PROCESS FOR INFLUENCING THE PROPERTIES OF COMBUSTION RESIDUE

ABSTRACT

Combustion residues can be partially melted and/or sintered in the combustion bed of a grate furnace system. By returning the unmelted and/or unsintered combustion residue, a completely sintered inert granulate is obtained. To control these melting and sintering processes, it is proposed that least one of the following process steps be implemented:

-- the residues are returned only as long as, and only in such an amount that, the changes thus caused in the essential combustion parameters remain within previously defined tolerance limits;

-- the combustion conditions of the combustion process are changed in such a way as to counteract the changes in the combustion parameters produced by the return;

-- the material composition of the combustion residue is changed by the return of selected fractions of the combustion residue in such a way that the melting and/or sintering process of the combustion residues is influenced; and

-- the material composition of the combustion residue is changed by the addition of additives in such a way that the melting and/or sintering process of the combustion residue is influenced.

(Figure 1)