

Easy-to-maintain, energy-saving equipment
with very little generation of sludge.

Wastewater Treatment Equipment with Three-dimensional Grillwork Contact Body

Features

- Consumes 40% lower power than conventional wastewater treatment equipment using activated sludge.
- Generates less than half the quantity of sludge generated from equipment using activated sludge.
- Withstands inflow load changes and ensures ease of use and maintenance.



Eslote

Overview

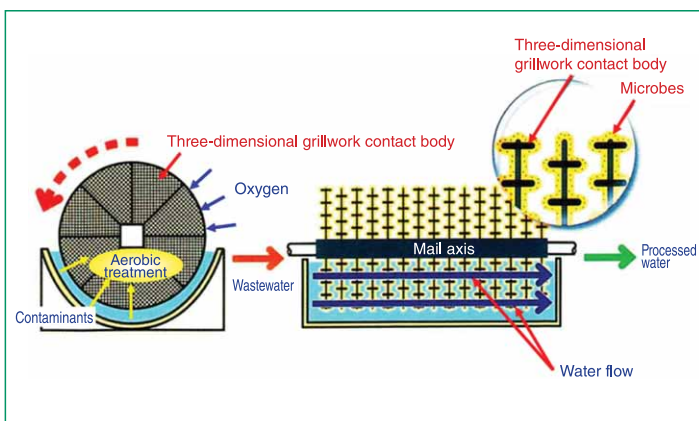
(Technical principles, actions, etc.)

Principle and Structure

The Eslote is wastewater treatment equipment that uses the microbe film on a three-dimensional grillwork contact body to purify wastewater.

The contact body rotates slowly while approximately 40% of the contact body is immersed in wastewater, takes in oxygen from the air, adsorbs contaminants from the wastewater, and breaks down the contaminants aerobically with the work of microbes.

The microbes proliferate in process of wastewater decomposition, and those that lose activity fall off and they are separated in the sedimentation layer of the equipment.



Structure of Eslote

Performance Characteristics

Compared with the conventional rotary disc contact body of existing wastewater treatment equipment, the specially designed three-dimensional grillwork contact body provides a great surface area with a large quantity of oxygen supply, and ensures high contact efficiency as a result of the water flow in the axial direction. Therefore, the possible BOD area load on the three-dimensional grillwork contact body is two to four times heavier than that on the conventional rotary disc.

Furthermore, like wastewater treatment equipment incorporating a conventional rotary disc, the Eslote is superior to equipment using activated sludge in the following points. ①Requires power only for the rotation of the contact body because no aeration blower is used, thus resulting in the power consumption 40% lower than that of conventional wastewater treatment equipment using activated sludge. ②The food chain of microbes adhering to the contact body is comparatively long, thus halving the quantity of sludge generated. ③Withstands load changes with no bulking, thus ensuring ease of use and maintenance.

Public Evaluation

The Eslote is an environmental technology proof model (with certification number 020-0407) granted by the Ministry of Environment under the Environmental Technology Verification Model Project.

Introductory Track Record

- In Japan:** Approximately 200 units (model type I and type II) have been delivered mainly for the wastewater treatment of food processing factories and chemical factories.
- Taiwan:** Four units (model type II) have been delivered for the wastewater treatment of solar wafer production facilities.
- Korea:** Four units (model type II) have been delivered for the wastewater treatment of solar wafer production facilities.
- Indonesia:** A unit each (model type I) has been delivered to two places for household wastewater processing. Sixteen units (model type I) have been delivered to 16 different places for hospital wastewater treatment.

Effects

- ①The Eslote does not consume much power with very little sludge generated, thus contributing to the establishment of a low-carbon society.
- ②The introduction of the Eslote into new wastewater treatment facilities makes it possible to save the cost of electric power, the cost of sludge disposal because the Eslote generates very little sludge, and ensures ease of use and maintenance, thus not requiring operators who have expertise in a special knowledge of wastewater treatment.
- ③The introduction of the Eslote into existing wastewater treatment facilities makes it possible to increase the processing capacity of the facilities with ease in the case of an increase in the quantity of wastewater or the density of contaminants in wastewater from factories.

file

017

Applicable field
Factory wastewater treatment and household wastewater treatment

Water Pollution

Energy Saving

New Energy

Measures against Global Warming
Natural Energy

Energy Recovery

Others

Air Pollution

Soil Pollution

SEKISUI AQUA SYSTEMS Co., Ltd. Environment Division

21st Floor, Tower West, Umeda Sky Bldg., 1-1-30
Oyodonaka, Kita-ku, Osaka 531-0076

● TEL / +81-6-6440-2601 ● FAX / +81-6-6446-2606 ● <http://www.sekisui.co.jp/>