

GASIFICATION FURNACE

ABSTRACT

A gasification furnace is disclosed. The gasification furnace comprises an outer shell (100) with an inlet and an outlet on the top and bottom respectively; an inner shell (200), which is composed of a membrane wall having a cooling water inlet (N2) and a cooling water outlet (N3) and is arranged in and spaced away from the outer shell (100), thereby defining a gasification chamber; a nozzle (1); a lower shell (300) which defines a slag exhausting chamber connected with the gasification chamber, and is arranged with a slag exhausting port (7) at the bottom and a gas discharging port (N5) on the top lateral wall; a cooler (9) which surrounds the outer shell outlet and is connected to the outer bottom wall of the outer shell (100); a positioning element (11) arranged between the inner bottom wall of the outer shell (100) and the inner shell (200).

Fig. 1