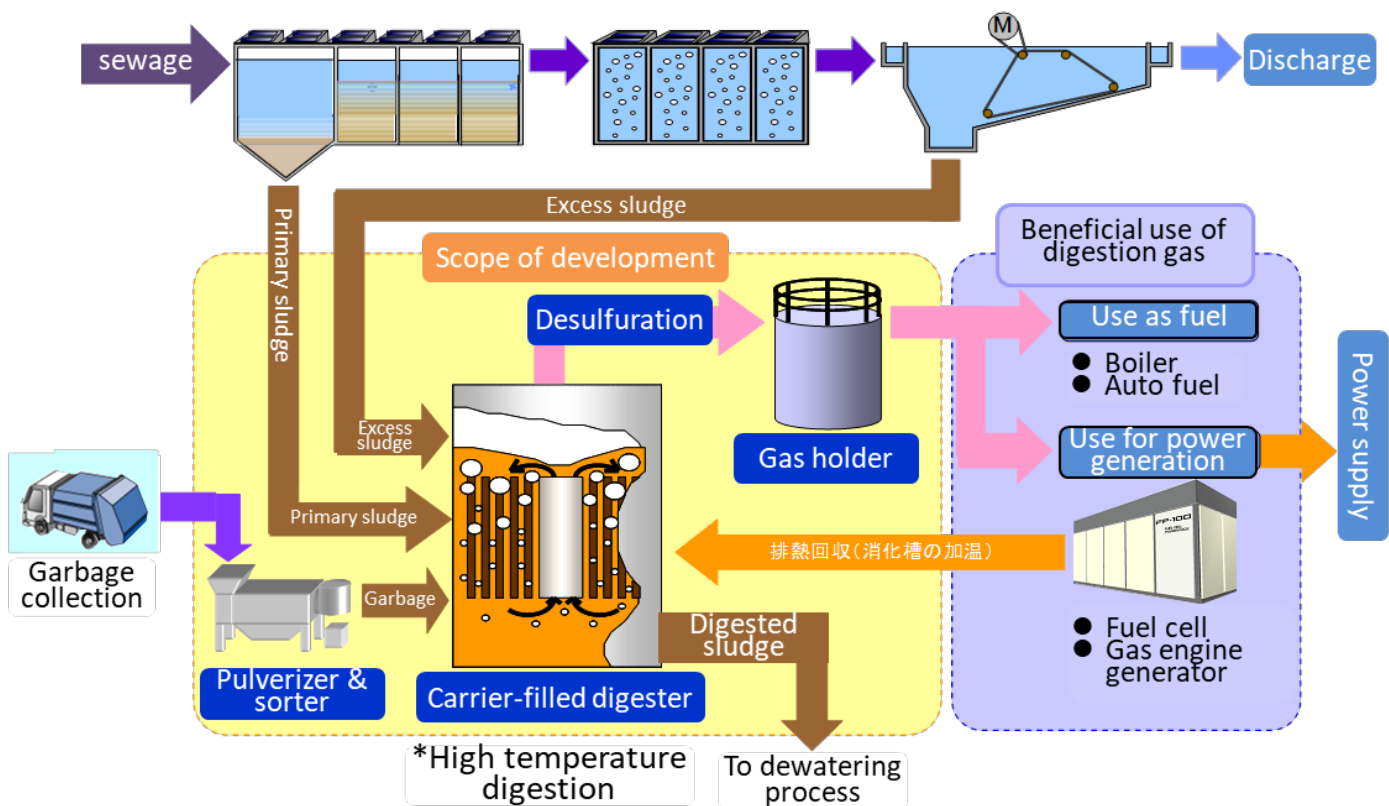


Carrier-Filled High-Speed Methane Fermentation

Developers: METAWATER . Co., Ltd.

Carrier filling, a stainless steel plate digestion tank and the control of digestion inhibition decrease digestion periods, reduce construction costs, and achieve a stable fermentation



Needs

- Integrate local biomass
- Efficient digestion treatment and increase digestion gas yields

Benefits

- Equal or higher sludge decomposition rate and digestion gas yield with shorter retention time of 1/2 to 1/6 than the conventional mesophilic digestion
- A smaller digestion tank than the conventional system reduces costs
- Adaptable to a load fluctuation. Enable a mixing treatment with other biomass.
- An automatic fermentation control such as NH₄-N concentration and charging load eliminates ammonia inhibition.