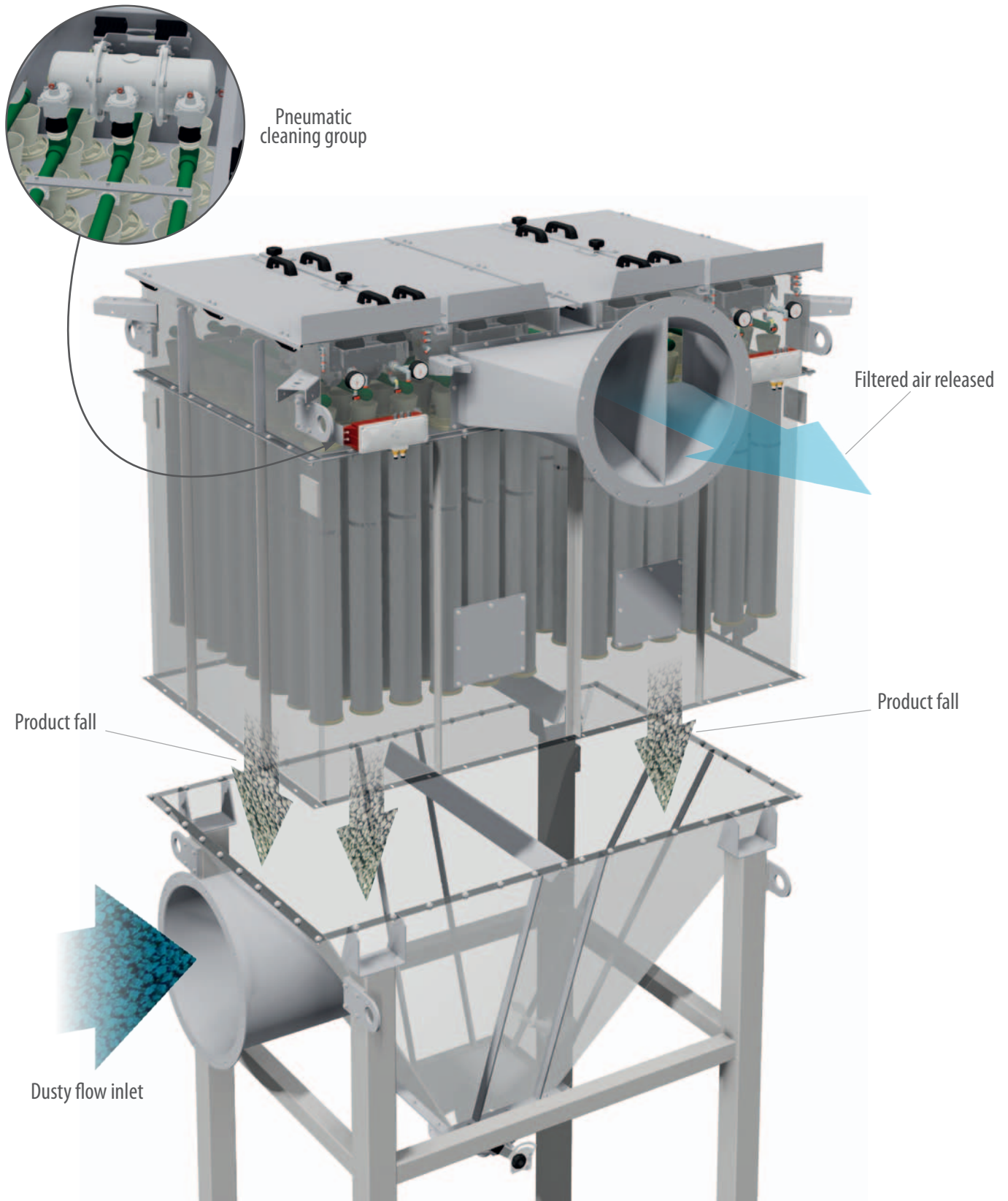




# Purpose

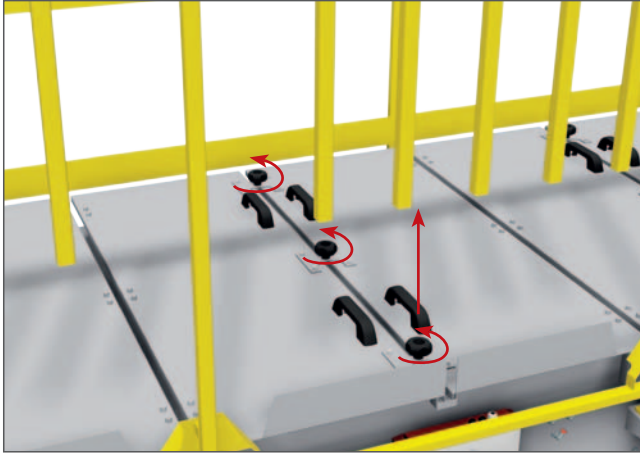
Dust collectors are designed to separate dusts conveyed by a dusty air flow. Powders must be kept outside the filtering element, while the fluid passes through the filter cloth and becomes de-dusted.

Dusts which remain inside the dust collector fall inside a container by pneumatic cleaning, 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.

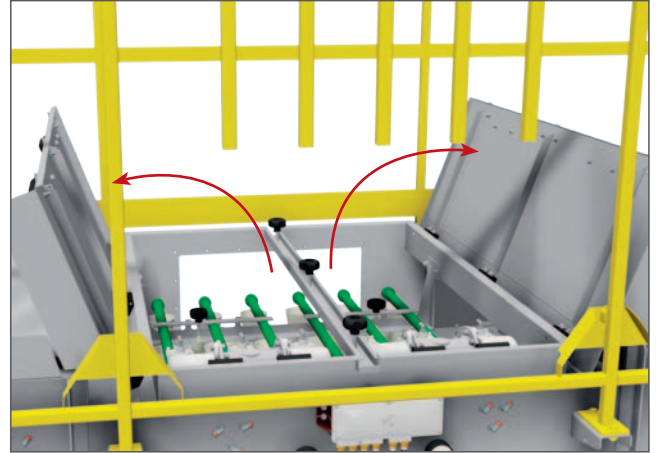


# Maintenance Filter elements

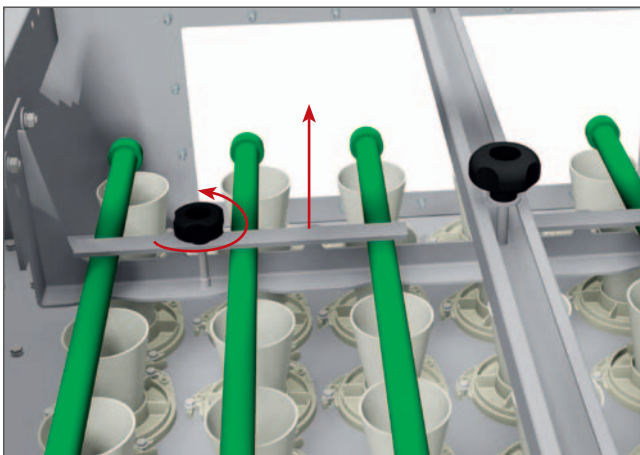
The filters SR. are equipped with a quick dismounting system for the filtering elements (cartridge or bag) allowing quick maintenance.



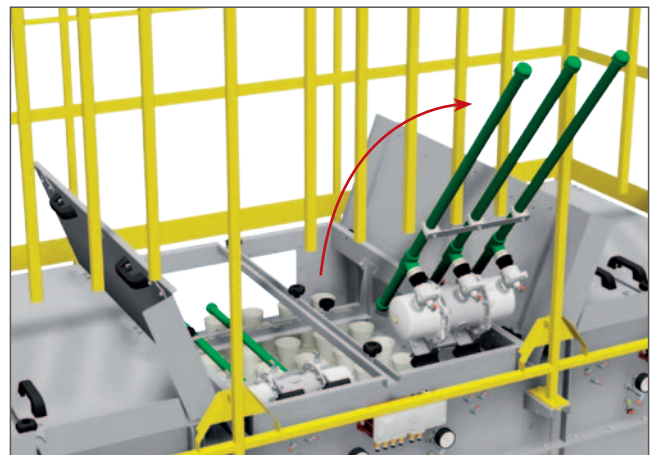
Unscrew the three locking knobs



Raise the hatch



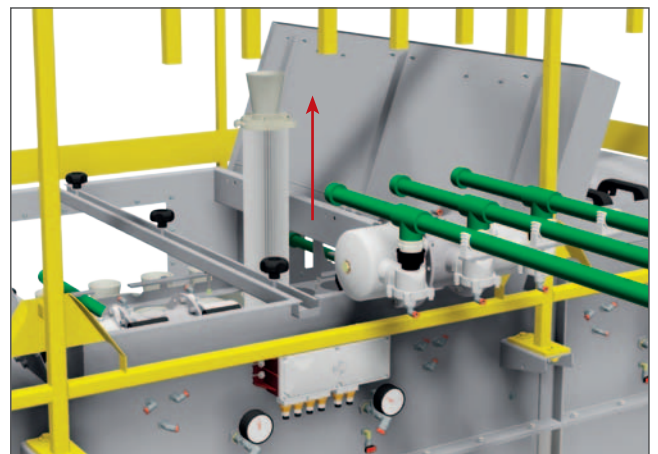
Unscrew the knob and lift the locking bracket



Raise the air conveying pipes to 180°



Loosen the locking screws and turn the filtering element until it is released

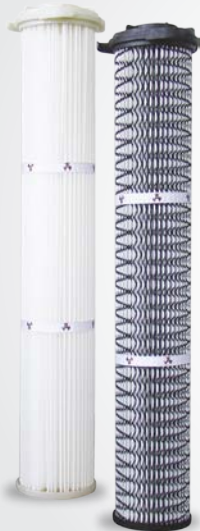


Extract the filtering element



# Fabric filter element

## PREMIUM POLYESTER



### "THERMAL BONDED TNT MATERIAL

- Emission <math>< 1 \text{ mg} / \text{Nm}^3</math>
- NB: Obtainable after application analysis (minimum product particle size / filtration rate / can velocity)
- Antistatic treatment available
- Lifetime: up to 20,000 operating hours
- Cleanable by water wash
- Classification: **M** according to BGIA test
- Weight:  $260 \text{ g} / \text{m}^2$
- Air permeability:  $280 \text{ m}^3 / \text{m}^2 \text{ h}$  (200Pa)
- Low pressure drops: <math>< 700 \text{ Pa}</math> (70 mm H<sub>2</sub>O)
- Low melting point heat-bonded synthetic fibers (Fig. 1)
- Homogeneous surface (Fig. 2) which increases the mechanical resistance
- NB: The commercial cartridges available on the market are produced with stitch-welded fabrics (Fig.3-4) which reduce the real filtering surface by up to 35% (Fig.5) "

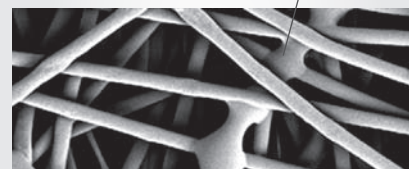
## TNT USED BY MIX PRODUCED BY FREUDENBERG



Fig.01 Standard 1.000  $\mu\text{m}$



Fig.02 (smooth surface)



Zoom heat sealing

## POLYESTER SKYFILTER®



### THERMAL BONDED TNT MATERIAL

- Emission <math>< 20 \text{ mg} / \text{Nm}^3</math>
- NB: Obtainable after application analysis (minimum product particle size / filtration rate / can velocity)
- Lifetime: up to 30,000 operating hours
- Cleanable by water wash
- Classification: **L** according to BGIA test
- Weight:  $250 \text{ g} / \text{m}^2$
- Air permeability:  $3400 \text{ m}^3 / \text{m}^2 \text{ h}$  (200Pa)
- Low pressure drops: <math>< 700 \text{ Pa}</math> (70 mm H<sub>2</sub>O)
- Less cleaning cycles required
- Low melting point heat-bonded synthetic fibers (Fig. 1)
- Homogeneous surface (Fig. 2) which increases the mechanical resistance
- NB: The commercial cartridges available on the market are produced with stitch-welded fabrics (Fig.3-4) which reduce the real filtering surface by up to 35% (Fig.5)

## FABRICS NOT MIX

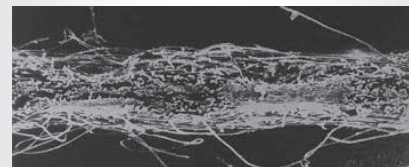
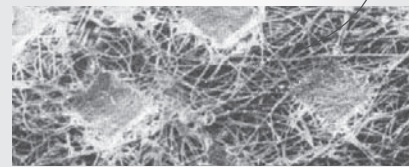


Fig.03 Standard 1.000  $\mu\text{m}$



Fig.04 (spot welded surface)



Zoom spot welding

## NEEDED FELT



### POLYESTER NEEDLE FELT MATERIAL

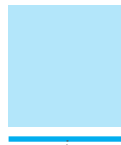
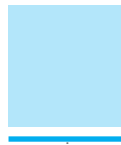
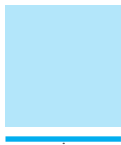
- Emission <math>< 5 \text{ mg} / \text{Nm}^3</math>
- NB: Obtainable only with specific types of tissues and after application analysis (minimum product particle size / filtration rate / rate of ascent)
- Different surface treatments available (antistatic / teflon coating / heat-sealed membrane)
- Cleanable by water wash
- Classification: L or M according to BGIA test
- Weight:  $450 \text{ g} / \text{m}^2$  or higher
- Antistaticity obtained with stainless steel fibers (Fig. 5)
- Can be installed on galvanized carbon steel cages or, on request, in stainless steel

## ANTISTATIC FABRIC



Fig.05


# Combination table



**Identification**  
/: Standard  
A: Atex

**Type**  
D: Cartridge  
L: Bag

**Air Outlet Type**  
D: Horizontal cylindrical outlet set for conveying pipe  
H: Fan assisted discharge

Cartridge		
	<b>084</b> = 84 m <sup>2</sup>	<b>230</b> = 230m <sup>2</sup>
	<b>105</b> = 105m <sup>2</sup>	<b>252</b> = 252m <sup>2</sup>
	<b>115</b> = 115m <sup>2</sup>	<b>290</b> = 290m <sup>2</sup>
	<b>145</b> = 145m <sup>2</sup>	<b>315</b> = 315m <sup>2</sup>
	<b>168</b> = 168m <sup>2</sup>	<b>345</b> = 345m <sup>2</sup>
	<b>210</b> = 210m <sup>2</sup>	<b>435</b> = 435m <sup>2</sup>

Bag		
	<b>027</b> = 27m <sup>2</sup>	<b>090</b> = 90m <sup>2</sup>
	<b>036</b> = 36m <sup>2</sup>	<b>108</b> = 108m <sup>2</sup>
	<b>045</b> = 45m <sup>2</sup>	<b>135</b> = 135m <sup>2</sup>
	<b>054</b> = 54m <sup>2</sup>	
	<b>072</b> = 72m <sup>2</sup>	
	<b>081</b> = 81m <sup>2</sup>	

## OPTIONAL



Gallery

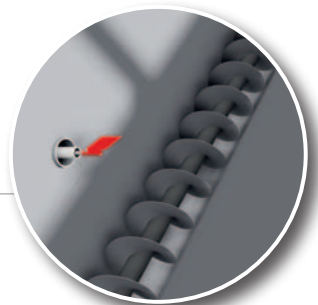
Solution with rotary-valve



Solution with butterfly valve



Solution with screw conveyor



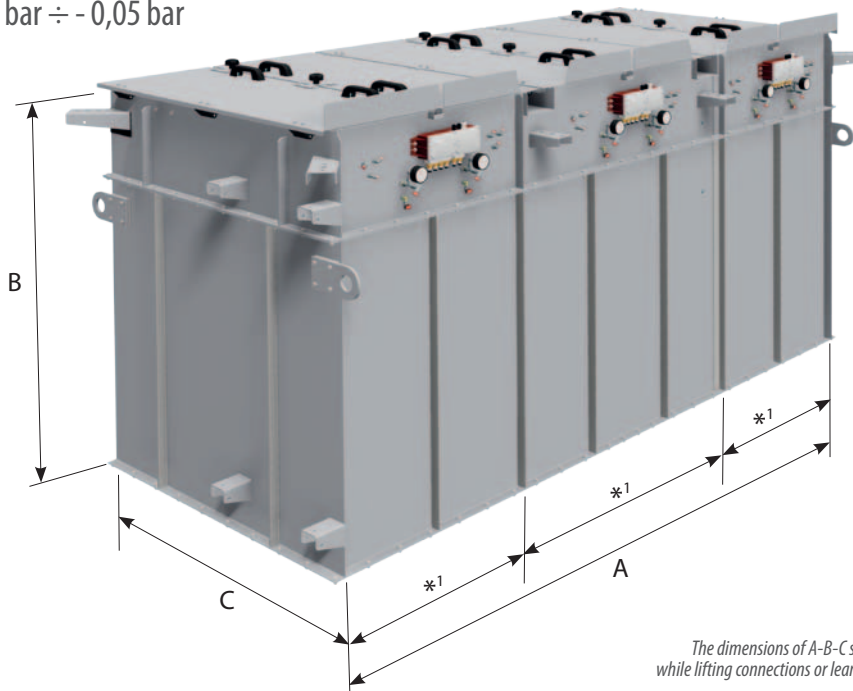
# Dimensions

## CARTRIDGE VERSION

TYPE SRD..	m <sup>2</sup>	Filter elements	n° mod.*	A	B	C	Nm <sup>3</sup> /h *	bar *	kg
SRD.084	84	Standard	1	1070	1450	1400	5	5	450
SRD.105	105	Standard	1	1070	1700	1400	5	5	480
SRD.115	115	Skyfilter®	1	1070	1450	1400	2,1	4	450
SRD.145	145	Skyfilter®	1	1070	1700	1400	2,1	4	480
SRD.168	168	Standard	2	2150	1450	1400	10	5	900
SRD.210	210	Standard	2	2150	1700	1400	10	5	950
SRD.230	230	Skyfilter®	2	2150	1450	1400	4,2	4	900
SRD.252	252	Standard	3	3300	1450	1400	15	5	1360
SRD.290	290	Skyfilter®	2	2150	1700	1400	4,2	4	950
SRD.315	315	Standard	3	3300	1700	1400	15	5	1450
SRD.345	345	Skyfilter®	3	3300	1450	1400	6,3	4	1360
SRD.435	435	Skyfilter®	3	3300	1700	1400	6,3	4	1450

## STRONG STRUCTURE

Relative pressure: + 0,03 bar ÷ - 0,05 bar



*The dimensions of A-B-C sections refer to the dimension of the filter body, while lifting connections or leaning parts of connected accessories are excluded*

## BAG VERSION

TYPE SRL..	m <sup>2</sup>	n° mod*	A	B	C	Nm <sup>3</sup> /h *	bar *	kg
SRL.027	27	1	1070	2100	1400	6	6	500
SRL.036	36	1	1070	2600	1400	6	6	570
SRL.045	45	1	1070	3100	1400	6	6	650
SRL.054	54	2	2150	2100	1400	12	6	1000
SRL.072	72	2	2150	2600	1400	12	6	1140
SRL.081	81	3	3300	2100	1400	18	6	1520
SRL.090	90	2	2150	3100	1400	12	6	1300
SRL.108	108	3	3300	2600	1400	18	6	1740
SRL.135	135	3	3300	3100	1400	18	6	1970

\* Average air consumption in Nm<sup>3</sup>/h for use with displayed pressure

Air inlet 3/8" GAS or pipe 12x1



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QUALITY  
SERVICE  
TECHNOLOGY  
INNOVATION

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