The Cost Effective Approach to Quality Filtration

With absolute ratings from 0.5 to 70 microns, Filtration & Membrane Technology, Inc., (FMT) pleated cartridges provide efficient solids removal in liquid streams. Each cartridge has a pleated, fixed pore media which maximizes effective surface area while preventing particle unloading and fiber migration. Media selections include cellulose, fiberglass, polyester, and polypropylene.

In this series, FMT offers its customers a choice between standard life and extended life filters. Both filters are composed of the same materials, with the extended life filter offering approximately 30% more surface area. Depending upon application, each style offers specific economic advantages.

FMT’s wide variety of pleated media, filter sizes, and end cap configurations provide customers with the preferred cartridge for their specific application. Superior construction methods and materials combined with excellent quality control techniques ensure that FMT filter cartridges will provide quality filtration, even in harsh operating conditions.

CONVENTIONAL SERIES
ABSOLUTE RATED FILTERS

CAP CONFIGURATIONS

FILTRATION COST EFFICIENCY

INCREASING FILTER LIFE

DOUBLING FILTER SURFACE AREA CAN INCREASE FILTER LIFE UP TO FOUR TIMES:

FILTER LIFE INCREASE =

\[
\frac{L_e}{L_o} = \left( \frac{A_e}{A_o} \right)^N
\]

Le = Extended Filter Life
Lo = Original Filter Life
Ae = Expanded Filter Area
Ao = Original Filter Area

1 ≤ N ≤ 2
FILTER EFFICIENCY

The Beta ratio ($\beta$) at a given particle size can be correlated to the filter efficiency at that particle size according to the following formula:

Filter Efficiency (%) = \left(\frac{\beta - 1}{\beta}\right) \times 100\%

Each filter element will have a different Beta Ratio for every specified particle size. The determination of a variety of Beta values for the same filter provides a filter efficiency profile commonly referred to as a Beta Curve.

<table>
<thead>
<tr>
<th>Beta Ratio ((\beta))</th>
<th>Filter Efficiency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>99.00</td>
</tr>
<tr>
<td>1000</td>
<td>99.90</td>
</tr>
<tr>
<td>5000</td>
<td>99.98</td>
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</tbody>
</table>

CARTRIDGE CODING

FMT CONVENTIONAL SERIES
AB = EXTENDED LIFE
DF = STANDARD LIFE

DIAMETER CODE
BLANK = 2.5" OD
P = 3.0" OD
X = 3.75" OD (222 O-RING)
Y = 3.75 OD (139 O-RING)
Z = 3.75" OD (134 O-RING)

LENGTH
1 = 10"
2 = 29.75"
3 = 36"
4 = 40"
9 = 20"
X = CUSTOM

END CAP
1 = DOE
2 = O-RING
3 = SPRING
7 = FIN

MICRON RATING @ BETA 5000
0.5 - 1/2 MICRON
2 - 02 MICRON
5 - 05 MICRON
10 - 10 MICRON
20 - 20 MICRON
40 - 40 MICRON
70 - 70 MICRON

MEDIA
C - CELLULOSE
G - GLASS
P - POLYPROPYLENE
R - POLYESTER

SPECIAL CONSTRUCTION MATERIALS CODE

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