Submerged Hollow Fibre Filtration Cartridges for Water and Wastewater Treatment

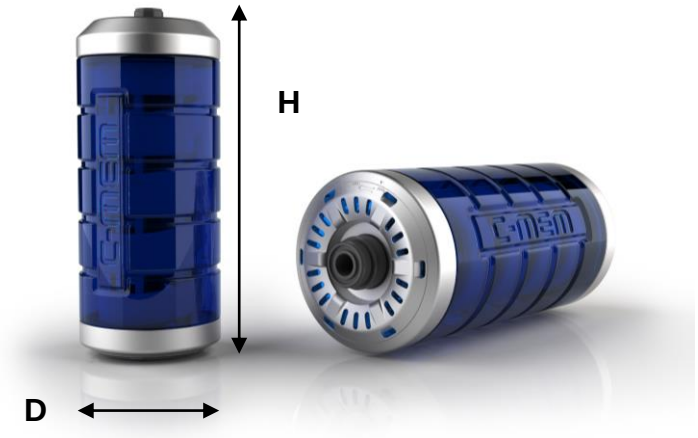
VERSION	**C-MEM cartridge:**	**March 2017**
PRODUCT DESCRIPTION	**Membrane Chemistry:**	**PE** (410-440µ, 740 mm +/- 15 mm, 1600 - 2000 fibres)
	Housing Shell / End Caps:	PE reinforced / PP reinforced / U-PVC / ABS
	Permeate Collection Tube:	U-PVC / SS 1.4301 (304)
	Potting Material:	Proprietary epoxy compound
	Membrane Construction:	Hollow fibre
	Antifouling:	Yes
	Pre-Wetting:	Yes

PRODUCT SPECIFICATION	**C-MEM Model**	**Flow Range (l/hr)**
	C-MEM cartridge 6 m²	30 – 600

OPERATING & DESIGN INFORMATION	Maximum Pressure (water, out-in):	3 bar 40°C
	Temperature Range:	0°C to 40°C
	Maximum Production Transmembrane Pressure:	0.7 bar
	Maximum Backflush Transmembrane Pressure:	1.5 bar
	Air scouring, if applicable:	6 Nm³/h – 4 hours/day max.
	Maximum Free Chlorine @ 25°C (77°F) or lower:	5000 ppm @ 9.5 pH during intermittent chemical backwash
	Maximum Total Chlorine Contact:	1.0 Mio ppm – hrs cumulative

PRODUCT DIMENSIONS

Model	Fiber Diameter (ID)	Membrane Area [min.]	D (mm)	H (mm)	Connection
C-MEM 6 m³	0.41 – 0.44 mm	~ 6 m²	164	410	1 ¼“



SFC Umwelttechnik
clean water for the world

Julius Welser Str. 15
5020 Salzburg
AUSTRIA

Tel. +43 (0) 662 / 43 49 02
Fax +43 (0) 662 / 43 49 02 – 8
e-mail office@sfcu.at
Internet http://www.sfcu.at

Start-up and commissioning:

C-MEM cartridges will be supplied integrity tested and are manufactured pre-wetted. They can be used for filtration without any pre-treatment. There may be some foam production immediately after starting filtration which shall disappear shortly.

Cartridge Storage Conditions:

New cartridges should be kept in their original shipping containers and crates until ready for installation. Cartridges should be stored as follows:

- Store the cartridges indoors and out of direct sunlight
- Store the cartridges a temperatures between 10 – 30°C
- Store the cartridges at relative humidity below 70%
- Store the cartridges in a horizontal position

Cartridge Cleaning Procedures:

General cartridge cleaning procedure before initial use of the cartridges and as required maintaining satisfactory cartridge productivity are outlined in this section. Different combinations of the flowing cleaning procedures, or custom-cleaning procedures that may call for proprietary chemical formulations, may be required to achieve satisfactory cleaning results.

Caustic Wash

- Use clean water (< 60 mg/litre $CaCo_3$ hardness) between 15 and 25 °C
- Circulate water through the system under standard pressure and flow conditions
- Add caustic (NaOH) slowly to achieve a pH of 12.0 (~ 0.5 wt% NaOH addition)
- Circulate caustic solution through the system for 20 to 30 minutes
- Drain and completely flush system with clean water at a water temperature between 10 and 30 °C

Caustic / Chlorine Wash

- Use clean water (< 60 mg/litre $CaCo_3$ hardness) between 15 and 25 °C
- Circulate water through the system under standard pressure and flow conditions
- Add caustic (NaOH) slowly to achieve a pH of 12.0 (~ 0.5 wt% NaOH addition)
- Add liquid sodium hypochlorite (NaOCl) to achieve a total chlorine concentration of 5000 mg/litre total chlorine (max.)
- Circulate caustic/chlorine solution for 20 to 30 minutes
- Check caustic/chlorine solution and add NaOCl as required to maintain total chlorine concentration
- Drain and completely flush system with clean water at a water temperature between 10 and 30 °C

Acid Wash

- Use clean water (< 60 mg/litre $CaCo_3$ hardness) between 15 and 25 °C
- Circulate water through the system under standard pressure and flow conditions
- Add citric acid (solid) slowly to achieve a pH of 2.5 (~ 0.5 wt% citric acid addition)
- Circulate acid solution through the system for 20 to 30 minutes
- Drain and completely flush system with clean water at a water temperature between 10 and 30 °C

NOTE:

ALWAYS ADD CAUSTIC BEFORE CHLORINE. NEVER ADD CHLORINE TO A NEUTRAL OR ACID SOLUTION.

ALL PROCESS LINES MUST BE COMPLETELY FLUSHED BETWEEN EACH CAUSTIC, CHLORINE, AND ACID WASH.

Contact Information: +43 (0) 662 / 43 49 02

Julius Welser Str. 15
5020 Salzburg
AUSTRIA

Tel. +43 (0) 662 / 43 49 02
Fax +43 (0) 662 / 43 49 02 – 8
e-mail office@sfcu.at
Internet http://www.sfcu.at