

JS Registers New Technology on its Innovation Program

-Steel digestion tank enabling sediment control and energy saving-

Japan Sewage Works Agency (JS) has been running the JS Innovation Program^{*1} since 2011. The program aims to encourage the development of new technologies meeting various needs of municipal wastewater business and facilitate the new technology adoption for our entrusted projects^{*2}.

JS newly registers the following technology on its Innovation Program.

Steel built digestion tank with quad-pit

Developers: JS, Ishigaki Company Ltd.

Summary and Features: This technology consists of a steel digestion tank and low energy consumption stirrers. The steel body digestion tank can reduce the construction period and costs. The four-divided pit at the bottom of the tank can control inside sediments by withdrawing sediments aggressively from the bottom along with digestion sludge withdrawal. The adopted stirrer and stable control of temperature difference contribute to energy saving.

*1: Note that JS Innovation Program verifies registered technologies for their applicability at JS's entrusted projects. The program does not evaluate the performance other than JS's commissioned projects.

*2: JS Innovation Program is valid for five years from the date of registration. If the registration is modified, validity starts on the date of the modification. Developers can re-apply only once to extend the validity of their technologies, which can be until a maximum of ten years.

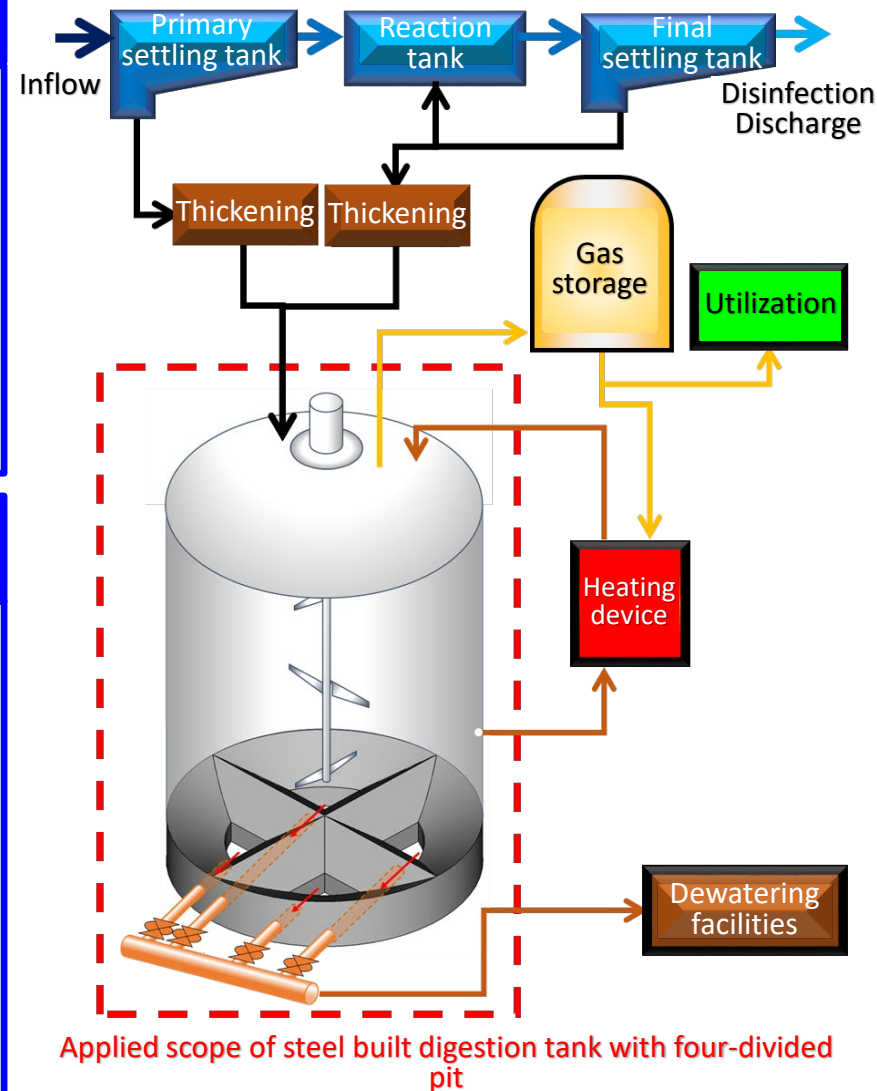
Steel Built Digestion Tank with Quad-pit

【Technology summary】

The technology combines a **steel built digestion tank** with **low energy consumption stirrers**. The digestion tank has a four-divided pit in its bottom, which can control inside sediments by withdrawing sediments aggressively from the bottom along with digestion sludge withdrawal.

【Scope of application】

- Applied sludge: Primary sludge, Excess sludge
- Supplied sludge property: TS 6% or less
- Facilities' scale: 1,000~9,000m³/unit
- Digestion: mesophilic digestion
- Others:
The thickness of the thermal insulation depends on the temperature, Prevention of salt damage in coastal areas



【Features and Benefits】

■ steel built digestion tank

- The concurrent process of prefabricated tank body and foundation works **reduces the construction period and initial costs**
- Flexible structure for a temperature sensor, inspection hole, etc.
- Inside corrosion protection: Type D for gas phase, Type A for liquid phase *JS Corrosion Control Manual (Regular inspection and repair every 10 years)

■ Four-divided pit

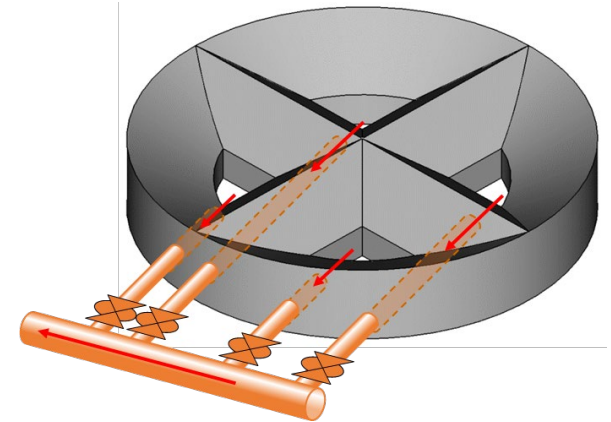
Each of the four divisions has a slope, pit, drawn pipe, and selector valve. The structure of the four-divided pit achieves withdrawing sediments from the bottom of a digestion tank aggressively along with digestion sludge withdrawal.

- Control sediments inside digestion tank
- Dredging costs can be reduced

■ Low energy consumption stirrer

- Stable control of temperature difference adjusts stirring speed to achieve energy saving

【Four-divided pit structure】



【Stable control of temperature difference】

