

cartridge filter unit with automatic regeneration by compressed air

G&G Patro JET 2-4-2-18



order number	G&G Patro JET 2-4-2-18
filtration surface	288 m²
air flow	min. 17300 m³/h, max. 20750 m³/h
type of filtration medium	cartridge filters
single element area	18 m²
type of regeneration	JET system
compressed air consumption	12 Nm³ (6 bar) at 15 second interval
number of cartridges	16 pcs.
material of filter cartridge	TI206 nano flame suppressive fiber
temperature resistance	150 °C
waste bin	53 litrů / 53 liters
design for EX	ATEX on demand
inlet flange	720 x 295 (mm)
outlet flange	810 x 420 (mm)
length - width - height	2336 / 1104 / 3597 (mm)
weight of filter	841 kg
<i>air flow at filtration rate</i>	<i>17300 m³/h at 1,0 m/min</i>
<i>the fan is not included</i>	<i>20750 m³/h at 1,2 m/min</i>

Description of cartridge filter

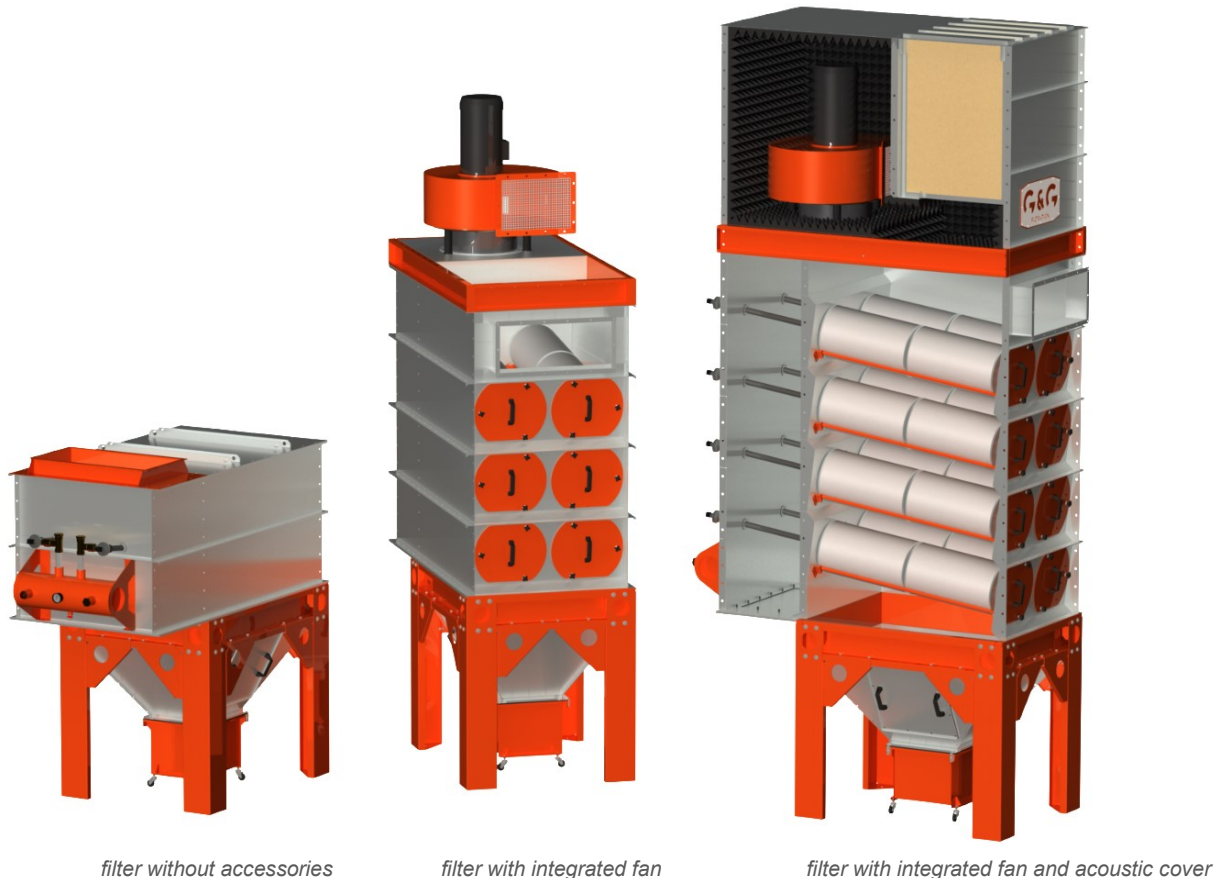
It is a dry, cartridge filter device for dust fractions, equipped with automatic regeneration of the filtering medium by compressed air. Regeneration of the filtering medium takes place cyclically in set time intervals with the possibility of control according to the current pressure loss. The suction power is determined by the fan used according to the type of material and the required load on the filter surface. The load on the filter surface is set at a minimum of $1.0 \text{ m}^3/\text{m}^2/\text{min}$ for the G&G Patro JET filter. The fan is not part of the filter unit. We manufacture filtration equipment in design for placement in an outdoor environment without the need for a roof. The filtration equipment achieves a high filtration efficiency - at 99.9%, so it is possible to return the filtered air to the production hall. The ratio of air return to the hall space and the outdoor environment is determined by the designer of the technology according to the characteristics of the extracted material and the air conditions of the production facility..

Use of cartridge filter

The filtration device is designed for the separation of dust from the extracted air. The filtration system always consists of a specific filtration unit and an appropriate exhaust fan. Cartridge filter G&G Patro JET is designed for air filtration from the process of welding, grinding, painting and other production processes, mainly in the automotive industry. In welding shops, it is necessary to install a sorbent dosing system in front of the filter unit to reduce the stickiness of greasy welding fumes. The filtration device is equipped with filter cartridges made of T1206 material, which contains a layer of the flame-resistant nanofiber. The filtration device can be applied for the extraction of explosive dust. In this case, the filter device is equipped with a relief membrane, which relieves the pressure wave to the outdoor environment, or a device for flameless release of the pressure wave into the inner space of the hall. The filtration device has compact dimensions even for high filtration capacities.

Types of cartridge filter

Cartridge filter units can be ordered separately in the version without a fan, also in the version with an integrated fan and in the version with an acoustic cover of an integrated fan.



Working conditions for G&G - Patro JET

The filtration device is designed for filtration of air with a temperature between -30°C and $+80^{\circ}\text{C}$. The filter in basic design is not for explosive dust (can be re-designed with accessories). The service life of the filter cartridges is set in the range of 2000 to 5000 operating hours. Replacing the filter medium takes an experienced service technician a maximum of 1 hour of work.