

HYDROTHERMAL TREATMENT SYSTEM

Abstract

The hydrothermal treatment system (1) includes: a hydrothermal treatment device (10) which performs a hydrothermal reaction of waste containing organic matter; an adjustment tank (11) which wets a hydrothermal treatment product obtained from the hydrothermal reaction; a first transport device (21) which transports the hydrothermal treatment product which is wetted in the adjustment tank (11); a pressure-separation device (12) which applies pressure to the hydrothermal treatment product transported by the first transport device (21) to separate the transported hydrothermal treatment product into hydrothermal treatment liquid and residue; a solubilization tank (13) which stores and heats up the hydrothermal treatment liquid separated by the pressure-separation device (12); a second transport device (22) which transports the hydrothermal treatment liquid which is heated up and solubilized in the solubilization tank (13) back to the adjustment tank (11); and a gas production device (14) which produces gas by utilizing the hydrothermal treatment liquid stored in the solubilization tank (13). The second transport device (22) transports the hydrothermal treatment liquid to the gas production device (14) when the concentration of organic matter contained in the hydrothermal treatment liquid stored in the solubilization tank (13) is at a predetermined concentration.

(Fig. 1)