



NIJHUIS FLEX-AERATION

The best aeration solution with the lowest TCO



NIJHUIS FLEX-AERATION

The best aeration solution with the lowest TCO

Aerobic treatment systems are based on a biological process operated and controlled under aerobic conditions (with aeration) that effectively treats COD and BOD into water, carbon dioxide and new biomass.

Besides the applied Nijhuis BIOCTOR biological technologies, the market of aeration products can be divided into surface aeration and bottom aeration.

Diversity and comparison

An important part of selecting biological technologies is diversity and comparison between several surface and bottom aeration technologies and products.

Nijhuis Industries flexible select, design, build, operate, maintain and monitor aerobic processes based on our broad range of **FLEX-AERATION** system to achieve the best aerobic treatment solution that is sustainable and has the lowest possible total cost of ownership.

A complete aeration package based on our industry expertise

Our objective is to design the most flexible and competitive solution for each application. Based on our industry expertise and knowledge, we will provide a complete aeration package.



Applications:

- New or retrofit plants
- Wastewater, waste-to-value or drinking water plants
- Treating COD and BOD
- Meeting your discharge limits

Customer benefits:

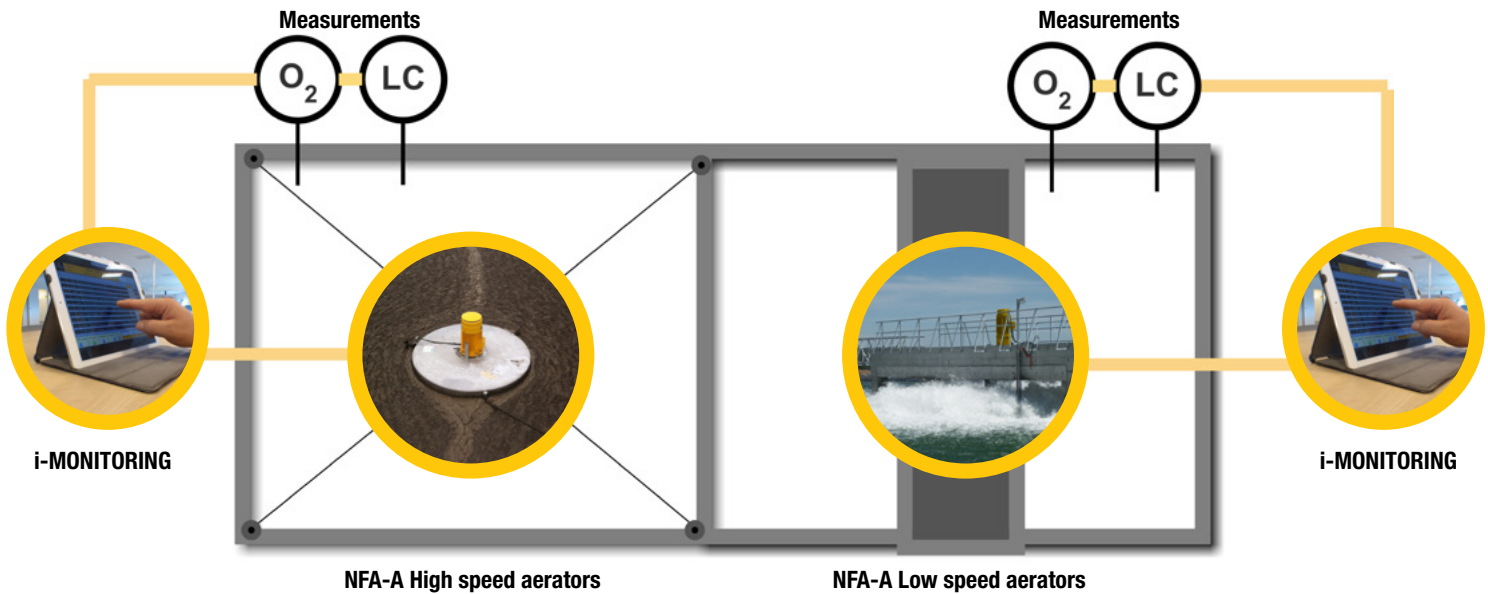
- The best aeration solution with the lowest TCO
- Selection is based on a flexible range of aeration technologies
- A complete Nijhuis aeration equipment package
- Added value services, such as design, build, operate, monitor and maintain
- Nijhuis expertise and application knowledge

NIJHUIS FLEX-AERATION

A complete aeration package

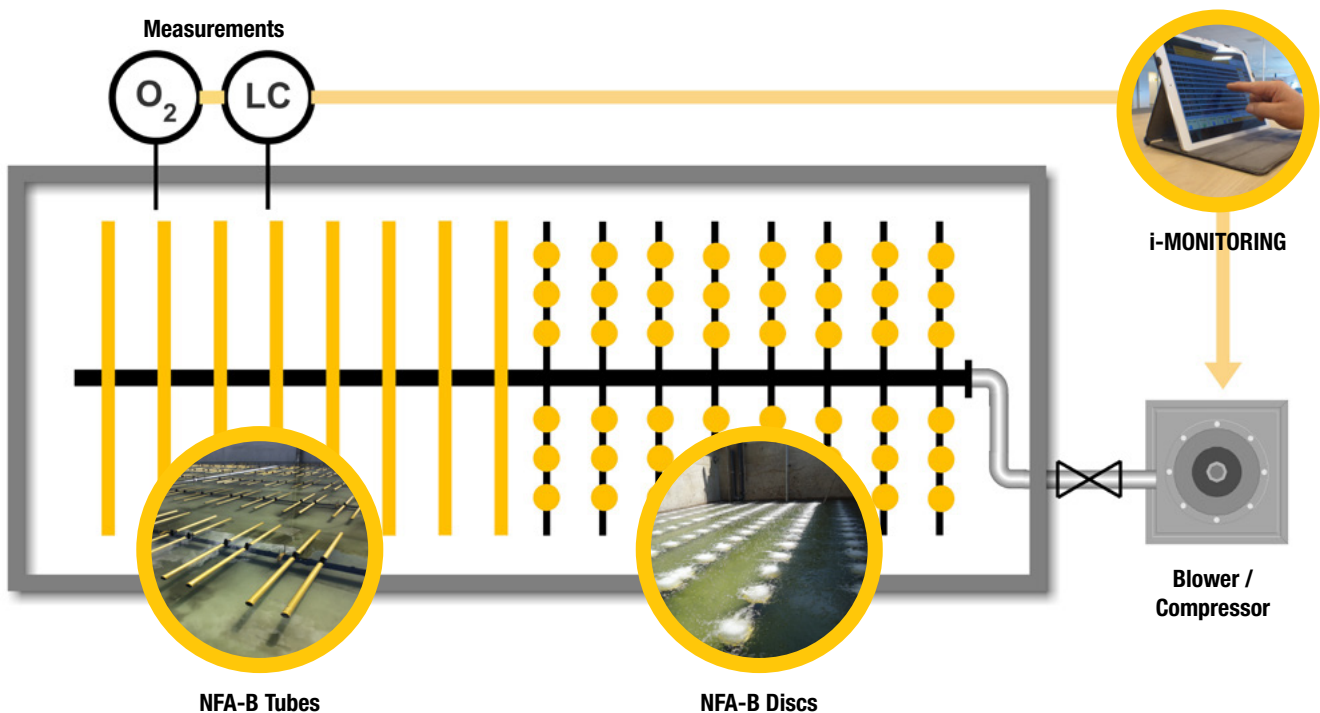
Nijhuis FLEX-AERATION surface (NFA-S)

Surface aeration solutions (NFA-S) can be applied with **high** or **low speed aerators**. NFA-S has a high oxygen transfer possibility and excellent mixing quality without affecting the sedimentation process of the sludge during the sludge water separation, for example in a clarifier. In general, for maintenance purposes the surface aerator can easily be removed. We will also select the right type of **aeration measurements** to monitor and control your system.



Nijhuis FLEX-AERATION bottom (NFA-B)

Bottom aeration solutions (NFA-B) can be divided into **tubes** or **disc diffusers**. Depending on your situation, tubes or disc diffusers membranes (both fine and coarse bubble types) can be installed into a new situation or retrofit. The frameless design of the diffuser body provides maximum aeration-active membrane surface. The aeration affected is uniform over the surface of the membrane. We will also select the right type of blower/compressor, aeration header, air support line and aeration measurements to **monitor and control the system**.



NIJHUIS FLEX-AERATION

How we select your aeration solution

We consider the following aspects when we selection your aeration solution with the lowest possible total cost of ownership:

- 1.** Type of wastewater and effluent requirements
- 2.** Plant design and footprint
- 3.** Local weather conditions
- 4.** Tank design and mixture
- 5.** Operational Expenditure
(Energy, maintenance, operational resources and spare parts)
- 6.** Capital Expenditure

