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- Pilot
· 50ton pilot
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SUMMARY

. Subject

“The sludge layer filtration application engineering development for a condition provincial foodwaste water control process improvement in Kyungki”

II. Objectives and Importance

This research which it see existing it is a development of the optimum technique the occurrence of the waste water of the foodwaste will establish a large amount separation technique which is efficient and economic it will be able to substitute the technique which is applied from the composting of the foodwaste trash and feeding chemical engineering just pretreatment process it will be able to minimize.

. Contents and scope of research

The separation of the solid is screw type decanter or centrifugal separator off mainly from pretreatment process of the existing foodwaste, or, it is a method which uses centrifugal machine etc. repetitively a biological wastewater treatment process, or an ocean disposal speculation without it respects the control of after that detachment misfortune it passes by or possibility control process it makes. The research which it sees investigated the connectedness of existing other control process and enough and it advanced an experiment.

- Identification of a foodwaste water characteristic by the first phase decanter

The enemy whom from the research which it sees it will apply in extra prize crisis decided in the first detachment misfortune which uses D Ken. Generally the food and trash after flowing, in compliance with a possibility work makes the process pass by which removes the foreign body. This time the enemy the material which is various contains and the extra prize is applied and it contains the particle characteristic material where the specific gravity is big. From the research which it sees consequently first detachment misfortune it applied a flotation and character it did.

- The deduction of optimum circulating water volume

From the research which it see the bubble occurrence system air of the fixed quantity which rises the person is becoming the structure which it does, consequently the bubble which flows by a flotation reactor of bubble quantity is decided in compliance with a circulating water content.

In order to decide the circulating water content which is necessary to the flotation of first foodwaste water it investigated the flotation quality which it follows in change of circulating water content. Also investigation of the flotation quality which it follows in cohesion system implantation it led and the circulating water content which is necessary to the solid-liquid separation of food and first phase foodwaste water it decided.

- The deduction of pilot plant plan factor

Detachment misfortune quality and circulation water content decision experiment it led and the research result which it comes to get and site circumstance plan factor of the flotation system which with base is derived suitability in field.

. Research result

- Foodwaste characteristic as a matter of analyzes
 - potential of hydrogen value
 - Total solids and suspended solids
- Flotation characteristic of foodwaste water
- Coagulant feeding value and circulating value
- The deduction of pilot plant plan factor
 - 50ton/day treatment

. Application plan of research result

It can be used as a basic data of foodwaste-water treatment for pretreatment of foodwaste water and design concept of facility.

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