Lifestyles

Sewage Treatment, Sludge Melting Systems

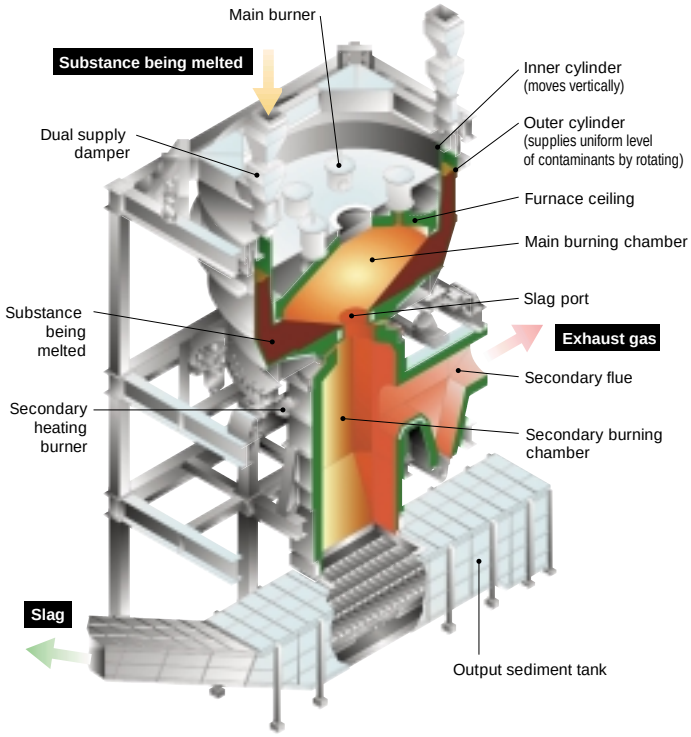
As wastewater networks grow more sophisticated and better quality is required in treated water, disposal of sludge from sewage treatment plants is becoming increasingly problematic.

Kubota's wastewater sludge melting furnaces make groundwater sludge less toxic and contribute to a higher level of recyclable material. In the furnaces, the moisture content is first vaporized, and then organic substances are decomposed and combusted. The combustron heat is then used to melt the remaining inorganic substances into slag. This slag encases toxic substances inside its glass form, and so is non-polluting. It can be reused as construction material or as aggregate for concrete. In addition, since sludge can be melted without auxiliary fuel, little energy is required for operation, and the waste heat can be used as a heat source for drying the slag, for increased efficiency.

Compact integrated septic tanks

Integrated septic tanks, which collect and treat wastewater from a household's toilet, kitchen and bath, are being promoted as a means of preventing river contamination by household wastewater in areas without sewer systems.

Kubota's compact integrated septic tanks not only assure a sanitary and comfortable household environment, but also reduce the burden on the natural environment. In a highly sophisticated, high-density activated processing system, a porous film is submerged in the water to increase the efficiency at which contaminants are removed, lowering the tank water's BOD to at least 50 milligrams per liter before the water is released. This system is ideal for use in areas where particularly high water quality is called for, such as areas where the water serves as the source for urban water supplies, as well as in cases where treated water is reused in cleaning and sprinkling systems.



Structure and operation of the melting furnace

Wastewater sludge incineration furnace

Kubota septic tank, KM model

Waste plastics Liquefaction Plant

Much of the plastic we throw away ends up in landfills, where it takes up space and does not corrode easily. Burning it results in high temperatures that can damage furnaces, as well as producing dioxins. Thus, disposing of discarded plastic presents major problems.

Taking advantage of the fact that 80% of the plastic found in urban trash is polyolefine, which can easily be converted to oil, Kubota developed a plant to do just that. Once discarded plastic has been turned back to oil, it can be used as fuel for diesel engines, along with other applications. These plants will undoubtedly make a significant contribution to reducing the volume of discarded plastic that ends up in landfills, and at the same time to conserving natural resources.

Fountain Equipment

A fountain in a public place revitalizes the area around it with the presence of nature, bringing both charm and comfort into urban surroundings. Kubota's fountains are designed on the theme of forging a new and creative relationship between people and water.

At the same time, fountains perform the important function of river water aeration, lowering the BOD in the water. Kubota's fountains play an active role in Osaka's Dotonbori River, improving the water quality and bringing pleasure and peace to passers-by.

Dotonbori River in Osaka

Waste Plastics Liquefaction Plant

Sagae Dam (Yamagata Prefecture)
This huge fountain, Japan's largest, propels water 112 meters into the air as part of a water conservation facility.