

Creating Human Life - Life with Water -

Aiken Kakoki K.K.

Corporate Profile





AIKEN of Water

Passing down beautiful nature to future generations forever.

“Water” is the common property of all living things.

Considering this precious resource “water” as the most important thing,
Aiken Kakoki K.K. has worked hard on R&D wastewater treatment-related issues.

Expanding the business domain into daily life is our future task.

We will never lose our spirit of challenge
and aim to continuously make strides as a company.

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Greetings _____

Since our foundation in 1982, we have always strived to help in community development under a management creed of “contributing to nature with an eye on the future of precious earth.”

Today, we face many environmental challenges. Water is indispensable to our daily life. Wastewater is generated in processes associated with business development. Water quality problems now affect our daily life itself. Under such circumstances, we have met customer requests in the functions of wastewater treatment equipment and tap water/utility water treatment equipment, in order to respond to social demands, under our motto “Passing down beautiful nature to future generations forever” in the field of wastewater treatment. In addition, we independently developed load calculators and remote control operation systems for supporting operation managers, which have been well received.

We will continue to focus on excess sludge volume reductions and recycling in the field of industrial waste and proactively work toward an even better future. We intend to contribute to the harmony of “industry,” “humans” and “nature,” being true to our name “Aiken of Water,” and contribute to the development of more comfortable and livable communities in the future as well.

President
Masanori Iwata

[Five Commitments to Environmental Protection]

- 1 We will promote protection against environmental pollution and continuously make efforts toward improvements in our environmental management system.
- 2 We will comply with environment-related laws, regulations and ordinances, as well as other requirements and principles that we observe.
- 3 We will work toward the following action items as our priority activities for environmental management:
 - ①Promotion of energy saving
 - ②Ensuring a reduction in waste generation and recycling
 - ③Making efforts to create products of environmental load reduction types and technical development
- 4 We will establish environmental goals and objectives, and work toward maintenance and improvement in environmental conservation activities.
- 5 We will communicate this environmental policy to all employees and our partner companies to request their understanding and cooperation.

Wastewater Treatment Equipment

Diverse organisms exist on Earth as a result of 3.5 billion years of evolutionary history and these organisms have been deeply involved in the circulation of materials on Earth's surface. One outcome from this is the self-purifying action (the action by which pollutants that enter rivers, seas, and atmosphere, are purified by natural means, such as sedimentation, adsorption, decomposition by microorganisms, etc.) seen in rivers and streams. The wide-ranging research and development that we conduct is based on using the purification functions of nature and is aimed at purifying wastewater efficiently and circulating water back to the natural environment through human control and management of these natural functions.

Industrial Wastewater Treatment Equipment

With the development of industries, the waste generated in production processes has diversified greatly. We at Aiken Kakoki carry out rapid and accurate assessments of discharge volume and pollution conditions of such industrial wastewater for each case individually in order to propose a response based on optimum treatment and operation methods. We consider it our mission to keep Earth beautiful.

[EGSB]



For reinforced concrete

These are optimum for medium- to high-concentration wastewater treatment. The gas generated in the treatment process can be recovered and used as fuel. In comparison to aerobic treatment, the power requirement is extremely low and significant reductions in running costs can be realized. An existing facility can be upgraded in pretreatment function and expanded.



Unit type (two reactors)



Unit type (single reactor)



Pure oxygen carrier activated sludge treatment process

Unlike the conventional activated sludge treatment process, pure oxygen is used in place of air to increase the oxygen absorption efficiency and maintain a high dissolved oxygen (DO) level. This increases and stabilizes the treatment capacity, reduces excess sludge, and reduces the installation area.



Carrier fluidized bed treatment process

Optimum for medium- to high-concentration detoxification treatment. The process can be added to the functions of an existing facility.



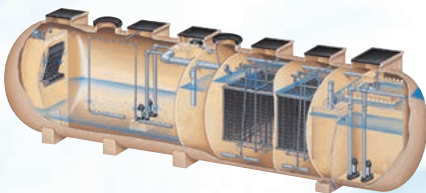
Membrane separation activated sludge treatment process

The combination of activated sludge treatment and an immersed membrane makes high-concentration activated sludge treatment possible and enables advanced treatment water quality to be secured with easy maintenance and control, space savings, and low cost.

Combined Treatment Septic Tanks

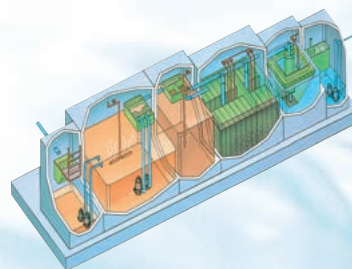
It is not an overstatement to say that in addition to wastewater discharged from factories, so-called domestic wastewater discharged from our daily living activities is a major cause of pollution of rivers and waterways. Domestic wastewater refers collectively to domestic miscellaneous wastewater from kitchen sinks, bathtubs, washing machines and toilets that are discharged from households. Such domestic wastewater can result in offensive odors, soil pollution, and other pollution problems if discharged without proper treatment.

We at Aiken Kakoki select septic tanks that are optimum for discharge volumes and pollution conditions of domestic wastewater discharged from buildings of various designs and construction from households to companies and factories to propose living and work environments that secure comfort and safety.



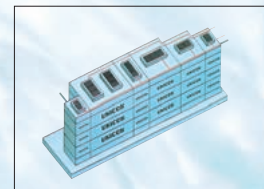
FRP septic tank

Combined treatment septic tank for household use to medium-scale applications.



PC septic tank

Combined treatment septic tank for medium-scale to large-scale applications. Can be installed more compactly than the FRP septic tank. Suited for cases where the installation space is limited.

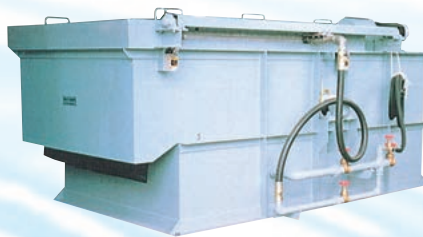


Wastewater Treatment-Related Equipment

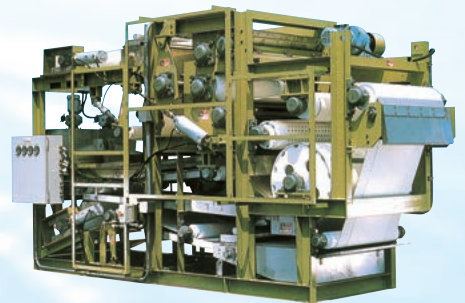
Wastewater treatment equipment combines and incorporates a variety of related equipment. Each piece of equipment serves an important role and purpose, therefore we make each piece to maximize the capability of the capability of the equipment. Aiken can build up optimum wastewater treatment systems combining a variety of related equipment and expertise, according to field and application. In an ever-diversifying industrial society, we always respond to customer need with optimum design and treatment.



Pure oxygen generator



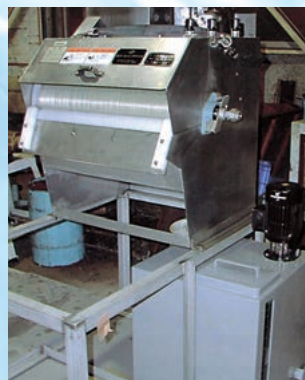
High-performance solid-liquid separator



High-pressure belt press dehydrator



Deodorization equipment



Rotary screen



Polydisc type dehydrator



Pump



Blower



Chemical injection equipment



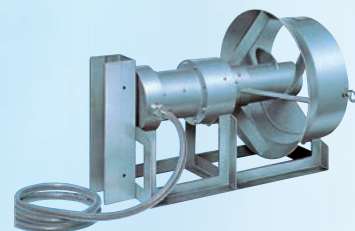
Pressurized flotation unit



OHR aerator



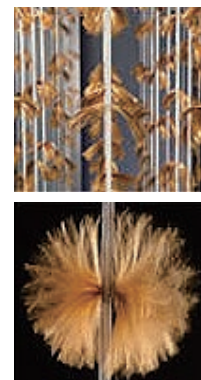
**Immersion type hollow fiber
MF membrane**



Submerged agitator



Carrier fluidized bed filter media



Fixed bed filter media

Tap Water/Utility Water Treatment Equipment Refrigeration Air Conditioner Water Treatment/Circulation Cooling

Tap water treatment system/utility water treatment system

Tap water, which we use without much particular attention every day, is indispensable to our daily life.

We provide a reliable system enabling everyday safe use of “water,” which constitutes 60% of the human body.

Water, including industrial water to support the industrial infrastructure of plants, also plays an important role in agriculture.

We make proposals across many fields to make a supply of safe water with no impurities.



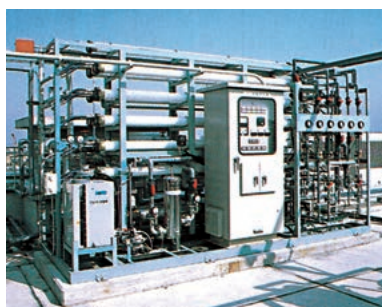
Automatic sterilization system



Cryptosporidium removal equipment



Iron removal and manganese removal processing equipment



**Ultrapure water equipment
(Reverse osmosis membrane)**



**Residual chlorine monitor
Ultralow turbidity monitor**



Fully automatic active carbon adsorption treatment equipment



**Urgent disaster response type small-portable seawater/
fresh water beverage processing equipment**

Water Treatment

Refrigeration Air Conditioner Water Treatment/Circulation Cooling Water Treatment

In the piping of refrigeration air conditioners, corrosion progresses by dissolved oxygen in water and corrosion troubles such as water leakage occurs. If a leakage accident occurs with a heat exchanger or in piping due to corrosion, it could lead to enormous costs and operational difficulties. Therefore, daily water treatment is very important.

Makeup water (tap water, underground water, etc.) for circulation cooling water contains scale components such as calcium and silica. It is condensed by scattering and evaporation of part of the cooling water in a cooling tower and adheres to heat exchangers and piping. Chemical treatment and blowing treatment are required to prevent scale adhesion. Excessive blowing in creates water usage charges and also cannot be said to be favorable water treatment from the viewpoint of water saving. We recommend minimum chemical treatment and automatic blowing management by appropriate water treatment.



Refrigeration air conditioner



Cooling tower



Remote monitoring equipment



Automatic blowing equipment



Multipurpose water treatment chemicals

Maintenance and Service

Inspection and maintenance for industrial machines

Water treatment equipment delivers its performance by normal functioning of each of the various related equipment combined. It is expected that the occurrence of a failure or deterioration in functioning will require a large repair cost or cause many other difficulties such as system breakdown. For example, in a plant, the manufacturing process may be disrupted.

However, failures and functioning deterioration can be prevented by daily management and periodic inspection and maintenance. We also recommend periodic inspection and maintenance to prolong the life of machinery and eliminate abrupt pairing costs.



Blower inspection and maintenance



Blower inspection and maintenance



Pump inspection and maintenance



Filter media replacement work



Inspection and maintenance for wastewater treatment equipment



Chemical cleaning work for refrigeration air conditioners

Water treatment related chemicals

Water treatment delivers its performance by a flexible combination of equipment, chemicals and engineering. We propose safe, low-cost chemical treatment by selecting equipment and chemicals appropriate for water quality and purpose of use, in addition to professional know-how and skill.

For wastewater treatment



Dehydration materials and coagulants



Oil treatment agent



Volume reducing agents for excess sludge



Countermeasure materials against activated sludge bulking



Countermeasure materials against activated sludge rising



Antifoaming agents

For tap water/utility water treatment



Iron-removal filter agents



Manganese-removal filter agents



Anthracite



Purified sodium hypochlorite



Chemical-cleaning chemicals for drinking water

< Various chemicals >

- Polyaluminum chloride
- Ferric chloride
- Aluminum sulfate
- Sodium hydroxide
- Other industrial chemicals

Industrial Instruments/Instrumentation Equipment/Analytical Equipment

Water treatment equipment consistently requires optimum operation management by collecting information from various measuring equipment regarding checks on normal operation, exertion of optimum performance and whether the operating method is appropriate. By total weight control, measurement is mandatory for some items. We propose measuring equipment and monitoring systems designed from the standpoint of the operation manager.

Industrial instruments/Instrumentation equipment



DO meter MLSS meter



pH meter



UV meter



T-N-P meter



Flowmeter



Load amount calculation system



Remote monitoring system

Analytical equipment



Multipurpose water quality measuring equipment



Portable water quality measuring equipment



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Machine and Equipment Installation Works (Standard-18 No. 9136)
Piping Works (Standard-18 No. 9136)
Business conducting general sales of poisonous and deleterious substances No. 265

Agents: Fukuoka/Wakayama/Nagoya/Kanagawa/Hiroshima
History: Founded on October 2, 1982
Established on June 17, 1983
Increased capital on March 28, 1996

Service companies

ANLET Co., Ltd. (Shikoku Service Center)
TACMINA CORPORATION..... (Shikoku Service Center)
Kurita Water Industries Ltd..... (Special agent)
Tsurumi Manufacturing Co., Ltd..... (Service center)

Main banks

Iyo Bank and Ehime Bank and Mizuho Bank



Aiken Kakoki K.K.

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Business

Design and construction of wastewater treatment equipment

Design and construction of tap water/utility water treatment equipment

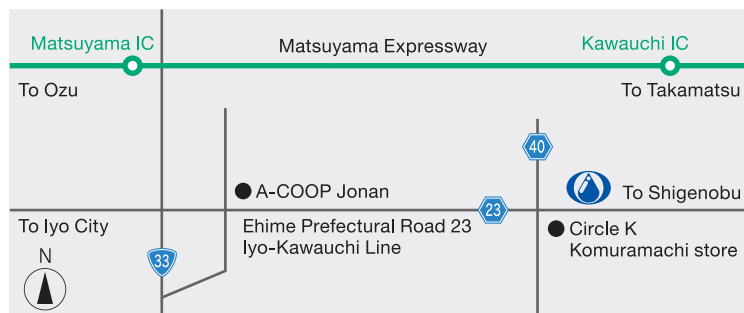
Design and construction of refrigeration air conditioners and circulation cooling-water treatment equipment

Inspection and maintenance of various types of water treatment equipment

Inspection and maintenance of industrial machines

Industrial instruments and analytical equipment

Various water treatment chemicals



<http://www.aiken-h2o.com/>