

Title (en)

DECARBONATION PROCESS OF CARBONATED MATERIALS IN A MULTI-SHAFT VERTICAL KILN

Title (de)

ENTKARBONISIERUNGSVERFAHREN VON KOHLENSTOFFHALTIGEN MATERIALIEN IN EINEM VERTIKALEN MEHRWELLENOFEN

Title (fr)

PROCÉDÉ DE DÉCARBONATATION DE MATÉRIAUX CARBONATÉS DANS UN FOUR VERTICAL À PLUSIEURS CUVES

Publication

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Application

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Abstract (en)

[origin: WO2022238384A1] The present invention relates to a decarbonation process of carbonated materials, in particular limestone and dolomitic limestone, with CO₂ recovery in a multi-shaft vertical kiln (MSVK) comprising a first, a second, and optionally a third shaft with preheating, heating and cooling zones and a cross-over channel between each shaft, alternately heating carbonated materials by a combustion of at least one fuel with at least one comburent, up to a temperature range in which carbon dioxide of the carbonated materials is released, the combustion of the fuel and the decarbonatation generating an exhaust gas, wherein decarbonated materials are cooled in the cooling zones with one or more cooling streams, wherein a mixing between the exhaust gas and the one or more cooling streams is minimized, by providing the cross-over channel arranged between the first and the second shaft with a closure means.

IPC 8 full level

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