

**Company name : DAIE INDUSTRY Co., Ltd.** Representative name : Takashi Kimura / Mr.

**Business Field :**

Design, manufacture, engineering work, and operational maintenance of devices for treating household wastewater and business facilities wastewater.

**Area of Specialty:**

High technical ability is used to manufacture FRP-made wastewater treatment equipment in plants, and inexpensive products with satisfactory workability are supplied.

**Technology / Product / Service PR Item No.1**

**【Category / name】 Septic tanks**

**【Characteristics, performance and applicable areas】**

**<Septic tank>**

This is a device for treating household wastewater in a toilet, kitchen, bathroom, or the like. This device is adapted to all facilities in which household wastewater is produced.



FCE type septic tank

**<FCE type Septic tank>**

The photograph in the upper left portion shows the most compact septic tank for a detached house.

This septic tank was the first to be certified as one to which an "Eco-mark" was assigned.

In actual use, electric power consumed by the blower is minimum. Electricity charges can be reduced by about 40 percent compared to that product of another company which has the largest share in Japan. The energy saving performance is the highest in Japan.

**<FCW type Septic tank>**

The illustration in the lower left portion shows a septic tank for a large-scale facility such as an apartment house, a store, a hotel, an office building, or the like. By arraying a plurality of tube-like objects of this type, it is possible to cope with facilities of various sizes.

As for the most common treatment performance of septic tanks in Japan, BOD for treated water is 20 mg/L.



FCW type septic tank

Both of the above septic tanks has performance such that the newly formulated Indonesian wastewater standard can be fully met.

From now on, not only is it intended to sell products having Japanese specifications, but also it is planned to develop new products complying with the environmental requirements and the wastewater standard in Indonesia, and to produce these products on-site.

As for on-site production of newly developed products, it is possible to hold down sale prices, thereby selling these products at prices that match on-site circumstances.

**【Appeal Points】**

- Toilets are converted to flush lavatories, resulting in the realization of hygienic toilet environment.
- Only a slight foul odor is produced.
- Treated water quality is so excellent that contamination of public water areas is prevented.
- In the case of septic tanks that are largely used in Indonesia, there are no bottom plates, with the result that fluid seeps underground. Therefore, it is feared that underground water is contaminated. If there are potable water wells in the vicinity of these septic tanks, there are cases where human health is affected.
- Daie Industry Co. Ltd. is a manufacturer engaged in the production of septic tanks for 45 years or more in Japan, and has variegated technical capabilities. Our company also plans to develop septic tanks and sewage treatment equipment that match the circumstances in Indonesia.
- We are groping for sales plans including future export not only to Indonesia but also to other Asian countries.

**【Types of businesses interested in Indonesia in the future】**

- A: Export and sale of products  B: Local manufacturing of products (at its own factory, factory of cooperating company or other)
- C: Seeking business partners for technical matters, etc. (including joint research)
- D: Seeking information sources (local business coordinator/advisor)      E: Other (description required)

**【Detailed description of business expecting to the potentials in Indonesia】**

A joint trading company will be founded in Indonesia to sell wastewater treatment devices. In the future, on-site production will also be taken into consideration.

**【Business type/line of company/organization that are targeted as possible business partner(s)】**

Our sights are set on business partners that will support us in terms of both sales and production in connection with the process where septic tanks are to be penetrated into Indonesia by means of the technical capabilities of our company. Desirable entities are enterprises that are concerned with construction work or have extensive sales networks, and enterprises interested in wastewater treatment business.

**【Record of Installation / Actual Performance】 (Use Application)**

All facilities used by people in the course of leading ordinary lives, such as detached houses, condominium buildings, office buildings, hospitals, and schools

**【In Japan】**

Many facilities such as detached houses, condominium buildings, stores, office buildings, schools and hospitals

**【Overseas】**

Products were delivered to China five years ago. Last year, two FCE7 type devices were installed in Medan, Indonesia.

**Main proprietary patents** Discharged Water Treatment Device and Water Discharge Method, No. 5698114; Septic Tank No. 5706366; etc.

**Main awards received** In 2013, FCE type septic tank of our company was granted the “Product of the Year” prize on the occasion of the “Eco-mark Award.”

**【Category / name】 Industrial wastewater treatment equipment**
**【Characteristics, performance and applicable areas】**

**<Industrial wastewater treatment equipment>**

Various types of wastewater are produced for specific purposes, such as wastewater types created during food production, stock farming, cleaning, artificial dialysis, and manufacture of a variety of products. These types of wastewater are treated by diverse methods suited for the respective types.

The photograph in the upper left portion shows wastewater treatment equipment in a meat processing plant. This equipment is installed on the ground, and is featured by a plurality of vertically installed tanks. In the case of installation on the ground, the construction period is short. This type of installation is suitable for modification work for existing facilities.



The photograph in the upper left portion shows a machine building and a chemical liquid tank in a food manufacturing plant. The photograph in the upper right portion shows a sludge dehydration machine. A treatment tank made of RC is buried underground.

In either case, we propose systems that are in compliance with the water quality regulations for discharge destinations. It is also possible to reuse wastewater by means of advanced treatment.

On the basis of many achievements, Daie Industry Co., Ltd. is able to design individual systems that match all sorts of wastewater and to manufacture treatment tanks of various shapes. Furthermore, consideration is given to the operational aspect after installation. Consequently, this equipment permits treatment function to be easily demonstrated.

**【Appeal Points】**

- This equipment is capable of meeting the new Wastewater Standard (P. 68/Menlhk/Setjen/Kum., 1/8/2016).
- By means of new technology, it is possible to take measures to reduce energy cost.

**[Types of businesses interested in Indonesia in the future]**

- A) Export and sale of products  B) Local manufacturing of products (at its own factory, factory of cooperating company or other)  
 C) Seeking business partners for technical matters, etc. (including joint research)  
D: Seeking information sources (local business coordinator/advisor) E: Other (description required)

**[Detailed description of business expecting to the potentials in Indonesia]**

Wastewater treatment equipment will be sold in Indonesia. In the future, consideration will be given also to on-site design and production.

**[Business type/line of company/organization that are targeted as possible business partner(s)]**

Our sights are set on business partners that will support us in terms of both sales and production in connection with the process where septic tanks are to be penetrated into Indonesia by means of the technical capabilities of our company.

Desirable entities are enterprises that are concerned with construction work or have extensive sales networks, and enterprises interested in wastewater treatment business.

**[Record of Installation / Actual Performance]** (Use Application) Various business facilities

**[In Japan]**

A wide variety of 150 or more business facilities

**[Installations abroad]**

None

Main proprietary patents

Main awards received

**Other Special Mentions**

Within the framework of the FY 2014 supplementary budget and the FY 2015 budget of JICA, our company was selected as an entity commissioned to carry out investigations with the aim of creating a proposal regarding overseas assistance business for small and medium-sized enterprises, with the result that we performed joint business in Indonesia. Then in FS 2017, subsequent to the proposal creation business, our company was selected as an entity commissioned to carry out penetration and verification business. We intend to conduct business with the aim of extending the penetration of septic tanks in Indonesia. In addition, our company was selected by the Ministry of the Environment of Japan as an entity commissioned to conduct model business for improving Asian water environment for the following purpose: New technology for wastewater purification will be used to develop equipment capable of meeting the new wastewater standard.

As mentioned above, we are making preparations to find our way into Indonesia by accumulating achievement results in the Indonesian market, and we are making efforts to find partners that can go ahead hand in hand with us.

## Company Profile

Company name (in English): DAIE INDUSTRY Co., Ltd (in Japanese): 大栄産業株式会社

Website: <http://www.daie-industry.co.jp/>

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Tel: +81 – 569 – 82 - 0338

Fax: +81 – 569 – 82 - 2114

Email: Transmission can be sent by making inquiries with the website.

Whether direct contacts from Indonesian companies can be made or not:

Tel:  Yes  No language to be used:  Japanese  English  Bahasa Indonesia  Other (specify)  No

Mail:  Yes  No language to be used:  Japanese  English  Bahasa Indonesia  Other (specify)  No

Department to Overseas development

contact section

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Business activities that have been conducted in Indonesia: (Launching Date: Sep, 2014)

A) Export and sale of products B: Local manufacturing of products (at its own factory, factory of cooperating company or other)

C) Seeking a business partner for technological matters, etc. (including joint research)

D: Seeking an information source (local business coordinator/advisor)  E: Other (description required) F: None

Space for describing other business:

Enterprises having a possibility of becoming joint management partners will be visited, and interviews will be performed.

The “Stakeholder Meeting for Dispersion Wastewater Treatment in Indonesia” to be hosted by the Ministry of the Environment will be participated in.

Business commissioned by JICA:

Investigation pertaining to creation of a proposal regarding overseas assistance business for small and medium-sized enterprises.