

ABSTRACT

The oblique bed wall (6) of the furnace main unit (1) is inclined in a downward direction towards the ash discharge outlet (5), oblique side walls (24R, 24L) are formed in the right and left side walls (1c, 1d) on the inlet (4) side of the furnace main unit (1), and fluidized bed material (S) blown up from the side fluid layers (RS, LS) is guided into the central fluid layer (CS). The fluidized bed material (S) is caused to circulate in succession from the central fluid layer (CS) at the inlet (4) side -> the central fluid layer (CS) at the ash discharge outlet (5) side -> side fluid layers (RS, LS) at the ash discharge outlet (5) side -> side fluid layers (RS, LS) at the inlet (4) side -> central fluid layer (CS) at the inlet (4) side, by means of dispersive air emitted from dispersive air pipes (21A, 21B, 25). By this means, the fluidized bed material (S) is caused to circulate in virtually a horizontal plane without partitioning walls, slow combustion is conducted due to a slow fluid speed, particularly in the drying and pyrolyzing zone, stable combustion is achieved, and generation of carbon monoxide and dioxin is suppressed.