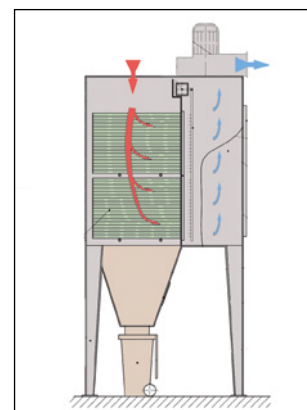


Dry separator PT-Filter



Standard for clean air

**For highly effective, energy-efficient
dry separation of fine dust in small spaces**



The PT Filter series is especially suitable for the separation of fine, free-flowing dust created by mechanical and thermal processes.

The task

The PT filter series is most suitable for the separation of very fine dusts in numerous applications. Virtually all types of dust can be separated efficiently with these filters. Among its multiple applications are metals processing and finishing, as well as plastics processing, the chemical and

pharmaceutical industries, or ceramics, stoneware and earthenware. The PT-Filter series is especially noteworthy in the dry separation of wet paint overspray. A useful feature is the filter plate exchange on the clean air side, which facilitates maintenance and reduces the overall height.

The PT filters have a modular design. This enables flexibility for different requirements, such as dust characteristics or the air flow to be extracted, etc. The sturdy and silent units enable trouble-free 24-hour operation at a continuous air flow rate.

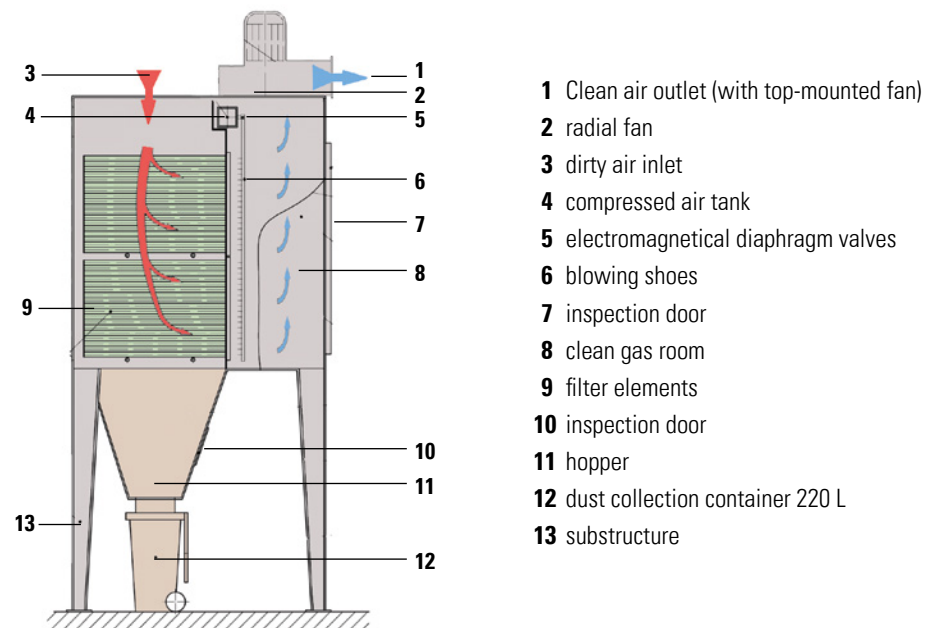
Examples of applications

Mechanical and thermal processes during which dry, airborne dust is created	
Grinding	Painting
Drilling, Turning	Blasting
Brushing	Thermal Joining
Fettling	Thermal Cutting
Blending, Weighing	Thermal Spraying

Advantages

- Filter elements for a variety of material properties
- Modular design
- Disassembles into identical components
- Flexible installation options
- Simplified installation in hard-to-access area
- Access on the clean air side to the horizontally installed filter elements
- Vertically designed upward pressure relief is possible
- Suitable for explosion protection measures for indoor and outdoor installations

Description



Operation

The PT series operates according to the downflow principle. The dust laden air enters via the air inlet into the upper section of the filter housing and flows around the filter elements from top down. The polluted air is sucked through the filter elements

that are fixed to the slotted wall and the dust collects on the surface of the filter elements. Cleaning of the filter elements is achieved by means of compressed air pulses during filtration operation. Thus, the air volume of the fan remains nearly constant.

The clean gas (cleaned air) exits through the top of the unit and in most cases can be re-circulated into the work area or is ducted outdoors. The separated dust falls into the dust collector section.

Filter elements

The filter elements are of high quality and are available in a variety of materials. Each filter element is selected depending on the specific application

in order to achieve optimum filtration, separation efficiency, and length of service.

Cleaning the filter elements

The pulse cleaning cycle can be adjusted for each application by means of a control unit. The air flow of the fan remains nearly constant. The

cleaning operation is activated either by a differential pressure regulator while in operation, or by a programmable downtime cleaning cycle.

Waste disposal

The air-tight and dust-tight disposal bins are connected to the filter's hopper with a clamping device, simplifying the exchange of dust collector containers.

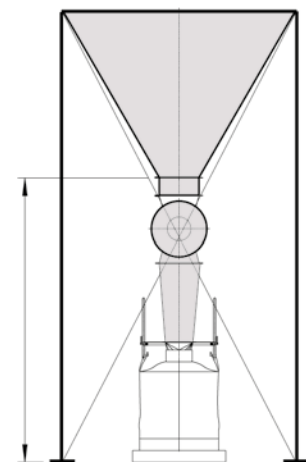
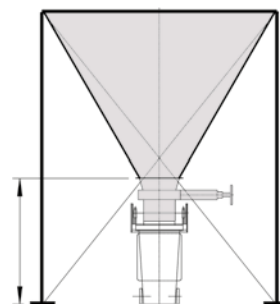
Waste disposal 1

- gate valve
- 220-liter container

Waste disposal 2

- rotary lock
- Big-Bag/container

For larger dust volumes or in 24-hour operations, the waste disposal is continuous via rotary valves, into disposal tanks or Big Bags.



Fan section

The direct-drive radial fan is very silent. Depending on the size of the filter unit, the fan is either integrated,

top-mounted or placed next to it.

Venting outdoors or re-circulation

Air recirculation is often possible with the use of high-quality filter elements. The cleaned air can be ducted and channeled (even with heat exchangers) to the outdoors, or re-circulated

back into the workplace. Alternate venting or recirculation can be accomplished by activating a switch within the exhaust duct. We will be pleased to furnish you with detailed information regarding the feasibility

of a recirculation system, ensuring compliance with your local rules and regulations.

Safety

It is possible to equip PT Filter systems with security technology if combustible or explosive dusts are

created during the manufacturing process.

Placement

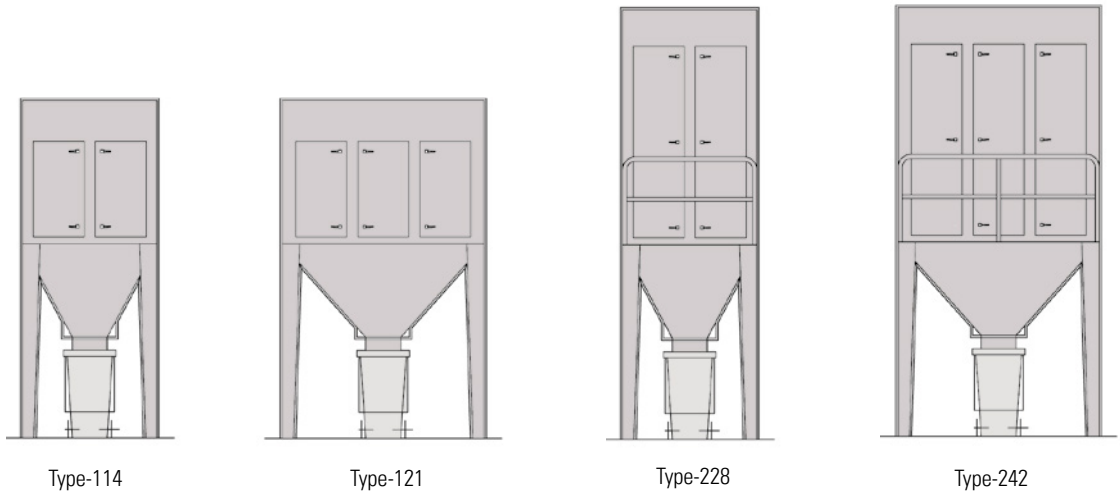
The PT-FILTERs are specifically configured for indoor installation, preferably adjacent to the equipment to be extracted. Outdoor installation is

possible with appropriate weather protection measures and required sound insulation.

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Technical data PT-Filter



Unit types	PT-114	PT-121	PT-228	PT-242
Max. air flow [m³/h]	16000	24000	32000	48000
Motor power [kW]	11,0 – 18,5	18,5 – 30,0	22,0 – 37,0	30,0 – 45,0
Max. number of filter elements [pcs.]	14	21	28	42
Filter surface area [m²]	129,7	194,6	259,4	389,3
Dimensions (L/W/H) [mm]	2444 x 1680 x 5720	2444 x 2450 x 6320	2444 x 1680 x 6870	2444 x 2450 x 7470

*) Only one valve is controlled, nominal pressure 6 bar
 Cleaning interval Standard PT-114/228 1,5 min
 Cleaning interval Standard PT-121/242 1 min

subject to modification



The PT filter with a fluid hopper is made for compact installation indoors.

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