

dena

PROTECTING THE ENVIRONMENT SINCE 1967



**PRODUCT
CATALOG**



EXPERIENCE AND TECHNOLOGY INNOVATION FOR CLEAN AIR

Our company was founded in the year 1967. Employing experience combined with high standards of technology, Dena has always dealt with project engineering regarding the machine building industry, in particular centrifugal fans, fabric filters, extraction systems and pneumatic conveying solutions for biomass fuels.

Thanks to the high efficiency level of our products and high performance in automation technology capabilities, we can meet, step by step, the demanding needs of global markets.

Infact, Dena is a leading company in the field of air treatment for Italian industries, developing and installing extraction systems in Europe, improving working environments and increasing efficiency.

Thanks to over 40 years of experience, we can offer our customers turnkey plant systems and dedicated support to provide qualified assistance at each stage of the purchasing and installation cycle, allowing us to solve any technical problems deriving from air filtration needs.

In order to reach high standard quality Dena designs and manufactures its machines in its in-house factory in Italy and consequently can promote its brand as Made in Italy. We comply with regulations as outlined in the European Machinery Directive, obtaining the most important European Certifications. Technology innovation, integrated solutions and comprehensive global service are the strengths of our company.

PAINTING BOOTHS AND DOWNDRAFT TABLES.....	5
Painting Booth model SOV	6
Downdraft Table model BAS	8
Downdraft Table model BAS V	10
Downdraft Table model PVB	12
Downdraft Table model PVB-H	14
FUMES AND DUST FILTRATION SYSTEMS.....	17
Dust Collector Cyclone model CY	18
Pocket Filter model TAF.....	20
Cartridge Filter model C-327	22
Cartridge Filter Atex version model C-327.....	24
Cartridge model CC-327.....	26
Cartridge Filter model GIC	28
Cartridge Filter model GIC-X	30
Bag House Filter model GIM.....	32
Bag House Filter model GIM-HT	34
Bag House Filter indoor model GIM-H	36
Cartridge Filter model GIC-HT	38
Bag House Filter Atex version model GICM.....	40
Bag House Filter Atex version model GIM.....	42
Ceramic Candle Filter model GICA	44
VOC ODOURS AND GAS FILTRATION SYSTEMS.....	47
Filter with extraction hood model FSF	48
Activated Carbon Filter model FCA	50
Activated Carbon Filter model COMBY.....	52
Scrubber model SCR	54
OIL MIST FILTRATION SYSTEMS.....	57
Filter for oil mist model FFO	58
Coalescence Filter model FCO	60
DUST COLLECTORS ON WHEELS.....	63
Filter on wheels for welding fumes Model FSA	64
Industrial Dust collector model DBVF	66
Industrial Dust collector model APF	68
POWDERS AND GRANULAR MATERIALS PNEUMATIC CONVEYING.....	71
Big-bag Emptying Station mod. SVBF with hoist	72
Big-bag Emptying Station with hoist mod. SVBF	74
Dust and granular materials vacuum mod. WX	76
Positive Pressure Pneumatic Conveyor mod. SVP.....	78





PAINTING BOOTHS AND DOWNDRAFT TABLES

Dena offers a full range of painting booths developed to meet the various needs of clients and components. We have designed different types of extraction benches to reduce human health risks from pollutants deriving from grinding, welding, sanding, coating, adhesives, polishing, sealing, brazing, metal cutting.

DRY PAINTING BOOTH SOV

DESCRIPTION

The dry painting booth SOV has been designed for suction and purification of pigments and steam resulting from painting processes. By means of its 3 level treatment system it ensures high efficiency in treating polluting particles. The maintenance cost of the machinery is particularly less expensive than other similar systems on the market. This process guarantees treatment of dust and solvents in the painting steam according to the existing norms of conformity. The DENA dry painting booth is designed entirely with CAD 3D, according to efficiency and modularity criteria. It is made with bolted galvanized sheets, so that it forms a self-carrying structure. The front suction side is equipped with filter holders, where the fabric filter is inserted. The centrifugal fan is mounted on the roof of the booth, it guarantees high efficiency, it is an anti-spark version.

Operating principle

Depression created by the fan at the end of the hose line permits to create on the front side of the booth an efficient suction of dust resulting by painting processes. Extracted air is filtered by a three phase system, in the first phase by the Andraee filter during which it is possible to treat 90% of dust, during the second one by means of the cellulose cartridges 99,99% of dust and at the end by means of the activated carbon cartridges that contribute to absorb solvents in the air flux.

OPTIONALS

Filtering ceiling, extension, lighting, control box, air recuperation.

APPLICATION FIELDS

Engineering industries, woodworking industries, ceramics industries, metalworking industries, resins, epoxide painting.

BASIC VERSION



Version with Extension



Version with "PLENUM" air immision



FILTERING MATERIALS



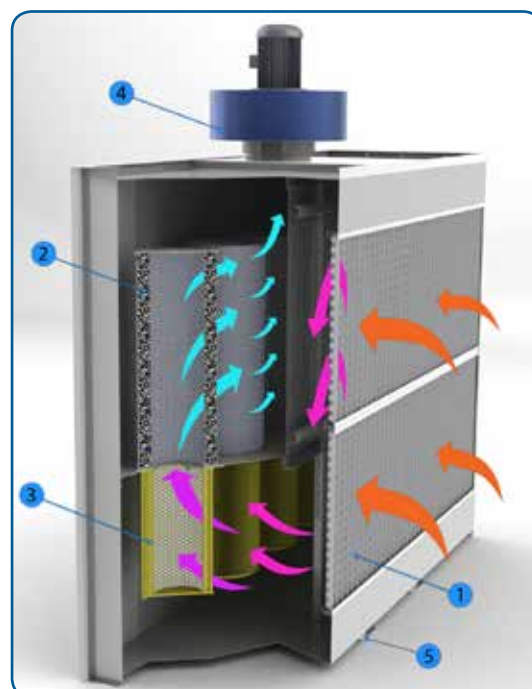
Inert Paper



Active Carbon

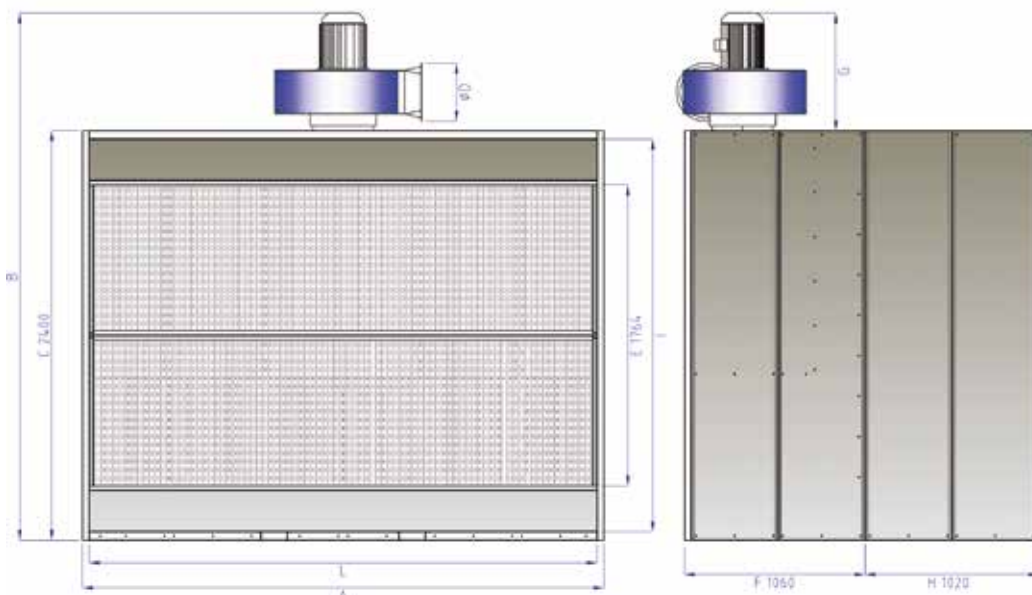


Cellulose



- 1 Extraction side with inert paper filter
- 2 Activated carbon cartridge
- 3 Filtering cartridge in polyester
- 4 Extraction fan
- 5 Fork lift guides

MOD. SOV	UNITS OF MEASURE	SOV 2	SOV 3	SOV 4	SOV 5	SOV 6	SOV 8
Fans	n°	1	1	1	2	2	2
Electric motor	Giri	1400	1400	1400	1400	1400	1400
Installed power	kW	1,1	2,2	4	3 x 2	2,2 x 2	4 x 2
Absorbed power	kW	0,99	2	3,8	2,28 x 2	2 x 2	3,8 x 2
Air flow rate	m ³ /h	6500	10000	13000	16500	20000	26000
Filtering surface of frontal paper	m ²	3,6	5,4	7,2	9	10,8	14,4
Prefilter air velocity	m/s	0,5	0,5	0,5	0,5	0,5	0,5
Quantity of filtering cartridges	n°	4	6	8	10	12	16
Filtering surface of cellulose cartridges	m ²	80	120	160	200	240	320
Air velocity to the cartridge	m/s	0,028	0,028	0,028	0,028	0,028	0,028
Quantity of activated carbon cartridges	n°	4	6	8	10	12	16
Surface of activated carbon layer	m ²	4,77	7,16	9,55	11,94	14,32	19,10
Air velocity through carbon layer	m/s	0,38	0,38	0,38	0,38	0,38	0,38
Carbon layer thickness	mm	80	80	80	80	80	80
Air contact time with carbon layer	s	0,21	0,21	0,21	0,21	0,21	0,21
Average absorption of pollutants	kg	16% of carbon weight					
Quantity activated carbon	kg	200	300	400	500	600	800
Volume activated carbon	m ³	0,40	0,60	0,80	1	1,20	1,60
Noise level	dba	63	63	68	68	70	70
Diameter of chimney duct	mm	400	450	550	450 x 2	450 x 2	550 x 2
Weight (fan excluded)	kg	500	710	914	1122	1328	1742
A	mm	2040	3060	4080	5100	6120	8160
F	mm	1060	1060	1060	1060	1060	1060
B	mm	3070	3180	3300	3150	3180	3300
D	mm	400	450	550	450	450	550
E	mm	1764	1764	1764	1764	1764	1764
C	mm	2400	2400	2400	2400	2400	2400
G	mm	670	780	900	750	780	900
H	mm	1020	1020	1020	1020	1020	1020
I	mm	2360	2360	2360	2360	2360	2360
L	mm	1960	2980	4000	5020	6040	8080



DOWNDRAFT TABLE BAS

DESCRIPTION

The DOWNDRAFT TABLE BAS has been specifically designed to be installed into factories producing dust and fumes. Inhalation by workers can result in health risks. It is necessary to capture polluting particles by means of the *downdraft table* in order to keep the working environment clean and safe. In fact, thanks to the uniform suction from the bottom side of the machine workers don't inhale any toxic particles. It is possible to order a tailored model with different kinds of flat surfaces or grids according to the work to be carried out.

Automatic filter cleaning

The machine is equipped with a cartridge filter, with a properly filtering surface. The cleaning system is automatic. In fact it is equipped with a tank of compressed air for the filter cleaning, this is an advantage for the worker busy with cleaning processes, as in this way he can save time. It is possible to choose, as an optional accessory, a HEPA filter.

Standard pre-filter

The length of the standard pre-filter corresponds to the worktop and it plays a specific role protecting the cartridge from sparks and blunt objects. It prevents the extracted particles from clogging the filter. The advantage is that you need to clean the filter only after many operating hours.

OPTIONALS

ATEX Conformity, Hepa Filtration, Stainless steel 304/316, Paint resistant to hostile environments, Manufactured with special steel (Corten), fire protection system, silencer, integrated fan.

APPLICATION FIELDS



ENGINEERING



TEXTILES



AUTOMOBILE



RUBBER AND PLASTIC

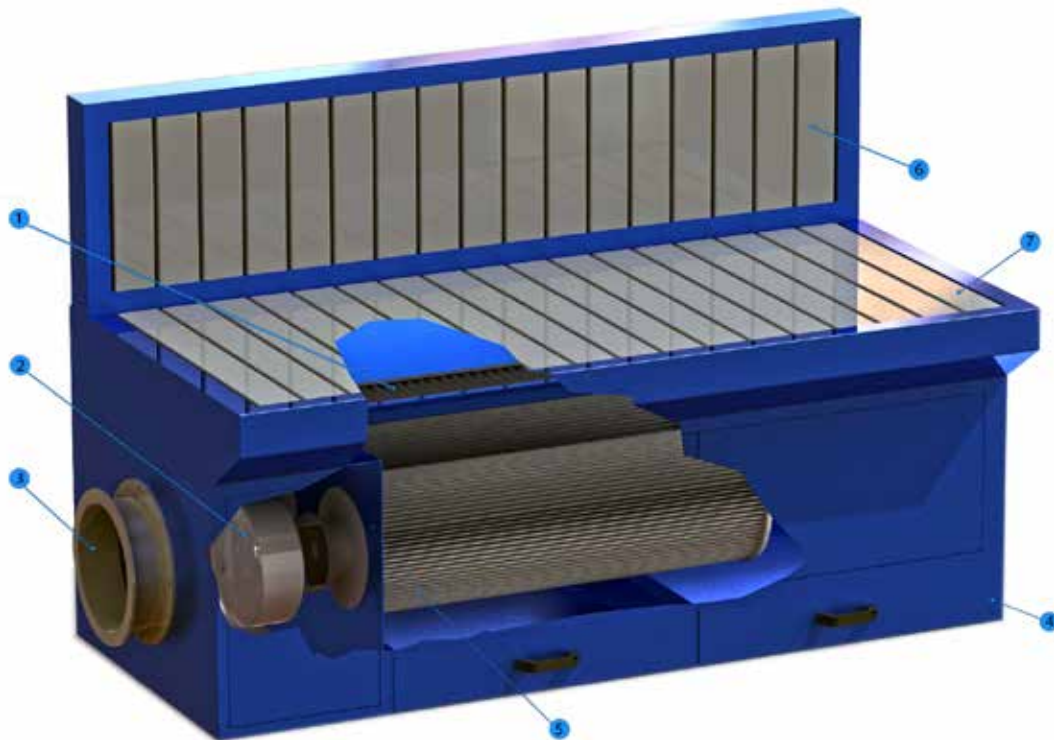
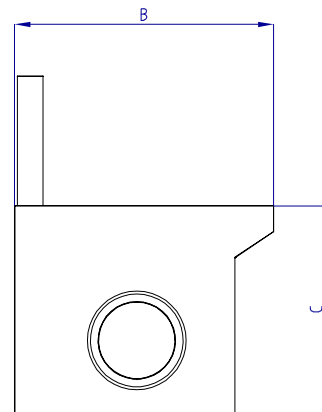
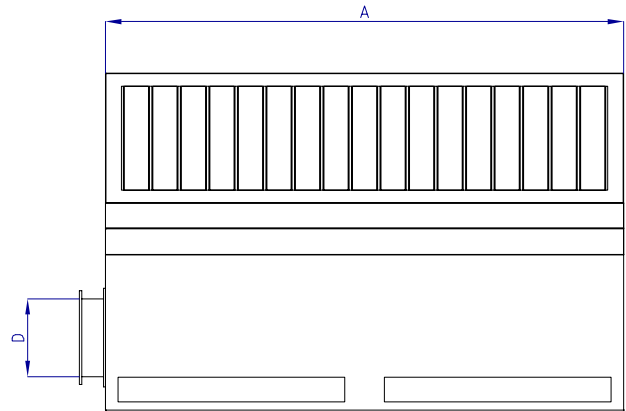
CLOSED VERSION



VERSION WITH ROOF



MOD. BAS	UNITS	BAS 10	BAS 15	BAS 20
Filtering surface	m ²	20	30	40
Cartridge quantity	n°	1	2	2
Cartridge material	/	Fabric non fabric polyester, 200 gr/m ²		
Cartridge dimensions	mm	Ø 325 x H 1200		
Suggested air flow rate	m ³ /h	1900	2850	3700
Air velocity on the grid	m/s	0.5		
Air flow rate on the grid	kg	200	200	200
Filtration efficiency	>%	99.9 (hepa)		
True HEPA filter	/	H11		
Dust container	n°	1	1	2
Non-return valve	n°	OPTIONALS		
Drop loss	mmH ₂ O	110		
Structure	Material	Painted carbon stainless steel		
Weight	kg	160	280	350
A	mm	1000	1500	2000
B	mm	1000	1000	1000
C	mm	800	800	800
Ø D	mm	250	300	350



- 1 Prefilter
- 2 Filter cleaning system
- 3 Air outlet
- 4 Dust collection pans
- 5 Filtering cartridges
- 6 Frontal vacuum panel
- 7 Work surface vacuum

DOWNDRAFT TABLE **BAS-V**

DESCRIPTION

The ideal solution for grinding, welding, painting, application of adhesives, and in all processes that produce fumes and dust that, if inhaled, can be dangerous for the health of the operator.

To keep the environment clean of pollutants it is necessary that polluting particles are captured efficiently through the extraction bench; in fact, thanks to uniform filtration from the bottom and front side the operator does not inhale any toxic substance. The bench can be customized with different kinds of platforms and grids, depending on the work to be carried out.

Automatic filter cleaning

The machine is equipped with a cartridge filter with a suitable filtering surface, the cleaning system is automatic: a tank of compressed air cleans the cartridge, consequently the working process is easier for the operator, saving time. The final filtration with Hepa Filter is optional.

Spark separator as standard

The spark separator is fitted as standard, with a length equal to the size of the countertop plays an essential function. It protects the cartridge from sparks and blunt objects. Furthermore, it prevents extracted particles from clogging the filter, the fan built into the BAS-V makes it a complete and versatile machine.

OPTIONALS

ATEX Conformity 20-22, Hepa Filtration, Stainless steel 304/316, Paint resistant to hostile environments, manufactured with special steel (Corten), fire protection system, silencer.

APPLICATION FIELDS



ENGINEERING



TEXTILES



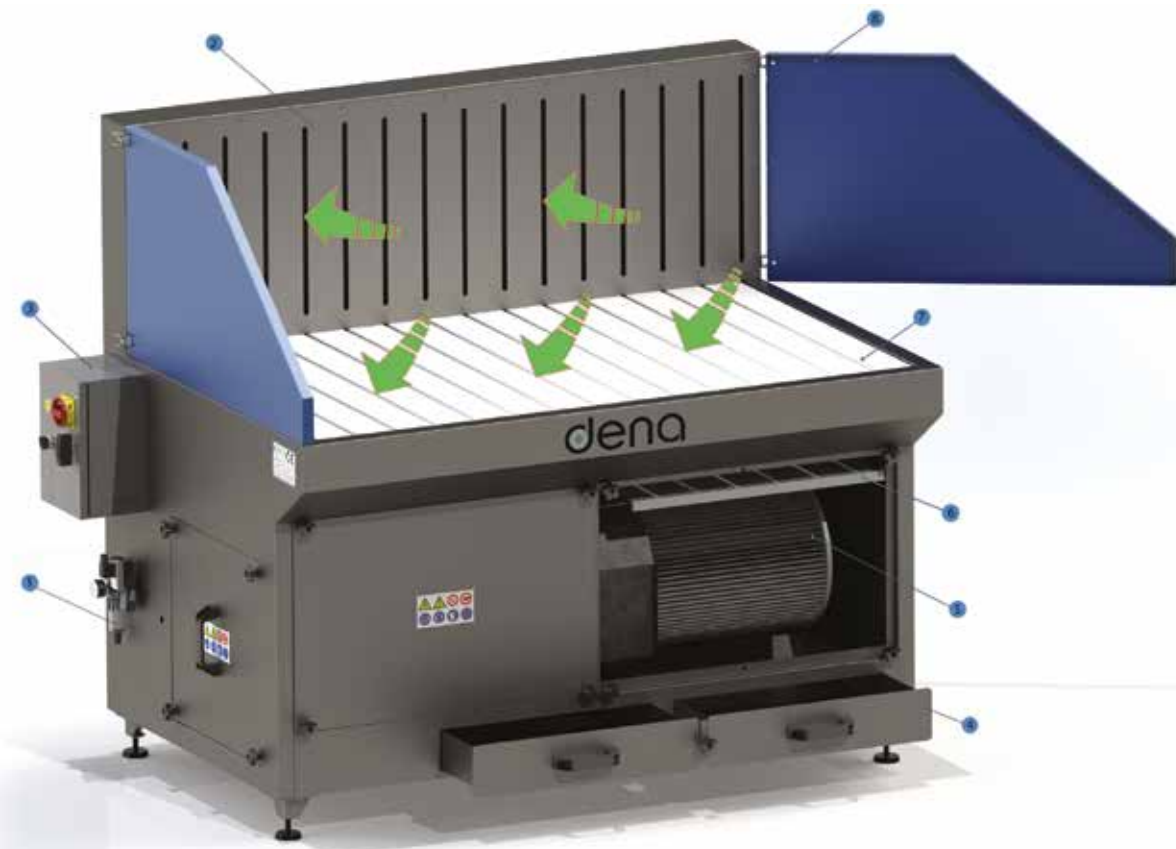
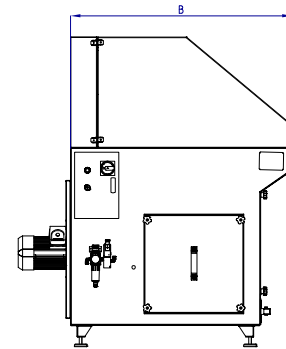
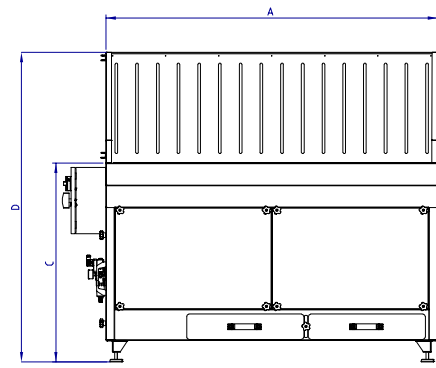
AUTOMOBILE



RUBBER AND PLASTIC



MOD. BAS-V		UNITS	BAS-V15	BAS-V20	BAS-V25
Filtering surface	m ²		20	30	40
Cartridge quantity	n°		1	2	2
Cartridge material	/		PES, 260 gr/m ²		
Cartridge dimension	mm		Ø 325 xH 1000		
Air flow rate	m ³ /h		2700	3600	4500
Air velocity on the grid	m/s		0.5	0.5	0.5
Air flow rate on the grid	kg		200	200	200
Filtration efficiency	>%		99.9 (hepa)		
True HEPA filter	/		H11		
Dust pans	n°		2	2	2
Installed power	kw		1,1	2,2	3
Fan pressure	mmH ₂ O		120	120	120
Structure	Material		Painted carbon stainless steel		
Weight	kg		280	330	370
A	mm		1500	2000	2500
B	mm		1000	1000	1000
C	mm		850-900		
Ø D	mm		250	300	350



- 1 Filter cleaning switchboard
- 2 Frontal vacuum grid
- 3 Control switchboard
- 4 Dust collection pans
- 5 Filtering cartridge
- 6 Anti-spark filter
- 7 Work surface vacuum
- 8 Side inspection door

DOWNDRAFT TABLE PVB

DESCRIPTION

The PVB downdraft table is the ideal solution to extract exhaust particles from grinding, welding, painting, application of adhesives, and in all working processes that produce fumes and dust that, if inhaled are dangerous for the health of the operators. It offers maximum safety for the operator and working environment, thanks to its structure closed on 5 sides preventing the accidental discharge of pollutants. The bench can be customized with different kinds of platforms and grids, depending on the work to be carried out.

Automatic filter cleaning

The machine is equipped with a cartridge filter with a suitable filter surface, the cleaning system is automatic. In fact, it has a tank of compressed air to clean the cartridge, consequently work for the operator is made easier, saving time. Final filtration with Hepa Filter is optional.

Maximum efficiency

Optional equipment: control panel integrated into

the structure, lighting, dust collection bags and blower integrated into the structure makes the PVB a complete machine ready to use. Designed to carry out heavy work 24 hours a day.

OPTIONALS

ATEX Conformity 20-22, Hepa Filtration, Stainless steel 304/316, Paint resistant to hostile environments, manufactured with with special steel (Corten), spark separator, output silencer.

APPLICATION FIELDS



ENGINEERING



TEXTILES



CERAMICS



CONSTRUCTION



EMBALLAGE



RUBBER AND PLASTIC



FOOD INDUSTRY



AUTOMOBILE

CLOSED VERSION



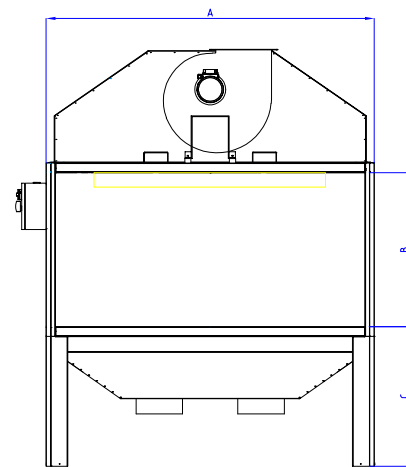
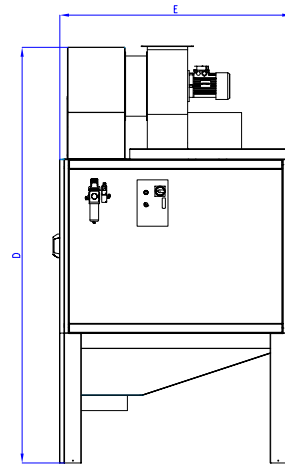
SWITCHBOARD



LIGHTING



MOD. PVB	UNITS OF MEASURE	PVB15	PVB20	PVB30
Filtering surface	m ²	48	64	96
Cartridge quantity	n°	3	4	6
Cartridge material	/	PES, 260 gr/m ²		
Cartridge dimension	mm	Ø 325 x H 1000		
Air flow rate	m ³ /h	2700	3600	4500
Air velocity on the grid	m/s	0.5	0.5	0.5
Air flow rate on the grid	kg	200	200	200
Filtration efficiency	>%	99.9 (hepa)		
True HEPA filter	/	H11		
Dust pans	n°	2	2	2
Installed power	kw	1,5	2,2	3
Fan pressure	mmH ₂ O	120	120	120
Structure	Material	Painted carbon stainless steel		
Weight	kg	520	750	930
A	mm	1620	2120	3120
B	mm	1000	1000	1000
C	mm	900-950		
D	mm	2680		
E	mm	1500		



- 1 Filter cleaning switchboard
- 2 Frontal vacuum grid
- 3 Control switchboard
- 4 Dust collection pans
- 5 Filtering cartridge
- 6 Anti-spark filter
- 7 Work surface vacuum
- 8 Side inspection door

DOWNDRAFT TABLE PVB-H

DESCRIPTION

It is the ideal solution for grinding, welding, painting, application of adhesives, and in all processes that produce fumes and dust that, if inhaled, are harmful to the operators health.

Zero emission

Thanks to its structure in 5 sides and walkable grid collection tank, the operator can perform even harsh working processes without spreading any pollutant into the environment.

Automatic filter cleaning

The machine is equipped with a cartridge filter with a suitable filtering surface, the cleaning system is automatic: it has a tank of compressed air to clean the cartridge, consequently the operator at work saves time. Final filtration with hepa filter is available.

Maximum efficiency

The product is available with control panel integrated into the structure, lighting, spark-proof system,

dust collecting drawers and the blower built into the structure. These accessories make the PVB-H a machine complete and ready to use. The model can be customized with different kinds of platforms and grids, depending on the work to be carried out. Designed for heavy duty 24 hours a day.

OPTIONALS

ATEX Conformity 20-22, Hepa Filtration, Stainless steel 304/316, Paint resistant to hostile environments, manufactured with special steel (Corten), spark separator, output silencer.

APPLICATION FIELDS



ENGINEERING



TEXTILES



CERAMICA



CONSTRUCTION



EMBALLAGE



RUBBER AND PLASTIC



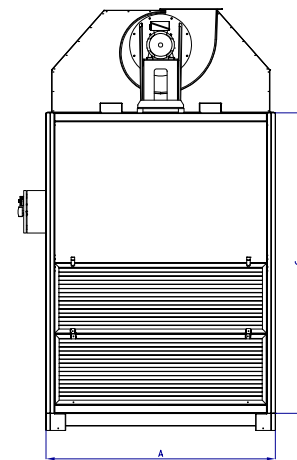
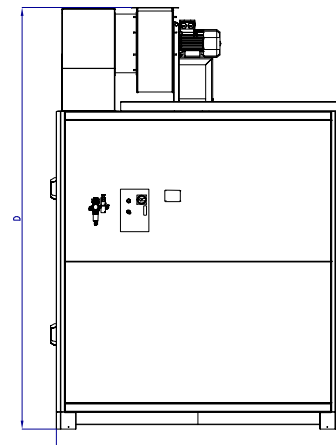
FOOD INDUSTRY



AUTOMOBILE



MOD. PVB-H	UNITS OF MEASURE	PVB-H15	PVB-H20	PVB-H30
Filtering surface	m ²	54	72	108
Cartridge quantity	n°	3	4	6
Cartridge material	/	PES, 260 gr/m ²		
Cartridge dimension	mm	Ø 325 x H 1000		
Air flow rate	m ³ /h	5400	7200	10800
Air velocity on the grid	m/s	0.5	0.5	0.5
Air flow rate on the grid to	kg	200	200	200
Filtration efficiency	>%	99.9 (hepa)		
True HEPA filter	/	H11		
Dust pans	n°	2	2	2
Installed power	kw	2,2	3	4
Fan pressure	mmH ₂ O	120	120	120
Structure	Material	Painted carbon stainless steel		
Weight	kg	750	920	1160
A	mm	1620	2120	3120
B	mm	1000	1000	1000
C	mm		2120	
D	mm		2976	
E	mm		2000	



- 1 Filter inspection door
- 2 Filter cleaning system inspection door
- 3 Fork lift guides
- 4 Filtering cartridge
- 5 Spark separator
- 6 Control box
- 7 Pulse-jet filter cleaning system
- 8 Extraction fan





FUMES AND DUST FILTRATION

The classic sleeve filters offer a wide range of industrial applications, from exhaust fumes resulting from wood chips combustion to any type of fume. Customers can choose among a series of sleeves and tissues for deacidification of fumes with the use of lime and activated carbon. Cartridge filters have a large filtering surface compared to their structure, and work well with low dust concentrations. Bag filters have an even bigger filtering surface, and work very well with dry and fine particles.

DUST COLLECTOR CYCLONE CY

DESCRIPTION

The cyclone can be used for dust with specific weight beyond 300kg/m³, and with coarse particles (beyond 10 micron for dust with specific weight beyond 1000-1500 kg/m³ and beyond 50 micron for dust with specific weight beyond 500 kg/m³, in the air in high concentrations). It can offer treatment efficiency up to 80%.

Operating Principle

Thanks to centrifugal force, dust particles are separated from the gas fluid which moves according to the rotary motion by means of the tangential inlet on the body of the cyclone.

Centrifugal acceleration acts on the particles in the same way as the weight force but radially. Treatment efficiency depends from high peripheral speed of the flux and on the contrary of the ray bend. For this reason one tries to increase flux speed and rotator motions with small bend. At the same peripheral speed the increasing diameter of the cyclone decreases centrifugal effect and con-

sequently its efficiency. The designer must choose the correct shape and size creating a tailored products according to the customer's needs.

Construction Details

The cyclone is a treatment system of cylindrical shape in its top side, truncated cone in its bottom part. It is manufactured in carbon steel or stainless steel (20/10 metal sheet).

OPTIONALS

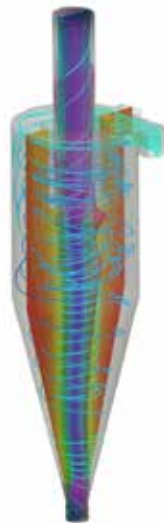
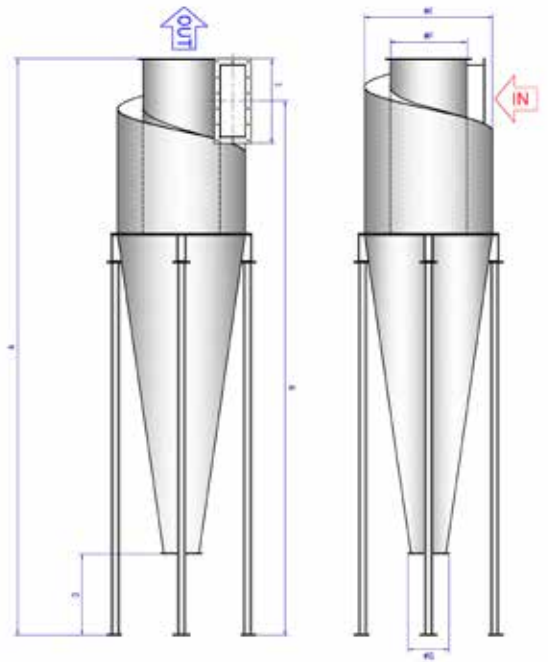
ATEX version, Star valve, suction probe connection for pneumatic transport, galvanized steel body, stainless or painted steel, dust container.

APPLICATION FIELDS

Dust treatment plants, pneumatic transport for wood industries, engineering industries, recycling plants, glass, inert waste, foundries, etc.



MOD. CY	UNITS	CY40	CY61	CY90	CY110	CY110
Maximum air flow rate	m ³ /h	960	2400	6000	8800	11000
Maximum fumes temperature	°C	80	80	80	80	80
Types of dust filtered	/	Industrial dusts and fumes				
Filtering efficiency	%	85-95%				
Dust pan capacity	n°/l	1 / 440	1 / 650	1 / 720	1 / 720	1 / 1100
Non-return valve	n°	1	1	2	2	2
Drop loss	mmH ₂ O	60				
Structure	Material	Painted carbon stainless steel - galvanized				
Weight	kg	192	240	320	395	445
A	mm	1900	2700	3600	4300	4700
E	mm	400	610	900	1100	1200
F	mm	250	380	500	620	700



CAD FLOW SIMULATION

- 1 Dusty air input
- 2 Purified air output
- 3 Dust container
- 4 Dust discharger

POCKET FILTER TAF

DESCRIPTION

TAF models are made up of modular units of pocket air filtration. The operating system with modular units permits to treat various quantities of air flow. It is easy to be installed into places with space constrains too. The modular units of this range of products can be used separately too, in the filtration process of polluting compounds, typical particle sizes range that varies from 0,3 and 5 micron, and in pre-filtration of electrostatic and activated carbon filters. They can be applied to post filtration processes after cyclone filters.

Operating Principle

Polluted airflow is pulled towards towards pre-filtration process by means of the inlet hopper, then the final pocket filtration process, an high efficiency filtration system, will treat the remaining polluting compounds.

Manufacturing Details

The modular structure is made in thick galvanized or varnished carbon steel sheet, the pre-filter and pockets are situated in a part of the structure with inspection door. Hoppers of inlet and outlet air flow can be tailored according to the customer's need.

OPTIONALS

Fan included, secondary and final HEPA filters, activated carbon filters.

APPLICATION FIELDS

Painting operations, operations that produce dust and fumes or pollutant particles, any activities where air cleaning is needed.

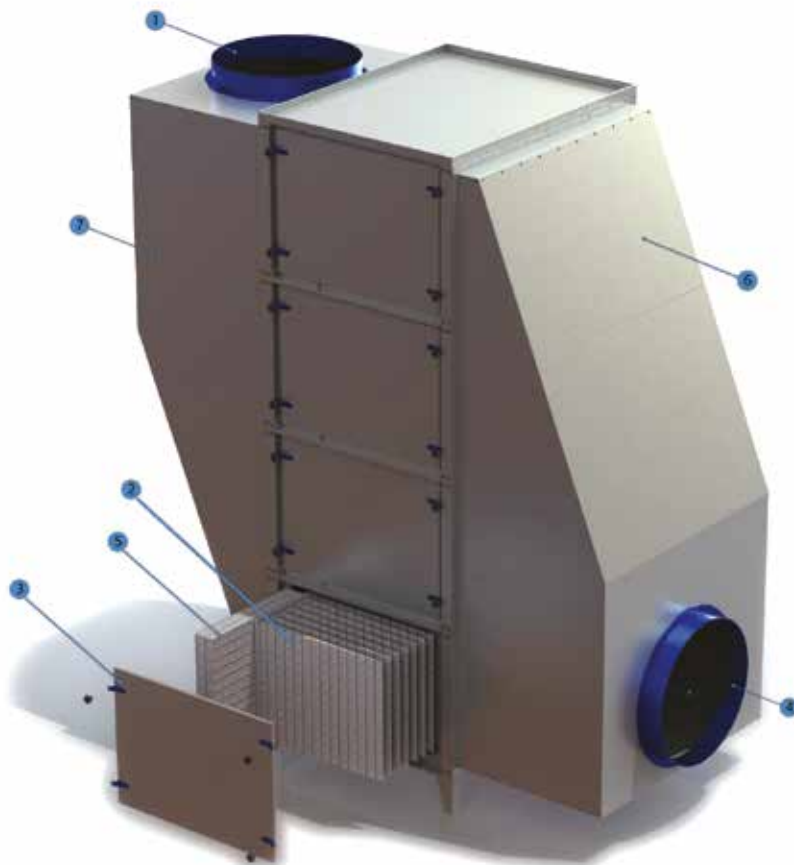
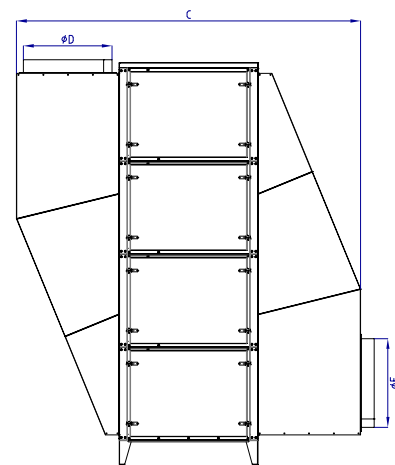
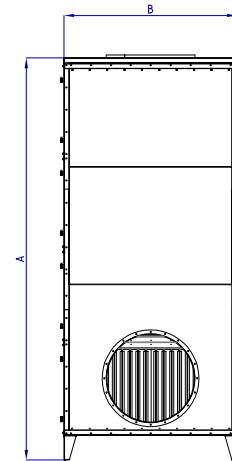
FILTER CHAMBER



CLOGGED FILTER CONTROLS



MOD. TAF	UNITS OF MEASURE	TAF1	TAF2	TAF3	TAF4
Air flow rate max	m ³ h	4500	9000	13500	18000
Filtering surface	m	34	68	102	136
Quantity of rigid pocket cells	n°	2	4	6	8
Quantity of pre-filtration cells	n°	2	4	6	8
Maximum fumes temperature	°C	100	100	100	100
Types of dust filtered	/	Industrial dusts and fumes			
Pocket cell material	/	Micro fiberglass			
Filtering class	/	HEPA			
Filtering efficiency	<	99.95%			
Initial Drop loss	mmH ₂ O	25	25	25	25
Final Drop loss	mmH ₂ O	60	60	60	60
Structure	Material	Painted galvanized carbon stainless steel			
Weight	kg	100	185	265	390
A	mm	900	1582	2264	2946
B	mm	1271	1271	1271	1271
C	mm	1867	1969	1971	2620
D	mm	350	450	550	650
E	mm	350	450 </td <td>550</td> <td>650</td>	550	650



- 1 Air input hole
- 2 Filtering pocket
- 3 Inspection door
- 4 Air outlet hole
- 5 Prefilter
- 6 Air outlet
- 7 Air input

CARTRIDGE FILTER VARIOMATIC C-327

DESCRIPTION

The C-327 cartridge filter is equipped with automatic compressed air cleaning, suitable for filtration and relative separation of medium, fine and impalpable powders. The automatic cleaning system keeps pressure loss constant and therefore suction constant as well.

Operating Principle

Dusty air is introduced into the lower part of the hopper (1) through the mouth connected to the panel. The most coarse dust contained in the air aspirated already undergo a first killing and fall into the hopper of collection due to the considerable decrease in speed. Overcoming the hopper dust passes through the filter cartridges (2) passing from the outside to the inside thus depositing the impurities in the collection hopper. While operating, the filter is maintained at perfect efficiency through a system of cyclical countercurrent cleaning. A jet of compressed air, accumulated in one special tank (3), is quickly injected into the cartridges (4), creating a violent wave of countercurrent shaking capable of detaching and precipitating the

particles deposited on the outside of the cartridges.

Manufacturing Details

The filter is made entirely of thick galvanized sheet, suitably worked and treated, to promote durability over time. The filter is provided with pneumatic system for cleaning the cartridges, and a cyclic programmer for washing of the cartridges. Furthermore it is complete with supporting legs, inspection doors, anti-explosion door, dust collection hopper.

OPTIONALS

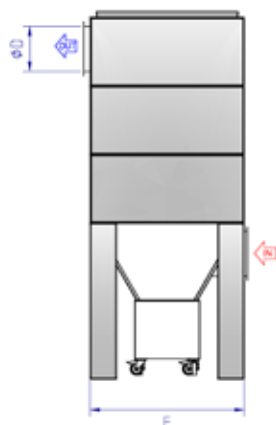
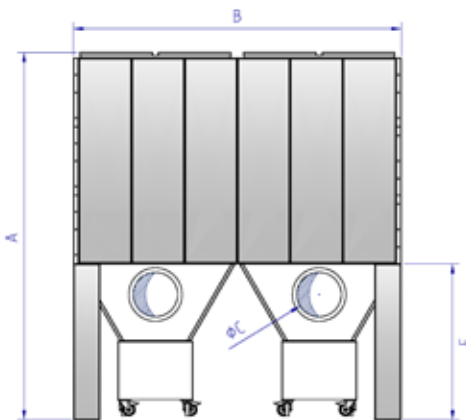
ATEX version, antistatic or high temperature cartridges, fire extinguishing system, insulation, hot air generator, spark detector, stainless steel baskets, aluminum venturi tube, quiet chamber, rotary valve and discharge auger, safety railing and ladder.

APPLICATION FIELDS

In all industrial processes where dust is present: Ceramics, Food, Paint, Foundries, Chemical, Rubber, Sugar, Extraction, Cement.



MOD. C-327		UNITS	C4-327	C6-327	C9-327	C12-327	C15-327	C18-327	C21-327	C24-327
Filtering surface	m ²		75.52	113.28	169.92	226.56	283.20	339.84	396.48	453.12
Quantity of filtering cartridges	n°		4	6	9	12	15	18	21	24
Maximum fumes temperature	°C		100							
Types of dust filtered	/		Industrial heavy and dry dusts and fumes							
Cartridge material	/		Fabric non fabric polyester, 200 gr/m2							
Cartridge dimension	mm		Ø 327 x H 1200							
Electrovalves	m/s		1	1	2	2	3	4	5	4
Electric Sequencer	n° uscite		1	1	2	2	3	4	5	4
Air tank capacity	n°/l		4x7	6x7	9x7	12x7	15x7	18x7	21x7	24x7
Air tank pressure	Bar		5							
Air compression consumption per air pulse	1		7							
Dust container / capacity	n°/l		1/100	1/100	1/100	2/100	2/100	3/100	4/100	4/100
Non-return valve	n°		1	2	4	4	6	8	10	12
Drop loss max	mmH2O		100							
Structure	Material		Galvanized metal sheets / Painted carbon stainless steel							
Weight	kg		360	370	480	690	1050	1350	1720	1980
A	mm		2862							
F	mm		1200							
B	mm		900	1275	1800	2550	3825	5108	6375	7650
Ø C	mm		350							
Ø D	mm		350							
E	mm		1215							



- 1 Dusty air input
- 2 Filtering cartridge
- 3 Compressed air tank
- 4 Cleaning phase cartridges
- 5 Dust collector tank

CARTRIDGE FILTER ATEX C-327

DESCRIPTION

The cartridge filter model C-327 made out of modular cartridges, ATEX version 21-22, is properly designed to filter dust with danger of explosion classes ST1-ST2. It is equipped with automatic cleaning by means of compressed air.

Operating Principle

The dust-filled air enters the bottom side of the hopper through the inlet connected to the panel. Coarser dust present into the extracted air is immediately depressed by means of the separation chamber and drops into the container hopper because of the lessening of speed. Passing through the quiet chamber dust then enters the filtering cartridges going from the outside into the inside, thereby depositing the impurities in the container hopper. While in function, the filter is always kept at maximum efficiency through a system of cyclical cleaning moving into the opposite direction. A compressed blast of air, gathered in the correct tank, is rapidly injected into the inside of the filtering cartridges, creating a shakingly violent wave in the opposite direction. This

process enables it to release the dust particles and let them far from being deposited on the outside of the filtering cartridges.

Construction Details

The filter is made entirely of a very thick galvanized steel, developed to be very durable over time.

The filter is equipped with a cyclical programme to wash the filtering cartridges. Furthermore, it is comprised of supporting legs, inspection doors, anti-explosion doors, dust container with quick release.

OPTIONALS

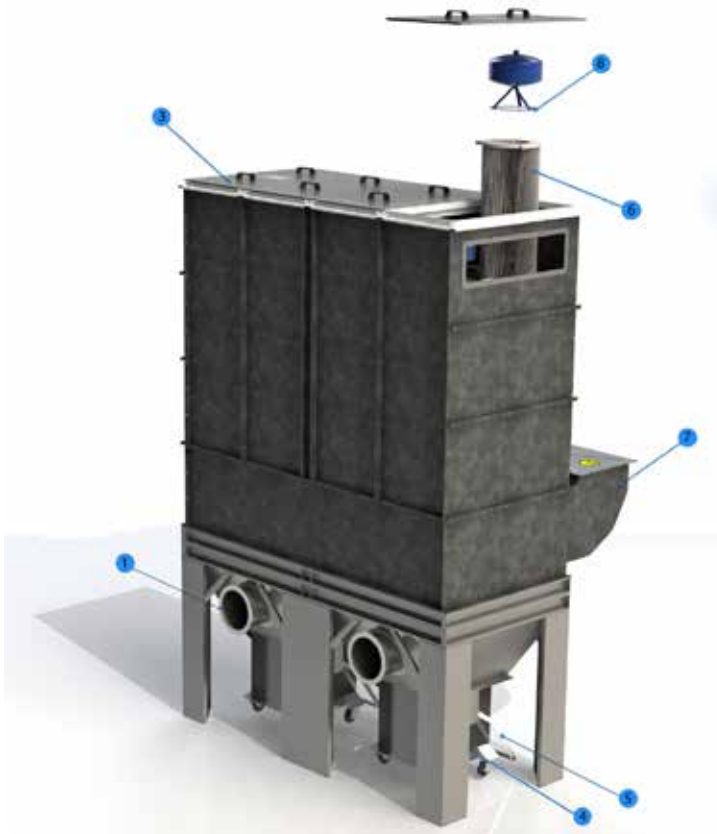
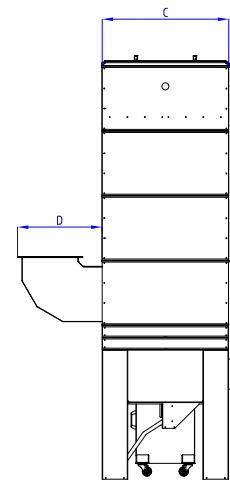
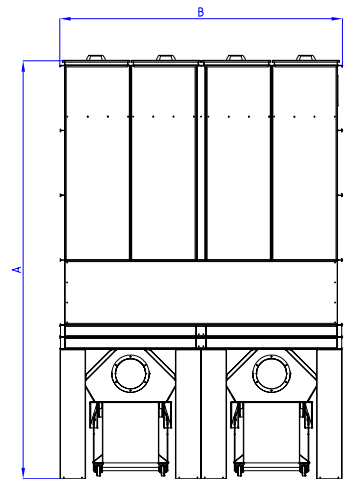
High temperature cartridges, fire protection system, spark detector, venturi aluminum tube, quiet chamber, rotative valve and discharge screw, safety railing and ladder.

APPLICATION FIELDS

Engineering, wood, aeronautic, ceramic, food, painting, foundries, chemical, rubber, sugar, cement.



MOD. C327		UNITS	C327-4	C327-6	C327-8	C327-10	C327-12
Filtering surface	m ²		80	120	160	200	240
Quantity of filtering cartridges	n°		4	6	8	10	12
Maxium fume temperature	°C		60				
Types of dust filtered	/		Industrial dusts and fumes				
Cartridge material	/		PES, 275 gr/m2				
Cartridge dimension	mm		Ø 327 x H 1200				
Electrovalves	n°		1	1	1	1	1
Electric Sequencer	n° uscita		1	1	1	1	1
Air tank capacity	n°/l		4x7	6x7	8x7	10x7	12x7
Air tank pressure	Bar		5				
Air compression consumption per pulse	l		7	21	35	63	78
Dust container / capacity	n°/l		1/50	2/50	2/50	3/50	3/50
Antiexplosion doors	n°		1	2	2	3	3
Maximum drop loss	mmH2O		160				
Structure	Material		Painted carbon stainless steel				
Weight	kg		489	620	750	870	1025
A	mm		3440				
B	mm		1237	1782	2327	2827	3372
C	mm		1052				
D	mm		695				



SPARK SEPARATOR

- 1 Air filter inlet
- 2 Outlet panel
- 3 Inspection door
- 4 Dust container
- 5 Quick release handle
- 6 Filtering cartridge
- 7 Outlet panel pan
- 8 Filter cleaning tank

CARTRIDGE FILTER CC-327

DESCRIPTION

The cartridge filter model CC is equipped with automatic cleaning by means of compressed air, targeted for the filtration and relative separation of medium, fine and impalpable dust. The automatic cleaning system keeps pressure loss constant and therefore suction constant as well.

Operating principle

The dust-filled air enters the bottom side of the filtering cartridges through a hole connected to the hopper. The coarser dust present in the suctioned air is immediately depressed by means of the separation chamber and drops into the container hopper because of the lessening of speed. Passing the quiet chamber, the dust then enters the filtering sleeves passing from the outside into the inside, thereby depositing the impurities in the container hopper. While in function, the filter is always kept at maximum efficiency through a system of cyclical cleaning moving into the opposite direction. A compressed blast of air, gathered in the correct tank, is rapidly injected into the inside of the filtering sleeves, cre-

ating a violent wave in the opposite direction. This enables it to release the dust particles and let them far from being deposited on the outside of the filtering sleeves.

Construction details

The filter is made entirely of very thick galvanized steel, opportunely developed to promote durability over time.

The filter has a filtering sleeves pneumatic cleaning system and a cyclical program to wash the filtering sleeves. Furthermore, it also has complete inspection portals.

OPTIONALS

Atex conformity version, antistatic cartridges, discharging rotary valve, fire system, insulation, hot air generator, spark detector.

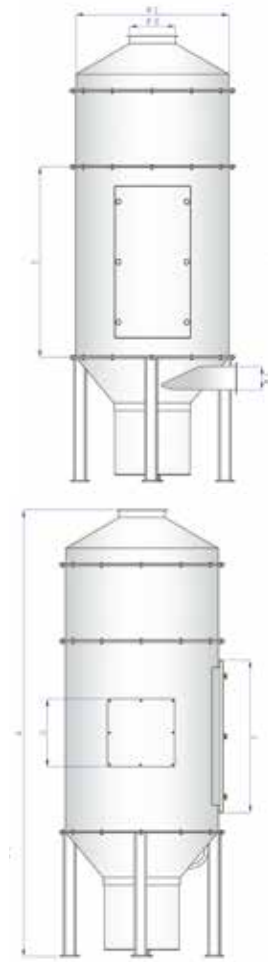
APPLICATION FIELDS

Engineering, wood, aeronautic, ceramic, food, painting, foundries, chemical, rubber, sugar, cement.

INOX
VERSION



MOD. C327		UNITS	CC-327/1	CC-327/3	CC-327/4	CC-327/5	CC-327/9
Filtering surface	m ²	14,57	43,71	60	72,85	131,13	
Quantity of filtering cartridges	n°	1	3	4	5	9	
Max fumes temperature	°C	80	80	80	80	80	
Types of dust filtered	/	Industrial dusts and fumes					
Cartridge material	/	PES 200 gr/m2					
Cartridge dimension	mm	Ø 325 x H 1200					
Electrovalves	m/s	1	1	1	2	3	
Electric Sequencer	n° uscita	1	1	1	2	3	
Air tank capacity	n°/l	1x7	3x7	4x7	5x7	9x7	
Air tank pressure	Bar	5					
Air compression consumption per air pulse	l	7	21	28	35	63	
Dust container / capacity	n°/l	1/100	1/100	1/100	1/100	1/100	
Non-return valve	n°	1	1	1	2	3	
Drop loss	mmH2O	120					
Structure	Material	Painted carbon stainless steel					
Weight	kg	100	400	445	480	640	
Height A	mm	3300					
Ø B	mm	150	300	300	350	450	
Ø C	mm	150	300	300	350	450	
D	mm	1500					
Ø E	mm	570	900	960	1400	1800	
F	mm	1000					
G	mm	500x500					



- 1 Air input flange
- 2 Compressed air tank
- 3 Air outlet flange
- 4 Filtering cartridge
- 5 Cleaning phase cartridge

CARTRIDGE FILTER GIC

DESCRIPTION

This cartridge filter is equipped with automatic cleaning and with an integrated fan in its structure, automatic cleaning by means of compressed air targeted for filtration and relative separation of medium, fine and impalpable dust. The automatic cleaning system allows an almost continuous dust loss and keeps extraction constant.

Operating Principles

Dust-filled air enters the side wall of the filter through the hole into the back inlet. The coarser dust present in the suctioned air is immediately depressed by means of the separation chamber and drops into the container hopper because of the lessening of speed. Passing the quiet chamber, the dust then enters the filtering sleeves passing from the outside into the inside, thereby depositing the impurities in the container hopper. While in function, the filter is always kept at maximum efficiency through a system of cyclical cleaning moving into the opposite direction. A compressed blast of air, gathered in the correct tank, is rapi-

dly injected into the inside of the filtering sleeves, creating a shakingly violent wave in the opposite direction. This enables it to release the dust particles and let them far from being deposited on the outside of the filtering sleeves.

Manufacturing details

This filter is made entirely of very thick galvanized steel, opportunely developed to make it long lasting. It is equipped with a cartridges pneumatic cleaning system and a cyclical program to wash the filtering sleeves. Furthermore, it also has complete inspection portals, fireproof portals and dust container hopper with quick release.

OPTIONALS

Atex conformity version, antistatic cartridges, discharging rotary valve, fire system, insulation, hot air generator, spark detector.

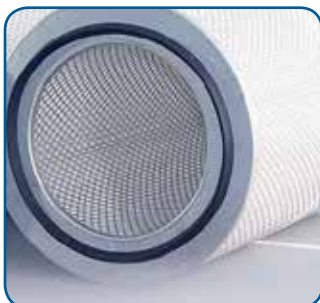
APPLICATION FIELDS

Engineering, wood, aeronautic, ceramic, food, painting, foundries, chemical, rubber, sugar, cement.

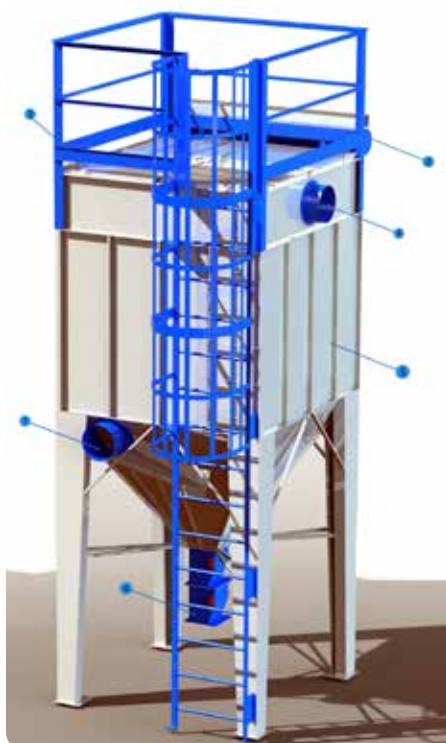
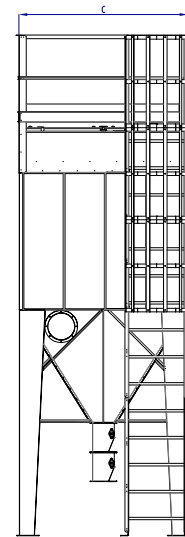
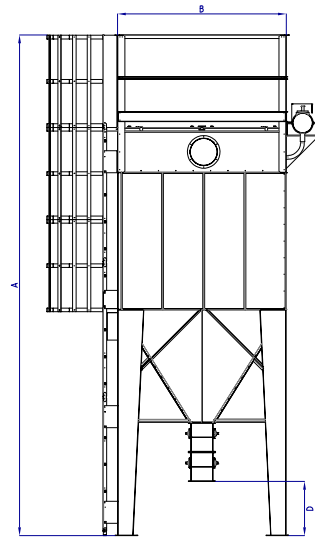
INSULATED VERSION



TYPE OF FILTER



MOD. GIC	UNITS	GIC-36	GIC-42
Filtering surface	m ²	144	168
Quantity of filtering cartridges	n°	36	42
Max fume temperature	°C	80	
Types of dust filtered	/	Dry dust and fumes	
Cartridge material	/	Polyester 100% BIA-USG, 500 gr/m2	
Cartridge dimension	mm	Ø 125 x H 2000	
Tube basket	Material	galvanized/abs	
Electrovalves	n°/Ø	6/1"	6/1"
Electric Sequencer	n° outlets	6	6
Air tank capacity	n°/l	1x38	
Air tank pressure	Bar	5	5
Air compression consumption per air pulse	l	50	50
Dust container / capacity	n°/l	on request	
Non-return valve	n°	OPTIONALS	
Drop loss	mmH2O	150	
Structure	Material	Galvanized sheets, painted on request	
Weight	kg	1250	1300
A (with railing)	mm	5477	
B	mm	1846	
C	mm	1846	
D	mm	600	
E	mm	Ø350	



BLOWER TUBE



DOUBLE CLAPET VALVE



- 1 Dusty air input tube
- 2 Inspection door cartridge
- 3 Compressed air tank
- 4 Filtered air outlet
- 5 Filter
- 6 Double clapet valve

CARTRIDGE FILTER GIC-X

DESCRIPTION

The cartridge filter is equipped with automatic cleaning and with integrated fan in its structure, automatic cleaning by means of compressed air targeted for the filtration and relative and relative separation of medium, fine and impalpable dust. The automatic cleaning system allows an almost continuous dust loss and keeps extraction constant.

Operating principles

Dust-filled air enters the side wall of the filter through the hole into the back inlet. The coarser dust present in the suctioned air is immediately depressed by means of the separation chamber and drops into the container hopper because of the lessening of speed. Passing the quiet chamber, the dust then enters the filtering sleeves passing from the outside into the inside, thereby depositing the impurities in the container hopper. While in function, the filter is always kept at maximum efficiency through a system of cyclical cleaning moving into the opposite direction. A compressed blast of air, gathered in the correct tank, is rapidly injected into the inside of the filtering sleeves, creating a violent wave in the opposite direction. This

enables it to release the dust particles and let them far from being deposited on the outside of the filtering sleeves.

Manufacturing details

The filter is made entirely of a very thick galvanized steel, opportunely worked to make it long lasting. The filter is equipped with a cartridges pneumatic cleaning system and a cyclical program to wash the filtering sleeves. It also has complete inspection portals, fireproof portals and dust container hopper with quick release.

OPTIONALS

ATEX conformity. Various systems of dust discharging in respect to ATEX standards. Stainless steel 304/3016. Coating resistant to hostile environments. It can be made in special steel (Corten), fire system, silencer.

APPLICATION FIELDS

Movement operations, storage, transportation, mixing, dust particles, grinding, sanding, polishing, solid and waste combustion, cutting processes, welding and surface cleaning.

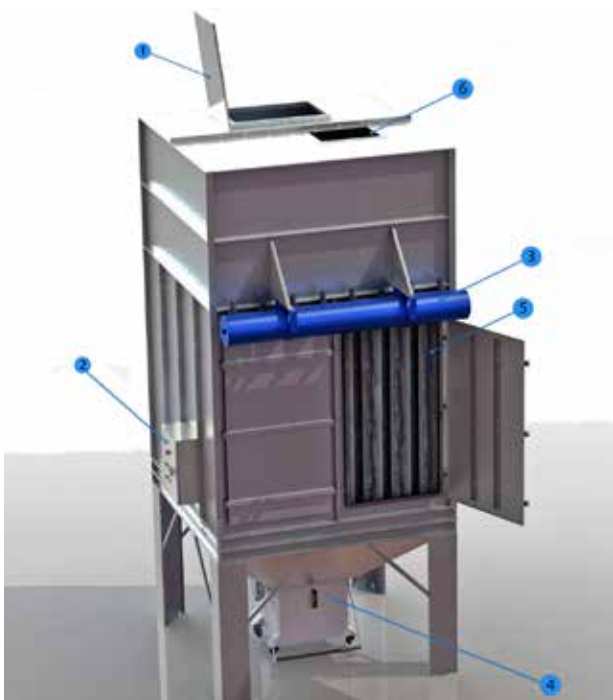
RAPID RELEASE DUST CONTAINER



CLEANING ECONOMIZER



MOD. GICX	UNITS	GICX-12	GICX-24	GICX-36	GICX-48	GICX-72	GICX-96
Filtering surface	m ²	48	96	144	192	288	384
Quantity of filtering cartridges	n°	12	24	36	48	72	96
Fan range	m3/h	2500	5000	8000	10.000	15.000	18.000
Installed power	kW	3	5.5	7.5	11	12.5	15
Max fume temperature	°C	80					
Types of dust filtered	/	Industrial dusts and fumes					
Cartridge material	/	Fabric non fabric polyester, 450 gr/m2					
Cartridge dimension	mm	Ø 145 x H 1500					
Tube basket	Material	galvanized/abs					
Electrovalves	n°/Ø	2/ 1 1/2"	4/ 1 1/2"	6/ 1 1/2"	8/ 1 1/2"	12/ 1 1/2"	16/ 1 1/2"
Electric Sequencer	n° uscite	2	4	6	8	12	16
Air tank capacity	n°/l	1x15	1x30	1x45	1x60	1x90	1x115
Air tank pressure	Bar	5					
Air compression consumption per air pulse	l	50					
Dust container / capacity	n°/l	1/125	1/125	2/125	1/125	2/125	3/125
Non-return valve	n°	OPTIONALS					
Drop loss	mmH ₂ O	100					
Structure	Material	Galvanized sheets, painted on request					
Weight	kg	500	700	1200	1600		
A	mm	4093					
(A)	mm	3250 (Version without fan)					
D	mm	890	1350	1795	2270	3190	4540
B	mm	460	920	920	1840	2760	2760
C	mm	1235					
IN-OUT	mm	200x200	350x350	350x350	350x700	350x1050	350x1050



- 1 Inspection door fan
- 2 Control switchboard
- 3 Compressed air tank
- 4 Dust collector tank
- 5 Filtering cartridges
- 6 Filtered air outlet

FILTER CHAMBER



BAG HOUSE FILTER GI-M

DESCRIPTION

The bag filter GI-M is equipped with automatic cleaning by means of compressed air, targeted for the filtration and relative separation of medium, fine and impalpable dust. The automatic cleaning system allows an almost continuous dust loss with constant suction.

Functioning

The dust-filled air enters the top part of the quiet chamber (6) by means of the hole on the panel. The coarser dust present in the suctioned air is immediately depressed and drops into the container hopper because of the lessening of speed. Passing the quiet chamber, the dust then enters the filtering sleeves (1) passing from the outside to the inside, thereby depositing the impurities in the container hopper. While in function, the filter is always kept at maximum efficiency through a system of cyclical cleaning moving in the opposite direction. A compressed blast of air, gathered in the correct tank (3), is rapidly injected into the inside of the filtering sleeves (4), creating a shakingly violent wave in the opposite direction. This enables it to release the dust particles and let them fall from being deposited on the outside of the filtering sle-

ves. The screw (7), moves the dust from alongside the star valve (9) and in its turn will offload the dust cyclically.

Manufacturing details

The filter is made entirely of a very thick galvanised steel, opportunely worked and treated to make it long lasting. The filter has a filtering sleeves pneumatic cleaning system and a cyclical programme to wash the filtering sleeves. Furthermore this, it also has complete inspection portals (2), fireproof portals (5) and a dust container hopper.

OPTIONALS

ATEX Conformity, Diversi System of dust discharge conform with Atex regulations(20), Stainless steel 304/316, Paint resistant to hostile environments, Manufactured with with special steel (Corten), fire protection system.

APPLICATION FIELDS

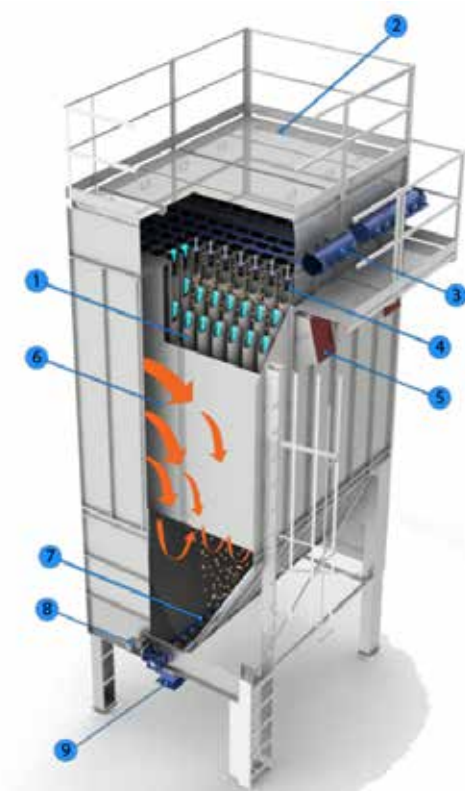
Movement operations, storage, transportation, mixing, dust particles, grinding, sanding, polishing, solid and waste combustion, cutting processes, welding and surface cleaning.



**BIG BAG
DUST EXHAUST**



MOD. GI-M	UNITS	GI-M6	GI-M66	GI-M18	GI-M24
Filtering surface	m ²	85,80	63	257,40	343,20
Quantità filtering sleeves	n°	66	66	198	264
Max fume temperature	°C	80			
Types of dust filtered	/	Industrial dusts and fumes			
Sleeve material	/	Fabric non fabric polyester, 450 gr/m ²			
Sleeve dimensions	mm	Ø 123 x H 3000	Ø 123 x H 2500	Ø 123 x H 3000	Ø 123 x H 3000
Venturi tube cages	Material	galvanized/abs			
Electrovalves	n°/Ø	6/1"	12/1"	18/1"	24/1"
Electric Sequencer	n° uscite	6	12	18	24
Air tank capacity	n°/l	1x25	2x25	3x25	4x25
Air tank pressure	Bar	5			
Air compression consumption per air pulse	l	50			
Dust container / capacity	n°/l	on request			
Non-return valve	n°	1	2	6	8
Drop loss	mmH ₂ O	160			
Structure	Material	Galvanized sheets, painted on request			
Weight	kg	1315	2630	3950	5260
A (with railing)	mm	7248			
F	mm	730			
B	mm	3006			
D (Quiet chamber not included)	mm	1498	2731	3964	5197
E	mm	2128			
C	mm	2703			
IN-OUT	mm	400x400	450x450	450x800	450x1200



DETAIL OF BLOWING TUBES



- 1 Filtering sleeves
- 2 Inspection door handles
- 3 Compressed air tank
- 4 Cleaning phase sleeves
- 5 Anti-spark portal
- 6 Quiet chamber
- 7 Output screw
- 8 Screw motor reductor
- 9 Rotary discharge valve

INSULATED VERSION



VARIOUS SLEEVE MATERIALS



BAG HOUSE FILTER GIM-HT

DESCRIPTION

The GIM-H bag filter has been designed expressly for thermal plants and for all those spaces with height problems. In fact, it is compact, equipped with inspection door for maintenance and extraction sleeves, the inside of the filter with walkable grid.

Operating principle

The dust-filled air enters the top of the quiet chamber through the hole into the panel. Coarser dust present into the extracted air is immediately depressed by means of the separation chamber and drops into the container hopper because of the lessening of speed. Passing the quiet chamber, dust then enters the filtering sleeves, creating a shakingly violent wave in the opposite direction. This enables it to release dust particles and let them far from being deposited on the outside of the filtering sleeves. The screw fall moves the dust from alongside the star valve and in its turn will offload the dust cyclically. At the end of the operating cycle dust is collected in the container with quick release.

Construction details

It is equipped with by-pass in the body of the filter to assure rapid assembly, made of thick stainless sheet, suitably processed and treated, to favor its durability. It is supplied with pneumatic cleaning of sleeves, controlled by an economizer with differential pressure switch. Furthermore, it is comprised of supporting legs, inspection doors, railings and stairs, anti-bursting door, dust collection hopper.

OPTIONALS

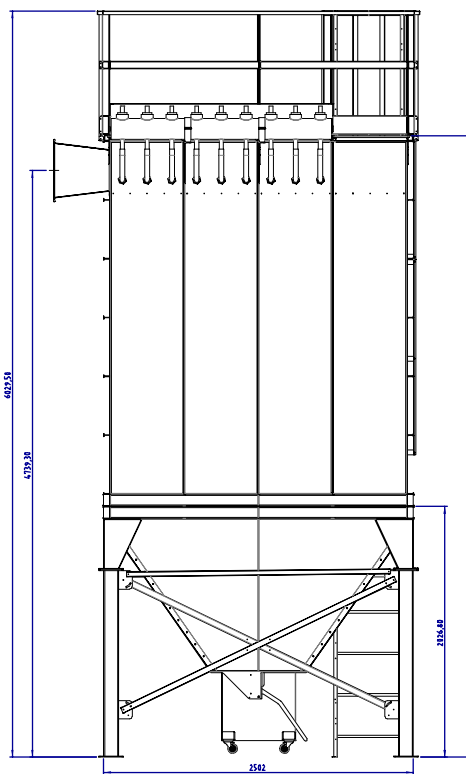
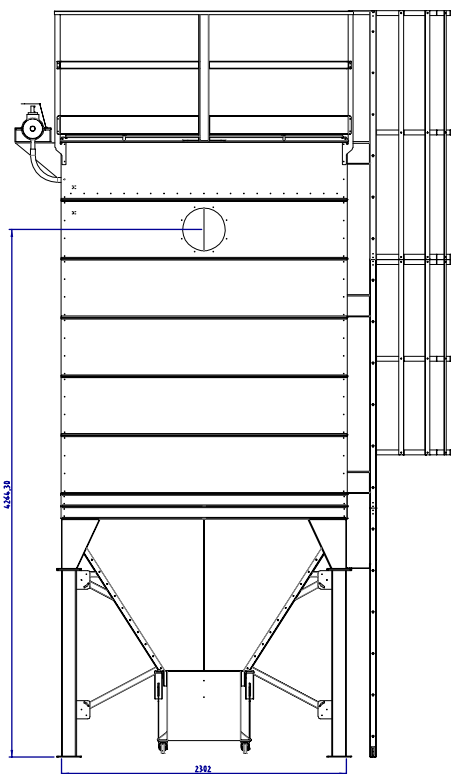
Atex conformity. System of dust discharge conform with Atex regulations (20). Manufacturing made out of stainless steel, 304/3016. Body filter heating, fire protection system, automatic by-pass.

APPLICATION FIELDS

Movement operations, storage, transportation, mixing, dust particles, grinding, sanding, polishing, solid and waste combustion, cutting processes, welding and surface cleaning.



MOD. GI-M	UNITS	GI-M30	GI-M54	GI-M81	GI-M99	GI-M132	GI-M165	GI-M198	GI-M231
Filtering surface	m ²	28	51.85	77.76	93	124	155	186	217
Quantità filtering sleeves	n°	30	54	81	99	132	165	198	231
Max fume temperature	°C	180							
Types of dust filtered	/	Dusty fumes							
Sleeve material	/	Tefloned aramidic fabric, 500 gr/m ²							
Sleeve dimensions	mm	Ø 123 x H 2500							
Venturi tube cages	Material	Painted steel with cataphorases							
Electrovalves	n°/Ø	6/1"	6/1"	9/1"	9/1"	12/1"	15/1"	18/1"	21/1"
Air tank capacity	n°/l	1/25	1/35	1/45	1/60	1/70	1/80	2/45	2/60
Air tank pressure	Bar	1x25	2x25	3x25	4x25				
Air compression consumption per air pulse	NLt	6							
Dust container / capacity	n°/l	1/100				2/100			
Insulation	Material	Rock wool - alluminum external							
Drop loss max	mmH ₂ O	160							
Structure	Material	Pickled and painted sheets							
Thickness	mm	30/10							
Weight	kg	1000	1600	1850	2250	2800	3000	3450	3900
Width	mm	1160	1900	1900	2080	2080	2080	2080	2080
Length	mm	1050	1900	2500	2240	2780	3320	3860	4400
Height	mm	4470				5020			



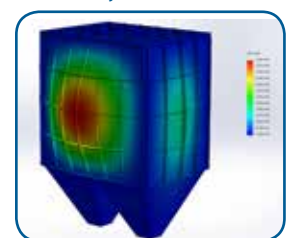
BY-PASS



FAN



STATIC ANALYSIS
0,3 BARG



INDOOR BAG HOUSE FILTER GIM-H

DESCRIPTION

The GIM-H bag filter has been designed expressly for thermal plants and for all those places with height problems. In fact, it is compact, equipped with inspection door for maintenance and extraction sleeves, the inside of the filter with walkable grid.

Operating principle

The dust-filled air enters the top of the quiet chamber through the hole into the panel. Coarser dust present into the extracted air is immediately depressed by means of the separation chamber and drops into the container hopper because of the lessening of speed. Passing the quiet chamber, dust then enters the filtering sleeves, creating a shakingly violent wave in the opposite direction. This enables it to release dust particles and let them far from being deposited on the outside of the filtering sleeves. The screw fall moves the dust from alongside the star valve and in its turn will offload the dust cyclically. At the end of the ope-

rating cycle dust is collected in the container with quick release.

Construction details

It is equipped with by-pass in the body of the filter to assure rapid assembly, made of thick stainless sheet, suitably processed and treated, to favor its durability. It is supplied with pneumatic cleaning of sleeves, controlled by an economizer with differential pressure switch. Furthermore, it is comprised of supporting legs, inspection doors, railings and stairs, anti-bursting door, dust collection hopper.

OPTIONALS

ATEX Conformity, System of dust discharge conform with Atex regulations (20), Manufacturing made out of stainless steel 304/316, Body filter heating, fire protection system, automatic by-pass.

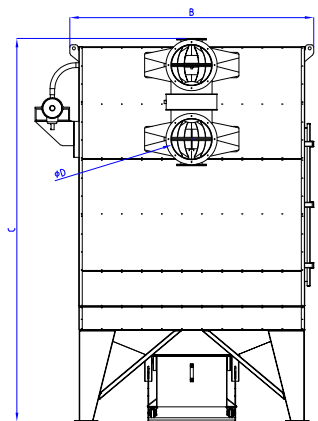
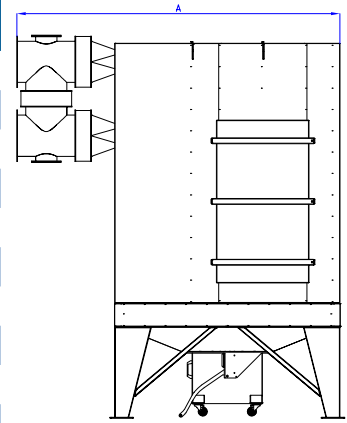
APPLICATION FIELDS

Fumes from combustion of solid and waste materials, biomass, cutting processes.

DOSING SYSTEM



MOD. GIM-H	UNITS	GIM-H36	GIM-H63	GIM-H90	GIM-H110	GIM-H143
Filtering surface	m ²	27.7	48.5	69.3	84.7	110.11
Quantità filtering sleeves	n°	36	63	90	110	143
Max fume temperature	°C	180				
Types of dust filtered	/	Dusty fumes				
Sleeve material	/	Tefloned aramidic fabric, 520 gr/m2				
Sleeve dimensions	mm	Ø 123 x H 2000				
Venturi tube cages	Material	Painted steel with cataphorases				
Electrovalves	n°/Ø	4/1"	7/1"	10/1"	10/1"	13/1"
Air tank capacity	n°/l	1/25	1/35	1/45	1/60	1/70
Air tank pressure	Bar	6				
Air compression consumption per air pulse	NLt	216 @ 6 bar (200ms)				
Dust container / capacity	n°/l	1/100				2/100
Insulation	Material	Rock wool - alluminum external				
Drop loss max	mmH ₂ O	160				
Structure	Material	Pickled and painted sheets				
Thickness	mm	30/10				
Weight	kg	1432	1820	2147	2478	2892
A	mm	2141	2741	3341	3341	3941
B	mm	2068	2068	2068	2468	2468
C	mm	3248	3248	3248	3248	3180
D	mm	300	350	400	450	500



- 1 By-pass system
- 2 Ergonomic handle container release
- 3 Clean air outlet
- 4 Inspection door handle
- 5 Fumes input
- 6 Dust container

CARTRIDGE DUST COLLECTOR GIC-HT

DESCRIPTION

The GIC-HT cartridge filter is equipped with automatic cleaning by means of compressed air, targeted for the filtration and relative separation of medium and impalpable dust. The automatic cleaning system allows almost continuous dust loss and keeps extraction process constant.

Operating principle

The dust-filled air enters the top of the quiet chamber through the hole into the panel. The coarser dust present into the extracted air is immediately depressed by means of the separation chamber and drops into the container hopper because of the lessening of speed. Passing the quiet chamber, dust then enters the filtering sleeves, creating a shakingly violent wave in the opposite direction. This enables it to release dust particles and let them far from being deposited on the outside of the filtering sleeves. The screw fall moves the dust from alongside the star valve and in its turn will offload the dust cyclically. At the end of the operating cycle dust is collected in the container with quick release.

Construction details

It is equipped with by-pass in the body of the filter to assure rapid assembly, made of thick stainless sheet, suitably processed and treated, to favor its durability. It is supplied with pneumatic cleaning of sleeves, controlled by an economizer with differential pressure switch. Furthermore, it is comprised of supporting legs, inspection doors, railings and stairs, anti-bursting door, dust collection hopper.

OPTIONALS

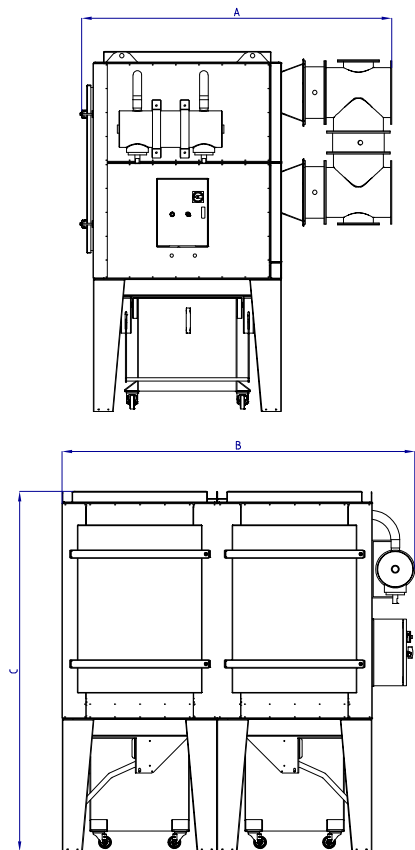
ATEX Conformity, System of dust discharge conform with Atex regulations (20), Manufacturing made out of stainless steel 304/316, Paint resistant to hostile environments, Manufactured with with special steel (Corten), fire protection system, automatic by-pass.

APPLICATION FIELDS

Movement operations, storage, transportation, mixing, dust particles, grinding, sanding, polishing. Fumes from combustion of solid and waste materials, biomass, cutting processes, such as plasma or laser.



MOD. GIC-HT	UNITS	GIC3-HT	GIC4-HT	GIC6-HT	GIC8-HT
Filtering surface	m ²	12	16	24	32
Quantity of filtering cartridges	n°	3	4	6	8
Max fume temperature	°C	250			
Types of dust filtered	/	Industrial dusts and fumes			
Cartridge material	/	Fabric non fabric polyester, 200 gr/m ²			
Cartridge dimension	mm	Ø 200 x H 1200			
Electrovalves	n°	2			
Electric Sequencer	n° uscite	2			
Air tank capacity	n°/l	1x21			
Air tank pressure	Bar	5			
Air compression consumption per air pulse	l	7	21	35	63
Dust container / capacity	n°/l	1/100	1/100	2/100	2/100
Non-return valve	n°	1	1	2	2
Drop loss	mmH2O	160			
Structure	Material	Painted carbon stainless steel			
Weight	kg	510	515	690	695
A	mm	1863			
B	mm	1192	1192	2121	2121
C	mm	2162			
Flangia IN-OUT	mm	Ø 300	Ø 300	Ø 350	Ø 350



BY-PASS SWITCHBOARD



BY-PASS



TANK





DESCRIPTION

The ATEX sleeve filter GIC-M is a machine with very high filtration efficiency, and has been designed to work in environments where a high protection against explosions is needed, in accordance with the legislation ATEX 94/9 / EC. It has a high structural strength that allows it to withstand very high pressures, designed using the finite element method (FEM ANALISYS), complying with the UNI welding process standards

EN 288-4 and directive 97/23 / CE (PED). This allows the use of the filter with highly explosive dust and is suitable for use in classified areas ATEX 21 and 22. The filter is equipped with anti-explosion breaking membranes certified, of a size appropriate to the explosive class of the powder to be treated. An explosion suppression or compartment system is installed in combination with the filter. The subdivision is necessary in order to avoid the propagation of the explosion in other parts of the plant or in the environment; it must always be associated with a suppression or relief system. The compartment system can be mechanical (guillotine valve) or chemical (dust suppressor).

Principle of operation

The dusty air is introduced into the lower part of the filter (4) through the tangential hole. The coarsest dust contained in the air already sucked up, they undergo a first felling and fall into the collection hopper.

Passing the quiet chamber the dust passes through the filtering sleeves passing. During work, the filter is always kept in perfect working order through a counter-current cyclic cleaning system. A jet of compressed air, accumulated in a special tank (3), is quickly injected inside the sleeves, creating a violent shaking wave in counter flow able to detach and precipitate the particles deposited on the outside of the sleeves. The rotary valve (7) will discharge the dust.

Construction details

The filter is made entirely of very thick carbon steel sheet, properly worked and treated, to favor its durability. The filter is equipped with a pneumatic system for cleaning sleeves and a programmer cyclical for washing the sleeves. It is also complete with support legs, inspection hatches (2), explosion-proof panels (5), dust collection hopper.

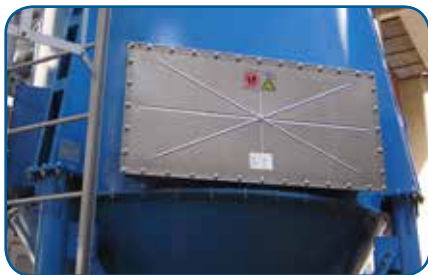
OPTIONALS

Discharge valve with rotocell, discharge system with exclusion valve, explosion suppression system, compartment valve, paint resistant to hostile environments, manufactured with special steel, fire protection system.

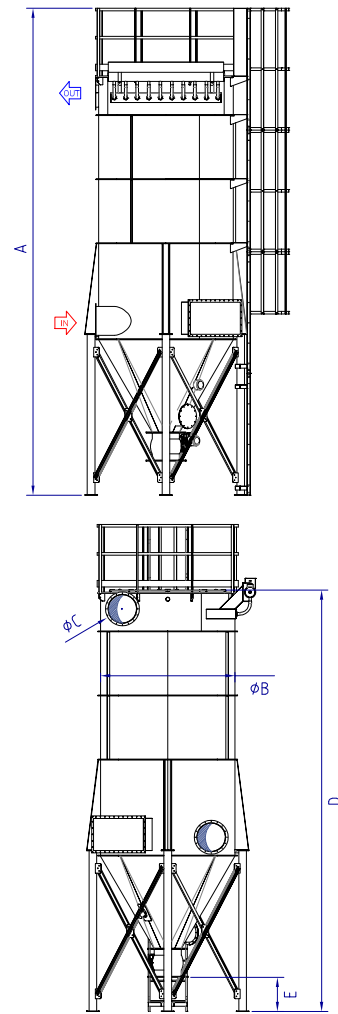
APPLICATION FIELDS

Ideal for highly explosive particles and for workplaces where extremely effective protection against explosions is needed.

BREAKAGE PANEL



MOD. GIC-M	UNITS OF MEASURE	GIC-M25	GIC-M51	GIC-M88	GIC-M132
Filtering surface	m ²	29.25	49.98	99.44	149.16
Quantità filtering sleeves	n°	25	51	88	132
Max fume temperature	°C	80			
Types of dust filtered	/	Industrial dusts and fumes			
Sleeve material	/	Antistatic felt polyester 500 gr/m ²			
Sleeve dimensions	mm	Ø 123 x H 3000	Ø 123 x H 2500	Ø 123 x H 3000	Ø 123 x H 3000
Venturi tube cages	Material	galvanized/abs			
Electrovalves	n°/Ø	4/1"	5/1"	10/1"	12/1"
Electric Sequencer	n° uscite	8	8	10	12
Air tank capacity	n°/l	1x25	1x25	1x35	1x45
Air tank pressure	Bar	5			
Air compression consumption per air pulse	Nlt	210 @ 6 bar (200ms)			
Dust container / capacity	n°/l	-	1/100	-	-
Antiexplosion panels	n°	1	1	2	3
Drop loss max	mmH ₂ O	150			
Structure	Material	Painted sheets, galvanized upon request			
Weight	kg	1260	1700	2300	2800
A	mm	5900	5400	7600	7600
D	mm	4900	4400	6600	6600
ØB	mm	1100	1500	2100	2400
E	mm	530			
Ø IN-OUT	mm	200	300	450	550



ROTARY DISCHARGE VALVE



VENTURI FOR PNEUMATIC TRANSPORT



- 1 Breakage panel
- 2 Filtered air output
- 3 Compressed air tank
- 4 Dusty air input
- 5 Point of attachment fire hose
- 6 Ladder
- 7 Dust collection hopper
- 8 Inspection panel
- 9 Rotary discharge valve

BAG DUST COLLECTOR ATEX GI-M

DESCRIPTION

The ATEX sleeve filter GI-M is a machine with very high filtration efficiency, and has been designed to work in environments where a high protection against explosions is needed, in accordance with the legislation ATEX 94/9 / EC. It has a high structural strength that allows it to withstand very high pressures, designed using the finite element method (FEM ANALISYS), complying with the UNI welding process standards

EN 288-4 and directive 97/23 / CE (PED). This allows the use of the filter with highly explosive dust and is suitable for use in classified areas ATEX 21 and 22. The filter is equipped with anti-explosion breaking membranes certified, of a size appropriate to the explosive class of the powder to be treated. An explosion suppression or compartment system is installed in combination with the filter. The subdivision is necessary in order to avoid the propagation of the explosion in other parts of the plant or in the environment; it must always be associated with a suppression or relief system. The compartment system can be mechanical (guillotine valve) or chemical (dust suppressor).

Principle of operation

The dusty air is introduced into the lower part of the filter (4) through the tangential hole. The coarsest dust contained in the air already sucked up, they undergo a first felling and fall into the collection hopper.

Passing the quiet chamber the dust passes through the filtering sleeves passing. During work, the filter is always kept in perfect working order through a counter-current cyclic cleaning system. A jet of compressed air, accumulated in a special tank (3), is quickly injected inside the sleeves, creating a violent shaking wave in counter flow able to detach and precipitate the particles deposited on the outside of the sleeves. The rotary valve (7) will discharge the dust.

Construction Details

The dust collector is made entirely of very thick steel, opportunely worked and treated to make it long lasting. The filter has a filtering sleeves pneumatic cleaning system and a cyclical program to wash the filtering sleeves. Furthermore, it also has complete inspection portals, fireproof portals and a dust container.

OPTIONALS

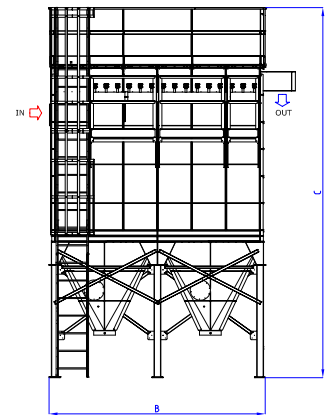
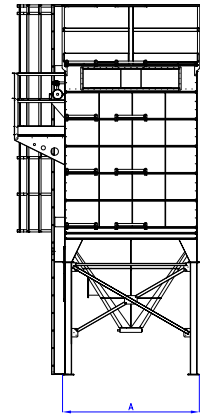
Discharge valve with rotocell, discharge system with exclusion valve, explosion suppression system, compartmentation valve, antiacid internal paint, manufactured with special steel, antiflooding filter.

APPLICATION FIELDS

Ideal for highly explosive particles and for workplaces where extremely effective protection against explosions is needed.



MOD. GI-M	UNITS	GI-M66	GI-M99	GI-M132	GI-M165	GI-M198	GI-M231	GI-M264
Filtering surface	m ²	63.3	63.3	126.72	158.4	190.08	221.76	253.44
Quantità filtering sleeves	n°	66	66	132	165	198	231	264
Max fume temperature	°C	60						
Explosive class of dusts to filter	/	ST3 - 300 bar m/sec - 11 bar g						
Sleeve material	/	PES, 520 gr/m ²						
Sleeve dimensions	mm	Ø 123 x H 2500						
Venturi tube cages	Material	Steel galvanized						
Electrovalves	n°/Ø	6/1"	9/1"	12/1"	15/1"	18/1"	21/1"	24/1"
Air tank capacity	n°/l	1/25	1/35	1/45	1/80	2/45	2/60	2/70
Air tank pressure	Bar	6						
Compressed air consumption per pulse	NLt	240 @ 5 bar (200ms)						
Discharge hoppers	n°	1	1	1	2	2	3	3
Drop loss max	mmH ₂ O	160						
Structure	Material	Steel S235JR						
Thickness	mm	40/10						
Weight	kg	3213	4120	4800	5302	5740	6548	7445
A	mm	2400						
B	mm	1990	2590	3190	3790	4390	4990	5590
C	mm	6500	6500	6500	6500	7200	7200	7200



CONDUCTIVE FILTER GROUPS



- 1 Hopper inclined to 60°
- 2 Inspection door handle
- 3 Air filter inlet
- 4 Discharge rotovalve
- 5 Manual shutter
- 6 Quiet chamber
- 7 Explosion outlet panels
- 8 Compressed air tank for sleeve cleaning

DUST COLLECTOR WITH CERAMIC CANDLES GICA

DESCRIPTION

The dust collector with ceramic candles GICA is especially designed for filtration and separation of particulates at extremely high temperatures. The automatic cleaning system helps maintain almost constant pressure drops and the extraction.

Operating principle

Dusty air enters the top part of the filter through the special flanged inlet. Coarser particles contained in the extracted air are immediately depressed and drop into the container hopper because of the considerable decrease in speed. Then the fluid flows through the filter candles going from outside to inside, thereby depositing impurities in the container hopper. While in function, the dust collector is always kept at maximum efficiency through a cyclical cleaning system.

A jet of compressed air, accumulated in a special tank, is quickly injected into some candles, creating a violent shaking wave in the opposite direction making the deposited particles drop outside of the candles.

Construction filters

The dust collector is made of thick steel, opportunity developed and treated, to make it long lasting. It is equipped with pneumatic sleeve cleaning, controlled by an economizer with a differential pressure switch. The tube plate is designed to withstand extremely high temperatures, and will not ruin the candles. Furthermore it can be supplied with complete supporting legs, inspection doors, railings and ladder, dust collection hopper.

OPTIONALS

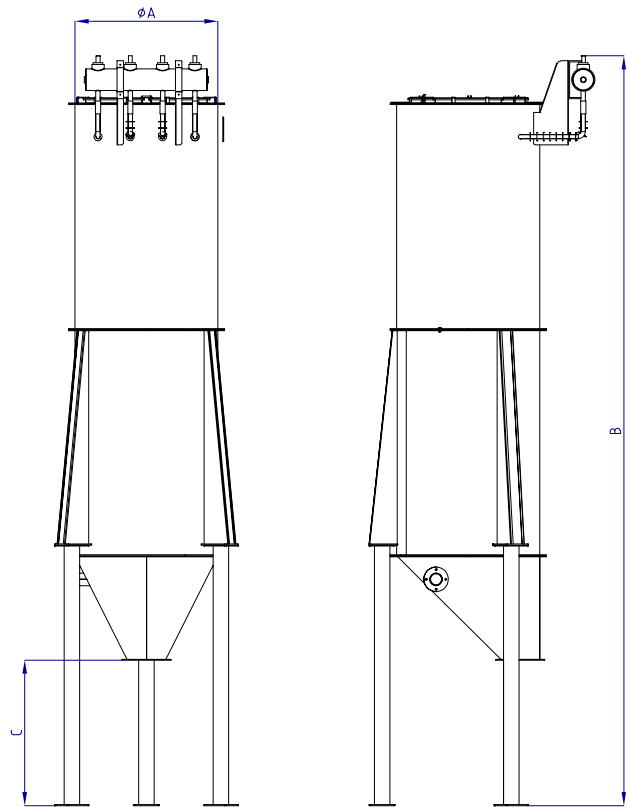
ATEX Conformity, System of dust discharge conform with Atex regulations (20), automatic bypass.

APPLICATION FIELDS

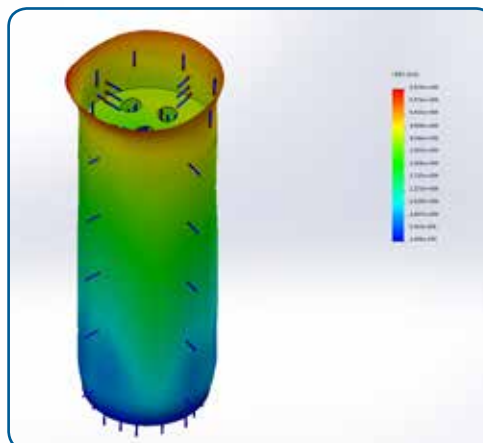
Solid and waste combustion fumes, biomass combustion fumes, syngas, high temperature smoke.



MOD. GICA	UNITS	GICA-10	GICA-20	GICA-30
Filtering surface	m ²	10.2	20.4	30.6
Quantity of filtering candles	n°	10	20	30
Max fume temperature	°C	500		
Materials	/	Inert, 250 gr/m ²		
Sleeve dimensions	mm	Ø 110 x H 2200		
Venturi tube cages	Material	-	-	-
Electrovalves	n°/Ø	4/1"	6/1"	8/1"
Electric Sequencer	n° uscita	8	8	8
Air tank capacity	n°/l	1x45	1x55	1x70
Air tank pressure	Bar	5		
Compressed air consumption per pulse	Nlt/h	210	210	210
Dust container/capacity	n°/l	on request		
Non-return valve	n°	1	1	1
Drop loss	mmH ₂ O	120		
Structure	Material	Steel AISI304		
Weight	kg	880	1320	1950
A	mm	1100	1700	2400
B	mm	5800	5800	6000
C	mm	1200	1200	1200



- 1 Filtering candles
- 2 Inspection panel
- 3 Filtered gas output
- 4 Floating filter plate
- 5 Polluted gas input
- 6 Filter cleaning system
- 7 Cone hopper
- 8 Compressed air tank







VOC ODOURS AND GASES FILTRATION SYSTEMS

The use of chemical compounds and harmful substances is increasing in industrial processes. They derive from dust, vapors, gases, or oil mist. Odors are almost never associated with health risks, when the concentration is often lower than the authorized limit.

Prolonged exposure to harmful odors can cause diseases.

Dena has developed dry and wet treatment solutions for the most varied operations: polyurethanes coating, chemical treatments on the materials, mixing operations, operations that develop VOC and CIV in the form of gases, treatment on plastic films, machining of pharmaceutical synthesis.

FILTER WITH SUCTION ARM FSF

DESCRIPTION

The filter FSF has been designed to extract welding fumes and any harmful substance and is the latest solution for extracting directly from the source the polluting particles. Flexible and modular, thanks to 4 filtering phases, air can recirculate into the working environment. It can be used as a portable or fixed unit. This model is equipped with a three-phase motor and can work continuously. The frame, the fairings, the main structure, are entirely manufactured in epoxy painted steel for maximum durability.

4 PHASES of FILTRATION

The machine is equipped with 4 phases of filtration to obtain 99.95% efficiency to achieve an even later stage of activated carbon.

ADVANTAGES

- customizable to meet every need
- one or two extraction arms
- mobile or stationary use
- dust collection drawer
- available in a series painted in white for food and pharmaceutical industry
- also suitable for stainless steel welding smoke extraction or electronic components.

OPTIONALS

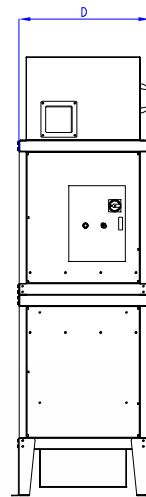
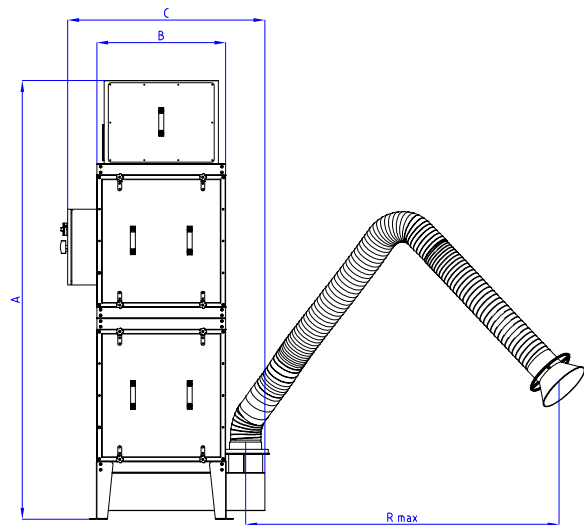
True HEPA H14 Filter, electrostatic filter, electric blower with frequency inverter.

APPLICATION FIELDS

Industries: painting, coating, resin, adhesive, solvents, paint production, glue.



MOD. FSF	UNITS OF MEASURE	FSF15	FSF30
Air flow rate max	m3/h	1500	3000
Installed power	kW	1.5	2.2
Maximum depression	mmH2O	50	70
Tension	V	230/400	230/400
Frequency	Hz	50	50
Noise level	(dB(A) ISO 3744)	68	70
Filtering stages	n°	4	4
Quantity of activated carbon	Kg	50	100
HEPA filtering class	H	H11	H11
Suction tube	Ømm	160	160x n°2
Weight	kg	170	340
Dust container capacity	lt	10	20
A	mm	2320	2320
B	mm	682	1364
C	mm	1042	1724
D	mm	692	692
R max	mm	3000	3000



- 1 Control switchboard
- 2 Filtered air outlet
- 3 Extraction fan chamber
- 4 Suctioning arm
- 5 Activated carbon cells
- 6 HEPA filter h11
- 7 Rigid pocket filter f7
- 8 Filtering cell g3

ACTIVATED CARBON CARTRIDGE FILTER FCA

DESCRIPTION

The cartridge filter (activated carbon filter) is a model designed to treat pollutants with high concentrations of solvents and volatile organic compounds (VOCs).

Designed to treat polluting particles containing high concentrations of solvents and volatile organic compounds. (VOCs) Thanks to its large filtering surface and the large quantity of activated carbon, one can obtain very long saturation processes so that it is possible to plan maintenance during the year. It is made of very thick panels made of zinc-coated sheets, bolted, in order to create a self-supporting structure. The bottom side of the filter is equipped with a separating chamber and with a series of optional cellulose filters, while the top side is equipped with a series of activated carbon cartridge filters to treat volatile organic compounds.

Operating Principle

Air to be treated enters the bottom part of the filter where the quiet chamber is situated, that operates in order to distribute air to be purified evenly to the filtering surface.

Then air passes through the first series of cellulose filters and eventually through the series of activated carbon filters that absorb polluting compounds definitely.

OPTIONALS

Execution in Stainless steel, treated carbon, ATEX discharge valve, ATEX Conformity.

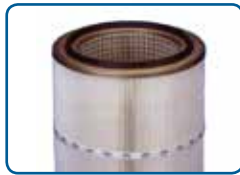
APPLICATION FIELDS

Industries: painting, coating, resin, adhesive, solvents, paint production, glue.

ACTIVE CARBON
CARTRIDGE



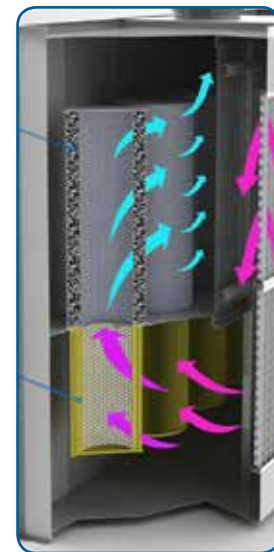
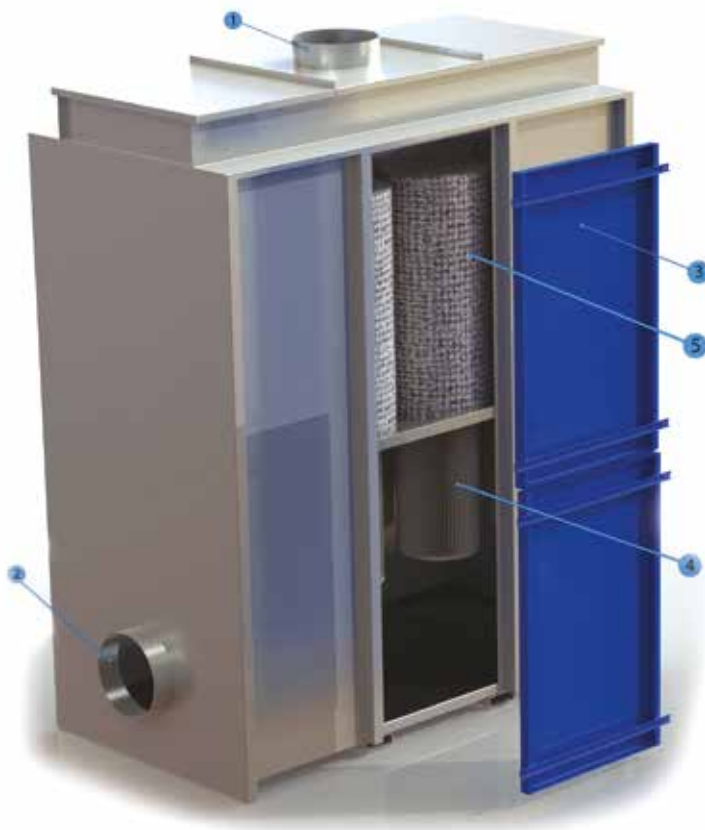
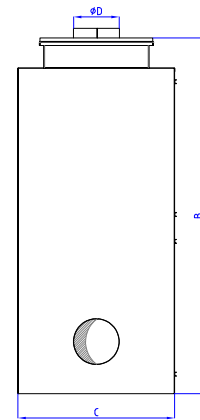
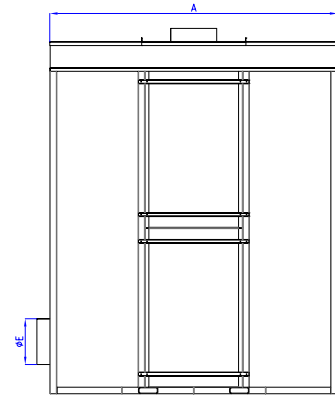
PREFILTER
CARTRIDGE



MONO VERSION



MOD. FCA	UNITS OF MEASURE	FCA4	FCA6	FCA8	FCA10	FCA12
Carbon cartridge quantity	n°	4	6	8	10	12
Prefilter quantity (OPTIONALS)	n°	4	6	8	10	12
Prefiltration surface	m ²	32	48	64	80	96
Max fume temperature	°C	37.8				
activated carbon quantity	kg	180	270	360	450	540
Cartridge dimensions	mm	Ø 450 x H 1000				
Prefilter dimensions	mm	Ø 327 x H 600				
Drop loss	mmH ₂ O	70				
Structure	Material	Carbon steel galvanized or painted				
Weight	kg	740	870	980	1090	1200
A	mm	1112	1662	2212	2762	3312
B	mm	2730				
B (without prefilters)	mm	1850				
C	mm	1200				
ØD	mm	250	300	350	400	450
ØE	mm	250	300	350	400	450



- 1 Filtered air outlet connection
- 2 Air input connection
- 3 Compressed air tank
- 4 Cartridge prefiltration
- 5 Activated carbon cartridges

ACTIVATED CARBON FILTER COMBY

DESCRIPTION

The filters with activated carbon, model Comby, used for air purification and extraction systems are a kind of adsorbent filters, ideal for the detention of effluents with high concentrations of Volatile Organic Compounds- VOCs.

The active carbon is a highly porous material, whose activity is directly proportional to its surface porosity. The solvent contained in the air to be filtered is then condensed and retained by capillarity in the active coal itself. The adsorption capacity is proportional to the surface and strongly influenced by numerous factors such as the concentration of the solvent to be filtered, the humidity, the temperature, the crossing speed, the contact time and the activated carbon particle size employed.

Thanks to the size and cubic construction form the filter, in addition to ensuring a high filtration efficiency, it ensures a significant duration of the charge of active coal provided.

Operating Principle

The activated carbon filter has been designed to get a crossing speed of 0,3 seconds and contact time of 1 second. This kind of operating principle is obtained by inserting two beds of activated carbon vertically into the cubic structure.

Air with volatile organic compounds enters the central part of the filter and expands into the quiet

chamber. Air is forced by depression of the fan to pass through the two activated carbon beds, which are well filled, and it goes out from the lateral connecting socket. It is possible to build smaller versions with one activated carbon bed only, whose operating principle and characteristics such as speed and contact time remain the same. Air will be expelled from the outside through the chimney. The filter is not equipped with pre-filtering, solid compounds in the air must be retained by means of other filtering systems.

Construction Details

The filter is made entirely of a very thick carbon steel sheet, opportunely worked and treated to make it long lasting. The filter is equipped with inlet and outlet air flow, support legs, inspection doors, carbon exhaust valves.

OPTIONALS

Hoist with support system, Execution in Stainless steel, treated carbon, ATEX discharge valve, ATEX Conformity.

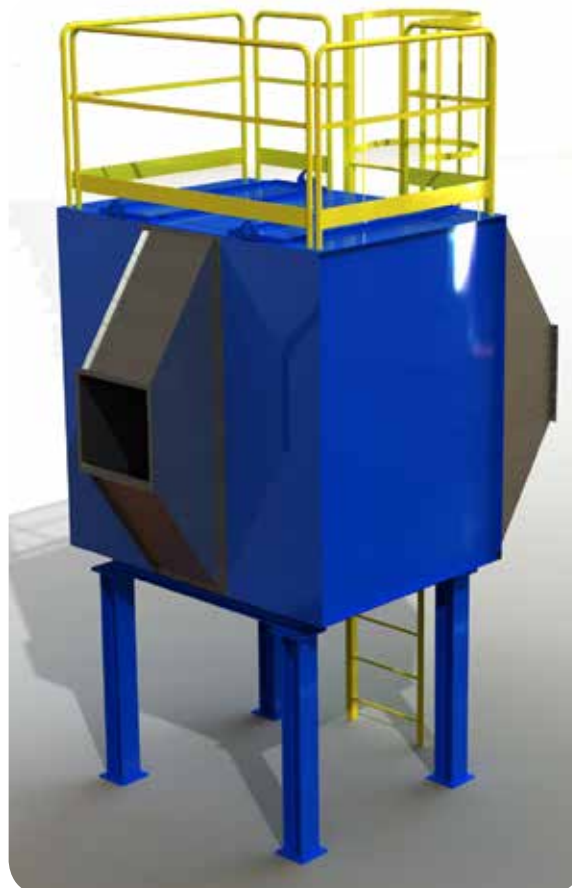
APPLICATION FIELDS

Industries: painting, coating, resin, adhesive, solvents, paint production, glue.

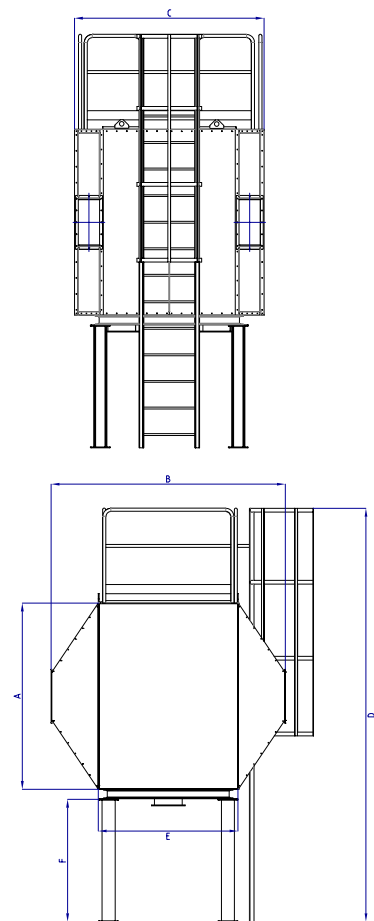
DISCHARGE VALVE



LOADING INPUT



MOD. CCB	UNITS	CCB110	CCB140	CCB200	CCB390
Air flow rate max	m ³ /h	8000	10000	12000	12000
Quantity activated carbon	kg	1100	1400 (1700)	1820 (2000)	1820 (2000)
Max fume temperature	°C	37.8	37.8	37.8	37.8
Carbon layer thickness	mm	400	400	410	410
Absorbent surface	m ²	6	6.9	8	8
Can velocity	m/s	0.37	0.4	0.41	0.41
Contact time	s	1	1	1	1
Volume activated carbon	m ³	2.5	2.72	3.2	3.2
Density	g/cm ³	0.55	0.55	0.55	0.55
Antiexplosion panels	N°	OPTIONAL			
Air input flangia	mm	n°2 Ø 300	n°2 Ø 300	n°2 Ø 300	n°2 Ø 400
Air outlet flange	mm	Ø 400	Ø 500	Ø 500	Ø 650
Non-return valve (OPTIONALS)	n°	1	1	1	4
Drop loss	mmH ₂ O	70			
Structure	Material	Painted carbon stainless steel			
Weight	kg	2080	2480	3150	6800
A	mm	2000	2300	2000	2000
B	mm	2500	2500	3000	5700
C	mm	2040	2040	2040	2410
D	mm	4450	4450	4450	4850
E	mm	1500	1500	2000	4700
F	mm	1250	1250	1250	1750



- 1 Load panels
- 2 Air input/output
- 3 Ladder
- 4 Filter chamber
- 5 Manual discharge valve

VERTICAL SCRUBBER A LAVAGGIO STATICO SCR

DESCRIPTION

The series SCR scrubber, suction plants to treat polluting compounds by humid system are built vertically in order to economize space. They can be manufactured in polypropylene, in other thermoplastic materials and in stainless steel. One can choose among various technology solutions according to the kind of polluting compound to be treated.

Operating principle

The scrubber operates as follows: air flow enters the tower from the bottom side and enters into countercurrent contact with the polluting compound to be treated. The contact between the liquid phase and the aeriform one happens on a surface which is made up of the filling body of the

tower by means of special grids. The filling is made up of special spheres with shape that permit long lasting contact with the compounds to be treated.

OPTIONALS

It is manufactured in PP PVC, stainless steel 304/316 L, in special stainless steel, seals in EPDM, PVC or viton.

APPLICATION FIELDS

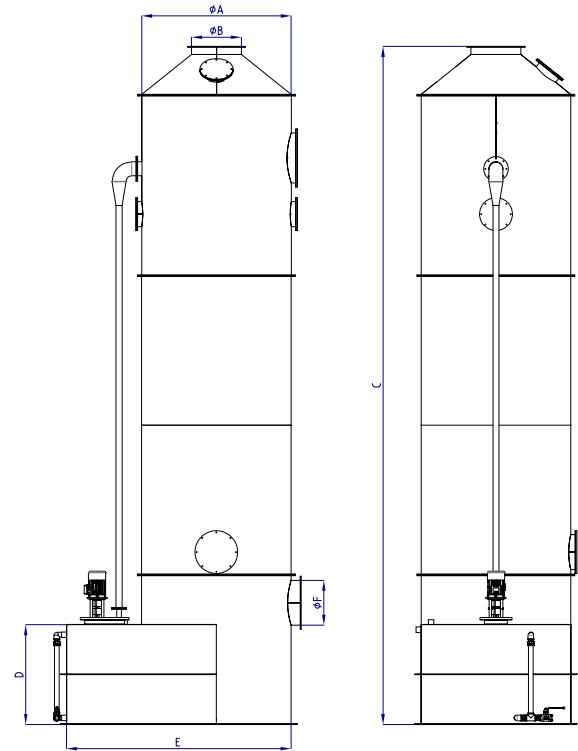
Scrubbers against ammonia, hydrochloric acid, iron chloride, galvanic, chemical, pharmaceutical industries.

Incinerators, composting plants with systems of smell treatment.

ATEX VERSION DETAIL



MOD. SCR	UNITS	SCR150
Air flow rate max	m ³ /h	10000
Contact time	s	2,2
Air velocity	m/s	1.57
Type of liquid distribution	/	plate, nozzles
Recirculation pump	m ³ /h	22
Total head pump	m	15
Installed power	kw	4
Cleaning water accumulation tub	l	1600
Drop loss	mmH ₂ O	150
Structure	Material	PP, PVC, 304, 316L
Weight	kg	1100
Flange Air outlet	mm	Ø 400
Non-return valve (OPTIONALS)	n°	1
Drop loss	mmH ₂ O	70
Structure	Material	Painted carbon stainless steel
Weight	kg	1100
A	mm	1500
B	mm	500
C	mm	6800
D	mm	1000
E	mm	2300
F	mm	450



ATEX VERSION DETAIL



- 1 Purified air outlet
- 2 Air filter inlet
- 3 Internal access hole
- 4 Liquid cleaner loading tube
- 5 Electrical pump
- 6 Tub inspection door
- 7 Reaction tub





OIL MIST FILTRATION SYSTEMS

Our oil mist filtration systems are based on the recovery of cooling liquids from machine tools.

Thanks to the efficiency of oil mist filtration we can offer an almost complete liquid recovery, providing safety for the operator. Dena offers a complete range of systems to help keep working environments efficient and safe. Based on the operation and approximate air stream, we can provide the best solution for our clients.

FILTER FOR OIL MIST FFO

DESCRIPTION

The FFO range is the ideal solution for installation on top of machines. Filtration is higher than 99.95% thanks to 6 treatment levels to filter any type of oil mist deriving from lubricants or coolants in turning, milling or grinding. The filtered air can be recirculated in the environment with maximum safety.

Exclusive oil mist separator system

Polluted air is extracted by the high efficiency centrifugal blower placed under negative pressure on the filters.

Thanks to its centrifugal system with V-design the air is separated from oil mist, thus the blower is free from any damage. In fact it works only with clean air, free of any residual pollutant.

Construction details

The structure is made of carbon steel painted, fully welded oil-tight, the filters are situated in a compartment full of inspection door. The tube located under the tank allows an discharge of accumulated liquid.

ADVANTAGES

- Filtration efficiency > 99.95% (HEPA H13)
- Reading clogging gauge filters
- Modular, compact design saving space
- Reuse of the coolant
- Easy maintenance and replacement filter parts
- Also available as simple filtering units, without blower

OPTIONALS

True HEPA filter H14, activated carbon filter, electrostatic filter, electroventilator with inverter.

APPLICATION FIELDS



ENGINEERING



TEXTILES



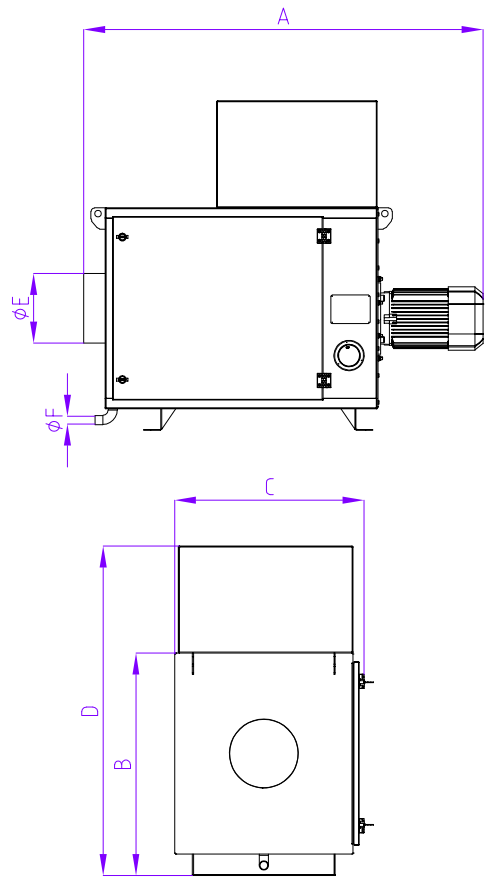
RUBBER AND PLASTIC



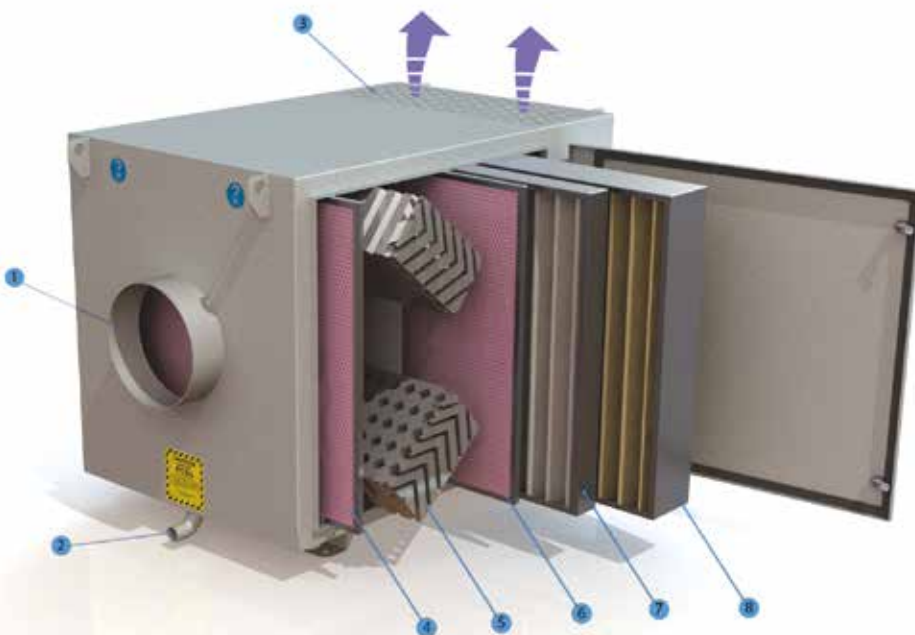
AUTOMOBILE



MOD. FFO	UNITS OF MEASURE	FF010	FF020
Air flow rate max	m ³ /h	1100	2200
Installed power	kW	0.75	1.5
Maximum depression	mmH ₂ O	50	70
Tension	V	230/400	230/400
Frequency	Hz	50	50
Noise level	(dB(A) ISO 3744)	67	69
Type of filter	/	Filtering cells	Filtering cells
Stages of filtration	n°	5	5
Final HEPA filter	-	H13	H13
Aspiration tube	Ømm	160	200
Weight	kg	95	115
Oil container capacity	lt	2	2
A	mm	970	1120
B	mm	524	624
C	mm	530	530
D	mm	824	924
E	mm	148	198
F	"G	3/4"	3/4"



MOD. HEPA FILTER H13



- 1 Oily mist input
- 2 Recycled oil outlet tube
- 3 Filtered air outlet
- 4 Metal prefilter G2
- 5 Centrifuge separator
- 6 Metal prefilter G2
- 7 Synthetic filter G4
- 8 Synthetic filter F9

FILTER FOR OIL MIST FCO

DESCRIPTION

The range is comprised of air filtration modular units for oil mists. There are three filtration levels of filtering to obtain maximum efficiency.

Operating principle

The flow of polluted air enters the first phase of filtration that thanks to the centrifugal force causes first treatment, then the fluid passes through the secondary phase, further separates oil mist filtration, the last phase in high efficiency filtering bag will treat remaining pollutants and micro dust particles.

Construction details

The structure is made of painted carbon steel fully welded, filters are enclosed in a body with inspection door. The handy tap located under the tank allows easy unloading of accumulated fluid.

OPTIONALS

ATEX Conformity 20-22, Hepa Filtration, Stainless steel 304/316, Paint resistant to hostile environments, fire protection system, silencer.

APPLICATION FIELDS



ENGINEERING



TEXTILES



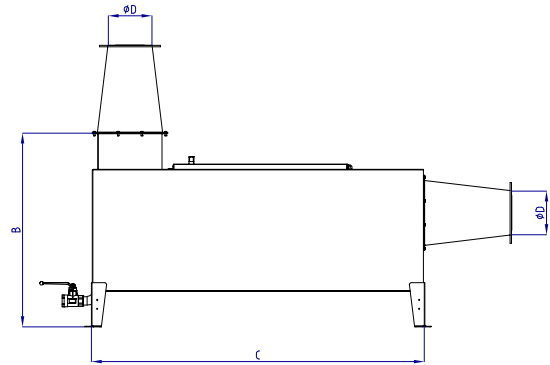
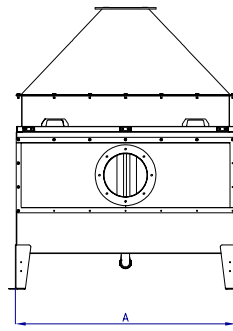
RUBBER AND PLASTIC



AUTOMOBILE



MOD. FCO	UNITS OF MEASURE	FCO-40	FCO-60	FCO-100
Filtering surface 2° stage	m2	2.8	4.2	5.6
Filter Quantity	n°	4	6	8
Filtering material	/	Galvanized grid G2		
Filtering surface 3°stage	m2	17	34	51
Filtering material	/	Fiberglass F6		
Suggested air flow rate	m3/h	4000	6000	10000
Filtration efficiency	>%	99.9 (hepa)		
True HEPA filter	/	H13		
Oil capacity	lt	20	25	40
Non-return valve	n°	OPTIONALS		
Drop loss	mmH2O	110		
Structure	Material	Painted carbon stainless steel		
Weight	kg	210	280	370
A	mm	882	1266	1266
B	mm	1120	1120	1420
C	mm	1913	1913	1913
Ø D	mm	250	350	450



- 1 Liquid discharge valve
- 2 Third stage filtration
- 3 Centrifuge separator
- 4 Filter inspection door
- 5 Adjustable feet
- 6 Filtered air outlet
- 7 Second stage filtration





INDUSTRIAL PORTABLE DUST COLLECTORS

Dena portable dust collectors are suitable for all types of fumes or dust. These professional vacuum cleaners are suitable for industries working in difficult environments which require high performance equipment. They can be installed in the chemical, pharmaceutical, engineering and clothing industries.

Always underestimated welding fumes affect health, the quality of products and production equipment. They reduce the capacity of the operators and decrease results. Direct extraction through high vacuum capture at the source is the only effective way to eliminate health risks.

MOBILE WELDING FUMES FILTER FSA

DESCRIPTION

The dust and fumes extraction is the cutting-edge mobile solution for vacuuming directly from the source. Flexible and modular, it practically solves every problem of fumes and dust. It can be used as a mobile unit or fixed. This model is equipped with a three-phase motor that can operate continuously. The frame, the fairings, the main building, are entirely manufactured in epoxy painted steel for maximum durability and strength.

Standard WASHABLE FILTER

The machine is equipped with a cartridge filter with a large filter surface to extend maintenance time.

SPARK separator

Filter fitted as standard, with a length of the cartridge, carries out the function to turn off the sparks you aspire and improve aspiration, protecting cartridge by splashing and blunt objects, preventing the vacuumed particles to clog the filter.

Benefits

- wide range of models to meet every need
- one or two suction arms

- mobile or stationary dust collection
- convenient drawer for dust collection
- available in "white" painting for the food and pharmaceutical industries
- also suitable for extraction of stainless steel welding smoke

OPTIONALS

True HEPA filter H14, active carbon filter, eletctrostatic filter, manual filter shaker, electroventilatore with inverter.

APPLICATION FIELDS



ENGINEERING



TEXTILES



CERAMICS



CONSTRUCTION



FOOD INDUSTRY



EMBALLAGE



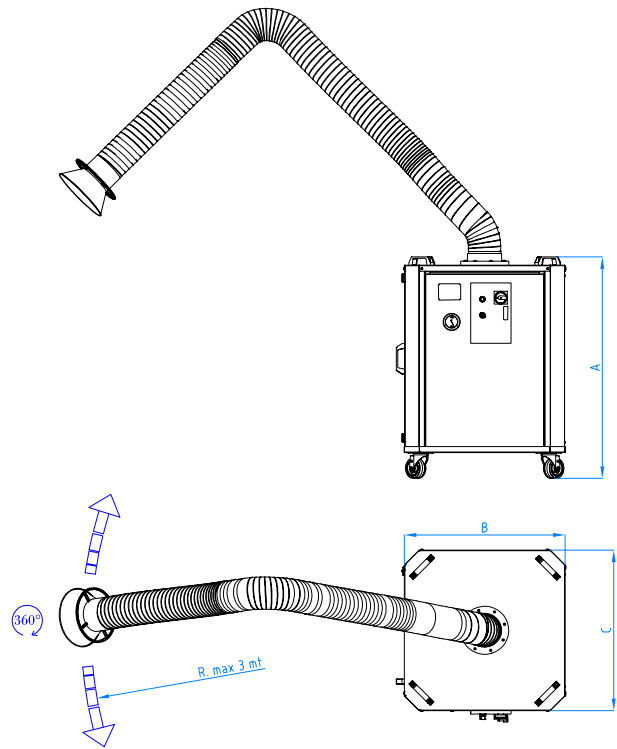
RUBBER AND PLASTIC



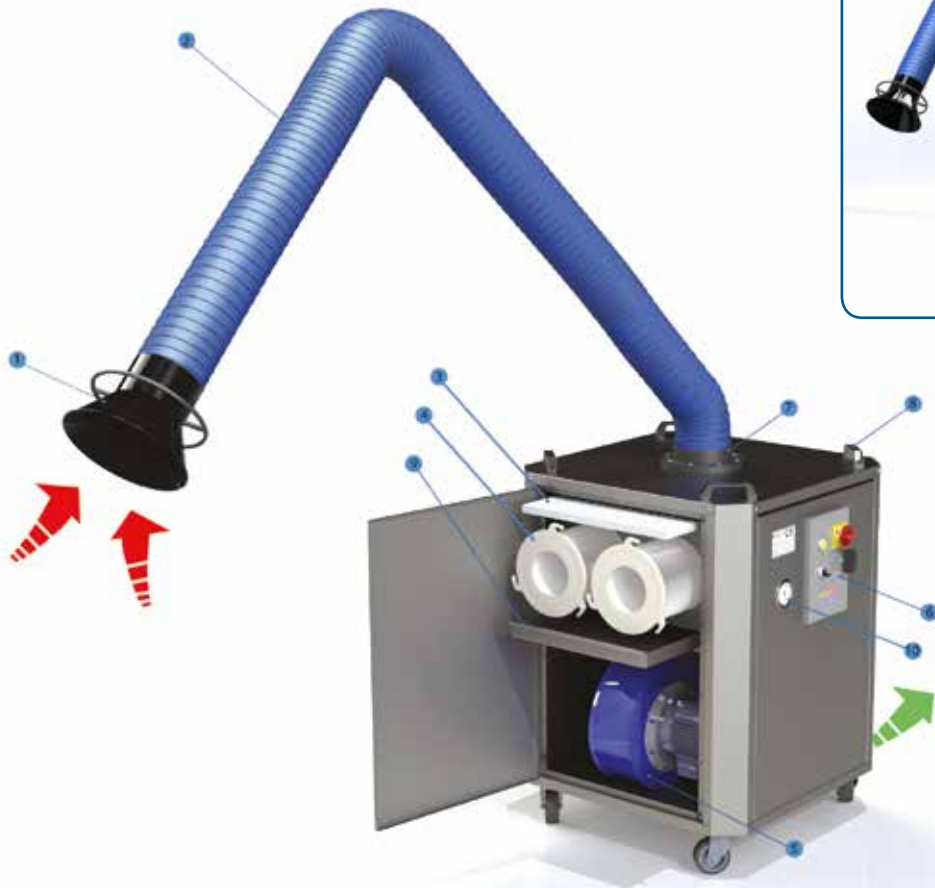
AUTOMOBILE



MOD. FSA	UNITS OF MEASURE	FSA15	FSA30
Air flow rate max	m3/h	1500	3000
Installed power	kW	1.5	2.2
Maximum depression	mmH2O	50	70
Tension	V	230/400	230/400
Frequency	Hz	50	50
Noise level	(dB(A) ISO 3744)	68	70
Type of filter	/	polyester cartridge	polyester cartridge
Primary filter surface	m2	10.19	20
Final filter surface	m2	2.69	2.69
Vacuum tube	Ømm	160	160x n°2
Weight	kg	110	160
Dust container capacity	lt	10	15
A	mm	1100	1100
B	mm	800	800
C	mm	700	800



2 ARM VERSION



- 1 Ergonomic metallic hood
- 2 PVC hose with internal springs
- 3 Anti-spark filter
- 4 Cartridge filter
- 5 Extraction fan
- 6 Switchboard
- 7 Extraction arm
- 8 Handles
- 9 Dust collection pan
- 10 Clogged filter indicator

INDUSTRIAL PORTABLE VACUUM CLEANER D-BVF20

DESCRIPTION

The D-BVF20 belongs to the high-end product and three phase DENA range. It's a professional suction machine that can carry out heavy work and satisfy every need: with a dimension of 63 x 51 cm, thanks to the cart with two fixed wheels of 200 mm and two pivoting of 80 mm, cleaning is very easy. It can be used in various work environments where operating power and low maintenance thanks to the automatic cleaning of the filter is needed.

This model is equipped with a three phase motor and it can be used continuously. The frame, speed fairing, central body and container are made of epoxy varnished steel in order to guarantee maximal durability and resistance.

AUTOMATIC CLEANING FILTER SYSTEM

A cartridge filter is part of the standard equipment of the machine, with a proper filtering surface. The cleaning system is automatic. It has a compressed air tank to clean the cartridge, so that the worker can spare time.

CYCLONE

The cyclone, fitted as standard, with the same length of the cartridge, works to improve the functioning of the suction machine, it protects the cartridge from blunt objects. It prevents the filter from being clogged by the sucked particles. The advan-

tage is to allow filter cleaning after many hours of functioning.

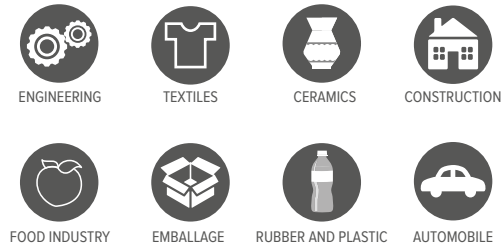
Filtering cartridges Viledon®

The right choice of the filtering cartridge is very important to guarantee the correct functioning of the suction machine, respecting the worker and the work environment. In fact, we only use Viledon filtering cartridges, made of polyester non-woven fabric, or polypropylene or PTFE. The kind of fabric is chosen according to the dusts to suck. Alternatively to the cartridge it is possible to ask for the star filtering made of polyester.

OPTIONAL ACCESSORIES

Absolute filter HEPA H 14, manual buffeting filter, star fabric filter, system with collecting bag, electrical panel with inverter, system of disposable collection bag.

APPLICATION FIELDS



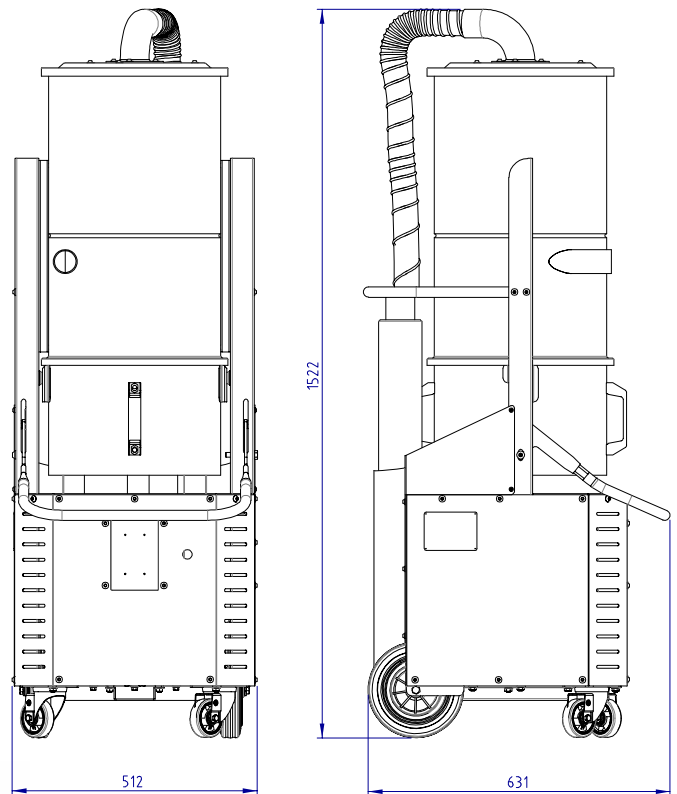
INTERNAL CYCLONE



ERGONOMIC CONTAINER HANDLE



MOD. D-BVF20	UNITS OF MEASURE	D-BVF20
Air flow rate max	m ³ /h	219
Installed power	kW	1.5
Maximum depression	mBar	175
Tension	V	230/400
Frequency	Hz	50
Absorption	A	6,4/3,7
Noise level	(dB(A) ISO 3744)	68
Type of filter	/	polyester cartridge
Primary filter surface	m ²	2
Final filter surface	m ²	0.3
Max pressure air tank	bar	5
Air tank	lt	2.3
in-out hole	Ømm	50
Weight	kg	70
Dust container capacity	lt	23
Dimensions	mm	512x631x h 1522



SAFETY FILTER



WHEELS



- 1 Primary filter
- 2 Dust container handle
- 3 Extraction hose
- 4 Motor
- 5 Silencer
- 6 Dust container
- 7 Safety filter
- 8 Filter cleaning system

INDUSTRIAL PORTABLE VACUUM CLEANER APF

DESCRIPTION

The portable dust collector APF belongs to the high-end product and three phase DENA range. It is a professional suction machine that can carry out heavy work and satisfy every need. Thanks to its cart with two fixed wheels of 160 mm and two castor wheels of 80 mm cleaning processes are very easy. It can be applied in various sectors, especially in work environments where operating power and low maintenance are needed by means of automatic filter cleaning.

This model is equipped with a three phase motor and can be used continuously. The frame, speed fairing, central body and container are made of epoxy varnished steel in order to guarantee maximal durability and resistance.

AUTOMATIC CLEANING FILTER SYSTEM

A cartridge filter is part of the standard equipment of the machine, with a proper filtering surface. The cleaning system is automatic. It has a compressed air tank to clean the cartridge, so that the worker can spare time.

CYCLONE

The cyclone, fitted as standard, with the same length of the cartridge, works to improve the functioning of the suction machine, it protects the cartridge from blunt objects. It prevents the filter from being clogged by the sucked particles. The advan-

tage is to allow filter cleaning after many hours of functioning.

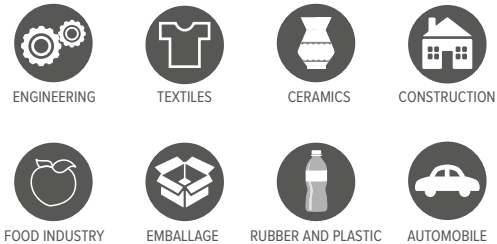
Filtering cartridges Viledon®

The right choice of the filtering cartridge is very important to guarantee the correct functioning of the suction machine, respecting the worker and the work environment. In fact, we only use Viledon filtering cartridges, made of polyester non-woven fabric, or polypropylene or PTFE. The kind of fabric is chosen according to the dusts to suck. Alternatively to the cartridge it is possible to ask for the star filtering made of polyester.

OPTIONALS

Absolute filter HEPA H14, manual buffeting filter, star fabric filter, system with collecting bag, electrical panel with inverter, compressor on top of the machine, predisposition for suction and replenishing fluids.

APPLICATION FIELDS



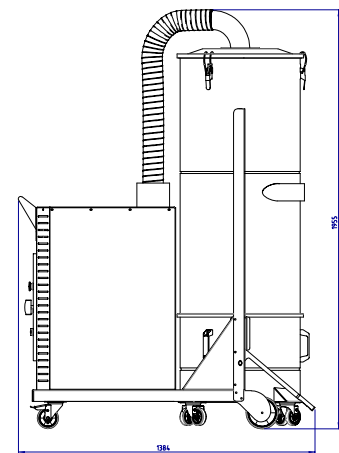
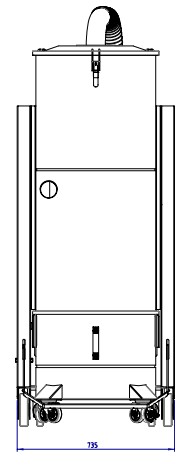
SILENCED AIR OUTLET



INTERNAL CYCLONE



MOD. APF	UNITS	APF35	APF55	APF75	APF110	APF200
Air flow rate max	m ³ /h	1500	414	570	915	1800
Installed power	kW	2.2	5.5	7.5	11	25.2
Maximum depression	mBar	30	400	400	500	500
Tension	V	230/400	230/400	230/400	230/400	380/480
Frequency	Hz	50	50	50	50	60
Absorption	A	11/9	10/8	11/9	16/12	48
Noise level	(dB(A) ISO 3744)	68	77	80	83	83
Type of filter	/	Cartridge polyester	Cartridge polyester	Cartridge polyester	Cartridge polyester	Cartridge polyester
Primary filter surface	m ²	10.19	10.19	10.19	10.19	26
Final filter surface	m ²	2.69	2.69	2.69	2.69	2.69
Max pressure air tank	bar	5	5	5	5	5
Air tank	lt	7	7	7	7	7
in-out hole	Ømm	145	60	80	80	120
Weight	kg	240	220	260	280	650
Dust container capacity	lt	100	100	100	100	230
Dimensions	mm	1393x735 h 2159	1384x735 h 1955	1384x735 h 1955	1384x735 h 1955	2170x930 h 2140



VACUUM GAUGE



ERGONOMIC CONTAINER HANDLE



- 1 Silenced air outlet
- 2 Dust container handle
- 3 Cyclone
- 4 Switchboard
- 5 Motor
- 6 Dust container
- 7 Safety filter
- 8 Filter cleaning system





POWDER AND GRANULAR MATERIAL PNEUMATIC CONVEYING

Dena dust collectors are suitable for all types of fumes and dust, high and low prevalence patterns. These professional vacuum cleaners are suitable for industries working in difficult environments which require high-performance equipment. They can be installed in chemical, food, pharmaceutical, engineering and clothing industries. The risks of welding fumes are often underestimated, but they can affect the operator's health and the quality of products. They reduce the working capacity, damage production and consequently decrease results. Extracting fumes at the source is the only effective way to eliminate any risk for the operator's health.

BIG-BAG EMPTYING STATION WITH HOIST

DESCRIPTION

This Big Bag emptying station optimizes working time and performance. It can lift up to 2,000 kg.

Equipment to empty big bags that optimizes time schedule and performance.

It lifts big bags up to a maximum weight of 2,000 kg.

Big-bag emptying systems are classified according to management system of the big bag and can be equipped with:

- cutting systems of the lower side
- closing system through motorized valve of the equipment
- blocking system of the lower part of the big bag
- weight and dosing of the extracted product

Operating principle

Using the switchboard, the Big-bag is lifted in the frontal part of its structure, it is shifted on the hopper and then it is lowered until it latches securely to the seal. The big-bag is cut automatically by the cutting system and is ready to begin its emptying cycle.

Manufacturing principle

The equipment has been designed with the method of FEM Analysis, complying with the European regulations in the field of welding processes UNI EN 288-4. The Big bag emptying is manufactured in carbon steel or in stainless steel, while the vibrating hopper is manufactured in stainless steel 304 or 316L. It is equipped with mono vibrator, Demag hoist, fabric vent filter, electric panel integrated into the equipment, silicon rubber seal or edmp, inspection door on the hopper.

OPTIONALS

ATEX Version, stainless steel version AISI-316L, dosing screw with weighing system, dosing with pneumatic system, bag cutter, bridge breaker.

APPLICATION FIELDS

In all industries where it is necessary to have emptying big bags and dosing of contained products, whether powders, grains or packing dusts.

INSPECTION DOOR



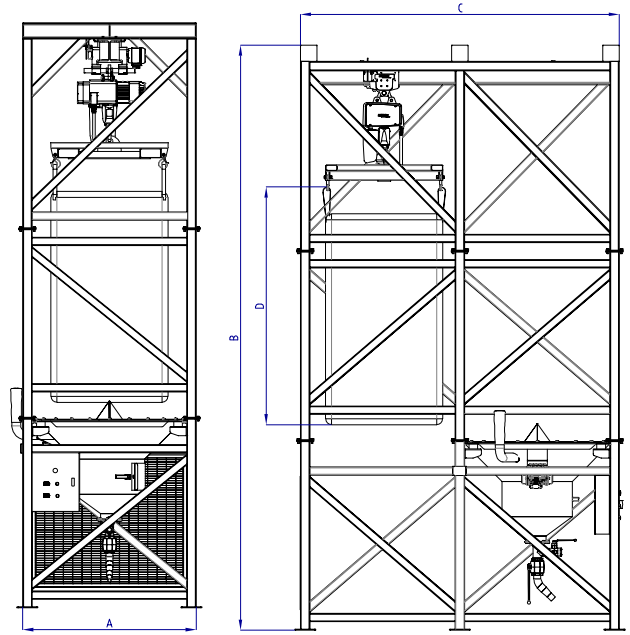
CABLE CART DETAIL



MOTOVIBRATOR DETAIL



MOD. SVB		UNITS OF MEASURE	SVB
Maximum air flow rate	kg		2000
Hoist movement in Height	mt		5
motovibrator power	W		270
Power supply tension	V		380/440
Frequency	Hz		50
Maximum consumption	A		12
Non-return valve	n°		1
Hopper capacity	lt		350
Structure	Material	Stainless steel aisi 304	
Weight	kg		1700
A	mm		1480
B	mm		4994
C	mm		2720
D	mm		2000 max



WHEELS



SAFETY FILTER



- 1 Switchboard
- 2 Seals
- 3 Big-bag
- 4 Safety gate
- 5 Demag Hoist
- 6 Vibrating hopper

BIG-BAG EMPTYING STATION SVBF

DESCRIPTION

The Big Bag emptying machine model SVBF allows easy and quick emptying of the content of big bags, with no leak in the air of the material contained therein. Operators are protected from accidental fall of big-bags during the emptying operation. The operator simply needs to hang the big-bag to the structure and proceed via auger or pneumatic transport, up to a maximum weight of 2,000 Kg.

The emptying systems SVBF FIBC are available with a wide range of accessories such as:

- bottom cutting systems for big-bag non returnable;
- motorized closure system of the big-bag emptying station;
- big-bag trunk locking system;
- weighing and dosing systems of the extracted product.

Operating principle

Using a forklift or crane to lift the big bag and hanging it at the top of the structure, the frame must be

previously adjusted at the correct height, the Big-Bag is cut automatically by the cutting system and now is ready to start its emptying cycle.

Construction details

The structure is designed using finite element method (FEM analysis), respecting the rules of welding processes UNI EN 288-4. Made of carbon steel or stainless steel, while the vibrating hopper is made of carbon steel or stainless steel 304 or 316L. It is equipped with vibrator, vent fabric filter, electrical panel integrated in the structure, silicone or edpm rubber gasket, inspection door on the hopper.

OPTIONALS

ATEX Version, stainless steel version AISI-316L, dosing screw with weighing system, dosing with pneumatic system, bag cutter, bridge breaker.

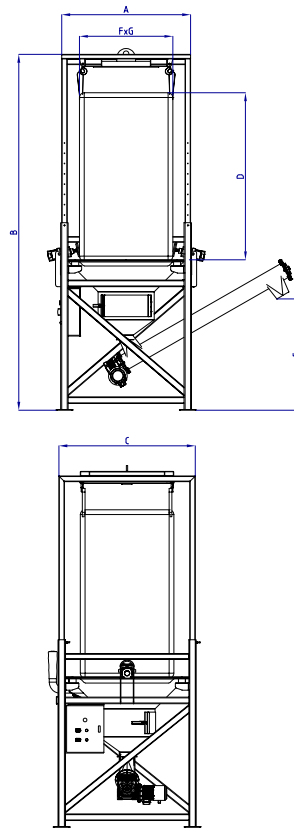
APPLICATION FIELDS

In all industries where it is necessary to have emptying big bags and dosing of contained products, whether powders, grains or packing dusts.

HOIST VERSION



MOD. SVBF	UNITS OF MEASURE	SVBF
Maximum air flow rate	kg	2000
Motovibrator power	kw	0.55
Motovibrator power	W	270
Power supply tension	V	380/440
Frequency	Hz	50
Maximum consumption	A	4
Exhaust filter	n°	1
Hopper capacity	lt	350
Structure	Material	Carbon Steel
Weight	kg	650
A	mm	1380
B	mm	3809
C	mm	1460
D	mm	2000 max
E	mm	1200
FxG	mm	1000x1000



PNEUMATIC TRANSPORT VERSION



- 1 Switchboard
- 2 Seals
- 3 Big bag movers
- 4 Output screw
- 5 Vibrating hopper
- 6 Bag holder frame
- 7 Bag cutter

POWDER AND GRANULAR MATERIALS CONVEYOR WX

DESCRIPTION

The range of DENA vacuum conveying systems with efficiency from 1,5 to 45 kW, can cover transport distances up to 200 mt and rate flow beyond 6 t/h. The model WX 52 can transfer granular materials over long distances with rate flow up to 100kg/h. It permits air to be separated from the product. The tangential inlet avoids the product to be wasted, thanks to the cyclonic separation of air flux.

ADVANTAGES

- ideal ofr GRANULES, DUSTS, CHIPS, PELLETS, FLAKES
- Automatic operation
- REGULATION AND CONTROL DISPLAY
- No powder loss
- Durability of the motor due to soft start

- Noise level under 75 dBA
- Low installation costs
- Remote control GSM/3G
- It works 24 hours a day

OPTIONALS

Display touch screen, stainless steel version, ATEX Version 20-22, filtri in classe M-H, Version for abrasive materials.

APPLICATION FIELDS



FOOD INDUSTRY



EMBALLAGE



RUBBER AND PLASTIC



AUTOMOBILE

PULSE AIR-JET
CLEANING SYSTEM

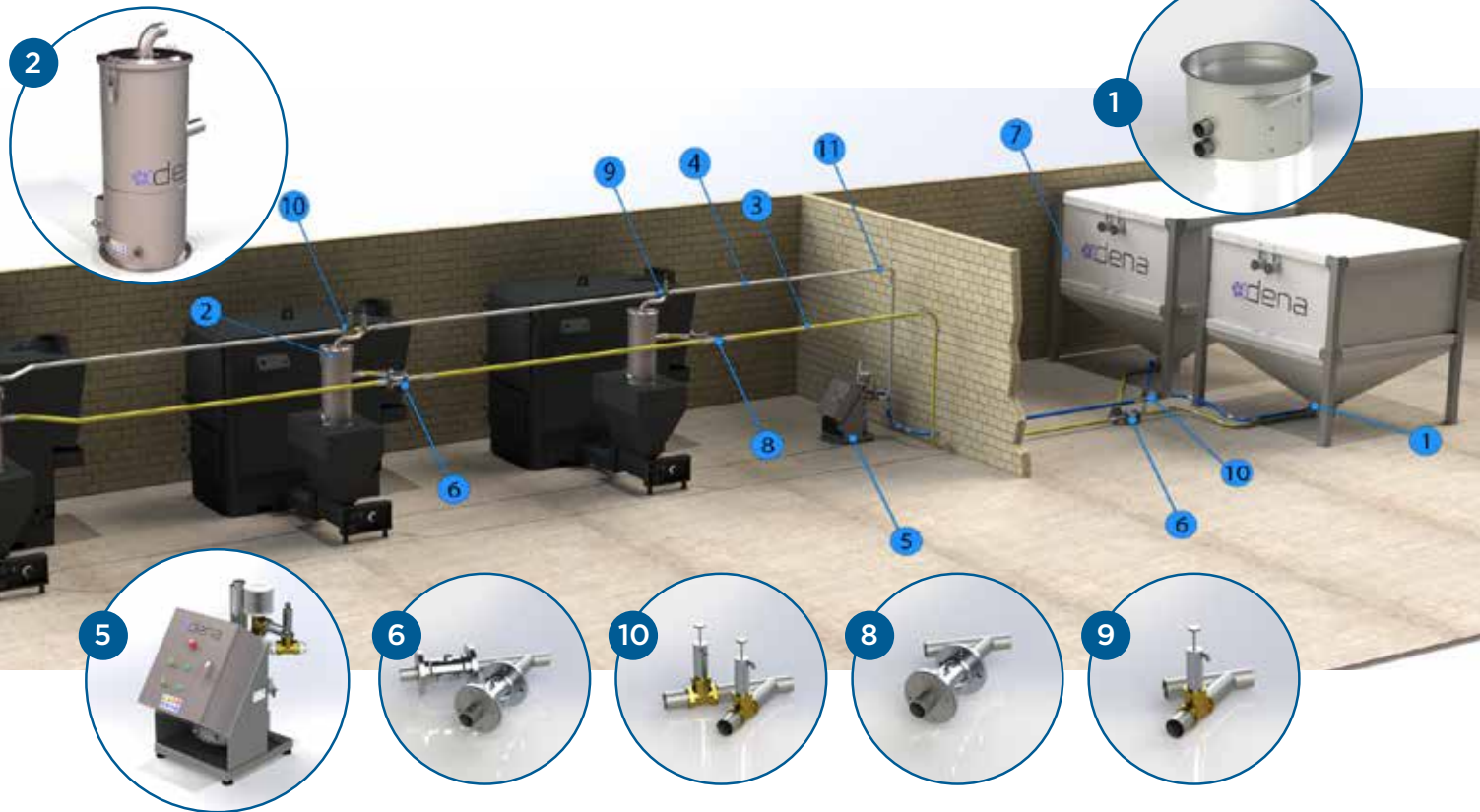
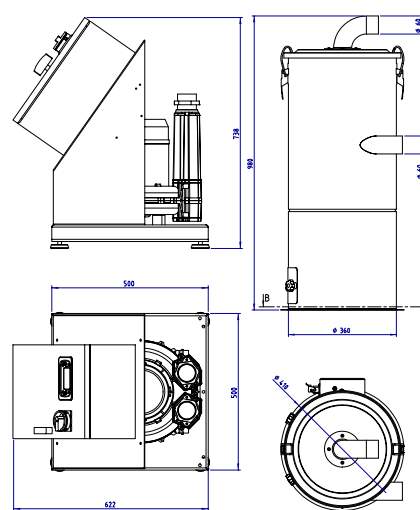


INVERTER/SOFT START

24H OPERATION

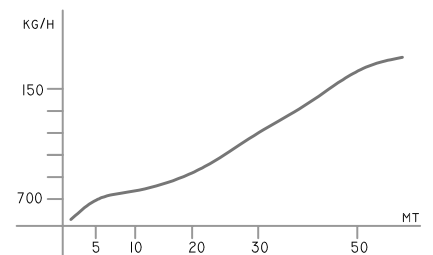
INTERNAL CYCLONE

MOD. WX	UNITS	WX52	WX52i
Nominal electric power	kW	1,5	2,2
Nominal power tension	V	380 (soft start)	220 (inverter)
Nominal Frequency	Hz	50	50
Capacity internal hopper	lt	12	12
Maximum depression	Mbar	250	275
Type of filter	/	Self-cleaning cartridge	
Cleaning system power	Air	6 bar	
Structure	Material	Carbon steel	
Weight	kg	95	97
Motor dimensions	mm	500 x 500 x H 700	
IN/OUT Tube Ø	mm	Ø 60	
Hopper dimensions	mm	Ø 360 x H 1000	



- 1 Suction probe for silo SIT type
- 2 Discharge hopper WX54 (with minimal level sensor)
- 3 Pneumatic conveying hose for pellet
- 4 Vacuum hose
- 5 Fixed suction base WX55 for three hoppers
- 6 Y deviation valve 2 ways for pellet hose
- 7 Storage fabric silo 10 m³
- 8 Y deviation valve for pellet hose
- 9 Y deviation valve for return air hose
- 10 Y deviation valve 2 ways for return air hose
- 11 Compression clamp Ø5

art n° PR12ES
 art n° WXG116
 art n° TB0002
 art n° TB0002
 art n° BFS55x3
 art n° VAY-P
 art n° SIT10
 art n° VAY-P1
 art n° VAY-V1
 art n° VAY-V
 art n° FS0002



POSITIVE PRESSURE PNEUMATIC CONVEYING SYSTEM **SVP**

DESCRIPTION

Among DENA wide range of pneumatic conveyors there are solutions from 2,0 to 45 kW efficiency, with conveying distances up to 200 mt and rate flow beyond 10t/h. They are the ideal technology to transfer big quantity of bulk materials, to load storage silos, indoor, outdoor or underground tanks. Furthermore, Dena supplies you with the suitable equipments to empty big-bags.

ADVANTAGES

- The ideal solution for granular material, powder, pellets
- Automatic operation
- No powder loss
- Durability of the motor due to soft start
- Low installation costs

- Energy saving
- Remote control GSM/3G
- It works 24 hours a day

OPTIONALS

Display touch screen, stainless steel version, ATEX Version 20-22, Version per materiali abrasivi.

APPLICATION FIELDS



FOOD INDUSTRY



EMBALLAGE



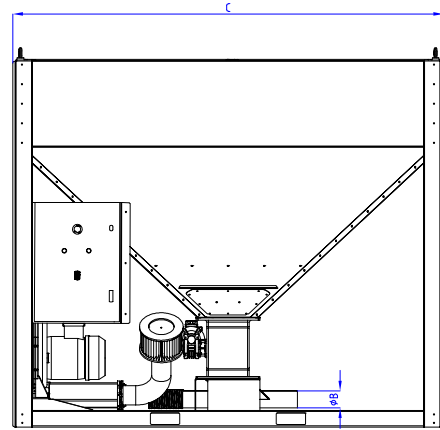
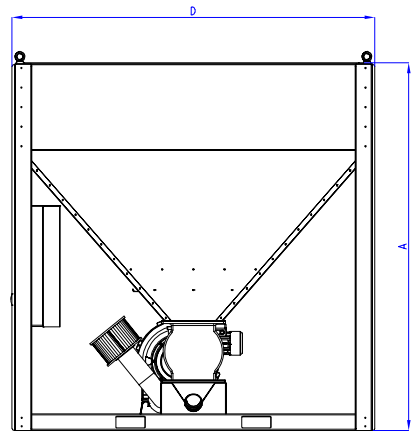
RUBBER AND PLASTIC



AUTOMOBILE



MOD. SVP		UNITS	SVP30	SVP75	SVP110
Nominal electrical power	kW		3.55	8.25	11.75
Material capacity	t/h		2	4.5	6
Nominal tension	V		380	380	380
Nominal frequency	Hz		50	50	50
Capacity internal hopper	m ³		0.1	1	4
Max pressure	Mbar		275	375	400
Structure	Material		Carbon steel		
Weight	kg		120	380	790





DENA GROUP SRLS

Via San Carlo, 49 - Fossacesia (CH) - ITALY

+39 0872.320.134 - info@denaspirazioni.com - www.denaspirazioni.com