

## SiCFM for Drinking water



### Applications

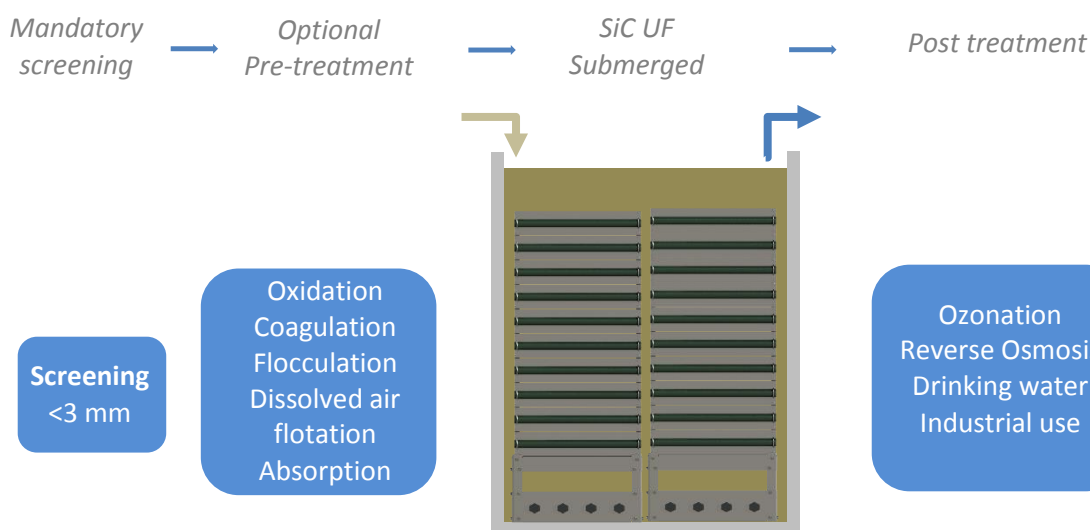
- Ground water → removal of Fe, Mn, As, Ra and other Suspended Solids (SS)
- Surface water → removal of Algae, Pathogens, Silt, and other SS

### Features & benefits of SiCFM membrane

- Hydrophilic material → clean water permeability of 10.000 LMH/bar
- Anti-clogging → membrane repels negatively charged particles
- Chemically inert → no degradation of membrane from any chemical or solvent
- Durable and robust → membrane material is the hardest manufactured material

### Operation features & benefits

- Highly compact designs
- High recovery - close to 100% mass balance
- Minimal maintenance & simple operation
- Lifetime exceeding 10 years
- Resistant to solvents, oil, grease, high temperature & high pressure
- Low energy consumption



## Proces

The SiCFM can be used in a wide variety of drinking water applications. The only basic requirement is a 3 mm screen prior to the SiCFM. However, to increase SiCFM performance, it is advisable to either flocculate, precipitate, etc, as per above chart. The SiCFM will subsequently remove turbidity, oil, SS and harmful pathogens providing excellent RO operation or drinking water quality.

Parameter	Unit	Ground water	Surface water
<b>Typical operational parameters</b>			
Membrane aircour rate	Nm <sup>3</sup> /hour	No air-scouring required	
Clean water permeability	LMH/bar	>10.000	
Recommended TMP range	bar (suction)	0,1-0,6	
Recommended flux rate	LMH	1.000	200-600*
Backwash flux rate	LMH	1500	1.000
Backwash pressure	bar	0,5-1	1-3
Recovery rate	%	99,5	99
Backwash frequency	hours	24-48	0,5-4
<b>Typical permeate quality</b>			
Fe, Mn	ppm	<0,02	
TSS	ppm	<1	
Turbidity	NTU	<0,2	
SDI	SDI	<3	
Bacteria removal	count	Log4	

\*depending on organic content