

SILICON CARBIDE ULTRAFILTRATION

HIGH FLUX – HIGH PERFORMANCE

H2O LARGE DIAMETER MEMBRANES FOR LIQUID FILTRATION

H2O Silicon carbide (SiC) ceramic membrane filters resist extreme mechanical, thermal and chemical stresses, making it ideal for challenging industrial water and wastewater applications.

H2O SiC membranes are highly porous, highly pure, recrystallized silicon carbide filters for liquid filtration.

The SiC membranes are characterized by high chemical and thermal stability and excellent trade-off between retention efficiency and permeate flux.



OIL & ORGANICS

H2O SiC membranes are designed to remove suspended solids, oil droplets & oil emulsions from fluids.

BACTERIA & ARSENIC

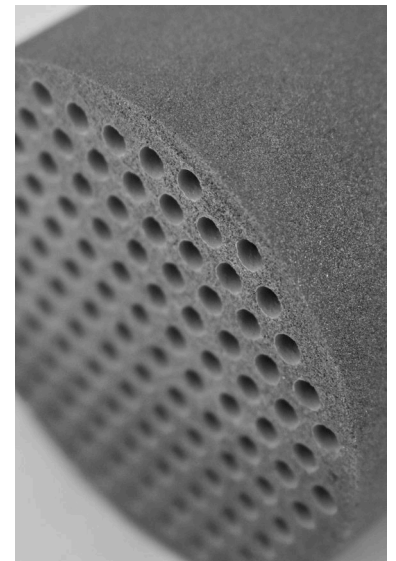
>99% removal of bacteria & arsenic

SUSPENDED SOLIDS

>99% removal of TSS, iron & other particulate metals & solids

HIGH TEMPERATURE

High temperature stability and excellent thermal shock resistance



RECYCLE, REMEDIATE, RECOVER

*DELIVERING NON-CHEMICAL, ENVIRONMENTALLY SUSTAINABLE SOLUTIONS
FOR HARD TO TREAT WATER APPLICATIONS*

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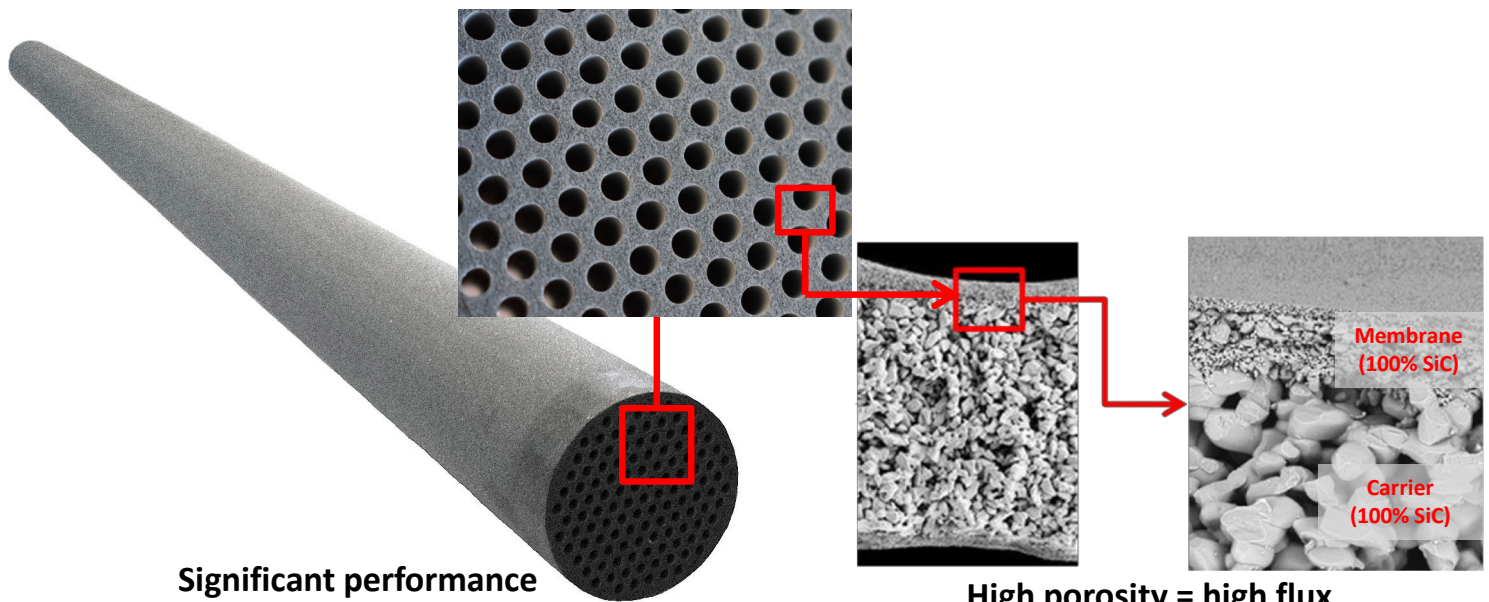
H₂O SiC Membrane Geometry & Material

Configuration:

Outside diameter	51 mm
Length	1200 mm
Channel hydraulic diameter	3 mm
Number of channels	121
Filtration area	1.34m ²
Membrane & carrier material	100% SiC
Available pore sizes	0.25 μm, 0.60μm, 1.0μm, 3.0μm

Performance Characteristics

Temperature tolerance	300 C	842 F
pH tolerance	0 - 14	
Membrane cleaning	Chlorine, acid, caustic, solvents, oxidizers	
Maximum TMP	2 bar	29 psi
Recommended cross-flow velocity	1-4 m/sec	3 - 13 ft/sec
Flux (clean water, 20C/68F, 1 bar)	12,000 LMH	7,068 GFD



Significant performance advantages compared to competing membranes

**High porosity = high flux
High flow rate, low power & small footprint**

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