Yield Co., Ltd.

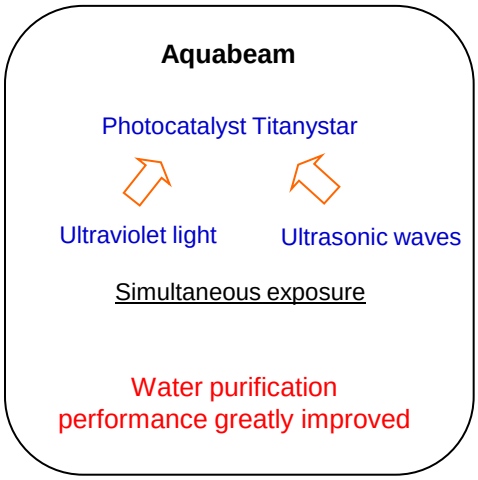
Aquabeam ®, Ultrasonic / Photocatalystic Water Purification System

High-performance water purification system for sterilizing viruses and bacteria and decomposing organic substances

Features

Aquabeam (Photocatalyst Titanystar plus ultraviolet light plus ultrasonic waves)
- Ultrasonic emits extremely high energy in water, not allowing ordinary photocatalysts to be used because it suffers flaking under such conditions.
- This combination has been achieved by using the characteristics of a highly activated and highly durable film from Titanystar, our core technology.
- First in the photocatalyst and ultrasonic industries, the combination of photocatalyst and ultrasonic is our original technology.

Conventional technology (Photocatalyst plus UV light)
- This technology can purify water but the treatment takes a long time.
- This technology leaves unsolved the problem of shortening the required treatment time, i.e. substantially improved performance.

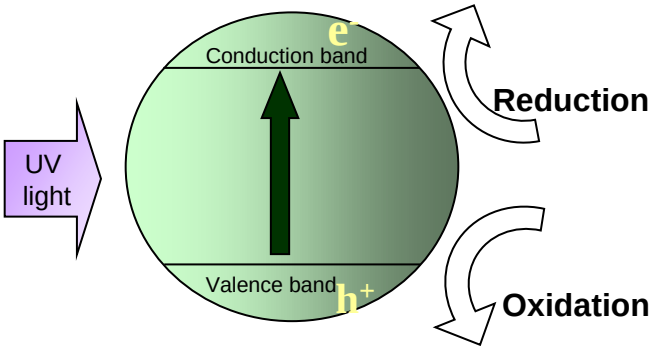


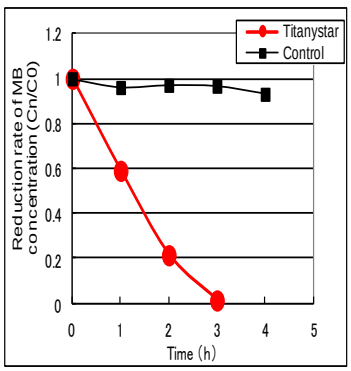
Overview (Technical principle, operation, etc.)

○ What is titanium oxide photocatalyst?

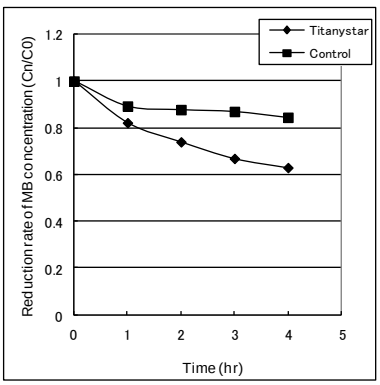
When the surface of titanium oxide photocatalyst is exposed to light (UV light), reactive oxygen species are generated on the surface and then oxidize and decompose harmful substances in contact with the species. The oxidizing potential then is stronger than that of ozone, chlorine or hydrogen peroxide, making most substances harmless. These excellent features enable titanium oxide photocatalyst to be used in a wide range of environmental cleaning applications such as antimicrobial applications and air and water purification.

There are two basic functions: oxidative decomposition and super hydrophilicity.





Aquabeam performance



Conventional technology performance

Track record of use

Suitable applications
- Sterilization of viruses and bacteria such as e-coli, mold and microcystis
- Decomposition of water- (or liquid-)borne harmful substances
  Drinking water, tap water, river and lake water, industrial functional water, medical water, electore water, hot spring and pool water, aquaculture water, ballast water, etc.

Unsuitable applications
- High-concentration polluted water
  Sewage water, industrial wastewater, etc.

Effects

Aquabeam lineup

Model AB-M
Treatment capacity: 20 m^3/h

Model AB-S
Treatment capacity: 10 m^3/h

Model AB-C
Treatment capacity: 5 m^3/h

Each unit in the Aquabeam lineup comprises the above main body and a control panel as a set.
Power supply: 100 V/200 V single-phase
We can manufacture units with treatment capacities other than those listed above.

Yield Co., Ltd.
New Business Division

http://www.yield-kyoto.com/en/
E-mail info@yield-kyoto.com
Address: 998-22 Suenokuchi-cho, Kamigyo-ku, Kyoto City
602-8382, Japan
TEL +81(0)75-467-2900 FAX +81(0)75-462-7003