# modular 5 DUCTING 5



# **FILTERS**





# **ABOUT US**

Air pollution is one of the biggest problems worldwide, not only on the outside environment but also on the inside work environment. Air pollution is a risk for the environment itself, as well as for people's health. Thus, it is important that industries ensure a clean environment inside their companies and work environments. This can be done by implementing proper systems with quality products to ensure good air quality.

**Modular ducting** supplies products to ensure clean air in the working environment. We stock a different variety of products such as galvanized ductwork, including bends and dampers, between others; industrial hoses and industrial vacuum cleaners. We have also available in our range, products such as filter and fans, which can be made available on order.

Our products are suitable for different industry sectors such as plastics, metal, food and pharma, agricultural, raw material, fume and dust extraction, wood processing, automotive and disposal industries.

Pull Ring Edge

### **Cleaning Systems Medium Pressure** ATFX **Rotary Valves Filters Ductwork** Branch Trouser Galvanized Industrial Hoses **Diverters** Rolled Edge **Fans Industrial Vacuums** Dampers Throttle Valves Accessories **Bends High Pressure**



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# modular 5 DUCTING

# OIL, V.O.C & FUMES









# modular 5 DUCTING

www.modularducting.co.uk

**AR** Electrostatic Line

# OIL, V.O.C & FUMES

# **AR**Electrostatic Line

### **PRODUCT**

AR filter belongs to Electrostatic Line and it is composed by modular units for the electrostatic air filtration from pollution like oil fogs, dusts, welding fumes and industrial smokes in general.

A very important feature of AR filters is their modularity: the smallest 3module has a filtration capacity of about 2 000.m³/h and, combining opportunely the modules, we can obtain multiple air capacities, up to 48 000 m³/h.

can obtain multiple air capacities, up to 48 000 m³/h.
AR Electrostatic Filters are constructed with a strong structure of bent sheet metal, suitable for the installation on the floor. The units are equipped with an inlet flange for the connection with the pipeline of the system.

The filter is also equipped with an electric board for the control of the electrostatic part and, for the model with the fan, also with the start/stop controls for the suction unit.

### **FEATURES**

The modularity of AR filters also allows to be joined together with different filtering elements such as pocket filters, drops separators, activated.carbon.filters. In a very compact version, the AR can be equipped with a fan unit, by adding a back module to the electrostatic.

by adding a back module to the electrostatic. There are two types of AR electrostatic filter for each configuration; one for the dry smokes and the otherfor the oil fogs. In the second version, there are a system for the unloading of the condensate collected by the electrostatic cells and a tank for the collection of the filtered oil.

AR filters can be equipped with an activated carbon module "AR CA" or a fan module "AR M", or both "AR CA M".

Electrostatic filters ensure the purification of the air from polluting elements like fumes, dusts, oil mists, welding and processing fumes. Those pollutants can have granulometry with values that vary from 10 to 0,01 micron. The flow resistance of the electrostatic filter can vary from 40 Pascal (filter clean) to 80 Pascal (filter dirty). The inlet concentration of the pollutant can be up to 50 mg/m the temperature of the fluid must not exceed 60°C and the relative humidity can vary from 20% to 99%.



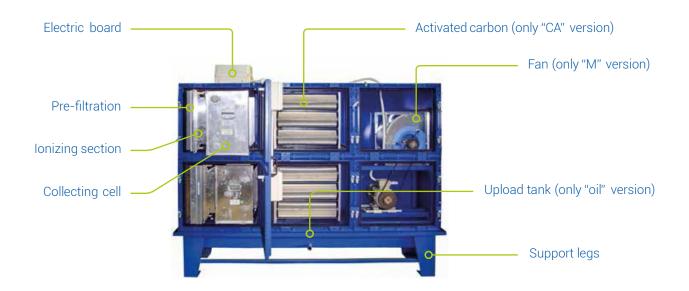








### **AR** Electrostatic Line



### **OPERATING PRINCIPLE**

The polluted particles contained within the gaseous flow, passing through the ionising section, are charged with unipolar electricity (thanks to the tungsten wires fed with 10 kV direct current suspended between electrodes

connected to the ground). In the collecting section (composed by pure aluminium plates fed with 5kV current, alternated with plates connected to the ground) the particles are repelled by the plates fed to the plates connected to the ground. Those last plates have the function to catch the polluting particles present in the fluid. The polluting particles kept in

the filter must be periodically removed with simple maintenance operations.



### **AUTOMATIC MONITORING SYSTEM**

The Automatic Monitoring System (AMS) is an electronic control device which allows to manage the filtering unit. Available with remote access and in two different versions for the models AR:

- AMS Local: each single machine has its own AMS alphanumeric;
- AMS Centralized: there is a centralized touch screen with all the graphic monitoring functions for more than one machines.



### **AR** Electrostatic Line

# OIL, V.O.C & FUMES

Model *	Confi- guration	Electro - static filters (Nr.)	Activated carbon cartrid - ges(Nr.)	Acti- vated carbon (Kg)	Motor Fan power (kW)	Max air- flow (m³/h)	Electro - static Power (W)	Filter pressu - re drop (Pa)	Fan pressure (Pa)	Noise level (dB(A))	Weight (Kg)	Filtering body dimen- sions LxHxP (mm)
AR 1x1		1	-	-	-	2.000	100	50	-	-	45	600 x 610 x 709
AR 1x1 CA		1	9	22,5	-	2.000	100	210	-	-	95	600 x 610 x 1418
AR 1x1 M		1			0,75	2.000	100	50	550	76	80	600 x 610 x 1418
AR 1x1 CA M		1	9	22,5	0,75	2.000	100	210	550	75	130	600 x 610 x 2127
AR 2x1		2	-	-	-	4.000	100	50	-	-	90	1130x 610 x 709
AR 2x1 CA		2	18	45	-	4.000	100	210	-	-	190	1130x 610x 1418
AR 2x1 M		2	-	-	1,5	4.000	100	50	550	75	155	1130x 610x 1418
AR 2x1 CA M		2	18	45	1,5	4.000	100	210	550	74	255	1130x610x2127
AR 1x2		2	-	-	-	4.000	100	50	-	-	90	600 x 1220 x 709
AR 1x2 CA	П	2	18	45	-	4.000	100	210	-	-	190	600 x 1220 x 1418
AR 1x2 M	В	2	-	-	1,5	4.000	100	50	550	75	155	600 x 1220 x 1418
AR 1x2 CA M		2	18	45	1,5	4.000	100	210	550	74	255	600 x 1220 x 2127
AR 3x1		3	-	-	-	6.000	100	50	-	-	135	1660x 610 x 709
AR 3x1 CA		3	27	67,5	-	6.000	100	210	-	-	285	1660x 610x 1418
AR 3x1 M		3	-	-	2,2	6.000	100	50	550	76	230	1660x 610x 1418
AR 3x1 CA M		3	27	67,5	2,2	6.000	100	210	550	75	380	1660x610x2127
AR 1x3		3	-	-	-	6.000	100	50	-	-	135	600x1830x709
AR 1x3 CA		3	27	67,5	-	6.000	100	210	-	-	285	600x1830x1418
AR 1x3 M		3	-	-	2,2	6.000	100	50	550	76	230	600x1830x1418
AR 1x3 CA M	- U	3	27	67,5	2,2	6.000	100	210	550	75	380	600x1830x2127
AR 4x1		4	-	-	-	8.000	100	50	-	-	180	2260x610x709
AR 4x1 CA		4	36	90	-	8.000	100	210	_	-	380	2260x610x1418
AR 4x1 M		4	-	-	4	8.000	100	50	600	77	310	2260x610x1418
AR 4x1 CA M		4	36	90	4	8.000	100	210	600	76	510	2260x610x1416
AR 1x4		4	-	50	-	8.000	100	50	-	-	180	600x2440x709
AR 1x4 CA		4	36	90		8.000	100	210	_	_	380	600x2440x1418
AR 1x4 M		4	-	-	4	8.000	100	50	600	77	310	600x2440x1418
AR 1x4 CA M		4	36	90	4	8.000	100	210	600	76	510	600x2440x1418
AR 2x2		4	-	-	-	8.000	100	50	-	-	180	1130x1220x709
		4	36	90	-	8.000		210	-	-	380	1130x1220x709 1130x1220x1418
AR 2x2 CA	$\blacksquare$	4	-	- 90	4		100		600			
AR 2x2 M		4		90	4	8.000	100 100	50		77	310 510	1130x1220x1418
AR 2x2 CA M			36	90		8.000		210	600	76		1130x1220x2127
AR 2x3		6	-		-	12.000	200	50	-	-	270	1130x1830x709
AR 2x3 CA		6	54	135	-	12.000	200	210	-	-	570	1130x1830x1418
AR 2x3 M		6	-	- 105	5,5	12.000	200	50	550	76	455	1130x1830x1418
AR 2x3 CA M		6	54	135	5,5	12,000	200	210	550	75	755	1130x1830x2127
AR 3x2		6	-	-	-	12.000	200	50	-	-	270	1660x1220x709
AR 3x2 CA		6	54	135	-	12.000	200	210	-	- 76	570	1660x1220x1418
AR 3x2 M		6	-	- 105	5,5	12.000	200	50	550	76	455	1660x1220x1418
AR 3x2 CA M		6	54	135	5,5	12.000	200	210	550	75	755	1660x1220x2127
AR 2x4	$\blacksquare$	8	- 70	- 100	-	16.000	200	50	-	-	360	1130x2440x709
AR 2x4 CA		8	72	180	-	16.000	200	210	-	-	760	1130x2440x1418
AR 2x4 M	$\blacksquare$	8	-	-	5,5	16.000	200	50	530	78	585	1130x2440x1418
AR 2x4 CA M		8	72	180	5,5	16.000	200	210	530	77	985	1130x2440x2127
AR 4x2		8	-	-	-	16.000	200	50	-	-	360	2260x1220x709
AR 4x2 CA		8	72	180	-	16.000	200	210	-	-	760	2260x1220x1418
AR 4x2 M	سب	8	-	-	5,5	16.000	200	50	530	78	585	2260x1220x1418
AR 4x2 CA M		8	72	180	5,5	16.000	200	210	530	77	985	2260x1220x2127
AR 3x3		9	-	-	-	18.000	300	50	-	-	405	1660x1830x709
AR 3x3 CA		9	81	202,5	-	18.000	300	210	-	-	855	1660x1830x1418
AR 3x3 M		9	-	-	7,5	18.000	300	50	490	76	665	1660x1830x1418
AR 3x3 CA M		9	81	202,5	7,5	18.000	300	210	490	75	1115	1660x1830x2127

<sup>\*</sup> available for fumes (AR F) and for oil (AR O)





### **AR** Electrostatic Line

AR 2x5		10	-	-	-	20.000	300	50	-	-	450	1130x3050x709
AR 2x5 CA	$\blacksquare$	10	90	225	-	20.000	300	210	-	-	950	1130x3050x1418
AR 2x5 M		10	-	-	7,5	20.000	300	50	450	77	730	1130x3050x1418
AR 2x5 CA M	ш	10	90	225	7,5	20.000	300	210	450	76	1230	1130x3050x2127
AR 4x3		12	-	-	-	24.000	300	50	-	-	540	2260x1830x709
AR 4x3 CA		12	108	270	-	24.000	300	210	-	-	1140	2260x1830x1418
AR 4x3 M		12	-	-	11	24.000	300	50	490	78	890	2260x1830x1418
AR 4x3 CA M		12	108	270	11	24.000	300	210	490	77	1450	2260x1830x2127
AR 3x4		12	-	-	-	24.000	400	50	-	-	540	1660x2440x709
AR 3x4 CA		12	108	270	-	24.000	400	210	-	-	1140	1660x2440x1418
AR 3x4 M		12	-	-	11	24.000	400	50	490	78	890	1660x2440x1418
AR 3x4 CA M		12	108	270	11	24.000	400	210	490	77	1490	1660x2440x2127
AR 2x7		14	-	-	-	28.000	400	50	-	-	630	1130x4270x709
AR 2x7 CA	Ш	14	126	315	-	28.000	400	210	-	-	1330	1130x4270x1418
AR 3x5		15		-		30.000	500	50			675	1660x3050x709
		15	135			30.000	500	210			1425	
AR 3x5 CA		15	135	337,5		30.000	500	210			1425	1660x3050x1418
AR 4x4		16	-	-	-	32.000	400	50	-	-	720	2260x2440x709
AR 4x4 CA		16	144	360	-	32.000	400	210	-	-	1520	2260x2440x1418
AR 3x6		18	-	-	-	36.000	600	50	-	-	810	1660x3660x709
AR 3x6 CA		18	162	405	-	36.000	600	210	-	-	1710	1660x3660x1418
AR 4x5		20		_		40.000	500	50			900	2260x3050x709
AR 4x5 CA		20	180	450	-	40.000	500	210	-	-	1900	2260x3050x1418
	$\Box$											
AR 4x6		24	-	-	-	48.000	600	50	-	-	1080	2260x3660x709
AR 4x6 CA		24	216	540	-	48.000	600	210	-	-	2280	2260x3660x1418
AR 3x8	<b>##</b>	24	-	-	_	48.000	800	50	-	_	1080	1660x4880x709
AR 3x8 CA		24	216	540	-	48.000	800	210	-	-	2280	1660x4880x1418

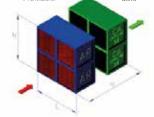
Normal electrostatic filter / Filtro elettrostatico normale.
Oil or smokes version / Versione per olio oppure per fumi.
Activated carbon excluded / Escluso il carbone attivo.
Fan Excluded / Escluso il ventilatore



### AR CA

Electrostatic filter with activated carbon / Filtro elettrostatico con carbone attivo. Fan excluded / Escluso

Electrostatic filter with fan/ Filtro elettrostatico con ventilatore. Activated carbon excluded / Escluso il carbone attivo



AR CA M

Electrostatic filter with activated carbon and fan / Filtro elettrostatico con il carbone attivo e con il ventilatore





**AR VOL** Electrostatic Line

OIL, V.O.C & FUMES

# **AR VOL** Electrostatic Line

### **PRODUCT**

Electrostatic filters "AR-VOL" are designed for providing a free electrostatic air filtration, so without the installation of

a suction system.

If an industrial area is affected by a problem of generalised pollution, that affects the entire structure or a considerable part of it, it is both technically and economically convenient intervening with a filtration that covers the volume of the entire polluted area (form this derives the name of the model).

If it is not possible installing capillary filtration systems or if it is necessary improving the efficiency of a centralized system, the use of "AR-VOL" filters becomes indispensable. Those filters are suitable for pollutants like welding fumes, processing fumes, powder and oil mists of

various origins.

"AR-VOL" electrostatic filters are constructed with a strong structure of bent sheet metal, suitable for the suspended installation; the height from the ground can vary, according to the consistency and the density of the

pollutants, from 3 to 5 meters.

The units are equipped with a conveyor (for the air inlet); a suction fan with baffles for the correct addressing of air in outlet; a control panel separated from the unit for an easy installation of the unit into the structure; an electric panel placed on the machine with a red light that signals the

anomalies (well visible also from a big distance).
The height from the ground for the installation of the volumetric should be calculated according to the type of

pollutant and the structure of the building.

### **FEATURES**

Electrostatic filters ensure the purification of the air from polluting elements like fumes, dusts, oil mists, welding and Those pollutants fumes. granulometry with values that vary from 10 to 0,01 micron. The flow resistance of the electrostatic filter can vary from 40 Pascal (filter clean) to 80 Pascal (filter dirty). The inlet concentration of the pollutant can be up to 50

mg/m the temperature of the fluid must not exceed 60°C and the relative humidity can vary from 20% to 99%.





# OIL, V.O.C & FUMES

### **AR VOL** Electrostatic Line



### **OPERATING PRINCIPLE**

The polluted particles contained within the gaseous flow, passing through the ionising section, are charged with unipolar electricity (thanks to the tungsten wires fed with 10 kV direct current suspended between electrodes connected to the ground).

In the following collecting section (composed by pure aluminium plates fed with 5kV current, alternated with plates connected to the ground) the particles are repelled by the plates fed to the plates connected to the ground. Those last plates have the function to catch the polluting particles present in the fluid. The polluting particles kept in the filter must be periodically removed with simple maintenance operations.



### **AUTOMATIC MONITORING SYSTEM**

The Automatic Monitoring System (AMS) is an electronic control device which allows to manage the filtering unit. Available with remote access and in two different versions for the models AR VOL:

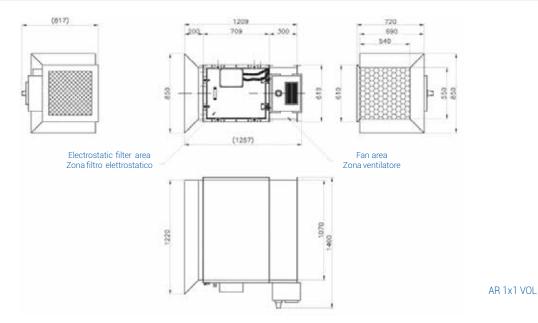
- AMS Local: each single machine has its own AMS alphanumeric:
- AMS Centralized: there is a centralized touch screen with all the graphic monitoring functions for more than one machines.

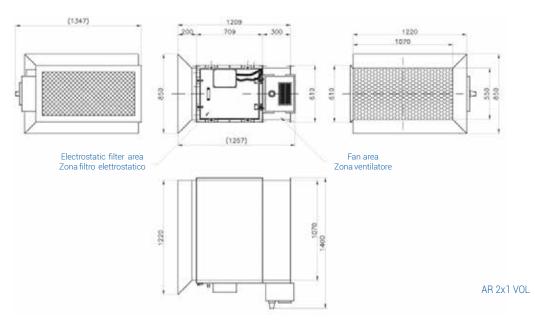


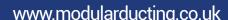
### **AR VOL** Electrostatic Line

# OIL, V.O.C & FUMES

Model	Electrostatic filters (Nr.)	Total Power (W)	Nominal air-flow (m³/h)	Electrical connection	Noise level (dB(A))	Weight (Kg)
AR 1x1 VOL	1	250	2.500	230V-1PH/50Hz	70	105
AR 2x1 VOL	2	500	5.000	230V-1PH/50Hz	72	210
AR 1x2VOL	2	500	5.000	230V-1PH/50Hz	72	210
AR 2x2 VOL	4	550	10.000	400V-3PH+N/50Hz	73	400

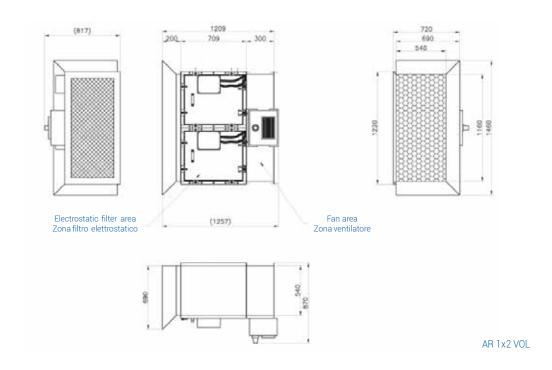


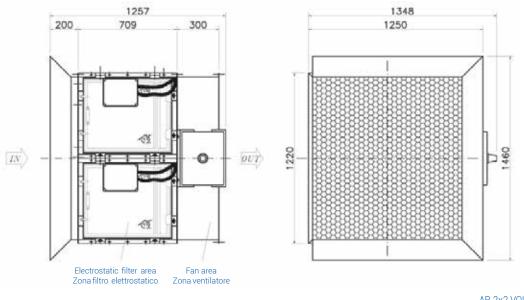






### **AR VOL** Electrostatic Line





AR 2x2 VOL



**ANTARES 100** Mechanical/Electrostatic Line

OIL, V.O.C & FUMES

# **ANTARES 100**

### Mechanical/Electrostatic Line

### **PRODUCT**

Thanks to their reduced dimensions, ease of use and functioning efficiency, the ANTARES 100 filters represent the real solution to the problems of aspiration and filtration of fumes deriving from different industrial productions. This model of filter has been designed according to the principles of modern technology and it's addressed to those industrial and handcrafted applications that need an aspiration and filtration system that proves to be easy to install, of reduced dimensions but of great manageability and stability; specifically, it's been developed for field as industrial mechanics and industrial furnaces where oily refrigerating liquids are used. The ANTARES 100 filters are made of modular panels, varnished with powder paint. They are equipped with coupling flange that allows its installation on the machine and fan with command and lighted control. They are available in the electrostatic version with one or two cells (tandem model) or in the mechanical version with a coalescent cartridge. Both models – electrostatic and mechanical – can be equipped with a HEPA absolute filter, that guarantee savery high filtration efficiency, up to 99,95%.



### ANTARES 100 DIMENSIONS / DIMENSIONI ANTARES 100





# OIL, V.O.C & FUMES ANTARES 100 Mechanical/Electrostatic Line

### **MAINTENANCE**

Maintenance operations are simple and immediate. They don't require specialized staff and can be performed in a short time.

DROP SEPARATOR	WASHING
METALLIC PRE-FILTER	WASHING
ELECTROSTATIC CELLS	WASHING
CARTRIDGE	REPLACEMENT
НЕРА	REPLACEMENT
METALLIC POST-FILTER	WASHING



**OPERATING PRINCIPLE — Electrostatic version**The aspired air is routed into the drops separator, that condenses liquid and oily substances. The second stage is formed by a metallic pre-filter that hold the particles with bigger granulometry. Then the prefiltered air passes through the electrostatic cell, where the smallest pollutant are subsided.



**Drop separator** 



**Metallic filter** 



Electrostatic cell



**HEPA** 



### **ANTARES 100** Mechanical/Electrostatic Line

# OIL, V.O.C & FUMES

**OPERATING PRINCIPLE — Mechanical version**The aspired air is routed into the drops separator, that condenses liquid and oily substances. The second stage is formed by a mecanical filter that hold the particles with bigger granulometry. Then the prefiltered air passes through the cartridge, where the smallest pollutant are subsided.









Metallic filter



Cartridge



**HEPA** 

Model	Nominal air-flow (m³/h)	Drop sepa- rator (Nr.)	Metallic pre-filter (Nr.)	Electro - static cell (Nr.)	Hepa Filter (Nr.)	Metallic post-filter (Nr.)	Total power (W)	Noise level (dB(A))	Electrical connection
ANTARES 100 E1	800	1	1	1	-	1	250	60	230V-1PH/50Hz
ANTARES 100 E2	800	1	1	2	-	1	250	60	230V-1PH/50Hz
ANTARES 100 E1 A	800	1	1	1	1	-	250	60	230V-1PH/50Hz

Model	Nominal air-flow (m³/h)	Drop sepa- rator (Nr.)	Metallic pre-filter (Nr.)	Electro - static cell (Nr.)	Hepa Filter (Nr.)	Metallic post-filter (Nr.)	Total power (W)	Noise level (dB(A))	Electrical connection
ANTARES 100 M1	800	1	1	1	-	-	250	62	230V-1PH/50Hz
ANTARES 100 M1 A	800	1	1	1	1	-	250	62	230V-1PH/50Hz





**EXPLORER** Mechanical/Electrostatic Line

# **EXPLORER**

### Mechanical/Electrostatic Line

### **PRODUCT**

Thanks to their reduced dimensions, ease of use and functioning efficiency, EXPLORER filters represent the real solution to the problems of aspiration and filtration of fumes deriving from different industrial productions. This model of filter has been designed according to the principles of modern technology and it's addressed to those industrial and hand-crafted applications that need an aspiration and filtration system that proves to be easy to install, of reduced dimensions but of great manageability and stability; specifically, it's been developed for field as industrial mechanics and industrial furnaces where oily refrigerating liquids are used. The EXPLORER filters are made of modular panels, varnished with powder paint. They are equipped with coupling flange that allows its installation on the machine and fan with command and lighted control. They are available in the electrostatic version with one or two cells (tandem model) or in the mechanical version with a coalescent cartridge. Both models – electrostatic and mechanical – can be equipped with a HEPA absolute filter, that guarantee savery high filtration efficiency, up to 99,95%.





### EXPLORER DIMENSIONS / DIMENSIONI EXPLORER





### **EXPLORER** Mechanical/Electrostatic Line

# OIL, V.O.C & FUMES

### **MAINTENANCE**

Maintenance operations are simple and immediate. They don't require specialized staff and can be performed in a short time.

DROP SEPARATOR	WASHING
METALLIC PRE-FILTER	WASHING
ELECTROSTATIC CELLS	WASHING
CARTRIDGE	REPLACEMENT
НЕРА	REPLACEMENT
METALLIC POST-FILTER	WASHING





**OPERATING PRINCIPLE — Electrostatic version**The aspired air is routed into the drops separator, that condenses liquid and oily substances. The second stage is formed by a metallic pre-filter that hold the particles with bigger granulometry. Then the pre-filtered air passes through the electrostatic cell, where the smallest pollutant are subsided.



**Drop separator** 



**Metallic filter** 



Electrostatic cell



**HEPA** 



# OIL, V.O.C & FUMES

### **EXPLORER** Mechanical/Electrostatic Line

**OPERATING PRINCIPLE — Mechanical version**The aspired air is routed into the drops separator, that condenses liquid and oily substances. The second stage is formed by a mechanical filter that hold the particles with bigger granulometry. Then the pre-filtered air passes through the cartridge, where the smallest pollutant are subsided.







**Drop separator** 



**Metallic filter** 



Cartridge



**HEPA** 



### **EXPLORER** Mechanical/Electrostatic Line

# OIL, V.O.C & FUMES

Model	Nominal air- flow (m³/h)	Drop separator (Nr.)	Metallic pre-filter (Nr.)	Electrostatic cell (Nr.)	Hepa Filter (Nr.)	Metallic post-filter (Nr.)	Total power (W)	Noise level (dB(A))	Electrical
EXPLORER 200 E1	900	1	1	1	-	1	200	71	230V-1PH/50Hz
EXPLORER 200 E1 A	900	1	1	1	1	-	200	71	230V-1PH/50Hz
EXPLORER 200 E2	1.000	1	1	2	-	1	200	71	230V-1PH/50Hz
EXPLORER 300 E1	1.200	1	1	1	-	1	250	73	230V-1PH/50Hz
EXPLORER 300 E1 A	1.200	1	1	1	1	-	250	73	230V-1PH/50Hz
EXPLORER 300 E2	1.300	1	1	2	-	1	250	73	230V-1PH/50Hz
EXPLORER 400 E1	1.400	1	1	1	-	1	250	73	230V-1PH/50Hz
EXPLORER 400 E1 A	1.400	1	1	1	1	-	250	73	230V-1PH/50Hz
EXPLORER 400 E2	1.600	1	1	2	-	1	250	73	230V-1PH/50Hz

Model	Nominal air- flow (m³/h)	Drop separator (Nr.)	Metallic pre-filter (Nr.)	Electrostatic cell (Nr.)	Hepa Filter (Nr.)	Metallic post-filter (Nr.)	Total power (W)	Noise level (dB(A))	Electrical
EXPLORER 200 M1	900	1	1	1	-	-	200	71	230V-1PH/50Hz
EXPLORER 200 M1 A	900	1	1	1	1	-	200	71	230V-1PH/50Hz
EXPLORER 300 M1	1.200	1	1	1	-	-	250	73	230V-1PH/50Hz
EXPLORER 300 M1 A	1.200	1	1	1	1	-	250	73	230V-1PH/50Hz
EXPLORER 400 M1	1.400	1	1	1	-	-	250	73	230V-1PH/50Hz
EXPLORER 400 M1 A	1.400	1	1	1	1	-	250	73	230V-1PH/50Hz





**CA** Activated Carbon Line

# **CA**Activated Carbon Line

### **PRODUCT**

The CA model is designed to reduce Volatile Organic Compounds with no high concentration and for applications which are not particularly hazardous. The units for this model are designed in a modular way in order to satisfy all possible needs in terms of capacity and possible space limitations. They may be used both as individual filtering units and as post-filtering units together with mechanical (pocket filters) and electrostatic filtration equipped with centrifugal fan in CA M version. Thanks to the small cartridges, which each contain 3 Kg of carbon, periodic maintenance operations for replacement are quick and easy.

### **OPERATING PRINCIPLE**

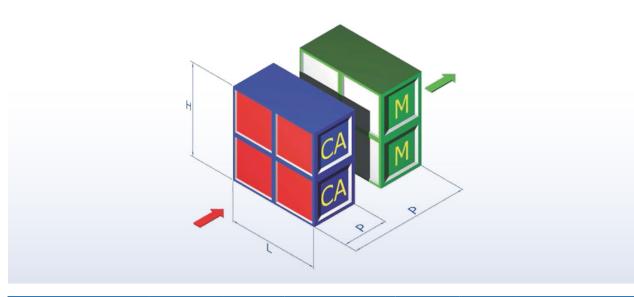
The polluted air is channelled to and collected in the mechanical prefilter where the larger sized physical pollutants are deposited. The air is pre-filtered through cartridges containing activated carbon where it deposits the various volatile pollutants.





### **CA** Activated Carbon Line

# OIL, V.O.C & FUMES



Model	Configuration	Activated carbon car - tridges (Nr.)	Activated carbon (Kg)	Motor fan (KW)	Max air-flow (m³/h)	Filter pressure drop (Pa)	Fan pressure (Pa)	Noise level (dB(A))	Filtering body dimensions LxHxP (mm)
CA 1x1		9	27	-	2.000	160	-	-	600 x 610 x 709
CA 1x1 M		9	27	0,75	2.000	160	550	75	600 x 610 x 1418
CA 2x1		18	54	-	4.000	160	-	-	1130 x 610 x 709
CA 2x1 M		18	54	1,5	4.000	160	550	74	1130x 610x 1418
CA 1x2	В	18	54	-	4.000	160	-	-	600 x 1220 x 709
CA 1x2 M		18	54	1,5	4.000	160	550	74	600 x 1220 x 1418
CA 3x1		27	81	-	6.000	160	=	-	1660 x 610 x 709
CA 3x1 M		27	81	2,2	6.000	160	550	75	1660x 610x 1418





### **CA** Activated Carbon Line

CA 1x3	П	27	81	_	6.000	160	-	-	600 x 1830 x 709
CA 1x3M		27	81	2,2	6.000	160	550	75	600 x 1830 x 1418
CA 4x1		36	108	-	8.000	160	-	-	2260 x 610 x 709
CA 4x1 M		36	108	4	8.000	160	600	76	2260x 610x 1418
CA 1x4	В	36	108	-	8.000	160	-	-	600 x 2440 x 709
CA1x4M		36	108	4	8.000	160	600	76	600 x 2440 x 1418
CA 2x2		36	108	-	8.000	160	-	-	1130x 1220x 709
CA 2x2 M	$\blacksquare$	36	108	4	8.000	160	600	76	1130x 1220x 1418
CA 2x3	H	54	162	-	12.000	160			1130x 1830x 709
CA 2x3 M		54	162	5,5	12.000	160	550	75	1130x 1830x 1418
CA 3x2	<del></del>	54	162	-	12.000	160			1660x 1220x 709
CA 3x2 M	Ш	54	162	5,5	12.000	160	550	75	1660x 1220x 1418
CA 2x4	H	72	216	-	16.000	160	-	-	1130x 2440x 709
CA 2x4M		72	216	5,5	16.000	160	530	77	1130x2440x1418
CA 4x2		72	216	-	16.000	160	-	-	2260x1220x709
CA 4x2 M		72	216	5,5	16.000	160	530	77	2260x1220x1418
CA 3x3		81	243	-	18.000	160	-	-	1660x1830x709
CA 3x3 M		81	243	7,5	18.000	160	490	75	1660x1830x1418
CA 2x5		90	270	-	20.000	160	-	-	1130x3050x709
CA 2x5 M	曲	90	270	7,5	20.000	160	450	76	1130x3050x1418
CA 4x3	HHH.	108	324	-	24.000	160	-	-	2260x1830x709
CA 4x3 M		108	324	11	24.000	160	490	77	2260x1830x1418
CA 3x4	HH.	108	324	-	24.000	160	-	-	1660x2440x709
CA 3x4M		108	324	11	24.000	160	490	77	1660x2440x1418
CA 2x7		126	378	-	28.000	160	-	-	1130x4270x709
CA 3x5		135	405	-	30.000	160	-	-	1660x3050x709
CA 4x4		144	432	-	32.000	160	-	-	2260x2440x709
CA 3x6		162	486	-	36.000	160	-	-	1660x3660x709
CA 4x5		180	540	-	40.000	160	-	-	2260x3050x709
CA 4x6		216	648	-	48.000	160	-	-	2260x3660x709
CA 3x8		216	648	-	48.000	160	-	-	1660x4880x709



**AERCARBO** Activated Carbon Line

OIL, V.O.C & FUMES

# **AERCARBO**Activated Carbon Line

### **PRODUCT**

The AERCARBO filtering unit was designed to filter pollutants that contain dust, solvent vapours and pollutants that are especially volatile. The AERCABO unit has a painted sheet metal panel structure that is bolted together. The cartridges containing approx 48 Kg of active carbon permits a good level of absorption. The filtering unit is also available in AERCARBO M version which is equipped with the centrifugal fan.

### **OPERATING PRINCIPLE**

The polluted air is channelled to and collected inside the plenum located in the lower part of the unit. The air rises and immediately meets the mechanical pre-filters where the larger sized physical pollutants are deposited. The pre-filtered air then rises up through the cartridges containing activated carbon and deposits the various volatile pollutants.

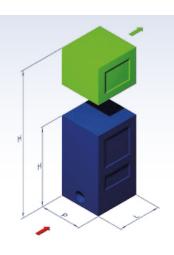






### **AERCARBO** Activated Carbon Line

Model	Cartridges (Nr.)	Activated carbon (Kg)	Motor fan power (kW)	Max air-flow (m³/h)	Filter pressure drop (Pa)	Fan pressure (Pa)	Noise level (dB(A))	Filtering body dimensions LxPxH (mm)
AERCARBO 2	2	100	-	-	400	-	-	1190x575x2180
AERCARBO 2 M	2	100	2,2	4.000	400	1100	75	1190x575x2880
AERCARBO 4	4	200	-	-	400	-	-	1190x1145x2180
AERCARBO 4 M	4	200	3	8.000	400	1100	76	1190x1145x2980
AERCARBO 6	6	300	-	-	400	-	-	1690x1145x2380
AERCARBO 6 M	6	300	4	9.500	400	1200	78	1690x1145x3180
AERCARBO 8	8	400	-	-	400	-	-	2500x1145x2380
AERCARBO 8 M	8	400	5,5	16.000	400	1200	78	2500x1145x3280
AERCARBO 10	10	500	-	-	400	-	-	3000x1145x2480
AERCARBO 10 M	10	500	11	22.000	400	1200	79	3000x1145x3380





**MAXICARBO** Activated Carbon Line

OIL, V.O.C & FUMES

# MAXICARBO Activated Carbon Line

### **PRODUCT**

The "Maxi-Carbo" activated carbon filter is designed for treating effluents with high levels of Volatile Organic Compounds (VOCs). The filtering unit is characterised by a completely welded steel structure equipped with one or two vertical beds of active carbon. Carbon is loaded from above through a door, while the depleted carbon is unloaded from below through a slide gate. The particular geometrical shape permits easier and faster operation of charging and discharging of the active carbon.

### **OPERATING PRINCIPLE**

The "Maxi-Carbo" activated carbon filter is suited with one or two vertical carbon beds. The air flow mixed to VOC passes through the vertical carbon bed located inside the "diamond-shape" structure. Thanks to the optimized contact time the vertical carbon bed absorbs the VOC released from the air flow. The filter is not equipped with prefiltration and therefore any possible solid particles in the air must be treated beforehand with other filtration systems.







### **MAXICARBO** Activated Carbon Line

Model *	Impact surface (m²)	Carbon volume (m³)	N° of Beds	P (mm)	L (mm)	H (mm)	Filter pressure drop (Pa)	
MAXICARBO 1/300		0,68						
MAXICARBO 1/400	2,25	0,90	1	2263	1570	3852	900	
MAXICARBO 1/500		1,13						
MAXICARBO 2/300		0,87						
MAXICARBO 2/400	2,89	1,16	1	2512	1445	3864	900	
MAXICARBO 2/500		1,45						
MAXICARBO 3/300		3,47						
MAXICARBO 3/400	5,78	4,62	2	2545	2000	3864	900	
MAXICARBO 3/500		5,78						
MAXICARBO 4/300		4,80						
MAXICARBO 4/400	8	6,40	2	2969	2300	4228	900	
MAXICARBO 4/500		8,00						
MAXICARBO 5/300		7,50						
MAXICARBO 5/400	12,5	10,00	2	3677	2300	4996	900	
MAXICARBO 5/500		12,50						
MAXICARBO 6/300		8,75						
MAXICARBO 6/400	14,58	11,66	2	3960	2370	5280	900	
MAXICARBO 6/500		14,58						

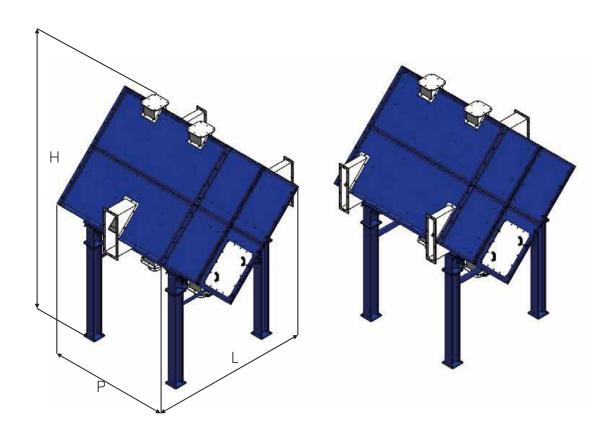


### **MAXICARBO** Activated Carbon Line

# OIL, V.O.C & FUMES

Model *	Impact surface (m²)	Carbon volume (m³)	N° of Beds	P (mm)	L (mm)	H (mm)	Filter pressure drop (Pa)	
MAXICARBO 7/300		10,09						
MAXICARBO 7/400	16,82	13,46	2	4201	1940	5500	900	
MAXICARBO 7/500		16,82						
MAXICARBO 8/300		13,87						
MAXICARBO 8/400	23,12	18,50	2	4950	2400	6269	900	
MAXICARBO 8/500		23,12						

<sup>\*</sup> without carbon





# **OIL, V.O.C & FUMES**

**MODULAR** Activated Carbon Filter

# MODULAR Activated Carbon Filter

### **PRODUCT**

The modular active carbon absorption filter is a filtration system used to treat the Volatile Organic Compounds through the contact of the air with activated carbon. The constructive geometry of the dust collector enables the dimensioning for high air capacities.

Its installation guarantees the quality of the air in the production and the protection of workers.

### **FEATURES**

### **Benefits**

The modular activated carbon absorption filter is composed and configured on the base of the type of use and the specific requirements of the client.

The unloading hopper, with manual shutters, enable the carbon unloading while the specific inlets with plugs on the top, accessible using a ladder and railing, facilitate loading operations.

The possibility of varying the thickness of the bed also enables the filter to be designed for the contact times necessary to absorb the specific substance.

The dust collector is manufactured in robust carbon steel sheeting.

### **Standard equipment**

-carbon unloading shutters

—ladder and railing to work safely during activated carbon loading operation

### **Options available**

-tackle for carbon loading

-structure for tackle



# modular f

www.modularducting.co.uk

**TA** Horizontal Pocket Filter

# OIL, V.O.C & FUMES

# TA Horizontal Pocket Filter

### **APPLICATION**

The TA filter is made up of modular units. These are modular in terms of air capacity and size, meeting our customer's every need. This type of unit can be used either singly or as pre-filters for electrostatic and active carbon filters, or indeed as pre-filters for cyclone filters.

### **PRODUCT**

The TA filters are modular in terms of both vertical and horizontal dimensions, and range from a basic module of 2,000 m<sup>3</sup>/h to standard versions of 48,000 m<sup>3</sup>/h or more,

The units are made of folded and bolted sheet metal and painted; they are fitted with flanges for easy connection to extractor ducts, eyebolts at the top for suspended installation and sturdy bases for ground installation.

The TA model is available in the four configurations: -Basic configuration: metal pre-filter, glass micro-fibre

pocket filter;

-"M" configuration: the same as the basic configuration, but with an additional section containing the extraction

unit (the fan) and its respective electric motor; -"CA" configuration: the same as the basic configuration, but with an additional section containing active carbon cartridges; each module is made up of 9 x carbon cartridges weighing (approx) 3 kg each.

-"CA M" configuration: the same as the basic configuration, but with two additional sections the first containing active carbon cartridges and the second containing the extractor (the fan) and its respective electric motor.

### **OPERATING PRINCIPLE**

The filters work in a vacuum. The air flows through the pre-filter, which captures the larger pollutants, and then the pocket filter comprising a set of single, ultra-deep pockets that are mechanically separated.

The surface area of all the fabric is such as to reduce the

filter's frontal speed and capture virtually all pollutants, so

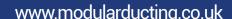
separation is to an exceptionally high standard.

As for the models with active carbon ("CA") section, the air is treated again by absorption of the active carbons before leaving or passing through the extractor.









# modular 5 DUCTING

# OIL, V.O.C & FUMES

### **TA** Horizontal Pocket Filter

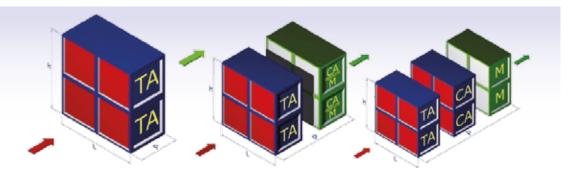
Model	Confi- guration	Pocket filter modules (Nr.)	Activated carbon cartridges (Nr.)	Acti- vated carbon (Kg)	Motor fan power (KW)	Max air flow (m³/h)	Filter pressure drop (Pa)	Fan pressure (Pa)	Noise level (dB(A))	Filtering body dimensions LxHxP (mm)
TA 1x1		1	_			2.000	250			600 x 610 x 709
TA 1x1 CA	1	1	9	27	-	2.000	400	_	_	600 x 610 x 1418
TA 1x1 M		1	-	-	1,1	2.000	250	1.180	71	600x610x1418
TA 1x1 CA M		1	9	27	1,1	2.000	400	1.180	71	600x610x1418
TA 2x1		2	-	-	-	4.000	250	-	-	1130x610x709
TA 2x1 CA	-	2	18	54	_	4.000	400	-	_	1130x610x1418
TA 2x1 GA		2	-	-	2,2	4.000	250	1.030	70	1130x610x1418
TA 2x1 IVI	-	2	18	54	2,2	4.000	400	1.030	70	1130x610x1418
TA 1x2		2	-		-	4.000	250	1.050	-	600x1220x709
TA 1x2 CA	_	2	18	54	-	4.000	400	-	-	600x1220x709
TA 1x2 M	+ $-$	2	- 18	- 54	2,2	4.000	250	1.030	70	600x1220x1418
	_	2								600x1220x1418
TA 1x2 CA M TA 3x1		3	18	54	2,2	4.000	400 250	1.030	70	1660x610x709
TA 3x1 CA	-	3	27	81	-	6.000	400	-	-	1660x610x709
TA 3x1 CA		3	-	- 81	4		250	1.340	71	1660x610x1418
TA 3x1 M	-	3	27	81	4	6.000	400	1.340	71	1660x610x1418 1660x610x2127
TA 1x3		3	-	81	-	6.000	250	1.340	-	600x1830x709
TA 1x3 CA	П	3	27	81	-	6.000	400	-	-	600x1830x709
TA 1x3 M		3		- 81	4	6.000	250	1.340		600x1830x1418
TA 1x3 CA M		3	- 07						71	
		4	27	81	4	6.000	400	1.340	71	600x1830x2127
TA 4x1	-		-	-	-	8.000	250			2260x610x709
TA 4x1 CA		4	36	108	-	8.000	400	1 000	- 70	2260x610x1418
TA 4x1 M		4	-	- 100	5,5	8.000	250	1.330	72	2260x610x1418
TA 4x1 CA M			36	108	5,5	8.000	400	1.330	72	2260x610x2127
TA 1 x 4		4	-	-	-	8.000	250	-	-	600x2440x709
TA 1 x4 CA		4	36	108	-	8.000	400	1 000	- 70	600x2440x1418
TA 1x4M		4	-	-	5,5	8.000	250	1.330	72	600x2440x1418
TA 1x4 CA M		4	36	108	5,5	8.000	400	1.330	72	600x2440x2127
TA 2x2	-	4	-	-	-	8.000	250	-	-	1130x1220x709
TA 2x2 CA		4	36	108	-	8.000	400	-	-	1130x1220x1418
TA 2x2 M		4	-	-	5,5	8.000	250	1.330	72	1130x1220x1418
TA 2x2 CA M		4	36	108	5,5	8.000	400	1.330	72	1130x1220x2127
TA 2x3		6	-	-	-	12.000	250	-	-	1130x1830x709
TA 2x3 CA		6	54	162	-	12.000	400	-	-	1130x1830x1418
TA 2x3 M	ш	6	-	-	7,5	12.000	250	1.580	73	1130x1830x1418
TA 2x3 CA M		6	54	162	8	12.000	400	1.580	73	1130x1830x2127
TA 3x2		6	- 54	- 100	-	12.000	250	-	-	1660x1220x709
TA 3x2 CA		6	54	162	- 75	12.000	400	1 500	- 70	1660x1220x1418
TA 3x2 M		6	-	- 100	7,5	12.000	250	1.580	73	1660x1220x1418
TA 3x2 CA M		6	54	162	7,5	12.000	400	1.580	73	1660x1220x2127
TA 2x4		8		-	-	16.000	250	-		1130x2440x709
TA 2x4 CA		8	72	216	-	16.000	400	1.570	-	1130x2440x1418
TA 2x4 M	<u> </u>	8	-	- 016	9	16.000	250	1.570	75	1130x2440x1418
TA 2x4 CA M		8	72	216	9	16.000	400	1.570	75	1130x2440x2127
TA 4x2		8	-	- 016	-	16.000	250	-	-	2260x1220x709
TA 4x2 CA		8	72	216	-	16.000	400	-	-	2260x1220x1418
TA 4x2 M		8	-	-	9	16.000	250	1.570	75	2260x1220x1418
TA 4x2 CA M		8	72	216	9	16.000	400	1.570	75	2260x1220x2127
TA 3x3		9	-	-	-	18.000	250	-	-	1660x1830x709
TA 3x3 CA		9	81	243	-	18.000	400	-	-	1660x1830x1418
TA 3x3 M		9	-	-	11	18.000	250	1.570	76	1660x1830x1418
TA 3x3 CA M		9	81	243	11	18.000	400	1.570	76	1660x1830x2127



### **TA** Horizontal Pocket Filter

# OIL, V.O.C & FUMES

TA 2x5CA M  10 90 270 15 20,000 400 11 TA 4x3  TA 4x3 CA  TA 4x3 CA  TA 4x3 CA  TA 4x3 CA  12 108 324 - 24,000 400 11 TA 4x3 CA  TA 4x3 CA  12 108 324 18,5 24,000 400 11		1130x3050x709 1130x3050x1418 1130x3050x1418 1130x3050x2127
TA 4x3	1.530 76 1.530 76 	1130x3050x1418
TA 4x3 CA  TA 4x3 CA	.530 76	
TA 4x3 CA  TA 4x3 CA		1130x3050x2127
TA 4x3 CA 12 108 324 - 24,000 400 TA 4x3 M 12 - 18,5 24,000 250 1 TA 4x3 CA M 12 108 324 18,5 24,000 400 1		
TA 4x3 M 12 18,5 24,000 250 1 TA 4x3 CA M 12 108 324 18,5 24,000 400 1	-	2260x1830x709
TA 4x3 CA M 12 108 324 18,5 24,000 400 1		2260x1830x1418
	1.910 78	2260x1830x1418
	1.910 78	2260x1830x2127
TA 3x4 12 24.000 250		1660x2440x709
TA 3x4 CA 12 108 324 - 24 000 400 TA 3x4 M 12 - 18.5 24 000 250 1		1660x2440x1418
TA 3x4M 12 18,5 24.000 250 1	.910 78	1660x2440x1418
TA 3x4 CA M 12 108 324 18,5 24.000 400 1	1.910 78	1660x2440x2127
TA 2x7		1130x4270x709
TA 2x7 CA 14 126 378 - 28.000 400		1130x4270x1418
TA 3x5 15 30,000 250		1660x3050x709
TA 3x5 CA 15 135 405 - 30.000 400		1660x3050x1418
TA 4x4 16 32.000 250		2260x2440x709
TA 4x4 CA 16 144 432 - 32.000 400	-	2260x2440x1418
TA 3x6 18 36.000 250		1660x3660x709
		1660x3660x1418
TA 3x6 CA 18 162 486 - 36,000 400		
TA 4x5 20 40.000 250		2260x3050x709
TA 4x5 CA 20 180 540 - 40.000 400		2260x3050x1418
TA 4x6		2260x3660x709
TA 4x6 CA 24 216 648 - 48.000 400		2260x3660x1418
TA 3x8 24 48.000 250		1660x4880x709
TA 3x8 CA 24 216 648 - 48.000 400		1660x4880x1418





# modular f

# OIL, V.O.C & FUMES

### **AERMIST TA** Vertical Pocket Filter

# **AERMIST TA** Vertical Pocket Filter

### **PRODUCT**

The AERMIST TA modular filters were devised and designed for the separation of oil from extracted air in several stages, and for easy implementation on tool machines and automatic production lines. They are perfect for the removal of pure oil and oil emulsion. AERMIST TA filters can be fitted with a "resting" module to ensure the removal of oil even during normal operation of the filter.

The AERMIST TA filter can handle large amounts of oily fumes and mist, and is intended mainly for the metalmechanics industries and all industrial processes involving oily lubricants. It can be used in many applications requiring large or medium-sized tool machines and is able to handle pure oil lubricant or oily

The filtered oil is deposited at the base of the separator and trickles out of the respective siphon. This means it is possible to retrieve and re-use virtually all of the oil. The AERMIST TA is fully electro-welded with a liquid seal and does not let any oil leak through. Highly efficient absolute history allow the filtered air to be

released back into the environment.

The differential pressure switch and a pressure gauge (as standard), determines any pressure loss and clogging of the internal filters; it also tells you when to replace the filter components.

The filter section features:

-A metal pre-filter for mechanical pre-filtering

—A drop separator (optional)

-An F9 (EN 779:2002) classified, highly efficient (95%) glass microfibre pocket filter

-Post-filtration phase (optional) with "ABSOLUTE" filters

### **OPERATING PRINCIPLE**

A vacuum created by the centrifugal fan forces the polluted air through the filter from the back; the air then flows into the vertical settling chamber for initial separation of the particles suspended in the fluid, aided by a sudden decrease in the speed of the fluid due to the sudden increase in breadth.

The separated oil particles fall into the hopper and converge in the siphon; the air is filtered again as it passes through the other stages and the absolute filter, if applicable, which captures any submicronic particles. The filtered air eventually reaches the vent and discharged into the atmosphere or released back into the environment.







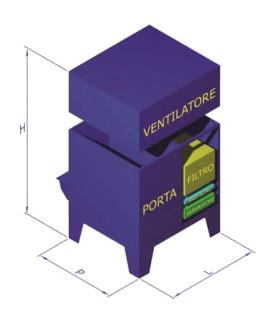


### **AERMIST TA** Vertical Pocket Filter

# OIL, V.O.C & FUMES

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Model	Configuration	Pocket filter modules (Nr.)	Motor fan power (KW)	Max air flow [m³/h]	Filter pressure drop (Pa)	Fan pressure (Pa)	Noise level (dB(A))	Filtering body dimensions LxPxH [mm]
AERMIST TA 1x1		1	-	2.000	250	-	-	610x600x1859
AERMIST TA 1x1 M		1	1,1	2.000	250	1.180	71	610x600x2568
AERMIST TA 2x1		2	-	4.000	250	-	-	1220x600x1859
AERMIST TA 2x1 M		2	2,2	4.000	250	1.030	70	1220x600x2568
AERMIST TA 3x1		3	-	6.000	250	-	-	1830x600x1859
AERMIST TA 3x1 M		3	4	6.000	250	1.340	71	1830x600x2568
AERMIST TA 4x1		4	-	8.000	250	-	-	2440x600x1859
AERMIST TA 4x1 M		4	5,5	8.000	250	1.130	72	2440x600x2568
AERMIST TA 2x2	H	4	-	8.000	250	-	-	1220x1130x1859
AERMIST TA 2x2 M	Ш	4	5,5	8.000	250	1.330	72	1220x1130x2568
AERMIST TA 3x2	H	6	-	12.000	250	-	-	1830x1130x2059
AERMIST TA 3x2 M		6	7,5	12.000	250	1.580	73	1830x1130x2768
AERMIST TA 4x2		8	-	16.000	250	-	-	2440x1130x2059
AERMIST TA 4x2 M		8	9	16.000	250	1.570	75	2440x1130x2768
AERMIST TA 5x2	$\overline{\mathbf{H}}$	10	-	20.000	250	-	-	3050x1130x2159
AERMIST TA 5x2 M		10	15	20.000	250	1.530	76	3050x1130x2868
AERMIST TA 6x2		12	-	24.000	250	-	-	3660x1130x2159
AERMIST TA 6x2 M		12	18,5	24.000	250	1.910	78	3660x1130x2868



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## OIL, V.O.C & FUMES

**AERMIST CAR** Cartridge Filter

# **AERMIST CAR**Cartridge Filter

### **APPLICATION**

The cartridge dust collector AERMIST CAR filter was designed to filter hazardous fumes and oily mists, which makes it perfect for metal machining industries and all sorts of industrial processes that employ oily lubricants. Many applications relate to large or medium sized machine tools and it functions well with both neat oils and oil emulsions.

### **PRODUCT**

Modular AERMIST CAR filters were studied and designed to separate oil from aspirated air by passing the fluid through several separation stages and they are easy to use with machine tools and automatic processing lines. This model is suitable for filtering both oil emulsions and neat oils. AERMIST CAR filters can be equipped with an "idle" module that allows for the recuperation of oil even during normal filter functioning.

even during normal filter functioning.

To further improve the efficiency of the AERMIST CAR system, the cartridges can be covered with a special drain pad (optional), which is able to hold a large quantity of pollutant and lengthen the life of the cartridge.

The filtered oil deposits in the lower par of the separator and exits through the special discharge siphon. That allows for almost all of the oil to be recuperated and therefore assures the relative recycling.

AERMIST CAR is entirely electric welded and it has a hydraulic seal to absolutely guarantee that there is no oil seepage.

A differential pressure switch and a pressure gauge, supply indications on the status of internal filters, controlling the pressure loss and lastly, indicating when it is time to substitute the filtering elements.

The filtering section includes:

-Mechanical pre-filtration through a metallic pre-filter

—A drip separator (optional)

Filtration in circular polypropylene (350 gr/m²) made from a drain pad on the external part of the cartridge itself—The folded cartridge filter is 100% cellulose with the performance of the functional filtration around 99%

—Post-filtration phase (optional) with "ABSOLUTE" filters H13





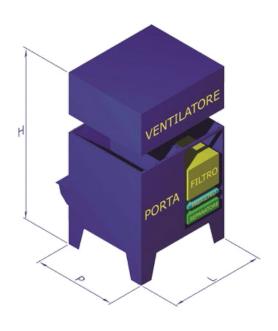
### **AERMIST CAR** Cartridge Filter

# OIL, V.O.C & FUMES

### **OPERATING PRINCIPLE**

The polluted air enters the filter from the back wall and passes through the vertical settling chamber where the first separation of particles in fluid suspension takes places thanks to the brusque decrease in the speed of the fluid entering due to the sudden increase in space. The oil particles that are separated fall into the hopper to then converge in the discharge siphon. The air is further filtered as it passes through the filtering stages and, if present, through the absolute filter which captures the sub-micron particles.

Model	Cartridges (Nr.)	Filtering surface (m²)	Motor fan power (KW)	Max air flow (m³/h)	Filter pressure drop (Pa)	Fan pressure (Pa)	Noise level (dB(A))	Filtering body dimensions LxHxP (mm)
AERMIST CAR 2	2	32	-	5.000	1.200	-	-	2000x2500x1400
AERMIST CAR 2 M	2	32	7,5	5.000	1.200	2.700	79	2000x3200x1400
AERMIST CAR 4	4	64	-	10.000	1.200	-	-	4000x2500x1400
AERMIST CAR 4 M	4	64	15	10.000	1.200	3.180	79	4000x3300x1400
AERMIST CAR 6	6	96	-	15.000	1.200	-	-	6000x2500x1400
AERMIST CAR 6 M	6	96	18,5	15.000	1.200	2.920	80	6000x3500x1400
AERMIST CAR 8	8	128	-	20.000	1.200	-	-	8000x2500x1400
AERMIST CAR 8 M	8	128	22	20.000	1.200	2.700	79	8000x3700x1400
AERMIST CAR 10	10	160	-	25.000	1.200	-	-	5000x2500x1800
AERMIST CAR 10 M	10	160	30	25.000	1.200	2.600	80	5000x2500x3900





# OIL, V.O.C & FUMES

**PICK UP** Trolleys Filtering Line

# **PICK UP** Trolleys Filtering Line

The PICK UP line consists of the most effective and complete devices of mobile vacuum-filter units for the extraction and filtering of welding fumes, dust and aerosols, with the advan-tage that the extraction hood may be placed close to the source of the substances to be extracted.

The use of PICK UP allows for the filtration of pollutants produced by welding and grinding operations, oily vapours from machine tools and aerosols deriving from rubber or plastic moulding, keeping the air inside the plant free of pollutants. The PICK UP is a self-contained unit mounted on wheels, strugtured specifically to give it a low centre of gravity for high stabili-

### Versions available:

—COMPACT with 1,1 Kw motor and 1 300 m³/h air flow; —STANDARD with 1,5 Kw motor and 1 600 m³/h air flow; —SUPER with 2,2 Kw motor and 2 500 m³/h air flow;

The COMPACT version is available in a wall-mounted version. With its special supporting bracket this version does not take up floor space, allowing the operator more freedom of movement. The possibility of one or two self-supporting pantographic arms makes PICK UP units highly flexible so they can extract and remove the polluting agent, even in hard to reach places. The PICK UP unit is a completely self-contained appliance on wheels, equipped with an on/off control panel and power plug. It can be used at once without installation or specialised technical help.

### **FEATURES**

The PICK UP line stands out for its four possible different types of main filtration:

### **Electrostatic version** recommended for oily vapors and fine dust —Mechanical pre-filtering

-Dual-voltage electrostatic filter -Active carbon panel post-filtering

### Rigid-pocket version recommended for fumes

Mechanical pre-filteringRigid-pocket filtering with F95 effectiveness

-Active carbon panel post-filtering

Cartridge version recommended for heavy fumes
—Pleated cartridge filter with BIA USG C certified effectiveness
—Active carbon panel post-filtering (COMPACT version only)
—In super configuration can be equiped with "pulse jet" cartridge

clearing system with manual or automatic control

### **Active carbon version** recommended for V.O.C.

-Mechanical pre-filtering

-Active carbon bed filter





**PICK UP** Trolleys Filtering Line

# OIL, V.O.C & FUMES

### **EXAMPLE OF ELECTROSTATIC PICK UP VERSION**







### **EXAMPLE OF CARTRIDGE PICK UP VERSION**









# modular 5 DUCTING

# OIL, V.O.C & FUMES

### **PICK UP** Trolleys Filtering Line

Model	N / Diam / L Arms	Nominal Air flow (Nm³/h)	Prefil - ter	Filtering elements	Acti- vated carbon (Kg)	Power (Kw)	Noise level (dB(A))	Weight (Kg)
PICK UP E1 COMPACT 0B	-	1.300	yes	N. 1 Electrostatic	1,5	1,1	76	100
PICK UP E1 COMPACT 1B	N.1 / Ø 150 / 3,2 MT	1.300	yes	N. 1 Electrostatic	1,5	1,1	76	120
PICK UP E2 COMPACT 0B	-	1.300	yes	N. 2 Electrostatic	3	1,1	76	110
PICK UP E2 COMPACT 1B	N.1/Ø150/3,2 MT	1.300	yes	N. 2 Electrostatic	3	1,1	76	130
PICK UP CAR COMPACT 0B	-	1.300	no	N. 2 Cartridges 180	2,5	1,1	76	85
PICK UP CAR COMPACT 1B	N.1/Ø150/3,2 MT	1.300	no	N. 2Cartridges 180	2,5	1,1	76	100
PICK UP CA1 COMPACT 0B	-	1.300	yes	N. 1 Activated carbon bed	13	1,1	74	95
PICK UP CA1 COMPACT 1B	N.1/Ø150/3,2 MT	1.300	yes	N. 1 Activated carbon bed	13	1,1	74	110
PICK UP CA2 COMPACT 0B	-	1.300	yes	N. 2 Activated carbon beds	13+13	1,1	74	110
PICK UP CA2 COMPACT 1B	N.1/Ø150/3,2 MT	1.300	yes	N. 2 Activated carbon beds	13+13	1,1	74	125
PICK UP E1 STANDARD 0B	-	1.600	yes	N. 1 Electrostatic	2,2	1,5	78	128
PICK UP E1 STANDARD 1B	N.1 / Ø 150 / 3,2 MT	1.600	yes	N. 1 Electrostatic	2,2	1,5	76	148
PICK UP E1 STANDARD 2B	N.2 / Ø 150 / 3,2 MT	1.600	yes	N. 1 Electrostatic	2,2	1,5	78	168
PICK UP CAR STANDARD 0B	-	1.600	yes	N. 1 Cartridge 600	-	1,5	78	125
PICK UP CAR STANDARD 1B	N.1 / Ø 150 / 3,2 MT	1.600	yes	N. 1 Cartridge 600	-	1,5	76	145
PICK UP CAR STANDARD 2B	N.2 / Ø 150 / 3,2 MT	1.600	yes	N. 1 Cartridge 600	-	1,5	78	175
PICK UP T1 STANDARD 0B	-	1.600	yes	N. 1 Pocket	2,2	1,5	78	122
PICK UP T1 STANDARD 1B	N.1 / Ø 150 / 3,2 MT	1.600	yes	N. 1 Pocket	2,2	1,5	76	142
PICK UP T1 STANDARD 2B	N.2 / Ø 150 / 3,2 MT	1.600	yes	N. 1 Pocket	2,2	1,5	78	162
PICK UP E1 SUPER 0B	=	2.500	yes	N. 1 Electrostatic	2,2	2,2	78	136
PICK UP E1 SUPER 1B	N.1 / Ø 200 / 3,2 MT	2.500	yes	N. 1 Electrostatic	2,2	2,2	76	156
PICK UP E1 SUPER 2B	N.2 / Ø 200 / 3,2 MT	2.500	yes	N. 1 Electrostatic	2,2	2,2	78	176
PICK UP CAR SUPER 0B	=	2.500	yes	N. 2 Cartridges 600	-	2,2	78	170
PICK UP CAR SUPER 1B	N.1 / Ø 200 / 3,2 MT	2.500	yes	N. 2 Cartridges 600	-	2,2	78	189
PICK UP CAR SUPER 2B	N.2 / Ø 200 / 3,2 MT	2.500	yes	N. 2 Cartridges 600	-	2,2	78	209
PICK UP CAR SUPER MJ 0B	-	2.500	yes	N. 2 Cartridges 600	-	2,2	78	200
PICK UP CAR SUPER MJ 1B	N.1 / Ø 200 / 3,2 MT	2.500	yes	N. 2 Cartridges 600	-	2,2	78	219
PICK UP CAR SUPER MJ 2B	N.2 / Ø 200 / 3,2 MT	2.500	yes	N. 2 Cartridges 600	-	2,2	78	239
PICK UP CAR SUPER AJ 0B	-	2.500	yes	N. 2 Cartridges 600	-	2,2	78	200
PICK UP CAR SUPER AJ 1B	N.1/Ø200/3,2 MT	2.500	yes	N. 2 Cartridges 600	-	2,2	78	219
PICK UP CAR SUPER AJ 2B	N.2 / Ø 200 / 3,2 MT	2.500	yes	N. 2 Cartridges 600	-	2,2	78	239



### **PICK UP** Trolleys Filtering Line

# OIL, V.O.C & FUMES

### PICK-UP CAR COMPACT & CA1/CA2 COMPACT



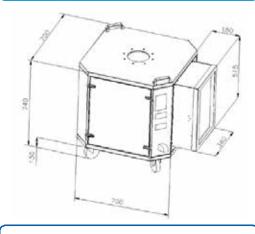
PICK-UP STANDARD



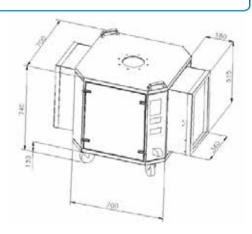
PICK-UP SUPER



**PICK-UP E1 COMPACT** 



**PICK-UP E2 COMPACT** 





# OIL, V.O.C & FUMES

**AEROIL** Oil Centrifugal Filter

# **AEROIL**Oil Centrifugal Filter

### **PRODUCT**

The centrifugal filter AEROIL has been designed for the separation of oil from the air sucked, through the principle of centrifugation and for an easy "machine-side" application, in the field of machine tools.

In the mechanical work-processing where especially "heavy" oils are utilized, it can be employed separately by itself, in all other cases it is recommended to use it as the pre-filter of an electrostatic filter placed down-stream. The AEROIL with its limited dimension and weight can be installed onboard the machine, or over a raised platform

previously arranged.

### **Applications**

-Mechanical industry: multiple-operation-lathes, threading machines, toothing machines, grinding/refacing machines, etc.

—Graphic industry: typographic rotary press for newspapers (ink fogs), etc.

Food processing industry: vegetal oil nebulizers, machines for pasta processing, etc.

-Other fields: turbines, compressors, pumps, lubricators, vaporizers, etc.

The AEROIL separator looks extremely compact and with very small dimensions/overall size due to the internal installation of the electrofan. The electric control can be fitted alongside the assembly or used as remote control near the operator.

### **OPERATING PRINCIPLE**

Thanks to the centrifugal force the oily particles mixed to the air flow are pushed against filters walls where they slip to the bottom and the discharge.

The filtered oil gathers in the lower section of the separator and finally comes out from the proper waste outlet. Thus the almost complete recovery of the oil is guaranteed, and therefore its recycling.

Due to the utilization of a pre-filter in steel-wool and a post-filter in fibreglass, a high collection performance is guaranteed for the oily particles, with an average value of 98%. The purified air is then recycled within the working environment.

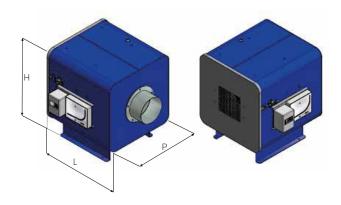




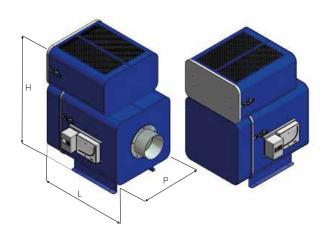
### **AEROIL** Oil Centrifugal Filter

# OIL, V.O.C & FUMES

Model	Filtering elements (Nr.)	Power (kW)	Electrical connection	Max air flow (m³/h)	Noise Level (dB(A))	Filtering body dimensions LxHxP (mm)
AEROIL 1	2	0,75	400V-3PH/50Hz	800	72	406x545x425
AEROIL 2	2	1,5	400V-3PH/50Hz	1.200	75	533x625x500
AEROIL 3	2	2,2	400V-3PH/50Hz	2.000	78	533x625x500



Model	Filtering elements (Nr.)	Power (kW)	Electrical connection	Max air flow (m³/h)	Noise Level (dB(A))	Filtering body dimensions LxHxP (mm)
ELEKTRO AEROIL 1	3	0,75	400V-3PH/50Hz	800	72	528x845x425
ELEKTRO AEROIL 2	3	1,5	400V-3PH/50Hz	1.200	75	655x925x500
ELEKTRO AEROIL 3	3	2,2	400V-3PH/50Hz	2.000	78	655x925x500





# OIL, V.O.C & FUMES

IPEROIL Coalescent Cartridge Line

# **IPEROIL**

## Coalescent Cartridge Line

### **PRODUCT**

The filter IPER-OIL is designed for the filtration of oil mist in the industrial field, therefore finds its application mainly in the engineering industry at the service of machines and automated production lines. The filter IPER-OIL has special effect coalescing cartridges, therefore particularly suitable for the filtration of oil mist particularly dense, type emulsivo oil mist, oil mist graphite. Thanks to its modularity and size is possible its applications from small work centers of large machine tools. The filter IPER-OIL is available in MAXI or M version.

The filter structure is completely modular and welded. At the bottom of each module there is a collection tank of oils filtered. Below each tank there is a hydraulic unloading. In the presence of multiple modules discharges are linked together in a single discharge point.

### **FEATURES**

- -HYPER-OIL has filter stages placed in sequence:
- -Pre mechanical filtration
- Droplet separator (optional)
- -Coalescing
- Post absolute filtration (optional)

A differential pressure gauge with visual indication and electrical controls the state of clogging of the filter elements. The electrical contact design allows to remote the signal of clogging of the filter elements.





### **IPEROIL** Coalescent Cartridge Line

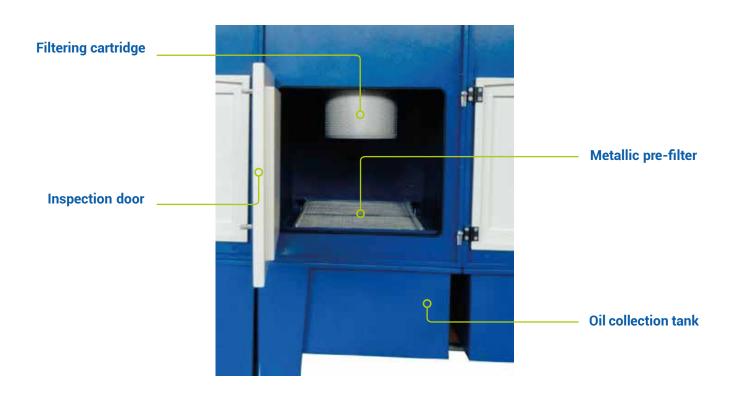
# OIL, V.O.C & FUMES

### **OPERATING PRINCIPLE**

The polluted air enters the filter at the bottom with oil collection tank. The metallic pre-filter traps the particulate coarser protecting all filter stages by successive inputs of components too large.

The droplet separator is built of metal labyrinth and is able to retain all particles in the form of drop, thus protecting filter cartridge from premature clogging. The pleated filter cartridge is made of a special fiberglass fabric which creates a coalescent effect. The oil present in the air stream end retained by the fibers of the cartridge.

stream end retained by the fibers of the cartridge. At full capacity the filter IPER OIL achieves an efficiency of 99% at 2 micron particle. The post filtration finishing is provided by filters called "ABSOLUTE". The filters are composed of cellulose materials pleated and supported by tapered aluminum separators. The filter has a minimum efficiency of 99.95% MPPS according to EN 1822.





### **IPEROIL** Coalescent Cartridge Line

										DIMEN	ISIONS	
Model	Filtering surfa - ce [m²]	Filtering ele - ments (Nr.)	Activated Mo- duls (Nr.)	Power (kW)	Rated Voltage [V]/[Hz]/[Ph]	Pressure Drop (Pa)	Residual Pres - sure (Pa)	Max air flow (m³/h)	L (mm)	P (mm)	H (mm)	H In (mm)
IPEROIL 1x1	41,28	1	1			800		4000	1015	1115	3100	0100
IPEROIL 1x1 M	41,28	1	1	5,5	400/50/3		1400	4000	1015	1115	3500	3100
IPEROIL 1x2	82,56	2	1			800		8000	1015	1715	3100	3100
IPEROIL 1x2M	82,56	2	1	11	400/50/3		1700	8000	1015	1715	3500	3100
IPEROIL 2x1	82,56	2	2			800		8000	2015	1115	3100	3100
IPEROIL 2x1 M	82,56	2	2	11	400/50/3		1700	8000	2015	1115	3500	3100
IPEROIL 3x1	123,84	3	3			800		12000	3015	1115	3100	3100
IPEROIL 3x1 M	123,84	3	3	15	400/50/3		1800	12000	3010	1115	3500	3100
IPEROIL 2x2	165,12	4	2			800		16000	4015	1715	3100	3100
IPEROIL 2x2M	165,12	4	2	22	400/50/3		1850	16000	4013	1713	3500	3100
IPEROIL 4x1	165,12	4	4			800		16000	4015	1115	3500	3500
IPEROIL 4x1 M	165,12	4	4	22	400/50/3		1850	16000	4013	1113	4000	3300
IPEROIL 5x1	206,40	5	5			800		20000	5015	1115	3500	3500
IPEROIL 5x1 M	206,40	5	5	2x11	400/50/3		1700	20000	3013	1113	4100	3300
IPEROIL 3x2	247,68	6	3			800		24000	3015	1715	3500	3500
IPEROIL 3x2 M	247,68	6	3	37	400/50/3		1950	24000	3013	1113	4100	3300
IPEROIL 4x2	330,24	8	4			800		32000	4015	1715	3500	3500
IPEROIL 4x2M	330,24	8	4	2x22	400/50/3		1850	32000	4010	1715	4100	3300

M = electric motor



