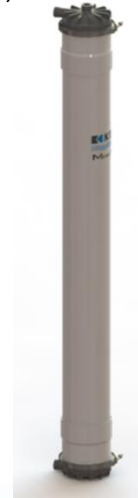


Nantra™ is a dual membrane process. It generates clean water that meets WHO guidelines from the water source leaving the contaminants where they are, in the river, lake or dam.

- NO Sludges to deal with.
- NO Chemical storage or handling\*
- NO Jar testing
- Fully automated with Nantra™ Smart IT
- Simplified Instrumentation and operation
- Feed water up to 3000 NTU
- Up to 90% colour and DOC removal
- NO alkaline reduction
- 6 Log cryptosporidium, giardia and bacteria removal
- Good removal of pesticides and herbicides
- Low energy consumption



**NANTRA™ is a two-stage process, fully automated and fully integrated.**

**Stage 1 is NantraUF™, seamlessly followed by Stage 2, NantraDOC™.**

Nantra™ will treat surface water with up to 3000 NTU turbidity without coagulation or other pretreatment. Colour and DO are reduced by up to 90%. There is nothing added to the reject streams of either process allowing the residuals to be returned directly to the environment. It, in effect, removed the water from the river, lake or dam, leaving the contaminants behind.

NantraDOC™ membranes are unique to Akvotek. NantraDOC™ is neither a nanofiltration nor an ultrafiltration membrane. It has the most desirable of the properties of both when it comes to water treatment without the disadvantages normally associated with the use of these technologies. NantraDOC™ is specifically designed to remove organic compounds while minimising the removal of divalent ions that can result in reduction in alkalinity and increase in corrosion potential. NantraDOC™ is a low energy membrane operating at less than 1.5 Bar without high recirculation. Typical Nanofiltration membranes operate at 5-8 Bar pressure and up to 5 times the permeate flow as recirculation.

In the Nantra™ process, the NantraDOC™ membranes are protected by the most advanced solids and turbidity removal membrane process on the market, NantraUF™, which incorporates the Koch Membrane Systems Puron MP membranes. Our NantraUF™ incorporates these membranes in a unique package that offers advanced control systems and virtually eliminate the need for sophisticated operation of the plants. The process self adjusts for changes in water quality without relying on instruments like turbidity meters that need constant calibration and are subject to failure.

## How Akvotek does it?



Like all Puron products, the membranes in the Puron MP are potted only at one end. This leaves the other end open to prevent the accumulation of solids in the element. This allows the operation of membrane on very high turbidity and suspended solids water – much higher than any other pressure membrane system.

Akvotek combine these membranes with our specifically developed software that allows the process to adjust the membrane flux, recovery, backwash sequency and operation process in response to changes to feed water quality. This is a seamless process that does not require any operator involvement. It can be fully monitored off site.

Lets Dance – Do the Nantra™ 2 step.

Contact Akvotek to discuss pilot plants and full laboratory analysis of our process. If you have a river, lake or dam and you need drinking water, call Akvotek.

[Info@akvotek.com.au](mailto:Info@akvotek.com.au)  
[www.akvotek.com.au](http://www.akvotek.com.au)