

EFFICIENT SOLID-LIQUID SEPARATION FOR ANY WATER QUALITY

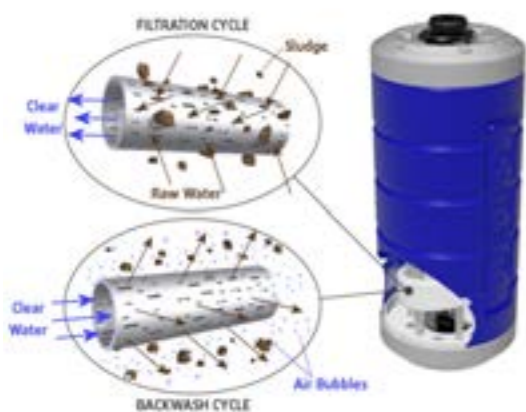
Sub-UF Module

IMMERSED ULTRAFILTRATION SYSTEM

The Sub-UF module is the heart of modern submerged ultrafiltration systems for water, wastewater and reuse.

Based on **C-MEM™** technology using robust, PFAS-free HDPE hollow fibre membranes and a pore size of only 20 nanometres (0.02 µm), the UF module enables the reliable removal of (particulate turbidity) turbidity and undissolved solids as well as 99.9999% of all bacteria, viruses and egg cells.

With 'outside-in' filtration, the raw water is passed through the membrane from the outside, while the purified water is collected inside the hollow fibre. The result is crystal-clear permeate – even with heavily contaminated inflows.



APPLICATIONS

WASTEWATER & REUSE

- Membrane bioreactor (MBR)
- Membrane moving bed biofilm reactor (MBBR)
- Landfill leachate
- Greywater recycling plants
- 4th treatment stage / hygienisation

INDUSTRIAL WASTEWATER / PROCESS WATER

- Biomass condensate treatment
- Process water treatment.
- Pre-treatment before NF / RO
- For agriculture, paper, food, beverage, chemical and wood industries

DRINKING WATER TREATMENT

- Removal of turbidity and microorganisms
- Groundwater and surface water
- Compact municipal drinking water plants
- Pre-treatment for UV disinfection
- Combination with C-ION™ plasma for arsenic, iron and manganese removal

PRODUCT HIGHLIGHTS

- HDPE hollow fibre (PFAS-free)
- Integration of hollow fibres into optimised cartridge technology for compact design, membrane protection and low operating costs.
- Low height, very high buffer volume
- Stable storage, no preservation necessary
- Chlorine resistance:
 - Up to 5,000 ppm free chlorine (250C, pH 9.5)
 - 1.0 million ppmh cumulative total chlorine contact
- Efficient chemical cleaning
- Highly effective air purging with low air consumption
- No regular filter replacement necessary with correct maintenance (SFC service and maintenance contract), service life of up to 10 years possible
- Compact design, space-saving for easy retrofitting
- Quick installation, connection ready
- Maintenance-friendly design
- Developed and manufactured in Europe

ADVANTAGES AT A GLANCE

- **Separation efficiency**
20 nm (0.02 µm) = removes 99.9999% of bacteria and viruses, safe removal of solids
- **Robust HDPE membrane**
PFAS-free, chlorine-resistant, durable
- **High surface density**
Maximum performance with minimum footprint
- **Low OPEX**
Energy-efficient cleaning, low chemical requirements
- **Modular integration**
Can be used submerged or pressure-driven
- **Ready to install**
Plug-and-Play, easy to maintain

TECHNICAL DATA

Parameters	Sub UF Modul 64 ⁶	Sub UF Modul 64 ¹²
Total filter area	384 m ²	768 m ²
Dimensions (L x W x H)	1.750 × 1.600 × 835 mm	1.750 × 1.600 × 1.165 mm
Weight (dry)	approx. 250 kg	approx. 325 kg
Frame material	Stainless steel SS 304 / 1.4301	Stainless steel SS 304 / 1.4301
Max. flow rate*	Up to 20 m ³ /h (at 0,5 bar)	Up to 40 m ³ /h (at 0,5 bar)

* depending on degree of contamination and temperature