Model DWS-CMF-TWIN Water Purifier

High Flow 1.5 gpm + High Performance + Microbial Retention

Point of Use Drinking Water Purification system

NSF-P231 Certified Microbiological Water Purifier! *NSF/ANSI Certified Standard 42 & 53*

System Details:

Twin Filter Head Assembly

- Series Flow design w/quick connection built-in 3/8" I/O fittings
- Wetted parts are NSF/ANSI Standard 42 & 53 Certified by WQA Gold Seal

Cartridge 1 & 2: CMF Charged Membrane Filter Microbial Retention

- Certified Performance to **NSF/ANSI Std 42, 53 & P231**
- CMF microbial internal raw media - **NSF/ANSI Std 42 & USP Class VI**
- Filter Protection by Agion to protect media from microbial fouling

"Allows for spend cartridges to be disposed of as normal waste".

System meets FDA Standards

- All materials are FDA listed as acceptable for potable and edible liquid contact per CFR Title 21 section 177-1520

Health Safety and the Environment - CMF media is based on the naturally occurring element boehmite which has no known HSE issues. Boehmite has long been used as an additive to food products, digestive analgesics, industrial applications and as an adjuvant for human vaccines. The media has passed testing to NSF/ANSI standard 42 & 61 for potable water contact, USP Class VI testing and endotoxin testing.

Electroadsorptive technology for water purification and filtration - The 0.8mm thick pleated media construction offers a torturous flow path and far more surface area than competitive charged membrane products, for unmatched miro-organism retention capacity and filter life. The positive surface charge around each alumina fiber resists dumping or shedding of captured micro-organisms, even if the media becomes compromised.

This solves a potential problem seen by other membranes, including those used in nanofiltration, ultrafiltration or microfiltration

Flow rate: 1.5 gpm

Use one of our Alwaysfresh Pre Filters upstream of this system to protect the CMF from fouling due to dirt/sediment and for added performance requirements such as Lead, Chemicals, etc.

DWS-CMF-HF-6000L

DWS-CMF-HFC-1000

See Specification Sheet for Detailed Performance for these models!

CMF™ Charged Membrane Filtration ... *the inside story*

Mechanical Filtration

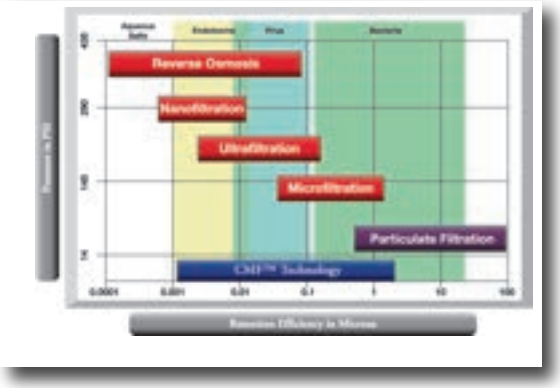
A Mean pore size of 1.5 micron is provided via glass structures which have Alumina fibers grafted to material. There are 400 such structure layers within the 0.8 mm thick material which creates a torturous flow path.

Adsorption / Retention of Organisms

The Alumina Fibers have a Zeta potential of 51 millivolts. This charge extends >1 micron along each structure to create a nearly total capture of the pore openings.

This provides a retention efficiency that approachs nano filtration with very low pressure requirements.

Strong Positive Zeta potential provides Electroadsorptive retention >= .002 micron rating. .



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Certified Performance

DWS-CMF-TWIN - (Cartridge #1 & 2 in Series) has been Certified/Validated performance tested using the protocols as recommended in the USEPA Public Drinking Water Guidance Manuals & US EPA P-231& approved by WQA without the protection of a Pre-Filter

CMF Media is Certified to NSF/ANSI Std 42 by WQA Gold Seal Program all other materials conform to NSF/ANSI Std 42 & Std 53 requirements.

Meets and exceeds NSF P231 Requirements

MS2 Bacteriophage Virus	>99.998%
RT Bacteria	>99.9999%
Cysts	>99.999%
Legionella pneumophila	>99.9999%*

*testing conducted by BCS Laboratory

Note: No detectable organisms after system!

Operating Specifications

MaxTemperature: 100 degrees F
Flow Rate: 1.5 gpm
Max Pressure 125 psi
Initial pressure drop : <1 psi

*Product performance based upon pre treatment to remove the dirt/particles which can compete for the absorption sites for microbial retention!

See performance test data sheets for individual contaminant's and reduction performance.

Use on potable water supplies, Public or Private water supplies requiring continuous purification, and for temporary use on non-potable water supplies suspected of being potable, excluding converting waste water to microbiologically potable water.

Photo courtesy of R. Ristau, IMS, Univ. of Conn

Active Layer:
- Has approx. 400 layers of charged fibers

Influent Water Quality Guidelines for Maximum LRV Efficiency

Performance Efficiency:
All CMF series cartridges require pretreatment for particulates, color, iron, manganese, & total organic carbon. Treatment must be installed upstream to maintain the life of cartridge.

Pretreatment Guidelines:

Turbidity	<=1 NTU
Color	10 units
TOC	<50 mg/L
pH	5-9.5
Iron	<0.3 ppm
Manganese	<0.05 ppm
TDS	<30 g/L
TSS	Low as possible to extend CMF life

Use of Pre-filter cartridge is required to remove dirt/sediment for extended filter(s) life.

Capacity Retention of bacteria, Virus, Cysts
Exceeds *1 million organisms per gpm of design flow rate. Challenged >* ***250 million*** *organisms per gpm of design flow rate during testing!*

Warranty:
12 months from date of purchase or 24 months from date of manufacture.

Market Applications

With the CMF-TWIN Charged Membrane Filter included in your treatment train it provides Protection from the Microbiological organisms that may be in your source water supply before, during and after Boil Order Advisory!

Home, Office Business & Industrial Applications for Superior Drinking Water filtration and a safe guard from the unknown issues facing our water supplies.

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AlwaysFresh
Water the way you want it

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