



AFM®



#### Product ID:

<b>Name:</b>	Dryden Aqua AFM® - Activated Filtration Media
<b>Usage:</b>	Replacing sand in all media filtration applications
<b>Material:</b>	Green recycled glass, uniquely shaped particles with activated surface
<b>Unique Features:</b>	Bio-resistant, self-sterilizing, sustainable, activated filtration media

#### Main Benefits:

- Over 30% lower running costs vs. sand
- Over 50% lower chlorine consumption and lower disinfection by-products vs. sand
- Filtration down to several microns at 100% efficiency without filtration aids
- More than 4 times longer lifecycle than sand
- Specifically engineered product, targeted for an efficient removal of priority metal oxides and other target constituents
- Guaranteed prevention of channeling & biological fouling on AFM® surface

#### About Dryden Aqua AFM® :

AFM® replaces sand in all filtration applications. It is manufactured from a specific glass type and processed to obtain the optimum particle size and shape, and then activated to increase the surface area by 300 times over crushed glass or sand.

The high surface area is negatively charged (zeta potential) to electro-statically attract organics and small particles. It also has permanent metal oxide catalysts, creating a high redox potential, to make AFM® self-sterilizing.



NSF/ANSI 61

## How to use AFM®

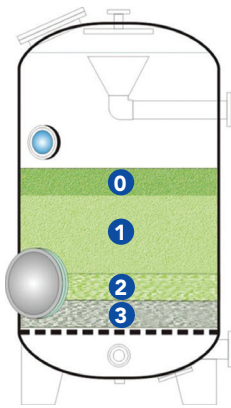


- Simply replace the sand in your media filters with AFM®
- AFM® has a 15% lower density than sand by weight:  
E.g. if your filter takes 200 kg of sand it will only require:  
 $200 \times 0.85 = 170$  kg of AFM®.

### Recommended operational parameters

Parameter	Value
Filtration velocity	1-15 m <sup>3</sup> /hr/m <sup>2</sup>
Back Wash velocity	35-55 m <sup>3</sup> /hr/m <sup>2</sup>
Max. operating differential pressure	> 0.4 bar
Back Wash Duration	for 5-10 mins
Water pH limits	3-9
Water temperature limits	1-100° C

### Recommended AFM® Grades and Arrangement from top to bottom (on a bottom plate), in Pressure Filters



Grade, Size (mm)	Commercial Purification	High Purification	Ultra Purification
<b>Grade 0</b> 0.25-0.50	n/a	20 %	60 %
<b>Grade 1</b> 0.4-1.0	70 %	50 %	20 %
<b>Grade 2</b> 1-2	15 %	15 %	10 %
<b>Grade 3</b> 2-6	15 %	15 %	10 %

#### Before first use of AFM®:

Back Wash the AFM® for 10-15 minutes, 3 consecutive times, with potable water and then rinse it for 1 hour.

#### Recommended applications for Dryden Aqua AFM®

Application Type	AFM® removes, for example:
Drinking water	Iron, Manganese, Arsenate and some priority chemicals
Municipal Wastewater	Phosphorous & Bacteria, BOD, COD & TOC
Industrial Process Water	Organic pollutants & oils, TSS, VSS & Particles < 1 micron
Industrial Wastewater	Colours and fine fibers, Residual mineral oils

### AFM® is Cost-Effective: Lifecycle Cost Analysis

