



# Nitro

Small footprint. Large impact.



Energy-efficient shortcut nitrogen removal for high-strength wastewater.  
Powered by MABR technology.

Perfect for high nitrogen containing streams like...



Anaerobic  
digestion and  
co-digestion



Leachate



Compost

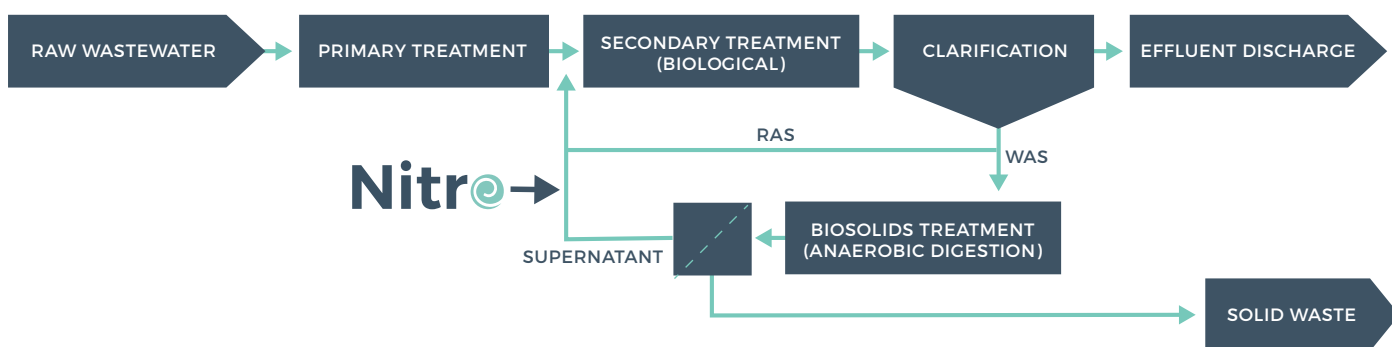


Swine and  
cow farms



Fertilizer

## Typical Process Diagram



## Why Nitro?



### Energy Efficient

Uses 40% less energy than conventional nitrogen removal processes



### Seamless

Non-invasive installation, one-pass, low maintenance, simple-to-operate.



### Powerful

More than 90% TIN removal can be achieved. Eliminates up to 20% of total nitrogen load to the plant.



### Robust & Resilient

Biofilm process protects from load shocks and low temperature.

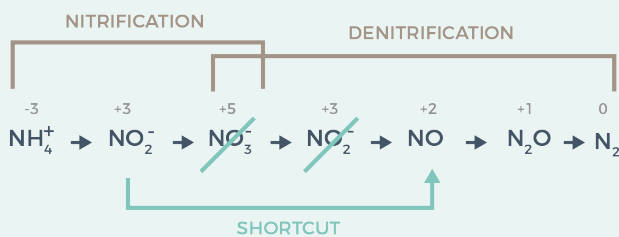
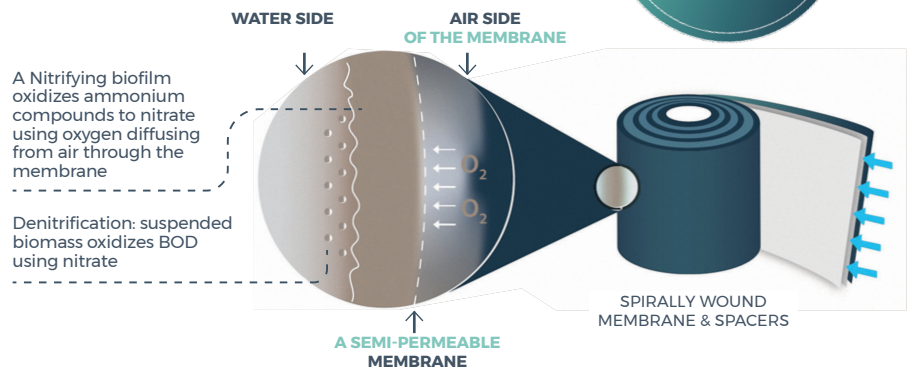


### Sustainable

GHG emissions reduced, ultra-low energy.

## MABR Technology

The MABR unique biological process enables simultaneous BOD, TN and TP removal, all in a single pass supported by highly efficient passive aeration which results in up to 90% less energy required for aeration.

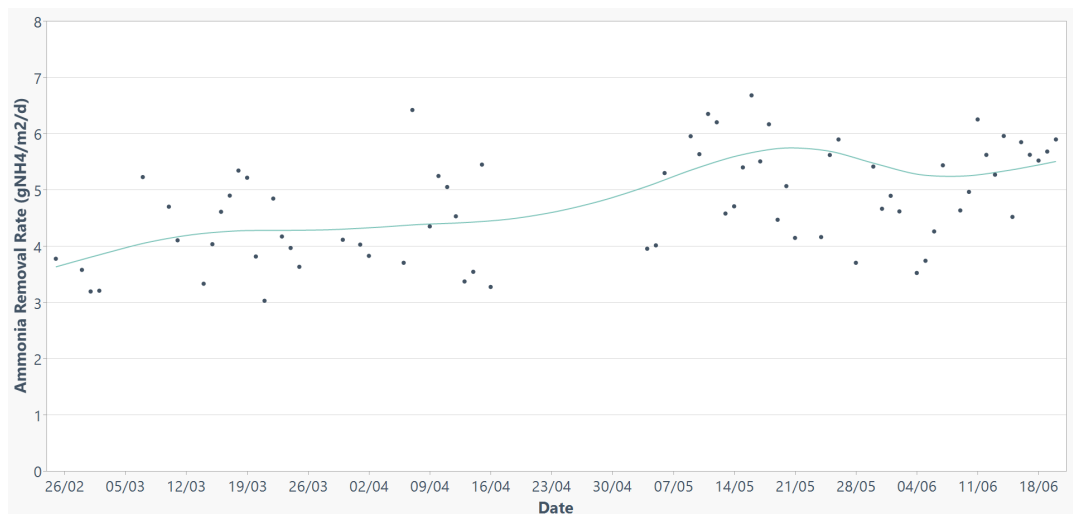


## Shortcut Nitrogen Removal

The shortcut nitrogen removal process saves energy by converting ammonia to nitrite, and then directly to nitrogen gas, skipping the conversion to nitrate in between.

## High Ammonia Removal Rate

Nitro plants achieve high ammonia removal rates resulting in very high effluent quality.



## Proven Track Record

Fluence has successfully deployed over 280 MABR plants around the world.

All installations have reliably and consistently delivered high effluent quality with low energy consumption and rapid deployment.

