

PMF

POROUS METAL FILTERS

SAND CONTROL SCREENS

FILTRATION SOLUTIONS FOR THE OIL AND GAS INDUSTRY



PROPER SAND MANAGEMENT BEGINS WITH PROPER SCREEN SELECTION.

PMF'S *SINTERPORE*® PREMIUM METAL MESH SAND CONTROL SCREENS HAVE BECOME A STANDARD STAPLE IN THE OIL FIELD.

PMF's unique screen design incorporates multiple diffusion bonded layers of woven metal mesh, creating a single monolithic sand control screen that is robust and has enhanced filtration specific characteristics - the right solution to any sand control problem.

PMF's *SINTERPORE*® sand control screens range from the single layer woven metal mesh to the multi-layer diffusion bonded Premium cartridges.

The *SINTERPORE*® cartridges are fit for purpose for standalone or gravel pack applications as well as for open-hole and cased-hole environments. PMF's optimal screen designs are critical in meeting your specific application and well conditions.



SINTERPORE® PREMIUM CLASSIC CARTRIDGES

FEATURES AND BENEFITS:

- Maximum permeability above other screen options.
- Precise woven metal mesh laminates achieve optimal filtration, uniform flow, and mechanical strength.
- Diffusion bonded (sintered) designs result in a robust monolithic structure that provides fixed pore geometry.
- Fully annealed alloy provides superior corrosion protection.
- Standard micron ratings from 60 µm to 400 µm (custom upon request).
- Standard alloys include 316Lss and Alloy 20.
- Available with or without shroud.
- When incorporated with your design criteria, the Premium Classic complies with all three levels of ISO 17824 and proposed API 19S.



Laminate Part Number	Nominal Micron Rating	Number of Layers	Thickness (inches)	Max Pore Size	Permeability (Darcy) ¹	Nominal Air Permeability (SCFM/SF @ 1" W.C.) ¹	Porosity (%)	Tensile
F-PMF-316L-60-DS3	60	3	0.072	82	286	410	58	550/650
F-PMF-316L-125-DS3	125	3	0.074	164	359	500	56	614/789
F-PMF-316L-175-SS4	175	4	0.074	210	538	750	58	749/854
F-PMF-316L-175-DS2	175	2	0.060	233	320	550	54	550/650
F-PMF-316L-250-SS4	250	4	0.074	286	610	850	58	681/764
F-PMF-316L-250-DS2	250	2	0.075	300	382	525	52	681/764
F-PMF316L-400-SS4	400	4	0.072	440	593	850	57	681/764

SINTERPORE® PREMIUM PRO CARTRIDGES

FEATURES AND BENEFITS - FORTE:

- Our unique design eliminates all welds within the filter media.
- Easy installation - the cartridge can be slid and welded on the base pipe.
- The diffusion bonded (sintered) design incorporates an integrated outer shroud, multiple mesh layers, and an optional inner shroud for maximum strength.
- High flow screen designs available that allow for superior uniform flow.
- Available in a wide range of micron ratings from 60 µm to 400 µm (custom upon request).
- Standard alloys for control filter layer include 316Lss and Alloy 20.
- Standard alloys for shroud material include 304ss, 316ss, 304Lss, and 316Lss.



FORTE

FEATURES AND BENEFITS - HEAVY OIL (H-O):

- Cartridge includes a fully integrated shroud with high performance mesh designed for harsh environments.
- Fit for purpose for injector and/or producer.
- Most economical option.
- Available in a wide range of micron ratings from 100 µm to 800 µm (custom upon request).
- Superior filtration, uniform flow, and enhanced erosion properties.
- Standard alloys for control filter layer include 304Lss, 316Lss and Alloy 20.
- Standard alloys for shroud material include 304ss, 316ss, 304Lss, and 316Lss.



HEAVY OIL (H-O)

THRU TUBING PREMIUM CLASSIC AND PREMIUM PRO

FEATURES AND BENEFITS:

- Premium Classic and Premium Pro designs are both great options for thru tubing.
- Standard and highly customizable designs.
- Economical designs to fit your work over budget.
- Premium Pro thru tubing offers the smallest OD package in the industry.
- Maximum flow rates for difficult sand conditions.

Pipe	Tube ID	Premium Classic Max OD (with tol.) without shroud	Premium Pro Max OD (with tol.) with shroud	
			Forte	H-O
1.050	1.150	1.388	1.480	1.390
1.250	1.370	1.370	1.700	1.610
1.625	1.760	1.760	2.090	2.000
1.875	1.960	1.960	2.290	2.200
2.063	2.130	2.130	2.460	2.370
2.375	2.470	2.465	2.790	2.710
2.975	2.930	2.930	3.260	3.170

Note: all units noted in inches

SINTERPORE® ECO SCREEN WRAP

FEATURES AND BENEFITS:

- Our most economical metal mesh screen cartridge option.
- Non-sintered design provides filtration and flow advantages above other non-sintered screen options.
- The integrated shroud allows you to weld the cartridge directly to the pipe saving time and money.
- Multiple weave options for superior filtration performance with micron ratings from 60 µm to 800 µm.
- Optional flow and drainage layers.
- Filter media is available in 304Lss, 316Lss, Alloy 625, and Alloy 20.



ECO
Non-sintered
cartridge

SINTERPORE® SINGLE LAYER SAND CONTROL SCREEN

FEATURES AND BENEFITS:

- Woven metal mesh available in micron ratings from 50 µm to 1500 µm upon request.
- Outstanding retention characteristics.
- Available in all standard corrosion resistant alloys: 316Lss, Alloy 20, Incoloy 825, and 904L.
- Robust and durable.
- Highest performance filter media.

Nominal Micron	Filter Mesh	Weave Type	Thickness +/- 0.003" (inches)	Conductivity (Kd/mm)	Permeability (Darcy) ¹	Permeability (SCFM/SF @ 1" W.C.) ¹
95	30 x 150	PDW	0.020	2.48	126	650
125	22 x 180	PDW	0.025	3.24	206	850
125	24 x 110	PDW	0.034	2.29	198	600
125	20 x 216	TDW	0.032	0.76	62	200
150	22 x 220	TDW	0.036	1.14	105	300
175	18 x 140	PDW	0.024	3.24	198	850
175	18 x 210	TDW	0.037	1.34	125	350
200	16 x 80	PDW	0.037	2.86	269	750
200	14 x 180	TDW	0.043	1.14	125	300
220	16 x 100	PDW	0.032	3.24	264	850
250	12 x 145	TDW	0.051	1.34	173	350
250	14 x 88	PDW	0.040	3.05	310	800
280	132 x 16	RDTW	0.046	2.67	312	700
300	12 x 64	PDW	0.050	3.62	460	950

PDW = Plain Dutch Weave
 TDW = Twill Dutch Weave
 RDTW = Reverse Dutch Twill Weave

1. ISO 4022/ASTM D737



The principal applications of PMF's **SINTERPORE®** diffusion bonded (sintered) product line includes filtration, separation, flow control, noise abatement, bulk solid fluidization, flame arrest and many other uses.

Porous Metal Filters, Inc (PMF) is part of the USA division of the Dorstener Group.

Dorstener Drahtwerke has been in business for 100 years and is an industry leader in wire and wire mesh products. The Dorstener Group has locations throughout Europe, North America, South America and Asia, specializing in high performance wire, wire cloth, welded mesh, and metallic filtration products.



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