Pascal

Cartridge filtration system for dry dusts and smokes
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 m³/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 ΔP and manage sequentially the opening of electro-valves and the consequent cleaning cycles conserving 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.
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 ΔP 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)

<table>
<thead>
<tr>
<th>MODELS</th>
<th>A</th>
<th>B</th>
<th>H</th>
<th>H1</th>
<th>H2</th>
<th>H3</th>
<th>H4</th>
<th>Open door dimensions</th>
<th>Weight kg</th>
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<td>2700</td>
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</tbody>
</table>

* With external electrical panel

### MODELS Max air flow* (m³/h) Head [mm H₂O] Power [kW] Cartridge number Filtration surface [m²] Noise level [dBa]** RPM (rpm) Tank capacity [liter] Kg activated carbons total N. cartridges activated carbons

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<th>Power [kW]</th>
<th>Cartridge number</th>
<th>Filtration surface [m²]</th>
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<th>RPM (rpm)</th>
<th>Tank capacity [liter]</th>
<th>Kg activated carbons total</th>
<th>N. cartridges activated carbons</th>
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<td>3520</td>
<td>300</td>
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</tr>
</tbody>
</table>

* With external electrical panel

** With soundproof box
Optional

**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
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.
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

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<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
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</table>

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Optional

Absolute filter H13
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Carbon filter
Activated carbons for removal of odors from previously filtered air.

Cleaning system
Cleaning system in counter-washing composed by a programmable Timer, collecting tank and electro-valves.

Suction Arm
Suction arm with 3 joints, including a 360° turning swivel ring and cupboard with handle.

Installations