

WORLD FIRST!

Viledon® NEXX Filter bags
Maximum performance with increased lifetime



Industrial Air Filtration | Emission Control

Innovation in dust removal technology

Viledon® NEXX filter bags are the next generation of surface filters with outstanding advantages over traditional filters manufactured from needled felt: Viledon® NEXX is much lighter and tougher, lasts significantly longer, is more cost effective, with lower emission values. **Only Viledon® NEXX applies the unique Evolon® technology.**

viledon®
NEXX
Made with Evolon®



Evolon®: the original

Evolon® is the base material for Viledon® NEXX: filter bags and is available with and without antistatic finish. This patented microfiber material has been developed specifically for the demanding requirements of dust removal technology.

Especially strong when it's dusty

Wherever high dust load occurs, Viledon® NEXX filter bags are just perfect: in the processing of sugar, plastics and chemical products, in steel mills, foundries, or in surface treatment processes. Viledon® NEXX demonstrates its outstanding qualities especially when it comes to recovering expensive products used in food and pharmaceutical industries or any application that utilizes silo storage. For example, flour dust generated by the milling process can easily be recovered from extracted air and reused. The extra fine microfiber surface made from continuous filaments prevents the contamination of valuable recovered products.



Reasons for choosing Viledon® NEXX filter bags

Original Evolon®

This high-quality filter medium exhibits unique characteristics for surface filtration.

Constant maximum performance with long service periods

Unlike traditional uncoated needle felt bags, there is virtually no dust penetration into the structure of the Viledon® NEXX filter material after the initial conditioning phase. The integrated microfiber layer creates a stable dust cake which prevents irreversible adhesion of dust particles inside the filter medium. The result is to create a stable operating condition and reduced resistance to flow. Continuous operation over long periods at minimum pressure loss becomes possible.

Long filtration cycles

Viledon® NEXX filter bags are sturdy and resilient, they are subject to lower mechanical stresses owing to lower operating pressure differential. This extends the filtration cycles and shortens the cleaning intervals. Costs for maintenance and replacement are minimised and the consumption of expensive compressed air for pulse jet cleaning is reduced.

Trouble-free cleaning

The microfiber layer of a Viledon® NEXX filter bag ensures dust is easily removed from the surface of the filter media.

Low emissions

Viledon® NEXX can achieve clean gas values of $< 1 \text{ mg/m}^3$ continuously.

Lower energy costs

The optimised filtration performance leads to a reduced requirement for compressed air cleaning of the filter bags and the potential to minimise the consumption of electrical energy.

Simple handling: 50 % lighter than needled felt

Only 240 g in weight per square metre the media offers high mechanical stability. This results in easy handling during filter bag installation and removal, even when the filter is contaminated with dust. Filter bags can be installed using any of the traditional methods used today, no special tools are required.

50 % fewer resources during manufacturing

When compared with needled felt, Viledon® NEXX uses roughly 50 % fewer resources during manufacture and still results in higher filtration performance! You make an active contribution towards the environment and the sustainable use of resources.

Individual solutions

Viledon® NEXX is available in a wide range of sizes, lengths, and shapes as well as in several mounting and closed end configurations. The innovative NEXX filter medium is also available to buy as a roll: antistatic (grey-black screen raster print) or standard design (grey).

Ambient air recirculation

After Viledon® NEXX a second filter stage with static filters can be installed to separate harmful dusts with required very low workplace concentrations or carcinogenic dusts and to permit air recirculation into the workplace. Hence, heating costs can be kept low, particularly in winter.

Special requirements

Viledon® NEXX filter bags can be pre-coated according to your requirements, e. g. with FHM-1500 for sticky dust types or with lime for oily dust types.



Endurance test passed

Viledon® NEXX filter bags have already been successfully employed for the separation of inorganic (powder coating) pigment dusts. To create the best surface finish, the (powder coating) pigment industry aims to manufacture pigments with the smallest possible particle diameters. The particle size distributions of the pigments are predominantly in the nm range. This type of dust does not create a suitable dust cake for surface filtration. For a filter medium to work effectively on this application it is necessary to have extremely fine fibers and pores like that exhibited by Viledon® NEXX filter media.

Viledon® NEXX filter bags are also manufactured without the use of silicone and are thus suitable for the recovery of powder coating pigments used in the automobile industry.



Mixed Sources

Product group from well-managed forests
and other controlled sources
www.fsc.org Cert no. SGS-COC-004060
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| Technical data | | | |
|-------------------------------------------------------|----------------------------------------------|----------------------------------------------|---------------------|
| Filter media | NEXX | NEXX as | Test specification |
| Weight [g/m ²] | 240 | 240 | DIN EN 29073 - 01 |
| Thickness [mm] | 1.0 | 1.0 | DIN EN ISO 9073 - 2 |
| Air permeability [l/dm ² min at 2 mbar] | 100 | 100 | DIN EN ISO 9237 |
| Fibers | PES / PA Hydroentangled microfilaments | PES / PA Hydroentangled microfilaments | |
| Temperature resistance [°C] | 150 | 150 | |
| Tensile strength [N/5 cm] | | | DIN EN 29073/3 |
| Longitudinal | > 700 | > 700 | |
| Transversal | > 800 | > 800 | |
| Elongation [%] | | | DIN EN 29073/3 |
| Longitudinal | ca. 35 | ca. 35 | |
| Transversal | ca. 35 | ca. 35 | |
| Mullen burst [MPa] | > 15 | > 15 | ASTM D 3786 - 2001 |
| Additional features | - | Antistatic printing | |

The specified numbers are average values with tolerances based on common production variations. The verification of the specifications and their transferability requires our explicit written approval on a case-by-case basis.

All preceding versions are hereby rendered invalid.

Superior Filtration Technologies

World-wide, Freudenberg Filtration Technologies develops and manufactures intelligent and energy-efficient filtration solutions. We make industrial processes more economical, conserve resources, protect the environment and as a result increase the quality of life. Our two strong brands Viledon® and micronAir® both enjoy a high reputation globally.

Viledon® produces excellent results in the industrial filtration of air and liquids. micronAir® fine dust filters have gained a reputation for applications in interior spaces, in engine air supply in the automobile industry, and in office applications. The solutions and services of Freudenberg Filtration Technologies are applied in many different industries and fields. About 1,000 associates at over 30 sites world-wide contribute to the company's success.



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