

ABSTRACT OF THE DISCLOSURE

5 The present invention relates to a method of carbonaceous substance powder gasification, characterized in: including the following steps: i) The substance react with the oxy gasification agent and generate the crude synthesis gas in which the main components are CO and H₂ and the ashes in which main components is inorganic substance; ii) Part of the high temperature crude synthesis gas and most of the ashes flow down to be cooled and purified, then the cooled and purified crude synthesis gas is delivered to the following
10 procedures, the quenched ashes are exhausted from the equipment through the cinder exit; the rest part of the crude synthesis gas and the ashes go up and mix with the cooling material, then enter into the cooling down reaction part, so that the carbon which is not fully reacted will again react with the supplemented gasification agent; the crude synthesis gas after the reaction and the ashes are cooled and purified, the ashes in the crude synthesis gas is
15 eliminated, so that the low temperature crude synthesis gas which is relatively clean, will be sent to the following procedures. The present invention also relates to a device for carbonaceous substance powder gasification.

(Figure 1)

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