

ABSTRACT

METHANE FERMENTATION PRETREATMENT APPARATUS

A methane fermentation pretreatment apparatus is provided that can remove small-sized unsuitable waste for fermentation, which is made fine by a solubilization treatment and passed through a screen, from a solubilized liquid. The methane fermentation pretreatment apparatus (A) includes a solubilization tank (4) in which a solubilization treatment is performed on organic waste (S3); a screen (5) that is first solid-liquid separator for removing unsuitable waste for fermentation contained in a solubilized liquid (S4) obtained by performing a solubilization treatment in the solubilization tank (4) on the organic waste (S3), by causing the solubilized liquid (S4) to pass therethrough; and second liquid-solid separator (7) having a hydrocyclone (10) that receives a solubilized liquid (S6) passed through the screen (5) and separates out the unsuitable waste for fermentation contained in the solubilized liquid (S6) from in the solubilized liquid (S6) by causing a centrifugal force to act on the solubilized liquid (S6), and a drainage device (11, 13) that receives the unsuitable waste for fermentation separated by the hydrocyclone (10) and dehydrates the unsuitable waste.

Figure 1