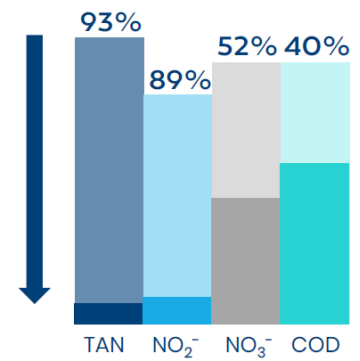


Electrochemical water treatment solution

Process for treatment and reuse of marine and brackish water, with high removal rates of pollutants (TAN, nitrite and dissolved organic matter), together with high disinfectant efficacy.





Electrochemical water treatment solution

Water treatment solution based on electrochemical oxidation technology, and is as a one-step solution for removal of pollutants, such as TAN, nitrite and organic matter, while providing in-situ disinfection. Only electricity is needed – no chemicals, gas, or heat. With a minimal need for new water intake, and a high efficacy on electrochemical unit, the solution has good environmental performance.

The solution is available for live-fish carriers (wellboats) and for RAS systems, either as a standalone system or in combination with a biofilter.

Fish health is well preserved and has been assessed with histopathological studies with very positive results. No macroscopic injuries are observed and all examined organs has excellent quality. Typical growth indicators such as SGR, FCR and SFR, shows good growth development.

The 3-step process consists of:

1. Pre-treatment: removal of solid particles, fats and oils
2. Main treatment: removal of ammonia, nitrite, organic material and pathogens
3. Post-treatment: neutralization of by-products from the electrochemical process, and restoring gas balance

The system has been successfully validated with salinity as low as 2.5‰ (ppt).

In summary, high TAN removal rate and disinfection offered by this solution ensures good water quality, ultimately leading to good development of fish, both in terms of health and growth.



MMC First Process has years of experience as a supplier of fish handling systems, that has both fish welfare and sustainability as its main focus. Transport and movement of fish in a gentle and humane fashion, ensures both enhanced fish welfare and high quality of the product that reaches the market.

The company has a wide range of products, ranging from specialized pumps, graders, water treatment systems, RSW systems, through to washing systems, packing lines and more.

*We truly are a **total** supplier for fish handling.*

- On-off switch, no adaption period
- Modular and scalable
- Compact design
- High degree of automation
- Full integration and surveillance
- High efficacy
- Predictable process
- Easy, robust and safe operation
- Process independent on pH and temperature
- Environmental friendly
- Excellent water quality
- High biomass security
- Securing fish welfare