NanoKriti
Nanobubble technology

LAKE AND POND TREATMENT

Before

After

Artificial aeration is a widely used approach in lake treatment to provide improved aeration, however, traditional aeration techniques like fountains have been challenging due to the low oxygen transfer rate (OTR). Nanobubble aeration has emerged as a promising technology that utilizes nano-scale bubbles to achieve higher OTRs owing to their large surface area and unique properties such as longevity and reactive oxygen species generation.

What is nanobubble technology and its use in Lake aeration

Nanobubble technology involves the generation and application of extremely small bubbles, known as nanobubbles, in various fields and industries. Nanobubbles are typically on the order of tens to hundreds of nanometers in size and can be either gas-filled or liquid-filled.

+918264733672

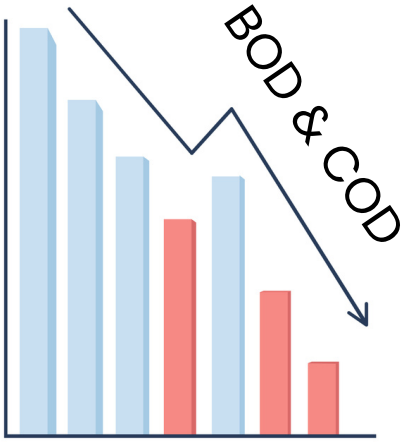
info@nanokriti.com

www.nanokriti.com

NanoKriti
Nanobubble technology

LAKE AND POND TREATMENT

Nanobubble technology is being explored for lake aeration and water quality improvement. Aeration involves introducing oxygen into a body of water, which is essential for maintaining the health of aquatic ecosystems.



Reduced Environmental Impact

Lakes often experience temperature stratification, where layers of different temperature and oxygen levels form.

Reduced Energy Consumption

Nanobubble requires less power consumption than the traditional aeration methods.

Increased Oxygen Transfer

Nanobubbles have a larger surface area-to-volume ratio compared to larger bubbles, which allows them to dissolve more efficiently in water.

Enhanced Mixing

The small size of nanobubbles promotes better mixing of oxygen and other gases throughout the water body.

Water Quality Improvement

Aeration with nanobubbles can promote the breakdown of organic matter, improving water clarity and reducing the potential for harmful algal blooms. Also, offers BOD & COD reduction

Preventing Stratification

Lakes often experience temperature stratification, where layers of different temperature and oxygen levels form. Nanobubble prevents stratification by diffusing throughout the water body.

+918264733672
info@nanokriti.com
www.nanokriti.com