

DEPTH FILTER CARTRIDGE IN MELT-BLOWN PP MICRO-FIBERS

Pure polypropylene depth filter elements
Exceptional dirt-holding efficiency
Graded density, surface cavity structure

MATROX

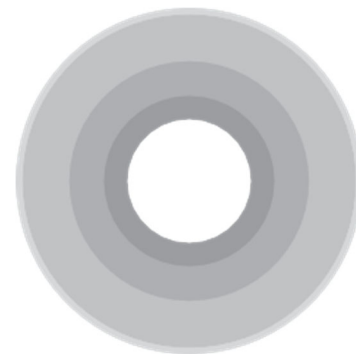
A safe and versatile high performance controlled porosity depth filtration cartridge

Depth filtration is an indispensable process to eliminate residual impurities and to drastically reduce the content of contaminants with particle grades over 1 micron. Matrox® is the ideal solution for these applications as its micrometric pore stability ensures a filtration efficiency of over 99%.

Matrox® depth filters are made entirely of graded density polypropylene microfibre. The external low density part of the filter separates coarser particulate, preventing the premature blocking of the cartridge. The internal, higher density part separates finer particulate. This configuration also gives the cartridge a superior contaminant holding capacity.

The use of bonding processes in assembly without the use of resins or adhesives eliminates all extractables and makes the whole component compact and resilient.

The Matrox® cartridge is biologically inert, and does not release or trap odor, tastes or color.



MELT BLOWN GRADED DENSITY
CONSTRUCTION



MATROX

A safe, versatile and cost-effective depth filtration cartridge

TECHNICAL SPECIFICATIONS

- high dirt holding capacity
- Filtration efficiency: >99% (multipass test)
- biologically inert, no fiber release from the filter media, no adsorption or release of color or odor
- wide chemical compatibility, easily regenerated with chemical products
- rigid structure, 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 @ 1.2 bar 60°C @ 2.1 bar 20°C @ 4.2 bar
Recommended replacement pressure drop	2.0 bar @20°C
Suggested operating pressure range	0.1 to 2.0 bar

PORE SIZE RATING (nominal)

0.5um - 1.0um - 3.0um - 5.0um

10.0um - 20.0um - 50.0um - 70.0um - 90.0um

FLOW RATE

Water Flow 20°C @0.1 bar /10"	0.5um	1.0um	3.0um	5.0um	10.0um	20.0um	50.0um >
Typical Flow Rate l/min	10	12	15	21	33	35	35

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

0.05m²/10"

SANITIZATION

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

MATERIALS OF CONSTRUCTION

Filtering media	PP Ultra-Fine Melt-Blown Fibers
Supports	Polypropylene
Inner sleeve	Polypropylene
Connections and tip	Polypropylene
Cage (only CR version)	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.

ionexfilters.com

