

ultrafilter silicone free filter

FFP / MFP /SMFP with nanotechnology



High performance filter ultrafilter

■ ultrafilter high-performance depth filter for removal of water and oil aerosols as well as particles from compressed air and gases. Free of parting agents and silicone, these filters are especially developed for laquer and optical applications.

■ Thanks to the unique combination of binderfree, non-woven nanofibre filter media and pleating technology, a reduction in energy costs of 70 % is achieved, as well as an improved filtration performance.

■ The new nanofibre material from ultrafilter is oleophobic, which means oil and water are actively rejected, so the differential pressure drop and therefore operation costs are reduced to a minimum compared with a conventional filter element.

Advantages and benefits

- 450 % greater filter media compared to standard elements
- free of parting agents
- silicone-free
- lower differential pressure
- improved filtration efficiency
- greater dirt-capturing capacity
- 70 % less energy costs

Applications

- chemical and petrochemical industry
- pharmaceutical industry
- food & beverage
- plastic industry
- process filtration
- instrumentation air



ultrafilter nanofilters FFP, MFP, SMFP

Features:	Benefits:
Binderfree, thermally welded nanofilter media	Low differential pressure and high particle load
Oleophobe filter media	Rejects oil and water
Free of silicone and parting agents	recommended for lacquer and optical industry
Pleated filter media	450 % more filtration surface, higher particle load capacity, low air flow speed
Support sleeves of stainless steel (316L)	Extremely large free flow, secure and long operation

Materials:	
no outer foam sock	according to requirements of automotive industry
Support sleeved inner/outer	Stainless steel 1.4301
Pre- and after filter medium	pleated Cerex
Filter medium	binderfree nanofibres of borosilicate
Bonding	Polyurethane
End caps	Aluminium
O-rings	Perbunan, silicon free and free of parting compounds

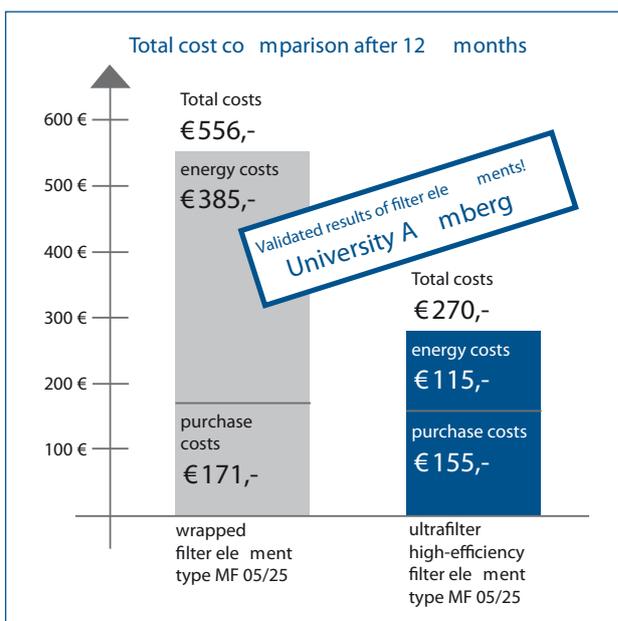
Validation
Validation of ultrafilter high-performance filters by University Amberg

Retention rate at a particle size of 0,01 µm
FFP = 99,999 %
MFP = 99,99998 %
SMFP = 99,99999 %

Residual oil content at an inlet of 3 mg/m ³
FFP = 0,1 mg/m ³
MFP = 0,03 mg/m ³
SMFP = <0,001 mg/m ³

Max. differential pressure
5 bar at 20 °C, independant from operation pressure

Start-up differential pressure
FFP = 0,04 bar
MFP = 0,08 bar
SMFP = 0,09 bar



element	correction factor
02/05	0,04
03/05	0,08
03/10	0,12
04/10	0,17
04/20	0,19
05/20	0,25
05/25	0,32
07/25	0,47
07/30	0,68
10/30	1,0
15/30	1,55
20/30	2,10
30/30	3,28
30/50	5,89

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