

# ULTRAFILTRATION MEMBRANE

## Ultrafiltration water treatment

The ultrafiltration membrane water treatment process offers unrivalled treatment quality and health safety.



Ultrafiltration is the final stage of treatment and forms part of an overall treatment process adapted to the characteristics of the water resource.

Ultrafiltration eliminates particles, colloids and macromolecules, with residual turbidity reduced to less than 0.2 NTU, without altering the water's mineral salt balance.

Stereau uses polyethersulfone hollow-fiber membranes operating at low pressure. This benchmark material, which is insensitive to bacterial attack and easy to clean, enables front-end filtration even on loaded water, with the added benefit of reduced energy consumption and lower maintenance costs.

In front-end filtration, the membrane modules can be arranged horizontally and grouped together in tubes for greater compactness and accessibility.

### FIELDS OF APPLICATION

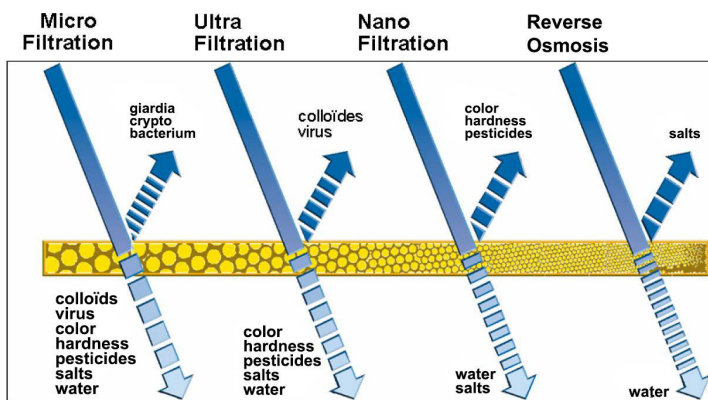
- Production or refinement of drinking water from surface water or groundwater
- High-quality industrial water production from biologically treated wastewater for reuse
- Pre-treatment of seawater for reverse osmosis desalination

# MEMBRANE UF

## UNSURPASSED TREATMENT QUALITY AND SAFETY

Ultrafiltration uses microporous membranes with pore diameters between 1 and 100 nm. Such membranes allow small molecules (water, salts) to pass through, while blocking high-molecular-weight molecules (polymers, proteins, colloids).

For this reason, this technique is used to remove macro-solutes and particles without altering the water's balance of mineral salts.



- Membranes approved by the French Health Ministry
- 99.99% controlled virus elimination
- Filtration from the inside to the outside of the fiber (in-out): more efficient washing



Vertical (Parthenay)

2 possible positions:  
Horizontal (Rochereau)



Thanks to high-performance cleaning techniques, Polyethersulfone membranes can filter charged water in frontal mode, reducing energy consumption and operating costs.

- Insensitive to bacterial attack
- Simplified shutdown procedures
- Highly resistant to chemicals allowing simple, effective cleaning.
- Washing without specific detergents, and therefore without industrial waste

A reference material: **POLYSULFONE**



## FEATURES

### Process performance:

- Turbidité : < 0.1 NTU
- Elimination bactérie : > 6 log
- Elimination Virus : > 4 log
- SDI : < 3

## REFERENCE

Rocamadour, East Meon (UK), Hawkley (UK), Hennebont, Rochereau, Roques-sur-Garonne, Basse vallée du Lot, Confolens, St-Sauveur Lendelin, Chenac, Lespielle, Arguenon, Pinel, Parthenay, Flamanville (eau de mer), Courtenay, Bois Joli,...

