

# Pascal

Cartridge filtration system for dry dusts and smokes



# Pascal

The new Pascal filter series are designed for the filtration of dust and smoke deriving from many machining processes.

The filtration module has specially been conceived for the industrial sector, where its important features lie in sturdiness, reliability and easiness of running and maintenance.

It is available in 3 sizes with flow rates ranging from 3.000 to 9.000 m<sup>3</sup>/h and with increasing filtration efficiency rates to reach 99,97%.

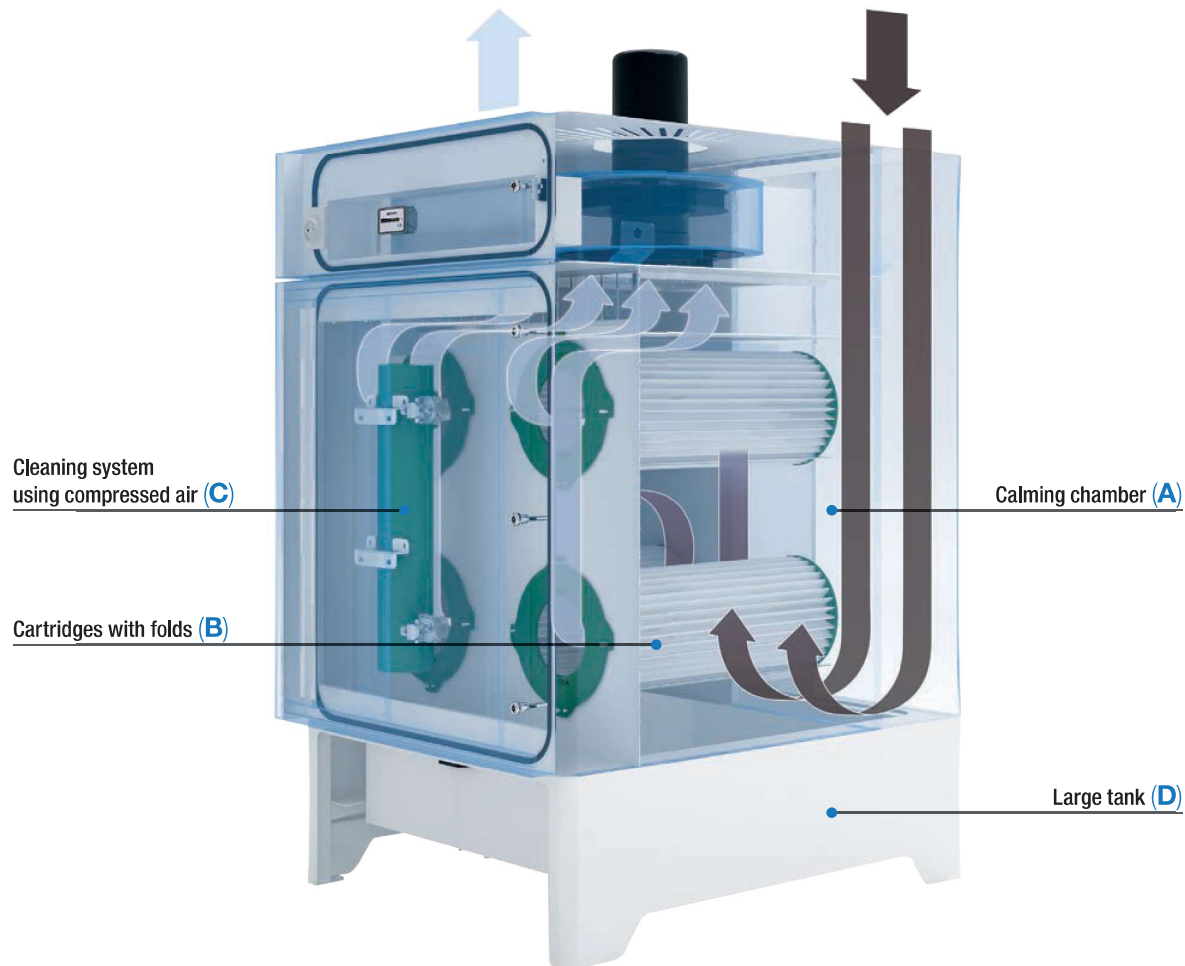


LOSMA grants that every single system is tested through strict control procedures.

Every unit is provided with a qualitative and functional test certificate.



# Working principles



- 1** The air entry section, which connects the piping to the filter, consists in a large section which serves as a calming chamber (A).
- 2** The following area consists of a chamber which houses the filter elements, cartridge with folds (B) with a high filtration surface, with F9 efficiency of 95%, withholding the finer impurities.
- 3** These cartridges are kept in perfect conditions from a programmable electronic cleaning system using compressed air (C) for counter-washing, which monitors continuously  $\Delta P$  and manage sequentially the opening of electro-valves and the consequent cleaning cycles conserving
- 4** compressed air consumption, contained in the storage reservoir. The program controller is equipped with a visual display for the visualization of main functionalities and the alarm limit planning.
- 4** The horizontal positioning of cartridges allows fast and quick maintenance, access to the filtration chamber is possible through a hinged door. Filter removal is easy, quick and clean, because the dirty chamber is separated from the clean section by a panel which also serves as a support structure for the filter elements. Dust is collected in a large tank (D), which can easily be moved with mechanical lift.

# Plus



## VERSATILITY AND MODULARITY

The use of filters with increasing filtration efficiency rate allows the implementation of Pascal in all modern mechanical machining, from the more simple to heavy duty operations. The 3 different available versions and relative suction power of Pascal enable to choose a solution which is always relevant to specific requirements without energy waste for oversized systems or, on the contrary, for systems which are not adequately dimensioned.



## PROGRAMMABLE ELECTRONIC SYSTEM

Permits the cleaning in counter-washing of cartridges using compressed air. It monitors continuously the  $\Delta P$  and manages the sequential opening of electro-valves and the cleaning cycles. In this way the system economize the compressed air contained into the tank. It has a digital display to visualize the main functions and setting the alarm limit.



## GREAT SUCTION POWER

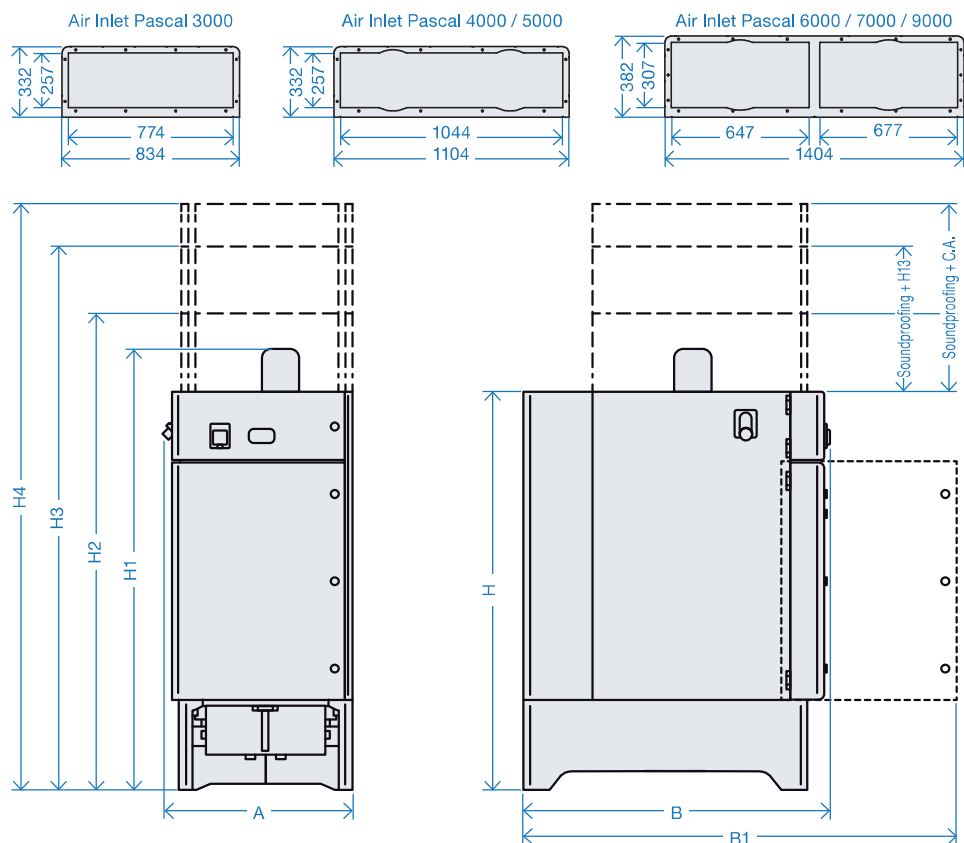
the use of high efficiency centrifugal fans and the high flow rates generated enable the Pascal series to be implemented for suction and filtration of large machine tools and for centralized systems.



## FAST AND EASY MAINTENANCE

Access to the filtration section is very easy and quick, without having to unscrew or disassemble anything. Simply unlock and open the hinged door to access the filters, which can easily be extracted and replaced in a short time.

# Technical data



MODELS	Dimensions (mm)							Open door dimensions	Weight kg
	A	B	H	H1	H2	H3	H4	B1	
<b>PASCAL 3000</b>	1000	1420	1940	2135	2320	2650	2870	2080	430
<b>PASCAL 4000</b>	1200	1470	1940	2180	2320	2650	2870	2400	440
<b>PASCAL 5000</b>	1200	1470	1940	2195	2320	2650	2870	2440	445
<b>PASCAL 6000 (*)</b>	1500	1520	2450	2620	3100	3430	3650	2700	680
<b>PASCAL 7000 (*)</b>	1500	1520	2450	2645	3100	3430	3650	2700	710
<b>PASCAL 9000 (*)</b>	1500	1520	2450	2755	3100	3430	3650	2700	820

\* With external electrical panel

MODELS	Max air flow*	Head	Power	Cartridge	Filtration	Noise level	RPM (rpm)		Tank	Kg activated	N. cartridges
	(m³/h) 50 (Hz) / 60 (Hz)	(mm H <sub>2</sub> O)	(kW) 50 (Hz) / 60 (Hz)	number	surface (m²)	(dBa)**	50 (Hz)	60 (Hz)	capacity liter	carbons total	activated carbons
<b>Pascal 3000</b>	3000	180	2,2	3	36	<80	2850	3420	135	64	4
<b>Pascal 4000</b>	4000	160	3	4	48	<80	2900	3480	205	80	4
<b>Pascal 5000</b>	5000	240	4	5	60	<80	2910	3490	205	80	5
<b>Pascal 6000 (*)</b>	6000	180	5,5	6	72	<80	2890	3470	300	128	5
<b>Pascal 7000 (*)</b>	7000	280	7,5	7	84	<80	2890	3470	300	128	8
<b>Pascal 9000 (*)</b>	9000	170	11	9	108	<80	2930	3520	300	128	8

\* With external electrical panel

\*\* With soundproof box

# Optional

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## Absolute filter H13

To obtain a very high filtration level, 99,97% according to norm EN 1822. Particularly suitable for micro-mists and smokes.

## Carbon filter

Activated carbons for removal of odors from previously filtered air.



# Installations

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# Pascal-M

The new Pascal M filter series are designed for the filtration of dusts and smokes deriving from many machining processes.

The filtration module has specially been conceived for the industrial sector, where important features lie in its sturdiness, reliability and easiness of conduction and maintenance.

It is available in 2 sizes with flow rates of 1,500 and 2,500 mc/h with increasing filtration rates to reach 99,97%.

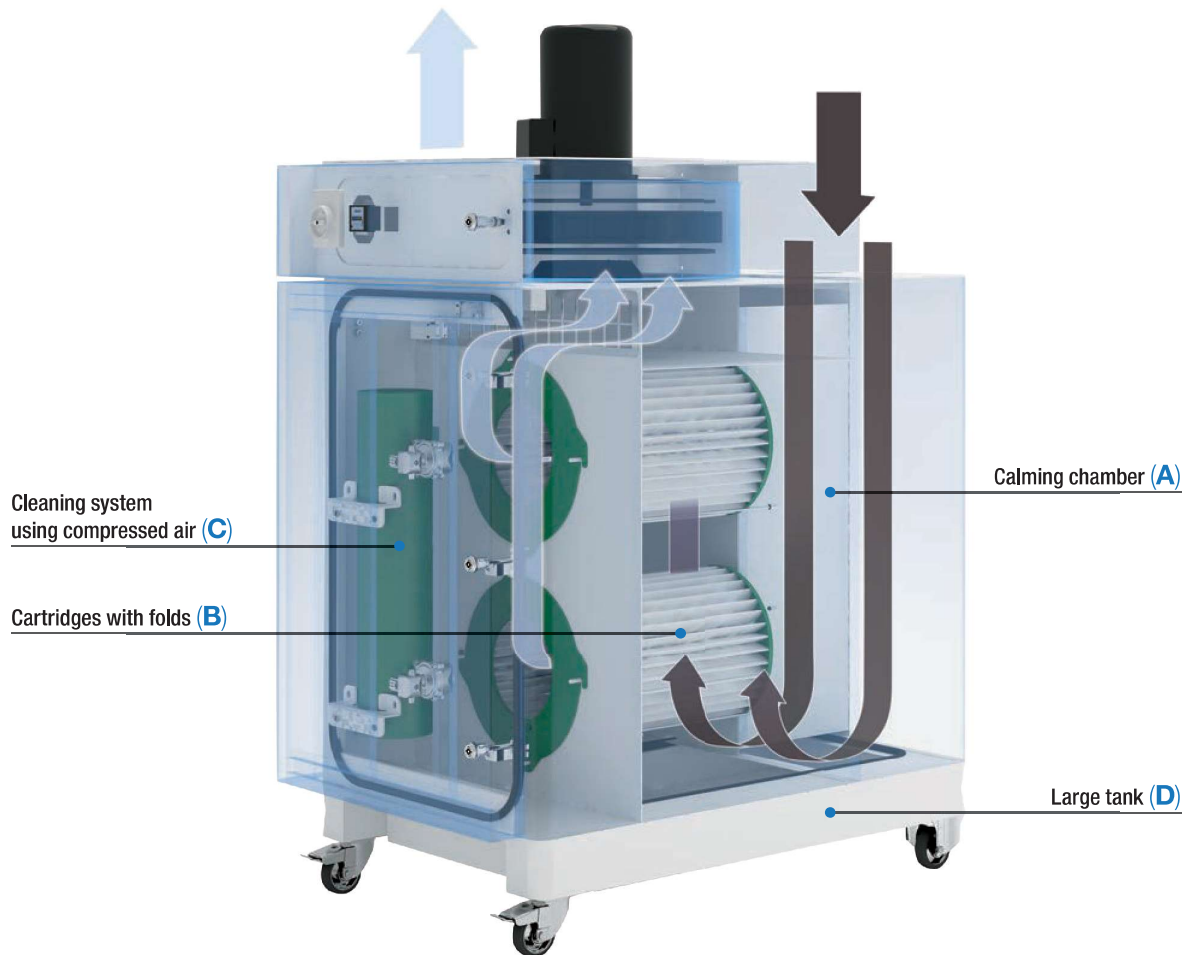


LOSMA grants that every single system is tested through strict control procedures. Every unit is provided with a qualitative and functional test certificate.





# Working principles



- 1** The air entry section, which connects the piping or the suction arm (optional), consists in a large section which serves as a calming chamber (A).
- 2** The following area consists of a chamber which houses the filter elements, cartridge with folds (B) with a high filtration surface, with F9 efficiency of 95%, withholding the finer impurities.
- 3** These cartridges are kept in perfect conditions from a cleaning system (optional) using compressed air (C), consisting in a Timer which manage the opening of the

electro-valves positioned on the storage reservoir and the cleaning cycles.

- 4** The horizontal positioning of cartridges allows a fast access and a quick maintenance, access to the filtration chamber is possible through a hinged door. Filter removal is easy, quick and clean, because the dirty chamber is separated from the clean section by a panel which also serves as a support structure for the filter elements. Dusts are collected in a collection tank (D), which can easily be removed and emptied. The filtration group is equipped with a trolley in order to be moved into the workshop.



# Plus



## VERSATILITY AND MANEUVERABILITY

Pascal-M is available in two versions with different flow rates and can be equipped with different post-filtration accessories and an articulated arm. It is mounted on a trolley allowing an easy transport.



## LONG LASTING FILTERS

The wide filtration surface used and the automatic cleaning system (optional) grants long lasting filters and saving for spare parts and maintenance management.



## GREAT SUCTION POWER

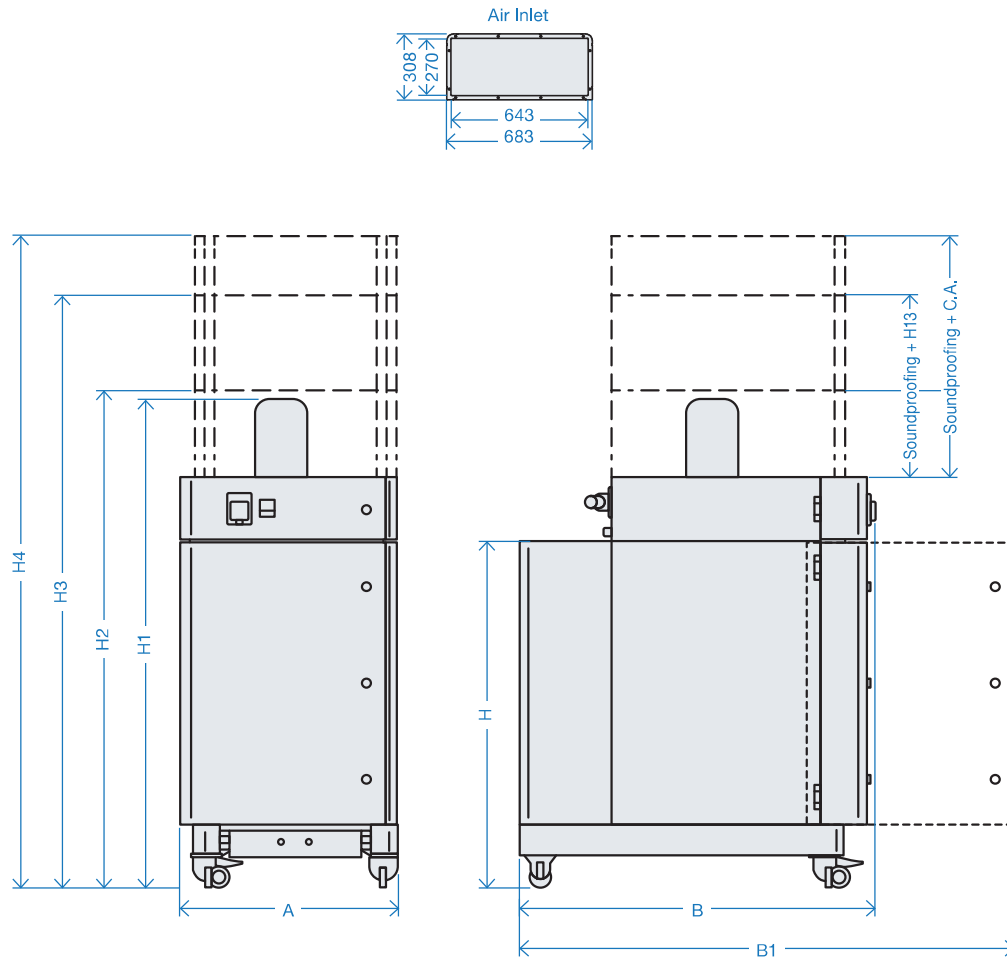
The use of high efficiency centrifugal fans allows Pascal-M to generate great suction powers with reduced energy consumption.



## FAST AND EASY MAINTENANCE

Access to the filtration section is very easy and quick, without having to unscrew or disassemble anything. Simply unlock and open the hinged door to access the filters, which can easily be extracted and replaced in a short time.

# Technical data



MODELS	Dimensions (mm)							Open door dimensions	Weight kg
	A	B	H	H1	H2	H3	H4	B1	
<b>PASCAL 1500 M</b>	800	1200	1200	1650	1700	2030	2250	1655	210
<b>PASCAL 2500 M</b>	800	1200	1200	1700	1750	2030	2250	1655	225

MODELS	Max air flow (m <sup>3</sup> /h)	Head (mm H <sub>2</sub> O)	Power (kW)	Cartridge number	Filtration surface (m <sup>2</sup> )	Noise level (dBa)**	RPM (rpm)		Tank capacity liter	Kg activated carbons total	N. cartridges activated carbons
	50 (Hz) / 60 (Hz)		50 (Hz) / 60 (Hz)				50 (Hz)	60 (Hz)			
<b>PASCAL 1500 M</b>	1500	123	1.1	1	10	<80	2840	3410	30	32	2
<b>PASCAL 2500 M</b>	2500	101	1.5	2	20	<80	2840	3410	30	32	2

\*\* With soundproof box