

PP MICROFIBER MULTI-LAYERS MEDIA

Filtration of difficult liquids

High viscosity and high solid contents

Depth filtration in multi-layer configuration

MATROX HD

Low pressure drop, high capacity of dust and long service life

The development of an innovative technology has let us create this new, extremely versatile and highly cost-effective cartridge, which combines effective clarification with a high contaminant holding capacity.

Melt-blown technology has been applied together with ultra-fine polypropylene microfibers to create a laminated, pleated filter media that significantly increases both the filtration area and the filter's particulate retention capacity, thanks to the large volumes of void within the element.

Multiple superimposed layers of increasing density optimize filtration efficiency. This filter is particularly suitable for the clarification of viscous liquids with high filterability indexes, or to filter fluids with high contaminant content.



MATROX HD

Pleated Melt-blown PP
Filtration of medium & high
viscosity fluids

TECHNICAL SPECIFICATIONS

- high-precision depth filter, consistent quality performance right up until blocking
- rigid structure
- resists contaminant release even at high Δp values
- biologically inert, no fiber release from the filter media
- no adsorption of color or odor
- no release of foreign color, odor or flavour
- wide chemical compatibility, easily regenerated with chemical products
- uniform filtration across the entire surface
- thermo-bonded construction with no surfactants, binders or adhesives
- all materials meet the requirements of FDA CFR Title 21 for food contact
- in compliance with EC Directive for food contact. Regulation (EU) No.10/2011+amendments;1935/2004-1895/2005

OPERATING CONDITIONS

Max operating pressure (Δp)	80°C @ 1.5 bar 60°C @ 2.5 bar 20°C @ 4.5 bar
Recommended replacement pressure drop	2.5 bar @20°C
Suggested operating pressure range	0.1 to 2.0 bar

PORE SIZE RATING (nominal)

1.0 um – 3.0um – 5.0um – 10.0um – 20.0um– 50.0um

FLOW RATE

Water Flow 20°C @0.1 bar /10"	1.0um	3.0um	5.0um	10.0um	20.0um	50.0um
Typical Flow Rate	8 L/min	10L/min	15L/min	25/min	50L/min	80L/min

Extrapolation for multiple housings and higher pressure drops is acceptable, but as flows increase the pressure drop of the housing becomes more apparent

FILTRATION AREA

0.30m²/10"

SANITIZATION

Steam : 121°C/30mins – Hot water : 80°C/30mins

MATERIALS OF CONSTRUCTION

Filtering media	PP Pleated Microfiber Media
Supports	Polypropylene
Inner sleeve	Polypropylene + ss316 insert
Connections and tip	Polypropylene
Gaskets	Silicone (standard), EPDM, Viton, FEP

DIMENSION

Length	254mm (10")-508mm (20")-762mm (30")-1016mm (40")
Outer diameter	69mm
Inner diameter	26mm

TRACEABILITY

Each filter element is identified by a lot number for complete traceability.