

Effective in various genres

Agriculture/
Hydroponics

Fishing
industry

Food/
Factory

Cosmetics

NANO-BUBBLES GENERATOR

SORA



NANO-BUBBLES GENERATOR



NANO-BUBBLES
LAB

technical cooperation THAILAND



Rajamangala University of Technology



There are nine campuses in Thailand with a total enrollment of 150,000 students.
There are also many exchanges with Japanese universities, and agreements have been made for joint development.

"High-spec type capable of containing various gases in high concentrations."

SORA-GR HS

NANO-BUBBLES Generator

Body size: 530 (length) x 150 (width) x 570 (height)
220V



Drain hose connection



Nano-size

87~98nm

Dissolved oxygen measured DO value: **30.0 ppm** ~



water temperature 27.6°C

O2 oxygen



Capable of enclosing various gases

gas
Oxygen

gas
Hydrogen

gas
Nitrogen

gas
Argon

gas
Ozone

gas
carbon dioxide

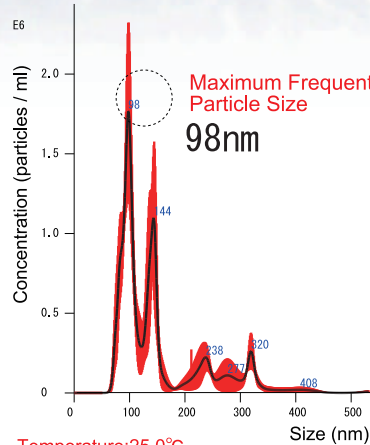
gas
fluorine

esp.

NANOSIGHT

pump-O2-rmutt-2 2024-02-08 16-05-03

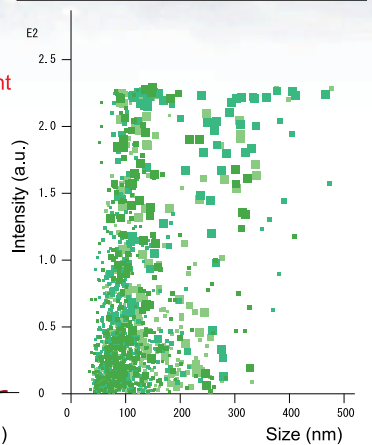
■ pump-O2-rmutt-2 2024-02-08 16-07-11~16-07-11
■ pump-O2-rmutt-2 2024-02-08 16-08-19~16-08-19
■ pump-O2-rmutt-2 2024-02-08 16-09-28~16-09-28



Temperature: 25.0°C

Averaged FTLa Concentration / Size for Experiment:
Error bars indicate + / - 1 standard error of the mean

Concentration (Upgrade): 8.79e+07 +/- 3.79e+06 particles/ml



(density/ml) pieces

87.9 million ~

"Eco-friendly type that takes in oxygen from the air."

SORA-GR AIR

NANO-BUBBLES Generator

Body size:
530 (length) x 150 (width)
x 570 (height)
220V



Outside oxygen

(air)
Oxygen

Nano-size

91~102nm

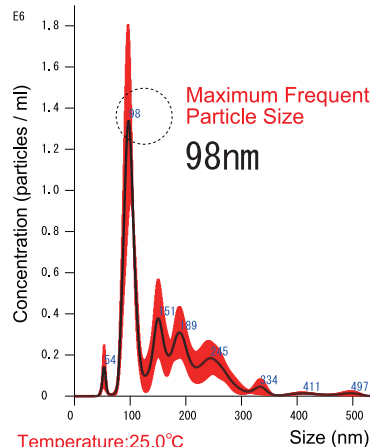
Dissolved oxygen measured DO value:
7.24 ~ 12.3 ppm

*The lower the water temperature, the easier it is for oxygen to enter the water.

NANOSIGHT

pump-air-2 2024-02-08 16-29-45

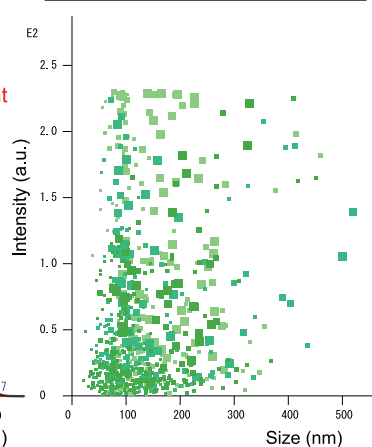
■ pump-air-2 2024-02-08 16-30-49~16-30-49
■ pump-air-2 2024-02-08 16-32-01~16-32-01
■ pump-air-2 2024-02-08 16-33-10~16-33-10



Temperature: 25.0°C

Averaged FTLa Concentration / Size for Experiment:
Error bars indicate + / - 1 standard error of the mean

Concentration (Upgrade): 6.72e+07 +/- 2.06e+06 particles/ml



(density/ml) pieces

67.2 million ~

Nano-size effect

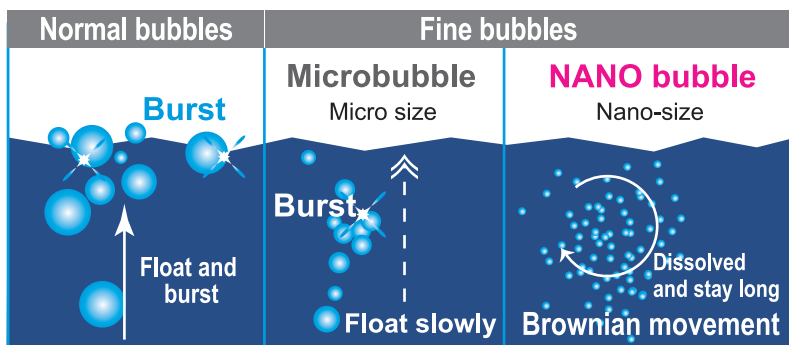
Physiological activation of organisms

Get into tiny gaps

Fine particle adsorption effect

Improved functionality

Cleaning without chemicals



Oxygen in normal water decreases with increasing temperature.

サイズの比較



Reference Video

nano bubble
Nano-size

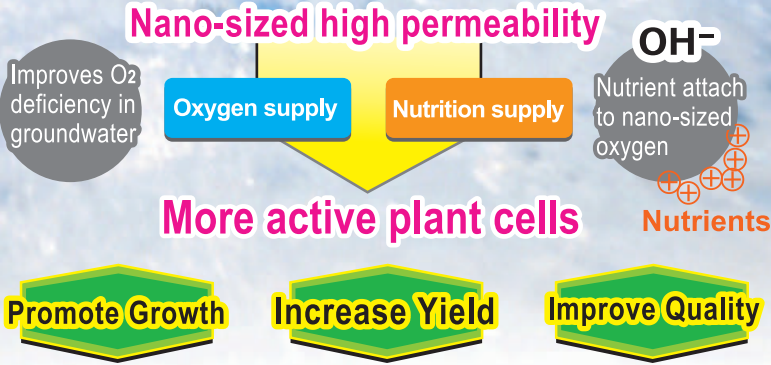
ISO Standard: Less than 1 μm

1 μm / 1000nm

Application in Agriculture

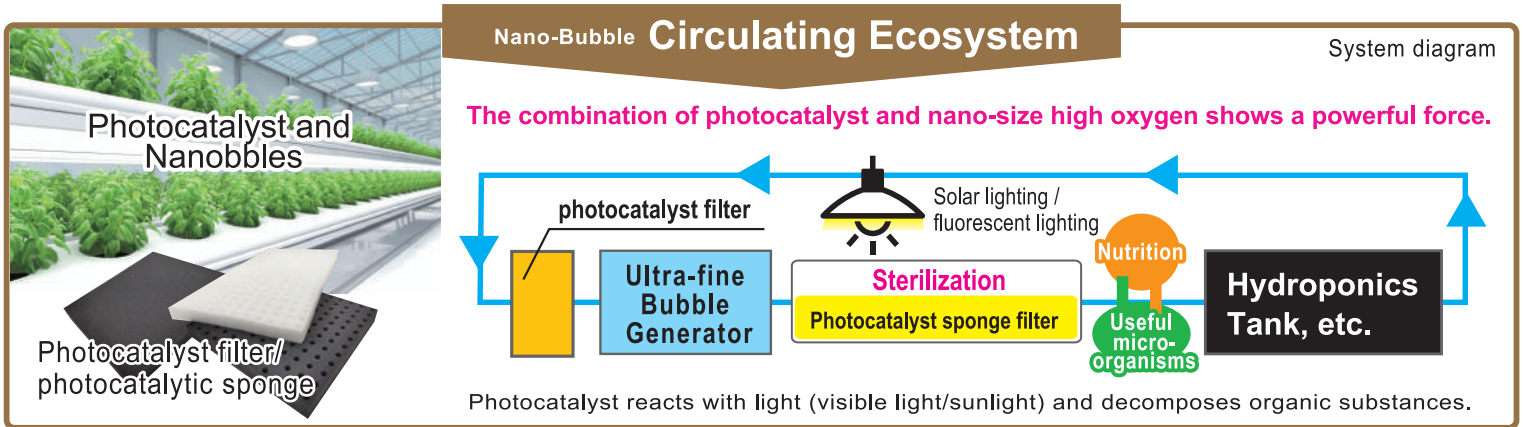
Dissolved oxygen in normal water decreases as the water temperature increases.

Absorb nutrients and oxygen from roots and leaves



The respiration speed of roots, and thus nutrients, is proportional to the amount of oxygen absorbed.

Prevents oxygen drop and pathogen spread caused by temperature changes in summer and winter



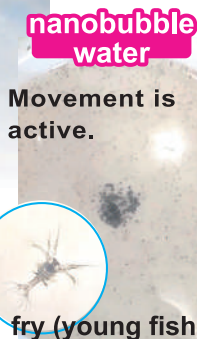
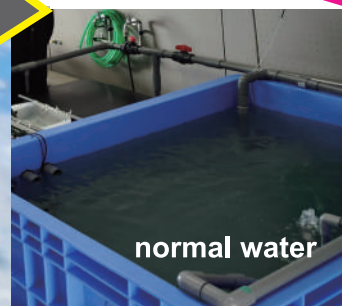
Water quality change after introduction of nanobubble generator

Application in the Fisheries Sector

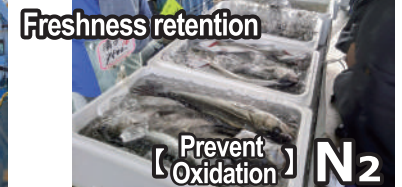
The increase in dissolved oxygen also increases movement.



Oxygen is also used during feeding. Can get enough food without worrying about lack of oxygen.



Fish are more active due to increased dissolved oxygen, and ammonia in the water is reduced due to the high oxygen content. Dirt that tends to accumulate on the bottom also rises to the surface, making water quality control easier.



At the shipping and sales stages, nitrogen nanobubble water is effective in preserving freshness. By internalizing the remaining oxygen in the body, oxygen is removed and oxidation is prevented.

"Can be filled directly with various gases. High-spec model."

SORA-EX 220V

NANO-BUBBLES Generator



Nano-size
61~93nm

Dissolved oxygen measured DO value:

~42.7 ppm

Body size: 600 (length) x 200 (width) x 570 (height)

Oxygen

Hydrogen

Nitrogen

Argon

Ozone

carbon dioxide

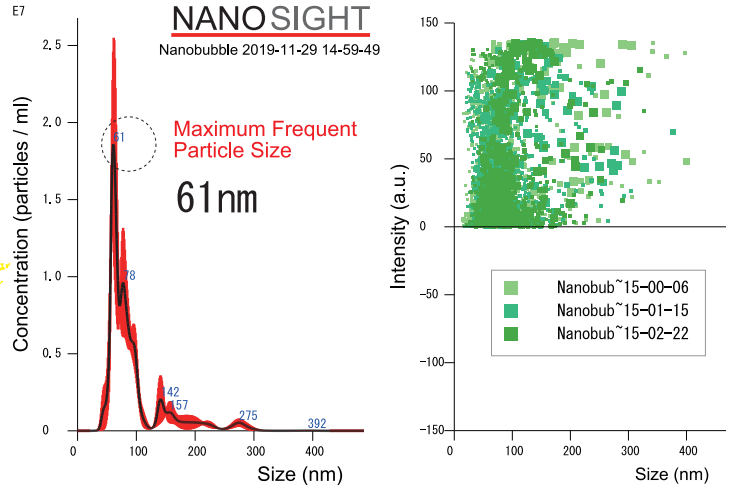
fluorine

esp.

Gas (O₂, CO₂ etc.) is finely crushed to nano size. Can generate 100L in about 45 minutes.

Science, health, beauty, food, etc.

Capable of enclosing various gases



Averaged FTLA Concentration / Size for Experiment:
 Error bars indicate + / -1 standard error of the mean
 Concentration: 6.00e+008 +/- 7.06e+007 particles/ml

(density/ml) pieces
600 million

Production of various nanobubble products

OEM

It can be used in various applications including shampoos, hair tonics, products requiring higher absorption, water and food.



Enhance moisturizing effect, cell activity and cleansing performance.



face lotion



Peeling gel
Facial cleansing gel



Shampoo, Conditioner
Body soap



Natural Soap

NANO-Bubbles

Nanobubbles are also effective in the cleaning and water treatment fields

The nano water itself has a surfactant effect. Enables cleaning without detergents or chemicals.



machine



Pesticide removal



Cut vegetables



Hot springs & pools



Wastewater treatment tank (aeration)



Filtration tank



Factory, farm wastewater

Fine bubbles activate microorganisms and increase processing capacity.

SORA

NANO-BUBBLES GENERATOR

Development : Rajamangala University
 Technical Cooperation :

NANOBEST JAPAN Company Limited
 Distributed by: Nakusul Japan LLC

<http://nanobestjapan.lsv.jp>

E-mail : nanobestjapan.hokkaido@gmail.com



Authorized Distributor