

Filter medium FE 2507 – sine for Viledon dust removal elements

Freudenberg - the origin of nonwovens

▶ Pleatable polyester filter medium with sinusoidal cross-section and microfibers sets new standards for the performance of pleated dust removal elements.

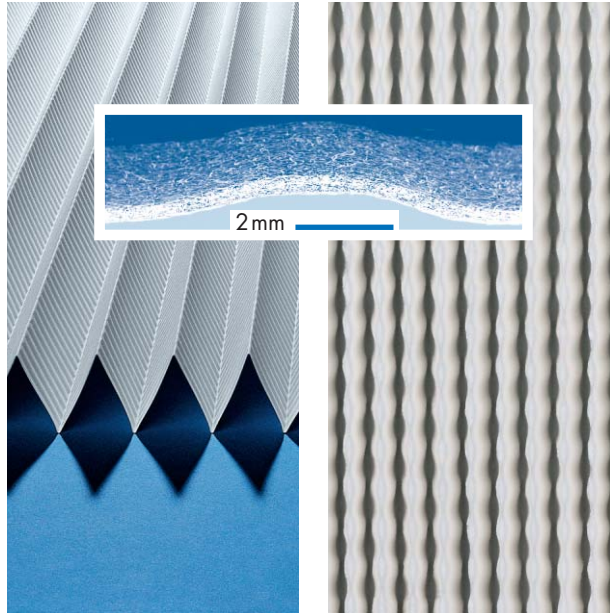
Lots of pluses for you with „sine“!

▶ **Save up to 35 % of your energy costs** when operating your cartridge system. The pleat corrugation significantly reduces the pressure drop, and thanks to its full-area thermal bonding the material exhibits a significantly smoother surface than linearly embossed spunbonded nonwovens. A plus which also benefits the cleaning characteristics into the bargain.

▶ **Profit from extended lifetimes and reduced maintenance costs.** The patented pleat stabilization concept is thermally stable up to 90°C, and remains stable even under alternating loads of filtration and cleaning phases.

▶ **Increase the air throughput** of your filters, since cartridges fitted with FE 2507 – sine offer a larger effective filter area.

▶ Measurements of fractional collection efficiencies prove: FE 2507 - sine meets the requirements of increasingly stringent **dust emission guidelines**. This is particularly true when it comes to arresting particles of < 2.5 µm, since the fiber structure is significantly more homogeneous than spunbonded nonwovens.



viledon®

Nonwoven data		
Weight	g/m ²	240
Material thickness	mm	approx. 0.45
Maximum tensile strength md	N/5 cm	300/600
Maximum elongation amd	%	25/40
Technical filter data		
Air-permeability at 200 Pa	m ³ /m ² h	300
Dust class to DIN EN 60 335-2-69, Annex AA BIA Category		M C
Mean penetration degree for quartz dust	%	0.05



and ENVIRONMENTAL
MANAGEMENT SYSTEM
to DIN EN ISO 14001

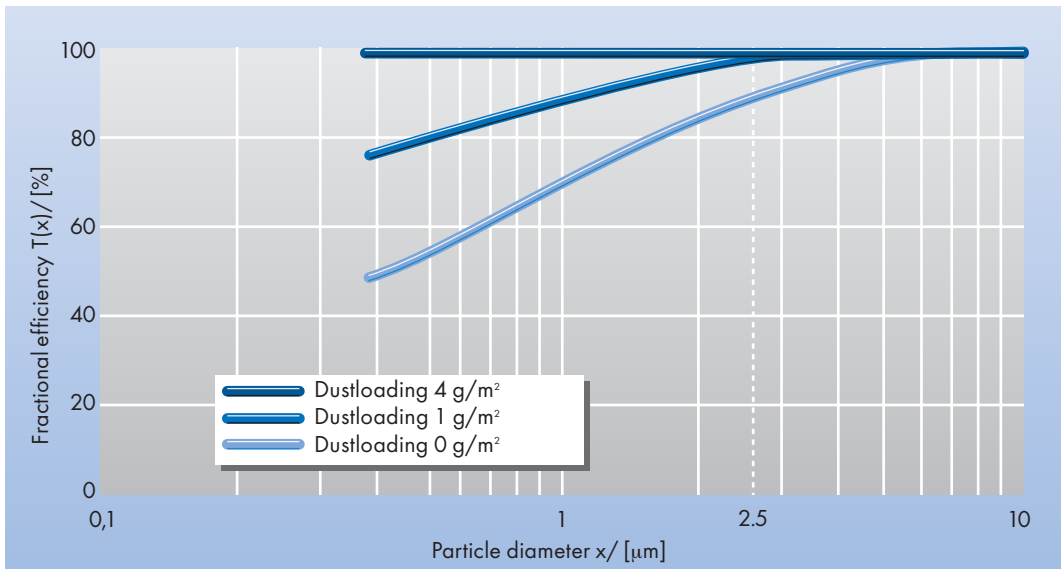
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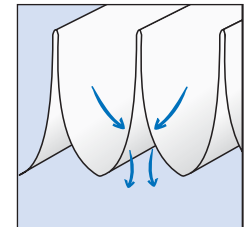
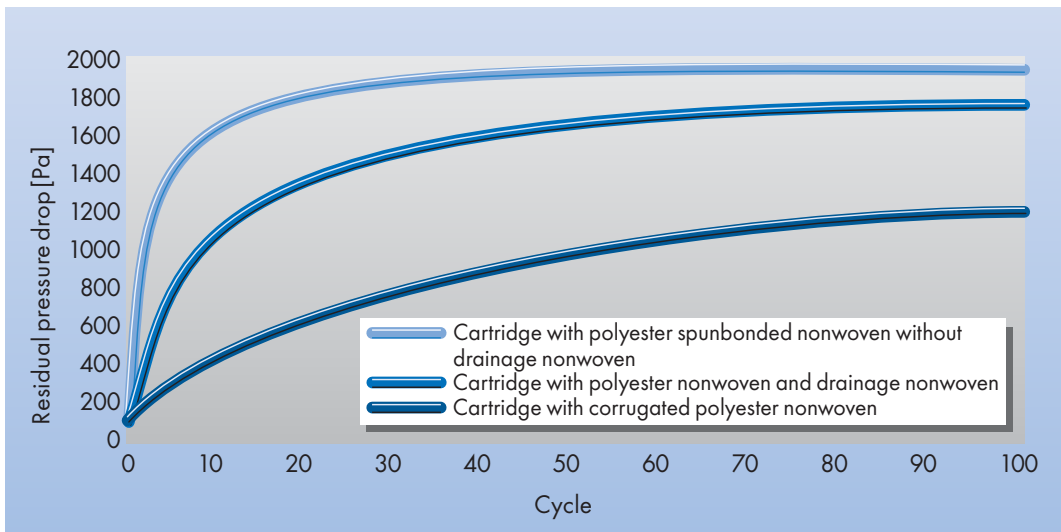
Technical filter test data for the FE 2507- sine

Diagram 1: Fractional efficiencies of the filter medium FE 2507- sine at different dust loadings, measured on the test stand in conformity with VDI 3926 and particle counter. Test dust: limestone, $x_{50} = 1 \mu\text{m}$.

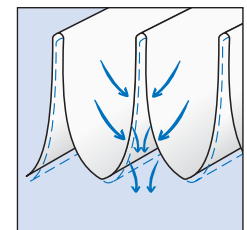


The pleat design explains the outstanding pressure drop characteristics of the FE 2507- sine type compared to other dust removal media.

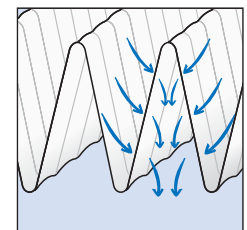
Diagram 2: Residual pressure drop of cartridges with $d = 327 \text{ mm}$, 175 pleats, pleat depth 48 – 50 mm and 10 m^2 filter area, polyester, dust class M (BIA Category C)



Pleats without drainage nonwoven



Pleat support with drainage nonwoven



Corrugated material with integrated spacers

The figures given here are mean values with tolerances entailed by the customary production fluctuations. Our explicit written confirmation is always required for the correctness and applicability of the information involved in any particular case. All preceding versions are hereby rendered invalid.

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