

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.

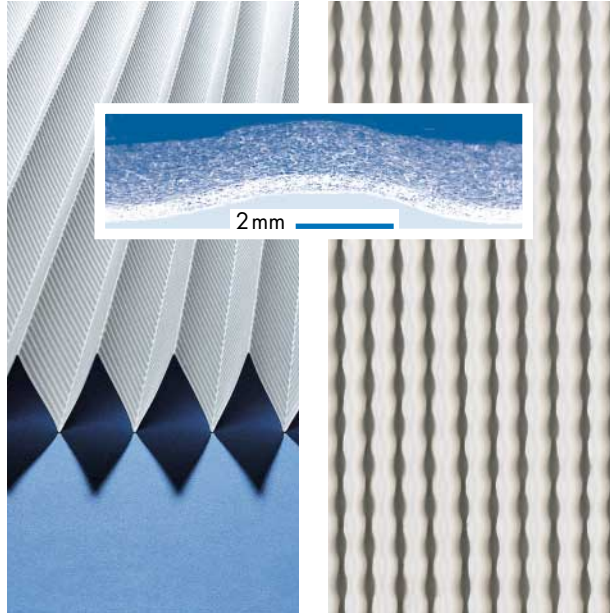
Lots of pluses for you with „sine“!

▶ **Save 25 – 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 spun-bonded nonwovens. A plus which also benefits the cleaning characteristics into the bargain.

▶ **Profit from extended lifetimes and reduced maintenance costs.** The pleat stabilization concept (patent pending) 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.



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
BIA Category: (Dust class to IEC 60 335-2-69)		C (M)
Mean penetration degree for quartz dust	%	0.05



and ENVIRONMENTAL
MANAGEMENT SYSTEM
to DIN EN ISO 14001

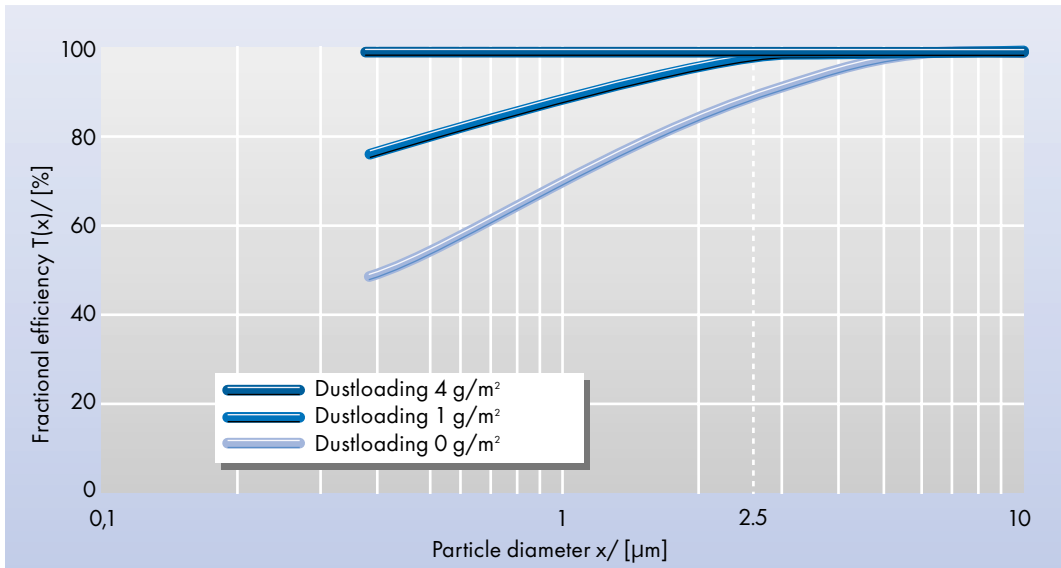
Reg. No. 1420

Freudenberg Vliesstoffe KG
Filter Division
Weinheim/Germany

The figures given are mean values, with tolerances entailed by the customary production-related variations. In any specific case, the correctness of any figure must be explicitly confirmed by us.

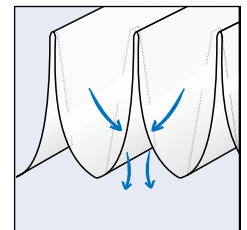
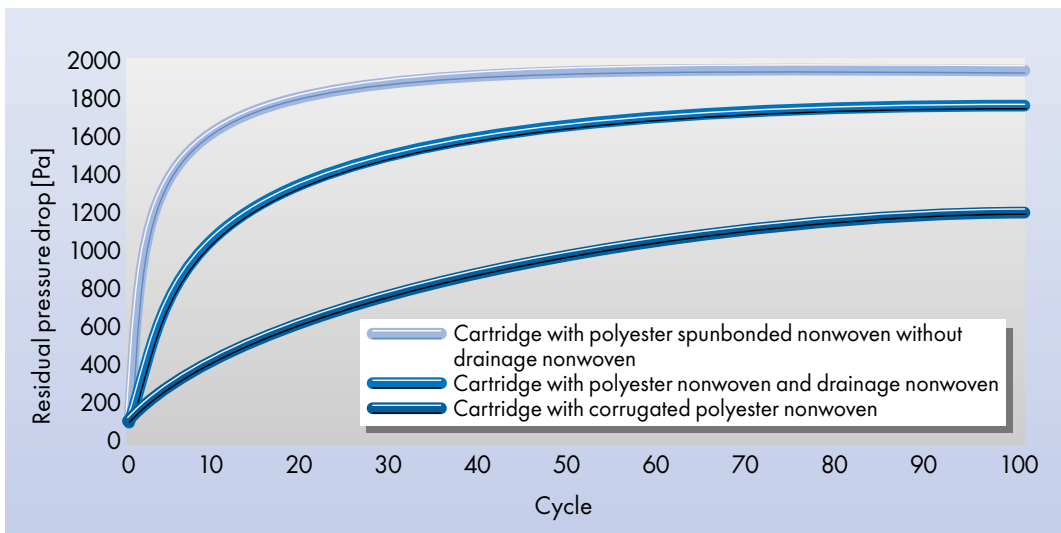
Technical filter test data for the FE 2507- sine

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, $x_{50} = 1 \mu\text{m}$.

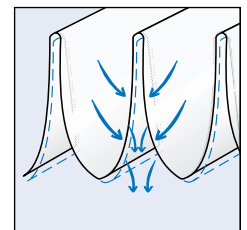


The pleat design explains the outstanding pressure drop characteristics of the FE 2507- sine type compared to other dust removal media.

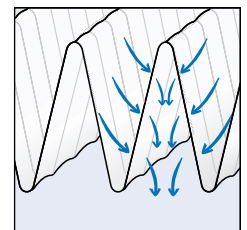
Diagram 2: Residual pressure drop of cartridges with $d = 327 \text{ mm}$, 175 pleats, pleat depth 48 – 50 mm and 10 m^2 filter area, polyester, BIA Category C



Pleats without drainage nonwoven



Pleat support with drainage nonwoven



Corrugated material with integrated spacers

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