ANOXKALDNES

Tracer™ MBBR Solutions

Removal of complex and harmful compounds from industrial wastewater

by VEOLIA Water Technologies

Treating contaminated waters biologically

Industrial effluents can often be loaded with special and complex compounds. Some of these compounds are difficult to remove and can also be harmful to the environment and living organisms if left untreated. As industry practices become more advanced and environmental regulations stricter, the need for addressing the treatment of complex compounds is apparent.
The combination of both adequate technology and process expertise is ideal when looking for compact and cost-effective biological treatment of wastewater.

Tracer™ is a family of specialized MBBR solutions that are unique for the treatment of specific compounds in industrial effluents.
By combining decades of expertise in process design, chemistry and microbiology, the team at AnoxKaldnes can find biological treatment solutions to complex or even toxic compounds. Biological treatment can not only transform and remove these compounds from the water, but also complement other physico-chemical processes, such as filtration or adsorption, which just transfer the pollutant from one environment to another. Stand-alone biological treatment or biological treatment complemented by a physical chemical process is often beneficial from both an economic and environmental standpoint.

These challenging compounds are often uncommon and therefore the knowledge of how to treat them is not widely known. Bench-scale simulations provide valuable information for determining the ability of microorganisms to degrade the substances but they are also good tools to accurately create full-scale designs.

With AnoxKaldnes bench-scale simulations, tailor-made processes can be developed for complex wastewaters. Our long and wide experience from bench-scale testing gives us an advantage in the operation and evaluation of the tests.

The solutions under the Tracer™ family were all found by first utilizing the bench-scale simulations available through AnoxKaldnes Services. AnoxKaldnes has a long list of compounds that have been tested throughout AnoxKaldnes' history. As such, AnoxKaldnes can quickly give feedback on the treatment feasibility of specific compounds.

Tests can further be done to accurately confirm the full-scale design. Other challenging conditions such as start-up and industrial shifts can also be tested using bench-scale simulations.

Advantages

Tracer™ solutions are based on well-proven MBBR technologies. AnoxKaldnes brings a deep knowledge of microbiology and wastewater treatment using MBBRs to the industrial world of complex compounds.

MBBR solutions have the following advantages:

- Smaller footprint compared to other biological treatment systems
- Robust and stable in the face of changing influen conditions
- Flexible to upstream and downstream processes
- Easily upgraded for future loads
- Low to no maintenance required
- Easy to retrofit into existing infrastructure

Feel free to contact us for more information about how AnoxKaldnes Tracer™ technology creates new possibilities in biologically removing harmful compounds from industrial wastewater.

Industrial applications for Tracer™ MBBRs

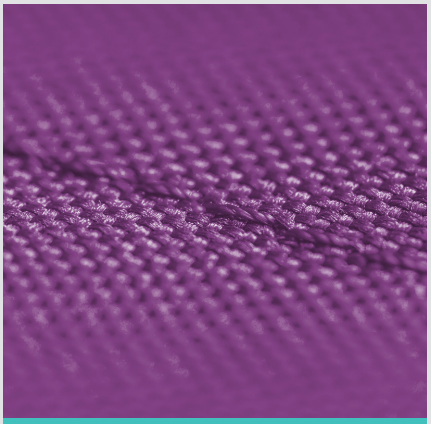
Industries around the world are facing tougher challenges as regulations are imposed that require higher levels of wastewater treatment prior to discharge. Heavy or specialised industries and those dealing with chemicals and pharmaceuticals often have a complex mix of contaminants in their wastewater and the options for treatment are limited.

Mining

Power and energy

Pharmaceutical

Chemicals



Textile

Pulp and paper

Oil and gas

A customized solution with a complete set of services

Tracer™ MBBR solutions offer tailor-made biological systems specially designed for the removal of the compounds of interest at a specific industrial facility. Cleaning cycles, production changes and ramp up/ramp down sequencing can often create disturbances in an industry's wastewater treatment plant.

By combining an AnoxKaldnes™ MBBR solution with an AnoxKaldnes Services offer, regular support for routine operational reviews and data analysis can be provided. More advanced services such as biological activity tests, diagnostic microscopy and on-site troubleshooting are also available.

For more information about AnoxKaldnes services visit
www.anoxkaldnes.com

Resourcing the world

AnoxKaldnes - Veolia Water Technologies
Klosterängsvägen 11A • 226 47 Lund
Tel. +46 (0)46 182150 • info@anoxkaldnes.com
www.anoxkaldnes.com

ANOXKALDNES
by VEOLIA
Water Technologies