

Process Water



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Challenge

Because of rising costs and growing supply challenges, more and more industrial and agricultural customers are using surface water instead of potable water. There are a few applications in which surface water is being treated by sandfilters. This treatment step partially reduces turbidity with only a limited efficiency for the removal of microbiology; therefore the treated surface water is only available for use in lowgrade applications.

Water treated with sandfilters cannot be used for high-grade applications because this treatment method does not remove microbiology, salinity or dissolved substances, such as nitrate. The treatment technology needed for removal of salinity is reverse osmosis, however reverse osmosis membranes are susceptible to microbiological fouling and silt that passes through sandfilters.

Solution

Norit X-Flow's hollow fiber ultrafiltration (UF) membranes screen all turbidity and microbiology. Norit X-Flow's UF membranes provide a simple solution which produces water that meets the highest standards for turbidity and microbiology. The water can either be used directly, if salinity and dissolved substances are within limits, or be fed to a reverse osmosis system to remove salinity and dissolved substances.

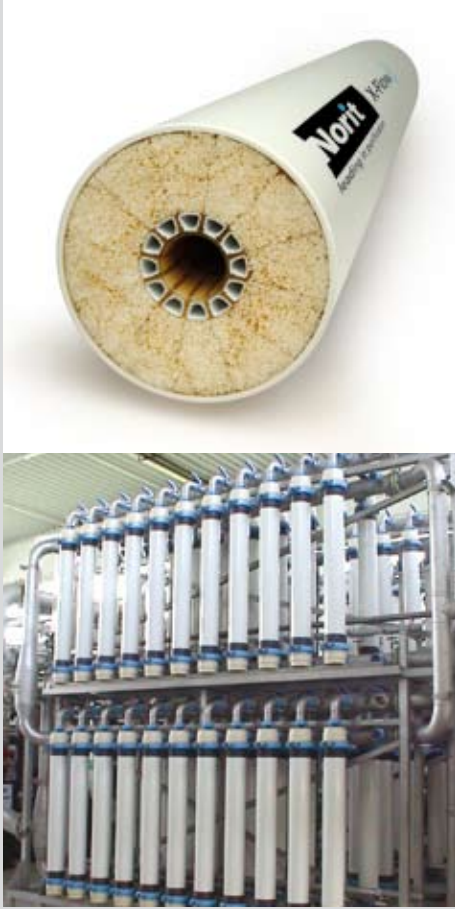
Norit X-Flow's hollow fiber membrane is available in two configurations:

- Norit XIGA™ – Multiple membranes, up to four, installed in horizontal membrane housings.
- Norit Aquaflex – Single membranes installed vertically and connected directly to feed and filtrate headers.



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Benefits

- Tight UF membrane
 - 6 log removal of bacteria
 - Turbidity \ll 0.1 NTU
 - Silt Density Index \ll 3
- Dead end filtration
 - Low energy consumption
 - Simple system
- Chemically enhanced backwash
 - Low operating pressure
 - Fully automated, no operators
 - Uses low cost chemicals
- Fully automatic operation
 - Logging of operating parameters
- Pressurized system
 - Fully enclosed
 - No operator exposure to fumes or aerosols
 - Small footprint
- Direct coagulation with inorganic coagulants
 - Short retention times
 - High removal of organics
 - Phosphate removal

Applications

- Chemical/PetroChem
- Process water
- RO pre-treatment
- Surface water



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Please visit our website to obtain information about your local support!

X-Flow BV reserves the right to make changes in the technical specifications at any time.

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Norit
leading in purification

X-Flow