

Title (en)
GASIFICATION BOILER FOR SOLID FUELS, IN PARTICULAR FOR BALES OF STRAW, WITH OPTIMISED EXHAUST GAS VALUES

Title (de)
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Title (fr)
CHAUDIERE A GAZEIFICATION POUR COMBUSTIBLES SOLIDES, EN PARTICULIER DES BOTTES DE PAILLE, PRESENTANT DES VALEURS D'ECHAPPEMENT OPTIMISEES

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Application
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Abstract (en)
[origin: US8261677B2] The invention relates to a gasification boiler for the combustion of solid fuels, in particular bales of straw, for heating purposes and for the production of hot water. The inventive boiler is characterized by optimal combustion and ash separation. The aim of the invention is to carry out the combustion of small particles in the most complete manner possible and to achieve an almost total separation of the ashes from the combustion gas upstream of the heat exchangers. To achieve this, according to the first feature of claim 1, the combustion and gasification chamber comprises lateral depressions that are configured next to the central grating and combustion chamber. Coarse particles collect in said depressions, leaving the fine particles to be carried with the combustion gas into the combustion chamber. According to the second feature of said claim, a cylindrical combustion chamber, configured as an additional component, is connected to the outlet of the combustion chamber. Said secondary combustion chamber significantly increases the combustion time, allowing small particles and partially oxidized gases to burn completely. According to the third feature, a cylindrical ash separator, configured as an additional component, is connected to the combustion chamber.

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